TRAINING & TECHNICAL ASSISTANCE PROCEDURES HANDBOOK

MEI Instruction 210-1(H)

Midland Energy Institute Kansas City, Missouri

March 1, 1978

The preparation of this handbook was made possible by funds from the Community Services Administration, Region VII, Kansas City, Missouri March 10, 1978

Mr. Glen Hand Executive Director Midland Energy Institute 906 Grand Kansas City, Missouri

Dear Mr. Hand:

This letter transmits the <u>Training & Technical Assistance Procedures</u>
<u>Handbook</u> which consists of the work specified for Tasks A and B of
HST's contract with MEI, dated December 2, 1977.

A camera ready copy of the Handbook will be given to you so that you may reproduce the copies your organization requires, after we have made any revisions you may desire.

When you do produce operational copies of the Handbook, we suggest that they be issued in a loose leaf binder. This will permit easy maintenance of the Handbook when pages are revised.

HST would like to take this opportunity to express its appreciation to the Midland Energy Institute for being selected to work with the Institute in establishing its management systems.

Cordially,

HUMAN SERVICES TECHNOLOGY

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Enclosures (5)

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PREFACE

This handbook presents procedures to be used by MEI staff in 1) the planning of training and technical assistance and in 2) the development of curriculum and the planning of training courses.

Since it is expected that professionals will be assigned to these functions, the procedures in great part are to be considered as a guide for the first "round" of T&TA planning and curriculum development. As the process is perfected and streamlined, these procedures may be revised accordingly.

It is probably true that the procedures presented in this handbook are more technical or detailed than the present MEI T&TA environment requires, i.e., a few key staff may already know all the data necessary to develop the first MEI T&TA plan. To the extent that this is true, the procedural steps presented here may be bypassed. The important aspect is to be able to produce the output documents (i.e., the various planning forms) required by these procedures, arriving at the desired T&TA Delivery Program.

From time-to-time, as suggested above, certain pages in this handbook may be revised. Major revision of the handbook, of course, would result in a reissue of the entire MEI Instruction creating the handbook. This would result in a change of the Instruction number in the upper right hand corner (e.g., from "Part 210-1(H)'' to Part 210-1/1(H)") and a reissue of the entire handbook. Short of this, a revised page may simply be substituted for old page. In such cases, the revised page will be indicated by a new date in the lower, right corner of the page in this format: "Rev. May 23, 1978" Revised pages will always be forwarded via an MEI Instruction. Such Instructions should be maintained in the front of the binder in which this handbook is kept so that the reader may always be aware of the latest update. The revised pages forwarded via the Instruction should be inserted at the appropriate place in the handbook and the old pages marked across with a large "X" or destroyed.

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ATTACHMENT

Set of All Forms Required by the Procedures

Part 210-1(H) I. T&TA Overview

CHAPTER I

I. T&TA OVERVIEW

MEI has the responsibility for the planning and delivery of training and technical assistance (T&TA) for more than sixty Community Action Agencies (CAA's) and related agencies or programs in the four state region (Iowa, Kansas, Missouri, Nebraska) from its headquarters in Kansas City.

Through T&TA and related activities MEI will help agencies develop, operate and continually perfect a balanced energy program, a program which provides a comprehensive range of essential services to those poor and near poor families and individuals most severely affected by the energy crisis. These services include but are not limited to at least the following services:

- weatherization of homes and other type living units.
- energy related crisis intervention
- consumer information
- education and legal assistance
- transportation
- utilization of alternative energy sources

The efforts of CAA's and related agencies are targeted to help the poor and near poor. This means that over 500,000 housing units in the four state region must be reached and assisted. The 500,000 figure is a conservative because in 1970 units occupied by the poor alone nearly totaled this amount:

	Housing U	nits Occupi	ed by the	Poor %	of All Inco	me Levels
	<u>Total</u>	Owner Occupied	Renter Occupied	<u>Total</u>	Owner Occupied	Renter Occupied
REGION 7	460,611	242,723	217,888	12.7	9.8	19.2
Iowa	104,320	60,741	43,579	11.6	9.5	17.2
Kansas	94 , 326	50 , 526	43,800	13.0	10.1	19.5
Missouri	203,767	100,729	103,038	13.4	9.9	20.6
Nebraska	58,198	30,727	27,471	12.3	9.8	17.3

A substantial number of housing units have been improved and families and individuals assisted but no where near the level of need. If all homes in need are going to be helped both the scope and productivity of every com munity's effort will have to increase substantially. This will surely take more funds. But it will also take training and technical assistance.

Together with the CAA's MEI can help make it happen, building on the base of expertise and experience gained in energy programs by the leading CAAs in the region.

MEI will conduct T&TA through both staff and consultants. It will be planned on the basis of a needs analysis essentially based on the desires of the CAAs. Most training will be delivered on a pre-determined annual schedule,

I. T&TA Overview

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adjusted quarterly with some flexibility to meet emergency training needs. Technical Assistance will be also be scheduled ahead on a proactive basic but a substantial amount of TA will be on a reactive basis; thus, it will be estimated annually (and then quarterly) but will be delivered only upon request.

All requests for TA will flow to the MEI TA coordinator, who will match the request with a consultant, see that a TA plan is developed and scheduled, and that the TA is delivered.

Probably the greatest share of MEI training will be at cluster points in the field where two or more closely based CAA's can participate. Central site (i.e., at MEI headquarters) will be provided on a regular schedule primarily to train personnel who missed scheduled cluster training or when there is no cluster training scheduled nearby.

Other MEI central site training will be offered for special purposes, e.g., training a few specialists or for plenary sessions of CAA's and related clients.

CHAPTER II

MEI TRAINING AND TECHNICAL ASSISTANCE PHILOSOPHY

2.1 Introduction

The source of all MEI program activities is Section 222(a) of the Economic Opportunity Act of 1964, as amended, subsection 12 that authorizes:

"A program to be known as Emergency Energy Conservation Services to enable low-income individuals and families, including the elderly and the near poor to participate in energy conservation programs designed to lessen the impact of the high cost of energy on such individuals and families and to reduce individual and family energy consumption" (Emphasis added).

Closely related to this basis or source of all MEI activities is the policy of governance of MEI by a board of directors representative of the CAA's which serve low-income individuals and families at the grass roots level in the states of Iowa, Kansas, Missouri and Nebraska.

The above direction and policy essentially form the MEI Training and Technical Assistance philosophy on which these planning procedures are based. Simply stated, this philosophy is to deliver training and technical assistance which is "closely tied to the desires and real needs of CAA's." T&TA philosophy will be expanded and more technically presented below but it will always be based on the principle of being "closely tied" to the CAA's. This relationship is not one based on sentiment. It is based on the fact that CAA's are and must be the primary deliverers of the energy-related services which directly benefit the poor and near poor.

2.2 Background on MEI Mission and Goals

MEI has been established to assist those organizations receiving Section 222(a)(12) funds to better carry out the mandate of that law, which is "To enable low-income and near poor to participate in energy conservation programs designed to lessen the impact of the high cost of energy on such individuals and families and to reduce individual and family energy consumption." To provide this assistance, the MEI will:

- 1) Develop and maintain the capability to deliver training and technical assistance covering the entire range of a balanced energy program as directed and defined by the CSA.
- 2) Serve as a medium through which organizations involved in the field of energy can communicate and coordinate their concerns and efforts.

From this mission statement flows four logical long-range goals which MEI will pursue and tailor its planning objectives to meet:

- 1. Provide T&TA for all section 222(a)(12) grantees in the region so that they may develop and deliver a 1) balanced, 2) effective and 3) adequate program to lessen the impact of the high cost of energy on poor and near poor individuals and families.
- 2. Identify the common concerns and efforts in regard to reducing the impact of the high cost of energy on poor and near poor individuals and families in the four state region. Develop strategies address-ing common concerns and integrating common efforts.
- 3. Develop common initiatives to remove or control the causes of the energy related concerns and to advance and support common efforts, including the acquisition of funding and material support.
- 4. Inform and educate the public, policy-makers and regulatory officials of the common concerns and efforts and common initiatives related to reducing the impact of the high cost of energy on poor and near poor families.

2.3 MEI Training Philosophy

MEI believes that centrally directed and supported training and technical assistance is a cost-effective way to help achieve the overall goals of the CAA energy programs. MEI believes that a mix of centralized and cluster (field located) training—and combined with on-site technical assistance when requested or indicated—can benefit both the populace served by the CAA trainees and the trainees themselves.

There is nothing new about the training of professionals and technical personnel in CAAs. What is new about MEI is instead the manner in which needed learning opportunities are made available and delivered, the care with which courses are designed to assure currency and usefulness to CAA workers, and the attention paid to the instructional needs both of individual participants and of their agencies.

MEI offers participating agencies a practical alternative to existing, less accessible, and more expensive means of obtaining professional instruction. Through MEI, CAA workers involved in energy related projects may attend tuition-free seminars and short courses, taught by established experts, at locations within driving distance of their agencies in most instances.

MEI's hope is that the efforts of the Institute will in the next few years provide a model for other regions, illustrating that formal, centrallyarranged professional/technical instruction—supplemented by on—site technical assistance—can address CAA's critical energy related needs in an efficient and cost—effective manner. Beyond this, it is the goal of the Institute to assist participating agencies in sharpening skills and enlarging their range of responses for dealing with pressing energy issues, and to give them collectively larger control over the energy destinies of their communities, states, and nation.

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2.3 Training and technical assistance

- 1. Through training and technical assistance,
 - a. Ensure that the knowledge of the optimal weatherization strategy and the mastery of weatherization skills is a basic capability of every CAA (staff and crews)
 - b. Provide the interest and knowledge throughout the region which will result in development of CAA energy projects beyond only weatherization.
 - c. Keep CAA's informed of all significant federal and state energy developments.
 - d. Assist in grant and other resource development activities
 - e. Ensure that CAA's have the capacity for self evaluation of the adequacy, effectiveness, quality, and productivity of their energy programs.
- 2. Assure training effectiveness and efficiency by:
 - a. Emphasis on conducting cluster field training where cost effective (from the stand point of the CAA's).
 - b. Development of community-based training where such is most appropriate and cost effective (e.g., the development of local Adult Basic Education courses for work crews).
 - c. Staying abreast of new winterization and conservation techniques.
 - d. Evaluating training outcomes regularly and systematically and having evaluation of MEI overseen by a special committee of the board of directors.
 - e. Emphasizing the training of trainers where appropriate.
 - f. Use of previous trainees—after field experience—as participating, visiting instructors.
 - g. Providing recognition of participation in training and of instructors via certificates, letters of thanks, pictures in newsletters and in local newspapers, etc.
- 3. Assure that TA is delivered efficiently by controlling the assignment of consultants, development of plans prior to TA site visits, evaluation of service by the TA user, and encouragement of proactive rather than reactive requests for TA.

2.4 T&TA Target Groups

The following groups have been targeted as the primary receivers of MEI training and technical assistance. It is assumed that citizen level or consumer level training will be conducted by individuals trained by MEI or other groups and not by MEI directly.

- 1. Weatherization crew chiefs and crew members
- 2. CAA directors and managers of CAA energy and other government (Section 222) funded energy projects.
- 3. Weatherization technical assistance consultants used by MEI
- 4. Consumer energy conservation counselors and trainers

2.5 Training approaches emphasized.

The following approaches to training will be emphasized by MEI unless experience indicates that other approaches are in order:

- Basic indoctrination to CSA energy program goals and strategies including the concept of optimal weatherization in order to build a common philosophy across the region, and among all workers.
- 2. Where ever possible, training classes will utilize hands-on instruction techniques.
- On-the-job training will be formally recognized and structured according to levels of skill difficulty and responsibility.
- 4. Safety will be an essential feature of all instruction. The potential dangers to home dwellers from careless installation of energy related materials or equipment will be continually emphasized, especially those relating to fires and killing fumes such as those from natural gas exhaust.
- 5. Some emphasis upon teaching "human relations" skills for relating to clients.
- 6. Emphasis on professional responsibility for quality work and its relationship to the client's property values and personal safety.
- 7. Emphasis upon using tools and equipment now used in the field.
- 8. Recognition of existing skills and competencies of individual trainees.

9. Use of building block or modular approach where a mix of courses and experiences and skills can build to various levels of proficiency.

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- 10. Emphasis upon training by (trained) crew chiefs where possible.
- 11. Development of "advanced" or "continuing education" activities so that when a worker has reached one level of skill, s/he is always encouraged to seek the next level.

2.6 Roles of MEI Training Staff

- MEI staff should be actively involved in delivering training: in the design, development and teaching of actual MEI courses.
- Staff should be knowledgeable of technical side of weatherization and conservation on a continuing basis, in order to maintain proper perspective with regard to training needs and methods, i.e., professional development of MEI staff.
- 3. Staff should periodically monitor quality of any MEI training regularly delivered by outside trainers.

2.7 Evaluation outlook

- 1. Evaluation will be built into on-going process of training, not something added on.
- 2. Evaluation of training will emphasize observable impacts upon trainee performance, rather than only upon trainees subjective impressions.
- 3. All programs and courses will be evaluated to some extent, rather than evaluating certain of them on a sampling basis.
- 4. Evaluation will emphasize long-range follow-up of training impact to determine the benefit to the poor and near poor client.
- 5. Evaluation will periodically include assessments of methods and materials recommended in training to see if they continue to be the best in field use.

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III. T&TA Planning Process

CHAPTER III

T&TA PLANNING PROCESS

3.1 Introduction

This chapter describes the process to be followed in the preparation of the MEI annual T&TA Plan. Subsequent chapters present the procedures for con-ducting the major tasks of this planning process.

The MEI T&TA planning process consists of the following elements:

- 1. Major planning tasks in the process
- 2. T&TA planning schedule (annual cycle)
- 3. Participation and roles of organizations and staff

3.2 Planning tasks

There are nine basic tasks which make up the annual T&TA planning cycle. These tasks take place in the year prior to the year in which the plan is to be implemented, although the date of the first course may not occur until the second or third month of plan implementation.

The following is a brief description of the planning tasks. Those which are not self-explanatory are the subjects of major subsequent chapters.

3.2.1 Define Scope

Determine the scope of the T&TA to be delivered in order to achieve the maximum utilization of MEI resources and to achieve MEI objectives. This includes determination of the T&TA audience in terms of agencies and types of staff and individuals to be assisted; the emphasis or subject of the training in general; and the MEI objectives to be addressed by the training. For example, should MEI provide T&TA in all areas which could reduce the impact of the high cost of energy on the poor, or should MEI only provide training in selected areas; e.g., weatherization? It should be noted that scope can change from one year to the next or it can be expanded.

Regardless of the scope of the T&TA plan, all T&TA activities should have a demonstrated link to one or more of MEI's formal objectives. T&TA not related to formal objectives, no matter how good, is irrelevant. Many organizations conduct such training, often without knowing it or not caring. MEI should take great care not to do this.

3.2.2 Identify T&TA Needs and Resources

Two of the major tasks in the planning cycle are the identification of T&TA needs and of the resources (instructors, consultants, organizations, etc.) to meet them. These tasks are likely to be performed. T&TA Planning Process joint effort. For example, a potential T&TA recipient may when requested

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about needs also be questioned about possible providers of such T&TA. Some resource identification, however, will occur independently as sources are sought outside the CAA system. Both needs and resources identification may require repeated inquiries and data collection to better define the T&TA needs and resources.

3.2.3 Need verification

Once T&TA needs have been developed they must then be verified against a sample or complete survey of potential recipients. The survey could take the form of a mail questionnaire to potential recipients.

3.2.4 Need assessment

Once T&TA needs have been verified, each need should be assessed to determine whether or not it can be resolved by the delivery of T&TA. T&TA cannot solve all problems. It is also necessary to assess whether or not the potential target groups or individual agency will accept training or TA, or act upon it.

3.2.5 List needs for MEI T&TA delivery

As a result of tasks above (3.2.3, 3.2.4), the identified needs for which MEI should deliver T&TA should be listed for input into to the following task.

3.2.6 T&TA delivery requirements

The results of needs and resource identification provides a list of needs and resources which can be matched to identify the T&TA Delivery Requirements for the forthcoming year. This is essentially a workload analysis matching who will provide the service with the target group or agency who will receive the service. Also analysis will indicate gaps between needs and potential resources. This comparative listing provides the T&TA requirements which MEI must plan to deliver.

3.2.7 T&TA resource development

Based on the matching and analysis of needs and resources, MEI staff fills gaps for TA by finding new resources (consultants, etc.) and also develops the curriculum and courses necessary to meet training needs. As new resources are developed and the training plan is completed, the T&TA delivery requirements are then updated.

3.2.8 T&TA delivery program

The final T&TA delivery requirements are then costed out and programmed for delivery according to a master schedule.

3.2.9 Evaluation and feedback

The delivery of the T&TA itself and its effectiveness are evaluated during the year and fedback into the planning cycle at 3.2.2 the following year.

3.3 T&TA planning cycle/schedule

The tasks outlined above should be performed on the basis of an annual cycle. Once a basic MEI T&TA plan is completed, the annual cycle will result in an update of the basic plan based on the results from the annual needs verification survey, evaluation feed back, budgetary limitations, and new emphases in regard to objectives.

The following is the schedule for conducting the planning tasks on an annual cycle basis:

	<u>Schedule</u>	
Task	From	<u>To</u>
1. Define Scope	05/01	05/15
2. Identify T&TA Needs/Resources	05/16	06/30
3. Need Verification	07/01	07/31
4. Need Assessment	08/01	08/15
5. List Needs for MEI T&TA Deliv.	08/16	08/16
6. Analysis/Match Needs/Resources	08/16	08/31
7. T&TA Resource Development	09/01	11/30
8. T&TA Delivery Program	12/01	12/31
9. Evaluation and Feedback	08/01	05/16
Implement Annual T&TA Plan	01/01	12/31

3.4 Participation and role of organizations and staff

The participants in each task in the planning cycle and their roles should be specified at the beginning of each planning cycle. These should correspond to the tasks of the planning cycle outlined above. Assignment of roles should be by formal memorandum in which assignments would be listed in the following format:

Project Director : MEI Executive Director Define Scope : MEI Board of Directors

Identify T&TA-

Needs : Mel Booking, Trainer
Resources : Allan Fund, Trainer
erify Needs : Mel Booking, Trainer/CAA's

Verify Needs : Mel Booking, Trainer/CAA's Need Assessment : Booking, Fund, Ex. Dir.

Etc.

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MEI T&TA ANNUAL PLANNING CYCLE--SHOWN OVER TWO CYCLES

3.5 TA plan preparation

The TA plan should be documented in the standard format provided at the end of this section, with supporting forms and schedules, so that it may be readily reviewed by CAA's, MEI staff and directors III. T&TA Planning Process agencies.

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T&TA Delivery Plan for 19XX

I. INTRODUCTION

- A. Description of the T&TA Planning Process
 - 1. Major Tasks and Cycle
 - 2. Major Data Collection Processes for Needs Identification Verification and Resource Identification. (Place copies instruments used in an attachment)
- B. Recognition of Participants and Their Roles
- C. Brief Summary T&TA Planned for Delivery, Priorities, and Relation of T&TA Planned to MEI Objectives and National/State Priorities

II. LISTING AND DESCRIPTION OF T&TA NEEDS

- A. Displayed on TA Needs Listing Sheet
- B. General Discussion of Needs and Their Significance

III. LISTING AND DESCRIPTION OF RESOURCES TO MEET T&TA NEEDS

- A. Displayed of T&TA Resource Listing
- B. General Overview of Resources. (Might point out nationally recognized resource or those making significant contributions; point out very popular Midland training courses, etc.) Give numbers of different types, etc; overall cost of maintaining resources, etc.
- C. Provide a Descriptive Sheet on Each Resource (maybe in an attachment)

IV. T&TA DELIVERY REQUIREMENTS

- A. Displayed on T&TA Delivery Requirements Chart. (Shows match of needs and resources and specifies the T&TA which must be delivered)
- B. General Overview of Requirements

V. T&TA DELIVERY PROGRAM

Overall Schedule and Costs of T&TA Program to Be Delivered for Year

VI. CATALOG OF FORMAL MEI COURSES TO BE OFFERED DURING THE YEAR

CHAPTER IV

IDENTIFICATION OF T&TA NEEDS

4.1 Introduction

To deliver effective traln1ng and technical assistance, it is important to first clearly identify T&TA needs. This is accomplished through the fol-lowing process:

- 1. Clearly identify the CSA/CAA energy-related objectives to be addressed by MEI T&TA during the year being planned.
- 2. Identify the kinds of programs and activities which are the necessary means to achieve the objectives (e.g., weatherization programs).
- 3. Identify what agencies (and types of personnel) carry out or should carry out the above programs).
- 4. Identify the general capabilities/skills these organizations or their staff members must have to successfully perform in the objective-oriented programs identified above. These capabilities and skills them become the planners training objectives.
- 5. Identify the needs in the areas of capabilities/skills mentioned above which must be met by various modes of T&TA to reach desired levels of performance, i.e., identify T&TA needs.

4.2 CSA/CAA Objectives

Using CSA documents, statements of objectives by CAA's, the MEI Long Range Plan and other relevant sources, make a list of objectives which CSA/CAA's intend to address in the forthcoming planning year.

For example, one present objective is to reduce the impact of the high cost of energy on the poor through energy conservation.

After the objectives have been listed and edited to eliminate duplication, etc., proceed to 4.3.

4.3 Programs or activities necessary to meet objectives

Begin with the first objective and write below it on a blank sheet of paper the various strategies (efforts) by which the objectives could be achieved. If you think about it there may be several. The alternative(s) selected will depend on many factors: availability of funds to support a particular alternative, technology known, special interests, number of personnel or agencies to be trained, etc. The point of this exercise is to continually check to see if CSA and CAA's are overlooking better alternatives than they have presently implemented.

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Some alternatives may have already been selected, i.e., by CSA, the CAA's or even the Congress. (For example, for objective 1 suggested above, CSA has selected "a balanced energy program providing a comprehensive range of

services ..." This could be termed a "service-oriented" strategy or the classical "treatment" approach to social problems but it is difficult to select a better alternative without individuals falling into economic distress or, worse even, freezing.)

Once a basic alternative or strategy is selected to reach a specific objective or even a set of objectives, identify the program or list of programs necessary to operationalize the effort necessary to reach the objectives. Under each program—if necessary—list its major activities. If a program is used to meet more than one objective use a matrix like the following figure to display the data on a large sheet of paper to show relationships.

	OBJECTIVE 1	OBJECTI	VE 2		
		Reduce unmet		OBJECTIVE	3
CURRENT OR PROPOSED PROGS.	<u>Conservation</u>	energy need	s to zero	Etc.	
Optimal Weatherization	X				
· Stop Infil. First	X				
· Insulation	X				
· Other Improvements	X				
Alternative Energy Sources	X				
· Passive solar	X				
· Green houses	X				
· Wood stoves	X				
Crisis Intervention		X			
· Emergency cash payments			X		
· Temporary shelter			X		
· Case work			X		
Credit Union for Level Payment					
Bills		X			
Education & Legal Ass't.		X			
Consumer Information	X	X		X	
Transportation				X	

If a program or activity is listed which does not clearly contribute to achievement of an objective, agencies are certainly free to pursue these but MEI should not devote its T&TA resources to such programs or activities. The effort of listing program or activities, as illustrated above, would be continued until all known ones have been listed.

4.4 Who carries out the programs

After having identified the range of programs necessary to meet CSA/ CAA objectives in general, the next step is to identify the types of groups and agencies which are administering (or which should administer) such programs. This step is followed by the identification of the types of personnel which are needed to staff such programs, e.g., administrative, laborers, estimators, group leaders, financial analysts, etc. This should be done, one program type at a time. The illustration, below, shows a format by which this information could be displayed. While, initially, the type group might only consist of the CAA, it could expand over time to SEOO's, State Energy Offices, County Extension Services, Utilities, other CSA grantees, CETA training programs, etc.

4.5 Capabilities/Skills required

Using the program and personnel data developed above, develop a list of capabilities and skills required by those programs and personnel and which could be provided by training and technical assistance. At the very general level, these capabilities/skills can be classified into three levels:

- · Organizational capabilities/skills
- · Individual/personal capabilities/skills
- · Individual attitudes/behavior

Technical assistance tends to focus on the first while training tends to focus on the second and third.

This information should be displayed along with the program/personnel data. We would suggest using 5x7 index cards with the following format:

Program A <u>Groups/Organizations</u>

Capabilities/skills required <u>Organizational</u>

<u>Personnel</u> Individual

IV. Identification of T&TA Needs

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The information on the index cards would then be used as a guide and aid in carrying out the needs identification process. For example, they can be used as a check list in developing a survey questionnaire; they can be used as prompters in field interviews; they can be used in the needs assessment process.

4.6 Needs Identification

Using the above information as a guide, actual needs can be determined from completing most or all of the following tasks:

- 1. List target groups or organizations. From the types of groups or organizations listed above on the index cards, identify <u>specific</u> organizations or agencies (i.e., by name) which should be considered targets of T&TA. For example, assuming that CAA Weatherization programs are at least one target group, develop a list of all such CSA grantees with such grants.
- 2. Examine relevant documents. Review official CSA grantee files for agencies receiving energy related grants. Look at work pro grams and monitoring reports and significant correspondence for signs of problems and areas of need. Findings on each grantee should be documented on a TA Needs Analysis Form. There will be a separate form for each group or organization. (A copy of this form is at the end of this section.
- 3. Interview CSA field representatives. Using the target group list developed in Item 1, above, interview CSA regional office field representatives as to T&TA needs they may see. Determine why some organizations are not very active in the energy field when they should be. Determine if such organizations wish to become active.
- 4. Visit sample projects. Conduct a field survey of a sample of organizations with energy-related grants each year. The size of the sample will vary, but 10 organizations would seem to be a reasonable number. Identify T&TA needs during these visits. Also interview the directors and key staff (as time permits) of these projects to determine their view of T&TA needs. This could be coupled with an evaluation visit in subsequent years to see the impact of MEI training and to determine user (project) satisfaction with MEI T&TA. A check list should be developed for use on these field surveys or use made of the index cards developed earlier (see paragraph 4.5).
- 5. Interview state officials. Informally interview SEOO's, state energy officials, and possible CETA prime sponsors with energy related projects to detect any "perceived" problems with CSA

sponsored energy projects as wellIV. Identification of T&TA Needs effectiveness of these projects.

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- 6. Review state energy plans. Review state energy plans for any observations or plans in regard to energy conservation programs or initiatives in the energy conservation areas.
- 7. Review TA requests. Review all requests for TA over the pre vious year of operation, or a summary of such requests if the volume is too great for individual reviews, to determine the general trend of reactive TA. Also review any evaluation reports of training or TA which MEI has completed.
- 8. Review trainees' evaluations. Review summaries of the course evaluations by those attending MEI training courses the past year and summary evaluations of users of TA. Tabulate major points made in regard to needs being me by source of evaluation, e.g., which agency, type of worker, etc.
- 9. Review Consultants' Reports of TA Delivered. Review a summary of all consultants' reports to identify any unmet needs reported by consultants.
- 10. Estimates of external forces. Estimate future T&TA needs based on knowledge of new or forthcoming legislative, regulations, programs, materials, shortages, etc.

4.7 Test and expand preliminary needs document

Using the preliminary needs identified and documented in the above exercise, formulate a T&TA Needs Survey instrument, test the instrument on a few CAA's and make revisions. Survey all CAA's involved in energy projects. Because the number of such CAA's is relatively small (about 60), a survey of all programs in operation would be feasible. (After the development of the first needs document and survey form, subsequent surveys will be less time consuming because they will consist of an update of the previous year's survey instrument and then be used to update an existing needs document.) The purpose of the survey is to have potential recipients (e.g., CAA's) verify the needs identified by MEI in the proceeding process and to further identify needs more specifically.

Because the cost of training will be very costly when viewed from the cost of productivity lost in the field while workers are attending training, it is worth the effort to continually refine training needs.

4.8 Tabulate survey and develop final estimate of T&TA needs

Tabulate survey questionnaires returned and then develop, on the $\underline{\text{T\&TA Needs}}$ $\underline{\text{Listing Form}}$ a more refined estimate of $\underline{\text{T\&TA needs}}$ for the planning document. (A copy of this form is at the end of this section.)

4.9 T&TA needs listing

IV. Identification of T&TA Needs

The outcome of the needs identification process is a listing of T&TA needs. List needs in sufficient detail as to be "actionable": (a) a clear

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statement of the problems and of (b) what an appropriate response to that problem would be. This can only be tentative, however, since strategic approaches to the problem will be developed in the following procedures. All needs should be related to objectives and programs served. Use objectives and programs identified in paragraphs 4.2 and 4.3.

4.10 Needs assessment

The needs as determined at this point, have no particular priority and, indeed, may represent a wide range of needs from very small requests for help—that can be easily met and resolved in less than a day—to major needs that may require periodic action over an extended period of time.

The needs assessment should include the two following considerations:

1. Is the Need susceptible to T&TA? The first task is to determine whether a particular need is susceptible to training or TA. That is, some needs for help may be so large as to require the employment of local expertise or a separate contract effort quite apart from the MEI program. For example, MEI T&TA will not be able to make up for the absence of a bookkeeper in a particular kind of program. That kind of problem can only be solved by hiring of a bookkeeper or contracting with an accounting service.

Also, needs may be real but the potential recipient does not recognize the need for help or is unwilling to accept it. Finally, some needs may be such that certain precedent conditions must be met before any technical assistance will bear fruit. For these reasons, and others, MEI staff may judge that particular needs should be eliminated from further consideration for T&TA.

Needs that have little direct relationship to energy objectives should also be eliminated.

2. Training or technical assistance? The second task in needs assessment is to determine particular strategies or approaches which should be used to meet general areas of need, e.g., training or technical assistance, or a mix of both such as training in conjunction with follow-up, on-site TA; training delivered centrally by MEI, training delivered on-site by MEI, or MEI supported training by other agencies, either on a paid or volunteer basis. The selected strategy or "mode" is then placed on the T&TA Needs Listing Form, following the description of the need.

Relevant, interested parties should be informed of any needs eliminated at this point. The next task is to set priorities among the needs surviving the assessment process.

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4.11 Setting priorities

Establish the relative importance of the remaining training and TA needs. This should be done in a systematic manner by the use of established criteria. This process may not be necessary in the early years of MEI but it will be as the MEI programs grow. The following are suggested criteria which can be changed from year-to-year:

- 1. Urgency. (E.g., the recipient of the T&TA needs capability to render an emergency service to reduce immediate and serious financial burden on the poor.)
- 2. Widespread Need. (E.g., the need exists in 75% of the programs)
- 3. Great Energy Conservation (E.g., if the need is met there is a probability that substantial amounts of energy will be conserved)
- 4. Impact. (E.g., if the need is resolved, the work it is related to will benefit a large number of poor and near poor; it will be necessary to pre-define "large number".)
- 5. Secondary Benefits. (E.g., the work the need is related to will generate significant employment)
- 6. Acceptance. (The T&TA is accepted by the client agency and will be put to good use.)

A <u>Priority Ranking Worksheet</u> has been provided to aid in establishing the relative importance of T&TA needs. (See form at the end of this section.) Using the worksheet, list each need down the left column. The criteria against which the need will be rated are listed across the top of the worksheet. First, assign a value from "0" to "5" to indicate the degree to which the T&TA need meets each criterion ("0"= No relationship to the criterion, "5"= fully meets the criterion).

When all needs are ranked by the criteria, add the scores across the columns for each need and establish a ranked list according to the index score for each need.

(The above method implicitly assumers that all of the criteria are of equal importance. That is, none is given more weight than another in establishing priorities. If that is not the case, one can establish a system of weights for the criteria and apply a scoring procedure similar to that described above. In such an instance, the numerical score of each need would have to be multiplied by the weight for that criterion and the results added, to establish a weighted index score. We stress that there is no meaning to the numbers or scores arrived at by these methods except to allow one to establish a priority listing.

When the priority ranking is completed, list all of the needs on the $\frac{\text{T\&TA}}{\text{Needs Listing Form}}$ in the right hand column according to priority. Either at this point or at the point of the approval of the total T&TA plan, the MEI Board of Directors should examine and approve the final results of the priority setting process.

MIDLAND ENERGY INSTITUTE IV-8 IV. Identification of T&TA Needs

T&TA NEEDS LISTING

MEI OBJECTIVE/ PROGRAM	DESCRIPTION OF T&TA NEED	OVERALL PRIORITY

IV. Identification	of T&TA Needs

T&TA NEEDS ANALYSIS FORM 1. Name of Recipient Organization (or target type of organizations) 2. Problem to be Addressed. 3. Type of knowledge/skill/expertise needed. 4. Strategy/mode of T&TA delivery. S. Expected results/impact of TA. 6. Proposed deliverer.

PRIORITY RANKING WORKSHEET

								R	
								E	
		M				А	Т	L	
		I	G			С	0	Α	
		D	R		В	С	Т	Т	
	U	Ε	E		Ε	Ε	Α	I	
	R	S	Α	I	N	Р	L	V	
	G	Р	Т	M	Ε	Т	S	E	
	Ε	R	С	Р	F	А	С	R	
	N	E	0	А	I	N	0	А	
	С	Α	N	С	Т	С	R	N	
Brief T&TA Need Description	Y	D	S	Ε	S	Ε	Ε	K	
									Weigh
									t*

*Assign weights for each criteria. When rating the need from 0 to 5 on a specific criterion, multiply the weight by the rating $(r \times w = score)$. If criteria are not weighted, leave blank.

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CHAPTER V

T&TA RESOURCE IDENTIFICATION

5.1 Introduction

This chapter presents the process for identifying T&TA resources to meet the needs identified in the previous sections of the plan. This process involves the following tasks:

- 1. Developing the workplan for resource identification
- 2. Identifying data sources and collection methods
- 3. Collecting and recording information
- 4. Matching resources with identified T&TA needs
- 5. Identifying needs without resources
- 6. Searching for resources for unmet needs.

5.2 Developing the workplan

An MEI staff member should be given the formal responsibility for directing the resource identification task. This staff person should then:

- 1. Establish the timetable of the effort, fitting it in with the schedule of the overall planning process (see paragraph 3.3).
- 2. Establish the geographical area from which most—if not all—T&TA resources will be drawn. Drawing from a smaller area has a number of benefits. In the area of costs, one benefit is less travel costs.
- Other staff involved in the effort should be identified and formally designated to assist the director of this planning effort.
- 4. Specify what kinds of training should be performed by a resource other than MEI staff, e.g., how to set up a credit union.
- 5. Identify areas in which T&TA are needed. Develop a list of pro-spects within each area. Do not try to be exhaustive. It is not necessary to identify every resource there is, but only about as many as MEI needs. It is best to keep the number small for manage ment control purposes but one does not want to "stretch any

resource too thin."

6. Resources may be individuals or organizations. Some may be free or paid for out of other funding budgets.

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5.3 Identifying data sources and collection methods

Specifically list the sources from which resources may be identified. These will include:

- 1. Survey the CAA's for nominees. (Resources may also be uncovered and passed on to the Resource ID staff person from staff persons involved in needs identification with CAA's).
- 2. Request suggestions from SEOO's and state energy offices.
- 3. Make contacts with the energy conservation specialists at the Regional Office of the Department of Energy.
- 4. Make contacts at local universities, especially with schools of engineering.
- 5. Make contacts with trade associations related to the field of energy.
- 6. Contact utility companies for suggestions. Possible some of their staff would be interested.

As names of organizations or individuals are listed as potential TA consul tants, they should be sent a <u>TA Resource Survey of Interest</u> form. (A copy of this form is at the end of this section.) When returned, this form will identify interest on the part of the resource and may identify other resources.

5.4 Collecting and recording information

As <u>TA Resource Survey of Interest</u> forms flow into the MEI offices, they should be screened for inclusion in further processing or for rejection. (Those rejected should have some kind of thanking response returned generally indicating that needs have been met and returning their papers.)

For those accepted for further processing, an identification number is assigned and a $\underline{\text{T\&TA Resource Description Index Card}}$ is completed. The papers are then filed in an individual folder for each resource. This folder will later be used by the TA coordination staff as the official folder for each resource, if the resource survives the planning and screening process.

The index cards should be filed by ID number of the resource but extra copies may be made for sorting by skill area.

5.5 Matching with identified needs

Resources which have been identified should then be linked to T&TA needs. It is a good idea to identify a primary and a back up resource wheneveration possible, in case the primary resource drops out or is eliminated from

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further consideration (e.g., will not negotiate a reasonable fee, etc.). Of course, this matching will be subject to change as the planning process proceeds.

The matching process is further described in Chapter 6.

5.6 Identifying needs without resources

As a result of the matching process, needs for which resources are not available will be identified and noted. This is further discussed in Chapter 6.

5.7 Searching for resources for unmet needs

Once the planners know which types of resources are not available, they may concentrate on making more detailed searches. It might also be possible that MEI will have to train consultants in some resource areas from the ranks of existing CAA's.

EXAMPLE OF T&TA RESOURCE DESCRIPTION INDEX CARD

\$	Fee \$	Skill Codes:
Name: Add:		
Phone: (O) (H) Availability:		Affiliation/Organizations:
Past Performance:	:	Contact:
Expertise (should	d relate to	skill codes):

TA RESOURCE SURVEY OF INTEREST

Your name has been suggested as a possible resource to MEI as provider of training or technical assistance. MEI utilizes both volunteer and paid providers. After you have had an opportunity to look over a description of the areas in which MEI is seeking T&TA resources (see attached pamphlet), and you are interested in an association with MEI, please complete the following questions and forward this questionnaire to MEI in the enclosed envelope.

Please also include a copy of your latest <u>resume.</u> Thank you for your interest. (Note: if you do not have an interest, you might suggest to us the name of a resource that would be interested.)

- 1. Attached to this questionnaire is a "Resource Skills Checklist." Please circle any of the skills for which you would be interested in providing assistance.
- checked:
 Ski11 #1:
 Ski11 #2:

2. Please briefly describe your particular expertise in the skill areas

- 3. Please indicate the amounts of time or time blocks in which you would be available:
- 4. Please any travel restrictions or areas to which you will not travel within the states of Iowa, Kansas, Missouri, Nebraska:
- 5. Please complete the following identifying and fee information:

 Name:
 Address:
 Fee Requirements:

 6. References in areas related to skills:
- 7. Name and Address and Skill area(s) of other possible T&TA resources:

Thank you.

VI. T&TA Delivery Requirements

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CHAPTER VI

T&TA DELIVERY REQUIREMENTS

6.1 Introduction

Previous procedures have 1) identified, assessed and prioritized T&TA needs and have 2) identified, evaluated, and cleared potential resources necessary for the delivery of the desired T&TA. The procedures presented in this chapter are concerned with the process of matching resources to needs and of preparing MEI's T&TA Delivery Requirements.

6.2 Matching needs and resources

Use the $\underline{\text{T\&TA Needs Listing}}$ form. Identify the first priority need on the list and enter the summary description of the need in column 2 of the $\underline{\text{T\&TA}}$ $\underline{\text{Delivery Requirements}}$ form.

In the "Mode" column, indicate the most appropriate mode for meeting the need. Make a clear distinction between "training" and "technical assistance." For the purposes of MEI T&TA, "training" is the communication of knowledge and skills or the development of attitudes that personnel must acquire to meet performance objectives of an organization at some universal level, e.g., across all occupants of a certain position type, across two or more organizations, etc.

"Technical assistance" is advice, counsel and illustration of ways to apply learned skills or behavior to a specific and somewhat organizationally unique problem. It is also the performance of a skill or service for an organization which is not available within the organization to help members of that organization to implement or improve specific activities.

The essential distinction between training and technical assistance, simply stated, is that training meets a need $\underline{\text{common}}$ to several organizations in a group setting; whereas, technical assistance meets a need unique to one organization or a need which can only be resolved by dealing with one organization or individual at a time.

The reason for making a distinction is to identify on the $\underline{\text{T\&TA Delivery}}$ $\underline{\text{Requirements}}$ sheet those needs which should be met by (matched $\underline{\text{with}}$) MEI training courses, as distinguished from those needs which should be met by TA consultants.

The above process is repeated until all needs from the $\underline{\text{T\&TA Needs Listing}}$ form have been listed in order of priority. Then examine the $\underline{\text{T\&TA Resource}}$ $\underline{\text{Description Index Cards}}$ and select the resource which is best able to respond to each of the needs. Enter the selected resource in the "Resource Identification" column. While the matching process is mechanical, careful thought and analysis must be given to whether the particular resource can actually meet the need as defined in the $\underline{\text{T\&TA Needs Description Form}}$. There may be some needs for which an appropriate resource $\underline{\text{cannot be}}$

<u>identified</u>.

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6.3 Completing the T&TA Delivery Requirements Form

The purpose of this form is to provide a master display of matched needs and resources (as well as needs without resources) and related data for overall analysis of the T&TA requirements for the next year.

Complete the other columns of data on the <u>T&TA Delivery Requirements</u> form such as, estimated number of mandays, estimated cost, etc.

In the far, left hand column, indicate the name of the MEI staff member charged with seeing that the need is met. Here as with the display of needs and the display of resources, we suggest that the requirements be distinguished as training or TA. It might be helpful to put training requirements on a separate sheet from that used for TA requirements.

The T&TA Delivery Requirements form is a serious attempt to identify what must be done in the T&TA program for the coming year in the region and what MEI itself is committed to do. It will be used in developing the MEI T&TA delivery program (schedule and cost) as well as MEI training curriculum and course offerings. To a great extent, it will shape MEI's annual operations.

The size and content of the T&TA delivery requirements will be a decision reached by MEI staff, approved by its Board of Directors, in consultation with CAA's and the appropriate funding agencies.

6.4 T&TA Resource Development

Based on the matching and analysis of needs and resources, above, MEI staff will plan to fill gaps for TA by finding new resources (see Chapter 5).

To meet the training needs identified as requirements for MEI trainers, MEI staff will also develop the curriculum and courses indicated (see Chapters 7 and 8). When courses are developed, the $\frac{\text{T&TA Deliverv Requirements}}{\text{Requirements}}$ form is then updated.

Once the ${ t T&TA}$ Delivery Requirements form is updated, the final ${ t T&TA}$ delivery requirements are costed out and programmed for delivery. The procedures for this are presented in chapter 9.

T&TA DELIVERY REQUIREMENTS

Staff	Summary of		Est.	Resource	Mode of	Est.	Source	Priority
Resp.	Need	Rank	Man-Day	Identification	T&TA	Cost	Funds	Type
- TOOL T	1.000							- 71- 0
							<u> </u>	

CHAPTER VII

CURRICULUM DEVELOPMENT

7.1 Introduction

This chapter outlines the steps to be followed in the development of the MEI curriculum necessary to meet the training requirements developed with the procedures presented in the previous chapter. These steps are:

- 1. Identify overall training requirements for the year.
- 2. Establish corresponding content requirements
- 3. Secure training attendance estimates from the field.
- 4. Identify target trainee characteristics
- 5. Finalize training methods and strategies
- 6. Select delivery time blocks
- 7. Estimate instructional costs
- 8. Prepare initial program budget
- 9. Develop curriculum adequacy criteria
- 10. Prepare initial program plan and schedule
- 11. Estimate costs, requirements of initial plan
- 12. Revise plan and schedule as required
- 13. Prepare final budget for year
- 14. Prepare detailed training activity schedule for year.

7.2 Identify overall training requirements for year(s)

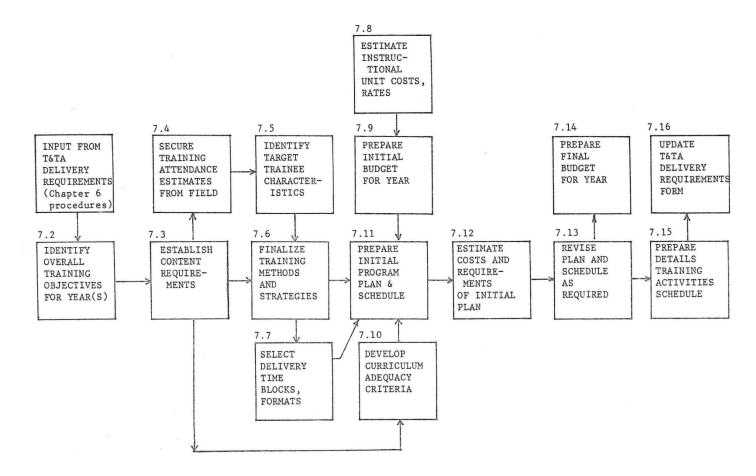
Based on the needs presented on the T&TA Delivery Requirements Form which have been selected to be met by training, specific training requirements should be set for the year or years being planned.

Training requirements for a particular year or group of years should be refined in the following form: brief, declarative sentences starting with a transitive (action) verb which specify:

VII. Curriculum Development

1. A particular kind of activity to be performed or product to be

MEI CURRICULUM DEVELOPMENT PROCEDURES



achieved.

- 2. How much of this activity or product is to be achieved, and
- 3. The period in which this activity or product is to be achieved.

An example of a suitable yearly or multi-year training program objective would be:

"Train at least 5 weatherization crews in each state in the region in recommended new techniques for wall insulation by October, 1979."

7.3 Establish corresponding content requirements

In this step, the overall training objectives are analyzed for content implications, i.e., for the subjects or disciplines to be taught. For example, if MEI has set objectives such as the example provided above; the corresponding content requirement drawn from this particular objective will be the recommended new techniques for wall insulation.

Following a review of all training objectives for the time period, a compre-hensive list of content requirements should be made. In many cases, the same content requirements may pertain to (or satisfy) several different training objectives. (See illustration on next page.)

By taking a comprehensive look at training content requirements for the year or years involved, MEI will be better able to determine the kinds of courses, instructors, instructional methods, equipment, and other resources and people needed to carry out the training objectives themselves.

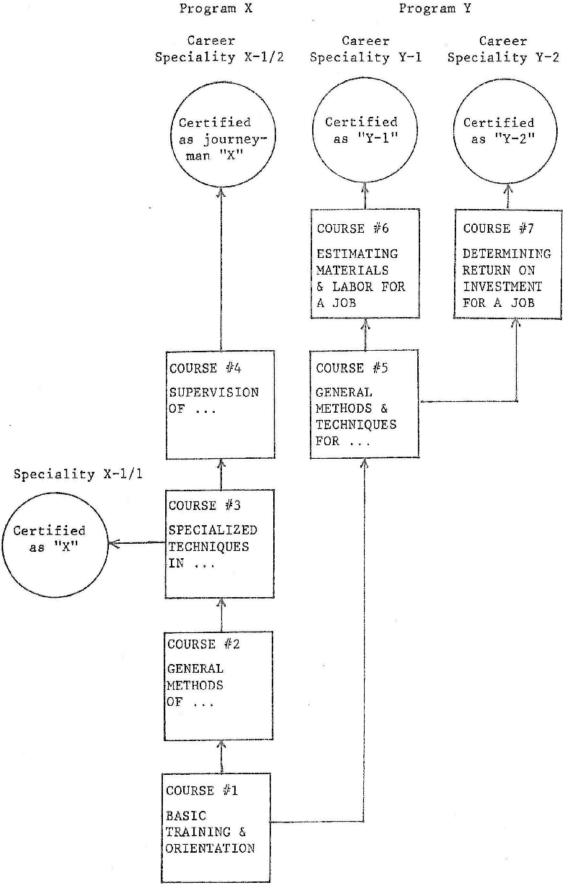
7.4 Secure training demand estimates from field.

A straight forward procedure for estimating numbers of trainees likely to attend training in particular areas and techniques is as follows:

- 1. Prepare a comprehensive list of course topics to be offered during the time period under consideration. This will be based upon the content requirements identified earlier.
- 2. Distribute this list to the CAA's and other clients, using the Training Interest Survey Form at the end of this section.
- 3. Request that each program director indicate the number of people (e.g., crew members) likely to need training during the time period indicated.
- 4. Analyze the returned estimates to determine which particular subjects or course topics on the list will be in demand and which ones will be least likely to be attended if offered.ulum Development

It will be helpful if space is provided at the bottom of the demand estimate list for project directors to list topics or subjects not already on the

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list in which they feel their crews (or they themselves) need training. While this may seem like a repeat of earlier procedures it is really a further refinement and confirmation of the earlier work. It should also be noted that this process may take place several months after the initial needs determination effort.

For each such topic or subject area they add on, project directors should also be asked to provide an estimate of the number of individuals likely to attend such training if offered.

7.5 Identify targeted trainee characteristics

These would be the same characteristics considered in designing particular courses (see Course Design Worksheet at end of Chapter 8): age, educational level, sex, related work experience, etc. At this point, it will be helpful to obtain a general overview of these characteristics to aid in later course design.

7.6 Finalize training methods and strategies

These would be decisions regarding the final training approaches and techniques to be used during the planning and budgeting period. Preliminary strategies will have been specified earlier (See paragraph 2.9).

MEI might consider in any particular year using group training, individual one-on-one training, or home-study training for particular types of subjects and trainee populations. MEI could also consider using centralized instruction (e.g., in Kansas City only) for certain topics, and cluster training in the field for other topics. There are also a number of delivery approaches which might be used for particular kinds of content, including multi-day instructional session versus having instructional days spaced out over a period of time to allow for on-the-job training between sessions.

Selections of training methods and strategies of these types should be based on the types of content to be delivered, the types of trainees to be served and the numbers of particular types of persons to be served during the year. What is being decided here is the <u>best means</u> for delivering the training product within broad areas of instructional and trainee need. Selection of a particular training method or strategy for a particular course is more a matter of course design and, in some cases, left up to the course designer. Since some training strategies and methods are in general more expensive or time-involving than others, the MEI planners and budgeters should be aware of these differences at the global level.

7.7 Select time blocks

VII. Curriculum Development

Here MEI identifies the different locations and periods of time which are available to it in scheduling and arranging subsequent training sessions. For example, certain months of the year may be seen to be the best for training (e.g., winter months for those involved in caulking and weather stripping). MEI may wish to pick a small number of training locations and work around their availability, rather than using a large and changing

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number of locations. This has been effective for other organizations involved in continuing training services because it reduces the number of unknowns associated with the training sites themselves.

One method which may be helpful in this planning effort would be to use the <u>Course Display Sheet Form</u> (at the end of this section) for use in scheduling MEI training activities. On this form, the rows represent particular courses and the columns represent months, and the displayed entries (cells) would be data on particular course sessions to be offered. Data from this form would later be transferred to the <u>Course Cost Estimate Form</u> and the <u>Annual Course Calendar</u> (copies of which are at the end of this section) which will be discussed further below.

7.8 Estimate instructional unit costs

At this point in the planning and budget process, MEI should estimate unit costs for its training services. Once underway, these estimates may be based upon previous expenditures. At the outset, MEI should confer with organizations delivering similar training services to obtain unit cost estimates. Obviously, a good clerical staff member could readily determine most standard costs.

Examples of unit cost data useful in subsequent budgeting for training activities are:

- 1. Rental charge per session day for training space
- 2. Equipment rental costs (audiovisual) per season
- 3. Daily labor rate or fees for instructors
- 4. Cost of refreshments per session
- 5. Cost of handout materials
- 6. Cost of developing the course and course materials, if any.
- 7. Etc.

7.9 Prepare initial program budget

At this point, the planner should be prepared to complete an initial budget for the training program for the planning year's operation. This should be done by transferring the courses finally selected on the <u>Course Display Sheet Form</u> to the <u>Course Cost Estimate Form</u>, and applying the basic cost data. In regard to trainees, the estimated range of the number attending (e.g., 20 to 25) should be recorded and multiplied by an estimated unit cost per trainee which is expected. This unit cost would be based on trans-portation costs, room costs, refreshments, etc. In most cases, trainees will have their costs paid for by their sponsoring organizations of the cost of the property of the costs of the cost of the costs of the cos

This initial budget is intended only as a feasibility check. After summing all of the costs on the Course Cost Estimate Form, if the planner determines that the total costs of the courses planned exceeds the total budget for training some re-thinking will be required even before specific courses are designed, developed or purchased, and before specific instructional and location arrangements are made.

7.10 Develop curriculum adequacy criteria

A set of courses and instructional programs comprises a curriculum. Cur ricula must satisfy criteria of adequacy when viewed as a whole, i.e., in terms of the procedural and instructional implications of the total set of courses involved.

Such a checklist of overall training curriculum adequacy is provided on the Checklist of Curriculum Adequacy Form at the end of this section. In reviewing the adequacy of a planned curriculum, the planner should develop a checklist of this sort—not necessarily the same as the one suggested—before designing the actual curriculum. At the very least, the curriculum checklist or one similar to it, should be applied to the list of titles of courses to be taught during the budget period, and to the overall training schedule, once these things are in hand.

7.11 Prepare initial program plan and schedule

At this point, assuming the initial budget check above indicates it is feasible to proceed with a particular number of courses and sessions in particular locations, MEI can put together its actual instructional program plan and schedule for the year or years involved.

It is helpful first to generate the final list of courses and to compare them against the list of initial instructional objectives developed in paragraph 7.2, above. This is to be sure that (1) all objectives have been addressed, that (2) each course is directly related to at least one of the objectives, and that there is no unnecessary duplication of courses.

Next, gather together information on resources (MEI instructors, consultants, course packages, equipment to be used, etc.) and match these with courses. The Course Display Sheet Form can be used for displaying this data in summary form.

Some resources should be placed in reserve for training contingencies which may arise during the year.

7.12 Estimate costs, requirements of initial plan

With the draft program plan and schedule in hand, MEI now can apply its unit cost figures to this plan to further refine overall cost information.

7.13 Revise plan and schedule as required

If the draft plan exceeds available funds, or calls for using unavailable equipment, or overburdens particular instructors or participants, or calls for equipment to be used at any time or location where they are likely to be unavailable, etc., it will need to be revised.

7.14 Prepare final budget for year

Here the budget prepared above (7.9) is revised so as to reflect any changes made in 7.11.

7.15 Prepare detailed training activity schedule for year

Using the revised plan and schedule, the planner should list each course planned on the $\underline{\text{Annual Course Calendar}}$ (see copy at the end of this section). This will show which $\underline{\text{week(s)}}$ during the year the course will be taught. The user can then view the quarterly $\underline{\text{Course Display Sheet Form}}$ or more detailed records on a particular course to get information on instructors, location, specific dates, etc.

The Annual Course Calendar could be expanded into a large wall display on which could be <u>included</u> data from the <u>Course Display Sheet Form</u> and the <u>Course Cost Estimate Form</u> on one central visual aid.

The <u>Annual Course Calendar</u> will also permit MEI to prepare and distribute in timely fashion necessary publicity connected with particular training courses and programs and to schedule other internal staff-related activities.

7.16 Update the T&TA Delivery Requirements

With detailed training budget and scheduling information in hand, go to the master copy of the $\underline{\text{T\&TA Delivery Requirements}}$ form (prepared in Chapter 6) and update it to reflect any changes in training requirements.

CHECKLIST OF CURRICULUM ADEQUACY FORM

Date:

Year or Period:

		ADEQUACY CRITERION	COMMENTS
(circle	one)		
Y N	NA	 Needed courses are offered often enough demand levels likely to be met sequence requirements can conveniently be satisfied etc. 	
Y N	NA	 2. Bad times of year have been avoided, considering: major holidays staff availability & vacations instructor availability space and equipment availability possible bad weather (travel, field training activities, etc.) etc. 	
Y N	NA	3. Content redundancy among individual courses is low.	
Y N	NA	4. No course is too lengthy or too short, considering:Trainee fatigueTrainee convenienceetc.	
Y N	NA	 Course publicity preparation, recycling times are taken into account in regard to timing. 	
Y N	NA	 6. Training pace is evenly distributed over year: space conflicts, underutilization is avoided administrative overloads avoided instructor overloads avoided trainee overloads avoided 	
Y N	NA	7. The expense for any course does not exceed \$(e.g., 25) on a per-trainee basis.	
Etc •			

MEI TRAINING INTEREST SURVEY FORM

# 2	Agency	Surveyed:	
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MEI Trainers are conducting the annual determination of training needs for next year and beyond. Your serious consideration will be appreciated in completing the questions below.

1. For each of the course subjects or topics listed below, please enter the number of personnel in your program who would attend in this next year, the "best" and "next best" times for attendance and the relative importance you give to each course.

No. of Personne 1 to Attend	Best Time (week or month)	Next Best (week or month)	Title of the Course	Lengt h of Cours e
			- ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	2
			Principles of XYZ	days
				3
			Cost estimating	days
			xxxxxxxxxxxx	

2. In addition to the above, we have been planning career ladders, or long-range training programs for a number of the specialities in the (e.g., Weatherization) program. Copies of these training programs are attached. Please review and offer your critical opinions on each of them. If they are satisfactory, just indicate that below. If you have suggestions, please write them on the back of the appropriate training program description and return with this survey form.

a.	Training	Program 1:	Like	as	is;	Not	needed;	Suggestions	attached
b.	Training	Program 2:	Like	as	is;	Not	needed;	Suggestions	attached
c.									

3. Please add any comments in regard to training that may be helpful to us. Thank you for your help.

VII. Curriculum Development

MIDLAND ENE		VII-10	I	March 1	I
PROGRAM	COURSE				QUARTER
			VII	. Curriculum	Development

Cours			Instructional Staff Labo Food/Lo Tran									Trainees]
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CHAPTER VIII

COURSE PLANNING AND DEVELOPMENT

8.1 COURSE PLANNING STEPS

Once the titles of the courses to be given during a particular year or years have been determined, it will be possible to proceed to design and develop these courses if they have not been prepared or used previously. To the extent that MEI uses "packaged" courses purchased from other sources, the techniques described in this section will not be needed. Whether MEI staff, instructors, or outside consultants design and develop needed courses, the following steps will be involved:

- 1. Complete the Course Design Worksheet (see sample at the end of this section). On this worksheet, the designer is required to sketch at broad levels the purposes (objectives) of the course, the amount of time likely to be required to teach the course; the sub-topics (units, modules) which will make up the content; the kinds of people at whom the course will be aimed; instructional strategies and techniques likely to be appropriate, and so on. Completed course design worksheets lay out, in comprehensive fashion, all the things the course designed will need to consider in putting together a course which meets both objectives and constraints.
- 2. Course Plan. With this information now available, the course designed can proceed to complete a "Course Plan." Course plans usually are comprised of one or more (usually a sizeable number) of sheets of the sort illustrated in the <u>Course Plan Format</u> (a copy of which is at the end of this <u>section</u>). Here the designer indicates which particular portions or topics (units or modules) are to be presented on which day of the course, and in what order. He indicates the particular number of hours and/or minutes (time blocks such as 9:30-9:45) to be devoted to each such unit or module of the course, and the learning objectives to be achieved by the module given in each time block.

On the course design plan format sheet, the designer then spells out exactly what the instructor is likely to be doing during that unit or module (e.g., "Shows how to weatherstrip a sliding door, using mock up"), and what the trainees will be expected to do during, or in response to, the things the instructor is doing (e.g., "Trainees watch and ask questions, will be asked to apply similar weatherstripping afterwards").

With a completed course plan in hand, the instructor (if he is someone other than the designer) will be clear regarding the manner in which the course is to be delivered, and regarding the things the trainees are supposed to be doing and learning during the course, at each step.

The MEI director of training development should review completed course plans before such courses are approved, and money authorized to develop the courses in question, and to buy the necessary equipment and supplies. In addition, course plans of this type are useful in evaluating instructor performance (looking at what they, and the traineers, were supposed to have been doing and learning) and in scheduling on a detailed basis the types of equipment needed on particular days of the courses during a training year.

8.2 Course development suggestions

At a minimum, a new course should be pre-tested on one sample group of trainees, or at least on MEI technical staff, to assure that course materials are intelligible, that the course sequence makes sense, and that enough time is allowed for completing each of the units or modules in the course.

At best, there will be continuous checking and feedback between MEI and its instructors and trainees with regard to the content and formal adequacy of its courses and programs. Courses should be revised and improved on an ongoing basis; suggestions for such changes should be recorded on course plan format sheets and integrated into the existing course plans involved.

MIDL	AND	ENERGY	INSTITUT	E	VII	I-2	March 1, 1978
Cour	rse						WORKSHEET Date: Designed by: Approved by:
		R LEARI VES:	NING/PER	FORMANCE			
S	SECO	NDARY (OBJECTIV	ES:			
4. E	ESTI	MATED (\$			3. DESIRED ATTENDANCE SIZE: MinMax
6. I	PROB.	ABLE A	UDIENCE	CHARACTER	IST.	ICS (ed	d. Level, experience, etc.):
7. 0	COUR	SE UNI'	TS OR MC	DULES (Li	st)	:	8. INSTRUCTIONAL STRATEGIES/TECHNIQUES:
							9. INSTRUCTOR QUALIFICATIONS REQUIRED
							10. TYPES OF EQUIPMENT REQUIRED:
							11. TYPES OF SUPPLIES/MATERIALS REQ:

12. SPACE AND LOCATION REQUIREMENTS:

13. OTHER DESIGN CHARACTERISTICS:

VIII. Course Planning & Development March 1, 1978

MIDLAND ENERGY INSTITUTE VIII-3

COURSE PLAN FORMAT

Course No	Date:	
	Designed by:	
Course Title:	Approved by:	

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DAY#	UNIT OR	TIME	LEARNING	INSTRUCTOR	TRAINEE	EQUIPMENT, SUPPLIES
1	MODULE	BLOCK	OBJECTIVES	ACTIVITY	ACTIVITY	MATERIALS REQUIRED:
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MIDLAND ENERGY INSTITUTE VIII-4

Part 210-1(H)

March 1, 1978

CHAPTER IX

T&TA DELIVERY PROGRAM

9.1 Introduction

The purpose of this procedure is to develop the final cost or budget estimate for the delivery of the T&TA in the planned year and to develop a schedule for its delivery. MEI procedures presented in other documents will address the process for the <u>control</u> of the delivery of T&TA but the schedules developed in this section essentially present the program which is to be delivered and controlled in the planned year.

9.2 Prepare the Cost and Program Delivery Form

The best way to prepare this form is to make up a 5x7 inch index card for every T&TA engagement listed on the T&TA Delivery Requirements Sheet. (This index card could also have estimated cost data breakdowns at the bottom and room for entering actual cost data after an engagement had been completed; this could form the data base for future budget estimates.)

The index cards should then be sorted according to planned delivery dates. If, in the case of TA, the dates are general (e.g., "May"), these cards should be placed at the beginning of the appropriate month.

The information on each card should then be listed on a line on the Cost and Program Delivery Form, clustered by month (i.e., use a separate sheet for each month. This will permit the addition of "late arrivals."

Total the cost columns and one will have the cost estimates for each month which can then be totaled to arrive at cost estimates for the quarter or for the year.

An MEI coordinator can then use this sheet 1) to remind the parties involved of aforthcoming engagement and then enter the date of this confirmation; 2) to record when an engagement has been completed; and 3) to clear the reception of client evaluative materials (in the case of TA).

In the event there are a number of engagements scheduled in any one month it would be better for the purpose of analysis to divide each month into "Technical Assistance" and "Training" sections.

MIDLAND ENERGY INSTITUTE IX-1 March 1, 1978

IX. T&TA Delivery Program

Month of	COST	AND	PROGRAM	DELIVERY	FORM
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ENGAGEMENT TYPE (NEED)	NAME OF CLIENT/S	NAME OF PROVIDER	EST. COST	CONFIRM DATE	COMPLETE DATE	REC'D EVAL

6.

Proposed deliverer.

Part 210-1(F	H)			

MIDLAN	ID ENERGY	INSTITUTE	IV-10 [Sic]; IX-3	-	March 1, 1	.978	
		EXAMPI	LE OF T&TA	RESOURCE	DESCRIPT:	ION INDEX (CARD	
\$ Name: Add :		Fee \$		Skill Co	odes:			
	: (O) (H) ability:		Affil	iation/O	rganizatio	ns:		
Past	Performar	nce:	Conta	act:				

Expertise (should relate to skill codes):

Part 210-1(H)

MIDLAND ENERGY INSTITUTE V-4 [Sic]; IX-4

March 1, 1978 IX. T&TA Delivery Program

T&TA NEEDS LISTING

MEI OBJECTIVE/ <u>PROGRAM</u>	DESCRIPTION OF T&TA NEED	OVERALL PRIORITY
INOUTH	DECORTITION OF THIS MEET	INIONITI

MIDLAND ENERGY INSTITUTE IV-9 [Sic]; IX-5 March 1, 1978

IX. T&TA Delivery Program

PRIORITY RANKING WORKSHEET

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	R	S	А	Ι	N	P	L	V	
	G	P	Т	M	Ε	Т	S	E	
	Ε	R	С	Р	F	Α	С	R	
	N	Ε	0	Α	Ι	N	0	A	
	С	А	N	С	Т	С	R	N	
Brief T&TA Need Description	Y	D	S	Ε	S	Ε	Ε	K	
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Pari.)		

*Assign weights for each criteria. When rating the need from 0 to 5 on a specific criterion, multiply the weight by the rating $(r \times w = score)$. If criteria are not weighted, leave blank.

MIDLAND ENERGY INSTITUTE IV-11 [Sic]; IX-6

March 1, 1978

TA RESOURCE SURVEY OF INTEREST

Your name has been suggested as a possible resource to MEI as provider of training or technical assistance. MEI utilizes both volunteer and paid providers. After you have had an opportunity to look over a description of the areas in which MEI is seeking T&TA resources (see attached pamphlet), and you are interested in an association with MEI, please complete the following questions and forward this questionnaire to MEI in the enclosed envelope.

Please also include a copy of your latest <u>resume</u>. Thank you for your interest. (Note: if you do not have an interest, you might suggest to us the name of a resource that would be interested.)

- 8. Attached to this questionnaire is a "Resource Skills Checklist." Please circle any of the skills for which you would be interested in providing assistance.
- 9. Please briefly describe your particular expertise in the skill areas checked:

Ski11	#1:	
Skill	#2:	

Part 210-1(H)

10.	Please	indicate	the	amounts	of	time	or	time	blocks	in	which	you	would	be
av	ailable	:												

11. Please any travel restrictions or areas to which you will not travel within the states of Iowa, Kansas, Missouri, Nebraska:

12.	Please complete the following identifying and fee information: Name: Address:
	Fee Requirements:
13.	References in areas related to skills:
14.	Name and Address and Skill area(s) of other possible T&TA resources:
Tha	nk you.
MTD	LAND ENERGY INSTITUTE V-5 [Sic]: IX-7 March 1, 1978

T&TA DELIVERY REQUIREMENTS

							1 -	
Staff	Summary of		Est.	Resource	Mode of	Est.		Priority
Resp.	Need	Rank	Man-Day	Identification	T&TA	Cost	Funds	Type
1								
1								

MIDLAND ENERGY INSTITUTE VI-3 [Sic]; IX-8 March 1, 1978

CHECKLIST OF CURRICULUM ADEQUACY FORM Date:

Year or Period:

			ADEQUACY CRITERION	COMMENTS
(ci	rcle	one)		
Y	N	NA	 Needed courses are offered often enough demand levels likely to be met sequence requirements can conveniently be satisfied etc. 	
Y	N	NA	 2. Bad times of year have been avoided, considering: major holidays staff availability & vacations instructor availability space and equipment availability possible bad weather (travel, field training activities, etc.) 	

Part 210-1(H)

				• etc.	
Y	N	NA	3.	Content redundancy among individual courses is low.	
Y	N	NA	4.	No course is too lengthy or too short, considering: • Trainee fatigue • Trainee convenience • etc.	
Y	N	NA	5.	Course publicity preparation, recycling times are taken into account in regard to timing.	
Y	N	NA	6.	<pre>Training pace is evenly distributed over year: space conflicts, underutilization is avoided administrative overloads avoided instructor overloads avoided trainee overloads avoided</pre>	
Y	N	NA	7.	The expense for any course does not exceed \$(e.g., 25) on a per-trainee basis.	
Etc •					

MIDLAND ENERGY INSTITUTE VII-9 [Sic]; IX-9

March 1, 1978

IX. T&TA Delivery Program

MEI TRAINING INTEREST SURVEY FORM

Agency Surveyed: _____

MEI Trainers are conducting the annual determination of training needs for next year and beyond. Your serious consideration will be appreciated in completing the questions below.

1. For each of the course subjects or topics listed below, please enter the number of personnel in your program who would attend in this next year, the "best" and "next best" times for attendance and the relative importance you give to each course.

No. of	Best Time	Next Best		Length of
Personnel	(week or	(week or	Title of the Course	Course

Part	210-	-1	(H)

to Attend	month)	month)		
			Principles of XYZ	2 days
			Cost estimating	3 days
			xxxxxxxxxxxx	

2. In addition to the above, we have been planning career ladders, or long-range training programs for a number of the specialities in the (e.g., Weatherization) program. Copies of these training programs are attached. Please review and offer your critical opinions on each of them. If they are satisfactory, just indicate that below. If you have suggestions, please write them on the back of the appropriate training program description and return with this survey form.

a.	Training	Program 1:	Like a	s is;	Not needed;	Suggestions	attached
b.	Training	Program 2:	Like a	s is;	Not needed;	Suggestions	attached
C							

3. Please add any comments in regard to training that may be helpful to us. Thank you for your help.

PROGRAM	COURSE		QUARTER
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MIDLAND ENERGY INSTITUTE VII-11 [Sic]; IX-11

March 1, 1978

IX. T&TA Delivery Program
IX. T&TA Delivery Program

Cours			Ins	struction	al Sta	ff						Train	nees	1
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MIDLAND ENERGY INSTITUTE VII-11 [Sic]; IX-12 March 1, 1978

R

COURSE DESIGN WORKSHEET

Course No	Date:
Course Title:	Designed by: Approved by:
1. MAJOR LEARNING/PERFORMANCE OBJECTIVES:	
SECONDARY OBJECTIVES:	
2. COURSE DURATION: 4. ESTIMATED COST: \$	3. DESIRED ATTENDANCE SIZE: MinMax
5. TARGET TRAINEE AUDIENCE:	
6. PROBABLE AUDIENCE CHARACTERISTICS	(ed. Level, experience, etc.):
7. COURSE UNITS OR MODULES (List):	8. INSTRUCTIONAL STRATEGIES/TECHNIQUES:
	9. INSTRUCTOR QUALIFICATIONS REQUIRED
	10. TYPES OF EQUIPMENT REQUIRED:
	11. TYPES OF SUPPLIES/MATERIALS REQ:
12 SPACE AND LOCATION REQUIREMENTS:	

- 13. OTHER DESIGN CHARACTERISTICS:

COURSE PLAN FORMAT

Course	No	Date:	
		Designed by:	
Course	Title:	Approved by:	

COUL						
DAY#	UNIT OR	TIME	LEARNING	INSTRUCTOR	TRAINEE	EQUIPMENT, SUPPLIES
	MODULE	BLOCK	OBJECTIVES	ACTIVITY	ACTIVITY	MATERIALS REQUIRED:
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MIDLAND ENERGY INSTITUTE VIII-4 [Sic]; IX-15 March 1, 1978

Month of	.	COST	AND	PROGRAM	DELIVERY	FORM

ENGAGEMENT TYPE (NEED)	NAME OF CLIENT/S	NAME OF PROVIDER	EST. COST	CONFIRM DATE	COMPLETE DATE	REC'D EVAL
			\$			

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