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- Breaking the Mold in Massachusetts
- Worcester County: Working Toward The Millennium

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From the **Field**



ILLUSTRATION: NAOMI SHEA

Central Region

Worcester County: Working Toward the Millennium

J O H N M U L L I N



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-



ufacturing, 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, semi-conductor, 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-

THE PRINCIPLES OF SMART MANUFACTURING FIRMS:

Lean with a compressed hierarchy of management.

Value workers.

Employees are paid a "living wage" and offered incentives (education, financial rewards) for improvement. They share in the company's success.

Seek constant improvement; these companies celebrate when they gain an ISO designation.

Export oriented.

The world is their market place, where they must prove their worth.

Push their suppliers to develop components that are of the highest possible quality.

Endeavor to rely on a local or regional supply base.