MANUFACTURING IN TRANSITION

Worcester County has long been famed for its manufacturing prowess. Its Blackstone Valley was the crucible of our industrial revolution. Its main city, Worcester, was the Silicon Valley of the nineteenth century: the rise of the modern wire industry and thousands of textile machines put the city at the forefront of America’s first industrial revolution. Leominster, with its “Man Behind the Foster Grants,” has long promoted itself as the pioneer plastics city. Indeed, the one link among the cities and towns of this region is that they made things. Perhaps of greater interest, the region is still linked by this tradition.

Throughout the county, “smart manufacturing” is alive and well – and succeeding.

MANUFACTURING IN TRANSITION

Worcester County has long been famed for its manufacturing prowess. Its Blackstone Valley was the crucible of our industrial revolution. Its main city, Worcester, was the Silicon Valley of the nineteenth century: the rise of the modern wire industry and thousands of textile machines put the city at the forefront of America’s first industrial revolution. Leominster, with its “Man Behind the Foster Grants,” has long promoted itself as the pioneer plastics city. Indeed, the one link among the cities and towns of this region is that they made things. Perhaps of greater interest, the region is still linked by this tradition.

Throughout the county, “smart manufacturing” is alive, well and succeeding. Smart manufacturing companies are the lean, customer-driven, technology-accepting, export market competitive makers of things. They depend on flexible, well paid, continually trained workers and rely on local institutions for technical, financial and support services. With minimal fanfare, Worcester County is building on its manufacturing base and, using the principles of smart man-

J O H N M U L L I N

Central Region

Worcester County:
Working Toward the Millennium

Throughout the county, “smart manufacturing” is alive and well – and succeeding.
Manufacturing, showing some success. In fact, over the past year, manufacturing employment and sales in the county have actually increased. The greater Worcester area now employs approximately 42,000 manufacturing workers in a wide range of occupations.

**What is happening in Worcester County? Six key factors appear important.**

**Tradition.** Almost all of these companies have evolved from established firms in the region. Their roots are here; they rely on local financial institutions that know them, and interact with support firms in the area. A large amount of anecdotal evidence suggests that “locally founded companies stay local.”

**Support network.** Greater Worcester has these firms in place. With the acceptance of “just in time” processes and the attraction of “mother ship” companies, the need for these support firms is extensive. It was once suggested that Worcester establish as its slogan, “Come to Worcester - ninety percent of your operations are already here and are world class.”

**Clustering.** The county has several existing and emerging clusters that match Michael Porter’s famed definition. Among these are fabricated metals, industrial machinery and equipment, fiber optic technologies and the plastics industry. Significant strengths also exist in the publishing, semiconductor, pharmaceutical and medical instruments industries.

**Regional respect for manufacturing.** State and local governments and institutions are reacting to provide needed technical assistance, infrastructure improvements and financial help. This response is not an easy task: the image of manufacturing as a form of industrial servitude still remains. Further, the popular perception is that Massachusetts manufacturers can no longer compete with those found in other areas. Today, thanks in part to more than ten public, private and quasi-public organizations in the county, the competitive position of these companies has improved.

**Location.** Worcester County cities and towns are well placed. Today, as the Worcester County economy grows, the job center of Massachusetts moves west and the region’s centers of competitive advantage expand, it is difficult to separate the metropolises of Boston and Worcester. Moreover, one can see similar connections emerging between Worcester and Providence. The city, with its interstates and major highway axes, is accessible from virtually all cities in the Northeast, not to mention four major airports: Worcester products can be quickly shipped anywhere in the globe through these ports.

**A balanced regional economy.** With a healthy number of jobs in manufacturing, service, construction, institutions and governments, prospects for steady growth are positive. The region has quietly undertaken diversification quite nicely and supports a good mix: traditional industries such as Norton and Wyman-Gordon; high tech companies such as BASF; ten colleges; and Fidelity (at its fringes in Marlboro and North Smithfield, Rhode Island). Indications are that the area may also become a power in energy production: at least six energy producers are currently examining the Blackstone Valley for potential sites.

**Medical Services and Higher Education**

In addition to manufacturing, medical services and higher education play a strong role in this regional economy. Recent data shows, for example, that every dollar spent at the University of Massachusetts Medical Center translates into an increase of $2.23 of expenditures in the economy, bringing an additional $1.23 of spending for goods and services throughout the region. Similarly, one new job at the Medical Center stimulates another job some-
place in Worcester County. This data suggests that a regional commitment to expanding medical services makes economic sense. Another recent report, written by the Colleges of Worcester Consortium, Inc. and funded by Bank Boston, entitled The Colleges of Worcester: A Foundation of Economic Success, reports that the ten colleges in the area, totaling 6,700 employees and 27,000 students, have a 1.5 billion dollar affect on the Commonwealth and have stimulated the creation of 16,700 jobs across the state. Clearly, higher education and medical activities are crucial to the county’s future.

NOTES OF CAUTION
We should not get carried away with the signs of improved performance and the relative stability of the region’s manufacturing base. It is considerably smaller, on the whole, than it was a decade ago. The Central Massachusetts Regional Planning Commission noted that its cities and towns lost 13,400 manufacturing jobs between 1984 and 1996. The region’s textile, leather and apparel industries are mere shadows of their former selves. Many of the remaining companies are in highly competitive markets and are owned by multinationals that have limited loyalty to place. Many will continue to leave, downsize or close. Perhaps of greater importance, many others will be formed and begin to grow again. While Worcester and its surrounding towns, the Blackstone Valley, the Devens area and Leominster, are organized and well on their way to insuring that they are competitive, other areas have not been so prepared or fortunate. Fitchburg continues to struggle to define its economic future. The prospects for recovery are also problematic for the northwest tier of communities from Fitchburg through Gardner to Athol need additional assets to create a climate for a strong positive economy. More work is needed.

Looking Ahead
In the long term, the prospects for success in Central Massachusetts are quite bullish, with few “outliers” that will require more work. The city of Worcester has a well-defined sense of direction. The Blackstone region is quickly and courageously facing the complex issues of handling the construction of the new I-90 - Route 146 Interchange without creating an eighteen mile strip mall. Given home rule, this will be no easy task!

Over the long haul, we expect this valley to be well positioned for growth, provided that it works as a region. It must also address the lack of modern water and sewer systems in most of its towns. The fiber optics firms in the southwest part of the county are also showing promise, as are diverse industries between Leominster and Ayer (on the county’s edge) and Leominster and Worcester. Unfortunately, the northwest tier of communities from Fitchburg through Gardner to Athol need additional assets to create a climate for a strong positive economy. More work is needed.

But there is reason for optimism: plastics thrive in the north, Devens is attracting manufacturing firms in the east, the Blackstone Valley is poised to take advantage of its new transportation assets, Worcester’s traditional metal working and modern biotech industries are creating new products, medical and educational institutions are expanding, and old industries are reinventing themselves. This region, a premier center of smart manufacturing, is moving in the right direction.

JOHN R. MULLIN is professor of urban planning and director of the Center for Economic Development at the University of Massachusetts Amherst. 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.

Encourage formal and informal networking among their employees and those of competitors. 
Active participants in their trade groups.

Try to bank locally or regionally. 
If local banks grow so will their communities.

Technology driven. 
They have no choice.

Strong ties to the region’s universities, colleges and laboratories, at the managerial level and the shop floor. 
Recipocity exists: manufacturers are also involved in the classroom.

Belief in lifelong training. 
Active participants in public and private training programs. Active participants in the community.