BUILDING SUCCESSFUL RELATIONSHIPS IN ECONOMIC AND WORKFORCE DEVELOPMENT:

MANUFACTURING EXTENSION PARTNERSHIP CENTERS AND THE WORKFORCE DEVELOPMENT SYSTEM

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EXECUTIVE SUMMARY

Introduction
The availability of a high quality workforce is an essential element for manufacturing firms, as well as other employers. Manufacturing firms require an on-going pipeline of educated and trained employees at all levels. Many firms readily recognize that their human assets are a vital element in maintaining their financial health.

Unfortunately, too many workforce and economic development polices and programs operate in isolation from each other. At the federal level, the reasons for this go back many years. Workforce programs were designed to assist people who were out of work gain employment. Economic development programs were geared towards business attraction and growth. They were operated by separate departments with different constituencies and stakeholders. Today there is recognition at the federal, state and local levels that workforce and economic development are intertwined, and that activities should be integrated for optimal outcomes.

Over the past few years, a number of Manufacturing Extension Partnership (MEP) centers and state and local Workforce Investment Boards (WIBs) have developed working relationships that are models for others to follow. The efforts demonstrate the positive impact of working together on firms, regions and states. These collaborations, often started in small ways, have developed into flourishing partnerships. Several of these are identified and highlighted in this paper.

Building these types of positive working relationships across long-standing barriers is easier said than done. The goal is to develop enhanced relationships that result in actions and activities that generate benefits for individuals, their employers, and the communities in which they live. Some MEP centers are working closely with workforce development organizations and developing policies and programs that are achieving excellent results. Others hear leaders in Washington or leaders in the states encouraging collaboration, but many are unclear about the practical steps needed to realize the vision. “I know that we need coordinated relationships between our economic and workforce development organizations, but I don’t know where to begin to make that happen in my community” is an all-too-common refrain.
Executive Summary

Introduction

This paper details the nature and extent of relationships that exist between Manufacturing Extension Partnership centers and their workforce development partners across the country. We hope that the information and examples cited herein illustrate some practical ways in which workforce and economic development organizations can generate value in their communities. While there are numerous opportunities for collaboration, for the purpose of this work, we focused on the following major workforce programs:

- State-funded customized job training programs;
- Workforce Investment Act (WIA) allotments to state and local agencies and Workforce Investment Boards; and
- H-1B Technical Skills Training Grant program, as authorized by the American Competitiveness and Workforce Improvement Act of 1998 (ACWIA 1998) and amended by the American Competitiveness in the Twenty-first Century Act of 2000 (ACWIA 2000).

The US Department of Commerce’s National Institute of Standards and Technology (NIST) MEP engaged the National Center on Education and the Economy (NCEE) in order to collect information systematically about these current practices, to organize the information into usable form, and to analyze the findings and assess the potential for broader replication of successful approaches. NCEE partnered on this work with the Corporation for a Skilled Workforce (CSW), another organization with deep expertise in workforce development and the MEP program.

In collaboration with NIST MEP, the NCEE/CSW project team decided on a two-phase approach to the study. The first phase involved asking questions of all MEP Center Directors. In all, forty-nine MEP centers responded to our electronic request for information, a response rate of more than 66 percent. The second phase involved follow-up telephone interviews with 19 selected centers.
Findings

Sources of Workforce Funding

- Nearly 90 percent of centers reported providing services to clients paid for, in part or in full, by federal, state, or local workforce funds.
- Over the last three years, 62 percent of centers reported accessing more than $400,000 in workforce funds to support these activities.
- Centers used state training funds more than twice as often as any other workforce funds for a wide range of training and related consulting services.

Services Delivered

- MEP Centers organized a wide range of services for clients using workforce funds, including training in lean manufacturing, ISO 9000, and other process improvement training, occupational and technical skills enhancement, basic skills training, and English-as-a-Second-Language training.

Impact

- Although there are numerous difficulties in isolating the effects attributable to the projects supported by workforce funds alone, aggregate impacts reported showed a median of more than 1500 jobs created or retained, $3.4 million in increased private investment, and $5.7 million of sales retained or increased resulting from efforts involving workforce funds.

Specific Examples

- The report provides vignettes citing a wide range of MEP center-workforce system collaborations, from training company leadership and staff in new production processes to helping a state agency streamline its process for reviewing customized training grant applications.
Implications and Recommendations

The results from the electronic and telephone responses, as well as the illustrations from centers, send a clear message. Workforce development organizations and MEP centers are collaborating to pursue mutually beneficial activities, in ways that fulfill the vision expressed by public leaders, in myriad areas. However, we encountered numerous constraints that could impede reaching the full potential of this partnership in the near term. These include:

- Confusion among many MEP centers about the different workforce partners and programs, the sources of workforce funding, and how to develop mutually beneficial relationships;
- Uncertainty among MEP centers about matching requirements to obtain NIST MEP funds, and uncertainty about which workforce funds (under what circumstances) can be used for NIST MEP match;
- Decreasing funds available for state customized training programs;
- Uncertainty regarding the status of the H-1B program;
- Uncertainty about the direction of WIA reauthorization and NIST MEP funding.

We recommend the following actions to be taken at the federal, state and local levels to increase the collaboration of MEP centers and the workforce development system.

Federal Level

Recommendation #1: NIST MEP and the US Department of Labor’s Employment and Training Administration (ETA) should collaborate to identify common interests as well as to identify opportunities that would further shared objectives, such as ETA’s High Growth Job Training Initiative.

Recommendation #2: NIST MEP and ETA should educate their respective agency staff regarding the opportunities for collaboration and encourage staff to explore them for mutual benefit.
Executive Summary
Implications and Recommendations

Recommendation #3: ETA and NIST MEP should use their influence with state and local officials to encourage collaboration among state and local organizations that constitute the affiliates of larger nationwide systems or networks.

Recommendation #4: ETA should support language in the WIA reauthorization process that fosters enhanced collaboration with intermediaries like MEP centers that have deep industry expertise and experience.

Recommendation #5: ETA should build on the successes of local WIBs and MEP centers in recently-funded H-1B projects.

State and Local Levels
Recommendation #1: State workforce development agencies, state workforce boards, and MEP centers should design processes for sharing information about industry trends and practices across organizations at the leadership and staff levels.

Recommendation #2: State workforce and economic development agency officials should systematically inventory current funding and program activities to identify areas of potential shared interest where agency missions and goals overlap.

Recommendation #3: State workforce development boards, state agencies, and MEP centers should explore opportunities for mutual benefit, as part of their agenda to align workforce and economic development priorities.

Recommendation #4: Local workforce and economic development officials should initiate a regional process to: scan current programs and activities, identify opportunities for collaboration between MEP centers and workforce organizations, and design and launch initiatives for furthering shared objectives.

Recommendation #5: At the local level, MEP centers and workforce organizations should advance shared objectives by working in partnership.

Recommendation #6: MEP centers should systematically learn the requirements and process of the workforce funds allocated in their states and communities, and develop strategies and alliances to foster the attainment of mutual objectives through their use.
I. INTRODUCTION

Historically, federal workforce policies and programs have operated in isolation from federal, state and local economic development activities. Workforce programs were designed to assist people who were out of work gain employment. Economic development programs were geared towards business attraction and growth.

The Manufacturing Extension Partnership (MEP) program was created under the Omnibus Trade and Competitiveness Act of 1988 to foster business growth among existing manufacturing companies, a relatively new focus of economic development. The emphasis was not on attracting new companies, but on strengthening existing small and medium sized manufacturers that often had been ignored by local economic developers. Since 1988, MEP centers have been established across the country and are working within their local communities and states to build a strong manufacturing base.

The Workforce Investment Act (WIA) was enacted in 1998. It governs programs focused on job training, adult education and literacy, and job placement activities, streamlining programs and providing more flexibility emphasizing business leadership in the design of the workforce development system. WIA stipulates that private employers comprise a majority of each Workforce Investment Board (WIB) and the chair must be elected from the private sector membership. Workforce Boards are to be representative of the employer mix in the community, in terms of both size and type of industry. The intent is to ensure that this system is market-driven; is easily accessible to any individual who wants or needs a job, education, or training; supplies well-trained people for all employers; and provides employers with assistance and support for life-long learning initiatives and for the creation of a high-performance workforce.

Over the past few years, a number of MEP centers and state and local WIBs have developed working relationships that are models for others to follow. These collaborations, often started in small ways, have developed into flourishing partnerships. Several of these are identified and highlighted in this paper.

The benefits of collaboration between MEP centers and the workforce development system are being recognized at the federal, state, and local levels. This work is
entirely consistent with the efforts of federal and state government leaders in workforce and economic development to encourage their local grantees and organizational partners to develop relationships and work together across programmatic and agency boundaries. David Sampson, Assistant Secretary of Commerce for Economic Development, has expressed this theme repeatedly. For instance, he stated that “The Bush Administration is committed to developing closer linkages between economic and workforce development.”

Emily Stover DeRocco, Assistant Secretary of Labor for Employment and Training, has expressed similar sentiments. She has noted that “The public workforce system must be an aggressive partner with business, labor, education, and communities...There are so many prospects for additional linkages, coordination, and better provision of services, that it is incumbent upon all of us to grasp these opportunities and provide world-class service to our customers... The tasks ahead of us are enormous, but we have learned that working together to solve common problems can be powerful. Cooperation is essential.”

Consequently, state and local officials in a wide variety of organizations are exploring options for bridging the traditional gap between workforce and economic development. Those affected include state and local Workforce Investment Boards, state and local public agency staff involved in workforce and economic development activities, organizations providing workforce or economic development services to individual job-seekers and employers, community colleges, quasi-public and community-based non-profit organizations and intermediaries, and other such organizations.

This interest in closer working relationships is attributable to several factors. Tight budgets at all levels of government have created a sense of urgency to do more with less. This economic necessity has been coupled with a widespread recognition that the potential benefits of integrated workforce and economic development relationships are worth the effort required to overcome differences in culture, language, performance outcomes, and other factors that have inhibited close working relationships in the past. Finally, there is a sense of increasing accountability among public leaders to provide better services for citizens and

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2 Speech to the Texas Workforce Commission, Dallas, Texas September 5, 2002.
better returns on the public investment. This can encourage program managers to think beyond narrow program guidelines and funding streams to identify creative ways to align missions, functions, and resources across programs in order to create more value for customers.

Building the types of working relationships envisioned is easier said than done. Even more difficult is translating those enhanced relationships into actions and activities that generate benefits for individuals, their employers, and the communities in which they live. Many state and local public officials hear the leaders’ statements and are unclear about the practical steps that they need to take to realize the vision. “I know that we need coordinated relationships between our economic and workforce development organizations, but I don’t know where to begin to make that happen in my community” is an all-too-common refrain.

This paper details the nature and extent of relationships that exist between MEP centers and their workforce development partners across the country. We hope that the information and examples cited herein illustrate some practical ways in which workforce and economic development organizations can generate value in their communities.
II. THE MANUFACTURING EXTENSION PARTNERSHIP AND WORKFORCE DEVELOPMENT

The Manufacturing Extension Partnership (MEP) is a nationwide network of not-for-profit centers in over 400 locations nationwide whose sole purpose is to provide small and medium sized manufacturers with the help they need to succeed. The centers are linked together through the Department of Commerce’s National Institute of Standards and Technology, receiving funds from federal, state, local and private resources. Their geographic proximity makes it possible for even the smallest firms to tap into the expertise of knowledgeable manufacturing and business specialists all over the United States. These specialists have had experience working on manufacturing shop floors and in plant operations.

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 applications of information technology. Solutions are offered through a combination of direct assistance from center staff and outside consultants.

Since the passage of the Workforce Investment Act (WIA) in 1998, MEP centers and federal, state and local workforce officials have explored multiple avenues for partnering for mutual benefit. NIST MEP showed some early leadership supporting this agenda, publishing in April 1999 the “The Workforce Investment Act of 1998: Opportunities for MEP Centers,” which provided guidance for centers on how to identify opportunities that would advance the agendas of both efforts.

Since that time, MEP centers have developed relationships with federal, state and local workforce agency and workforce investment board (WIB) officials, taking advantage of the increased flexibility for working with employers under WIA and related statutes. It is not surprising, given this flexibility, that the relationships between MEP centers and the workforce system have taken on a wide range of forms. These include cross training of staff, joint outreach to employers and particular industries, using workforce funds for the provision of training on the fundamentals of lean manufacturing, using workforce funds for training and technical assistance on lean implementations, assisting dislocated workers moving into manufacturing careers, training incumbent workers in manufacturing
occupations frequently filled by foreign workers on H-1B visas, and other such collaborative activities.

These joint activities have evolved to support various elements of the MEP centers’ goals while furthering objectives of the workforce system. Many of the joint activities are generating good outcomes, which in turn support further development of useful relationships.

These trends and forces argued for a systematic exploration of the innovative initiatives between MEP centers and the workforce system, to document the extent of cooperation between workforce and manufacturing modernization organizations involved in economic development function. Moreover, this knowledge can shed light on the opportunities and potential benefits if replicated on a wider scale. The US Department of Labor’s Employment and Training Administration (ETA) is urging the workforce system to provide increased “employer services” — though most have begun only in the last year or two to serve employers intensively. The workforce system is under intense pressure to collaborate with economic development organizations, and to be more “demand-driven” — both of which support expanded partnerships with the MEP system. Many within the workforce development arena are approaching their work by industry sector, with many regions developing and implementing manufacturing-focused initiatives.

Manufacturing is of major importance not only to the nation as a whole, but to a majority of American communities. Manufacturing jobs and their wages are the foundation of many local economies. In recent years, manufacturing has been under intense global competition. Thousands of manufacturing jobs have been lost. Some firms have made significant effort to redesign the way they operate in order to remain in business. Others are struggling to remain in business or have gone out of business. For those firms seeking to improve their operations, training and organizational development efforts are key in supporting process improvements and productivity-increasing measures. Implementing lean manufacturing, for instance, requires extensive training for managers, technical staff, and front line operators around every step of the targeted process.

• For many MEP customers, the costs of providing this training are seen as a barrier. Small manufacturers are very price-sensitive; it is a reality of working with them. One MEP Center Director noted, in the course of
researching this project, that about one-half of the 400 firms they worked with last year needed training as a component of a transformation strategy. Through state grant programs, 90 percent of the firms served by that center received some help to underwrite these costs. Another Center Director noted that the workforce funds make a big difference in getting the companies to “bite the bullet,” moving the companies beyond talk to action.

While there are numerous opportunities for collaboration, for the purpose of this work, we focused on the following major workforce programs:

- State-funded customized job training programs;
- Workforce Investment Act allotments to state and local agencies and Workforce Investment Boards; and
- H-1B Technical Skills Training Grant program, as authorized by the American Competitiveness and Workforce Improvement Act of 1998 (ACWIA 1998) and amended by the American Competitiveness in the Twenty-first Century Act of 2000 (ACWIA 2000).

These programs are explained in greater detail below.

**State-Funded Customized Job Training Programs**

Since the late 1950s, virtually every state has set aside money to subsidize customized training for individual employers or groups of employers. Funds are provided for customized, employer-specific training, including training for incumbent workers and new hires. The state programs, in general, differ from federal employment and training programs in numerous ways.

In contrast to federal programs, which historically emphasized social goals, state programs were created as economic tools to attract and retain jobs. The state programs are employer-centered, not worker-centered like the federal programs, though they share the ultimate goal of improving the lives of state residents. The state programs generally are more flexible than federal programs, with fewer requirements for targeting individuals, allowing employers more latitude regarding
whom to train. Another distinguishing feature of the state programs is that they train incumbent workers for new jobs or new job duties, which states view as a necessity in a fast-changing, technologically-demanding economy.³

The state programs vary widely from state to state on numerous elements. They derive their funding from different sources (e.g., state appropriation line item, Unemployment Insurance Fund surtax, etc.), restrict applicant eligibility in different ways (e.g., individual employers, consortia of employers, specific industries, etc.), and allow funds to be used in different ways. Different types of state agencies are responsible for program administration (e.g., workforce agency, economic development agency, hybrids), and with those differences comes variations in application procedures, response times, reporting requirements, state oversight and monitoring, and a host of other factors.

Throughout the 1990s into 2001, states generally increased funding levels and expanded the number of job training programs they supported. Estimates vary somewhat regarding the aggregate state funds available, ranging from $575 million⁴ in 1998 to $593 million (up 10 percent from the previous year and up 63 percent from 1988–1989)⁵ for 1998–1999 for both incumbent workers and new hires. These increases made the states a smaller, but still substantial, source of funding compared to the federal government.

**Workforce Investment Act**

Congress passed the Workforce Investment Act (WIA) of 1998 (PL 105-220) to consolidate, coordinate, and improve employment, training, literacy, and vocational rehabilitation programs in the United States. WIA replaces numerous federal job training, adult education, and literacy programs with streamlined, coordinated workforce development systems.


Some key elements of state and local workforce investment systems include the following:

- **State Workforce Investment Boards** — Each state is required to have a board that advises the Governor on the development of a five-year strategic plan for the development and implementation of the state’s workforce investment system. The boards include the Governor, a majority of business members and representatives of 14 education and training programs, local elected officials, state legislators, economic development experts, unions, and the general public. Some state boards follow a narrow mandate that is limited to the prescribed WIA functions. Other state boards take a broader policy view that includes linkages to K–12 education, post secondary education and economic development.

- **Local Workforce Investment Boards** — Local boards develop local plans, policies, and priorities for One-Stop systems and centers and certify One-Stop operators. They include a majority of business members and are chaired by employers. Workforce boards, at minimum, provide oversight to their local One-Stop centers. Active workforce boards provide community leadership on workforce issues ranging from work with schools, community colleges, economic development organizations, and the business community.

- **One-stop Career Centers** — Each local partnership is required to establish a one-stop career center system through which workforce development services are provided. One-Stop centers provide services to both individuals seeking work and to employers seeking assistance with workforce issues. Job seeker services range from self-help in resource rooms with internet connections to unemployment benefit claims to training and support services for the chronically unemployed. Services for employers range from posting individual job openings to pre-screening job applicants.

The US Department of Labor (DOL) allots funds appropriated by Congress to states once they have an approved state plan for use of the funds. Funds are provided via three distinct funding categories or “streams” based on the intended target of the services: adults, dislocated workers, and youth. (In FY 2003, there were approximately $2.5 billion available in the adult and dislocated worker funding streams that are most relevant for our discussion.) Allotments to states for the adult
funding stream are based on a formula that considers relative numbers of unemployed and economically disadvantaged persons in each state. Allotments to states for the funding stream for dislocated workers are based on a formula that considers relative numbers of unemployed persons and long-term unemployed persons in each state. The Department holds 20 percent of dislocated worker funds in reserve for various national dislocated worker purposes.

After receiving the federal allotment, Governors first reserve up to 25 percent of the dislocated worker funds for “rapid response activities” and up to 15 percent of all (adult, dislocated worker, and youth) funds for “statewide workforce investment activities.” The remaining funds are allocated to local WIBs. For the adult funding stream, this is done using the same formula used in making the allotments to states. For allocating dislocated worker funds to local areas, Governors have the authority to determine the formula used.

“Rapid response activities” are required services provided by a state or designated entity (in the event of a mass layoff or natural disaster that results in mass job dislocation) in order to assist dislocated workers in obtaining reemployment. Other “statewide” activities are “allowable” (not required), and these include providing capacity building and technical assistance to local areas as well as implementing innovative incumbent worker training programs. In addition, in Section 665.320 (a, b, d), the regulations specify that the state may:

- “…identify strategies for the aversion of layoffs;
- develop and maintain mechanisms for the regular exchange of information relating to potential dislocations;
- collect and analyze information related to economic dislocations, including potential closings and layoffs; and
- devise and oversee strategies for:
  1. layoff aversion, such as pre-feasibility studies of avoiding a plant closure
  2. incumbent worker training
  3. linkages with economic development activities at the federal, state, and local levels, including Federal Department of Commerce programs and available state and local business retention and recruitment activities.”
Local WIBs have the authority to use WIA funds to provide training services to persons earning up to an income level that they have determined will provide self-sufficiency in the local area. Numerous local WIBs have set high self-sufficiency levels (i.e., $18-$25 per hour) in order to use WIA funds for incumbent worker training, as part of a broader strategy for the region. In this scenario, workers earning less than the self-sufficiency wage would be eligible for WIA training funds.

As discussed later in the report, WIA is undergoing Congressional reauthorization at the present time. Some of the provisions noted above may change as a result of the reauthorization process.

**H-1B Technical Skills Training Grant Program**

In the late 1990s, employers complained of shortages of workers with higher-level skills in information technology, the sciences, and other fields. To find workers with these skills, employers often turn to foreign workers, who enter the United States with H-1B visas to work in specialty occupations.

In 1998, Congress passed legislation raising the limit on the number of high-skilled workers allowed to enter the United States. The statute also imposed a $500 fee on employers — later raised to $1000 — for each foreign worker for whom they applied. Fifty-five percent of the funds collected are provided to the US Department of Labor for technical skills grants to increase the supply of skilled workers in occupations identified as needing more workers. The National Science Foundation receives 22 percent of the funds to distribute as scholarship grants to post-secondary schools for low-income students in computer science, engineering, and mathematics degree programs.6

DOL uses 75 percent of the funds to award the skill grants to local workforce investment boards, created under WIA to establish local workforce development policies, thereby linking the skill grant program with the workforce system. The Boards use the funds to provide training to employed and unemployed people. The remaining 25 percent of DOL funds for this purpose are awarded to business partnerships that typically focus on incumbent workers. These partnerships must

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The Manufacturing Extension Partnership and Workforce Development

H-1B Technical Skills Training Grant Program/Conclusion

consist of at least two businesses or a business-related nonprofit organization that represents more than one business. The partnership may also include any educational, labor, faith-based or community organization, or WIB.

Over the last two years, DOL has faced increasing pressure from business interests and Congress to target funds more toward the high-skill individuals like those occupations typically sought by employers applying for H-1B visas. DOL responded by modifying the Solicitation for Grants Announcement (SGA) notice accordingly. Subsequent awards have reflected this priority more so than grants awarded in the program’s early years. Although MEP centers have been subcontractors to H-1B grantees since program inception, the breadth and depth of centers’ involvement has increased with this change in focus. Note: On January 14, 2004, ETA published a Federal Register notice canceling the program’s SGA “...in order to reconsider...goals and proposals.”

Conclusion

This report provides the first systematic look at how MEP centers and workforce organizations are collaborating to address workforce needs among client manufacturers. We hope that this information can inform similar efforts across the nation.
III. METHODOLOGY

NIST MEP engaged the National Center on Education and the Economy (NCEE) in order to collect information systematically about these current practices, to organize the information into usable form, and to analyze the findings and assess the potential for broader replication of successful approaches. In particular, it was deemed important to organize the information collected into a logical framework that would provide insights for understanding current practice, for further analysis of those practices, and for subsequent decision-making. NCEE chose to partner on this work with the Corporation for a Skilled Workforce (CSW), another organization with deep expertise in workforce development and the MEP program.

NCEE/CSW engaged in extensive discussions with NIST MEP staff, partners, and center staff regarding the precise information needed from MEP Center Directors in order to understand the current activities underway between MEP centers and the public workforce system, broadly defined.

NCEE also considered the most appropriate methods to solicit input from centers and to elicit the desired information. In collaboration with NIST MEP, the NCEE/CSW project team decided on a two-phase approach to the study.

The first phase involved distributing questions to all Center Directors. This was done in several steps:

- In June, NCEE/CSW staff developed questions likely to solicit the desired information. These questions were shared informally with several Center Directors to test whether they elicited that information effectively. NCEE/CSW incorporated feedback from these Center Directors into the final list of questions sent to all Center Directors.

- On July 7, 2003 MEP Director Kevin Carr sent an email to all Center Directors regarding the purpose of the study, the potential benefits, and the methodology to be employed.

- On July 9, 2003 NCEE sent the questions to the 74 Center Directors using a NIST MEP-provided list dated June 30, 2003. Center Directors were asked to respond to the two pages of questions via return email by July 25. (These questions are found in the Appendix.)
The second phase involved follow-up telephone calls in September with selected centers. This was done to clarify ambiguous responses, to collect additional information, and to gather insights from centers that had submitted particularly interesting or innovative responses. Based on the responses received, centers were divided into four categories. These were centers that:

- Used workforce funds from a variety of sources;
- Received H-1B funds that originated with the US Department of Labor;
- Received state customized training funds; and
- Have not received either federal or state workforce funds.

The project team selected a cross section of centers from each category for follow-up phone interviews. The following table identifies the centers called by category.
Table 1: MEP Centers Involved in Follow-Up Calls by Category

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<th>Category</th>
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<td>Centers that used workforce funds from a variety of sources</td>
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<td>• Delaware Valley Industrial Resource Ctr</td>
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<td>• Hudson Valley Technology Devt Center</td>
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<td>Centers that received H-1B funds</td>
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<td>• Virginia Philpott</td>
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<td>Centers that received state customized training funds</td>
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IV. FINDINGS

In all, forty-nine centers responded to our electronic request for information. This represents a response rate of more than 66 percent. In the second phase, as noted above, follow-up phone calls were conducted by NCEE/CSW with 19 centers. The following paragraphs highlight some of the main findings drawn from both the written responses as well as the follow-up phone interviews. The findings are organized into the following categories:

- Sources of Workforce Funding
- Services Delivered
- Funding Flow and Process
- Impact

Sources of Workforce Funding

Sources of workforce funding fall into two main categories: (1) funds from federal sources including ETA direct grants, federal funds obtained through a state agency or local workforce board; and (2) funds from state sources including general fund training grants or other state funds dedicated for employer training. The study found that:

- Nearly 90 percent of centers reported providing services to clients that were paid for, in full or in part, by federal, state, or local workforce funds. The vast majority of centers that responded indicated that federal, state, or local workforce funds had paid for, in full or in part, services delivered by the center. This suggests that MEP centers are proficient at identifying and accessing workforce funds, and integrating them into the delivery of services to small manufacturers. Follow-up phone conversations indicated that the funds flowed both directly to centers for use with small manufacturing enterprises (SMEs), as well as to the small manufacturers themselves, who used the funding to offset the costs of services delivered.
Findings
Sources of Workforce Funding

Table 2: Has your center provided any training or consulting services to manufacturing clients that were paid for in full or part via federal, state or local workforce funds?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>0%</td>
</tr>
</tbody>
</table>

- Over the last three years, 62 percent of centers reported accessing more than $400,000 in workforce funds to support these activities. In the last three years, nearly two-thirds of responding MEP centers reported accessing more than $400,000, either directly or through delivery of services to clients, to underwrite the cost of projects with manufacturers. More impressive is that a full 85 percent accessed at least $200,000 during this time. Moreover, this amount likely understates the actual amounts accessed, because the question forced Center Directors to respond in categories in which “more than $400,000” was the highest amount that they could report. Information gathered from follow-up phone interviews corroborates this likely understatement.

- Nearly half of responding MEP centers reported accessing — either directly or through delivery of services to clients — more than $200,000 in funds in the last year, while an additional 21 percent reported accessing between $100,000 and $200,000. Forty-nine percent of MEP centers accessed over $200,000 during the last year. Nearly two out of three centers reported accessing at least $100,000 during that time. As noted above, this amount likely understates the actual amounts accessed, based on information obtained from phone interviews.
Findings

Sources of Workforce Funding

• Centers used state training funds more than twice as often as any other workforce funds for a wide range of training and related consulting services. As noted in Table 3, MEP centers tapped state training funds far more frequently than any other workforce funds for a wide variety of services delivered to manufacturers. For instance, when asked about funds used to support lean manufacturing training, responding centers indicated that they used state customized training funds 42 percent of the time, on average. Centers reported using H-1B training funds 19 percent of the time, and “other” sources 14 percent of the time. In phone interviews, the most frequently cited reason was the centers’ ability to use these state funds to match funds available from NIST.

H-1B training funds from the US Department of Labor, which centers typically accessed as subcontractors, were used about half as often as state customized training funds. WIA (federal) funds, obtained through state workforce entities, constituted the next most frequently used funds across the board. However, funds from “other” sources were used more often for lean manufacturing and ISO 9000 training activities. Finally, WIA (federal) funds through local workforce agencies, and state economic development agency funds, registered lowest in relative importance, though not insignificant in magnitude.
Source of Workforce Funding/Services Delivered

Table 3: Proportion of Workforce Funds Used to Provide Various Services to MEP Center Clients

<table>
<thead>
<tr>
<th>Source of Funding</th>
<th>Lean Mfg Training</th>
<th>Lean Implementation</th>
<th>ISO 9000</th>
<th>Other Process Improvement Training</th>
<th>Occupational/Technical Skill Enhancement</th>
<th>Basic Skills Training</th>
<th>ESL</th>
</tr>
</thead>
<tbody>
<tr>
<td>State customized training funds from state workforce agency</td>
<td>42</td>
<td>38</td>
<td>40</td>
<td>40</td>
<td>44</td>
<td>44</td>
<td>39</td>
</tr>
<tr>
<td>WIA (Federal) funds through state workforce agency</td>
<td>12</td>
<td>11</td>
<td>14</td>
<td>16</td>
<td>8</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>WIA (Federal) funds through local WIB</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>13</td>
<td>8</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>H-1B training funds from US Department of Labor</td>
<td>19</td>
<td>24</td>
<td>23</td>
<td>22</td>
<td>24</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>State economic development agency funds</td>
<td>7</td>
<td>7</td>
<td>2</td>
<td>9</td>
<td>12</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Other sources of funds</td>
<td>14</td>
<td>16</td>
<td>16</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Services Delivered

*MEP Centers provided a wide range of services using workforce funds.*

As noted in Table 3, MEP centers delivered a wide range of services to manufacturers using workforce funds. These services included lean manufacturing training, assistance with lean implementations, ISO training, other process improvement training, occupational/technical skills enhancement, basic skills training, training in English-as-a-Second-Language, and other services. Funds are also used to underwrite awareness sessions that are used to get companies “in the door.” In some states, funds also can be used to pay for organizational assessments as well as training.
Findings

Funding Flow and Process

The phone interviews, and subsequent conversations with center staff, suggest that this list of services delivered with support from workforce funds represents only a fraction of the activities underway. Section IV provides numerous examples from centers of creative strategies, services, and collaborations between MEP centers and workforce entities that tell a richer story about the nature of these cooperative ventures.

Funding Flow and Process

MEP centers serve as both primary grant recipients of the workforce funds and as subcontractors on projects, in relatively equal proportions.

According to the responses received from Center Directors, MEP centers receiving workforce funds serve as the primary contractor or grantee 45 percent of the time, and they are subcontractors about 39 percent of the time. Centers serve in some other relationship to the funding agency about 16 percent of the time.

Table 4: MEP Centers’ Relationship to Provider of Workforce Funds

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Percent Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary contractor/grantee</td>
<td>50%</td>
</tr>
<tr>
<td>Subcontractor</td>
<td>45%</td>
</tr>
<tr>
<td>Other</td>
<td>15%</td>
</tr>
</tbody>
</table>

Workforce funds generally flow to MEP centers using two paths. First, workforce funds can go directly to MEP centers as a primary contractor or grantee for their use in delivering services to small manufacturers. In California, for example, the California Manufacturing Technology Center (CMTC) negotiates a grant to work with its customer base through a process developed over time with the state agency.
Second, workforce funds flow directly to manufacturers for investing in skills development that will enhance productivity or quality, and these companies engage MEP centers to deliver agreed-upon services. The flow of funds through either of these paths depends on several factors, including the origin and nature of the workforce funds and constraints associated with the use of those funds, the priorities and preferences of the public agency that is responsible for the funds, the MEP center’s relationship with the funding agency, the employer’s desire to control the funds and associated activities, and a host of other factors. In Delaware, for example, funding is through a portion of the state payroll tax. Firms apply directly to the state, often with the center’s assistance.

When MEP centers act as the primary contractor, this typically refers to situations where the MEP center receives funds directly from a federal, state or local government entity such as a Department of Labor or Economic Development, Employment Security Commission, or WIB. Often, the funding results from a competitive process whereby the MEP center responds to a request for proposals issued by that public entity; satisfactory proposals are judged to be of sufficient quality to meet criteria established that further the public agency’s intended objectives. Centers that receive large amounts of state workforce funds have developed close working relationships with the state departments that fund the work.

When acting as a subcontractor, MEP centers are engaged by both manufacturing clients and other service providers such as community colleges to deliver a wide range of services within their areas of core expertise, as noted above. In many such cases, the subcontractor agreement is built on longstanding relationships with the manufacturer or other service provider. Indeed, MEP centers often work closely with the manufacturer to diagnose needs, and assist the client in accessing and/or securing workforce funds to implement recommended projects and underwrite the costs of those projects.

**MEP Centers exhibit entrepreneurial behavior to find new sources of funds that will support their work.**

Thirty-five percent of respondents indicated that their workforce funds came through relationships established through the agency that provides their state match for NIST MEP funds. This suggests that MEP centers are entrepreneurial since over 60 percent receive workforce funds from sources other than the host
Findings

Funding Flow and Process

agency or agency that provides their state match. Evidently, MEP Centers are skilled at identifying opportunities and building the relationships necessary to learn about and acquire workforce funds derived from other sources. Specifically, center respondents cited responding to RFPs 28 percent of the time, and another 35 percent cited “other” ways in which the relationships were established. Some of the most successful have developed working relationships with community colleges and within state departments over many years.

During the phone interviews, respondents provided additional insight into the many ways in which the relationships were established. In some cases, states encouraged leveraging funds from multiple sources. Others developed relationships with agencies that are willing to invest in objectives similar to those served by MEP, obtained referrals through partner organizations, and received direct congressional earmarks.

Table 5: How was the relationship with the funding agency(ies) established?

<table>
<thead>
<tr>
<th>Relationships</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same agency that provides my state match</td>
<td>40%</td>
</tr>
<tr>
<td>Respond to RFP</td>
<td>35%</td>
</tr>
<tr>
<td>Identify opportunity for mutual benefit</td>
<td>30%</td>
</tr>
<tr>
<td>Other</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>0%</td>
</tr>
</tbody>
</table>

Centers that did not use workforce funds cited a wide variety of reasons for not pursuing these funds.

Based on discussions in the phone interviews and responses to the written questions, it is clear that MEP center staff do not have a clear understanding of distinctions among the myriad sources of workforce funds, the constraints upon their use, and the opportunities for pursuing additional workforce funds. In response to the initial questions, nearly one-third of centers indicated that they did not understand workforce funds or how to access them. Only 9 percent said that it
“was too much hassle,” which would have suggested that the effort required did not justify the potential results. Another 9 percent of center respondents reported that there was “not sufficient demand among clients.” Subsequent telephone interviews suggest that, in these cases, centers and their clients did not have an accurate picture of the ways in which workforce funds could be used to accomplish activities of mutual interest.

Impact

Although centers reported that they could produce impact data resulting from the work supported by workforce funds, and they are willing to share those data, there are numerous difficulties in isolating the effects attributable to the projects supported by workforce funds alone.

Nearly three-quarters (74 percent) of centers reported that they could produce impact data resulting from the work supported by workforce funds, and even more (91 percent) expressed willingness to share those data. However, there are numerous difficulties in reporting impact data that result directly from projects that involve the use of workforce funds. First, many centers reported difficulty with isolating the impact of the projects involving workforce funds specifically. In many cases, the workforce funds support one component in a series of projects with a client manufacturer, or an initiative targeted on a subset of workers. The NIST survey data report impact from the entire project or series of projects, not only those using workforce funds. Since the stated impacts may refer to the effects of multiple projects with the client, it is impossible to separate out the impact of the training funds versus the technical assistance, consulting, and related services received by the client.

Centers did identify instances where the impact of projects involving workforce funds can be isolated. However, in many cases, these centers reported that many of these projects have been initiated only recently, and it is too early to assess impact.

With those caveats, to the extent that centers could ascertain impact from projects involving workforce funds, the results have been impressive. For instance, the Oklahoma Alliance’s projects funded by the state’s Employment Security Commission (see next section) using federal WIA funds generated impacts, for the state’s investment of $100,000, that included 94 new jobs, $7 million in cost savings, and $20 million in sales increases. Most state workforce agencies have no
Findings

Impact

experience with metrics that capture impact on the business, and so they were quite pleased with this return-on-investment.

Centers reported widely-differing experiences in terms of the numbers of their manufacturing clients using workforce funds.

Of the 28 centers that responded to this item, more than half (16 centers) reported that they had used workforce funds to serve up to 50 or fewer companies, 12 centers reported serving 20 or less. The remaining centers’ responses were scattered across a wide range, including up to several hundred companies served with workforce funds. This suggests either that the potential for helping manufacturing clients to use workforce funds is relatively untapped, or that the instances where it makes sense to use workforce funds as part of a client solution are somewhat uncommon.

In general, the centers accessing significant amounts of state workforce funding appeared to use these funds with larger numbers of clients than centers using other types of workforce funding. Based on phone interviews, some centers were able to leverage workforce funding support for more than half of their manufacturing customers. In some instances, state funds were used to develop special programs with far-reaching impact. For example, in Illinois, the Illinois Manufacturing Extension Center (IMEC) established a combination of original equipment manufacturer (OEM) supply chain programs with funding from Boeing, the state, and participating firms.

Aggregate impacts reported showed a median of more than 1500 jobs created or retained, $3.4 million in increased private investment, and $5.7 million of sales retained or increased resulting from efforts involving workforce funds.

As noted above, centers reported difficulty in separating out impact derived from projects including funding from workforce sources from those projects that did not involve the use of workforce funds. Moreover, the question did not specify a time period, asking instead about “aggregate impacts.” For these reasons, and because the data are based on a wide variety of types of projects supported by workforce and other funds, these results regarding reported impact should be interpreted with caution. Having said that, centers reported that the projects using workforce funds generated considerable impact with regard to jobs created and retained, increased private investment, and sales retained or increased.
V. EXAMPLES OF CREATIVE STRATEGIES

Examples of Creative Strategies

In the process of gathering the data reported above, we came across numerous examples of creative approaches used by MEP centers with workforce partner organizations. Some of these are highlighted in the vignettes below.

Oklahoma Alliance for Manufacturing Excellence

Under a competitive RFP process, the Oklahoma Alliance for Manufacturing Excellence received $100,000 in state Workforce Investment Act funds from the Oklahoma Employment Security Commission each of the last two years to work with manufacturers on lean implementations. The Alliance used these funds with twenty companies each year ($5000 per company) to assist companies in getting “over the hump” from attending training in the classroom on lean manufacturing to in-plant lean manufacturing implementations generating considerable impact.

The twenty manufacturers matched the $100,000 grant with $275,000 of in-kind and cash resources. In aggregate, the manufacturers reported jobs created, cost savings, and sales increases as noted above. In addition, one manufacturer that already had shifted some assembly operations to Mexico realized cost savings sufficient to justify keeping operations in Oklahoma, to the benefit of the workers, community, and local suppliers.

Rhode Island Manufacturing Extension Service

The Rhode Island Manufacturing Extension Service (RIMES) has a longstanding relationship with state and local workforce officials. Several staff members worked previously with workforce agencies, so they understand the mission and functioning of the workforce system. Building on existing relationships, RIMES has identified numerous benefits to linking manufacturers to the workforce system.

RIMES regularly offers the MEP lean manufacturing training courses to client manufacturers in facilities provided by One-Stop Career Centers and the Community College of Rhode Island (CCRI). This provides an outstanding opportunity for manufacturers to learn about services and resources available through One-Stops and CCRI. RIMES sought and received agreement from the
Examples of Creative Strategies

CCRI to accredit these lean courses as a way to enhance their credibility and to tap into funds available for Individual Training Accounts (ITAs), similar to vouchers, under WIA. CCRI is on the WIA “eligible training provider list” that enables both laid-off workers and incumbent workers (those earning below the locally-established wage necessary for self-sufficiency) to use these training vouchers for enrolling in the lean courses, and they can earn academic credit.

The Rhode Island Human Resource Investment Council recently has agreed to fund a manufacturing “boot camp” for laid-off workers. This program provides basic skills for the manufacturing workplace and general awareness of manufacturing opportunities in the region. Individuals and companies can take advantage of this opportunity to increase the supply of manufacturing workers familiar with lean principles available in the local labor market.

RIMES has been particularly successful in helping companies access state customized training funds for their workers. Without assistance from an intermediary like RIMES, it is very difficult for small manufacturers to navigate the application processes and resources available. These funds have facilitated company transitions to new technologies, software, equipment, and production processes designed to increase productivity.

Hudson Valley Technology Development Center

Hudson Valley Technology Development Center (HVTDC) provides an outstanding example of a center that has used federal, state and local workforce funds to support a wide variety of services to manufacturers. The center has achieved success in defining companies’ needs and finding the available workforce funds to underwrite the cost of addressing those needs. The services provided to clients using workforce funds range from English-as-a-Second-Language training through training on new heavily automated equipment to assistance with process improvement techniques.

HVTDC worked in partnership with the Westchester County WIB and four local manufacturers on an H-1B award from the US Department of Labor. The center helped to assess the companies’ needs, write the proposal, and deliver training related to new operations software and lean manufacturing processes. The local
WIB provided additional funding to support services for participating companies beyond the scope of the H-1B training grant — an increasingly common occurrence as local WIBs become interested in using flexible funds to meet business needs. The center has found local WIBs helpful in identifying funding opportunities that meet clients’ needs. For instance, some WIBs have sought and received authority to use WIA funds to support worker training for individuals earning up to $20 or even $25 per hour. In addition, many local WIBs have designated staff to focus on the manufacturing sector in particular.

The center recently received funding (along with numerous other MEP centers in New York) from the state Department of Labor for “Accelerate New York.” Working with two local WIBs, HVTDC will use resources from this initiative to help small- and medium-sized businesses develop, update or modify their business plans and identify and prioritize related staff training needs. This project builds on results from the Strategic Training Alliance Program, an earlier $32 million initiative of New York DOL and the state’s economic development agency (Empire State Development), which HVTDC used to meet the training and skills-upgrading needs of businesses needing technology-savvy workers.

**Oregon Manufacturing Extension Partnership**

Over the last year, the Oregon MEP has observed an increased interest among the leadership of the state workforce board and the Department of Community Colleges and Workforce Development toward serving the needs of employed workers. Working closely with local WIBs and community colleges, OMEP has received state funding for conducting lean manufacturing training and lean implementation projects. Through a grant from Portland Community College, the center is combining training in lean processes and English-as-a-Second-Language instruction for local manufacturing workers. In addition, the state workforce and economic development agencies have funded a large supply chain project working with Freightliner and ten suppliers. The success of these efforts is based on good relationships at the state level and with community college partners and the Oregon Institute of Technology, which hosts the center.

Recently, the Oregon MEP was a partner on an H-1B grant awarded to the local WIB for the Salem region (known as the Enterprise for Employment and Education
Examples of Creative Strategies

or E3), along with the Salem Economic Development Corporation and Chemeketa Community College. The project team convened a group of manufacturers (including high tech manufacturers such as SUMCO, Suntron, and Intel as well as smaller local manufacturers) to increase workforce training through the development of an Advanced Manufacturing Academy. Through the Academy, the center will assess participating companies’ technical capabilities and offer Lean 101 and Value Stream Mapping classes to enhance productivity.

Catalyst Connection (Pittsburgh)
Catalyst Connection has found workforce funds available through the H-1B training program to be particularly helpful. Working as a subcontractor to the Westmoreland Fayette WIB and Robert Morris University, the center has worked with manufacturing clients to increase high school students’ interest in manufacturing careers. The program received more than 400 student applications over the last two summers, and they have placed 150 students in summer internships during that time. Indirectly, the center has worked with 1000 small manufacturers on this project, with about 100 directly involved in the effort. Catalyst Connection sees this project building relationships for subsequent H-1B projects that address issues broader than increasing the pipeline of skilled manufacturing workers, such as defining skill needs for information technology workers in advanced manufacturing. Catalyst Connection has used state training funds to organize consortia of small manufacturers to serve common needs and to deliver specialized training (e.g., for lean manufacturing, web development and design, leadership and supervisory training). They anticipate pursuing additional state funds to support numerous initiatives, including more advanced levels of training for supply chain management and development, and improving processes to suppliers and OEMs.

New Hampshire MEP, Florida MEP, Maine MEP, Massachusetts MEP (MEP Management Services Incorporated)
MEP Management Services Incorporated (MSI) has been successful in securing H-1B workforce funds for numerous MSI centers since the H-1B program’s inception, in each case partnering with the local WIB. New Hampshire received an award in 2001, and Florida received awards in 2002 and 2003. In the fall of 2003, Maine and
Examples of Creative Strategies

Massachusetts received funding under an RFP well-suited to MEP centers that specifically targets workers needing skills in advanced manufacturing, biotechnology and biomedical research and manufacturing, innovation services, and other industries.

For instance, Maine MEP is launching a “Technical Skills Training Opportunity” under this award that will ensure that Maine’s highly skilled engineers and scientists can keep abreast of emerging manufacturing technologies. Moreover, it will assist these employees in manufacturing companies to access cutting edge technology developed by nationally-recognized laboratories and universities. Following the technology transfer, engineers and professional staff will be trained in and positioned to transform those technologies into globally competitive, first generation commercial products. Participating companies, particularly small and mid-sized manufacturers, will also be assisted to become suppliers to defense contractors through the New England Defense Manufacturing Supply Chain Database.

MEP MSI centers have found that participating in federal H-1B projects paves the way for subsequent state workforce grants. Recruiting and convening companies with mutual interests, assessing needs, and overall project management roles provide a good fit for MEP MSI centers. Building relationships with state labor officials and local WIBs also helps provide ongoing access to information, data, and resources that can assist other manufacturing clients.

In addition, in 1999, the Maine Department of Labor received a US DOL Incumbent Worker System Building Demonstration grant to develop a Workforce Development Consultant certification course. Maine DOL worked with the Maine MEP to develop the course, based in part on MEP’s Lean Manufacturing 101. The course helped state agency staff (in adult education, technical colleges and universities, One-Stop Career Centers, and other agencies) understand the environment affecting the skill needs of businesses and workers; explore the elements of workplace needs assessment; and provide a framework for identifying necessary skills, education, and training in response to needs. The course consisted of 32 hours of classroom instruction plus outside research and fieldwork. Over 100 people completed the certification, and participants received Continuing Education Units through the University of Maine.
Examples of Creative Strategies

Alaska Manufacturers’ Association

Alaska state WIB officials learned about the capability of the MEP system at a regional workforce meeting in California last winter. The state was interested in using the Alaska Manufacturers’ Association (AMA) Lean Enterprise services to improve the state Department of Labor’s process for processing and approving state DOL training grants for discretionary fund grant proposals.

AMA reviewed the existing situation, and found multiple processes in multiple locations, a complex organizational structure, and inefficient steps. Working with agency staff, they launched a value stream mapping of the grant approval process in each location. Ultimately, as a result of this work, the Department combined the multiple processes into one process for reviewing grant proposals, in one location. Removing the inefficiencies in the process resulted in reduced administrative costs, greater accuracy, and quicker turnaround time for the agency.

Illinois Manufacturing Extension Center

When Boeing was considering locations for its corporate headquarters, a training support grant program sponsored by the Illinois Department of Commerce and Economic Opportunity’s (DCEO) was recognized as a valuable incentive. With over 600 first tier suppliers in Illinois, Boeing felt that the funds could improve the productivity and competitiveness of these suppliers, while strengthening and expanding their supplier-training program.

Boeing selected the Illinois Manufacturing Extension Center (IMEC) as the primary contractor to assist in the delivery and administration of the Supplier Development Program funded by DCEO. IMEC is responsible for overall program administration, coordinating marketing efforts, subcontractor selection, and financial management. IMEC contracts with the Chicago Manufacturing Center for training the Chicago six-county area and with other training subcontractors who deliver specific training courses. An RFP process is used to select training providers other than IMEC and CMC. IMEC assists in screening RFP respondents, with Boeing approving the specific subcontractors for individual courses. Over 55 courses were offered to suppliers in the last fiscal year.
Boeing also supports follow-up on-site assistance to key suppliers to address critical performance challenges. Boeing measures the success of its manufacturing suppliers in terms of percentage of parts delivered on time, quality acceptance rates, supplier affordability, and customer satisfaction. Boeing monitors these and other measures appropriate to specific suppliers both before and after training to evaluate training program effectiveness. For those suppliers that receive training on-site, IMEC administers a follow-up impact assessment survey to document resulting performance improvements.

DCEO provided supplier training support funds for the supplier initiative of $733,000 for FY 2002–2003 and $900,000 for FY 2003–2004. These funds cover 50 percent of the cost of training provided to Boeing suppliers and an additional 15 percent for program administration. Including costs paid by suppliers, the total funding for the FY 2002–2003 supplier development program was about $1.4 million. The FY 2003–2004 program is expected to have a total funding level of about $1.7 million.
VI. IMPLICATIONS

The results from the electronic and telephone responses, as well as the illustrations from centers above, send a clear message. Workforce development organizations and MEP centers are collaborating to pursue mutually beneficial activities, in ways that fulfill the vision expressed by public leaders, in myriad areas. However, we encountered numerous constraints that could impede reaching the full potential of this partnership in the near term. These include:

- Confusion among many MEP centers about the different workforce partners and programs, the sources of workforce funding, and how to develop mutually beneficial relationships;
- Uncertainty among MEP centers about matching requirements, and uncertainty about which workforce funds (under what circumstances) can be used for NIST MEP match;
- Decreasing funds available for state customized training programs;
- Uncertain status of H-1B program;
- Uncertainty about the direction of WIA reauthorization and NIST MEP funding.

Each of these constraints is discussed briefly in the following paragraphs.

There is confusion among MEP Center Directors and staff about available sources of workforce funding — We heard from MEP center leadership and staff that they do not fully understand the different sources of federal and state workforce funding, and how and under what circumstances to access these programs. This corroborates recent work (supported by the Rockefeller Foundation in several states) that found multiple workforce funding streams, multiple programs, and little clear policy guidance on how to connect them for job seeker and employer customers.

While the particular circumstances of mutual interest and funding availability vary widely from one state and community to the next, it is clear that MEP centers are missing opportunities to align with the responsible agencies and use these workforce resources to achieve mutual objectives. A systematic assessment of each
possible source of funds in each community and state provides the best approach to identifying opportunities. An understanding of the different sources of workforce funding is an essential prerequisite to conducting such an assessment. Developing and nurturing relationships among WIBs and agency officials at the local and state levels can accelerate this process.

There is uncertainty among MEP centers about which workforce funds can be used to match funding from NIST MEP — In order to receive federal funds from NIST, MEP centers must provide matching funds from public and/or private sources. We encountered considerable differences of opinion about which workforce funds can be used to match federal funds from NIST to MEP centers. Obviously, workforce funds that can count as match are seen as more desirable to centers.

While we did not formally pursue this question in all instances, it appears that most centers counted state training funds (whether received by the center or by the manufacturing client for the center’s work) as match. Opinions were mixed regarding whether to count federal funds (from WIA or the H-1B training program) passed through state and local agencies or WIBs as match. Others said that the criterion they used was: “who signs the check?” In other words, which entity engages the MEP center for the work? In this scenario, if a public agency pays the bill to an MEP center for work performed, those funds cannot be used for match. If the same public agency makes a grant directly to SMEs, and the manufacturer engages MEP and pays for services delivered, then they felt that centers can count those funds as match for NIST purposes.

Addressing this question consistently across centers is important for program compliance and program design reasons, and NIST MEP should provide clarification to minimize confusion in this area. Of course, centers want to comply with existing federal law and practice regarding matching requirements. However, if the policy regarding match depends in part on the flow of funds, centers that have an option will choose to design programs and funding flows in a manner that best suits their needs.

For instance, many centers use state customized training funds to underwrite project costs with manufacturing clients. However, centers’ role in securing these funds varies from “hands-off” (i.e., the manufacturer seeks the funds independent
of the center, then contracts with the center for service delivery) to very “hands-on” (i.e., the center works closely with the manufacturer to apply for the funds, structure the project in a manner likely to receive funding, and deliver the services). In these cases, the funds flow directly to manufacturers. In other cases, centers receive funds directly from state and local agencies, and the center allocates it among client manufacturers. Clearly, issues about match will affect decisions about the optimal flow of funds and program design.

State customized training funds are in decline — Over the last decade, most states used general fund or business tax supported programs to provide customized training to companies for incumbent worker training. These programs are highly regarded by MEP centers to support a range of projects because of their flexibility and the ability to use these funds for NIST match, in many cases. However, a recent survey\(^7\) finds that many states are reducing funding for these programs due to budget constraints. Jobs for the Future surveyed 30 state-financed programs in 16 states, and found that funding is declining for nearly three-quarters of the 30 programs studied, when recent, long-term, and projected declines are considered. Moreover, they found that 60 percent had lost some or all funding as of the most recent budget cycle, and that future budget reductions are highly likely.

Based on our follow-up conversations with centers and selected states, it appears that states where funding is provided through general fund appropriations have seen their allocations dramatically reduced. States that use tax credit or withholdings from the unemployment insurance surcharge to fund employee training have been affected also, but not as severely.

As the use of workforce resources for economic development objectives has become more widespread, numerous states have increased their use of WIA discretionary funds to allow for incumbent worker training. Since workforce funds either underwrite a portion of client costs, or provide direct support for many center budgets, access to these funds is important. But there are many other interests competing for these relatively scarce funds, and states have much discretion regarding how to allocate these resources.

H-1B training funds face an uncertain future at best within the Administration and Congress — Over the last year, MEP centers have become increasingly familiar with the H-1B Technical Skills Training Grant program operated by the US Department of Labor and the potential it holds for MEP centers-workforce collaboration. Working with local WIBs and independently, numerous centers have applied for and received H-1B funds, or are now in the process of preparing individual or group applications. As noted above, these have been large, multi-year awards involving complex projects, with the potential to support MEP priorities around advanced manufacturing and technology transfer activities in particular.

The prospects for Congressional reauthorization and continuation of the H-1B program have been declining. Some of the key provisions of the H-1B visa program contained in the American Competitiveness in the 21st Century Act of 2000 expired on September 30, 2003. Labor market conditions have changed considerably since the late 1990s, when this program was first authorized, and its political support has dissipated. Last fall, ETA cancelled planned Prospective Applicant Conferences for organizations interested in submitting subsequent proposals, while continuing to accept proposals for the more than $100 million remaining. On January 14, 2004 the Department published another Federal Register notice canceling the SGA “...in order to reconsider...goals and principles.” At this time, it is unclear how ETA intends to use the remaining funds, although it is possible that the proposed approach will allow continued collaboration between MEP centers and the workforce system.

There is uncertainty about the direction of WIA reauthorization and NIST MEP funding — The US House of Representatives and the Senate recently have passed different versions of the Workforce Investment Act as part of a process of reauthorization. Both chambers addressed issues that will impact the manner and extent to which MEP centers can partner with local and state WIBs to address workforce needs of manufacturers. For instance, the House and Senate versions both authorize explicitly the provision of incumbent worker training services, up to 10 percent of the available local funds. The Senate version cites specific allowable

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8 The Department of Labor published the Solicitation for Grants (SGA) announcement that governs the award of 75% of the available funds through local WIBs in a Federal Register notice at 68 FR 567 on January 6, 2003. Numerous MEP centers have partnered with WIBs to access these funds or serve as subcontractors delivering services. A second SGA, dated June 19, 2003, addressed the award of 25% of the funds for “business partnerships” that did not necessarily involve WIBs. DOL announced project awards December 31, 2003.
Implications

business services that can be provided and includes references to the types of organizations that should be engaged as partners, including MEP centers. If not reauthorized, WIA will continue to operate as under current law. If Congress agrees on a reauthorized version in the winter or spring of 2004, it is likely to include provisions favorable to expanded relationships between workforce organizations and MEP centers. Obviously, it will be important to watch reauthorization closely in the process of formulating strategies and next steps.

NIST MEP faces uncertainty about continued Congressional appropriations for the program. The FY 2004 appropriations bill at the conference level provided only $39.607 million, down from $106.623 million in FY 2003. It is unclear at this time how this significant reduction will affect the number of centers providing services, the services available for manufacturers, and funding levels anticipated for FY 2005.
VII. RECOMMENDATIONS AND NEXT STEPS

The findings in this study suggest that the interactions of state and local workforce organizations and MEP centers have been mutually beneficial. Manufacturing companies have benefited from the use of workforce funds to achieve important strategic objectives, enhancing the competitive position of the companies and their ability to contribute to local employment and economic prosperity. Individual workers have benefited from the transferable process improvement and skills training received that is applied immediately in the workplace to support new technologies and productivity-enhancing processes. The communities in which these workers and companies reside benefit from healthier companies able to pay higher wages with benefits to a more highly-educated workforce, contributing to a stronger local economy.

If implemented, the following recommendations will increase the prevalence and impact of these examples of collaboration between the public workforce system and MEP centers. Moreover, these recommendations will help both systems to accomplish shared objectives for job-seeker, company, and community well-being.

**Federal Level**

**Recommendation #1: NIST MEP and the US Department of Labor's Employment and Training Administration (ETA) should collaborate to identify common interests, as well as to identify opportunities that would further shared objectives** — Responding MEP centers saw the development of a partnership between the Departments of Commerce/NIST and ETA as an important step in building more collaboration at the state level. There are numerous opportunities for addressing shared objectives.

ETA’s Business Relations Group has launched a “High-Growth Job Training Initiative” that provides an opportunity for collaboration with MEP centers around expanding industries within the manufacturing sector. MEP centers could assist ETA by identifying such industries, advising on strategies for engaging these industries, convening manufacturers in targeted manufacturing industries, and ensuring that initiatives for worker skill development are aligned with company strategies for productivity enhancement. ETA and the workforce system could
Recommendations and Next Steps

Federal Level

assist MEP to ensure that developing workers’ skills in demand occupations based on industry need is an integral part of company modernization efforts.

Collaboration between the two federal agencies — Labor and Commerce — would help MEP centers, state workforce agencies, and state and local WIBs define specific roles, responsibilities, and outcomes desired as a result of working to attain mutual objectives. Federal leadership can clarify opportunities and delineate the appropriate next steps to move the relationships from the discussion stage to action to generating impact. The actions of federal partners can provide a road map for use by state and local officials.

Recommendation #2: NIST MEP and ETA should educate their respective agency staff regarding the opportunities for collaboration and encourage staff to explore them for mutual benefit — A prerequisite to enhanced collaboration is better understanding of the different agencies and programs, the history and culture of those programs, and the funding streams, statutes and regulations guiding policies and practice. Given the breadth and scope of agency functions, it is not surprising that federal workers in one agency are not always aware of the work of other, even related, agencies. NIST MEP and ETA leadership should provide information and structured training for agency staff in order to improve understanding about functions and opportunities for collaboration across agencies.

Recommendation #3: ETA and NIST MEP should use their influence with state and local officials to encourage collaboration among state and local organizations that constitute the affiliates of larger nationwide systems or networks — By virtue of the funding support provided, federal officials in NIST MEP and ETA hold important positions of influence regarding state and local behavior and practice. They should use this influence to raise awareness and encourage collaborative action.

For instance, NIST MEP and ETA could use the “bully pulpit,” regional and national meetings, research agendas, and pilot projects to heighten the awareness about their state and local networks and the opportunities for collaboration. Federal agency leaders and staff should be familiar with the opportunities as reported in this paper, and should promote these opportunities as they identify appropriate circumstances in their many contacts with state and local workforce officials and MEP centers.
Recommendation #4: ETA should support language in the WIA reauthorization process that fosters enhanced collaboration with intermediaries like MEP centers that have deep industry expertise and experience — The network of MEP centers can assist workforce organizations in moving toward a more demand-driven system. The WIA reauthorization process constitutes an important opportunity to guide state and local workforce officials regarding how the workforce system can provide services and information valued by employers. ETA should support statutory language that promotes a strong role for intermediaries, like MEP centers, and flexibility in the use of WIA funds for economic development purposes.

Recommendation #5: ETA should build on the successes of local WIBs and MEP centers in recently-funded H-1B projects — In recent H-1B awards made by ETA, there are numerous projects that involve substantial collaboration between local WIBs and MEP centers. These projects promote use of emerging technologies and production innovations among skilled workers in technology-driven manufacturing industries. Providing access to these technologies will enhance the skills of participating workers and enhance the competitive position of local manufacturers that take advantage of these innovations. For the affected communities, the H-1B investment constitutes an important economic development strategy for expanding existing companies. For all these reasons, ETA and NIST MEP should explore ways to support these projects and launch such additional technology transfer efforts with available funds.

State and Local Levels

Recommendation #1: State Workforce Development agencies, state workforce boards, and MEP centers should design processes for sharing information across organizations at the leadership and staff levels — Workforce Boards, workforce agency leaders, and MEP leadership and staff should develop on-going channels for sharing information about individual companies, industry trends, and the local economy. In the normal course of business, both workforce system and MEP center staff collect and act on information that has broad value to other service providers. This information includes anecdotal evidence gained through routine contact with employers and being active in the community, as well as original research conducted for specific purposes. Because of the relative different circles in which the economic and workforce development organizations have traveled historically,
and program and funding silos that exist, the information collected is typically not shared with others that may benefit.

This information can influence a variety of activities both in the workforce system and among MEP centers. The information can provide valuable content useful in strategic planning, affecting decisions about which segments of the employer marketplace to target, or how to design and launch sectoral strategies. The information can be useful in shaping strategies to support growing sectors of the economy as well as anticipating declining sectors and developing layoff aversion strategies. The information can also influence the approach used in the planning process itself, identifying important community or industry participants to include, or potential partners to engage.

**Recommendation #2:** State workforce and economic development agency officials should systematically inventory current funding and program activities to identify areas of potential shared interest where agency missions and goals overlap — Most state economic development organizations have efforts to attract new businesses, to support and expand businesses already in the state, and to develop small and emerging business start-ups. Workforce organizations typically seek to enhance opportunities for job seekers and to assist employer customers in meeting their human resource needs. State officials should scan current funding streams and program activities to assess the extent to which agency or program priorities and activities are aligned, or not aligned, in pursuit of common objectives across agencies and programs. The assessment should collect information about the extent to which collaboration exists across agencies and programs already, identify barriers to collaboration, and develop policies and strategies to eliminate them.

**Recommendation #3:** State workforce development boards, state agencies, and MEP centers should explore opportunities for mutual benefit, as part of their agenda to align workforce and economic development priorities — The review of current programs and activities will identify opportunities for collaborating across workforce and economic development programs and agencies. As state workforce officials strive to align their work with economic development priorities, state workforce development agencies and state workforce boards should systematically explore opportunities with MEP centers, especially around the examples presented in this report. This recommendation is particularly relevant in states that are either
merging economic and workforce development agencies, or creating hybrid councils to accomplish similar purposes.

**Recommendation #4:** Local workforce and economic development officials should initiate regional process: scan current programs and activities, identify opportunities for collaboration, between MEP centers and workforce organizations, and design and launch initiatives for furthering shared objectives — In most communities, observers find a myriad of workforce and economic development organizations, both public and private, providing a wide array of services to different and sometimes overlapping audiences. Like at the state level, a review of the region’s current programs and activities provides enhanced understanding of what is and what could be, as well as the roles and priorities of different political jurisdictions within the region. The region’s economic and workforce development officials can then plan to address gaps and opportunities that emerge from the scan.

**Recommendation #5:** At the local level, MEP centers and workforce organizations should advance shared objectives in partnership — As illustrated in the examples presented in this report, there are numerous opportunities for MEP centers and workforce organizations to collaborate. The opportunities fall under two broad organizational functions, planning and service delivery, that can be mapped across three areas that most economic developers understand well: business attraction, business expansion and retention, and entrepreneurship development.

At a minimum, workforce and economic development officials in states and communities should consider adopting some of the relatively easy, low-cost practices illustrated in the report’s examples. These include:

- Sharing information and making referrals across organizations and staffs, especially regarding opportunities for averting layoffs by delivering productivity-enhancing processes and technologies to companies;
- Seeking input from intermediaries like MEP centers in policy development decisions that affect manufacturers;
- Developing joint workforce and economic development strategies for strengthening and expanding the existing manufacturing base;
Recommendations and Next Steps

State and Local Levels

- Providing cross training of workforce and economic development staff regarding other organizations’ current programs and activities so that they might recognize opportunities for collaboration across agencies and programs, especially regarding work with MEP centers;
- Co-locating staff from different agencies and organizations, such as in the workforce system’s One-Stop centers and community colleges, especially to support joint organizational initiatives;
- Bringing staff together from different organizations to jointly deliver specific services to employers, including making marketing visits to employers; and
- Delivering MEP center courses such as lean manufacturing in the workforce system’s One-Stop centers to expose manufacturing employers to available resources.

Recommendation #6: MEP centers should systematically learn the requirements and process of the various workforce funds allocated in their states and communities, and develop strategies and alliances to foster the attainment of mutual objectives through their use — MEP centers should undertake a systematic process in order to incorporate the use of workforce funds into their arsenal of available resources when serving manufacturing clients. First, centers should learn about the different workforce funding streams and how, and under what circumstances, to access them. Second, identify how the funding streams are being used in their states and communities. Third, build relationships with the state and local agency and WIB officials who set priorities for use of these funds and make decisions about resource allocation. Fourth, educate decision-makers about the overlap in mission and potential benefits of alignment of MEP and workforce resources and expertise. Finally, propose and implement specific initiatives that illustrate the benefits of this collaboration.
APPENDIX: CENTER DIRECTOR QUESTIONS

Advancing the MEP Agenda Through Collaboration with Workforce Agencies

Please respond to each of the following issues on behalf of your MEP center.

I. Training and Consulting Services

1. Has your center provided any training or consulting services to manufacturing clients that were paid for in full or part via federal, state or local workforce funds?
   ___yes (Continue with question 2 below.) ___no (Skip to item 6 below.)
   ___not sure

2. What services were provided? (For each service noted below, please indicate the source of the funds using the numerical code 1-6 as specified.)

Funding source codes:

- State customized training funds from state workforce agency
- Workforce Investment Act (federal) funds through state workforce agency
- WIA (federal) funds from local Workforce Investment Board
- H-1B visa training funds from the US Department of Labor
- State economic development agency funds
- Other _______________________________________________________

___Training in lean manufacturing ___Basic skills training
___Lean implementations ___English as a Second Language training
___ISO 9000 training
___Other process improvement training
___Training for occupational skills enhancement
___Other _______________________________________________________

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Appendix: Center Director Questions

3. What is the estimated aggregate value of the funds provided for this work:
in the most recent year? over the last three years?
___less than $25,000 ___less than $50,000
___$25,000-50,000 ___$51,000-100,000
___$50,001-100,000 ___$100,001-200,000
___$100,001-200,000 ___$200,001-400,000
___more than $200,000 ___more than $400,000

4. What is your center’s relationship to the funding provider(s)?
___Prime contractor /grantee ___Subcontractor
___Other ____________________________________________________________

5. How was the relationship with the funding agency(ies) established?
___Same agency that provides my state match
___Responded to RFP ___Identified opportunity for mutual benefit
___Other ____________________________________________________________

6. If your center has not collaborated with federal, state or local workforce
agencies, why not?
___No demand among clients ___Too much hassle
___Don’t understand the workforce resources or how to access them
___Other ____________________________________________________________

II. Impact

1. Does your center have impact data from the services provided?
___yes ___no ___not sure

2. Are you willing to share the aggregated data?
___yes — If yes, who should be contacted to obtain the data? ____________
___no ___not sure
Appendix: Center Director Questions

3. What is your estimate of the aggregate impact of these efforts on:
   ______jobs ______private investment ______sales increased/retained

4. What is your estimate of the aggregate number of firms that have benefited?
   _______________________

III. Contact Information
For purposes of follow-up as needed, please provide name and email address for each of the following center staff, if applicable:

Respondent: ___________________________________________________________

Person knowledgeable about this work: _______________________________________

Center Workforce/HR/training specialist: _________________________________

Please return this form to Mark Troppe at mtroppe@ncee.org. If you have any questions, please contact Mark via e-mail or at 202-378-2195. Thank you for your assistance.