

# The Georgia Manufacturing Technology Survey 1996

## Overview of Approach

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The Georgia Manufacturing Extension Alliance (GMEA) has an explicit evaluation element designed around these three main aims:

- Provide consistent feedback about the effectiveness, targeting, and impacts of GMEA's services
- Support systematic learning about how services are being delivered and what services and approaches work best and why, so as to assist the ongoing improvement and management of program services
- Furnish evaluative information to GMEA's major stakeholders and sponsors, including the state of Georgia and NIST.

### I. Survey Objectives

One of the central elements of the GMEA evaluation element is a survey of Georgia manufacturers. Georgia Tech has conducted such a statewide survey of manufacturers above a certain employment size since 1989. The most recent survey was conducted in 1994.

The objectives of the present survey are:

- To measure the change in performance of GMEA assisted firms by incorporating a control element which will permit comparisons between GMEA-served firms relative to changes in the performance of similar (e.g., by employment size, industry, etc.) non-assisted firms,
- To identify trends and needs in the manufacturing base which can be used in program planning.

#### a. Key Parameters of Manufacturing Performance

The key parameters of manufacturing performance to be measured in the survey include:

- Greater use of computers for manufacturing
- Increased in training expenditures
- Increased sales per employee
- Increase in employee wages
- Number of new jobs created

#### b. Key Parameters of Trends and Needs in the Manufacturing Base

The key trends and needs in the manufacturing base to be measured in the survey are:

- Areas of significant problem (plant layout, manufacturing process, product development, material failures, CAD/CAM, automation and control, electronic commerce, quality assurance, business systems, market development, financing, human resources, energy, environmental)
- Trends in use of manufacturing technologies (LAN, bar code readers, MRP)
- Trends in adoption of quality and management approaches (ISO certification, statistical process control)
- Trends in participation in inter-firm activities
- Interest in training subjects and delivery methods

### II. Survey Design

The survey will be administered by mail to all identified manufacturers in Georgia with 10 or more employees. There are about 7,000 manufacturers in the state with 10 or more employees. (Manufacturers with fewer than 10

employees may receive surveys if they completed a survey in 1994.) The survey package will include cover letter from the Governor of Georgia, a questionnaire, and a postage-paid return envelop. It will also include a coupon for complimentary attendance at one training course in the *Modern Manufacturing* series valued at \$75.

The survey team will make a particular effort to obtain completed questionnaires from those manufacturers that completed survey forms in 1994. This effort will help provide information about the company's manufacturing performance before and after GMEA assistance, relative to similar non-assisted firms. It will also enable continuing tracking of trends and needs in the manufacturing base since 1994. Telephone follow-ups focusing on this group will be conducted to encourage response.

Data in the Protrac customer and project tracking system will be incorporated into the survey database to examine what types of GMEA assistance and services led firms to take positive action (or otherwise), and under what conditions.

### **III. Timing**

The questionnaire package will be completed and available for review at the end of August 1996. The survey will be piloted with a sample of Georgia manufacturers in September. The questionnaires will be mailed to Georgia manufacturers in early November. Preliminary results will be available in March 1997, and final results by May 1997. A customized report summarizing key survey results will be distributed in Georgia manufacturers in May 1997.