

## MANUFACTURING EXTENSION PARTNERSHIP

# MAKING A DIFFERENCE FOR AMERICA'S MANUFACTURERS



The NIST Manufacturing

Extension Partnership

is a nationwide network

of resources helping

small manufacturers

become more

competitive. At the

heart of MEP are

manufacturing extension

centers locally positioned

throughout the U.S. to

address the critical and

often unique needs of

small manufacturers.

**NIST**

National Institute of Standards and Technology  
Technology Administration, U.S. Department of Commerce

“...an important resource for helping small manufacturers achieve the kinds of world-class gains formerly limited to larger companies. Their focus on value-adding activity on the shop floor is exactly right. The MEP network gets results—quickly and affordably.”

Richard Schonberger, author, *World Class Manufacturing: The Next Decade*

### Small Manufacturers: The Foundation of American Industry

Manufacturing creates wealth for our nation: wealth in the form of economic growth, increased jobs and robust trade in world markets. Productivity improvements by U.S. manufacturers are leading the nation. Between 1992 and 2001, manufacturing productivity grew at double the rate of the entire economy: manufacturing productivity rose by nearly 36 percent compared to a 18% increase for the non-farm business sector. Approximately 350,000, small manufacturers account for over half the total value of U.S. production and represent 98.8 percent of all manufacturing establishments. They employ nearly 11.1 million people and account for two-thirds of all U.S. manufacturing employment. These jobs are high-skilled and high-wage, with production employees earning 50% more than retail employees per hour.

### The Challenge for Small Manufacturers: Bridging the Productivity Gap

As critical as small manufacturers are to the economy, the productivity gap between large and small firms is widening. Between 1992 and 1997, productivity for large manufacturers grew by 22.6 percent versus 15.5 percent for small manufacturers. And as large manufacturers increase their dependence on suppliers for parts and services, the performance and capabilities of small manufacturers become even more critical to the competitiveness of all manufacturers and to the health of the U.S. economy. Yet, according to a National Research Council report, “Many of these smaller firms, however, are operating far below their potential. Their use of modern manufacturing equipment, methodologies and management practices is inadequate to ensure that American manufacturing will be globally competitive.”

Limited budgets, lack of in-house expertise, and lack of access to the newest technologies are but a few of the significant barriers faced by small manufacturers—barriers that MEP aims to help them overcome.

### How MEP Is Making a Difference

**M A N U F A C T U R I N G   E X T E N S I O N   C E N T E R S**  
MEP is a national network of affiliated manufacturing extension centers and field offices located throughout all 50 states and Puerto Rico. Created in 1988, today’s network delivers services to firms across the country and in Puerto Rico. Centers are funded by federal, state, local and private resources to serve small manufacturers.

Each center works directly with area manufacturers to provide expertise and services tailored to their most critical needs, which range from process improvements and worker training to business practices and information technology applications. Solutions are offered through a combination of direct assistance from center staff and assistance from outside consultants. Centers often help small firms overcome barriers in locating and obtaining private-sector resources.

### P A R T N E R S H I P S

MEP provides small and mid-sized manufacturers with access to a wealth of tools, techniques and other resources through thousands of public and private affiliations. Initiatives with the U.S. Departments of Labor, EPA, National Association of State Development Agencies, the State Science and Technology Institute, the National Association of Manufacturers, state and local employment training organizations and hundreds of universities and community colleges are a few examples of how MEP leverages public and private resources to make a comprehensive range of technical services and assistance available to small manufacturers.

Each year, MEP helps thousands of manufacturers solve problems, increase productivity and achieve higher profits. Through continuous assessment and improvement of our products, services and service-delivery approaches, MEP is committed to meeting the strategic needs of small and mid-sized manufacturers as they negotiate the New Economy of the 21st century.

### For More Information

For a list of centers and other information about MEP, contact:

Manufacturing Extension Partnership  
100 Bureau Drive, Stop 4800  
Building 301, Suite C100  
National Institute of Standards and Technology  
Gaithersburg, MD 20899-4800  
Telephone: (301) 975-5020  
FAX: (301) 963-6556  
E-mail: [mepinfo@mep.nist.gov](mailto:mepinfo@mep.nist.gov)

Or visit our web site at [www.mep.nist.gov](http://www.mep.nist.gov)

Phone 800-MEP-4MFG for the center serving your area

# RESULTS: WHAT THE DATA SHOWS

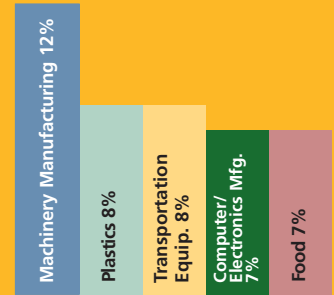
## FY 2003 MEP ACTIVITIES

18,422 Manufacturers served in FY 2003

MEP has provided assistance in more than 270,000 customer engagements including technical assistance projects, training programs, networking events and long-term strategic support

Since the program began, MEP has served more than 184,000 clients

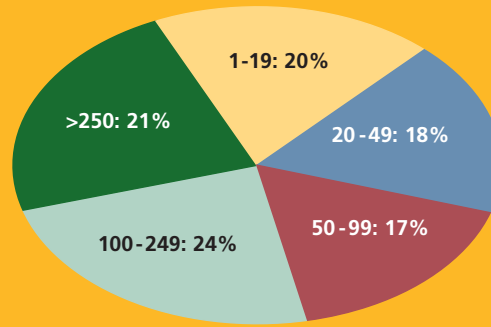
## TOP SIX INDUSTRIES SERVED



## TOP SIX AREAS OF ASSISTANCE



## HOW WE ASSISTED FIRMS



## SIZE OF FIRMS SERVED BY NUMBER OF EMPLOYEES

### Notes:

FY 2003 activity data derived from reports on 27,409 engagements with over 18,422 client firms.

## FY2002 \* MEP CLIENT-REPORTED IMPACTS

### CLIENT-REPORTED IMPACTS AS A DIRECT RESULT OF MEP ASSISTANCE

<b>Increased/Retained Sales</b>		
New Sales	\$953 million	\$2.79 billion
Retained Sales	\$1.84 billion	
<b>Cost Savings</b>		\$681 million
<b>New Client Investment in Modernization</b>		\$940 million
<b>Jobs Created</b>		8,966
<b>Jobs Retained</b>		26,062

\*Independent follow-up of clients with projects completed in FY2002. Of the 5,808 clients selected to be surveyed, 5,015 completed the survey in FY2003. Measures are a conservative snapshot of benefits. Recurring or cumulative benefits may be larger.

“Systematic evaluation studies have confirmed that the MEP is having a positive effect on businesses and the economy...has achieved national coverage and established local service partnerships... and most important...MEP services are leading to desired business and economic goals...”

Philip Shapira, Ph.D., *Issues in Science and Technology*, Spring, 1998, “Extending Manufacturing Extension”

### Benefits to GA Manufacturers

Georgia MEP clients surveyed reported manufacturing benefits in the following areas:

- improvements to an existing process
- improvements in management skills
- improvements in employee skills
- improvements in an existing product or service

Furthermore, comparing Georgia MEP clients with non-clients found that assistance from the Georgia MEP increased the value-added of the average client plant by up to \$443,000 between 1999 and 2001.<sup>1</sup>

### PA Manufacturers Post Positive Productivity Gains

A study of Pennsylvania’s Industrial Resource Centers (IRC) found that the program boosted the labor productivity of IRC clients by an average of between 3.6 and 5.0 percentage points per year. The study found that these productivity gains raised gross state product by about \$1.9 billion. Finally, the study found that for every state dollar invested in the program, the program generated almost \$22 of additional income to the state economy.<sup>2</sup>

### Higher Productivity Growth for MEP Clients

Researchers at The Center for Economic Studies, U.S. Census Bureau, found that manufacturing extension clients experienced between 3.4 and 16% more growth in labor productivity over a five-year period than similar non-client firms. The productivity

growth of the 1,559 firms studied translates into \$484 million in additional value-added at client firms.<sup>3</sup>

Based on these results, a second study estimated that this value-added increase translates into \$1.3 billion in additional economic output over 5 years, leading to \$213 million in additional federal revenues and a \$4.47 increase in real disposable income per capita.<sup>4</sup>

### Value-Added Income and Jobs for NY

A New York Manufacturing Extension Partnership study found that the state’s \$5.3 million investment in the program between July 1995 and March 1997, combined with the federal investment, generated an additional \$227 million of value-added income in New York State. This growth, in turn, led to the creation of 2,600 jobs.<sup>5</sup>

### GAO Survey Positive

An independent survey of MEP clients by the General Accounting Office found MEP had a positive effect on a firms performance in the areas of:<sup>6</sup>

- profits
- sales
- product quality
- workplace technology
- worker productivity
- customer satisfaction

## SOURCES

1 Georgia Tech Policy Project on Industrial Modernization. December 2002.

2 “The Pennsylvania Industrial Resource Center: Assessing The Record and Charting the Future,” By Nexus Association for the Ben Franklin/IRC Partnership Board. October 1999.

3 *Journal of Policy Analysis and Management*, “Evaluating the Impact of Manufacturing Extension on Productivity Growth,” by Ronald S. Jarmin, Winter 1999.

4 “Estimating Economic Impacts of Government Technology Programs: Manufacturing Studies Using the REMI Model,” by M.A. Ehlen and S.F. Weber, economists for the National Institute of Standards and Technology, 1997.

5 “Evaluation of the New York Manufacturing Extension Partnership,” by Nexus Associates for New York State Science and Technology Foundation/ Empire State Development, 1997.

6 “Manufacturing Extension Programs: Manufacturers’ Views of Services,” U.S. General Accounting Office, Report GAO/GGK-95-216BR, August, 1995.