

Information and Training Modules for Planning, Implementing, and Operating Specialized Transportation Services

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An information dissemination program designed to upgrade the skills and expertise of individuals involved in planning and operating transportation services for the elderly is described. The framework of the program comprises seven training modules that include technical memoranda, case studies, slide presentations with illustrated scripts, resource lists, and an annotated bibliography. The program is intended to be used in conjunction with a 1979 planning handbook sponsored by the Administration on Aging. Although the focus of the program is transportation service for the elderly, the training materials are designed to cover a wide range of applications and can easily be adapted to other population groups.

Under a grant from the Administration on Aging, Transportation for the Elderly: An Information Dissemination Program (1) was designed as a means for upgrading the skills and expertise of individuals involved in planning and operating transportation services for older Americans. The seven information dissemination modules developed as part of the materials included technical memoranda, case studies, visual aids, resource lists, and a bibliography, all of which were intended to supplement a planning handbook prepared in 1976 (2) (also sponsored by the Administration on Aging).

This paper highlights the materials developed for training in the provision of paratransit service. Copies of the materials are available from each state agency on aging or from Crain-Revis Associates.

The information dissemination program was intended to be used in conjunction with the planning handbook as a training program and a source of technical assistance on transportation. The materials were structured to serve different levels of skill, and they were designed to be used either individually (in a "self-training" program) or in group sessions. Because the materials were developed under a grant from the Administration on Aging, much of the language has focused on agencies and transportation providers that serve the elderly. However, the basic planning and training elements that constitute the training modules have been designed to be used in a broad range of applications. In most instances, only the word "elderly" will need to be removed or expanded to cover other population groups. At a few rare points in the training materials, some modification may be needed to account for the concerns of specific programs that involve the non-elderly.

Before the modules are discussed in more detail, it will be helpful to summarize the overall strategy behind the effort.

BASIC APPROACH

The specific approach used in developing the training materials was based on two strategies:

1. Design the materials so that they could be used in modules--either separately or in combination--and at different levels of skill, and
2. Base the modules on actual operating experience drawn from field work at specific sites.

In the context of these two objectives, the various

training elements were structured around materials designed to correspond with functional areas covered in the planning handbook and, by supplementing each functional area of the handbook, increasingly complex issues could be specifically dealt with. To provide a sense of immediacy and relevance, specific sites were selected, in cooperation with the Administration on Aging, to receive technical assistance based on the relevance of their problem to the functional areas developed and the validity of the specific site as a training example. Approximately 12 sites were used in the training materials.

FORMAT OF MODULES

We structured our efforts around seven "transportation project milestones" drawn from the planning handbook: getting started, building a sound base, equipment evaluation, problem areas, system design, developing an operating plan, and system operation. These seven areas, shown in Figure 1, became the framework around which each of the training modules was built.

Table 1 (2) summarizes the seven training modules and describes the elements in each of them. The modules consist of the planning handbook, the milestones, 11 case studies, 11 technical memoranda, five slide shows with illustrated scripts, 19 resource lists, and an annotated bibliography.

The relation between the planning handbook and the training modules is shown in Figure 2. For example, case studies 1 and 2 relate to "getting started", whereas case studies 8 and 10 relate to "budgeting". A similar distribution is shown in Figure 2 for each of the seven training modules.

Table 2 describes the case studies and technical memoranda. Slide shows (with scripts) were developed for the following subject areas: the planning process, coordination, hardware and equipment, operations, and monitoring and evaluation.

In addition to the technical memoranda, case studies, and slide presentations, the following 19 resource lists were developed to help projects to establish sources of information from a large number of resources: potential federal funds, U.S. congressional committees, federal and other agencies, state highway and transportation officials, state public utility and service commissions, state insurance commissioners, state departments of labor, state and local safety organizations, governors' highway safety representatives, the American Red Cross, the Association of Volunteer Bureaus, the Legal Services Corporation, the Consumer Federation of America, American Advertising Federation clubs, Farmers Home Administration state directors, the State Agricultural Extension Service, higher education programs in gerontology, sources of transportation publications, and selected local plans, studies, reports, and evaluations.

An annotated bibliography was also prepared to provide the basis for further reading.

Figure 1. Transportation project milestones.

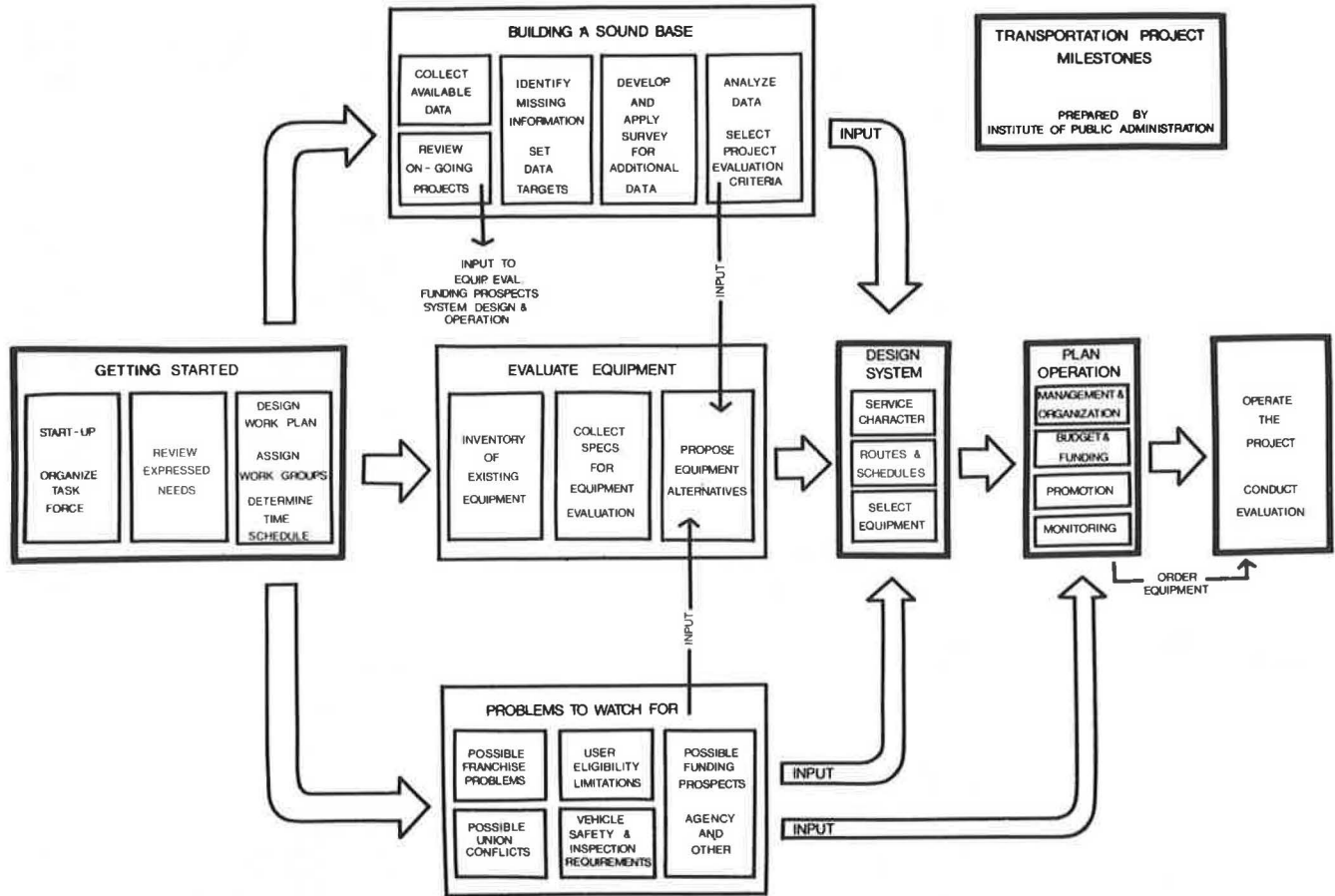


Table 1. Information dissemination modules.

Module	Description	Elements
1	Planning handbook: Transportation Services for the Elderly	Nine chapters and annexes covering all phases of planning and operations
2	Transportation project milestones	Flow and organization chart for overall planning format and content
3	Case study workbook: Transportation Services for the Elderly (cases and problems)	Eleven case studies covering all phases of planning and operations
4	Slide presentations	Four slide shows and illustrated scripts on planning process, coordination, equipment selection, operations, marketing, monitoring, and evaluation
5	Technical memoranda	Eleven technical memoranda on specific techniques and problems in all phases of planning and operations
6	Annotated bibliography	Detailed bibliography with full range of references
7	Resource lists	Nineteen resource lists containing information on available sources of assistance and current data

USE OF MODULES

By using the case studies, technical memoranda, slides, resource lists, and other materials in conjunction with the planning handbook, it would be possible to develop an excellent program for expanding skills in all aspects of transportation, particularly as it relates to special services and paratransit. Each state agency on aging was provided with a free set of the information modules along with special training on how to use it. Five special training sessions were held in different parts of the country, and our evaluation material indicated that the modules were well-received and understood. However, there has been no follow-up on how extensively they have been used.

As noted earlier, the materials were developed and assembled so that they could be used at dif-

ferent levels of skill from introductory concepts to detailed technical explanations. The information was also designed so that it could provide a curriculum for "self-training" or "group instruction", through workshops, seminars, or more formal classrooms. Training programs could be designed to use different formats for instruction, each of which could be tailored to the skill needs of the particular group or individual in question. Figure 3 shows the skill levels of each module. For example, visual-aid material (slides) could be used as a presentation to officials or political decision makers in order to provide them with some overview of and insight into the problems or requirements of planning and operating transportation services, whereas the technical memoranda are more appropriate for training use.

In combining the seven training modules with the

Figure 2. Information modules and subject coverage.

Planning Handbook Subject Area	Information Module and Number						
	1 Planning Handbook	2 Transportation Milestones	3 Case Studies	4 Slide Shows	5 Technical Memoranda	6 Annotated Bibliog'y	7 Resource Lists
Getting Started	Section I		No. 1 No. 2	Planning Process	No. 1 No. 2		
A Sound Data Base	Section II Annex A		No. 3 No. 4	Planning Process	No. 3 No. 4		A 1 1
Designing the Service	Section III Annex B		No. 5 No. 6	Planning Process Coord'tion	No. 5 No. 6		S S
Selecting Equipment	Section IV Annex C		No. 7	Selecting Equipment	No. 5 No. 6		S S
Running the Project	Section V		No. 8	Coord'tion Operations	No. 7 No. 8 No. 9-10		S S
Budgeting	Section V Annex D		No. 8 No. 10	Operations Monitor/Ev	No. 7 No. 8 No. 10		S S
Monitoring, Evaluation	Section V Part B Section VII		No. 9	Monitoring and Evaluation	No. 8		S S
Paying for the Project	Section VIII		---	Coord'tion	No. 11		S S
Special Problem Areas	Section IX		No. 11	All Slide Shows			S S

Table 2. Case studies and technical memoranda.

Element	Description	Handbook Coverage
Case study		
1	Trans-Aid, Winston-Salem, NC	Getting Started, Section I
2	Northeast Counties of Oklahoma (NECO) Area Agency on Aging in Vinita and adjacent counties	Getting Started, Section I
3	Valley Transit District, Ansonia, CT	Building a Sound Data Base, Section II
4	Clark County Health and Welfare Planning Council, Clark County, WA	Filling the Information Gaps, Section II
5	Lift Line, Palm Beach, FL	Designing the Service, Section III
6	Whistlestop Wheels, Marin County, CA	Designing the Service, Section III
7	Transportation of the Elderly, St. Petersburg, FL, and other systems	Selecting the Right Equipment, Section IV
8	Ottumwa, IA, and OATS, Columbia, MO	Running the Project: Financial Accounts and Controls, Section V
9	Senior Citizen's Transportation, Inc., Warwick, RI	Monitoring and Evaluation: Improving the Efficiency of Medical Scheduling, Section VII
10	SMELI, Southbridge, MA	Paying for the Project, Section VIII
11	Care-a-Van, Fort Collins, CO	Some Problems to Watch for: Obtaining Insurance, Section IX
Technical memorandum		
1	Transportation and the Social-Psychological Needs of the Aging	Getting Started, Section I
2	Public Transit and Agency Transportation Coordination	Building a Sound Data Base, Section II
3	Identifying the Elderly for Transportation in Rural Areas	Building a Sound Data Base, Section II
4	Inventory Mapping of Resources, Needs, and Potentials for Transportation of the Elderly in San Antonio, Texas	Building a Sound Data Base, Section II
5	Lessons in Equipment Selection for Small Urban and Rural Areas	Designing the Service, Section III; Selecting the Right Equipment, Section IV
6	Selecting Vehicles to Serve the Elderly and Handicapped	Selecting the Right Equipment, Section IV
7	Transportation Costs and Service Guidelines for Coordinating Agency Transportation Services	Running the Project, Section V; Putting the Budget Together, Section VI
8	Uniform Recording of Transportation Services and Operations	Putting the Budget Together, Section VI; Monitoring and Evaluation, Section VII
9	Depreciation of Transportation Equipment as a Cost of Operation for Coordinated Agency Transportation Services and the Case of Athens, Georgia, Department of Human Resources	Putting the Budget Together, Section VI
10	Urban Mass Transportation Administration Section 15 Accounts and Human Service Agency Transportation	Putting the Budget Together, Section VI; Monitoring and Evaluation, Section VII
11	The Need for Technical Assistance by State and Local Service Agencies and Transportation Projects for the Elderly	Some Problems to Watch for, Section IX

level of skill of potential users, three objectives were defined for the modules:

1. They were to be a source of general information on transportation.
2. They were to serve as an introductory course.
3. They were to have the capacity to be used by those who needed more advanced training and already had some experience.

In this context, the planning handbook was designed to serve as a basic text for an introduction

to transportation planning for human-service-agency projects and covered the full range of activities involved. The case studies and technical memoranda were intended to be used as supplemental reading, whereas more advanced training efforts, either on an individual self-training basis or as part of a more formal effort, would use the case studies along with the technical memoranda. A full course of training could then be accomplished by using a combination of the slides and the transportation planning milestones in conjunction with advanced assigned readings from the planning handbook, the case studies,

and the technical memoranda. Discussions centering around the problems, issues, and solutions raised by each of the case studies and technical memoranda could also be stimulated.

CURRICULAR AND TRAINING FORMATS

To provide some further insight into the way in which all the materials might be combined to structure curricular and training sessions, Table 3 gives the ways in which the information modules may be used in terms of user skills and training objectives, the mix of information modules that can be used, the amount of time that can be spent on the materials, and the training formats for which they are relevant. Thus, when users have limited skills, and the objectives are public relations or general overview, the milestones and slides are adequate and can be presented in half-day sessions or less. More complex objectives and a mix of materials are, of course, also possible.

In Table 3 it can be seen that, for general in-

formation purposes, the transportation milestone chart and the slide shows serve as an important basis for introducing to public policy decision makers, or for presenting to agency staff, the general elements involved in providing transportation services for agency clients. These materials in combination could be handled on either an informal or formal basis and should be workable in a half-day session.

At the more intermediate level of providing a general course in transportation services for agency clients or for those who either have some limited background in operating systems or are about to become involved in such activities, a general training course is possible that combines the planning handbook, the transportation milestone chart, the case studies, the resource lists, and the bibliography. This material can be used either as a self-training program or in workshops, seminars, or formal classrooms and in sessions from one-half day to two full days. Self-training efforts can, of course, be paced by the individual.

Finally, for individuals who have some developed skills (say one or two years of experience), a program of readings and discussions can be organized, either on a self-training basis or in groups. By using the case studies and/or technical memoranda, seminars and discussions can be organized around specific subject areas. Each of the case studies illustrates an actual experience, and discussion and examination of that experience can serve to expand the insights of even experienced staff. Similarly, because the technical memoranda tend to cover more specific and technical subject areas, they help to stimulate discussion on specific problem areas, especially in terms of operations.

As a further means of providing guidance on the way in which the modules can be organized into training programs, Table 4 gives curricula formats for half-day, one-day, and two-day training programs. An important consideration is the degree to which advance reading of materials is required. If advance reading is possible, more discussion and longer sessions become feasible (and productive). However, given the amount of information to be

Figure 3. Information modules by level of skill application.

Information Module & Number	Level of Skills(Training Objective)		
	General Info Public Rel'n	Introductory Training M'dls	Advanced Training
1.Planning Handbook			
2.Transport Milestones Chart			
3.Case Studies			
4.Slide Shows			
5.Technical Memoranda			
6.Annotated Bibliography			
7.Resource Lists			

Table 3. Module objectives and format by level of skill in transportation.

Level of Skill	Training Objective	Materials and Modules for Training Objective	Applicable Group Time Period	Applicable Format
None, general knowledge only	Introduction to concepts, public information	Transportation milestones, slide shows	Half-day sessions	Self-training, formal and informal groups
Some background but limited experience	Training in human-service-agency transportation, upgrade skills	Planning handbook, slides, case studies, bibliography, resource lists	Half-day to two-day sessions	Self-training, workshops, seminars, classroom
Experience with transporting human-service-agency clients	Expand existing skills, stimulate further study	Handbook review, case studies, technical memoranda	Half-day to two-day sessions	Self-training, seminars, workshops, discussion groups

Table 4. Suggested curricula formats by skill objectives and training time.

Skill Objective	Curricula by Length of Training Session		
	Half Day	Full Day	One and One-Half to Two Days
General information, public relations	Slide shows, transportation milestones	Slide shows, transportation milestones, afternoon discussion	
Introductory training in human-service-agency transportation		No advance work; slide shows, transportation milestones, case studies, bibliography, resource lists, discussions	Advance reading; handbook review, case studies, technical memoranda, bibliography, resource lists, discussions
Advanced training, skills expansion	Advance reading; case studies, technical memoranda, discussion	Advance reading; handbook review, case studies, technical memoranda, bibliography, resource lists ^a	Advance reading; handbook review, case studies, technical memoranda, bibliography, resource lists ^a

^aOne- and two-day sessions differ in intensity and should be customized.

Table 5. Illustrative training agendas.

Time	Activity
Half-Day Session	
8:00 a.m. to 8:30 a.m.	Registration
8:30 a.m. to 8:45 a.m.	Introduction and description of program
8:45 a.m. to 9:00 a.m.	Discussion of transportation milestones
9:00 a.m. to 10:00 a.m.	Two slide shows: planning process, coordination
10:00 a.m. to 10:15 a.m.	Break
10:15 a.m. to 11:45 a.m.	Two slide shows: equipment selection, operations
11:45 a.m. to 12:15 p.m.	One slide show: marketing, monitoring, and evaluation
12:15 p.m. to 12:45 p.m.	Bibliography, resource lists, final discussion
Full-Day Session	
8:00 a.m. to 8:30 a.m.	Registration
8:30 a.m. to 8:45 a.m.	Introduction and description of program
8:45 a.m. to 9:00 a.m.	Discussion of transportation milestones
9:00 a.m. to 10:00 a.m.	Two slide shows: planning process, coordination
10:00 a.m. to 10:30 a.m.	Break
10:30 a.m. to 11:30 a.m.	Two slide shows: equipment selection, operations
11:30 a.m. to 12:00 noon	One slide show: marketing, monitoring, and evaluation
12:00 noon to 1:00 p.m.	Lunch
1:00 p.m. to 2:00 p.m.	Planning handbook discussion: coverage linked to slides
2:00 p.m. to 3:00 p.m.	Planning handbook discussion: continued coverage
3:00 p.m. to 3:30 p.m.	Break
3:30 p.m. to 4:30 p.m.	Selected case studies for presentation and discussion
4:30 p.m. to 5:30 p.m.	Open discussion

covered, two-day training sessions can be easily scheduled.

The formats in Table 4 are, of course, only suggestions. The only limitation in the use of the modules lies in being sure to tailor each of the uses and combinations of the modules into formats that meet the specific needs of the individuals who will be using them. It is essential to know what these individuals' skill levels are. The material in the modules ranges in difficulty from the slides, which present an overview, to the technical memoranda, which are quite specific and technical. It is therefore necessary to structure the curricula accordingly.

Table 5 summarizes two possible agendas for training workshops, one for a half day and one for a full day. Both are illustrative only and by no means exhaust the possibilities. The full-day session is designed to provide a quick introduction to materials with the expectation (hope) that the attendees would then follow up with more intensive reading of the materials. The half-day session is intended as a purely informational effort or a quick introduction to the subject. For more advanced training, a more tailored approach would be required, and this, as previously suggested, would be built around the case studies and technical memoranda and encourage more discussion and direct participation in the analysis and presentations. In the presentations, individuals could be asked to read and report on a specific case and the presentation would then be the basis for discussion. A similar approach could be used for the technical memoranda.

CASE STUDIES

The purpose of the case studies is to illustrate

transportation project procedures for planning, operation, and evaluation and to disseminate information on transportation services for the elderly based on real-world experience. The case studies have been developed to illustrate a particular part of the planning process, and some have been supplemented with discussion questions and practice examples. Most of the information for the case studies was developed from on-site technical assistance provided to the specific projects described in the studies. Thus, the case-study material is based on the experience of actual transportation providers. Such information provides a valid and consistent view of the past experiences of projects.

Some of the case-study projects may have changed their situations or modes of operation since they were initially visited. However, modifications that might have occurred do not invalidate the value or representativeness of each case study. Technical review indicated that the material was still useful for illustration even when some of the original characteristics had changed.

In some case studies, details on specific aspects were lacking; to ensure relevance, where additional information was necessary and available, the original projects were contacted again for clarification and greater detail. In other cases, information may have been elaborated on by the authors for purposes of clarification, especially when insufficient detail was available from the project. For some of the case studies, materials from more than one project have been woven together to provide a more complete illustrative example, and, occasionally, hypothetical material has been added to improve the clarity, completeness, and representativeness of the case study.

Following the description of some of the case studies, discussion questions have been added for further understanding of the project planning process and for self-testing of comprehension by the reader. Not all questions have discrete or absolute answers, and great effort should not be necessary to arrive at reasonable solutions. Approximate answers and an understanding of their derivation will be sufficient in most cases. Some questions may have more than one correct answer and should be considered as thought-provoking rather than requiring a right or wrong answer. The questions are meant for individual consideration and group discussion, to explore topics based on the experience of readers, and to reinforce their comprehension of the material.

Where alternative case studies are presented, in the main body of the text or in the discussion questions, they are intended to illustrate varied approaches to a common problem. Often a single case study does not represent the only response or even the principal solution. In these situations, alternative case studies or discussion questions, based on information from other projects, are presented for a view of diverse procedures.

REFERENCES

1. Transportation for the Elderly: An Information Dissemination Program. Administration on Aging, U.S. Department of Health, Education, and Welfare, Jan. 1979.
2. Planning Handbook: Transportation Services for the Elderly. Administration on Aging, U.S. Department of Health, Education, and Welfare, Nov. 1975.