

MAINE STATE LEGISLATURE

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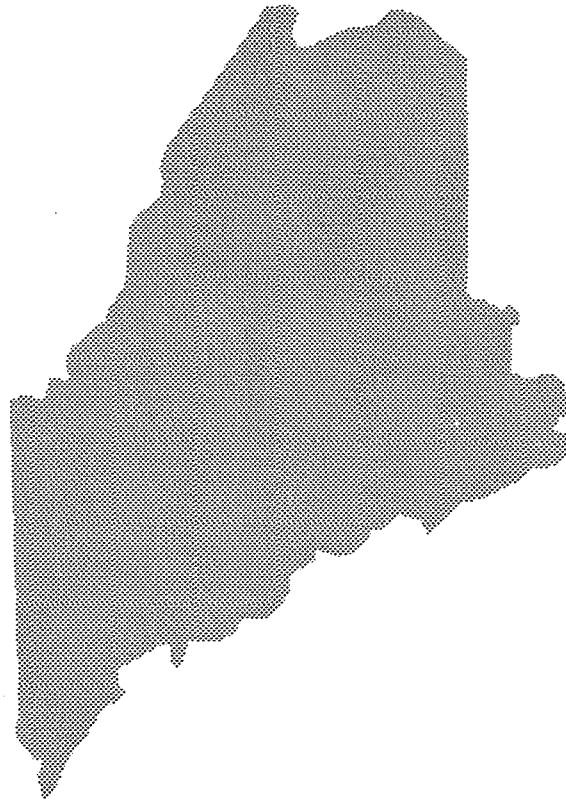


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Manufacturing Modernization Program

*Helping Maine's small and medium sized manufacturers grow more competitive
by facilitating the delivery of quality modernization services through:*

*"Direct Outreach"
"Network formation"
"Coordination"*



Submitted to:
Technology Reinvestment Project
June 30, 1994

Submitted by:
Maine Science and Technology Foundation

In Partnership with:
Center for Technology Transfer
Maine Metals Products Association
Maine Technical College System
Modernization Partnership

TRP Cover Sheet S-1

TRP USE ONLY

1. Proposal Title

Manufacturing Modernization Program for the State of Maine

2. Please check one:

- A. Technology Development
 B. Technology Deployment

3. Proposal Team Principal Point of Contact (Name, Organization, Address)

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4. FOR TECHNOLOGY DEVELOPMENT ONLY:

Technology Focus Area. Select only one:

- A. High Density Data Storage Systems
 B. Object Technology for Rapid Software Development and Delivery
 C. Interoperability Testbeds for the NII
 D. High Definition Systems Manufacturing
 E. Low-cost Electronics Packaging
 F. Uncooled Infrared Sensors
 G. Environmental Sensors

5. FOR TECHNOLOGY DEVELOPMENT ONLY: Select ONE Statutory Program:

- Defense Dual-Use Critical Technology Partnerships
 Commercial-Military Integration Partnerships
 Defense Advanced Manufacturing Technology Partnerships

Cost Summary	6. Performance Period (Months)	7. Total Projected Cost of Proposed Effort	8(a). Cash Cost Share from Proposers	8(b). In-kind Cost Share from Proposers	9. Total Cost Share from Proposers 8(a)+8(b)	10. Total TRP Funds Requested (7-9)
a. Base Program	12	1,942,447	314,100	671,300	985,400	957,047
b. Option 1	13-24	2,647,852	618,065	713,152	1,331,217	1,316,635
c. Option 2	25-36	2,881,338	717,509	788,275	1,505,783	1,375,555

11. Abstract

The Maine Science and Technology Foundation, in partnership with the Maine Metals Products Association (MMPA), the Center for Technology Transfer (CTT), the Maine Technical College System and a consortium of modernization service providers, will create and administer a new Manufacturing Modernization Program (MMP) for the State of Maine. MMP will help Maine's 2378 small and medium-sized manufacturing firms grow more productive and competitive. MMP will build needed capacity in three areas: direct outreach to firms; formation of cooperative networks among firms to maximize delivery of modernization services; and coordination of all available modernization services. It will do so through sector-based Manufacturing Outreach Centers (MOCs), a Central Program designed to ensure coordinated delivery of high quality services; and through Field Offices of the Central Program in areas that do not possess a high enough concentration of firms to warrant an MOC. This strategy employs experienced field agents to work directly with firms. TRP funds will be used to implement the first year of the program by supporting the development of the core capabilities of the Central Program, the first MOC in Portland, and the first Field Office in Caribou. CTT, in partnership with MMPA, will sponsor and operate the Portland MOC which will serve approximately 1187 firms within a 60-mile radius and 550 metals and electronic firms statewide. The Caribou Field Office will serve 210 firms. Eventually, MMP will provide support across Maine's entire manufacturing population through 2 MOCs and 3 Field Offices. The total program costs are expected to be approximately \$1.94 million over the first 12 months of the project.

TRP Participant Sheet S-2

1. Proposal Title:

Manufacturing Modernization Program for the State of Maine

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10. Please check **All** the boxes below that apply and enter Standard Industrial Classification (SIC) code:

- | | |
|--|--|
| a. <input type="checkbox"/> Private Individual (Not part of an organization) | k. <input checked="" type="checkbox"/> Not-for-profit Organization |
| b. <input type="checkbox"/> Commercial Firm (majority of sales non-defense) | l. <input type="checkbox"/> FFRDC |
| c. <input type="checkbox"/> Defense Firm (majority of sales defense) | m. <input type="checkbox"/> Government-Owned, Government Operated |
| d. <input type="checkbox"/> Small Business | n. <input type="checkbox"/> Government-Owned, Contractor Operated |
| e. <input type="checkbox"/> Small Disadvantaged Business | o. <input type="checkbox"/> Department of Defense Laboratory |
| f. <input type="checkbox"/> Academic Institution | p. <input type="checkbox"/> Department of Energy Laboratory |
| g. <input type="checkbox"/> Hist. Black Coll. or Univ./Min. Inst. (HBCU/MI) | q. <input type="checkbox"/> Other Federal Laboratory |
| h. <input type="checkbox"/> Federal Government Organization | r. <input type="checkbox"/> Regional Development Authority |
| i. <input type="checkbox"/> State Government Organization | s. <input type="checkbox"/> Foreign Owned |
| j. <input type="checkbox"/> Local Government Organization | t. <input type="checkbox"/> Other _____ |

Please enter your four digit (SIC) code:

11. I certify that I am authorized to bind the participant organization named above and that, to the best of my knowledge and belief, this proposal is submitted by that participant in good faith.

Laurie Kane
Signature

6/27/94
Date

Laurie Kane
Print Name if different than above.

Controller
Title

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TRP Participant Sheet S-2

1. Proposal Title:

Manufacturing Modernization Program

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10. Please check **All** the boxes below that apply and enter Standard Industrial Classification (SIC) code:

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| i. <input type="checkbox"/> State Government Organization | s. <input type="checkbox"/> Foreign Owned |
| j. <input type="checkbox"/> Local Government Organization | t. <input checked="" type="checkbox"/> Other Trade Association |

Please enter your four digit (SIC) code:

11. I certify that I am authorized to bind the participant organization named above and that, to the best of my knowledge and belief, this proposal is submitted by that participant in good faith.

Robert D. King
Signature

Robert D. King

Print Name if different than above.

June 24, 2004
Date

President

President

Title

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TRP Participant Sheet S-2

1. Proposal Title:

Manufacturing Modernization Program

2. Lead Proposer:

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| j. <input type="checkbox"/> Local Government Organization | t. <input type="checkbox"/> Other _____ |

Please enter your four digit (SIC) code:

11. I certify that I am authorized to bind the participant organization named above and that, to the best of my knowledge and belief, this proposal is submitted by that participant in good faith.

Robert L Dalton
Signature

June 24, 1994
Date

Robert L. Dalton

Executive Director

Print Name if different than above.

Title

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TRP Participant Sheet S-2

1. Proposal Title:

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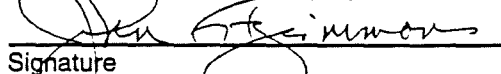
9. E-mail:

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| f. <input type="checkbox"/> Hist. Black Coll. or Univ./Min. Inst. (HBCU/MI) | q. <input type="checkbox"/> Other Federal Laboratory |
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Signature

6/22/94
Date

Print Name if different than above.

President
Title

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MANUFACTURING MODERNIZATION PROGRAM

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PART 1: EXECUTIVE SUMMARY

1. OVERVIEW

Maine is a manufacturing state. Historically, Maine's economic prosperity stemmed from its mills and shipyards. Today, over half the Gross State Product still comes from manufacturing.

Maine's manufacturing base is dominated by 2378 small and medium sized firms. (Larger firms with more than 500 employees constitute less than 2% of Maine's manufacturers.) On the whole, these relatively small firms are more sophisticated and competitive than their size may suggest. But they often lack sufficient in-house capacity to respond quickly to growing economic pressures.

One of these pressures results from defense cutbacks. Maine is the fourth highest recipient of defense funding *per capita* nationwide. Cuts in defense spending have significant adverse impacts on Maine's economy. In the last three years alone, Maine has lost 3200 defense-related manufacturing jobs, which represents 3.5% of the state's entire manufacturing workforce. The threat of further cuts looms ever larger.

This proposal calls for the creation of a new Manufacturing Modernization Program (MMP) that will help Maine's small and medium sized manufacturers grow more competitive by facilitating the delivery of quality modernization (*technology, market research and analysis, skills enhancement, work organization, finance, advanced business practices and inter-firm cooperation*) services that enhance the productivity and competitiveness of Maine's manufacturing firms. MMP will serve all these firms, but initially, it will pay particular attention to the special and immediate needs of those manufacturers that rely upon defense work. MMP will begin by targeting metals and electronics manufacturing, because these sectors contain 80% of Maine's defense-reliant manufacturing firms.

The design of MMP responds directly to industry needs. In recent surveys and focus groups, Maine manufacturers have called for:

- more on-site contact and support
- direct assistance in the forming of cooperative networks
- coordinated delivery of the services available statewide

This proposal will build needed capacity in three areas: direct outreach; network formation; and coordination. It will do so through *sector-based Manufacturing Outreach Centers (MOCs)* and *Field Offices* designed to support firms directly, and through a *Central Program* designed to ensure coordinated delivery of high quality services. The Central Program will be administered by the MSTF; the MOCs will be sponsored and operated by industry-led organizations under contract from the MSTF and will be located in areas that possess a high concentration of firms; and Field Offices will be operated by the Central Program and located in areas that do not possess a high concentration of firms.

A critical piece of MMP's strategy is the *field agent*. These agents will be qualified professionals who understand manufacturing and know how to "talk shop." They will work directly with firms, assessing problems and providing some level of technical assistance. They will also "market and broker" the services available elsewhere, thus connecting firms to broader sources of technical information, and to relevant business expertise. In addition, agents will organize cooperative *networks*, through which groups of firms work together to solve problems and receive services more effectively.

This proposal is the culmination of a year-long planning process sponsored by NIST, and supported by the direct involvement of Maine manufacturers and service providers. Throughout this process, much care was taken to develop a program that fits the realities of Maine. The resultant proposal is tailored to the special characteristics of Maine's manufacturing industry and geography.

The prime sponsor of this proposal is the Maine Science and Technology Foundation (MSTF), which led the recent planning process. MSTF's major partner in this proposal is the Center for Technology Transfer (CTT), which is an industry-driven organization with considerable experience forming cooperative networks. Another key partner is the Maine Metal Products Association (MMPA), which represents manufacturing firms in the metals and electronics sectors.

2. INITIAL TRP FOCUS & LONG-TERM PLANS

This proposal is carefully designed to focus where needs and opportunities are greatest. Consider, for instance, the first MOC. It will be located in Portland, where the concentration of manufacturing firms is greatest. It will focus on metals and electronics manufacturers, which are concentrated in that area, critical to Maine's economy, and positioned to benefit greatly from modernization services. Moreover, the MOC will be sponsored by CTT, which--both by itself and by its affiliation with MMPA--ensures a direct and cooperative relationship with industry.

Eventually, MMP will serve all of Maine's small and medium sized manufacturers, through two MOCs and three Field Offices (operated by the Central Program and located in areas where the density of manufacturing firms does not warrant an MOC). But the thrust of this proposal is on the first MOC in Portland and the first Field Office in Caribou.

By starting with a smaller initiative and building it over time, the proposers will develop a far stronger program. Lessons learned from developing the first MOC and Field Office will be applied to later efforts. In addition, some sort of initial focus will help MMP realize meaningful, short-term results that demonstrate its value, and build ongoing support.

3. TARGET POPULATION

The primary, initial target population is those small and medium sized enterprises (SMEs) that are the focus of the first MOC, namely: 1) the 1187 manufacturing firms concentrated in southern Maine around the City of Portland; and 2) the 550 firms engaged in metals and electronics manufacturing statewide. (NOTE: Of the 550 firms, roughly 350--or 64%--are located around Portland. Thus, there is a sizable overlap between the two groups.) These target firms are among Maine's most innovative and technically capable. With the right assistance, these firms can make real strides forward.

Another initial target is the 210 manufacturing firms that will be served by the Central Program's first Field Office. That Field Office will be located in northern Maine, which is geographically isolated and requires a local presence.

4. DEFENSE CONVERSION

MMP is designed to serve defense conversion objectives. Many of Maine's small and medium sized manufacturers rely on defense-related work, but *all* these firms undertake a good portion of commercial work as well. The challenge--within such a population--is to help firms to uncover new market opportunities and compete more efficiently, so that they may expand their level of commercial activity. This is exactly what MMP aims to do.

The initial focus on metals and electronics manufacturing also relates to MMP's interest in defense conversion. Many of Maine's metal and electronics manufacturers have a stake in defense-related projects as sub-tier contractors. In fact, SMEs from these sectors constitute 80% of Maine's defense-reliant manufacturers.

Likewise, the initial focus on the Portland area relates to defense conversion. SMEs from greater Portland undertake a substantially higher amount of defense-related work than SMEs located elsewhere in Maine. In addition, all five of Maine's large defense contractors are located in the Portland area: if a

major layoff at one of these large firms floods the market with workers, it is critical that Portland area manufacturers are prospering, so that they are positioned to rehire some (or all) of these workers.

The Central Program's first Field Office in Caribou will serve manufacturing firms in northern Maine's economy which has been particularly hard pressed by the closing of Loring Air Force Base.

5. DELIVERY MECHANISMS

MMP builds new capacity to fill existing gaps. It focuses on three inter-related activities: *direct outreach*, *coordination*, and *network formation*.

"Direct outreach" involves establishing substantive contact with firms. It will be provided primarily by new field agents, who understand manufacturing and can help manufacturing firms solve problems.

"Network formation" involves the organization of groups of firms into *service delivery networks* (of finite duration) designed to help solve specific problems. These networks will enable MMP to reach more firms and to provide services more efficiently. In addition, they will help familiarize firms with each other, and encourage them to work together more in the future.

"Coordination" involves a variety of tasks designed to ensure that manufacturing firms are receiving high quality services in a coordinated manner that is "user friendly." It involves the field agents' efforts to market and broker available services, and to track the services firms receive. It also involves program-wide efforts to evaluate service quality, to train service professionals, and to develop (and refine) the systems field agents use for marketing, brokering, and tracking client services.

6. TECHNOLOGY SOURCES & RELATED SERVICES

MMP will be linked directly to all key service providers in Maine, and several outside the state. These organizations and companies will provide MMP and its client firms with direct access to a complete range of technological information and modernization services.

The proposers are already working in partnership with all relevant organizations in Maine. These organizations have been part of the planning process that led to this proposal, and they have committed themselves to participation in MMP.

As MMP develops, it will work to broaden its current resource pool to include: 1) key out-of-state players that can provide services unavailable in Maine; and 2) a variety of Maine companies (not only consulting firms, but also manufacturers that may possess the capacity and interest to pass along their knowledge to other Maine firms).

Finally, the MSTF is currently developing a special "INTERNET gateway" designed to support both service providers and target firms with direct access to relevant information.

7. MANAGEMENT EXPERIENCE

One of the strengths of this proposal is the experience of its two key players: MSTF and CTT. Organizations that have successfully undertaken "technology deployment" before know that it is difficult work. It requires building trust within industry, and with trusting industry to help guide the program. It requires close coordination with a variety of organizations to ensure that there is no wasteful duplication. And it requires a special kind of staff who can both understand and work with a broad array of people within industry, government, and academia.

Through past performance, both MSTF and CTT have proven themselves capable of meeting these requirements and more. They are perhaps uniquely positioned to create MMP, and to begin to assist firms--quickly and meaningfully--to serve both Maine and the nation.

MSTF is a state chartered non-profit organization. It was created by the Legislature as Maine's principle science and technology organization. MSTF is a private/public partnership with a Board of Directors that is dominated by industry representatives. That Board is nominated by the Governor and confirmed by the Legislature.

MSTF's mission is to facilitate the growth of Maine's economy through effective, strategic applications of science and technology. Its principle programs include:

- 1) Centers for Innovation - industry driven technology partnerships serving specific industry sectors. This five-year old program has effectively used new technology to benefit Maine firms engaged in aquaculture, biomedical technology, and metals and electronics manufacturing. MSTF's active role with these Centers has grounded it in the realities of business.
- 2) Maine EPSCoR - a cooperative federal-state initiative designed to enhance the research competitiveness of states which have historically received a relatively small portion of federal research dollars. In the past two years this program has greatly expanded, in response to its success improving the research capabilities of Maine institutions, faculty, and students. MSTF's oversight of EPSCoR provides it with experience building broad coalitions and administering large federal grants. Moreover, EPSCoR is coordinated by the Research Excellence Partnership (REP), a body with many parallels to MMP.

MSTF has led the planning process that culminated in this proposal. Through this process, MSTF has built a trusting partnership among manufacturers and service providers.

MSTF is the ideal organization to lead the development of MMP. It has experience managing statewide programs and multi-million dollars in federal grants. Because of its organizational mandate, the MSTF also has experience designing, managing and evaluating programs that are industry led and operated. MSTF also possesses--through its leadership of EPSCoR--a depth of experience in applied research. This provides a special opportunity for linking MMP with REP (and research activity within Maine).

CTT is one of Maine's Centers for Innovation designed to advance economic growth through the application of technology. CTT is a industry-driven partnership representing business, government, and academia. Structurally, CTT is a separate non-profit organization.

CTT targets Maine's metals and electronics manufacturers, and is closely aligned with both industries. In addition, CTT's director serves as the executive director of the Maine Metal Products Association (MMPA), which is the trade association representing these sectors.

Most of CTT's programs focus on developing cooperative networks, by which small firms can work together to overcome the disadvantages of size. CTT is a national leader in this area. It has developed both production networks and service networks. Its most recent efforts involve *service delivery networks* designed around ISO 9000 and "decision support systems" (DDS). This activity provides a proven model for MMP's network activity.

The proposers feel there is great power in matching an MOC that aims at general outreach and support, with an innovative organization that is nationally recognized for viewing technical problems creatively.

The Portland MOC's activities will be overseen by CTT's board. Currently, this board consists primarily of industry representatives from the metals and electronics sectors, but it will be modified to include broader representation from the other manufacturing sectors the MOC will serve. For specific advice on the metals and electronics sectors, the MOC will turn increasingly to the Maine Metal Products Association.

PART 2: BODY OF PROPOSAL

1. STATEMENT OF NEED

The Maine Science and Technology Foundation (MSTF) has been leading a state-wide effort to enhance the modernization services provided to Maine firms. With financial support from NIST, MSTF has brought together a broad array of manufacturing firms and organizations (from industry associations to service providers) to explore ways to better support modernization.

This year-long planning process included the undertaking of various studies of Maine's manufacturing firms and service providers. Some of the key findings¹ of these studies are offered below:

- Maine's manufacturers, like those across the country, are facing severe pressures, the result of increased competition from abroad, and defense cutbacks at home.
- Most of Maine's 2378 small and medium sized enterprises (SMEs) engaged in manufacturing have limited in-house capacity to bring about needed change.
- These manufactures require a full range of extension services, both *technical services* (e.g., process audits, benchmarking, and on-site technical assistance) and related *business services* (e.g., strategic planning, market identification, and finance assistance). What's more, firms often require the delivery of technical services to be *coordinated with* the delivery of related business services.
- These manufacturers are requesting specific technical assistance. Demand is highest in these three areas: 1) network formation; 2) efficiency improvements; and 3) process technology.
- These manufacturers are requesting that service providers spend more time at firms, as a way to obtain first hand knowledge of operations and problems. Only 5% of manufacturing firms receive any on-site assistance.
- These manufacturers are often unaware of what services are available. They request that service providers improve their marketing efforts.
- Generally speaking, Maine's systems of service delivery are not designed to yield evaluative data or effective feedback.

These findings suggested a clear need to improve modernization services, and to improve the overall coordination, marketing, and evaluation of these services.

In addition, the rural dispersed (see **Figure 1**) character of Maine's manufacturing community suggests that a new model of service delivery be implemented. This model will be further developed within the proposal and will respond and adapt to the first year of operating experience to incorporate as yet untested rural manufacturing service delivery mechanisms. Since models for this type of rural service delivery do not exist in Maine or nationally, the creation and implementation of the program will be an important learning experience for the MSTF and NIST.

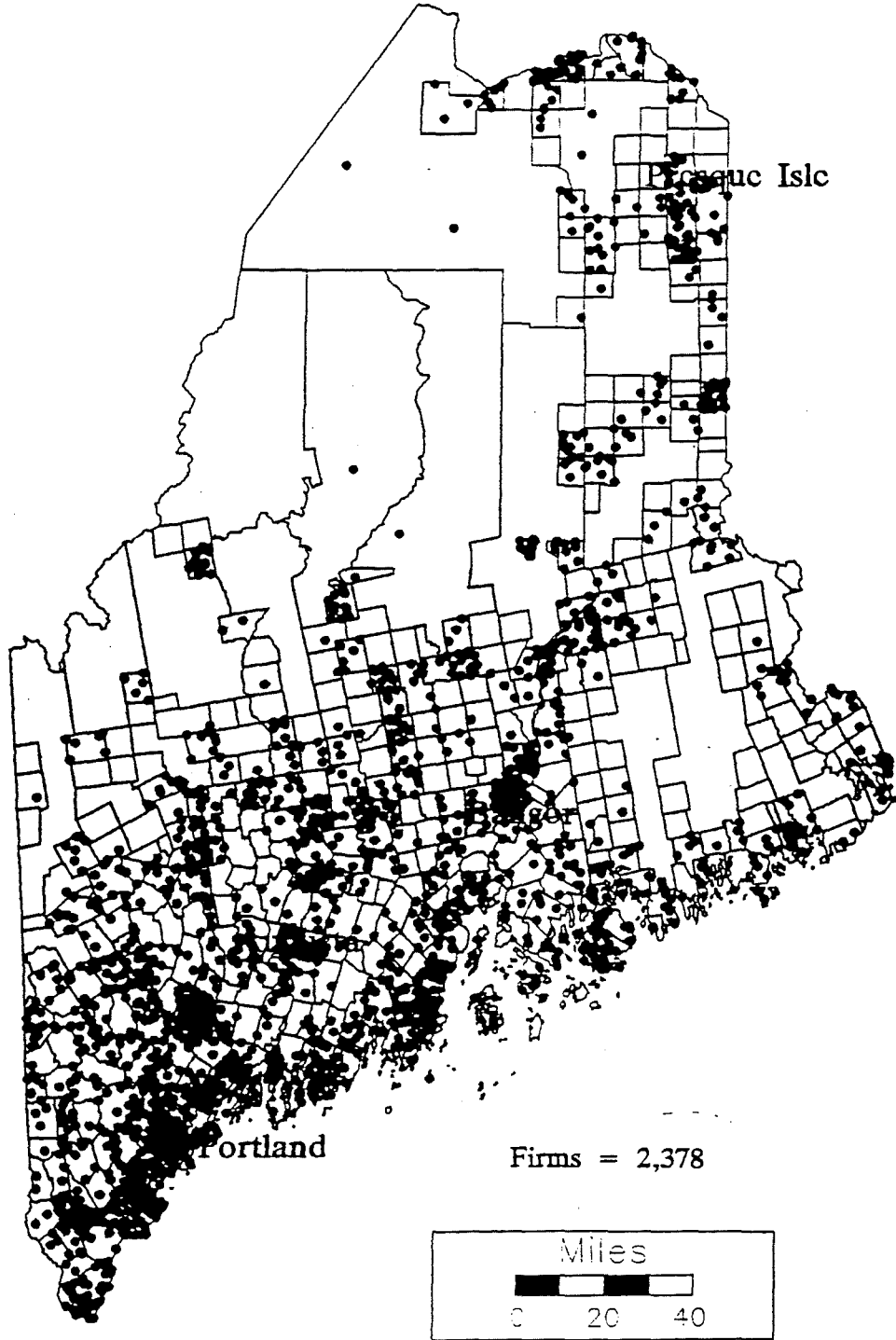
To this end, consensus was reached on developing a comprehensive Manufacturing Modernization Program (MMP), led by MSTF, that will eventually support and coordinate the delivery of all

¹ Reports on findings from surveys of sector-specific manufacturing firms including defense-reliant firms and an assessment of Maine's manufacturing modernization service providers (including large firms with capacity to provide services) and service gaps are available at the MSTF.

FIGURE 1.

Manufacturing Firms in Maine

September 1993



modernization (*technology, market research and analysis, skills enhancement, work organization, finance, advanced business practices and inter-firm cooperation*) services state-wide. This proposal is the first step toward that vision.

2. OVERALL STRATEGY FOR SERVICE DELIVERY

MMP will facilitate the delivery of quality modernization services that enhance the productivity and competitiveness of Maine's manufacturing firms. It will do so, primarily, through three inter-related activities: direct outreach, network formation, and coordination.

"Direct outreach" will involve establishing substantive contact with industry. MMP will build relationships with manufacturing firms. It will assess firms' problems, and provide direct assistance where appropriate. It will also provide a vehicle for MMP's marketing and brokering of available services.

"Network formation" will involve the organization of groups of firms into cooperative *networks*. There are many types of cooperative networks, but the type MMP will organize will be *service delivery networks*, of finite duration, designed to help solve specific problems. Small groups of firms with similar needs will be brought together in ways that make it easier to deliver services. One benefit of this approach is that it enables MMP to reach more firms and to provide services more efficiently. (Greater efficiency is possible, not just because several firms are being served concurrently, but because cooperating firms often begin to solve each others problems, reducing the need for outside help.) Another benefit is that firms become acquainted with each other, and more accustomed to turning to each other to solve problems and to take advantage of opportunities. (In this way, service delivery networks lay a foundation for future networks aimed at cooperative manufacturing.)

"Coordination" will involve a variety of tasks designed to ensure that manufacturing firms are receiving high quality services in a coordinated manner. These will include MMP's effort to market and broker available services, to track the services firms receive, to evaluate service quality, and to help train service professionals.

Taken together, MMP's activities cover the following nine functions:

- 1) contacting firms and building relationships with them;
- 2) organizing service delivery networks;
- 3) providing other direct services;
- 4) marketing the services available state-wide;
- 5) brokering the services available state-wide;
- 6) tracking the services each client firm receives;
- 7) evaluating and certifying service providers;
- 8) helping to train service professionals;
- 9) assessing industry needs and modifying program direction accordingly.

MMP will undertake these functions through three inter-related components: 1) the Central Program; 2) industry-sponsored Manufacturing Outreach Centers (MOCs); and 3) Central Program-operated Field Offices. Each component is described in more detail below.

A. Central Program

The Central Program is responsible for MMP's overall planning and coordination. More specifically, it will:

Determine the configuration of the overall system. The Central Program will decide what the territory of each MOC and Field Office will be, and the level of resources each will receive. With direct input from manufacturers, it will continually examine MMP, and modify it to best serve industry.

- Set the direction for the MOCs. The Central Program will enter into contracts with the sponsors of MOCs to meet the agreed upon goals and objectives of the Program in terms of services, service delivery mechanisms and coordination. The Central Program will have the authority to modify or terminate those contracts as necessary, to make MMP responsive to industry needs.
- Develop the systems by which "field agents" (located at MOCs and Field Offices) will market, broker, and track services.
- Develop and implement systems for evaluating and certifying service providers.
- Develop and implement systems for providing educational opportunities for professionals engaged in delivering services (both within MMP and at other organizations).
- Supervise those field agents working at Field Offices (as opposed to MOCs, which will supervise their own field agents).
- Work closely with various service providers (both public and private) to ensure that MMP helps them serve industry better.

B. Manufacturing Outreach Centers

MOCs will be placed where firms are concentrated. They will provide general outreach and support to all manufacturing firms in their geographical area (i.e., within a 60 mile radius).

In addition, each MOC will maintain a sector-oriented specialty, designed primarily to serve firms in its area, but capable of serving firms state-wide. MOCs and the Central Program's Field Offices will link firms in their service areas that require this type of focused capability to the appropriate MOC. This linkage is key to provision of quality technical services within the rural model developed for this program.

MOCs will follow the Central Program's direction, and must meet its evaluation standards. Yet MOCs will be sponsored by separate organizations. These organizations will have an industry focus and a proven track record serving the target population. At the same time, sponsorship by separate organizations will provide these Centers with a degree of flexibility, as will be needed to best serve the geographical area and industrial sectors on which they are focused.

MOCs will (together with Field Offices) provide the vehicle for implementing MMP's coordinated systems of marketing, brokering, and tracking.

MOCs will employ "field agents" as their principle means of working with firms. These agents will be qualified professionals who understand manufacturing and know how to "talk shop." They will be capable of providing general support to all manufacturers, but possess special capabilities in the sectors that are the MOC's specialty.

Field agents play three roles. One role involves the marketing, brokering, and tracking of services. Agents will contact a firm, assess its problems, direct it to service providers who can help, and follow-up to see that the desired help did in-fact occur. The goal is that field agents will develop ongoing relationships with manufacturers. An agent will begin to understand how a particular firm operates, and when that firm has a problem or opportunity that warrants outside assistance, the agent will be able to efficiently direct the firm to the best source of help.

A second role for the field agents involves organizing service delivery networks. Agents will identify firms with similar problems that could be effectively brought together into a network. In most cases the agents will also identify service providers capable of supporting the network, by delivering needed services.

A third role for field agents involves providing firms with other direct services. One place this may occur is where a firm has a problem which is within the field agent's scope of knowledge. Another place this may occur is where a firm wants to retain a field agent to help it oversee a specific modernization project. (A regular responsibility of agents will be "tracking" the services provided to firms by other organizations. Thus, it will at times be a natural and appropriate step for an agent to move beyond "tracking" to some level of "project management.") Care will be taken to ensure that the provision of direct services does not monopolize an agent's time or compete directly with qualified private consultants. Some of the more in-depth services may be made available to firms for a fee.

C. Central Program Field Offices

Field Offices will be placed in areas that do not possess a high enough concentration of firms to warrant an MOC, but where the number of firms is high enough to warrant the presence of a field agent. In fact, a given Field Office will likely be no more than a single field agent (perhaps even a part-time field agent) working in an area that is geographically isolated from an MOC.

Agents at Field Offices will play the same roles as agents at MOCs. Yet these agents will report directly to the Central Program.

D. Location of MOCs and Field Offices

The location of MOCs and Field Offices will be determined by where small and medium sized firms are located. Maine's manufacturing population is scattered (as shown in FIGURE 1). Yet some areas of concentration do exist, primarily in southern and central Maine.

This proposal selects five areas, each small enough to allow for convenient driving. (No area has a radius of more than 60 miles, except for northern Maine, which is slightly larger.) These five areas are strategically chosen, so that they cover 2250 of Maine's 2378 small and medium sized manufacturers. The overall strategy is to locate MOCs in the two most populated areas, and Field Offices in the three less populated areas, as shown below:

AREA	NUMBER OF FIRMS
Southern Maine (MOC)	1187
Central Maine (MOC)	600
Northern Maine (Field Office)	210
Western Maine (Field Office)	140
Eastern Maine (Field Office)	150

3. THREE-YEAR GOALS

MMP's broad goals for each of the first three years are outlined below and reflect an incremental approach to program development and evaluation. The goals marked (*) are part of this proposal. The other goals--while part of MMP's overall strategy--are beyond the scope of this proposal. (The specific outcomes of this proposal are listed separately in **Part 3: Statement of Work**)

Year 1

- Develop "core capabilities" of Central Program *
- Create first MOC (in southern Maine) *
- Create first Field Office (in northern Maine) *

Year 2

- Begin to expand capabilities of Central Program *
- Increase capacity at first MOC *
- Create second MOC (in central Maine)
- Create second Field Office (in western Maine)

Year 3

- Complete expansion of capabilities of Central Program *
- Increase capacity at first MOC (to stable level) *
- Increase capacity at second MOC
- Create third Field Office (in eastern Maine)

The advantages to this incremental approach are two-fold. First, the lessons learned from developing the first MOC and Field Office can be applied to later efforts. Second, an initial focus is necessary to organize MMP's work and to help it realize meaningful, short-term results.

4. PROPOSED YEAR 1 ACTIVITIES TO BE SUPPORTED BY TRP

A. Development Central Program's Core Capabilities

Creation of the general systems functions for the overall management of statewide activities is the work of the Central Program housed at the MSTF. Administrative, marketing, brokering and tracking systems as well as evaluative instrumentation, and provision of training opportunities for service professionals are core capabilities to be developed in year one.

Centralization of this function at the MSTF and provision of a distinct "look and feel" for tools and materials is critical to the strongly coordinated effort envisioned for the MMP. The development and integration of tools with tracking and evaluation systems will provide for clear flow patterns in the work and reporting of the field staff to the MOCs and the Central Program. The systems will be developed to assure strict tracking to the goals and objectives of the program and the subsequent contract language between the Central Program and the MOC and the MOC and private contractors. Most importantly the systems developed will assure high quality service and accountability for results across all service provider levels.

The MSTF is currently developing an INTERNET Gateway for Maine Science and Technology. Manufacturing Modernization will be included as a submenu in this Gopher. Modernization service directories, educational/training tools, and modernization topics will be accessed through this system. It is the intent of the MSTF to provide each "certified" modernization service provider in Maine an account to communicate with the Central Program, among providers and with clients, and later with NIST's LINKS.

MSTF is distinctly suited to manage the core program development by virtue of its position as the key agency for science and technology in the state. MSTF is a successful public/private partnership overseen by a Board dominated by industry representatives. MSTF has successfully led the planning process that has culminated in this proposal. Programs of the Foundation form an excellent and synergistic match with the MMP.(see **Participants & Roles** below).

In addition to the MMP Director, who will be supported by MSTF funds, needed staff will include two "program specialists" and a secretary.

B. Create First MOC in the Greater Portland Area

The first MOC will be located in Portland, in southern Maine. It will focus on metals and electronics manufacturing, which covers SIC 3300-3800, and includes these sectors: primary metals, fabricated

metals, machinery, electronic equipment, transportation equipment, and instruments. (See **More About Target Population**). The Portland area and these sectors are ideal for the first MOC, for among the following reasons:

- Portland is Maine's largest city. Almost 50% of Maine's manufacturing firms (roughly 1187 out of 2378) are located within a 60-mile radius of Portland (See **Figure 2**).
- The targeted sectors together constitute 550 firms. About 364 of these firms (66%) are located within a 60-mile radius of Portland.
- The targeted sectors are critical sectors for Maine. They provide over 20,000 jobs (about 22% of the state's manufacturing employment), and constitute 80% of Maine's defense-dependent firms.

The MOC will be sponsored/operated by the Center for Technology Transfer (CTT) under contract from the MSTF. (See **Participants & Roles**) CTT is the ideal organization to do so because it is :

- An industry-driven organization, which has an excellent reputation among manufacturers and a proven track record.
- Has a direct and close affiliation with the Maine Metal Products Association (MMPA), which serves the same industrial sectors as the MOC.
- A nationally-recognized leader in the formation of cooperative networks, which is a thrust of MMP's strategy.

The Portland MOC will provide general outreach and support to the 1187 manufacturing firms in the Portland area, eventually with five field agents. CTT's Director will dedicate 50% of his time to direct the MOC. Additional staff will include a "support specialist" and a secretary.

C. More About the First Portland MOC Target Population

This proposal is targeted, primarily, on two sub-populations of Maine manufacturers, namely (1) the **1187 manufacturing firms in the Portland area**, which will be served by the first MOC, and (2) **the 550 firms** that comprise the metals and electronics manufacturing sectors **statewide** (SIC 3300-3800), on which the first MOC will focus.

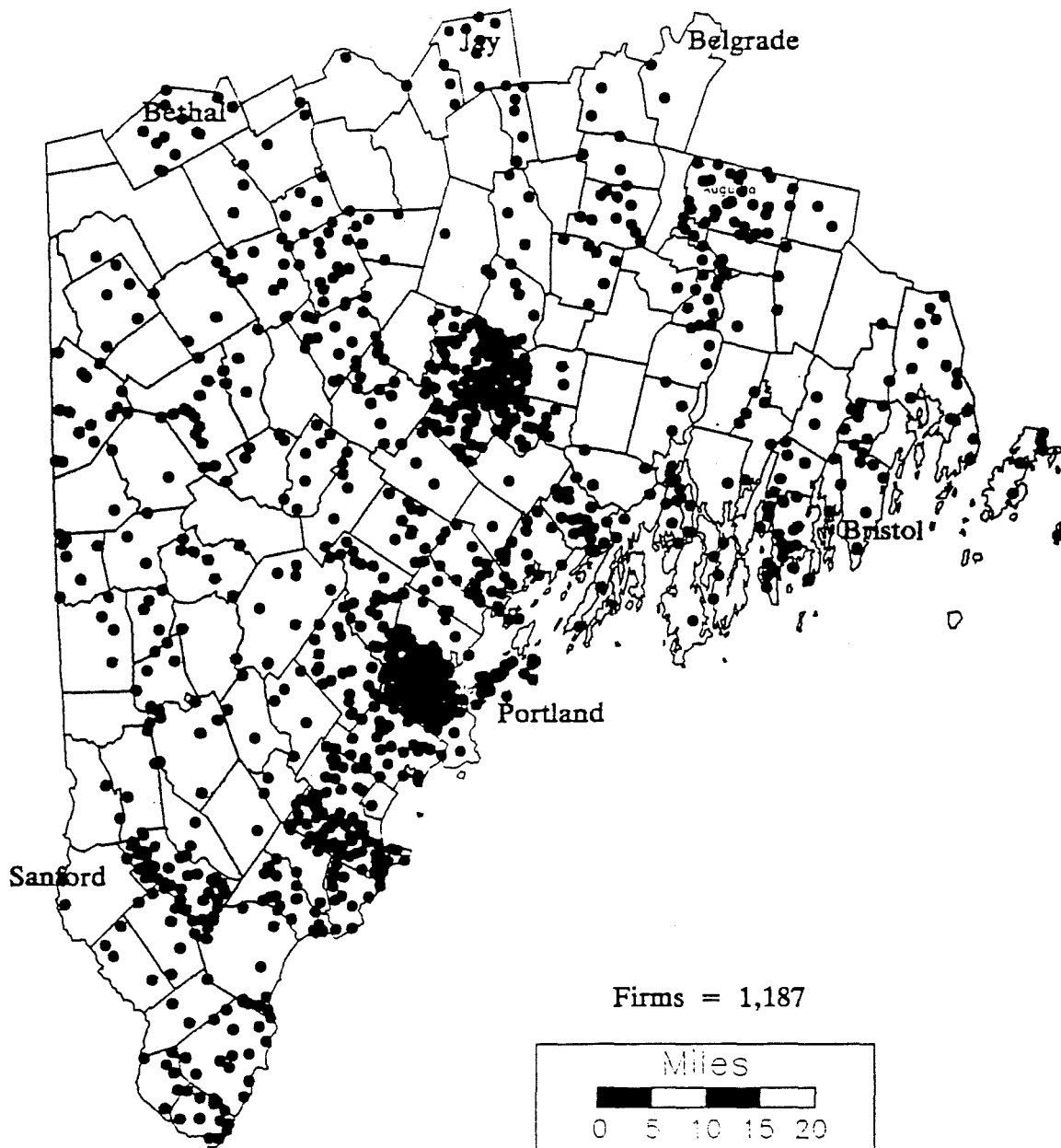
The breakdown of firms in the Portland area, by sector and concentration, is shown below:

SECTOR	NUMBER OF FIRMS (% OF 1187)
Food	101 (8.5%)
Textiles, Apparel	98 (8.3%)
Wood Products, Furniture	210 (17.7%)
Paper And Allied Products	21 (1.8%)
Printing And Publishing	163 (13.7%)
Chemicals, Petroleum	34 (2.7%)
Rubber, Leather, Glass, Concrete	114 (9.6%)
Metals, Electronics	362 (30.5%)
Miscellaneous	84 (7.1%)

FIGURE 2.

Manufacturing Firms in a 60 Mile Radius of Portland

September 1993



The breakdown of firms involved in metals and electronics manufacturing, both statewide and in the Portland area, is shown below:

SUB-SECTOR	# FIRMS STATEWIDE	# FIRMS PORTLAND
Primary Metals	14	7
Fabricated Metals	130	121
Machinery	182	109
Electronic Equipment	54	42
Transportation Equip.	144	58
Instruments	26	25
Total	550	362

Small and medium size enterprises (SMEs) in metals and electronics manufacturing comprise over 80% of Maine's defense-reliant manufacturing firms. (Maine possess roughly 100 defense-reliant manufacturers. 85 of these firms fall within metals and electronics, and 81 of them qualify as SMEs.) The number of defense-reliant SMEs, by relevant sub-sector, both statewide and in the Portland area, is shown below:

SUB-SECTOR	DEFENSE SMEs STATEWIDE	DEFENSE SMEs PORTLAND
Fabricated Metals	36	36
Machinery	34	31
Electronic Equipment	8	8
Transportation Equip.	7	7
Total	81	78

D. Create the Central Program First Field Office

The first Field Office will be located in Caribou. Northern Maine is the ideal place to establish the first field office, for the following reasons:

- Northern Maine is geographically isolated from the rest of the state, and can only be easily serviced by programs with a local presence.
- Northern Maine's economy is particularly hard pressed by the closing of Loring Air Force Base.

The Field Office will provide general outreach and support to the 210 manufacturing firms in that area, through a single field agent. The only additional staff will be a half-time secretary.

5. PARTICIPANTS & ROLES

The proposed initiative will involve a variety of participants. The most important participants are, of course, Maine's manufacturers. They will participate in two main ways:

1. Representatives of manufacturing firms serve on: a) MSTF's Board, which will direct MMP's overall activities; b) CTT's Board, which will direct the MOC's activities; and c) MMPA's Board, which will advise the MOC.
2. The broader industry will collectively help determine MMP's overall focus, through an ongoing process of assessment and evaluation.

Various organizations will play key roles, to ensure that industry is provided the services they determine that they need. These include: MSTF; CTT; MMPA; the Maine Quality Center; the Modernization Partnership (formerly MTEC); and various participating service providers. More detail is provided below.

A. Maine Science and Technology Foundation (MSTF)

Summary Role: administers MMP and operates Central Program

MSTF is a state chartered non-profit organization. It was created by the Legislature as Maine's principle science and technology organization. MSTF is a private/public partnership with a Board of Directors that is dominated by industry representatives. That Board is nominated by the Governor and confirmed by the Legislature.

MSTF's mission is to facilitate the growth of Maine's economy through effective, strategic applications of science and technology. Its principle programs include:

- 1) Centers for Innovation - industry driven technology partnerships serving specific industry sectors. This five-year old program has effectively used new technology to benefit Maine firms engaged in aquaculture, biomedical technology, and metals and electronics manufacturing. MSTF's active role with these Centers has grounded it in the realities of business.
- 2) Maine EPSCoR - a cooperative federal-state initiative designed to enhance the research competitiveness of states which have historically received a relatively small portion of federal research dollars. In the past two years this program has greatly expanded, in response to its success improving the research capabilities of Maine institutions, faculty, and students. MSTF's oversight of EPSCoR provides it with experience building broad coalitions and administering large federal grants. Moreover, EPSCoR is coordinated by the Research Excellence Partnership (REP), a body with many parallels to MMP.

MSTF has led the planning process that culminated in this proposal. Through this process, MSTF has built a trusting partnership among manufacturers and service providers.

MSTF is the ideal organization to lead the development of MMP. It has experience managing statewide programs and multi-million dollars in federal grants. Because of its organizational mandate, the MSTF also has experience designing, managing and evaluating programs that are industry led and operated. MSTF also possesses--through its leadership of EPSCoR--a depth of experience in applied research. This provides a special opportunity for linking MMP with REP (and research activity within Maine).

B. Center for Technology Transfer (CTT)

Summary Role: sponsors and operates the Portland MOC

CTT is one of Maine's Centers for Innovation designed to advance economic growth through the application of technology. CTT is an industry-driven partnership representing business, government, and academia. Structurally, CTT is a separate non-profit organization.

CTT targets Maine's metals and electronics manufacturers, and is closely aligned with both industries. In addition, CTT's director serves as the executive director of the Maine Metal Products Association (MMPA), which is the trade association representing these sectors.

Most of CTT's programs focus on developing cooperative networks, by which small firms can work together to overcome the disadvantages of size. CTT is a national leader in this area. It has developed both production networks and service networks. Its most recent efforts involve *service delivery networks* designed around ISO 9000 and "decision support systems" (DDS). This activity provides a proven model for MMP's network activity.

The proposers feel there is great power in matching an MOC that aims at general outreach and support, with an innovative organization that is nationally recognized for viewing technical problems creatively.

The Portland MOC's activities will be overseen by CTT's board. Currently, this board consists primarily of industry representatives from the metals and electronics sectors, but it will be modified to include broader representation from the other manufacturing sectors the MOC will serve. For specific advice on the metals and electronics sectors, the MOC will turn increasingly to the Maine Metal Products Association.

C. Maine Metal Products Association

Summary Role: advises CTT/MOC on sector focus

The Maine Metal Products Association (MMPA) is a non-profit membership organization representing Maine's metals and electronics manufacturers. It is the only organization in the state which focuses on these sectors. MMPA undertakes a variety of activities designed to support this industry.

MMPA's role in this proposal is both natural and advantageous. It is natural because MMPA represents the same sectors that the MOC will focus upon, and because MMPA is closely aligned with CTT, as noted above. It is advantageous because it provides the MOC with a direct link to the population it will focus upon, and with a place to turn for advice on how to best develop and implement its programs.

There is also another advantages to linking the MOC to MMPA. MMPA is the recipient of a current TRP grant, which aims to bring methods of "environmentally-conscious manufacturing" (ECM) to a small population of Maine's metals and electronics firms. (Most of that grant's budget is devoted to connecting firms to sources of ECM technology, and to providing in-depth technical assistance.) Thus MMPA is a link to valuable technical sources and services, from which the MOC will be well-positioned to benefit.

D. Maine Quality Center (at Southern Maine Technical College)

Summary Role: supports curriculum development for worker training networks

The Maine Quality Center at Southern Maine Technical College (SMTC) is one of six centers being developed within the Maine Technical College System (MTCS) through a direct \$2.8 million State appropriation. These centers are expected to develop into the State of Maine's primary vehicle for delivering specialized worker training to manufacturing firms. Specifically, the MTCS Quality Centers will:

- provide established Maine businesses in all sectors with long-term educational partners which can help them prosper and remain competitive through upgrading and enhancing the work methods and skills of their employees
- customized training programs that meet employer specifications

- Instructors at no cost to the employer
- Facilities for training (at the college, company, or rented facilities)

MMP will subcontract with the Quality Center at SMTC to develop curricula specific to the needs of manufacturing firms in the Portland MOC's service area. Doing so lays the ground work for developing various *service delivery networks* for worker training.

Curricula development is critical to the creation of certain worker training networks, which--to be most effective--must focus on the specific needs of participating firms. Yet developing effective, focused curricula goes beyond what is expected from the field agents who organize networks. MMP's tie to the Quality Center will provide needed information and expertise, enabling field agents to organize networks for worker training more easily, and in ways that will yield greater results.

E. The Modernization Partnership

Summary Role: advisory body to MMP director

The "Modernization Partnership" is the new name for the Maine Technology Extension Consortium (MTEC), an association of Maine's service provider organizations. During the planning process that led to this proposal, MTEC provided a forum for these organizations to discuss issues, share information, resolve conflicts, and begin to explore ways to coordinate services. It will continue this work as the "Manufacturing Partnership," only now the consortium will be formalized as an advisory body to the MMP director. Partnership members include not-for-profit manufacturing extension service providers, state and local economic development agencies, consultants, federal agencies, and faculty and programs in academic institutions. Examples of member organizations are: *Centers for Innovation (CFIs); Technical College System and Maine Quality Centers; Department of Economic and Community Development; Maine World Trade Association; Maine Department of Labor; Maine Development Foundation; Small Business Development Centers (SBDCs); University of Maine; University of Southern Maine; National Semiconductor; Coastal Enterprises, Inc.; Eastern Maine Development Corporation; Northern Maine Development Commission; Androscoggin Valley Council of Government; Portland Region Economic Development Council; Economic Conversion Project; The Maine Alliance; Maine Chamber of Commerce and Industry; U.S. Forest Service.*

F. Participating Service Providers

Summary Role: 1) *providing services to firms, as coordinated by MMP*
 2) *submitting to MMP's evaluation and certification standards*

A broad array of service providers (both public and private) will participate in MMP, by providing services (to manufacturing firms) that MMP helps coordinate. MMP's systems for marketing, brokering, and tracking services will be designed and implemented to involve all interested providers that are capable of delivering quality services. Quality will be maintained through MMP's education of service professionals, and through MMP's evaluation and certification of service providers.

The public organizations providing services in Maine have already agreed to submit to MMP's evaluation process and certification standards. They have done so because they see the benefit in MMP's coordination of services, and recognize that meaningful coordination (through marketing and brokering) is not possible unless quality standards are understood and imposed. The proposers believe that other service providers (including private firms) will recognize these benefits as well.

6. NEXT STEPS

The long-term plan is to move beyond a single MOC, a single Field Office, and a Central Program that focuses on a subset of service providers.

There are three "categories" of future work: 1) expanding the capabilities of the Central Program; 2) creating a second MOC; and 3) creating additional field offices.

The first category of future work is a direct and necessary follow-on to the initial work, which created the Central Office. For that reason, it is included in the funding request for this proposal in Years 2-3. The other two categories of future work relate to the initial work, and yet they are distinct additions. For that reason, they are not included in the funding request for this proposal. (The proposers intend to seek alternative funding for these activities.)

Nonetheless, all three categories of future work are integral to MMP's overall strategy, and for this reason, they are described below.

A. Expand Capabilities of Central Program

The Program will, as soon as practicable, begin to include interested private firms and out-of-state organizations in its coordinated systems for the marketing, brokering, and tracking of services, and for the evaluation and certification of service providers.

Eventually, the Program will coordinate the full range of modernization services, as provided by both participating organizations and firms, from both inside and outside Maine.

B. Create a Second MOC

A second MOC will be created in central Maine. It will focus on wood products manufacturing (covering SIC 2400, 2500, and 3940). This location and sector-orientation makes sense for the following reasons:

- Central Maine has the highest concentration of manufacturing firms outside the Portland area. Over 25% of Maine's manufacturing firms (roughly 600 out of 2378) are located in this area.
- The targeted sectors constitute about 750 firms. Although these firms are scattered throughout the state, a higher proportion is located in central Maine than anywhere else.
- The targeted sectors are critical sectors for Maine. They provide 14,000 jobs directly, and more jobs indirectly (because much of the wood used in manufacturing is harvested in Maine).

Such an MOC would provide general outreach and support to the 600 manufacturing firms in central Maine, and specialized support for the 750 wood products manufacturers statewide.

C. Create Additional Field Offices

Two additional Field Offices will be created: one in far eastern Maine, and the other in western Maine. Both locations are geographically isolated, though not to the extent of northern Maine. (On a map, western Maine appears relatively close to the MOCs in southern and central Maine, but intervening mountains and lakes makes travel harder than it looks.) Each Field Office would serve roughly 150 manufacturing firms.

7. MANAGEMENT PLAN

The lead sponsor for this proposal is MSTF. MSTF shall be responsible for ensuring that all work is carried out in a manner that satisfies funding agencies and participants.

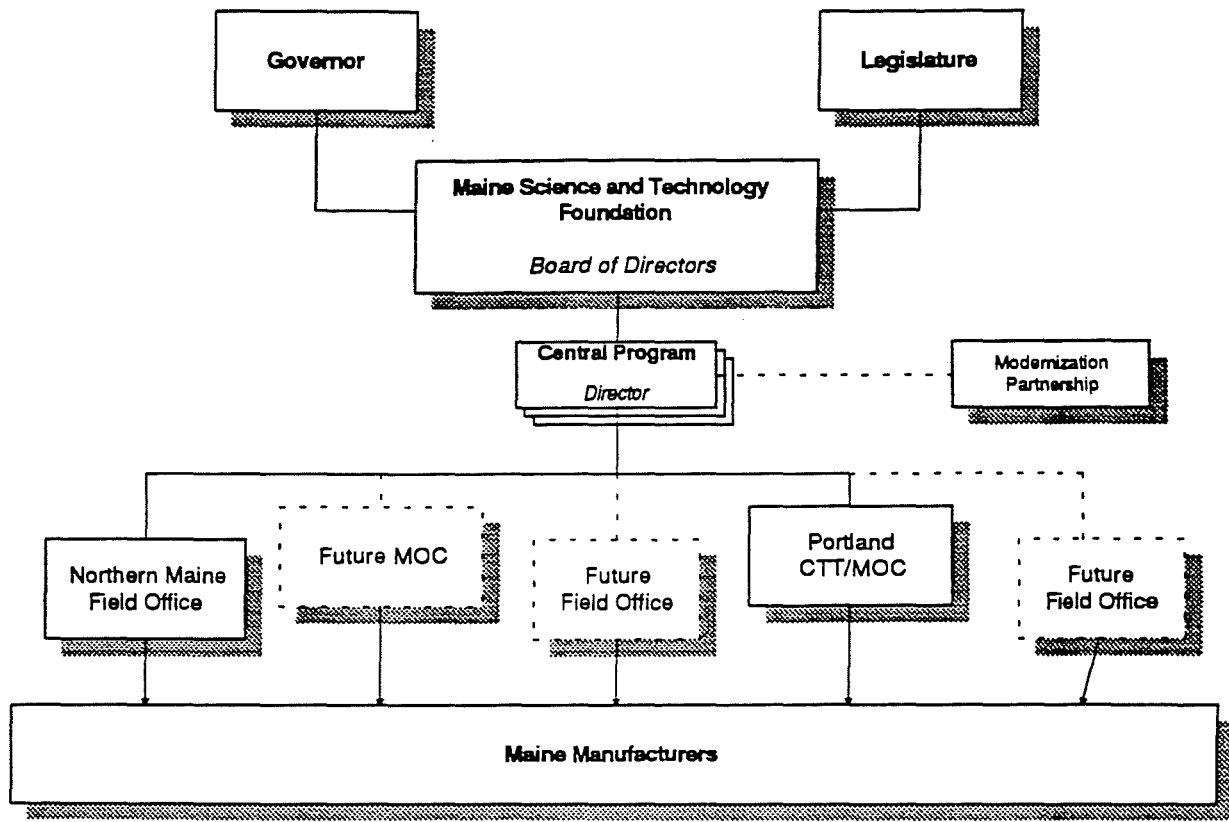
MSTF's activity with MMP will be overseen by its Board of Directors, which is dominated by representatives from industry. A special committee of the Board will serve as a "Steering Committee."

The Board of Directors will play an active role in this initiative. Either the Board or the "Steering Committee" will be involved in the hiring and evaluation of the director of MMP. That director will report to the Committee regularly, and to the full Board as needed.

The MSTF will contract with CTT to operate the Portland MOC. The director of MMP will be responsible for executing the project in a manner that is consistent with the decisions of the Board of Directors, the requirements of funding agencies, and the provision of any contracts. Within these bounds, the director is empowered to enter into contracts, hire staff, or undertake whatever other actions he/she feels necessary to advance the initiative, to modify, terminate, or transfer all contracts including those of the MOCs, within the framework of MMP, in order to best serve industry

Manufacturing Modernization Program Organizational Chart

June 27, 1994



Positions created within the Central Program and Field Office shall be employees of MSTF. Positions created the MOC shall be employees of CTT. (Expected hiring dates and salary levels are outlined within the Cost Proposal.)

Positions	Year 1	Year 2	Year 3
MSTF EMPLOYEES			
• <u>Central Program</u>			
1. MMP Director	X	X	X
2. Program spec.	X	X	X
3. Program spec.	X	X	X
4. Secretary	X	X	X
• <u>Field Office</u>			
1. Field Agent	X	X	X
2. Secretary	X	X	X
CTT/MOC EMPLOYEES			
1. Director	X	X	X
2. Support spec.	X	X	X
3. Support spec.			X
4. Secretary	X	X	X
5. Field Agent	X	X	X
6. Field Agent	X	X	X
7. Field Agent	X	X	X
8. Field Agent		X	X
9. Field Agent			X

PART 3: STATEMENT OF WORK

1. DESCRIPTION OF TASKS

The work of this proposal can be divided into three tasks: 1) operating the Central Program; 2) operating the MOC; and 3) operating the Field Office. Within each task there are several sub-tasks. Each task and sub-task is described in detail below.

TASK 1: Operating the Central Program (45% of YEAR 1 budget)

Sub-task 1: administration

This sub-task involves the administrative duties of the Central Program. It involves: refining staff job descriptions; hiring and managing staff (both within the Central Program and at the Field Office); developing contract language and procedures for the MOC; adopting internal operational procedures (including those for Field Offices); developing an ongoing strategy for assessing industry needs and tailoring MMP's activities to these needs; and the developing an ongoing system for evaluating progress.

A financial audit will be undertaken as part of the annual review of MSTF's books. An external evaluation of progress will be undertaken during YEAR 3.

Sub-task 2: developing marketing tools

This sub-task involves the development (and continuous refinement) of tools for marketing services. These may include electronic bulletins, printed materials, and a face-to-face outreach program involving field agents. The Central Program will probably undertake this development activity directly, but it may contract out some of this work (to a private consultant or possibly even a service provider that possesses the desired expertise). The Central Program will work closely with MMP's field agents during this development process.

The tools the Central Program develops will be implemented by the field agents at the MOC and Field Office.

A meaningful marketing effort must be based on accurate information about what each service provider does. Thus, MMP will coordinate its efforts involving marketing with those involving evaluation.

Sub-task 3: developing brokering tools

This sub-task involves the development (and continuous refinement) of tools for brokering services. These may include a program of direct counseling, or an electronic brokering system that prompts users with queries about their problems, and then suggests who to contact. The Central Program will probably undertake this development activity directly, but it may contract out some of this work (to a private consultant or possibly even a service provider that possesses the desired expertise). The Central Program will work closely with MMP's field agents during this development process.

The tools the Central Program develops will be implemented by the field agents at the MOC and Field Office.

Of course, meaningful brokering puts MMP in a position of deciding which service providers are most capable of helping a firm solve a particular problem. To do so fairly, MMP must first know what services each provider delivers and how well it delivers them. Thus, MMP will coordinate its efforts involving brokering with those involving evaluation.

Sub-task 4: developing tracking tools

This sub-task involves the development (and continuous refinement) of tools for tracking the services each client firm receives from service providers. These may include standardized reporting forms completed by each service provider for each client contact, or a centralized database that service providers access to record such contact. The Central Program will probably undertake this development activity directly, but it may contract out some of this work (to a private consultant or possibly even a service provider that possesses the desired expertise). The Central Program will work closely with MMP's field agents during this development process.

The tools the Central Program develops will be implemented by the field agents at the MOC and Field Office.

Sub-task 5: evaluating service providers

This sub-task is designed to evaluate the activity of service providers and to certify their capabilities. It is divided into two phases: development and implementation. Both phases will be undertaken directly by the Central Program.

During the development phase, the Central Program will develop tools for evaluating and certifying those organizations providing services. These tools will include: 1) various benchmarks for different services; 2) various benchmarks for organizations as a whole; 3) systems needed to make comparisons to those benchmarks; and 4) certification standards.

As the goal is an evaluation system that is well-suited to Maine's service providers, the Central Program will work closely with Maine providers in developing evaluation tools. (Of course, MMP recognizes the importance of developing "firm yet fair" evaluation tools, and will not let Maine's service providers sway it from this course.)

MMP is cognizant of several evaluation tools being developed nationally. It does not intend to "reinvent the wheel." Rather, it will actively explore the suitability of using existing (or emerging) tools, either "as is" or in a modified form.

During the implementation phase, the Central Program will apply these tools in a way that allows it to evaluate and certify service providers. Initially, it will apply these tools to the MOC and Field Office. Shortly thereafter (once the initial "bugs" are worked out), it will begin to apply these tools to all participating service providers.

The standards for certification will be high, and for that reason, not all service providers will likely meet the standards fully. Moreover, a given provider may be fully certified to provide one type of service (e.g., general business counseling), but not another (e.g., technical assistance).

MMP will make special allowances for: 1) a service provider attempting to develop new capabilities; and 2) a service provider with proven capabilities, yet which happens to fall slightly below certification standards in a given year. Such providers will be allowed to participate, but under limited periods of probation.

An appropriate process will be established to hear any grievances a service provider may have concerning its evaluation and/or certification.

Sub-task 6: training service professionals

This sub-task involves the training of professionals who deliver modernization services. It is divided into two phases: development and implementation.

During the development phase, the Central Program will develop curriculum materials and delivery mechanisms for training service professionals. For help, it will turn to educational experts, and to similar efforts occurring elsewhere.

The initial focus of the implementation phase will be on training MMP's field agents. But increasingly, the Central Program will implement training programs designed to help train professionals at outside organizations.

Sub-task 7: facilitating worker training networks

Networks will be organized by field agents within the Field Office and the MOC. Yet at times, the formation of a network will require some advance work that is beyond what is expected from field agents. One example of this involves MMP's plans to encourage future networks organized around worker training. Successful networks of this type must provide firms with the instruction they need. To do so requires development of curricula specific to those needs. For that reason, some of MMP's early activity is being geared toward curricula development. The Central Program will coordinate efforts between the MOC and the Maine Quality Center (at Southern Maine Technical College), aimed at developing curricula of value to target firms. This will lay the ground work for the formation of working-training networks.

TASK 2: Operating the MOC (48% of Year 1 budget)

Sub-task 1: administration

This sub-task involves: refining staff job descriptions; hiring staff and managing staff; managing the funds earmarked for network development; adopting internal operational procedures; developing an ongoing strategy for assessing industry needs and tailoring the Center's activities to these needs; and developing an ongoing system for evaluating progress. In addition, a financial audit will be undertaken annually.

Sub-task 2: contacting firms

This sub-task involves the MOC's contact with target firms through mailings, phone calls, visits, and special events.

Sub-task 3: marketing, brokering, and tracking services

This sub-task involves the efforts of the Center's field agents to market, broker, and track client services, using the tools developed by the Central Program.

Sub-task 4: organizing networks

This sub-task involves efforts to organize service delivery networks, as described in OVERALL STRATEGY. In most cases, field agents will create and manage such networks, but outside service providers will be called upon to deliver the services that the networks exists to receive. (Special funding is set aside to help offset the costs of delivering services. In YEAR 1, MMP covers half the cost, and in YEARS 2-3, MMP covers a third of the cost; the remainder is paid by the firms receiving service.)

Sub-task 5: providing other direct services

This sub-task covers the provision of other direct services to firms through MMP field agents. Such services may include quick assessment, problem solving, and different levels of "project management." When a firm receives a more in-depth or time-consuming service, it may be charged a fee.

TASK 3: Operating the Field Office (7% of Year 1 budget)

The Field Office must perform all of the same sub-tasks performed by the MOC, except one (administration), which is covered by the Central Program. Of course, for each sub-tasks the Field Office does undertake, the level of activity will be less than within the MOC, which is serving far more firms.

(NOTE: Funding for organizing networks at Field Offices appears in the budget for the Central Program, which will control these funds.)

2. SPECIFIC OUTCOMES

Outcomes for the Central Program, Portland MOC and Central Program Field Office are outlined on the next page for Years 1-3.

2. SPECIFIC OUTCOMES

	Central Program	Portland MOC	Field Office
YEAR 1	<ul style="list-style-type: none"> Developed computer database for all Maine's manufacturing firms 	<ul style="list-style-type: none"> Made quarterly contact (by mail) with all 1187 target firms 	<ul style="list-style-type: none"> Made quarterly contact (by mail) with all 210 target firms
	<ul style="list-style-type: none"> Developed initial systems for coordinated marketing, brokering, tracking, and evaluation. (Initial focus on service provider organizations) 	<ul style="list-style-type: none"> Made substantive, on-site contact with 135 firms 	<ul style="list-style-type: none"> Made substantive, on-site contact with 60 firms
	<ul style="list-style-type: none"> Conducted initial trial of evaluation system on 5 service provider organizations 	<ul style="list-style-type: none"> Made substantive, follow-up contact with 45 firms 	<ul style="list-style-type: none"> Made substantive, follow-up contact with 20 firms
	<ul style="list-style-type: none"> Conducted education programs for professionals delivering services, namely day-long seminars attended by 50 professionals, and mini-courses attended by 15 professionals. 	<ul style="list-style-type: none"> Brokered (and then tracked) services for 12 firms. 	<ul style="list-style-type: none"> Brokered (and then tracked) services for 8 firms
	<ul style="list-style-type: none"> Began development (in coordination with MOC) of coordinated curricula for worker training at target firms 	<ul style="list-style-type: none"> Organized 3 <i>service deliver networks</i> (averaging 6 firms each). 	<ul style="list-style-type: none"> Organized (in conjunction with Central Program) 2 <i>service delivery networks</i> (averaging 4 firms each).
	<ul style="list-style-type: none"> Organized (in conjunction with Field Office) 2 <i>service delivery networks</i> (averaging 4 firms each). 	<ul style="list-style-type: none"> Provided some level of direct support (e.g., quick assessment or problem solving) to 6 firms. 	<ul style="list-style-type: none"> Provided some level of direct support (e.g., quick assessment or problem solving) to 3 firms
YEAR 2	<ul style="list-style-type: none"> Updated manufacturing database 	<ul style="list-style-type: none"> Made quarterly contact (by mail) with all 1187 target firms. 	<ul style="list-style-type: none"> Made quarterly contact (by mail) with all 210 target firms
	<ul style="list-style-type: none"> Developed broader systems for coordinated marketing, brokering, tracking, and evaluation. (Included other service providers, both Maine firms and out-of-state organizations.) 	<ul style="list-style-type: none"> Made substantive, on-site contact with 135 firms. 	<ul style="list-style-type: none"> Made substantive, on-site contact with 40 firms.
	<ul style="list-style-type: none"> Evaluated all of Maine's service provider organizations, and conducted an evaluation trial on several private firms that provide services 	<ul style="list-style-type: none"> Made substantive, follow-up contact with 75 firms. 	<ul style="list-style-type: none"> Made substantive, follow-up contact with 30 firms.
	<ul style="list-style-type: none"> Conducted education programs for professionals delivering services, namely day-long seminars attended by 50 professionals, and mini-courses attended by 15 professionals. 	<ul style="list-style-type: none"> Brokered (and then tracked) services for 25 firms. 	<ul style="list-style-type: none"> Brokered (and then tracked) services for 10 firms
	<ul style="list-style-type: none"> Continued development (in coordination with MOC) of coordinated curricula for worker training at target firms 	<ul style="list-style-type: none"> Organized 4 <i>service deliver networks</i> (averaging 6 firms each). 	<ul style="list-style-type: none"> Organized (in conjunction with Central Program) 3 <i>service delivery networks</i> (averaging 4 firms each).
	<ul style="list-style-type: none"> Organized (in conjunction with Field Office) 3 <i>service delivery networks</i> (averaging 4 firms each). 	<ul style="list-style-type: none"> Provided some level of direct support to 15 firms. 	<ul style="list-style-type: none"> Provided some level of direct support to 6 firms
YEAR 3	<ul style="list-style-type: none"> Updated manufacturing database. 	<ul style="list-style-type: none"> Made quarterly contact (by mail) with all 1187 target firms. 	<ul style="list-style-type: none"> Made quarterly contact (by mail) with all 210 target firms
	<ul style="list-style-type: none"> Evaluated and refined systems for coordinated marketing, brokering, tracking, and evaluation 	<ul style="list-style-type: none"> Made substantive, on-site contact with 135 firms. 	<ul style="list-style-type: none"> Made substantive, on-site contact with 30 firms.
	<ul style="list-style-type: none"> Evaluated all of Maine's service provider organizations and all interested private firms that provide services. 	<ul style="list-style-type: none"> Made substantive, follow-up contact with 90 firms. 	<ul style="list-style-type: none"> Made substantive, follow-up contact with 40 firms
	<ul style="list-style-type: none"> Conducted education programs for professionals delivering services, namely day-long seminars attended by 50 professionals, and mini-courses attended by 15 professionals 	<ul style="list-style-type: none"> Brokered (and then tracked) services for 32 firms. 	<ul style="list-style-type: none"> Brokered (and then tracked) services for 12 firms.
	<ul style="list-style-type: none"> Organized (in conjunction with Field Office) 3 <i>service delivery networks</i> (averaging 4 firms each). 	<ul style="list-style-type: none"> Organized 5 <i>service deliver networks</i> (averaging 6 firms each). 	<ul style="list-style-type: none"> Organized (in conjunction with Central Program) 3 <i>service delivery networks</i> (averaging 4 firms each).
	<ul style="list-style-type: none"> Coordinated external evaluation of MMP 	<ul style="list-style-type: none"> Provided some level of direct support to 20 firms. 	<ul style="list-style-type: none"> Provided some level of direct support to 8 firms.

SECTION 4: SELECTION CRITERIA INDEX

Target Population

Executive Summary (ES), Page 3
Body of Proposal (BP), Pages 7, 12, 13, 14

Defense Conversion

ES, Page 3
BS, Page 14

Delivery Mechanisms

ES, Page 4
BP, Pages 8,9,10

Technology Sources & Related Services

ES, Page 4
BP, Pages 11, 14, 15, 16, 17

Management Experience

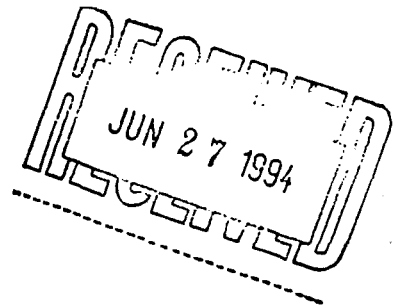
ES, Page 4,5
BP, Pages 15, 16, 18, 19

Funding

See Cost Proposal

Coordination

ES, Page 4
BP, Pages 8, 14, 15, 16, 17



June 24, 1994

Terry Shehata, Ph.D.
Vice President
Maine Science & Technology Foundation
87 Winthrop Street
Augusta, ME 04330

Dear Terry:

This letter is written in support of the proposal to establish a Manufacturing Modernization Program for the State of Maine. The Maine Metal Products Association(MMPA) and its membership is 100% behind this effort.

As you know, MMPA is the membership organization representing firms in the metals and electronics sectors. We have been involved in the design of this Modernization Program and are convinced that is the best way to organize resources to help support manufacturers in Maine.

The services the Modernization Program will provide are critical to Maine's manufacturers, and particularly to the metals and electronics sectors. These sectors have lost over 3000 jobs to defense cuts in just the last three years. We need the Modernization Program to get back on track!

MMPA is fully comfortable with its role in this proposal as an advisory body to the new Manufacturing Outreach Center. We will provide timely and useful information that will help keep the Center focused on the real needs of Maine's manufacturers.

By working together, we can do wonders for Maine!

Sincerely yours,

Robert King
President
Maine Metal Products Association

RK/aml



June 28, 1994

Dr. Phil Nanzetta
Manufacturing Extension Program
National Institute of Standards and Technology
Gaithersburg, MD

Dear Dr. Nanzetta:

As interim chair of the Modernization Partnership (formerly the Maine Technology Extension Consortium), it is with great enthusiasm that I express the support of the members of the Partnership to the TRP proposal submitted by the Maine Science and Technology Foundation to create the new Manufacturing Modernization Program (MMP).

The membership fully supports the role of the MSTF in this effort and supports the necessity for certification of providers. Due to the page limitation of the proposal, not all letters of support were included. However, all letters of support from the members are available at the MSTF and could be submitted to NIST at your request.

The Partnership hopes the proposal will be favorably reviewed by the Technology Reinvestment Project team.

Sincerely,

A handwritten signature in cursive script, appearing to read "Robert M. Kidd".

Robert M. Kidd
Interim Chair



John R. McKernan, Jr.
Governor

DEPARTMENT
of
ECONOMIC AND COMMUNITY DEVELOPMENT
193 State Street
State House Station 59
Augusta, Maine 04333

Michael W. Aube
Commissioner
207-287-2656
FAX 207-287-2861

June 9, 1994

Terry Shehata
Maine Science and Technology Foundation
P.O. Box 707
Augusta, Maine 04332

Dear Terry:

It was a pleasure talking with you this afternoon regarding the Maine Modernization Partnership and its relationship to this department and the Maine Economic Development and Business Assistance Coordinating Council. I believe this effort has the potential to significantly enhance the competitiveness of Maine manufacturing firms, which we both agree is vital to our future. You have my complete support, and that of my staff.

We would welcome the opportunity to participate in any evaluation and certification process necessary to ensure an effective, high quality program of this nature. This will not only ensure that Maine's manufacturers receive truly expert assistance, but will also allow us to broaden our own knowledge base and perform a useful "self examination".

Please let me know of anything I or my staff can do to help you proceed with this project.

Sincerely,

A handwritten signature in black ink, appearing to read 'Alan P. Brigham', written over a large, stylized circular flourish.

Alan P. Brigham
Development Director

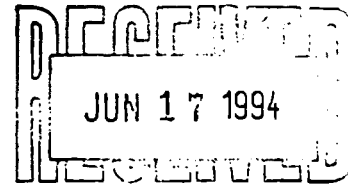
Business Development
187 State Street
State House Station 59
Augusta, Maine 04333
207-287-3153
FAX 207-287-2861

Community Development
219 Capitol Street
State House Station 130
Augusta, Maine 04333
207-624-6800
FAX 207-624-6810

Tourism
189 State Street
State House Station 59
Augusta, Maine 04333
207-287-5710
FAX 207-287-5701



UNIVERSITY OF SOUTHERN MAINE



School of Applied Science

Office of the Dean
101A Technology Center
Gorham, Maine 04038
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FAX (207) 780-5129

Office of the Assistant Dean
101B Technology Center
Gorham, Maine 04038
(207) 780-5440

June 14, 1994

Dr. Terry Shehata
Vice President
Maine Science and Technology Foundation
PO Box 707
Augusta, ME 04332-0707

Dear Dr. Shehata:

The University of Southern Maine School of Applied Science, of which the Production Technology Center is a part, supports the Manufacturing Modernization Program. We are willing to participate in the program in roles which are consistent with our mission and expertise, and to have those of our appropriate services certified.

Sincerely yours,

Brian C. Hodgkin
Dean, School of Applied Science

c: I. Most

BCH/mek



JUN 22 1994

The Maine Alliance

120 Exchange Street • P.O. Box 189 • Portland, Maine 04112 • (207) 774-1001

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Sunday River Skiway Corp.

Vice Chairman
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James D. Delamater
Bethel Bancorp

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The Dunlap Corporation

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Semba Epstein Real Estate

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ABB Environmental Services

David T. Flanagan
Central Maine Power Co.

Gerard J. Geant
The Geant Company

Edward J. Kane, Esq.
Blue Cross/Blue Shield of Maine

Kathie M. Leonard
Auburn Manufacturing, Inc.

Joseph A. Lovejoy
KPMG Peat Marwick

Joseph M. Malone
Malone Commercial Brokers

Richard J. McGoldrick
Commercial Properties, Inc.

Paul D. Merrill
Merrill Industries

Richard A. Molyneux
Key Bank of Maine

David J. Ott
Fleet Bank

William J. Ryan
Peoples Heritage Bank

Curtis M. Scribner
J.B. Brown & Sons

B. Dean Stearns
New England Telephone Co.

Robert D. Steele
Waste Management of Maine

James T. Walsh
Shaw's Supermarkets, Inc.

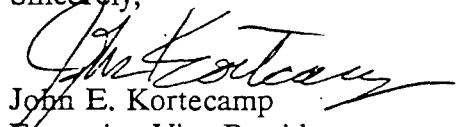
Kathryn M. Weare
The Cliff House

Robert M. Kidd
President
Maine Science and Technology Foundation
P.O. Box 707
Augusta, Maine 04332-0707

Dear Mr. Kidd:

On behalf of The Maine Alliance, I want to offer our support for the Maine Science and Technology Foundation's "Manufacturing Modernization Program."

We view technological strength to be fundamental to the economic development of Maine. It is critical, particularly in a state of our size, to coordinate modernization efforts so that we leverage resources and avoid redundancy. MSTF has a history of effectiveness in working in a collaborative manner and adding value to the process. Therefore, we endorse MSTF's efforts to enhance the productivity and competitiveness of Maine's manufacturing firms through MMP.

Sincerely,

John E. Kortecamp
Executive Vice President

RECEIVED
JUN 22 1994

Water Street
P.O. Box 268
Wiscasset
Maine 04578



Coastal
Enterprises
Inc.

Telephone
(207) 882-7552
Facsimile
(207) 882-7308
Email

hn1510@handsnet.org

June 15, 1994

Dr. Terry Shehata
Maine Science and
Technology Foundation
87 Winthrop Street
Augusta, ME 04332-0707

Dear Terry:

We are pleased to support the Manufacturing Modernization Program (MMP) organized by MSTF and hope to play a role in its implementation.

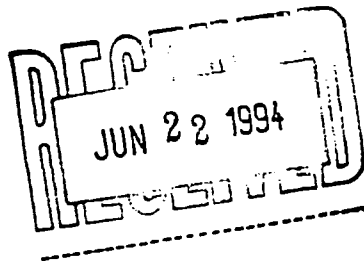
CEI recognizes the importance of setting standards for service delivery, evaluating service providers, and providing technical certification of staff involved with delivering field services. We would be willing for MSTF to evaluate any services that we may provide under the program and have our staff certified where appropriate.

We hope that the proposal to NIST for implementing the first phase of the MMP is reviewed favorably.

Sincerely,

A handwritten signature in black ink, appearing to be "R. Phillips", written in a cursive style.

Ronald L. Phillips
President



(207) 780-4420 • Fax: 780-4810

Offices: 15 Surrenden Street, Portland
Mailing Address: 96 Falmouth Street
Portland, Maine 04103

June 17, 1994

Terry Shehata, Ph.D
Maine Technology Extension Consortium
PO Box 707
Augusta, ME 04332-0707

Dear Terry:

This is in response to your letter of June 6.

The Maine Small Business Development Centers are very supportive of the objectives of the proposed Manufacturing Modernization Program (MMP) and in agreement with the implementation plan as outlined. As I'm sure MSTF and MTEC will agree, the clients of MMP will be best served by a coordinated agency/organization approach, which delivers integrated and complete business services.

The MMP definition clearly identifies markets, finance and advanced business practices as vital to the modernization process. These are strong points of the SBDC program, which, as you know, includes several other resources valuable to MMP. You may not be as aware of the over 160 years of diverse manufacturing management experience within our counseling staff.

We will cooperate fully with MSTF's evaluation and certification program. We began our intense TQM (Continuous Quality Improvement) program several months ago and last August completed a successful week-long Onsite Review, which is congressionally required. Our national Association of Small Business Development Centers (ASBDC) is designing an even more rigorous certification process. I am involved with this and could perhaps add value to the MSTF process.

Best wishes with MMP.

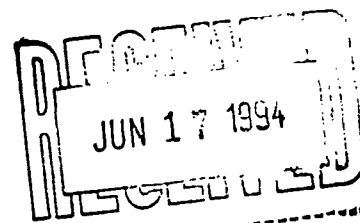
Sincerely,

Charles F. Davis
State Director

▣ Bangor (207) 942-6389 Eastern Maine Development Corporation 1 Cumberland Place Suite 300, PO Box 2579 Bangor, ME 04402-2579 FAX: 942-3548	▣ Caribou (207) 498-8736 Northern Maine Development Commission 2 South Main Street PO Box 79 Caribou, ME 04736 FAX: 493-3108	▣ Lewiston/Auburn (207) 783-9186 Androscoggin Valley Council of Governments 125 Manlev Road Auburn, ME 04210 FAX: 783-5211	▣ Machias (207) 255-3313 University of Maine at Machias Math & Science Building Machias, ME 04654 FAX: 255-4864	▣ Portland (207) 780-4949 School of Business, Economics & Management University of Southern Maine 96 Falmouth Street Portland, ME 04103 FAX: 780-4810	▣ Sanford (207) 324-0316 Southern Maine Regional Planning Commission 255 Main Street, PO Box Q Sanford, ME 04073 FAX: 324-2958	▣ Wiscasset (207) 882-7552 Coastal Enterprises Inc. Water Street, PO Box 268 Wiscasset, ME 04578 FAX: 882-7308
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UNIVERSITY OF MAINE



Office of the Vice President for Research
and Public Service

5703 Alumni Hall
Orono, Maine 04469-5703
207-581-1504

June 14, 1994

Robert M. Kidd
President
Maine Science and Technology Foundation
P.O. Box 707
Augusta, ME 04332-0707

Dear Bob:

It is my pleasure to express the University of Maine's support for the implementation of a new statewide Manufacturing Modernization Program designed by the Maine Science and Technology Foundation (MSTF) and the Maine Technology Extension Consortium (MTEC) with funds from the National Institute for Standards and Technology.

MSTF's legislative mandate is to enhance the state's economy and well being through science and technology. MSTF programs cover the spectrum of science and technology from its commercial and business activities, including industry-driven and led centers for innovation for the aquaculture, biotechnology, and metal and electronics industries, to its research activities such as Maine EPSCoR and the Marine Research Board. This legislative mandate and structure gives you a unique ability to efficiently coordinate the delivery of quality modernization services that will enhance the competitiveness of Maine's manufacturing firms.

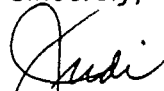
Key to the Manufacturing Modernization Program, as conceptualized by MSTF and MTEC, is that it is designed around Maine's existing organizations and will not unnecessarily waste valuable resources duplicating those effective services now available in our state. It will provide a needed formal structure for evaluation of existing services being offered and work with providers to ensure that all services are of the highest quality and at the cutting edge of the field.

Any program that plans to "evaluate" and "certify" existing providers must be sensitive to the needs of the providers and the constraints and opportunities they encounter. We believe that MSTF has the ability to successfully develop an evaluation/certification process that meets both the program's needs and the providers' goals. Under MSTF and MTEC leadership, an equitable and consistent method of fair evaluation and certification can be established in Maine.



If my office may be of assistance as you pursue implementation funds, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Judith".

Judith I. Bailey
Vice President for Research
and Public Service

kds

cc: Frederick E. Hutchinson
Terry Shehata



**MAINE
AQUACULTURE
INNOVATION
CENTER**

141 North Main Street • Suite 203
Brewer, Maine 04412
207•989•5310 Fax 207•989•5795

Promoting Maine aquaculture development through research and industry partnerships

MAIC Ref. No. 4062103
June 20, 1994

Terry Shehata, Vice President
Maine Science and Technology Foundation
P.O. Box 707
Augusta, ME 04332-0707

Dear Terry,

The Maine Aquaculture Innovation Center (MAIC) wishes to express its support for the MANUFACTURING MODERNIZATION PROGRAM (MMP) proposal which the Foundation has submitted to the National Institute of Standards and Technology (NIST). If approved, this program would facilitate the delivery of important services which will make Maine firms more competitive.

A key element of this program involves evaluation and certification of organizations providing services. Insofar as MSTF is actively consulting with the various organizations which would play roles in the improved service delivery system, MAIC would welcome evaluation by MSTF and expects that its staff will seek certification in the manner described in the proposal document (Task 7).

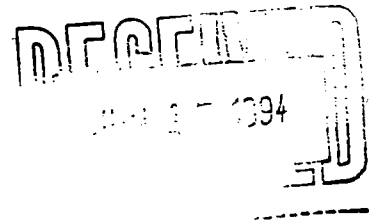
The need in Maine for improved coordination and planning of modernization services for industry is apparent. This project offers an opportunity to upgrade the quality of existing services; to eliminate the wasteful duplication of services; and to identify specific service needs which are not currently being satisfied.

The MSTF proposal has MAIC's full support.

Sincerely,

Michael M. Hastings
Executive Director

MAINE DEVELOPMENT FOUNDATION



June 16, 1994

Terry Shehata
Vice President, Director of Programs
Maine Science & Technology Foundation
87 Winthrop Street
Augusta, ME 04330

Dear Terry:

This letter concerns the Maine Manufacturing Modernization program and expresses the Maine Development Foundation's firm commitment to the goals and activities of the proposed program.

As you know the Maine Development Foundation has been actively engaged with MSTF and other organizations as part of the Maine Technology Extension Consortium to design the manufacturing program over the last several months. We are pleased with our involvement, the design, and your encouragement for continued work with manufacturers.

We are more than willing for our organization to be evaluated by MSTF (or others) and to have our staff certified to participate in the program. We would like to be involved in reviewing the evaluation certification criteria and the process you will be using, but trust that MSTF will organize the evaluation/certification procedure in fair and high quality manner.

Please call if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Henry Bourgeois', is written over the typed name.

Henry Bourgeois
President

HB:km

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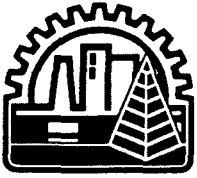
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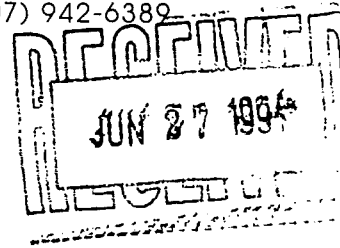
Richard L. Pattenau
University of Southern Maine

William J. Ryan
Peoples Heritage Bank



EASTERN MAINE DEVELOPMENT CORPORATION

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June 23, 1994

Terry Shehata, Ph.D.
Maine Science & Technology Foundation
P.O. Box 707
Augusta, ME 04332-0707

Dear Terry:

As a member of the Maine Technology Extension Consortium (MTEC), we are well aware of the efforts of both MTEC and the Maine Science & Technology Foundation to design a statewide "modernization program" that will support the needs of Maine's manufacturers as they strive to remain competitive in a rapidly changing business environment.

Eastern Maine Development Corporation is pleased to be involved in the "Manufacturing Modernization Program" (MMP). We see this as an excellent opportunity to unify the work of many fine service organizations that already exist here in Maine and to provide the individual members of these organizations with consistent, quality training that, in turn, will be of benefit to Maine businesses. These businesses represent the future of our Maine economy and deserve the highest quality technical support that we can provide.

Toward that end, we support the evaluation process proposed for MMP service providers and look forward to participating in the development of both the training that will be required and the evaluation tools that will subsequently be used.

If we can be of any further assistance, Terry, don't hesitate to contact me.

Sincerely,

Charles G. Roundy
President

TRP Cost Sheet S-3

1. Proposal Title					
Manufacturing Modernization Program for the State of Maine					
2. Base Program or Option (Check Only One)			3. Performance Period: (For Development Only)		
<input checked="" type="checkbox"/> Base Program	<input type="checkbox"/> Option 1	<input type="checkbox"/> Option 2	_____ (See Cost Instructions)		
Elements of Costs	4. TRP Total Project Cost	5. Cost Share from Proposer		6. Total Cost Share from Proposer [5i + 5ii]	7. Total TRP Funds Requested [4 - 6]
		(i) Cash	(ii) In-Kind		
a. Labor	250,667	105,000	69,000	174,000	76,667
b. Fringe Benefits	39,967	23,100	-0-	23,100	16,867
c. Travel	24,000	-0-	-0-	-0-	24,000
d. Equipment	20,000	-0-	-0-	-0-	20,000
e. Supplies	12,000	6,000	-0-	6,000	6,000
f. Contracts	1,477,436	180,000	602,300	782,300	695,136
g. Construction	-0-	-0-	-0-	-0-	-0-
h. Software	-0-	-0-	-0-	-0-	-0-
i. Patents	-0-	-0-	-0-	-0-	-0-
j. Royalties	-0-	-0-	-0-	-0-	-0-
k. Dir. Materials	-0-	-0-	-0-	-0-	-0-
l. Other Dir. Costs	6,000	-0-	-0-	-0-	6,000
m. Total Dir. Costs	1,830,070	314,100	671,300	985,400	844,670
n. Indirect Costs	112,377	--	--	--	112,377
o. COM or Profit *					
p. Total Cost [m+n]	1,942,447	314,100	671,300	985,400	957,047
q. Percent Cost Share = Total Proposers' Cost Share (6)/Total Project Cost (4)				51%	

* No cost of money (COM) or profit/fee will be considered on a TRP project at any level.

TRP Cost Sheet S-3

1. Proposal Title

Manufacturing Modernization Program for the State of Maine

2. Base Program or Option (Check Only One)

Base Program Option 1 Option 2

3. Performance Period: (For Development Only)

_____ (See Cost Instructions)

Elements of Costs	4. TRP Total Project Cost	5. Cost Share from Proposer		6. Total Cost Share from Proposer [5i + 5ii]	7. Total TRP Funds Requested [4 - 6]
		(i) Cash	(ii) In-Kind		
a. Labor	290,750	108,250	69,000	177,250	113,500
b. Fringe Benefits	48,785	23,815	-0-	23,815	24,970
c. Travel	25,000	-0-	-0-	-0-	25,000
d. Equipment	10,000	-0-	-0-	-0-	10,000
e. Supplies	12,000	6,000	-0-	6,000	6,000
f. Contracts	2,081,208	480,000	644,152	1,124,152	957,056
g. Construction	-0-	-0-	-0-	-0-	-0-
h. Software	-0-	-0-	-0-	-0-	-0-
i. Patents	-0-	-0-	-0-	-0-	-0-
j. Royalties	-0-	-0-	-0-	-0-	-0-
k. Dir. Materials	-0-	-0-	-0-	-0-	-0-
l. Other Dir. Costs	6,000	-0-	-0-	-0-	6,000
m. Total Dir. Costs	2,473,743	619,065	713,152	1,331,217	1,142,526
n. Indirect Costs	174,109	--	--	--	174,109
o. COM or Profit *					
p. Total Cost [m+n]	2,647,852	618,065	713,152	1,331,217	1,316,635
q. Percent Cost Share = Total Proposers' Cost Share (6)/Total Project Cost (4)				50%	

* No cost of money (COM) or profit/fee will be considered on a TRP project at any level.

TRP Cost Sheet S-3

1. Proposal Title					
Manufacturing Modernization Program for the State of Maine					
2. Base Program or Option (Check Only One)			3. Performance Period: (For Development Only)		
<input type="checkbox"/> Base Program		<input type="checkbox"/> Option 1	<input checked="" type="checkbox"/> Option 2		_____ (See Cost Instructions)
Elements of Costs	4. TRP Total Project Cost	5. Cost Share from Proposer		6. Total Cost Share from Proposer [5i + 5ii]	7. Total TRP Funds Requested [4 - 6]
		(i) Cash	(ii) In-Kind		
a. Labor	297,403	111,498	69,000	180,498	116,905
b. Fringe Benefits	50,249	24,530	-0-	24,530	25,719
c. Travel	26,000	-0-	-0-	-0-	26,000
d. Equipment	10,000	-0-	-0-	-0-	10,000
e. Supplies	12,000	6,000	-0-	6,000	6,000
f. Contracts	2,290,862	575,481	719,275	1,294,756	996,107
g. Construction	-0-	-0-	-0-	-0-	-0-
h. Software	-0-	-0-	-0-	-0-	-0-
i. Patents	-0-	-0-	-0-	-0-	-0-
j. Royalties	-0-	-0-	-0-	-0-	-0-
k. Dir. Materials	-0-	-0-	-0-	-0-	-0-
l. Other Dir. Costs	6,000	-0-	-0-	-0-	6,000
m. Total Dir. Costs	2,692,514	717,509	788,275	1,505,783	1,186,731
n. Indirect Costs	188,824	--	--	--	188,824
o. COM or Profit *					
p. Total Cost [m+n]	2,881,338	717,509	788,275	1,505,783	1,375,555
q. Percent Cost Share = Total Proposers' Cost Share (6)/Total Project Cost (4)				52%	

* No cost of money (COM) or profit/fee will be considered on a TRP project at any level.

COST PROPOSAL

SECTION 1: TOTAL COST

1. MMP's total costs are outlined in TABLE 1. For each of three years, TABLE 1 contains:

- A. A summary page of Total Program costs; and
- B. Three pages breaking down costs by MMP's tasks (namely: operating the Central Program; operating the Field Office; and operating the Outreach Center).

2. Explanation of personnel costs are outlined below:

The following staff will be hired at the indicated base salary:

MMP Director (\$55,000); Field Agents (\$45,000); Program Specialists (\$40,000); Support Specialists (\$35,000); Full-time Secretary (\$20,000); Half-time Secretary (\$10,000). A 4% cost adjustment is assumed for outyears.

Staff is assumed to be hired at the beginning of the month indicated: MMP Director (month 1); Field Agent at Field Office (month 1); Field Agents at Outreach Center (months 3,4,5,13,25); Program Specialists (month 4); Support Specialists (months 4,25); Full-time Secretary (month 3); Half-time Secretary (month 1).

Benefits are estimated at 22% of salary. A 4% cost adjustment is assumed for outyears.

3. Explanation of indirect rates are outlined below:

MSTF's indirect rate is calculated at 10% of all direct costs, except equipment. CTT's indirect is calculated at 25% of all direct cost, except equipment, associated with the Outreach Center.

Base Program Budget

Total Program						
Activity	TOTAL PROJECT COST	COST SHARE (CASH)	COST SHARE (IN-KIND)	TOTAL COST SHARE	TRP FUNDS REQUESTED	
A. Labor	\$ 250,667	\$ 105,000	\$ 69,000	\$ 174,000	\$ 76,667	
B. Fringe Benefits	\$ 39,967	\$ 23,100	\$ -	\$ 23,100	\$ 16,867	
C. Travel	\$ 24,000	\$ -	\$ -	\$ -	\$ 24,000	
D. Equipment	\$ 20,000	\$ -	\$ -	\$ -	\$ 20,000	
E. Supplies	\$ 12,000	\$ 6,000	\$ -	\$ 6,000	\$ 6,000	
F. Contracts	\$ 1,477,436	\$ 180,000	\$ 602,300	\$ 782,300	\$ 695,136	
<i>Mfg Outreach Center</i>	\$ 938,186	\$ 120,000	\$ 372,300	\$ 492,300	\$ 445,886	
<i>Program Development</i>	\$ 229,250	\$ -	\$ 90,000	\$ 90,000	\$ 139,250	
<i>Network Facilitation</i>	\$ 210,000	\$ 60,000	\$ 90,000	\$ 150,000	\$ 60,000	
<i>Continuing Education</i>	\$ 100,000	\$ -	\$ 50,000	\$ 50,000	\$ 50,000	
G. Construction	\$ -	\$ -	\$ -	\$ -	\$ -	
H. Software	\$ -	\$ -	\$ -	\$ -	\$ -	
I. Patents	\$ -	\$ -	\$ -	\$ -	\$ -	
J. Royalties	\$ -	\$ -	\$ -	\$ -	\$ -	
K. Direct Materials	\$ -	\$ -	\$ -	\$ -	\$ -	
L. Other Direct Costs	\$ 6,000	\$ -	\$ -	\$ -	\$ 6,000	
M. Total Direct Costs	\$ 1,830,070	\$ 314,100	\$ 671,300	\$ 985,400	\$ 844,670	
N. Indirect Costs	\$ 112,377				\$ 112,377	
O. Com or Profit						
P. Total Cost (m+n)	\$ 1,942,447	\$ 314,100	\$ 671,300	\$ 985,400	\$ 957,047	
Q. Percent Cost Share = (6)/(4)				51%		

Base Program Budget

1. Central Program							
Activity		TOTAL PROJECT COST	COST SHARE (CASH)	COST SHARE (IN-KIND)	TOTAL COST SHARE	TOTAL COST SHARE	TRP FUNDS REQUESTED
A. Labor		\$ 150,067	\$ 50,000	\$ 23,400	\$ 73,400	\$ 76,667	\$ 76,667
<i>Board Oversight</i>		\$ 23,400	\$ -	\$ 23,400	\$ 23,400	\$ -	\$ -
<i>MMP Director</i>		\$ 50,000	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ -
<i>Program Specialists (2)</i>		\$ 60,000	\$ -	\$ -	\$ -	\$ 60,000	\$ 60,000
<i>Secretary</i>		\$ 16,667	\$ -	\$ -	\$ -	\$ 16,667	\$ 16,667
B. Fringe Benefits		\$ 27,867	\$ 11,000	\$ -	\$ 11,000	\$ 16,867	\$ 16,867
C. Travel		\$ 12,000	\$ -	\$ -	\$ -	\$ 12,000	\$ 12,000
D. Equipment		\$ 15,000	\$ -	\$ -	\$ -	\$ 15,000	\$ 15,000
E. Supplies		\$ 10,000	\$ 5,000	\$ -	\$ 5,000	\$ 5,000	\$ 5,000
F. Contracts		\$ 539,250	\$ 60,000	\$ 230,000	\$ 290,000	\$ 249,250	\$ 249,250
<i>Program Development</i>		\$ 229,250	\$ -	\$ 90,000	\$ 90,000	\$ 139,250	\$ 139,250
<i>Network Facilitation</i>		\$ 210,000	\$ 60,000	\$ 90,000	\$ 150,000	\$ 60,000	\$ 60,000
<i>Continuing Education</i>		\$ 100,000	\$ -	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
G. Construction		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
H. Software		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
I. Patents		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
J. Royalties		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
K. Direct Materials		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
L. Other Direct Costs		\$ 5,000	\$ -	\$ -	\$ -	\$ 5,000	\$ 5,000
M. Total Direct Costs		\$ 759,184	\$ 126,000	\$ 253,400	\$ 379,400	\$ 379,784	\$ 379,784

Base Program Budget

2. Portland MOC							
		TOTAL PROJECT COST	COST SHARE (CASH)	COST SHARE (IN-KIND)	TOTAL COST SHARE	TOTAL COST SHARE	TRP FUNDS REQUESTED
A. Labor		\$ 314,417	\$ -	\$ 179,000	\$ 179,000	\$ 179,000	\$ 135,417
<i>Board Oversight</i>		\$ 31,000	\$ -	\$ 31,000	\$ 31,000	\$ 31,000	\$ -
<i>Director (50%)</i>		\$ 40,000	\$ -	\$ 40,000	\$ 40,000	\$ 40,000	\$ -
<i>Field Agents (3)</i>		\$ 101,250	\$ -	\$ -	\$ -	\$ -	\$ 101,250
<i>Support Specialist</i>		\$ 17,500	\$ -	\$ -	\$ -	\$ -	\$ 17,500
<i>Secretary</i>		\$ 16,667	\$ -	\$ -	\$ -	\$ -	\$ 16,667
<i>Client Firms</i>		\$ 108,000	\$ -	\$ 108,000	\$ 108,000	\$ 108,000	\$ -
B. Fringe Benefits		\$ 38,592	\$ -	\$ 8,800	\$ 8,800	\$ 8,800	\$ 29,792
C. Travel		\$ 31,500	\$ -	\$ 4,500	\$ 4,500	\$ 4,500	\$ 27,000
D. Equipment		\$ 15,000	\$ -	\$ -	\$ -	\$ -	\$ 15,000
E. Supplies		\$ 2,500	\$ -	\$ -	\$ -	\$ -	\$ 2,500
F. Contracts		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Network Formation</i>		\$ 420,000	\$ 120,000	\$ 180,000	\$ 300,000	\$ 300,000	\$ 120,000
G. Construction		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
H. Software		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
I. Patents		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
J. Royalties		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
K. Direct Materials		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
L. Other Direct Costs		\$ 6,000	\$ -	\$ -	\$ -	\$ -	\$ 6,000
M. Total Direct Costs		\$ 828,009	\$ 120,000	\$ 372,300	\$ 492,300	\$ 492,300	\$ 335,709
N. Indirect Costs		\$ 110,177	\$ -	\$ -	\$ -	\$ -	\$ 110,177
O. Com or Profit		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
P. Total Cost (m+n)		\$ 938,186	\$ 120,000	\$ 372,300	\$ 492,300	\$ 492,300	\$ 445,886
Q. Percent Cost Share = (6)/(4)						52%	

Base Program Budget

3. Caribou Field Office						
Activity	TOTAL PROJECT COST	COST SHARE (CASH)	COST SHARE (IN-KIND)	TOTAL COST SHARE	TOTAL COST SHARE	TRP FUNDS REQUESTED
A. Labor	\$ 100,600	\$ 55,000	\$ 45,600	\$ 100,600	\$ -	\$ -
Field Agent (100%)	\$ 45,000	\$ 45,000	\$ -	\$ 45,000	\$ -	\$ -
Secretary (0.5 FTE)	\$ 10,000	\$ 10,000	\$ -	\$ 10,000	\$ -	\$ -
Target Firms	\$ 45,600	\$ -	\$ 45,600	\$ 45,600	\$ -	\$ -
B. Fringe Benefits	\$ 12,100	\$ 12,100	\$ -	\$ 12,100	\$ -	\$ -
C. Travel	\$ 12,000	\$ -	\$ -	\$ -	\$ 12,000	\$ 12,000
D. Equipment	\$ 5,000	\$ -	\$ -	\$ -	\$ 5,000	\$ 5,000
E. Supplies	\$ 2,000	\$ 1,000	\$ -	\$ 1,000	\$ 1,000	\$ 1,000
F. Contracts	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G. Construction	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
H. Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
I. Patents	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
J. Royalties	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
K. Direct Materials	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
L. Other Direct Costs	\$ 1,000	\$ -	\$ -	\$ -	\$ 1,000	\$ 1,000
M. Total Direct Costs	\$ 132,700	\$ 68,100	\$ 45,600	\$ 113,700	\$ 19,000	\$ 19,000

Option 1 Budget

Total Program						
Activity	TOTAL PROJECT COST	COST SHARE (CASH)	COST SHARE (IN-KIND)	TOTAL COST SHARE	TRP FUNDS REQUESTED	
A. Labor	\$ 290,750	\$ 108,250	\$ 69,000	\$ 177,250	\$ 113,500	
B. Fringe Benefits	\$ 48,785	\$ 23,815	\$ -	\$ 23,815	\$ 24,970	
C. Travel	\$ 25,000	\$ -	\$ -	\$ -	\$ 25,000	
D. Equipment	\$ 10,000	\$ -	\$ -	\$ -	\$ 10,000	
E. Supplies	\$ 12,000	\$ 6,000	\$ -	\$ 6,000	\$ 6,000	
F. Contracts	\$ 2,081,208	\$ 480,000	\$ 644,152	\$ 1,124,152	\$ 957,056	
<i>Mfg Outreach Center</i>	\$ 1,431,208	\$ 300,000	\$ 414,152	\$ 714,152	\$ 717,056	
<i>Program Development</i>	\$ 190,000	\$ -	\$ 90,000	\$ 90,000	\$ 100,000	
<i>Network Facilitation</i>	\$ 360,000	\$ 180,000	\$ 90,000	\$ 270,000	\$ 90,000	
<i>Continuing Education</i>	\$ 100,000	\$ -	\$ 50,000	\$ 50,000	\$ 50,000	
G. Construction	\$ -	\$ -	\$ -	\$ -	\$ -	
H. Software	\$ -	\$ -	\$ -	\$ -	\$ -	
I. Patents	\$ -	\$ -	\$ -	\$ -	\$ -	
J. Royalties	\$ -	\$ -	\$ -	\$ -	\$ -	
K. Direct Materials	\$ -	\$ -	\$ -	\$ -	\$ -	
L. Other Direct Costs	\$ 6,000	\$ -	\$ -	\$ -	\$ 6,000	
M. Total Direct Costs	\$ 2,473,743	\$ 618,065	\$ 713,152	\$ 1,331,217	\$ 1,142,526	
N. Indirect Costs	\$ 174,109	\$ -	\$ -	\$ -	\$ 174,109	
O. Com or Profit	\$ -	\$ -	\$ -	\$ -	\$ -	
P. Total Cost (m+n)	\$ 2,647,852	\$ 618,065	\$ 713,152	\$ 1,331,217	\$ 1,316,635	
Q. Percent Cost Share = (6)/(4)				50%		

Option 1 Budget

1. Central Program							
Activity	TOTAL PROJECT COST	COST SHARE (CASH)	COST SHARE (IN-KIND)	TOTAL COST SHARE	TRP FUNDS REQUESTED		
A. Labor	\$ 188,400	\$ 51,500	\$ 23,400	\$ 74,900	\$ 113,500		
<i>Board Oversight</i>	\$ 23,400	\$ -	\$ 23,400	\$ 23,400	\$ -		
<i>MMP Director</i>	\$ 51,500	\$ 51,500	\$ -	\$ 51,500	\$ -		
<i>Program Specialists (2)</i>	\$ 92,700	\$ -	\$ -	\$ -	\$ 92,700		
<i>Program Secretary</i>	\$ 20,800	\$ -	\$ -	\$ -	\$ 20,800		
B. Fringe Benefits	\$ 36,300	\$ 11,330	\$ -	\$ 11,330	\$ 24,970		
C. Travel	\$ 13,000	\$ -	\$ -	\$ -	\$ 13,000		
D. Equipment	\$ 7,500	\$ -	\$ -	\$ -	\$ 7,500		
E. Supplies	\$ 10,000	\$ 5,000	\$ -	\$ 5,000	\$ 5,000		
F. Contracts	\$ 650,000	\$ 180,000	\$ 230,000	\$ 410,000	\$ 240,000		
<i>Program Development</i>	\$ 190,000	\$ -	\$ 90,000	\$ 90,000	\$ 100,000		
<i>Network Facilitation</i>	\$ 360,000	\$ 180,000	\$ 90,000	\$ 270,000	\$ 90,000		
<i>Continuing Education</i>	\$ 100,000	\$ -	\$ 50,000	\$ 50,000	\$ 50,000		
G. Construction	\$ -	\$ -	\$ -	\$ -	\$ -		
H. Software	\$ -	\$ -	\$ -	\$ -	\$ -		
I. Patents	\$ -	\$ -	\$ -	\$ -	\$ -		
J. Royalties	\$ -	\$ -	\$ -	\$ -	\$ -		
K. Direct Materials	\$ -	\$ -	\$ -	\$ -	\$ -		
L. Other Direct Costs	\$ 5,000	\$ -	\$ -	\$ -	\$ 5,000		
M. Total Direct Costs	\$ 910,200	\$ 247,830	\$ 253,400	\$ 501,230	\$ 408,970		

Option 1 Budget

2. Portland MOC						
Activity	TOTAL PROJECT COST	COST SHARE (CASH)	COST SHARE (IN-KIND)	TOTAL COST SHARE	TRP FUNDS REQUESTED	
A. Labor	\$ 497,250	\$ -	\$ 255,000	\$ 255,000	\$ 242,250	
Board Oversight	\$ 31,000	\$ -	\$ 31,000	\$ 31,000	\$ -	
Director (50%)	\$ 41,600	\$ -	\$ 41,600	\$ 41,600	\$ -	
Field Agents (4)	\$ 185,400	\$ -	\$ -	\$ -	\$ 185,400	
Support Specialist	\$ 36,050	\$ -	\$ -	\$ -	\$ 36,050	
Secretary	\$ 20,800	\$ -	\$ -	\$ -	\$ 20,800	
Target Firms	\$ 182,400	\$ -	\$ 182,400	\$ 182,400	\$ -	
B. Fringe Benefits	\$ 62,447	\$ -	\$ 9,152	\$ 9,152	\$ 53,295	
C. Travel	\$ 48,000	\$ -	\$ -	\$ -	\$ 48,000	
D. Equipment	\$ 9,500	\$ -	\$ -	\$ -	\$ 9,500	
E. Supplies	\$ 10,000	\$ -	\$ -	\$ -	\$ 10,000	
F. Contracts						
Network Formation	\$ 600,000	\$ 300,000	\$ 150,000	\$ 450,000	\$ 150,000	
G. Construction	\$ -	\$ -	\$ -	\$ -	\$ -	
H. Software	\$ -	\$ -	\$ -	\$ -	\$ -	
I. Patents	\$ -	\$ -	\$ -	\$ -	\$ -	
J. Royalties	\$ -	\$ -	\$ -	\$ -	\$ -	
K. Direct Materials	\$ -	\$ -	\$ -	\$ -	\$ -	
L. Other Direct Costs	\$ 2,500	\$ -	\$ -	\$ -	\$ 2,500	
M. Total Direct Costs	\$ 1,229,697	\$ 300,000	\$ 414,152	\$ 714,152	\$ 515,545	
N. Indirect Costs	\$ 201,511				\$ 201,511	
O. Com or Profit						
P. Total Cost (m+n)	\$ 1,431,208	\$ 300,000	\$ 414,152	\$ 714,152	\$ 717,056	
Q. Percent Cost Share = (6)/(4)				50%		

Option 1 Budget

3. Caribou Field Office							
			TOTAL PROJECT COST	COST SHARE (CASH)	COST SHARE (IN-KIND)	TOTAL COST SHARE	TRP FUNDS REQUESTED
Activity							
A. Labor			\$ 102,350	\$ 56,750	\$ 45,600	\$ 102,350	\$ -
<i>Field Agent (100%)</i>			\$ 46,350	\$ 46,350	\$ -	\$ 46,350	\$ -
<i>Secretary (0.5 FTE)</i>			\$ 10,400	\$ 10,400	\$ -	\$ 10,400	\$ -
<i>Target Firms</i>			\$ 45,600	\$ -	\$ 45,600	\$ 45,600	\$ -
B. Fringe Benefits			\$ 12,485	\$ 12,485	\$ -	\$ 12,485	\$ -
C. Travel			\$ 12,000	\$ -	\$ -	\$ -	\$ 12,000
D. Equipment			\$ 2,500	\$ -	\$ -	\$ -	\$ 2,500
E. Supplies			\$ 2,000	\$ 1,000	\$ -	\$ 1,000	\$ 1,000
F. Contracts			\$ -	\$ -	\$ -	\$ -	\$ -
G. Construction			\$ -	\$ -	\$ -	\$ -	\$ -
H. Software			\$ -	\$ -	\$ -	\$ -	\$ -
I. Patents			\$ -	\$ -	\$ -	\$ -	\$ -
J. Royalties			\$ -	\$ -	\$ -	\$ -	\$ -
K. Direct Materials			\$ -	\$ -	\$ -	\$ -	\$ -
L. Other Direct Costs			\$ 1,000	\$ -	\$ -	\$ -	\$ 1,000
M. Total Direct Costs			\$ 132,335	\$ 70,235	\$ 45,600	\$ 115,835	\$ 16,500

Option 2 Budget

Total Program						
Activity	TOTAL PROJECT COST	COST SHARE (CASH)	COST SHARE (IN-KIND)	TOTAL COST SHARE	TRP FUNDS REQUESTED	
A. Labor	\$ 297,403	\$ 111,498	\$ 69,000	\$ 180,498	\$ 116,905	
B. Fringe Benefits	\$ 50,249	\$ 24,530	\$ -	\$ 24,530	\$ 25,719	
C. Travel	\$ 26,000	\$ -	\$ -	\$ -	\$ 26,000	
D. Equipment	\$ 10,000	\$ -	\$ -	\$ -	\$ 10,000	
E. Supplies	\$ 12,000	\$ 6,000	\$ -	\$ 6,000	\$ 6,000	
F. Contracts	\$ 2,290,862	\$ 575,481	\$ 719,275	\$ 1,294,756	\$ 996,107	
<i>Mfg Outreach Center</i>	\$ 1,640,862	\$ 395,481	\$ 489,275	\$ 884,756	\$ 756,107	
<i>Program Development</i>	\$ 190,000	\$ -	\$ 90,000	\$ 90,000	\$ 100,000	
<i>Network Facilitation</i>	\$ 360,000	\$ 180,000	\$ 90,000	\$ 270,000	\$ 90,000	
<i>Continuing Education</i>	\$ 100,000	\$ -	\$ 50,000	\$ 50,000	\$ 50,000	
G. Construction	\$ -	\$ -	\$ -	\$ -	\$ -	
H. Software	\$ -	\$ -	\$ -	\$ -	\$ -	
I. Patents	\$ -	\$ -	\$ -	\$ -	\$ -	
J. Royalties	\$ -	\$ -	\$ -	\$ -	\$ -	
K. Direct Materials	\$ -	\$ -	\$ -	\$ -	\$ -	
L. Other Direct Costs	\$ 6,000	\$ -	\$ -	\$ -	\$ 6,000	
M. Total Direct Costs	\$ 2,692,514	\$ 717,509	\$ 788,275	\$ 1,505,783	\$ 1,186,731	
N. Indirect Costs	\$ 188,824	\$ -	\$ -	\$ -	\$ 188,824	
O. Com or Profit	\$ -	\$ -	\$ -	\$ -	\$ -	
P. Total Cost (m+n)	\$ 2,881,338	\$ 717,509	\$ 788,275	\$ 1,505,783	\$ 1,375,555	
Q. Percent Cost Share = (6)/(4)				52%		

Option 2 Budget

1. Central Program						
Activity	TOTAL PROJECT COST	COST SHARE (CASH)	COST SHARE (IN-KIND)	TOTAL COST SHARE	TOTAL COST SHARE	TRP FUNDS REQUESTED
A. Labor	\$ 193,350	\$ 53,045	\$ 23,400	\$ 76,445	\$ 116,905	
<i>Board Oversight</i>	\$ 23,400	\$ -	\$ 23,400	\$ 23,400	\$ -	
<i>MMP Director</i>	\$ 53,045	\$ 53,045	\$ -	\$ 53,045	\$ -	
<i>Program Specialists (2)</i>	\$ 95,481	\$ -	\$ -	\$ -	\$ 95,481	
<i>Secretary</i>	\$ 21,424	\$ -	\$ -	\$ -	\$ 21,424	
B. Fringe Benefits	\$ 37,389	\$ 11,670	\$ -	\$ 11,670	\$ 25,719	
C. Travel	\$ 13,000	\$ -	\$ -	\$ -	\$ 13,000	
D. Equipment	\$ 7,500	\$ -	\$ -	\$ -	\$ 7,500	
E. Supplies	\$ 10,000	\$ 5,000	\$ -	\$ 5,000	\$ 5,000	
F. Contracts	\$ 650,000	\$ 180,000	\$ 230,000	\$ 410,000	\$ 240,000	
<i>Program Development</i>	\$ 190,000	\$ -	\$ 90,000	\$ 90,000	\$ 100,000	
<i>Network Facilitation</i>	\$ 360,000	\$ 180,000	\$ 90,000	\$ 270,000	\$ 90,000	
<i>Continuing Education</i>	\$ 100,000	\$ -	\$ 50,000	\$ 50,000	\$ 50,000	
G. Construction	\$ -	\$ -	\$ -	\$ -	\$ -	
H. Software	\$ -	\$ -	\$ -	\$ -	\$ -	
I. Patents	\$ -	\$ -	\$ -	\$ -	\$ -	
J. Royalties	\$ -	\$ -	\$ -	\$ -	\$ -	
K. Direct Materials	\$ -	\$ -	\$ -	\$ -	\$ -	
L. Other Direct Costs	\$ 5,000	\$ -	\$ -	\$ -	\$ 5,000	
M. Total Direct Costs	\$ 916,239	\$ 249,715	\$ 253,400	\$ 503,115	\$ 413,124	

Option 2 Budget

3. Caribou Field Office							
Activity		TOTAL PROJECT COST	COST SHARE (CASH)	COST SHARE (IN-KIND)	TOTAL COST SHARE	TRP FUNDS REQUESTED	
A. Labor		\$ 104,053	\$ 58,453	\$ 45,600	\$ 104,053	\$ -	
<i>Field Agent (100%)</i>		\$ 47,741	\$ 47,741	\$ -	\$ 47,741	\$ -	
<i>Secretary (0.5 FTE)</i>		\$ 10,712	\$ 10,712	\$ -	\$ 10,712	\$ -	
<i>Target Firms</i>		\$ 45,600	\$ -	\$ 45,600	\$ 45,600	\$ -	
B. Fringe Benefits		\$ 12,860	\$ 12,860	\$ -	\$ 12,860	\$ -	
C. Travel		\$ 13,000	\$ -	\$ -	\$ -	\$ 13,000	
D. Equipment		\$ 2,500	\$ -	\$ -	\$ -	\$ 2,500	
E. Supplies		\$ 2,000	\$ 1,000	\$ -	\$ 1,000	\$ 1,000	
F. Contracts		\$ -	\$ -	\$ -	\$ -	\$ -	
G. Construction		\$ -	\$ -	\$ -	\$ -	\$ -	
H. Software		\$ -	\$ -	\$ -	\$ -	\$ -	
I. Patents		\$ -	\$ -	\$ -	\$ -	\$ -	
J. Royalties		\$ -	\$ -	\$ -	\$ -	\$ -	
K. Direct Materials		\$ -	\$ -	\$ -	\$ -	\$ -	
L. Other Direct Costs		\$ 1,000	\$ -	\$ -	\$ -	\$ 1,000	
M. Total Direct Costs		\$ 135,413	\$ 72,313	\$ 45,600	\$ 117,913	\$ 17,500	

Option 2 Budget

2. Portland MOC						
Activity	TOTAL PROJECT COST	COST SHARE (CASH)	COST SHARE (IN-KIND)	TOTAL COST SHARE	TRP FUNDS REQUESTED	
A. Labor	\$ 665,894	\$ 95,481	\$ 329,848	\$ 425,329	\$ 240,565	
<i>Board Oversight</i>	\$ 31,000	\$ -	\$ 31,000	\$ 31,000	\$ -	
<i>Director (50%)</i>	\$ 42,848	\$ -	\$ 42,848	\$ 42,848	\$ -	
<i>Field Agents (5)</i>	\$ 238,702	\$ 95,481	\$ -	\$ 95,481	\$ 143,221	
<i>Support Specialist (2)</i>	\$ 75,712	\$ -	\$ -	\$ -	\$ 75,712	
<i>Secretary</i>	\$ 21,632	\$ -	\$ -	\$ -	\$ 21,632	
<i>Target Firms</i>	\$ 256,000	\$ -	\$ 256,000	\$ 256,000	\$ -	
B. Fringe Benefits	\$ 62,351	\$ -	\$ 9,427	\$ 9,427	\$ 52,924	
C. Travel	\$ 60,000	\$ -	\$ -	\$ -	\$ 60,000	
D. Equipment	\$ 6,000	\$ -	\$ -	\$ -	\$ 6,000	
E. Supplies	\$ 15,000	\$ -	\$ -	\$ -	\$ 15,000	
F. Contracts						
<i>Network Formation</i>	\$ 600,000	\$ 300,000	\$ 150,000	\$ 450,000	\$ 150,000	
G. Construction	\$ -	\$ -	\$ -	\$ -	\$ -	
H. Software	\$ -	\$ -	\$ -	\$ -	\$ -	
I. Patents	\$ -	\$ -	\$ -	\$ -	\$ -	
J. Royalties	\$ -	\$ -	\$ -	\$ -	\$ -	
K. Direct Materials	\$ -	\$ -	\$ -	\$ -	\$ -	
L. Other Direct Costs	\$ 2,500	\$ -	\$ -	\$ -	\$ 2,500	
M. Total Direct Costs	\$ 1,411,745	\$ 395,481	\$ 489,275	\$ 884,756	\$ 526,989	
N. Indirect Costs	\$ 229,118				\$ 229,118	
O. Com or Profit						
P. Total Cost (m+n)	\$ 1,640,862	\$ 395,481	\$ 489,275	\$ 884,756	\$ 756,107	
Q. Percent Cost Share = (6)/(4)				54%		

COST PROPOSAL

SECTION 2: COST SHARE

The cost share for each of MMP's three tasks, across each of three years, is outlined in TABLE 1.

The information below explains the cost share and its source. It is provided for YEAR 1, with comments where it changes in outyears (i.e., YEARS 2-3).

A. Central Program

- A. *Board Oversight*: \$23,400 in-kind support from Board members. This was calculated as 585 hours of Board time (both full Board of Directors and Steering Committee), valued at \$40/hour.
- B. *MMP Director*: \$50,000 cash support from MSTF. (Amount increases in outyears.)
- C. *Fringe Benefits*: \$11,000 cash support from MSTF. (Amount increases in outyears.)
- D. *Supplies*: \$5,000 cash support from MSTF. (Amount increases in outyears.)
- E. *Program Development*: \$90,000 in-kind support from SMTC. This is a contribution toward the development of worker training curricula at SMTC's Quality Center.
- F. *Network Formation*: 1) \$60,000 cash support from participating firms. Firms participating in service delivery networks will be required to pay for half the cost of services. (Amount increases in outyears, as program grows and portion paid by firms increases to two-thirds.) 2) \$90,000 in-kind support from participating firms. Firms participating in networks will be required to keep track of the number of hours their employees contribute. Given past experience, this is a conservative estimate of likely contributed time, valued at \$40/hour. (Amount increases in outyears, as program grows.)
- G. *Continuing Education*: \$50,000 in-kind support from organizations and firms participating in programs. Participants will be required to contribute time or services of equal value to the cost of the training programs.

2. Field Office

- A. *Field Agent*: \$45,000 cash support from MSTF. (Amount increases in outyears.)
- B. *Secretary*: \$10,000 cash support from MSTF. (Amount increases in outyears.)
- C. *Client Firms*: \$46,600 in-kind support from firms. This covers the time contributed by employees of firms during (and after) visits with field agents. It was conservatively estimated at 1140 hours, and valued at \$40/hour.

3. Outreach Center

- A. *Board Oversight*: \$31,000 in-kind support from Board members at both CTT and MMPA. This was calculated as 775 hours of Board time, valued at \$40/hour.
- B. *Director*: \$40,000 in-kind support from CTT. This represents 50% of the time of CTT's director. (Amount increases in outyears.)

- C. *Client Firms*: \$108,000 in-kind support from firms. This covers the time contributed by employees of firms during (and after) visits with field agents. It was conservatively estimated at 2700 hours, and valued at \$40/hour.
- D. (This amount increases in outyears, as additional field agents increase the amount of contact with firms.)
- E. *Fringe Benefits*: \$8,800 in-kind support from CTT. (Amount increases in outyears.)
- F. *Travel*: \$4,500 in-kind support from CTT. This represents roughly 50% of the travel budget of CTT's director. (This support is provided in YEAR 1 only.)
- G. *Network Formation*: 1) \$120,000 cash support from participating firms. Firms participating in service delivery networks will be required to pay for half the cost of services. (Amount increases in outyears, as program grows and portion paid by firms increases to two-thirds.) 2) \$180,000 in-kind support from participating firms. Firms participating in networks will be required to keep track of the number of hours their employees contribute. Given past experience, this is a conservative estimate of likely contributed time, valued at \$40/hour. (Amount increases in outyears, as program grows.)

COST PROPOSAL

SECTION 3: COST TO GOVERNMENT

The cost to government is outlined in TABLE 1, as the amount of funds requested by TRP.

COST PROPOSAL

SECTION 4: OFF-BUDGET RESOURCES

MMP will develop capabilities for providing some services for a fee, as specified in the Technical Proposal (See OVERALL STRATEGY).

The degree to which such services will be provided is unclear, but it is assumed that this will be a modest undertaking. No fee income is expected in YEAR 1. During YEAR 2, perhaps \$15,000 will be taken in. During YEAR 3, perhaps \$25,000 will be taken in.

Program Development: This line requests TRP funds for: 1) developing tools for marketing, brokering, tracking and evaluating services; and 2) the development of curricula for worker training. For #1, the estimated costs are \$100,000 for YEAR 1, \$31,500 for YEAR 2, and \$29,160 for YEAR 3. For #2, the estimated costs are \$39,250 in YEAR 1, \$68,500 in YEAR 2, and \$70,840 in YEAR 3.