

MASSACHUSETTS BENCHMARKS

• the quarterly
review of
economic
news &
insight

• premier issue fall '97 volume one issue 1

- **The State
of the State**
- **All About
Composite Indexes**
- **Regional Dynamics**
- **The New Economic
Structure**

A PUBLICATION OF
THE UNIVERSITY
OF MASSACHUSETTS

IN COOPERATION WITH
THE FEDERAL RESERVE
BANK OF BOSTON





ILLUSTRATION: NAOMI SHEA

REGIONAL OVERVIEW

Four primary industries currently provide much of the impetus for economic growth.

In the future, From the Field will focus on one region at a time.

For the inaugural issue, we have asked all of our analysts to provide brief overviews.

BOSTON METRO

KEY INDUSTRIES DRIVE THE HUB

The Boston Metro region, often referred to as the economic engine or “hub” of both the Commonwealth and the immediate New England region, continues to recover from the 1988-1992 downturn. Employment is increasing, the office vacancy rate is declining, and unemployment rates continue to fall.



New private construction activity in the city of Boston reached almost \$1.4 billion in 1996, the highest amount since 1989.¹

This new construction includes four new hotels, new retail establishments, residential developments, and some major office renovations.

In addition to increased private construction, several large public projects are underway to improve the transportation infrastructure in the region: the Central Artery/Third Harbor Tunnel Project, the modernization of Logan Airport, and the Boston Harbor Navigation Improvement Project. While traditional sources of employment in the region such as manufacturing and wholesale trade have declined over the last ten years, the services sector continues to expand, particularly in areas of business and professional services: law, accounting, data processing, engineering, advertising and architecture. The other key sector of employment growth has been the securities sector, largely accounted for by the continued expansion of the mutual fund industry.² The health sector, a large area of employment in Boston Metro, expanded rapidly during



the late 1980s, but leveled off during the 1990s.

Three recent studies of the Boston Metro economy all concluded that four primary industries currently provide much of the impetus for economic growth: financial services, health, high technology, and higher education.³ One study indicates that these four industries effect almost half of all jobs in the greater Boston area.⁴

Consequently, the immediate future of the Boston Metro economy will likely be substantially influenced by two major factors: the performance of these four industries; and completion of the major public projects and the potential growth of those businesses which benefit the most from that improved transportation infrastructure.

— David Terkla

DAVID TERKLA is a professor and chair of the economics department at the University of Massachusetts Boston. He is also a faculty member of the Environmental Coastal and Ocean Sciences Program. Dr. Terkla has written extensively on the importance of nontraditional cost factors to local economic development and has been involved in several projects related to environmental management and economic development issues.

CENTRAL MASSACHUSETTS FACING THE SECOND INDUSTRIAL REVOLUTION

The cities and towns of Central Massachusetts, many of which played a critical role in the nation's first industrial revolution, are in dramatic flux. Indeed, it is common to note the mills formed under Samuel Slater's nineteenth century system of manufacturing now juxtaposed with futuristic



industries making products for the new millennium. The region serves as both the center of the Commonwealth and of New England. From

the cultural attractions of Worcester's famed institutions, to skiing on Mount Wachusett, to tourism in the Blackstone Valley, to pockets of modernized traditional industries, to high technology firms and biotech research, the area is steadily transforming itself.

The economy of the region is varied. In the north, the Montachusett region is recovering quite well. While some of its communities, such as Athol and Petersham, are still suffering from the last recession, others are in the midst of a growth spurt. Leominster, for example, is virtually out of space for its rapidly expanding plastics industry. The region is also home to the Central Massachusetts "sleeping giant," Devens. Once New England's largest military installation, Devens is now rapidly converting into a powerful civilian job

generator. To the south, the Blackstone Valley is slowly and steadily expanding its industrial base. Spurred by the completion of Route 146 as a divided highway, the construction of the Rt. 146 - Mass Pike interchange, the establishment of the Blackstone Heritage Corridor and development on its fringes, the Valley has established a strong cadre of regional leaders to insure its economic growth. In the center, the city of Worcester and its surrounding suburbs are in the midst of several initiatives to expand the area. Its medical city and biotechnology activities are particularly noteworthy.

Central Massachusetts is not without problems. Its northwestern communities suffered dramatically in the last recession and recovery has been slow. The Blackstone Valley, while well positioned for growth, has yet to capture its potential. And Worcester itself, despite many striking successes, must continue to struggle to revitalize its downtown and extensive brownfields.⁵

Clearly, Central Massachusetts will evolve into a remarkably different area over the next decade: from furniture making to Simplex in Gardener; from plastics to polymers in Clinton; from old mills to biotech plants in Worcester; and from geographic isolation to high speed access ways through the Blackstone - economic change is in the wind. Central Massachusetts is facing the second Industrial Revolution.

— John Mullin

JOHN MULLIN is a professor of urban planning and director of the Center for Economic Development at the University of Massachusetts. His research focuses on industrial planning with a specific emphasis on revitalization. Over the past ten years, his research and planning work has involved more than twenty projects in Worcester County.

NORTHEAST MASSACHUSETTS MANUFACTURING: IN THE BLOOD OF THIS REGION

From the end of World War II, through the 1960s, the economy of the northeast was influenced by the decline of the textile industry. A spectacular rebirth occurred in the 1970s and 1980s with both the emergence of nearby Route 128 as a high technology center and the Reagan build-up of the defense industry.



Between 1975 and 1980, 100,000 new high tech jobs were created in the state. Wang, Digital Equipment Corporation, Prime, and Data General emerged, along with hundreds of small firms, to create the mini-computer industry. Thousands of metalworking, plastics and electronics companies received lucrative subcontracts to

supply these computer and defense firms with components, accessories, tooling, machines and instrumentation. But in the late 1980s, when the computer industry crashed and deep cuts were made in defense spending, the regional lack of industry diversification resulted in a sharp downturn.

Remarkably, even with this decline, the economic base of the region still rests mostly with manufacturing: making things is “in the blood” of the region. While only 15.3 percent of the state workforce was employed in manufacturing in 1995, 21.7 percent of the northeast regional workforce was so employed. Two industry sectors that are strong in the region - industrial machinery and equipment and electronic and electrical equipment - ranked one and two respectively in the state for total dollar value of exports in 1995. At the same time, the concentration of retail and service establishments, especially in high-wage business, engineering, and management services, is lower than the state average.

This region is caught then, on the horns of a dilemma: though it remains manufacturing-intensive, the total share of manufacturing employment in the region has fallen to 21.7 percent in 1995 from 31.7 percent in 1991. With fewer high-wage service sector jobs than the other regions, unless the high-wage manufacturing sector grows, wage rates in the entire region could decline.

— Robert Forrant

ROBERT FORRANT *is an assistant professor in the department of regional economic and social development at the University of Massachusetts Lowell. He has completed industry sector studies throughout Massachusetts and consulted for numerous education and training organizations. He currently serves on the Board of Directors of MechTech, Inc., a four-year machinist apprentice training program.*

SOUTHEAST MASSACHUSETTS

STAYING AHEAD OF THE CURVE - A SECOND CHANCE

With a total population of 1.2 million, the southeast region consists of 67 towns and cities. It is a geographically and economically diverse region with pristine beaches and working waterfronts; historical districts and advanced research laboratories; farmlands and cranberry bogs; and traditional manufacturing centers adopting computer-assisted production technologies.



The industrial history of the region began in 1811 when the first textile mill opened in Fall River. By the end of the century, more than

100 cotton mills were operating in the city. During the same period, the whaling industry made New Bedford one of the

wealthiest cities in the world. Eventually, as the whaling trade declined in the 1840s, textile and apparel manufacturing became the leading industry in New Bedford.

Brockton, Taunton, and Attleborough also emerged as manufacturing centers during the 1800s. The Brockton economy centered on shoe manufacturing. Attleborough became dominant in the jewelry making industry. Taunton had a diverse manufacturing base anchored by fabricated metals, jewelry, textiles and apparel industries.

Decline began in the late nineteenth century, as industry owners failed to make use of new technologies and abandoned their earlier entrepreneurial spirit. Lower wages and cheaper production costs in the South cost Massachusetts 94,000 jobs in textiles and shoe manufacturing in the 1920s alone. This trend continued through the Great Depression and World War II. Moreover, while other regions diversified their economies or nurtured high technology firms, new industries failed to emerge or locate in the southeast region.

More recently, in the 1980s, rapid population growth in Plymouth and Barnstable Counties made the regional rate of employment growth higher than the state average. The region’s population growth accounted for 40% of the state’s population increase during the 1980s. However, many of these residents are commuting to the Boston Metro region for employment.

Significantly, the region is still more dependent on traditional manufacturing than the rest of the state. The textile industry, directly and indirectly, accounts for almost one-third of total employment in Fall River and, despite the loss of more than 8,000 manufacturing jobs over the last decade, traditional manufacturing continues to generate 31 percent of direct employment in New Bedford.

This manufacturing sector is poised for productivity gains. Implementing new technologies and training highly skilled employees will help negate wage and cost advantages of national and global competitors. Renewal of traditional manufacturing, including textiles, electronics, and fabricated metals, will continue to drive the economy, while new growth will likely develop around marine resource industries such as tourism, laboratory research, marine electronics and instrumentation, aquaculture, and environmental technology.

— Clyde Barrow

CLYDE BARROW *is a professor of political science and director of the University of Massachusetts Dartmouth Center for Policy Analysis. Dr. Barrow specializes in political economy and public policy. He has authored numerous studies on regional economic development and municipal infrastructure in southeastern Massachusetts and served extensively as a research consultant.*

CONTINUED ON PAGE 18



**WESTERN MASSACHUSETTS
TRACKING LOWER POPULATIONS
AND THE LABOR MARKET**

The western region has 101 cities and towns in Berkshire, Franklin, Hampden and Hampshire Counties. The University of Massachusetts Center for Rural Massachusetts considers 84 of these communities rural and 17 urban. Fourteen of the urban communities are centered around



Springfield, while the cities of Pittsfield and North Adams are in north Berkshire County and Greenfield is in Franklin County. The current population of

the entire region is 800,000, or 13 percent of the total for Massachusetts. The Springfield cluster is almost half a million, north Berkshire approximately 60,000, and Greenfield 18,000. The 84 rural municipalities have a total population of about 225,000.

In the last quarter of a century, the relative importance of major economic sectors in the region has experienced a shift similar to the rest of Massachusetts: manufacturing has swapped positions with services as the dominant sector, while government, finance, and trade (wholesale and retail activities) have remained about the same. This shift has been somewhat more pronounced in Western Massachusetts, where manufacturing dropped from almost half of earnings to approximately a quarter, while statewide manufacturing went from about a third to less than a quarter.

Paper, fabricated metals and plastics remain the center of the regional manufacturing base. Not only do they account for over a third of the manufacturing payroll, but more importantly, they continue to have an unusual concentration in the region when compared with the rest of the state.

Population changes are often an unrecognized but important background when considering economic trends in Western Massachusetts. While the national population has grown by almost 30 percent, and the state by about 7 percent, Western Massachusetts has the same population it did in the early 1970s. Further, since the end of the last recession, the state has resumed population growth, but Western Massachusetts has decreased. The principal reason for the recent decrease in Western Massachusetts is domestic migration. Over 35,000 people left the region between 1990 and 1995. In comparing these numbers with Massachusetts as a whole, not only did a higher proportion of people leave the region, but there was much less growth due to international migration.

This recent decrease in population indicates that current low unemployment rates in Western Massachusetts stem largely from fewer people living in the region. For example, the unemployment rate for the region in 1996 was 4.5 percent. If the labor force in 1996 was the same size as in 1990, the unemployment rate would have been 9.6 percent.

The current economic growth period in Western Massachusetts is not only different from the 1980s, but also differs from what is currently happening elsewhere in the state. The apparent economic health of this region is due largely to demographic changes rather than to a classic economic expansion. ▮

— Bruce MacDougall

BRUCE MACDOUGALL is a professor of landscape architecture and regional planning at the University of Massachusetts Amherst. He is also director of the Center for Rural Massachusetts and the Office of Geographic Information and Analysis. He has been involved in economic, demographic, and natural resource analysis issues for over thirty years.

REFERENCES:

¹ Boston Redevelopment Authority, INSIGHT, December 1996.

² City of Boston, “Boston’s Economy 1996,” November 1996.

³ The Commonwealth of Massachusetts, “Choosing to Compete,” May 1993; Harvard Business School, Monitor Company, Inc., “The Competitive Advantage of Massachusetts,” 1991; and Greater Boston Chamber of Commerce, “Greater Boston’s Leading Industries: Drivers of the Regional Economy,” 1995.

⁴ Chamber of Commerce, 1995.

⁵ **Brownfields** refer to existing and sometimes historic properties which are no longer in use, but offer potential for redevelopment. Environmental regulations may affect the economic feasibility of renovation.

Maps

Regional maps are from the Office of Geographic Information and Analysis, University of Massachusetts Amherst.