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A FEASIBILITY STUDY FOR
A HOUSING MANAGEMENT INFORMATION SYSTEM



Housing Research and Development
University of Illinois, Urbana, Illinois

A FEASIBILITY STUDY FOR
A HOUSING MANAGEMENT INFORMATION SYSTEM

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ABSTRACT

Increasing attention is being directed to the development of professionalism among those who work in all sectors of the field of housing management. One way to increase professional competence is the provision of readily accessible, reliable, and relevant management information. At this time, there is no organization which performs this function adequately on a nationwide basis.

Extensive inquiry among potential users of management information in the public sector--the prime target of this report--as well as more limited inquiry within the publicly assisted and private sectors, shows considerable recognition of a need for improved methods to provide certain kinds of information in certain ways. Selection of subject matter and of communication methods will be key determinants of the usefulness, and hence the success, of any information system. Findings show that a chronic shortage of time, coupled with impatience in filling out forms and unwillingness to read more than the briefest of print materials, characterize the challenge of attempting to provide information to management personnel. Any new system must take these factors into account in developing presentation formats and delivery methods.

Investigation of the experience of existing information systems serving other fields, as well as the identification of successful services and of service gaps in state and regional technical assistance agencies and housing-related reference libraries now functioning, suggest useful approaches for a proposed new housing management information system. Accordingly, this report makes the following recommendations:

1. The information system should play a strong coordinating role with respect to ongoing programs of existing institutions. It should avoid re-creating facilities and services now performing well, but should increase knowledge of and access to these services.
2. To avoid the high cost of establishing duplicative services, existing organization should be strongly encouraged to cooperate in an information-sharing arrangement.
3. Although persons in the public sector may be the first major target area, the information system should be designed to serve all segments of housing management and all should be invited to share in decision-making through an Advisory Council which is broadly representative of all sectors.
4. The housing management information system should be independently staffed, and its start-up phase should be implemented by the National Association of Housing and Redevelopment Officials (NAHRO).
5. While some of its services may become self-supporting, it is unlikely that the information system will be initiated or sustained

unless there is a dependable outside funding source. Accordingly, organizing and operating costs should be subsidized by the U. S. Department of Housing and Urban Development (HUD), but HUD should not administer the system.

6. The system should be organized on a regional basis to be able to reach and to respond to the maximum number of users in ways oriented to their varying needs. A small central clearinghouse, located to Washington, D. C., should coordinate and share the responsibilities.

7. Development of the system should be incremental in every facet: regions served; user population served; subject areas covered; range of services provided; and staffing.

8. Key services should include, directly or by referral:

- a. Print Material Access
- b. Schedules of Education/Training Programs
- c. Non-Print Information Exchange (Human Resources File, Experience Exchange Descriptions, Collective Experience Exchanges)
- d. "Hardware" Product Information
- e. Direct Technical Assistance
- f. Newsletter Publication

9. Methods must be developed to evaluate information handled by the system and the effectiveness of the system itself and its services.

10. The question of costs and benefits is very difficult to measure, especially in what is primarily a "software" service with effects that can be determined only over an extended time frame. If the goal of the information system is to expand substantially the competence of persons in the field of housing management, and if it is recognized that many in the field have not been in the habit of seeking training or in other ways systematically improving their knowledge and skills, then it seems inevitable to conclude that a concerted effort must be made to try to assemble, package, and distribute information and information opportunities so that people whose habit has not been to reach out, will want to do so. Realistically, this will require the housing management information system to "sell itself" and, to do so, it will have to provide a number of services without charge to the user. There will, therefore, be costs to HUD--the recommended underwriter--but these costs may be recovered in the long run through the benefits of development of a professional cadre better able to control economic and social costs within the housing entities that they manage.

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INTRODUCTION

A. The Need for Housing Management Information

The federal government's involvement in housing production, a role traditionally reserved for the private sector, is generally traced to the enactment of the Housing Acts of 1934 and 1937. From that time until the late 1960's, a period of approximately thirty years, housing production and home ownership were the focal points of federal housing policy. While home ownership continues to be important, it has become increasingly clear that the construction of a "decent" living unit, especially a rental unit, is not enough to insure a suitable living environment. The housing which has been constructed, whether it be public, assisted, or private, must be effectively managed if the residents, the managing entity, and the community are to benefit from housing development efforts.

The problems facing the public housing sector are, perhaps, the most complex and challenging. Public housing no longer serves those who are primarily interested in living temporarily in subsidized housing. Increasingly, it has come to be a permanent housing arrangement for those with little prospect of upward mobility. This has, in turn, led to a situation in which management problems have become increasingly complex--economically, socially, culturally, and politically. Beyond this, an Urban Institute study¹ has shown that well-managed housing results in increased tenant satisfaction and, in fact, costs less to operate than poorly-run housing. The need for better housing management is clear, and the benefits it would provide for residents, public officials, and the general public are great.

The need for improving housing management pertains not only to the public housing sector but is also applicable to the assisted housing sector, as detailed by Robert Kolodny in his 1974 report Advisory Services for Better Housing, Inc.² While recognizing that other factors are instrumental in determining the success or failure of a housing project, he emphasized that ineffective management was a prime source of difficulty.

1

Sadacca, Robert, Suzanne B. Loux, Morton Isler, and Margaret Drury, Management Performance in Public Housing. Urban Institute, 1974, pp. 37-44.

2

Kolodny, Robert, Advisory Services for Better Housing, Inc., (Community Service Society of New York, June 1974), p. 29.

This need for better housing management has become a high priority of federal housing policy as evidenced by the actions taken by the Department of Housing and Urban Development (HUD). In 1971 a new post--that of Assistant Secretary for Housing Management--was created at HUD to focus attention on the field of housing management and give it equal standing with housing production. A further impetus was given when the National Center for Housing Management (NCHM) was created by executive order in 1972.

Along with the introduction of these administrative and organizational changes came programs oriented to housing management, such as the Public Housing Management Improvement Program (PHMIP). As part of this particular program, 13 local housing authorities, mostly large in size, were given a total of 25 million dollars to develop innovative solutions to problems in housing management. Until the inception of this program these problems had not been tackled in a systematic way. The "products" which were developed as outcomes of this program are now being communicated to those authorities participating in another HUD program for improving housing management, the Target Project Program (TPP). The Target Project Program has been developed by HUD primarily to assist medium size authorities to acquire a high level of management proficiency.

HUD has received extensive assistance from OASIS (Organization for Applied Science in Society) in several aspects of the PHMIP and TPP efforts. One of the jobs OASIS performed involved the development and production of a catalog listing the PHMIP products available for transfer to TPP authorities. (See Appendix D for a description of this catalog.)

Accompanying this increased awareness has been the growing attention given to the development of professionalism among those who work in the field of housing management. This interest has manifested itself in a number of ways. The development of new management training programs and the growing involvement of a variety of people in such questions as accreditation, certification, and licensing, are indicators of the emerging interest in professionalization. One important key to the ability to develop professionalism throughout the field rests with the availability and accessibility of a reliable and comprehensive source of relevant and responsible housing management information. Such a source can assist those in housing management to acquire needed information and can also provide a conduit for communication exchange in the field.

The provision of a forum for the sharing of ideas is an important step in the development of a profession. There can be several outcomes of such sharing: 1) dissemination of information on work in progress; 2) encouragement of the development of new perspectives and innovative practices within the field;

3) testing, evaluation, and selective adoption of new and proven management techniques; and 4) development of a greater feeling of community among those involved in housing management.

There is at present no organization which is adequately meeting these objectives through the provision of print and non-print housing management information at the national level. This has led to two major problems, Firstly, no adequate means exist for locating available information. This is especially true when trying to find people with expertise gained through experience in the field. Personal expertise is not easily tapped, particularly if the person in question is not within convenient geographical proximity. Secondly, the supply of information to those in housing management is inconsistent. Resources vary considerably between regions of the country, and even within a region inconsistencies may exist. In recognition of the need for an organization to deal with these problems, NCHM, working under a HUD contract, formulated, in 1975, a proposal for a housing management information center. The system which was proposed has not been implemented.

B. Assignment to Housing Research and Development

In response to the unmet need for housing management information, HUD contracted with the National Association of Housing and Redevelopment Officials (NAHRO) in the summer of 1975 to perform a number of tasks known as "housing management services." NAHRO, in turn, subcontracted two of their seven tasks to the Housing Research and Development Program (HR&D) of the University of Illinois at Urbana-Champaign. HR&D was selected as the subcontractor because of its experience in researching and reporting on issues relating to housing management. NAHRO's primary tasks involved it in the marketing efforts of the Public Housing Management Improvement Program (PHMIP) authorities. These marketing efforts were organized to assist in the "transfer" of PHMIP products to Round II TPP authorities. This transfer effort represents a preliminary attempt to formalize the information sharing which presently occurs informally between housing authorities.

The two tasks assigned to HR&D called for the design of an information system to facilitate this exchange of information among all housing authorities. These tasks were:

- Design the essential components of a clearinghouse for the dissemination of housing management improvement information and related technical assistance, and
- Develop a minimum of two detailed designs to effect the transfer of housing management improvement

techniques to local housing authorities and the private assisted housing market. One of these designs should be oriented to the establishment of regional management technical assistance centers.

Throughout this report the term "information system" will be used to embrace either a national clearinghouse or a national clearinghouse with regional technical assistance centers.

C. Definitions

Information system: "methods, materials, media, producers and recipients involved in an organized way to effect information transfer within a specific field, activity, or organization."³

Clearinghouse: "depository for documents with the additional mission of serving as a central agency for collection classification, and distribution of information;...also includes such functions as collecting and maintaining records of research and development in the planning stage, in progress, and in completion."⁴

Technical assistance center: an organization responsible for providing not only written information but also other forms of assistance to its user population; this could include such things as referral or consulting services.

D. Method of Operation

In order to accomplish the assignment, HR&D took the following steps:

1) Established a continuing liaison with NAHRO which included consulting on the progress of the work, discussing conceptual proposals, and reviewing preliminary recommendations. This was carried out through communication with both the NAHRO national office staff and the NAHRO National Advisory Panel on Housing Management.

³
Weisman, Herman, Information Systems, Services, and Centers, (John Wiley, 1972), p. 14.

⁴
Ibid., p. 15.

2) Reviewed available information on comparable clearing-houses and information transfer systems, with attention given to the costs and benefits as well as the overall effectiveness of alternative systems.

3) Identified the primary sources of housing management information and explored the ways in which these sources might wish to participate in the operation of an information system.

4) Developed an interview format used to survey selected local housing authorities (including PHMIP and TPP authorities), HUD and NAHRO regional officials, selected private managers of publicly-assisted housing, and other resources.

5) Administered interviews and analyzed the information obtained from them.

6) Identified components of a proposed information system, defined their interrelationships, and described the functions services, and products of such a system.

7) Developed alternative models for providing information to local housing authorities and other prospective users.

SUMMARY OF FACT-FINDING ACTIVITIES

The specific sub-tasks undertaken as part of the work described in the preceding general work plan are briefly listed below. A detailed analysis of the information obtained through the accomplishment of these tasks is contained in later sections of the report. For the purpose of discussion, it is useful to divide the work accomplished into three broad categories: 1) analysis of user information needs; 2) investigation of existing housing information resources; and 3) review of existing and proposed information systems.

A. Analysis of User Information Needs

1. Random sample user survey

The major emphasis of the research effort involved the surveying of executive directors of local housing authorities (LHAs) to ascertain their present sources of information and to determine their information needs. The survey instrument used to do this was constructed by HR&D staff members and was designed to be administered over the telephone to the executive director. The director was sent a copy of the survey in advance so he/she could become familiar with the questions to be asked. This also reduced the amount of reading and explanation the interviewer had to do over the telephone.

The survey was pre-tested with five directors, representing one small authority and four medium size authorities. Following the pre-tests, the survey was revised and sent to the directors of 80 local housing authorities selected at random from housing authorities throughout the United States. Of the sample, 37 had 100 units or fewer, 16 had between 101 and 200 units; 18 had between 201 and 700 units, and nine had more than 700 units.

Data were collected from 71 authorities (32 authorities with fewer than 100 units, 15 with 101 to 200 units, 17 with 201 to 700 units, and seven with 701 plus units). The data were then coded and tabulated by computer.

2. NAHRO conference interviews

A number of delegates to the NAHRO national convention held in Los Angeles (October 12-15, 1975) were interviewed to obtain their input into the design of the system.

3. Selected LHA directors

Several LHA executive directors, known for their participation in regional and national housing activities were contacted. Their experience in the housing management field was believed to be sufficiently broad to give them insights into the information needs of those in the field.

4. Publicly-assisted housing sector user information needs

A selected group of people active in the assisted housing market were interviewed to gain some impressions on the information needs of this group of potential users. In addition to these individuals, several members of the Management Advisory Council of the National Corporation for Housing Partnerships were contacted.

5. Private housing sector user information needs

People active in the private housing sector were contacted to help in determining what an information system could provide for them and how they might relate to it. Those contacts included people who were active in the Institute for Real Estate Management (IREM).

6. Information needs identified by public agencies

Another group of potential users who were contacted included those who were active in various state agencies. A number of individuals in this group administer active assistance programs for LHAs and for those in the assisted housing sector, thus their perceptions of the information gaps in the housing field were considered relevant.

B. Investigation of Existing Housing Information Resources

1. Document resources

Nine library facilities were visited in the course of the research effort. These were:

- HUD Library, Washington, D.C.
- NAHRO Library, Washington, D.C.
- Information Center of the National Center for Housing Management (NCHM), Washington, D.C.
- Urban Institute Library, Washington, D.C.
- National Association of Realtors Library (NAR), Chicago
- Joint Reference Library (JRL), Chicago
- Real Estate Research Corporation Library, Chicago
- Rural Housing Alliance Library (RHA), Washington, D.C.
- National Leased Housing Association Library (NLHA), Washington, D.C.

2. Technical assistance resources

Personnel from five state or regional agencies now providing technical assistance to LHAs were interviewed by telephone. These were:

- Bureau of Housing Assistance of the Florida Department of Community Affairs
- Housing Authority of the County of King (State of Washington)
- Division of Housing of the State of Wisconsin
- Demonstration Project of the New Jersey Department of Community Affairs
- Texas Department of Community Affairs

3. HUD resources

HUD personnel with housing management responsibilities at the HUD area offices in Chicago, Los Angeles, San Francisco, Atlanta and New York, and at the HUD regional offices in Chicago, San Francisco, Atlanta, and New York were visited. Conversations were also held with HUD central office personnel.

4. Training and educational resources

A number of organizations offering education and/or training were examined. As there are several organizations (NAHRO, NCHM, HUD, IREM) with widely known education and/or training programs, it was considered more useful, at this point, to review some lesser known programs. The programs reviewed included those of several universities and that of the St. Louis Housing Authority. The university programs surveyed included:

- University of Georgia, Athens, GA
- North Texas State University, Denton, TX
- Southern University, Baton Rouge, LA
- California State University at Sacramento, CA
- University of Wisconsin, Madison, WI

C. Review of Clearinghouses or Information Systems

In all, 13 clearinghouses were investigated. Information on nine of the systems was collected through visits to the clearinghouses or information systems. The systems visited included:

- ERIC (Educational Resource Information Center)
Clearinghouse on Early Childhood Education,
Urbana, IL
- San Mateo Educational Resource Center (SMERC),
San Mateo, CA
- Information Services of the HUD office of Inter-
national Affairs, Washington, D.C.
- National Criminal Justice Reference Service,
Washington, D.C.
- National Center for Voluntary Action Clearinghouse
Washington, D.C.
- National Clearinghouse for Poison Control Centers,
Bethesda, MD
- National Clearinghouse for Criminal Justice
Planning and Architecture, Champaign, IL

- American Society of Planning Officials (ASPO)
Information Service, Chicago, IL
- Public Administration Services, Chicago, IL

Information on two other systems, the Smithsonian Science Information Exchange (SSIE, Washington, D.C.) and the National Referral Center (Washington, D.C.), was collected through telephone interviews supplemented by readings about the systems. Two additional information systems, the National Rehabilitation Information System and the National Clearinghouse on Aging, are still in the planning stage. Information on these two was collected through reading the reports outlining their implementation and operation strategies. After reading the reports, people involved in the formulation of the reports were interviewed.

INFORMATION NEEDS OF PUBLIC HOUSING USERS

A. Random Sample User Survey

When the idea of a housing management information system was first put forward, little was actually documented about the information needs of potential users, their attitudinal receptivity, or their capacity to handle additional information if it were provided. A "user profile" was considered to be a necessary first step in the design of an information system and accompanying services. The validity of this approach was confirmed by personnel interviewed in existing clearinghouses and other information systems.

Information upon which to base the "user profile" was gathered by surveying housing authority executive directors drawn from most areas of the country and representative of different size authorities. Preference was given to interviewing executive directors because it was presumed that they were familiar with a broad range of management problems and more attuned to possible sources of management information.

Housing authorities surveyed were selected by a systematic random sampling of those authorities listed in Local Authorities Participating in Low-Rent Housing Programs. The size of the sample and the randomized selection process produces statistically significant and valid survey results.

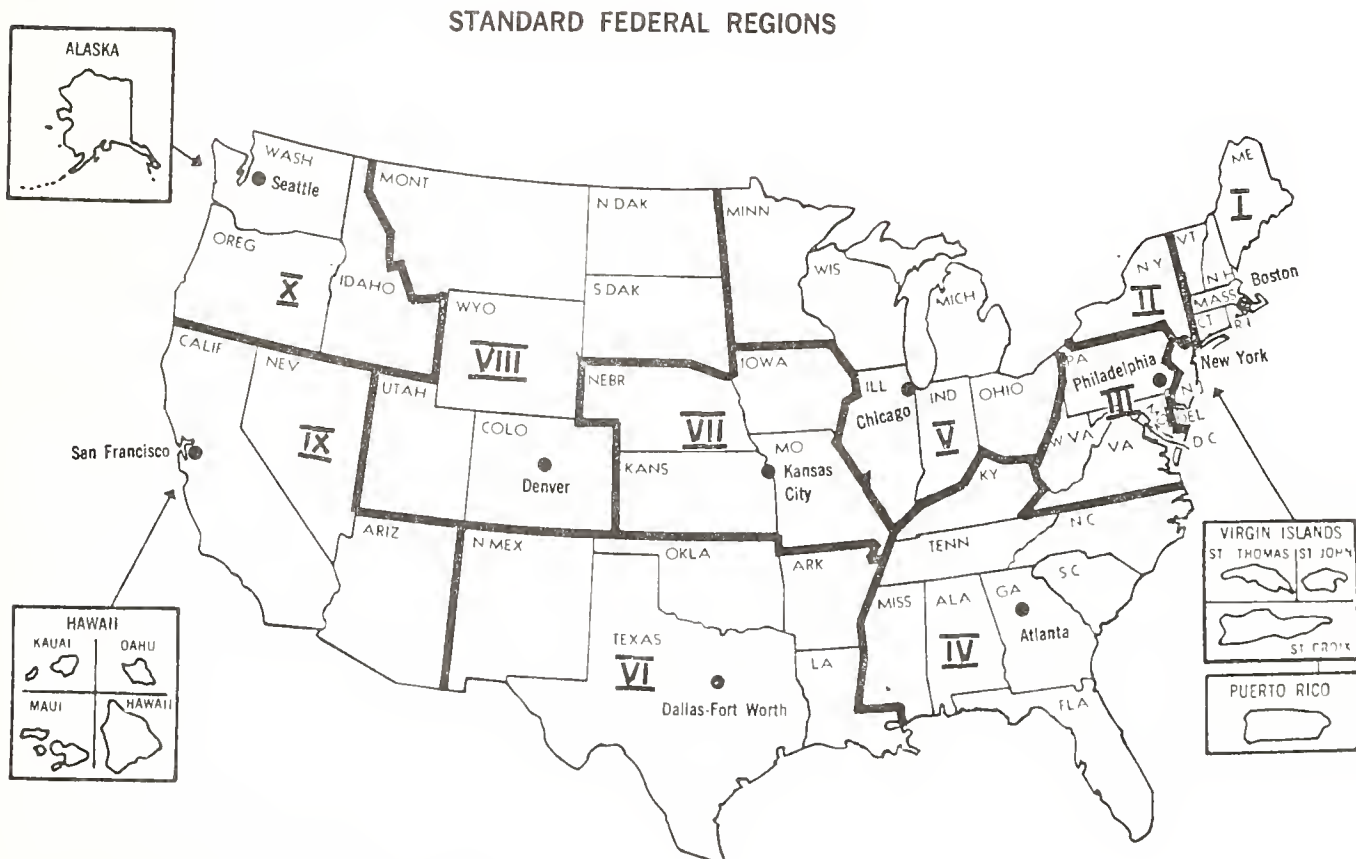
1. User survey

An interview form (see Appendix A) designed to be completed over the telephone by an HR&D staff member, was developed by the staff of Housing Research. Even though the interview form was to be filled in by HR&D staff, a copy of the form was sent to the prospective interviewee so that he/she could become familiar with its content and format and thereby avoid confusion and time loss during the telephone interview. The interview forms were mailed to a randomly selected sample of 80 housing authority executive directors. Each interview took approximately 20 minutes and forms were completed for 89 percent of the sample. This 89 percent "rate of return" is remarkable considering how busy executive directors are and how difficult it can be to reach the directors of very small housing authorities. Respondents were, with one exception, cooperative and seemingly interested in the topic of the interview. They were assured that individual answers would be kept confidential, with no individual being identified, and with the information being used for the purpose of developing a profile of user needs.

One word of caution is needed in reviewing the results of the survey. The housing authorities included in the sample ranged in size from nine units to 8,500 units. For the sample to be truly representative this degree of variation in size was necessary, but the overall results tend to obscure significant differences between different size authorities. Throughout this section of the report, the results which will appear are from the full sample. Where these results would be misleading if they were thought to be representative of all authorities regardless of size, the reader will be alerted. For purposes of this report, housing authorities are categorized by number of units in the following manner: very small (0-100 units); small (101-200 units); medium (201-700 units); large (701 plus units). Results for each question in the interview form for each size category of authority can be found in Appendix B.

2. General demographic information

The 71 housing authorities which cooperated in the completion of the interview forms were representative of the ten



federal regions. The number of authorities sampled in each region reflected the actual distribution of authorities throughout the country. Accordingly, Regions IV, V, and VI, which contain the greatest number of authorities, were surveyed most heavily. Each of the other seven regions was represented in the sample to lesser degrees.

The percentage of sample authorities in each size category is indicative of the total number of authorities in each category. Authorities with 0-100 units constitute 45% of the sample. Those with 101-200 units, 201 to 700 units and 701-plus units account for 21%, 24% and 10% respectively. This means that 66% of all LHAs have fewer than 200 units under management.

3. Survey Results

One finding of the interviews is that executive directors of all size housing authorities substantially agree in their assessment of their management responsibilities. From a list of thirteen responsibilities related to the operation of an LHA, the six most frequently identified as being "very important" were:

- rent levels, collection, and tenant accounts
- property maintenance
- budget and related matters
- tenant application, selection and occupancy
- internal auditing and control
- management-HUD communication

Table I shows the subject areas from which the interviewees made their choices.

The selection of "very important" responsibilities does differ slightly by size of authority. For example, large authorities identified resident-management communication and personnel administration as two of their priority responsibilities, while HUD-management communication and tenant application, selection, and occupancy were not as frequently selected as "very important" responsibilities. Medium size authorities differed from the total sample responses in only one area. They felt that personnel administration was a more important responsibility than internal auditing and control. Table II illustrates the difference in how often each size category of LHA rated a responsibility as being "very important."

Table I
Rating of Responsibilities

	<u>Very Important</u>	<u>Important</u>	<u>Slightly Important</u>	<u>Not Important</u>
a) Rent levels, collection and tenant accounts	85.9	14.1	--	--
b) Property maintenance	81.7	16.9	1.4	--
c) Tenant application, selection and occupancy	69.0	29.6	1.4	--
d) Tenant social, health and job opportunity services	19.7	56.3	19.7	4.2
e) Management-resident communication	57.7	36.6	5.6	--
f) Management-HUD communication	59.2	35.2	5.6	--
g) Management communication with state and local agencies	26.8	47.9	22.5	2.8
h) Budget and related matters	80.3	16.9	2.8	--
i) Improvement of buildings and grounds	47.9	45.1	4.2	2.8
j) Security arrangements	29.6	38.0	25.4	7.0
k) Personnel administration and employee relations	56.3	33.8	4.2	5.6
l) Public relations	35.2	54.9	8.5	1.4
m) Internal auditing and control	59.2	35.2	1.4	4.2

Column or row sums may not equal 100 percent due to rounding inconsistencies or missing data.

TABLE II
Rating of "Very Important" Responsibilities
by Size of Authority

	<u>Very Small</u> 0-100 units	<u>Small</u> 101-200 units	<u>Medium</u> 201-700 units	<u>Large</u> 700 plus units	<u>Combined</u>
a) Rent levels, collection and tenant accounts	84.4	80.0	100.0	71.4	85.9
b) Property maintenance	78.1	73.3	88.2	100.0	81.7
c) Tenant application, selection and occupancy	78.1	46.7	76.5	57.1	69.0
d) Tenant social, health and job opportunity services	15.6	13.3	23.5	42.9	19.7
e) Management-resident communication	50.0	73.3	47.1	85.7	57.7
f) Management-HUD communication	59.4	60.0	64.7	42.9	59.2
g) Management communication with state and local agencies	15.6	33.3	29.4	57.1	26.8
h) Budget and related matters	78.1	86.7	76.5	85.7	80.3
i) Improvement of buildings and grounds	43.8	40.0	52.9	71.4	47.9
j) Security arrangements	28.1	20.0	29.4	57.1	29.6
k) Personnel administration and employee relations	43.8	60.0	70.6	71.4	56.3
l) Public relations	40.6	20.0	29.4	57.1	35.2
m) Internal auditing and control	56.3	66.7	52.9	71.4	59.2

Column or row sums may not equal 100 percent due to rounding inconsistencies or missing data.

Responsibilities which were considered less important included social services; management communication with state and local agencies; security arrangements; public relations; and improvement of buildings and grounds. Several of these responsibilities are the targets of substantial HUD programs, e.g., the Modernization Program, yet they are low on the priority list of LHA executive directors. This discrepancy between LHA personnel's perceptions of what is important and the perceptions of others is an issue with which an information system will have to deal.

From the same list of LHA responsibilities, the executive directors identified the subjects on which they or their staff could definitely benefit from additional information and training.

Table III
Areas in which Information and Training may be Needed

	<u>Definitely</u>	<u>Might be Helpful</u>	<u>Not Necessary</u>
a) Rent levels, collection and tenant accounts	35.2	31.0	29.6
b) Property maintenance	31.0	39.4	28.2
c) Tenant application, selection and occupancy	31.0	39.4	28.2
d) Tenant social, health and job opportunity services	18.3	49.3	31.0
e) Management-resident communication	23.9	53.5	21.1
f) Management-HUD communication	25.4	56.3	16.9
g) Management communication with state and local agencies	18.3	53.5	25.4
h) Budget and related matters	45.1	39.4	14.1
i) Improvement of buildings and grounds	21.1	52.1	25.4
j) Security arrangements	16.9	40.8	39.4
k) Personnel administration and employee relations	22.5	42.3	33.6
l) Public relations	23.9	53.5	21.1
m) Internal auditing and control	36.6	39.4	21.1

Column or row sums may not equal 100 percent due to rounding inconsistencies or missing data.

Table IV
 Cross Tabulation of Responsibility Ranking
 and Training Ranking*

LHA Responsibility	Size of Authority				All
	0-100 units	101-200 units	201-700 units	701+ units	
a) Rent levels, collection and tenant accounts	5	4	1	3	2
b) Property maintenance	3	2	6	1	2
c) Tenant application, selection and occupancy	5	7	2	4	4
d) Tenant social, health and job opportunity services	12	9	11	8	12
e) Management-resident communication	8	5	3	2	5
f) Management-HUD communication	2	7	7	7	6
g) Management communication with state and local agencies	10	10	10	6	10
h) Budget and related matters	1	1	2	2	1
i) Improvement of buildings and grounds	7	8	5	5	7
j) Security arrangements	9	12	9	6	11
k) Personnel administration and employee relations	11	6	3	1	9
l) Public relations	4	11	3	4	8
m) Internal auditing and control	6	3	7	4	3

*

A low number indicates an area which was rated high in importance and for which there was also a demand for training.

It is apparent that the responsibilities which were identified as being "very important" are also perceived as the responsibilities for which additional information and training are most needed. This high degree of correlation should not obscure significant differences which can be detected between authorities of different sizes. For instance, large authorities found tenant social, health and job opportunity services; management communication with state and local agencies; security arrangements; public relations; and personnel and employee relations to be responsibilities which warranted additional information and training. Medium size authorities indicated that management-resident communication and personnel administration were responsibilities for which they wanted additional training. Small authorities differed slightly in their choices. Tenant application, selection and occupancy and improvement of building and grounds were two responsibilities for which they wanted more training. The very small authorities expressed a need for information and training in public relations. The only other group to indicate a similar need was the large authorities.

a. Determination of subject area priorities

It is important to determine whether the same person who rated a particular subject high in importance also wanted more training in that subject area. Thus, a cross tabulation to show the correlation between the responses to both questions was necessary. The results of this cross tabulation are presented in Table IV. The methodology used in the cross tabulation and a description of the procedures used in ranking the responsibilities appears in Appendix C. The cross tabulation indicates that five of the six responsibilities already identified as being "very important" to LHAs are also those responsibilities for which additional information and training are most desired. The only area which does not remain constant overall is communication. Table I and III show the importance of management-HUD communication, but in the cross tabulation management-resident communication is considered more important. It should be noted that management-HUD communication is still considered to be almost as important.

b. Determination of preferred mode of training

One intention of the survey was to identify, through the interview format, the mode of learning (training) which the potential users found most appealing. The preferences which were expressed may make it easier for the staff of an information system to address the educational needs voiced by those in the survey. The most frequently preferred format for training

is a combination of classroom or workshop instruction with on-the-job training. On-the-job training by itself was the next most frequently selected type of training. Pre-job short courses and college degree curriculums were not as well regarded. Once again, it must be noted that these findings differed somewhat by size of authority. (See Appendix B for differences by size of authority.)

Table V
Type of Training Preferred

	<u>Very Helpful</u>	<u>Helpful</u>	<u>Somewhat Helpful</u>	<u>Not Helpful</u>
a) More on-the-job training	50.7	31.0	9.9	7.0
b) Pre-job short courses	23.9	39.4	23.9	12.7
c) College degree curriculum in housing management	22.5	26.8	21.1	28.2
d) Combination of classroom or workshop instruction with on-the-job training	53.5	23.9	16.9	5.6

Column or row sums may not equal 100 percent due to rounding inconsistencies or missing data.

c. Sources of information

The perceptions of potential users of the effectiveness of various information sources is important to the staff of an information system as the users' impressions of a source will influence their willingness to initiate contact, to share information with the source, and to evaluate seriously the information provided by the source. It may be an appropriate role of an information system to help the users become more aware of the value of certain resources and to assist the sources in improving their services and image.

Each of the executive directors in the sample was asked to rate a number of sources of housing management information in terms of usefulness to them. Although the sources included in this question have other functions in addition to education and technical assistance, these were the functions which were rated.

HUD workshops were considered by the executive directors to be the single most useful source of management information, and were the most widely attended. This response is not surprising when one remembers the degree to which housing authorities

are dependent upon HUD's interpretation of regulations. It is also one of the few forums where executive directors can express their concerns to the people who influence policy and/or procedures.

Table VI
Usefulness of Management Resources

	<u>Very Useful</u>	<u>Somewhat Useful</u>	<u>Not Useful</u>	<u>No Experience</u>
a) HUD workshops	62.0	25.4	4.2	8.5
b) NAHRO workshops (National Association of Housing and Redevelopment Officials)	25.4	26.8	5.6	42.3
c) IREM workshops (Institute of Real Estate Management)	5.6	5.6	8.5	80.3
d) NCHM workshops (National Center for Housing Management)	8.5	11.3	7.0	73.2
e) Community college and/or university courses	15.5	23.9	7.0	53.5
f) Technical school courses	4.2	22.5	7.0	66.2
g) Apprenticeships	14.1	15.5	9.9	60.6
h) State Department of Community Affairs or other state agency	16.9	32.4	9.9	40.8

Column or row sums may not equal 100 percent due to rounding inconsistencies or missing data.

Workshops sponsored by NAHRO were ranked second in terms of usefulness, followed by those of state departments of community affairs or other state agencies, and community colleges and/or university courses. Workshops sponsored by the National Center for Housing Management (NCHM) and the Institute of Real Estate Management (IREM), were not rated as highly. It should be noted, however, that both NCHM and IREM have not placed their primary emphasis on conventional public housing management.

A large number of the authorities surveyed have had very limited experience with different kinds of workshops. Although HUD workshops have been fairly well attended by those surveyed,

almost 66% of all authorities have not attended NAHRO workshops. IREM and NCHM training courses have failed to reach 80% and 72% of the LHAs, respectively.

Table VII
Percentage of Authorities by Size Category with
no Experience in Training Forms Listed

	<u>0-100 units</u>	<u>101-200 units</u>	<u>201-700 units</u>	<u>701 plus units</u>	<u>All</u>
a) HUD workshops	15.6	6.7	00.0	00.0	8.5
b) NAHRO workshops (National Association of Housing and Re- development Officials)	65.6	46.7	11.8	00.0	42.3
c) IREM workshops (Institute of Real Estate Management)	84.4	80.0	76.5	71.4	80.3
d) NCHM workshops (National Center for Housing Management)	71.9	73.3	70.6	85.7	73.2
e) Community college and/ or university courses	62.5	33.3	58.8	42.9	53.5
f) Technical school courses	71.9	73.3	52.9	57.1	66.2
g) Apprenticeships	68.8	53.3	58.8	42.9	60.6
h) State Department of Community Affairs or other state agency	53.1	46.7	29.4	14.3	40.8

In general, the authorities which have received the least exposure to training and technical assistance efforts have been the very small authorities. For example, every large authority has had staff attend at least one HUD workshop, but only 85 percent of the very small authorities have been able to do this. All large authorities were represented at NAHRO workshops, but this was true for only 34 percent of the very smallest authorities. The same pattern is apparent for community college and/or university courses, apprenticeships, and assistance from state departments of community affairs or other state agencies. There is little difference between various size authorities on the other sources of training and technical assistance which were listed.

The only difference worth mentioning is the relatively high number of executive directors of medium size authorities who have had experience with community college and/or university courses.

d. Print sources of information

The extent to which executive directors found certain print sources of information useful was determined by asking them which documents they referred to on a regular and frequent basis. The responses to this question appear in Table VIII.

Table VIII
Rating of Print Information Sources

	<u>Yes</u>	<u>No</u>
a) HUD regulations and guidelines	98.6	1.4
b) HUD Challenge	25.4	74.6
c) NAHRO Newsletter	60.6	39.4
d) NAHRO Journal of Housing	40.8	59.2
e) IREM Journal of Property Management	4.2	93.0
f) Housing Affairs Letter	35.2	63.4
g) Technical publications	35.2	63.4
h) Product catalogues	54.9	45.1

Column or row sums may not equal 100 percent due to rounding inconsistencies or missing data.

The most frequently referred to type of document was, predictably, the HUD regulations and guidelines. The NAHRO newsletter, manufacturers' product catalogs, and the Journal of Housing were the next most frequently used documents. It is a bit unfair to compare "product catalogs," a category which encompasses more than one publication, to a specific publication such as the Housing Affairs Letter. Nonetheless, the magnitude of the response for product catalogs does suggest a possible service of an information system. The system staff might choose to collect and disseminate information on product catalogs, or even mail copies of the catalogs directly to interested users.

The general trend is for the larger authorities to refer to printed information more frequently than smaller housing authorities. There are a number of exceptions to this trend, such as with product catalogs, but this probably reflects the variations in the roles of the executive directors. For instance, in a large authority the executive director would not be concerned with product catalogs on a daily basis but some of the staff probably would. The director of a smaller authority, on the other hand, must be involved in every aspect of housing management.

A more interesting trend is the very limited use of "slick" publications, such as HUD Challenge and the Journal of Housing, by smaller authorities. They much prefer the newsletter format, in which important issues are succinctly summarized. Both the NAHRO Letter and the Housing Affairs Letter are referred to frequently by smaller authorities.

e. Non-print resources

An issue which has been explored previously is the perception of various information sources by potential users. The same question was explored in a slightly different way through another question the executive directors were asked. Each executive director was asked to rate several sources according to the extent to which he/she found the information helpful in the performance of management responsibilities. Their responses are recorded in Table IX.

The HUD area office representatives were considered to be the most useful sources of information by a substantial majority of the respondents. Other LHA executive directors are also considered to be a very useful source. The importance of these two sources of information is confirmed by the results of another question which was asked. In response to: "Who do you turn to first when you want information about any aspect of housing management?," they overwhelmingly mentioned their HUD area office and other executive directors as primary sources. The importance of other executive directors in the informal information network which exists, suggests another role for the information system: it might systematize and facilitate these informal information and experience exchanges. If such a service were offered by an information system, it should capitalize on the executive directors' preferred mode of communication so as not to impose unreasonable demands on their time. The interviews indicate that 45.1 percent of all executive directors prefer to seek information by telephone. In-person communication is preferred by 33.8 percent and only 12.7 percent preferred to use the mail.

Table IX
Usefulness of Assistance Resources

	<u>Very Useful</u>	<u>Somewhat Useful</u>	<u>Not Useful</u>	<u>No Experience</u>
a) HUD area office representative	85.9	14.1	--	--
b) HUD regional office representatives	36.6	46.5	7.0	9.9
c) HUD Washington office	15.5	29.6	19.7	35.2
d) NAHRO regional councils	8.5	32.4	8.5	50.7
e) NAHRO national office staff	7.0	14.1	14.1	53.5
f) Other LHA directors and managers	60.6	22.5	8.5	8.5
g) Private consultants	12.7	16.9	11.3	59.2
h) University technical resources	9.9	19.7	8.5	62.0
i) State government personnel	16.9	28.2	12.7	42.3
j) Local government personnel	29.6	38.0	9.9	22.5

Column or row sums may not equal 100 percent due to rounding inconsistencies or missing data.

Other sources which were also considered to be "very useful," though less frequently, were HUD regional office representatives, local government personnel, state government personnel, and HUD's Washington office staff. Private consultants and university technical resources were considered very useful by only a small percentage of authorities, but this can be attributed, in part, to the limited experience most executive directors have had with these resources.

Although 91.5% of all executive directors have not used the services of a private management consulting firm, among the 8.5% who have, 76% found their services "very useful." None found the private consultants' services "not useful." A variety of reasons were given for not using a consultant's services. The major reason was that a consultant's services were just not needed. It is difficult to know whether this is an accurate assessment of LHA needs. Other reasons which were less frequently given were: 1) lack of money; 2) insufficient familiarity with

management consulting firms; and 3) a dearth of consulting firms in the immediate area. As might be expected, the larger authorities did not give the latter two explanations for not using a consultants' services. These authorities are located in bigger communities where one would expect to find such resources. The very smallest and medium size authorities responded differently. Almost 40% of the executive directors of these authorities were either unfamiliar with consulting firms or unaware of their presence nearby. Twenty-five percent of the executive directors of medium size authorities were equally unfamiliar with consulting firms.

Table X
Reasons Given for not Using Private Consultants,
by Size of Authorities

	<u>0-100</u> <u>units</u>	<u>101-200</u> <u>units</u>	<u>201-700</u> <u>units</u>	<u>701 plus</u> <u>units</u>	<u>All</u> <u>_____</u>
a) Services not needed	40.0	53.3	62.5	75.0	50.8
b) No money	23.3	33.3	12.5	25.0	23.1
c) Not familiar with management consulting firms	13.3	6.7	12.5	00.0	10.8
d) No consulting firms in the area	16.7	6.7	12.5	00.0	9.2
e) Other	6.7	00.0	00.0	00.0	6.2

Column or row sums may not equal 100 percent due to rounding inconsistencies or missing data.

The future of the relationship between private management consultants and public housing authorities is not clear. To date, consultants have been used to a very limited degree, but where they have been involved, their work seems to be appreciated. An information system may wish to document instances where consultants have intervened and begin to familiarize executive directors with the services and competencies of various consultants.

f. Factors affecting participation

A possible role for an information system is the publicizing of existing educational efforts, including workshops and seminars.

The degree to which executive directors could be expected to participate in such efforts, both as recipients and as contributors of knowledge, was explored in each interview. It has already been shown that virtually all executive directors attend the training sessions sponsored by HUD. In order to know more about the extent of their educational involvement, the executive directors were asked to indicate the total number of training sessions that they or their staffs attended in the previous year. The responses to this question are presented in Table XI.

The responses indicate a direct relationship between size of authority and the number of training sessions attended. The larger the authority, the more sessions the executive directors and their staffs attended. The smaller the authority, the fewer sessions attended.

Table XI
Percent of Authority Personnel Attending
Training Sessions

	<u>0-100</u> <u>units</u>	<u>101-200</u> <u>units</u>	<u>201-700</u> <u>units</u>	<u>701 plus</u> <u>units</u>	<u>All</u>
1-5 sessions	91.6	63.1	43.9	28.7	66.9
6-10 sessions	8.3	7.7	31.4	14.3	15.0
11-15 sessions	0.0	15.4	12.6	14.3	8.3
16 plus sessions	0.0	7.7	12.6	42.9	10.0

Column or row sums may not equal 100 percent due to rounding inconsistencies or missing data.

One indication of an executive director's commitment to sharing information is his willingness to play an active role in workshops and seminars. The executive directors were asked whether they would be willing to help lead a one or two-day workshop on a particularly successful aspect of their operation. This is, of course, only a rough indicator. Many people are willing to share information but are not willing to lead a workshop. Nevertheless, almost half (48%) of the sample said they would definitely be willing to help lead a session. A smaller percentage (32%) were disposed not to help in this way. A sizeable percentage (20%) were hesitant to commit themselves but said that perhaps they would be willing.

Table XII
Percent of Executive Directors Willing to Help Lead Workshop

	<u>0-100</u> <u>units</u>	<u>101-200</u> <u>units</u>	<u>201-700</u> <u>units</u>	<u>701 plus</u> <u>units</u>	<u>All</u>
Yes	31.3	60.0	58.8	71.4	47.9
No	46.9	26.7	23.3	0.0	32.4
Maybe	21.9	13.3	17.6	28.6	19.7

Column or row sums may not equal 100 percent due to rounding inconsistencies or missing data.

Executive directors of smaller authorities are less likely than executive directors of large authorities to want to lead a workshop or seminar. It is impossible to tell whether this unwillingness to lead a session is merely a reflection of the unlikelihood of their attendance in any capacity, an indication of the way they feel about their program and what it has to offer other authorities, or how they feel about themselves. It does appear that many people are willing to be actively involved.

The extent to which executive directors and their staffs can participate in working sessions and the amount of information they can thereby acquire is dependent, in large measure, upon the amount of money available for publications, membership dues and fees, and travel.

What Table XIII shows is that in the very smallest and small authorities, where there are usually fewer than two staff members, a totally inadequate sum of money has been allocated for those items which could improve access to housing management information. One does not know whether the present budget allocation is an amount which reflects a negative assessment of the value of information currently available, or whether there is no budgetary flexibility to allow additional monies for this purpose.

Table XIII
Selected Budget Allocations by Size of Authority

	<u>\$0-\$50</u>	<u>\$51-\$100</u>	<u>\$101-\$200</u>	<u>\$201-\$300</u>	<u>\$301 plus</u>
Publications					
a. Very small	90.6	6.3	3.1	00.0	00.0
b. Small	66.7	6.7	6.7	6.7	13.3
c. Medium	29.4	23.5	17.6	23.5	5.9
d. Large	00.0	00.0	14.3	14.3	71.4
e. All	62.0	9.9	8.5	8.5	11.3
Membership Fees and Dues					
a. Very small	84.4	9.4	00.0	6.3	00.0
b. Small	46.7	40.0	6.7	6.7	00.0
c. Medium	11.8	17.6	47.1	5.9	17.6
d. Large	00.0	00.0	00.0	00.0	100.0
e. All	50.7	16.9	12.7	5.6	14.1
	<u>\$0-\$250</u>	<u>\$251-\$500</u>	<u>\$501-\$1000</u>	<u>\$1001-\$2000</u>	<u>\$2000 plus</u>
Travel					
a. Very small	46.9	37.5	3.1	9.4	3.1
b. Small	33.3	26.7	33.3	6.7	00.0
c. Medium	17.6	11.8	11.8	41.2	17.6
d. Large	00.0	00.0	00.0	14.3	85.7
e. All	88.7	4.2	4.2	1.4	1.4

Column or row sums may not equal 100 percent due to rounding inconsistencies or missing data.

g. Information system services desired

In addition to the structured questions which the executive directors were asked, they also had the opportunity to respond to an open-ended question that dealt with the types of services they would like a national housing management "clearinghouse and regional technical assistance centers" to provide.

Twenty-two of the 79 executive directors surveyed suggested some sort of mechanism for assisting in the identification and utilization of human resources. Suggestions of what this might entail included ideas such as:

- "Identification of people with specific areas of expertise"
- "A directory of experts"

- "Identification of people who know how to relate management skills to low-income people"
- "How to work with consultants"
- "Referral service for specific problems"

Not all those surveyed envisioned the information as only providing referral service. A number of respondents felt the system personnel should also be available for consultation. The ideas mentioned for this service included such things as "basic assistance to new executive directors," "monitoring and evaluation of on-going programs," and "problem centers providing technical assistance."

The executive directors suggested that educational training programs concentrate on three major subject areas: 1) assistance in improving housing maintenance; 2) advice on budgetary and accounting procedures; and 3) assistance in improving tenant-management relations.

Maintenance was the most commonly mentioned area in which training was desired. Workshops and conferences were suggested as possible settings in which training could take place. One director requested "nuts and bolts training," and another suggested "directions on achieving and maintaining good condition of buildings and equipment."

Directors from all size authorities requested training in accounting and budgeting. Suggestions of what should be covered in such a course included: "budget preparation and accounting procedures" and "directions on achieving and maintaining solvency."

In the area of tenant relations, those interviewed asked for conferences or seminars that would assist them in maintaining good relationships with their tenants. One executive director also requested "guidelines in securing and keeping good tenants and getting rid of problem tenants."

It was suggested several times that the information system could assist the housing authorities by publicizing existing educational training programs. A newsletter was suggested as one possible means for accomplishing this.

A number of respondents did not specify in what area they thought training should be offered but did say they felt training was a reasonable role for an information system to fill.

A variety of other possible areas for training were mentioned by respondents. These included:

- Role of LHA in community development process
- Rent collection strategies (suggested three times)
- Legal aspects of tenant lease
- Insurance

B. Information Needs Identified by NAHRO Conference Delegates and Pre-Selected LHA Directors

Two other groups involved in public housing, who were potential users of a housing management information system, were consulted to obtain their input into the design of such a system. The first group was a selected group of LHA staff personnel who were consulted because of their broad involvement with and interest in the housing management field. These were people known for their work in activities outside their own authorities. The second group was comprised of people attending the NAHRO convention in Los Angeles (October 12-15, 1975), who responded to an open invitation to contribute to the design of the system. The convention afforded the HR&D staff a unique opportunity to meet with a number of potential users of a housing management information system. The convention attracts a variety of people involved in public housing, including executive directors, other staff personnel, and members of boards of commissioners. People from each of these groups were consulted in the course of the convention.

Respondents were asked to identify the kinds of assistance they could envision an information system providing housing authorities. The possible services suggested by the directors generally fell into three major categories: an experience exchange; a technical assistance or consulting service; and training programs. Within each of these three categories it is interesting to examine the specific ideas proposed.

1. Experience exchange

The idea of having available some type of experience exchange was mentioned fairly frequently. Most of the respondents envisioned this as a systemization of the type of exchange that now takes place informally between the personnel of housing authorities. It was also seen as a way of publicizing innovative techniques and practices being tried successfully in other housing authorities. One example, cited by a staff member of a large housing authority, was to make available information

on work being done on upward mobility for tenants. His authority was instituting a program in this area and would have been interested in knowing who else had been involved in such programs. A director of a medium-sized authority, who had only recently begun work in his position, saw this kind of exchange as a way he, as a newcomer, could become acquainted with others working in the field. He also had a problem in that there were few medium size authorities in his area of the country, and he needed an effective way to contact directors of other medium size authorities.

Most of those who suggested an experience exchange as a possible service offered by an information system seemed to envision the exchange as a way of providing the requestor with the name and phone number of a possible resource person and leaving the actual contact up to the individual involved. One executive director, however, felt that it would be appropriate for the exchange to produce regularly written concise case histories of work done in housing authorities. These documents could either be circulated regularly to those in the field or else could be kept on file and made available to those requesting information on a specific subject.

2. Technical assistance/consulting services

The second major category of work pictured as being an appropriate function for the information system was a technical assistance or consulting service. These two services are clearly related as both involve serving housing authorities in an advisory capacity. The technical assistance function can be split into two sub-categories. One is the provision of on-site assistance. This was generally thought to be most useful to the small authorities and was usually thought to encompass instruction in practical matters, such as maintenance. The other sub-category is the provision of assistance in the mechanics of completing forms for HUD. This was thought to include help with contract and grant applications and the provision of sample drafts of lease and grievance procedures to meet HUD's criteria.

"Consulting service" is a fairly broad term, used here to describe the variety of advice-rendering roles respondents thought an information system could handle. The range of ideas offered in this category can perhaps best be illustrated by furnishing examples of the respondents' comments.

One suggestion, made by several respondents, was the implementation of a "hotline." Ideas varied concerning what this service should include. One respondent viewed it as a referral service, designed to assist the caller in finding an appropriate resource to help him. Another proposal for the "hotline" was to have it manned by experts who could provide the caller with whatever

information he needed on the spot. This view was echoed by another respondent who thought the information system should provide the LHAs with one-on-one consultation. This type of service, it was thought, would be of particular value to the smaller LHAs. A final idea for the "hotline" was to have it alert callers to potential sources of funds for LHA projects. The respondent who suggested this felt the service should not only alert authorities to possible sources of funds but should also help them to attract the money. He felt medium size authorities needed someone to help them "make noise."

Another type of advice sought by respondents was reliable information on housing-related activities of the federal government. This would include the interpretation of federal laws and regulations and up-to-date information on HUD policies. Along this line, it was suggested that the service might try to fill the information gaps left by incomplete explanations given by HUD on what they require or propose.

3. Training programs

The third major category into which responses on possible information system roles fell was training programs. This category may be split into two subcategories: the method of training and the subject areas in which training was thought to be particularly needed.

Topical seminars were suggested as being useful for training purposes. One director thought this type of intensive instruction would be helpful since he was required to be "a doctor, a lawyer, and a cop." Workshops were also felt to be potentially useful if they allowed two-way communication with HUD personnel. It was proposed that these sessions might make available the expertise of a consultant or specialist in a setting where the cost of the services could be shared by several authorities.

One respondent thought that traveling internships should be instituted to allow new LHA personnel to visit successful LHA operations to learn how to handle their LHAs effectively. Another training form that was suggested involved having instruction one day each week combined with actual work experience at a housing authority.

Subject areas in which training was thought to be desirable were also suggested by the respondents. Three areas were cited most often: budgeting, maintenance, and computer technology. Other areas mentioned as possibilities for training included: rent collection, property management for tenants, social services, working with the elderly, and occupancy.

These three major categories of possible information system roles (an experience exchange, consultation or advice, and training) encompass the majority of responses given to the question of what services should be provided for LHAs. One further area, cited by two respondents, dealt with the provision of print material to LHA personnel. One member of an LHA board of commissioners thought it would be useful to have bibliographies available covering subject areas of interest. The director of a large LHA suggested the system could be a source of technical publications and abstracts.

A number of general comments were received. Several respondents mentioned the difficulties involved in serving the needs of the geographically dispersed LHAs in the western states. Another respondent noted that bad information is worse than no information and that an information system, if it is to be of real value, will need to furnish reliable, high-quality services. It was also pointed out that LHAs will need to be convinced of the value of the products and services offered by the system. The same person noted that this becomes an even greater problem in dealing with the LHAs which do not have a full-time professional staff member.

C. Information Needs Identified by Public Agencies

HUD area offices and various state agencies are currently helping public housing authorities deal with a number of problems facing them. Because of this involvement it was considered to be important to survey them to ascertain their perceptions of information needs of local housing authority personnel.

1. Inadequately served user groups

According to those consulted, two groups of people who are not now being adequately served through existing agencies are members of housing authority boards of commissioners and the staffs of small and moderate size authorities.

Representatives of several HUD area offices emphasized the key role that commission members play in setting goals and establishing operating priorities for the authority. In their opinion, commissioners would be able to do a better job if they were more familiar with the objectives of national housing programs, including, but not limited to, the conventional public housing program; if they were more knowledgeable about technical issues; and if they were more sensitive to the housing needs of their own communities. Some authorities do send members of their commissions to training sessions but this is clearly the exception rather than the rule. The majority of small authorities

have less than \$50.00 allocated for membership fees and dues and these same authorities have less than \$250.00 budgeted for travel. Obviously, with such meager sums of money allocated, very little formal training of commission members takes place away from their locality. Aside from the shortage of money, there is another reason that commissioners rarely participate in training programs. In the limited surveying done to date, no agency has been found which is providing training specifically designed for commission members.

The staffs of smaller housing authorities, and to a lesser degree the staffs of moderate size authorities, are also unable to take full advantage of available training and information resources. According to those surveyed, there are three reasons for this:

1. The typical staffing pattern in smaller housing authorities makes it virtually impossible to attend training sessions. Usually authorities with fewer than 100 units have only an executive director and a single full or part-time maintenance person. In many instances the executive director not only operates the authority but also holds down another job. Under these circumstances it is easy to understand why so few executive directors of small authorities have been able to participate in formalized training programs other than the HUD-sponsored workshops.

2. The financial resources which an LHA has at its disposal are not sufficient to help an executive director and/or staff acquire the desired training. For example, 85% of all "very small" authorities (0-100 units) have less than \$50 for membership fees and dues and the same percent have less than \$500 for travel. Even the least expensive workshops require a modest tuition fee. Add to this the cost of room, board, and travel, if the training site is not conveniently located, and one can appreciate the difficulties facing small housing authority executive directors. Not only are executive directors constrained by limited budgets and time, but they also are so inadequately paid that they are generally unable to subsidize their own education.

Closely tied to the problem of insufficient funds for training is the problem of insufficient money available for the acquisition of publications. About 90% of all smaller LHAs have less than \$50.00 for publications. Although a lack of publications may not adversely affect the operation of an authority, it nevertheless is indicative of the relatively low importance assigned to management improvement information.

3. The training is not provided at locations close enough to their authorities. The user survey indicated that the major reason why executive directors did not attend workshops was because of inconvenient locations. At one time, some HUD area offices provided their training in decentralized locations within the states, but, because of budget cuts, they can no longer do this. Some state technical assistance agencies have provided their training efforts in a variety of locations, as have some state NAHRO chapters. The majority of training is offered, however, at centralized meeting points which are not usually convenient for most smaller housing authorities.

For these reasons it is apparent that two groups of people, commissioners and staffs of smaller LHAs, find educational/training workshops generally inaccessible and/or inappropriate. One role which an information system might wish to play would be to facilitate the pairing of worthwhile training programs with heretofore uninvolved individuals who would be likely to benefit from such experiences. This might be achieved most successfully through a regionalized effort of the information system.

2. Needed services

A service which a number of HUD area offices feel would help authorities improve their maintenance capability is the provision of product (hardware) display and demonstration. One spokesperson feels that the service should be provided, but HUD participation would not be wise because HUD could find itself acting as an agent of the manufacturers. Another regional spokesperson acknowledges the potential awkwardness of a relationship between HUD and the manufacturers, and his area has avoided criticism by limiting itself to assisting the state chapter of NAHRO organize its yearly convention, at which the manufacturers participate by providing exhibitions and by serving as panelists.

A service which is closely related to product information is the dissemination of information generated by the Public Housing Management Improvement Program (PHMIP). Some of the products which were developed by PHMIP authorities and adapted for use by Target Project Program (TPP) authorities may be just as appropriate for some non-TPP authorities. However, existing plans do not provide for the systematic transfer of information and experiences from TPP authorities to non-TPP authorities. Although, at present, many HUD area offices are hesitant to recommend PHMIP-TPP products for a variety of reasons (including lack of familiarity with and/or lack of evaluation of the product itself and its transfer value), it might be reasonable to expect an information system to carry out the job of disseminating such information. It has even

been suggested that the staff of the information system could help HUD area office personnel become more familiar with the products of both programs.

According to the personnel interviewed from HUD area offices and state agencies, another type of assistance that LHAs could use is advice on how to improve their financial situation through increasing the types of housing they manage. For instance, some authorities are managing FHA-insured housing which was in default. The staff of an information system would be in a position to point out management opportunities by sharing the experiences of other LHAs.

Both of the preceding services suggest the desirability of developing a mechanism to assist authorities replicate or adopt programs which have proven successful in another authority. HUD and other agencies do not have a systematic way of collecting, evaluating, compiling, and disseminating successful problem-solving techniques on any basis, including interregional. HUD's Office of Technical Memoranda is about to publish a magazine called Housing Management which will showcase the PHMIP products. Descriptions of these products, written by the PHMIP authorities, will be sold individually and will be available from National Technical Information Services (NTIS). This is just one possible format for information sharing.

A newsletter has been frequently mentioned as the best vehicle for sharing information. If an information system were to become involved in producing a newsletter, the development of a regionalized outreach effort might be implemented to collect and evaluate problem-solving techniques. The centralized component of the system could be responsible for gathering each region's evaluations and publishing a review of promising techniques in a monthly newsletter.

A final type of assistance which LHAs need, according to HUD area representatives and other agencies, is help with problems that occur only on an occasional basis. Such services as architectural and engineering consultation, and assistance in grant application preparation for small authorities are examples of infrequently needed, but useful services.

INFORMATION NEEDS OF ASSISTED AND PRIVATE HOUSING PERSONNEL

Although the major focus of this study assignment is upon the public housing sector, HUD, NAHRO, and HR&D staff considered it important to gain some understanding of the information needs of the entire housing management field. Because of (a) the substantial overlap of skills requirements; (b) the desirability of encouraging professional mobility laterally between the public and private sectors; and (c) the increasing trend of LHAs to contract with private management firms for services (e.g. Trenton HA and St. Louis HA) an introductory examination of the needs of the non-public segments of the housing management arena was considered necessary.

A. Procedures

Limited by constraints of time, budget, and the primary direction of the research contract, HR&D could not attempt a random sample survey of the private and federally assisted housing field to develop an accurate user profile comparable to that achieved for the public sector (see Section III above). Furthermore, whereas the public housing sector is composed of about 3,000 local housing authorities, the private sector contains an almost unknowable and unreachable number of thousands of individuals and companies in the business of managing. IREM research indicates that at least 60,000 people in the private sector nationwide currently serve in the capacity of resident managers.⁵ This does not take into account non-resident managers and those at higher administrative levels. The feasibility of surveying a representative sample of this enormous universe would, therefore, be difficult even with adequate time and money. Under the limitations of this contract it was impossible.

In order to gain at least a surface understanding of the needs of this enormous and heterogeneous user group, HR&D reviewed the literature (e.g. Urban Institute studies and Kolodney) and conducted in-person or telephone interviews with a small number of key individuals, as follows:

- persons directly involved in management of assisted housing;
- executives of large real estate development and management firms serving on the Advisory Council of the National Corporation for Housing Partnerships (NCHP);

⁵IREM. The Resident Manager: Qualities for Success. Chicago, January, 1975.

- executives of the National Association of Realtors (NAR) and its Institute of Real Estate Management (IREM).

This was clearly a non-random selection of people who, by virtue of their leadership roles, can be considered to be more than usually skilled, sensitized, insightful, and successful. In view of the central message of a 1971 report by NCHP: "the nation presently lacks the understanding, professional competence, and institutional framework required to manage assisted housing,"⁶ this group was considered to be especially qualified as a knowledgeable resource for commentary on any proposed national and/or regional information system.

Not too surprisingly, a broad spectrum of informational needs, including those relating to physical facilities, fiscal resources, human relations, and social services delivery were identified by those interviewed. While some respondents spoke of the need for "nuts and bolts" information, others stressed the need to attract "a different type of person into housing management--one with more human awareness and empathy" who could then be taught the necessary technical skills. Regardless of subject matter on which information was felt to be needed, there was general agreement that training and other forms of providing information should be closely related to actual job situations and not abstract or theoretical.

What might be somewhat surprising is the great emphasis placed by a majority of the corporate executives contacted on the need for training of management staff in human relations, downplaying the concern with bricks and mortar. As one such person commented: "Everyone is into communications and social services now, even for apartments renting at \$600 per month. The need is not for rent collectors." Another said: "It is not management of property; it is management of people."

While any list would undoubtedly lengthen as the number of respondents grew, it is interesting to note the specific areas of information needs cited as important by those interviewed:

- workable budget planning
- realistic long range financial planning (five years)
- ways to save/get money to extend services
- evaluating alternative computer systems

⁶ NCHP Task Force for Housing Management, Phase II Report (Final). August 2, 1971. Vol. I.

- energy-saving techniques
- garbage compacting
- paints and paint schedules
- vacancies and rental methods
- rent collections
- ways to reduce vandalism
- union contracts
- teaching tenants housekeeping skills
- tenant organizations
- human relations/tenant-management relations
- human services/social services delivery
- counselling, psychology, social work
- day care
- gerontology
- training tenants for housing management jobs

A partner in a large urban real estate firm managing a number of public and federally assisted housing projects, claimed that it was his experience that "tenants will understand maintenance deferral when the dollars just are not there if management has achieved a good working relationship with residents." Thus, skill in human relations was his highest priority.

B. Current Information Sources and Delivery Methods

A chronic shortage of time, coupled with impatience in filling out forms and unwillingness to read more than the briefest, most focused of print materials, characterizes the difficulties of attempting to provide information to better equip management personnel. Any new system must take these factors into account in deciding on presentation formats and delivery methods. A look at current practices shows that information is obtained primarily through interpersonal contacts and publications in the following ways:

- telephone or in-person requests to personally known "experts"
- contacts within peer professional, trade or "purpose" organizations (IREM, local boards of realtors, the now-defunct National Housing and Human Development Alliance)
- peers in the field (another person doing the same kind of job)
- short courses offered in a variety of ways
- specialized seminars and workshops ("one seminar per employee per year--the cheapest and closest!")
- newsletters (e.g. Housing Affairs Letter)
- HUD regulations and guidelines (where applicable)
- information bulletins (brief updates on specific topics' experience exchanges)

In general, the consensus seems to be for seeking practical answers to "how to do it" questions, regardless of the topic of concern. While some people are motivated and accustomed to reading reflectively and in depth, most have neither the time nor the inclination to do this.

C. Interest in an Information System

There appeared to be definite interest in seeing a workable, "and absolutely a-political" information system developed, particularly one which emphasized regional technical assistance centers recognizing variations in needs in different parts of the country. A number of comments were made deploring the lack of systematic, regular information-sharing among organizations and between people in the public and private sectors. "There is now no neutral ground where they can meet," was one comment. "There is no reason why the private sector shouldn't cooperate," said one individual who felt that "a common body of knowledge should be universal and without ownership." Another individual pointed out that, whereas there now is a good deal of unnecessary institutional jealousy and protectionism, there needs to be a fundamental attitudinal change among members of trade organizations. "They have no need to feel threatened, but the rank and file and some of the leaders must be convinced of this." Positive sentiment was summed up by one person who said: "They should have gotten together long ago." It was suggested that the approach should be an alliance of all constituent groups with no single one dominating.

D. Information System Implementation

A format and procedures that make it easy to use an information system is of paramount importance. For, no matter how much valuable information might be accumulated, if it is not packaged and distributed in ways compatible with the patterns and preferences of potential users, it will not be used. Those interviewed stated that while the demand for information is definitely increasing as professionalism is emphasized more, it is nonetheless essential to furnish that information in a style that conforms to user needs. This was summed up by one knowledgeable source this way: "People want direct answers. They all have deadlines and want instant information or 'put in one teaspoon and stir.'"

The consensus was that, insofar as possible, the guiding principle should be to bring the information to the user, rather than vice versa. The user is primarily the person who is already on the job and wants to improve his/her capabilities. Secondly, the user can be the person who is searching for a career. Both types of users need to be reached.

Specific suggestions for format and procedures included:

- telephone information center
- directory of resources
- newsletter
- availability of resource experts ("trouble shooters when we hit a snag")
- one-day seminars on timely topics
- courses offered in locality (or home study)
- problem-solving sessions with information-sharing
- annotated clearinghouse schedule of all courses, seminars, workshops being offered within a region or nationally
- regional training centers that are coordinated nationally
- data bank of innovative management techniques
- topical loose-leaf experience exchange books (this was both praised and deprecated)

Several persons suggested reliance upon visual aids (slides, films, film strips, videotapes) for initial presentation of material in training/seminar sessions, with use of print material as follow-up, take-home reinforcement. Leadership of training should be by experienced, successful practitioners, rather than by academicians, and there should always be opportunities for student participation. Evening course work combined with and related to day-time job experience was suggested as a very effective arrangement.

E. Incentives for Participation

Whereas there was general recognition of the value of systematizing and increasing the flow of relevant information both to and from users, there was a range of opinion as to how to get the system used. Everyone agreed that the initial start-up would be slow and difficult. Several respondents agreed with one who said: "I don't see how you're going to get anyone to do any more paper work for any kind of information system." A point was raised by one man who said that most people feel that they are already doing a good job and may not see the need to participate. It was suggested that unless people are in some way compensated for their participation they will be reluctant to do so. This compensation need not come only in the form of money but could involve increased prestige and the rewards of recognition for having taken the time to contribute to a successful information system.

Above all, it was stated that the information system will have to persuade potential users of the value of its proffered services. A newsletter might be provided as a way to inform the potential users about what is available from the information system and it was suggested that this should be provided free of charge. It will take time to convince people that it is worth their while to use the system, and if charges are made for services initially it will discourage such use. Whatever forms are needed for any portion of a center's procedures, they should be brief and, insofar as possible, should be set up to take minimum response time by checking boxes rather than writing paragraphs. Once operational, to be successful, the information system should take a high profile and speak with authority. This assumes that the staff of the system will have done a great deal of preparatory work.

EXISTING SOURCES OF HOUSING MANAGEMENT INFORMATION

A. Document Resources

This section of the report identifies some of the major sources of printed housing management information, explores the extent to which the sources are used, and presents the views of the people working for those sources on the appropriate function of an information system. The nine resource centers visited were:

- HUD Library, Washington, D.C.
- NAHRO Library, Washington, D.C.
- NCHM Information Center, Washington, D.C.
- Urban Institute Library, Washington, D.C.
- National Association of Realtors Library, Chicago, IL
- Joint Reference Library (JRL), Chicago, IL
- Real Estate Research Corporation Library, Chicago, IL
- Rural Housing Alliance Library, Washington, D.C.
- National Leased Housing Association Library, Washington, D.C.

At the most general level, the majority of those individuals interviewed, who in most instances were librarians, expressed interest in the implementation of a housing management information system. Thus, the idea of an information system as it was generally perceived, involved the bibliographic control of housing management literature and the subsequent dissemination of that literature. The information system services which involve non-print communication, such as an experience exchange or a referral service, were not discussed with those who were contacted. The primary emphasis of this aspect of the research effort was to elicit comments on the availability of print resources. The librarians who were interviewed were not certain what information local housing authority executive directors might need, though some did suggest that only documents from HUD, NAHRO, and NCHM would really be necessary to handle LHA information needs.

1. HUD library

The HUD library is the largest of these three collections, with 550,000 items. Library personnel, however, are uncertain what percentage of this collection pertains to the housing management field or complementary areas. A staff of 16 professionals and six non-professionals is employed at the main library and is responsible for handling approximately 560 information requests monthly. The HUD library receives all HUD publications and also collects other housing-related materials, as well as reports published by local housing authorities. No budget information was made available to HR&D staff members.

Another information resource provided by HUD is the HUD Program Information Center (PIC), which generally handles requests for information by referring the user to offices which might be better equipped to handle such questions, such as the HUD regional offices or other offices within the national office. PIC personnel said that computerization of the referral aspect of their facility is expected in 1976. Some of those interviewed felt that a housing management information system might operate a similar referral service on a broader scale.

HUD also maintains a Publication Service Center, which is responsible for processing written requests for newly published HUD pamphlets and handbooks. Approximately 5,000 requests are received monthly and the staff processes most of the requests on the same day as they are received. Orders for documents can also be phoned in with pick-up arranged for the same day. The incorporation of a similar department into the housing management information system was seen by some of those interviewed as a fast and efficient means through which copies of documents could be secured, both by resource centers and by individuals.

2. NAHRO library

The NAHRO librarian estimated the size of the NAHRO collection to be about 13,000 items, with between five and six hundred documents pertaining to housing management and another 200 documents relating to complementary areas. Subscriptions to about 350 periodicals are also maintained. The NAHRO library's present budget is \$5,230, which includes \$3,200 for books and \$1,000 for periodicals. The Journal of Housing was said to be the most frequently used source of information kept by the library, although the Housing Affairs Letter and the Housing and Urban Affairs Daily are also heavily used.

While most material that the NAHRO staff needs is generally available from the library, it is possible for material to be borrowed through inter-library loan. Through this program, the NAHRO library has access to materials from such organizations as HUD and the National League of Cities.

3. NCHM information center

The NCHM information center houses what is perhaps the most complete collection of housing management information. It is also one of the few organizations which could cite much use of its facilities by housing authority personnel. According to the NCHM librarian, 20 percent of the NCHM information center's users are members of housing authority staffs. The resource center was begun in 1972 following a survey of individuals in the housing management field to determine what types of information sources these individuals were using; what kinds of information, if available, they would find useful; and what types of information those surveyed produced in their own organizations. One result of the survey was the establishment of the NCHM collection, which was estimated to contain about 5,000 volumes of published and near-print material, such as monographs and technical reports, and 300 serial titles, such as periodicals and indexes. Annual reports of between 50 and 100 LHAs are also kept in the facility.

Although the most frequently used source of information varied with the type of information sought, the NCHM librarian said that those desiring housing management training information most often request the IREM Journal of Property Management, the NAHB (National Association of Home Builders) Journal-Scope, and publications from various universities' urban resource centers. Additionally, the NCHM information center has subscriptions to four newspapers which, together with the periodicals, account for the largest portion of the library's acquisition budget.

4. Urban Institute library

Some of the most scholarly research done in the field of public housing management has been done by the Urban Institute. The Institute's library is primarily a resource center for its staff. The collection contains between three and four thousand books and also has 12,000 soft-covered reports in the vertical file. The U.S. Census statistics are part of the library's "core" data, although library personnel emphasized that it is often difficult to gather all the statistical material which might be useful to the staff. While the head librarian suggested that a national housing management information system might gather such statistical material, she also saw the need for inclusion of psychological and behavioral information on housing management.

5. National Association of Realtors library

The preceding four organizations, HUD, NAHRO, NCHM, and the Urban Institute, deal primarily with material concerning the public and assisted housing sectors. It is important, however, to realize that substantial resources are also available in the private housing sector. One library which handles material supporting the efforts of those in private housing is that of the National Association of Realtors (NAR).

The NAR library has a collection of 10,000 titles, including materials from the Institute of Real Estate Management (IREM). While generally believing the collection to be complete and adequately serving its users' needs, a library staff member did say she would welcome the establishment of a housing management information system or any similar center that would contribute to the gathering of housing management information. She said existing housing management information is located in several different places, making information retrieval difficult. Most of the other individuals, whose views on resource availability were solicited, substantiated this observation and said they hoped the establishment of the housing management information system would correct this situation. One individual added that existing housing management literature does not address the responsibilities of the individual housing manager and hoped the information system might fill this gap.

It is unclear what quantity of printed housing management material currently exists and would need to be collected if the information system does indeed ever wish to take on the role of being the collector of housing management literature. The nine resource centers surveyed had collections ranging in size from 550,000 items (the HUD library) to 5,300 items (the NCHM information center). It should be noted, though, that the large HUD collection not only includes that agency's report and journals, but also contains a large body of information representing the total housing field. The only estimate received on the total number of documents which might be involved was obtained from NCHM. While their collection currently contains only 5,300 documents, they project that there might potentially be 20,000 to 25,000 items in a housing management collection.

6. Joint Reference library

A number of those interviewed stressed that if the information system is to become involved in document collection, it will have to have a carefully defined acquisition policy. This need for a careful definition of the range of material to be collected was noted particularly by those working in larger,

more complex libraries such as the Joint Reference Library (JRL). JRL staff members emphasized that it would be critical to the housing management information system, if it decides to deal with the literature of the field, to have an acquisitions policy established and adhered to from the beginning, in order to alleviate the stresses which accompany an overabundance or lack of information.

The Joint Reference Library, which has a collection of 20,000 books and 60,000 pamphlets, serves primarily the graduate level programs of the social science departments of the University of Chicago and the eight organizations, such as the American Society of Planning Officials (ASPO) and the American Public Works Association, which are housed in the same building as JRL. JRL personnel said that duplication of information was a frequent problem and for this reason repeated evaluation of the collection was necessary so that unwanted documents did not crowd the library's limited physical facilities. It was also stressed, however, that as the library is used by a number of different organizations, it is necessary to maintain a collection of sufficient size to meet at least the minimum needs of each of these groups of users.

7. Real Estate Research Corporation library

The importance of having libraries tailor their collections to meet the information needs of their users was emphasized not only by the JRL staff, but was also discussed by the staff of the Real Estate Research Corporation library. The library serves primarily the Corporation's staff analysts who deal extensively with statistical data. Thus, approximately 20 percent of the library's collection (which includes 4,000 single copies of books, 2,000 indexed pamphlets and over 20,000 reports from various consulting firms) pertains to statistical data. Library personnel said that the U.S. Census material is the single most important source of information for the staff. Despite the fact that a relatively complete collection is maintained to serve the corporation's purposes, the library staff said that they find it necessary to refer library users to other resource centers at least once a day. These centers include Chicago's Municipal Reference Library and the Chase Manhattan Bank Library in New York City.

The possibility of charging a fee for the services offered by the proposed information system was frequently discussed by those who were interviewed. It is interesting to note, however, that only three of the librarians contacted headed facilities that regularly charged fees for their services. These were the libraries of the Rural Housing Alliance (RHA), the National Leased Housing Association (NLHA), and the National Association

of Realtors Library. A review of the policies of two of these-- RHA and NLHA--at this point provides a useful illustration of types of policies followed by resource centers that charge a fee for use of their facilities and for their publications. An examination of RHA is particularly interesting as it is an example of an organization which charges fees, although its members, some of whom are staff members of non-profit agencies, may have little money available for such purposes.

8. Rural Housing Alliance library

RHA currently has approximately 350 members who receive a variety of publications, including a monthly bulletin and periodic mailings. Additionally, members are welcome to use the services of the RHA's information and research staffs. Approximately 20 to 30 requests for information from members are handled each month. RHA also regularly publishes lists of pamphlets, books, and films, and purchase of these materials is open to both members and non-members.

9. National Leased Housing Association library

The National Leased Housing Association currently has 400 members and offers two types of membership: "public," which is open to the staffs of public housing authorities or other non-profit agencies, and "private," which can be purchased by either firms or individuals who offer professional services related to management, ownership, or financing of leased housing. Public memberships cost \$100, and private ones cost \$300. Members receive a monthly bulletin and special memos on current regulations and legislation. Additionally, members may use the resources of the NLHA research staff. NLHA personnel estimate that approximately 50 requests for information from members are handled each month. NLHA members also receive first notification of the Association's semi-annual conferences.

B. Technical Assistance Resources

The incorporation of decentralized regional technical assistance centers into the outreach effort of a national clearinghouse on public housing management information is an approach to information dissemination which is under consideration. HUD and NAHRO have each had a number of years of experience in decentralizing certain aspects of their operations.

HUD, from its inception in the sixties, has used the standard federal regions as a basis for its operation, and during the years when George Romney served as its Secretary, HUD further subdivided its operation by setting up area offices within the regions. NAHRO, as another example, has regional councils representing groups of states and individual state chapters. In each of these cases the parent organization has recognized the difficulty in trying to adequately serve its far flung community from centralized offices in Washington.

Throughout the course of the research effort consideration has been given to the practicality and effectiveness of decentralizing some aspects of the information system. It was thought that the provision of technical assistance might be a likely function of regional centers. Thus, investigating the possibility of regionalization involved the review of five existing technical assistance resources. Those technical assistance resources which are reviewed here were selected because they were mentioned by respondents during the completion of the user survey. Many other agencies are actively involved in providing technical assistance and, if space had permitted, their scope of activities would have warranted inclusion. The technical assistance resources which were reviewed include:

- Bureau of Housing Assistance of the Florida Department of Community Affairs
- King County (Washington) Housing Authority
- Division of Housing of the Wisconsin Department of Local Government Affairs and Development
- Housing Demonstration Program of the New Jersey Department of Community Affairs
- Texas Department of Community Affairs and the Texas Housing Association

1. Bureau of Housing Assistance, Florida Department of Community Affairs

The Bureau of Housing Assistance, Florida Department of Community Affairs, currently serves the needs of local housing authorities in four major ways. They provide information to housing authorities on Section 8 rent subsidies. They assist in explaining the various aspects of the 1974 Housing Act. They keep a record of and refer housing authority personnel to various sources of federal funds. They provide low interest loans for as much as \$200,000 to local governmental units or housing

authorities for purchasing rural land for the development of owner-occupied Farmers Home Administration insured housing or rental housing. This program is called the "Rural Land Acquisition and Site Development Assistance Trust Fund."

In addition to these services, the Bureau has contracted with three universities to help the state coordinate its long range efforts in the housing field. The three universities--Florida A & M, the University of South Florida, and the Joint Center for Environmental and Urban Problems (a consortium of Atlantic University and Florida International University)--are geographically situated so that each one is in a different regional planning area of the state, selected from among the state's ten regional planning areas.

Each university was to have four long range tasks in the area of housing management: 1) coordination of post-secondary educational efforts; 2) development of in-service training programs; 3) operation of research and development projects; and 4) provision of information in the housing field. During the first, and perhaps only, year of the program (1974-5), each university was assigned five specific tasks which they were to accomplish. First, they were to establish an advisory group to help them guide their own efforts. Each advisory group was to contain representatives of finance, mortgage banking, savings and loans, public housing, construction, resident groups, developers, real estate, regional planning commissions, and community colleges. The community colleges were included because it has been taken for granted, considering the university system as it exists in Florida, that community colleges would eventually provide training to people involved in housing. To date each advisory group has met at least twice, the most effective groups being those which have good personal relations between the staff and the advisory groups members.

Secondly, the universities were to implement programs for regional centers, though this has not been carried out because of insufficient funding. Thirdly, they were to standardize and expand the survey work begun earlier to assess both the need for training and education in the field of housing management and also the supply of and demand for trained personnel. The universities were hesitant to adopt a new program if there were not jobs available for the graduates of such a program. Work on this part of the contract is almost complete and a written report on it should be available soon. Fourthly, they were to develop a long range training strategy for housing professionals, using the community colleges for training and credentialling programs. Finally, they were to pilot test a number of training programs.

Each university was specifically instructed not to design a new training curriculum but, rather, to organize and evaluate

the sessions of established training programs. Each of the universities conducted training sessions, and each chose to sponsor a curriculum developed by the National Center for Housing Management (NCHM). The Joint Center sponsored a two-day NCHM training session on administration and accounting. The University of South Florida sponsored a modified five-day NCHM session on the management of housing for the elderly. Florida A & M tried something a bit unusual. It contracted with NCHM to develop a special seminar to help executives of housing related organizations work more effectively with those institutions and organizations in Florida which deal directly with housing.

In addition to this program involving regional centers, the Bureau is receiving a HUD contract to lay the groundwork for aggregating services in small authorities. Three state regions and 14 LHAs are affected by the aggregation program.

The Bureau had an LHA visitation policy, the purpose of which was to visit every LHA in the state so that the local authorities would know of the Bureau's existence and the Bureau would know what types of problems faced the LHAs. This program was not envisioned as an on-going program but rather was designed to introduce the new agency to its constituency.

2. The Housing Authority of the County of King, State of Washington

The state of Washington does not have a department of community affairs or a housing finance agency as many other states do. This void at the state level has been filled to some degree by the outreach efforts of the King County Housing Authority. The Authority frequently assists small LHAs without charging for the Authority's time or resources. This type of arrangement is usually limited to sporadic calls from LHAs for assistance rather than long-term working relationships. The Authority does, however, maintain working relationships with two housing authorities for which the Authority is compensated. Each of these two small housing authorities has its own board of commissioners which sets policy. All of the day-to-day operations of the authorities are carried out by the King County Housing Authority. The effectiveness of the services they provide is informally evaluated during meetings which are held six times a year with the local boards of commissioners. Cooperative agreements, such as the one described here are not unique to King County, but this illustrates the type of work being done in a number of areas of the country.

A number of staff members of the Authority participated in NCHM training sessions for managers which were held in California. Their response to these sessions was favorable. From their

point of view, a useful source of assistance had been HUD area office contacts. They have been less satisfied with the assistance offered by the regional and national office staffs. They pointed to the problem, frequently cited by housing authority staffs, of the continual turnover of HUD personnel as hampering the effectiveness of the various HUD offices. University resources have not been tapped in the past by this Authority.

According to the assistant director of the Authority, the greatest need of LHAs is to have an arena in which they can share experiences: they need someone to talk to, "a travelling circus."

3. Housing Services Section, Division of Housing, Department of Local Affairs and Development, State of Wisconsin

The technical assistance program for housing of the Department of Local Affairs and Development (DLAD) began about five years ago. It is an outgrowth of DLAD's general program of technical assistance for local governmental units. In the second year of DLAD's assistance program, the Division of Housing was created to handle the expanded workload generated by new state housing legislative programs. The technical assistance function is now handled by the Housing Services Section of the Division of Housing, which presently employs eight people, six professional and two clerical.

The institutions that receive technical assistance from DLAD include local governments, housing authorities, non-profit housing corporations, community action agencies, and private developers and builders. DLAD serves local governments by providing information and advice to city councils, village boards, and county boards; by assisting them in the location of housing authorities or other non-profit groups; and by aiding in the planning of local housing programs.

Housing authorities are also helped in the preparation of such things as applications, organization meeting transcripts, and other important documents. DLAD also serves as a liaison with HUD area office staff. To some extent, they used Title VIII funds to provide management assistance through training programs on housing topics. This has been done extensively by state agencies, including, for example, the Office of Housing and Buildings of the Illinois Department of Local Government Affairs. In the past, sessions have included a workshop on FmHA programs, a week-long tour of four cities in the state with HUD area office staff personnel to explain and discuss Section 23, housing management for Indian Housing Authorities, and alternative funding sources for groups involved in housing services and housing development.

There are a variety of other services which DLAD provides. DLAD assists non-profit housing corporations by helping them to organize and identify available and useful programs (HUD and FmHA) and develop program plans. Community action agency housing staffs and other housing agencies receive assistance in the development of programs; the identification and pursuit of funding sources; and the formation of a liaison with local and area governments. The private developer and builder receives information on available programs; communities expressing an interest in housing development; and basic needs data, such as census data and locally-conducted market surveys. In addition to the assistance already described, DLAD also administers a number of state programs, such as a revolving loan fund and a housing production package.

Perhaps the most noteworthy accomplishment of the Housing Services Section has been its ability to get those who have received assistance from them to offer similar services to others. For example, when a tornado hit the city of Oshkosh, a community action agency housing staff, which had received a DLAD grant, undertook what would have been DLAD's job of providing replacement housing to families left homeless. This type of cooperation expands DLAD's ability to improve housing in the state as other organizations may follow through on work which DLAD could only begin.

When a representative of DLAD was asked to comment on the performance of a number of organizations providing information and/or training on housing management, the HUD area office staff was generally considered to be capable and well-informed. Universities were considered useful, particularly the extension programs which were offered. Short courses and seminars offered in the extension programs by the engineering department of a number of universities were cited as being very beneficial.

The same Housing Section representative felt that there was very little the LHAs needed that DLAD could not provide. They did say, however, that there were three services that could be offered by an information system, particularly a decentralized component of that system. The first was information and training in the area of finance so that staff members could better understand the considerations of the owner of a building. The second, was the provision of those services that a state or local government needs on an occasional basis but cannot afford to provide on a full-time basis. One such service that was mentioned was making available the services of architectural and engineering consultants. The final service which was considered useful was the compilation and dissemination of useful, practical ideas.

4. New Jersey Department of Community Affairs

The New Jersey Department of Community Affairs has been actively involved in several programs in the area of housing. Three of the programs affect, at least in part, local housing authorities. The program which has been in existence the longest, and is also the most complex, is the Housing Demonstration Program. This program was begun in the late 1960's and had four objectives: housing rehabilitation/neighborhood and home improvement; new housing production; housing management and the provision of social services; and program development/design/research. Although all of these programs are of interest to anyone concerned with housing in general, the housing management/social service program is of particular interest in considering housing management technical assistance.

Eight separate management projects have been funded since the outset of the Demonstration Program, beginning with a small grant to the American Baptist Management Corporation in fiscal year 1969. The largest single contract awarded under this program was to the Inner Apartment Rehabilitation Services, which sought to demonstrate how a program of professional, social, and recreational services can prevent or reduce vandalism and deterioration while at the same time lowering management and maintenance costs. Other projects which have been funded have included a tenant education project in a new FHA-financed, federally-subsidized, suburban garden apartment complex; two housing security and management improvement programs at different sites; and a tenant organization program. All of these programs are presently being evaluated and the report on them should be available shortly.

The Department of Community Affairs has begun to offer state-wide seminars on a variety of housing management topics. During 1975, the Housing Demonstration Program organized and sponsored a series of six seminars covering the following topics: accounting and financial planning; rents, rent collection, and rent control; tenant selection, leasing, and landlord/tenant laws; security and maintenance--normal and preventive; provision of social services; and tenant organization and tenant orientation. A look at the list of session leaders indicates participation by many federal and state agencies from both inside and outside New Jersey. The HUD area office was very helpful in arranging the seminars and its personnel attended every session.

Another project in which the State Department of Community Affairs is involved is working with four LHAs to aggregate their services. This is being done under the auspices of a HUD grant, and NAHRO has been hired to monitor and evaluate the project; to publish three bulletins describing the project; and to evaluate professional development needs and suggest appropriate training.

5. Texas Department of Community Affairs and the Texas Housing Association

The Texas Department of Community Affairs and the Texas Housing Association have worked together for the past three years to bring training and information to small isolated housing authorities. The Texas Housing Association has 262 members, each paying a \$25.00 membership fee. In 1975 the two organizations sponsored 10 seminar training sessions on such subjects as: lease and grievance procedures; tenant selection criteria; and administrative changes necessitated by the Housing Act of 1974. Previous training, offered by the two organizations, focused on the management of housing for the elderly. These training sessions were two-day workshops located in each of the 10 state regions. North Texas State University has been very active in the development of management training materials and has a close working relationship with the Department of Community Affairs.

C. HUD Area Office Resources

HUD area offices provide support services to both the public and publicly assisted housing sector. A thorough review of all the services provided is not possible at this point. It is important, however, to outline the basic resources that a public housing authority (the focus of this report) can call upon to help it resolve housing management-related problems. Generally, the Housing Programs Management Branch of each HUD area office has staff assigned to four functions: 1) maintenance engineering; 2) housing management; 3) leasing and occupancy; and 4) fiscal analysis. These functions are the heart of every LHA operation and the area office staffs are usually highly skilled in these areas.

Besides the four primary areas of staff expertise, area office staffs are also responsible for explaining and supervising specific HUD programs such as Section 8 and Modernization. One area office has organized four teams, each knowledgeable about a specific program, to present workshops throughout the area. The four teams are presently emphasizing: 1) Section 8; 2) TPP and Modernization; 3) Performance Funding; and 4) Occupancy criteria. By and large, staff members in each area office actively participate in workshops and seminars which are sponsored by a variety of interested organizations. To a lesser degree, they organize and sponsor workshops of their own.

A major obstacle to the improvement of housing management practices, in the opinion of many HUD area staff members, is the lack of systematic evaluation of housing management practices

for all authorities in an area. Each area office would like to have one of its Housing Management Officers visit each LHA once a year for the purposes of evaluation and counseling. In practice, what frequently happens is that Housing Management Officers concentrate their efforts on a few authorities which are in obvious difficulty. Thus the area office staff finds itself in the increasingly delicate position of monitoring programs through the yearly budget review, but not being able to help some LHAs improve their performance.

D. Education and Training Resources

1. University and community colleges

In surveying available resources, it is important to consider the growing contribution made to the field of housing management by universities and community colleges. One aspect of this contribution is higher education's role in providing training for those in housing management. It is necessary to understand what types of training are offered by universities and community colleges in order to have a complete idea of the resources currently serving those in management. It should be understood that this discussion of programs is not a comprehensive picture of what is available but rather illustrates the kinds of programs emerging around the country.

Telephone interviews were conducted with people from five university programs:

- Continuing Education Center of the University of Georgia
 - Center for Community Services at North Texas State University
 - Center for Housing Management of Southern University (Baton Rouge, LA)
 - Continuing Education for Community Services program of California State University at Sacramento
 - University of Wisconsin-Extension, Department of Engineering
- a. Continuing Education Center of the University of Georgia (Athens, GA)

The Continuing Education Center has facilities to provide

not only instruction but also housing and meals for those attending workshops on the Georgia campus. According to one of those instrumental in staging the workshops, there is no need for those attending ever to leave the facility in the course of the session.

The workshops held at the Center are under the joint sponsorship of the University and NAHRO and last from one and one-half to five days. They are generally taught by University or Southeast Regional Council (SERC) NAHRO personnel, whose services may be supplemented by HUD staff members with appropriate expertise.

The topics covered by the training have included social services, gerontology, and general housing management. This last category encompasses training in organizational communication, management-HUD communication, legal policies and procedures, and employee training and evaluation. The decision on what subject areas to cover is to some degree governed by a survey conducted by SERC-NAHRO four years ago. The survey had a checklist of a number of areas in which training might be desirable, and respondents indicated which of those held the most interest for them. A further determinant of the subject matter covered in the sessions is the possibility that credentialing of public housing managers may become a reality, and the Center is developing a program that may assist in this process. The Center plans not only to develop a program but may also issue print materials concerning credentialing, depending on the timetable for certification of housing managers.

In the four years that the Center's program has been operational it has served between 1,000 and 1,200 people; however, there is some duplication reflected in these figures as some people have attended more than one session. No formal follow-up has been done of those who have attended the sessions to get their reaction to the training, though it has been found that people frequently return for another course. Most of the seminars are designed to handle approximately 25 people in one session. Those attending the sessions are not limited to LHA executive directors, as individual project managers are frequent participants. Brochures to attract people to the seminars are sent all over the Southeast Region. Attendance varies in relation to the distance from the Georgia location.

b. Center for Community Services at North Texas State University (Denton, TX)

The Center offers a two-day workshop under the joint sponsorship of the Governor's Committee on Aging, the Texas Department of Community Affairs, and North Texas State University.

These workshops are held in a variety of locations around the state and are designed to instruct participants in various aspects of the aging process; to acquaint them with the resources available to them in their housing authority's location; and to allow them to exchange ideas on successful methods of working with the elderly. The participants in the workshop include not only public housing managers but also tenants, local city officials, and social service workers. Approximately two-thirds of those who attend are public housing managers or tenants.

The first day of the workshop is generally taught by four faculty members from North Texas State, and the second day is usually led by local people under the coordinating effort of a staff person from the Center. The range of subjects covered has been determined by the University staff and also by a survey of directors of LHAs which house the elderly.

The cost of the sessions is defrayed in part by the Governor's Committee and by the Department of Community Affairs. North Texas State's costs are covered through contractual arrangements with the state. The cost for a potential participant is only two dollars, but food and lodging are not provided by the workshop sponsors.

c. Center for Housing Management of Southern University
(Baton Rouge, LA)

The Center for Housing Management was organized with funds provided by HUD. Southern University was one of five universities who shared in a \$660,000 grant to develop a college curriculum in the field of housing management. The program currently operating at Southern University has served approximately 400 people to date and is comprised of two major options--a minor at the college level or a series of workshops for those already working in the field.

Completion of the college program required 18 course hours of classroom study and an internship. The courses offered include: an introduction to housing management, which is mainly an historical view of the field; the community and the housing manager, which gives a social perspective on the field; the management of physical facilities, which includes maintenance, security, pest control, and other relevant topics; administrative management; and fiscal management. The internship phase is handled through nearby housing authorities, such as New Orleans or East Baton Rouge. Non-profit corporations which operate subsidized housing are also acceptable agencies for internship placement.

In developing this college curriculum, Southern University and the other four universities involved in the HUD program were

attempting not only to institute a system that would work at their own university but were also trying to develop a transferable model that might be used by other universities interested in conducting similar programs.

The second option offered by Southern University is workshops for those already working in the housing management field. To facilitate the staging of these workshop sessions, Louisiana was divided into eight regions. Through this system of division no LHA was more than 50 miles from a training center. The facilities of housing authorities and branch campuses of Southern University were used for training.

No session lasted for more than one day, as those attending (primarily executive directors) could not afford to take any more time away from their jobs. Each session was one part of a two-year series of workshops, thus extended training was available through a set of brief educational segments. The size of the authority from which those attending came depended upon the area of the state in which the particular workshop was held. The workshops held in more rural areas attracted smaller authorities, while those held in New Orleans or other large urban areas drew staff from larger authorities. According to the project director, there is undeniably a difference between the needs and interests of large authorities and those of their smaller counterparts.

The cost of staging the workshops has been subsidized by HUD, with those attending having to cover only the expense of operating the physical facility and the cost of the noon meal. When HUD support is no longer available, the fee charged those attending the workshop will have to increase, and the project director anticipates this will make it more difficult for personnel from some authorities, particularly the smaller ones, to attend.

The subjects covered in the workshops were determined in several ways. Introductory workshops were held to get input from potential participants. Also, personnel from NAHRO, IREM, NCHM, and the National Apartment Association (NAA), among others, were contacted to determine on what subjects they thought training might be most beneficial. Finally, the views of several people in the real estate profession were solicited.

Follow-up contact is made with those attending the sessions in two ways. It has been done either through on-site visits or else through testing. The on-site visits are conducted to see if the material taught in the workshops is actually being used. If the need arises, supplementing these visits with on-site supervision is within the scope of the program. Testing is carried out both before and after the training sessions. This testing not only keeps participants in touch with the University

but the comparison of the results of the pre-test and the post-test also provide one indication of what has been learned at the workshop.

d. Continuing Education for Community Services program of California State University at Sacramento (CSUS)

The Regional Housing Management Training Program (RHMITP) was centered in northern California and involved a number of universities and community colleges located in that area. The involvement of CSUS and other universities in the program has essentially terminated, though instruction is still in progress at nine community colleges in the region.

Originally, two curriculums were developed: one for adult education and the other for the School of Business Administration. The principal focus of the present course of instruction is the mature adult learner and the program relies heavily upon on-site instruction. (Of 110 hours of study required to complete the course, 51 are done in the classroom and 59 are on-site.) The course takes between 17 and 25 weeks to complete and is available only at the community colleges. According to one of those instrumental in the development of the program, offering the course at the community college makes it less expensive for students to enroll and allows more flexibility in the program itself.

The present curriculum was developed in response to the information gathered by surveying 500 people involved in housing management. The curriculum was designed to assist those surveyed to perform better in their jobs and also to provide adequate training for those preparing to enter housing management positions.

Of those currently taking the course, approximately one-half are currently involved in the housing field and approximately one-half are approaching the housing field hoping to change careers. About 40% of those attending the sessions are involved in public housing, while the others are involved in a variety of other types of housing.

e. The University of Wisconsin--Extension, Department of Engineering (Madison, WI)

The focus of the courses offered by the Wisconsin extension service is slightly different from that of the other university programs described. It is not aimed primarily at local housing authority staff personnel and their problems but deals

with a variety of building issues, such as building codes, building inspection, maintenance codes, and rehabilitation. The sessions offered by the department can last anywhere from two and one-half days to two weeks, and they can either be a presentation of a state of the art report or else a practical demonstration of how to deal with major problems.

In planning and developing its program, the extension service tries not to conflict with the educational programs being offered by other professional agencies. The subject areas to be covered by the courses are determined largely by the extension staff, using its own insight and expertise. This expertise has developed through work done in the architecture and construction fields, communication with people currently working in the field, readings done in relevant subject areas, and perception of the educational needs of those in the field who have to deal with new legislative programs. After having determined the appropriate subjects to cover in the courses, the extension service then prepares a broad outline of the course content and solicits the participation of people with the qualifications and expertise necessary to teach the course.

While none of the courses deal specifically with public housing management, housing authority officials have shown interest in the sessions dealing with various zoning and planning problems, such as a course that was offered on the design of housing for the elderly. Courses on building codes have also attracted some attention from housing authority personnel. Because the National Center on Housing Management has offered its course on managing housing for the elderly on the University of Wisconsin campus, the extension service has avoided duplicating NCHM programs.

No proceedings are published of the conferences but handbooks are distributed to those who attend. Additional material is sometimes sent to those who have attended, and some surveying of former participants is done to obtain their evaluation of the program and also to maintain contact with them. The fee charged for these sessions is generally about \$110.00 for two days or \$300.00 for a week. The service is non-profit, but the fees must cover the cost of instruction.

2. Local Housing Authorities

The training of LHA personnel is not, however, the exclusive function of universities and community colleges or public and professional agencies. Within virtually every LHA some training of new staff must be done. The degree to which this training is systematized may vary greatly between authorities.

Some authorities, particularly the larger ones, have developed sophisticated in-house training programs. An example of the type of work being done is the tenant-management training program of the St. Louis Housing Authority. The training program used in St. Louis was designed to assist the tenants in preparing them to manage and maintain their own buildings.

The training program was developed by a private consulting firm with input from the Tenant Management Corporation (TMC), a corporate entity charged with the responsibility of managing specific housing projects, and the St. Louis Housing Authority. The curriculum was designed to be completed in 90 days, and the original plan was to have instruction conducted in a classroom removed from the housing authority site in order to prevent distractions. It was found, though, that this was not necessary and the classes were eventually held on-site. This enabled the course to proceed at a faster rate as transportation was no longer a problem.

Instruction was handled in two phases. The first was classroom instruction, and the second involved participation in a variety of tasks related to the onset of the tenant management program. Those enrolled in the program were salaried throughout the duration of the course.

Training was instituted for all staff personnel: administrative, tenant services, maintenance, custodial, and security. Some of the instruction was also designed to serve the TMC directors. The number of sessions that each of these groups was supposed to attend varied, although administrative personnel were required to participate in every aspect of the program. This was done so that they would not only better understand the various jobs within the management structure, but also so that they could handle any job on a short-term basis if the need arose.

The course was taught principally by personnel from the private consulting firm, whose efforts were supplemented by members of the housing authority staff; representatives of various social agencies, who discussed available social service resources; and people from local universities, who reviewed the educational resources available. New staff members no longer go through this program but are trained instead by those TMC personnel who took the original course. A manual for the instructional program was developed through funds provided by the Ford Foundation and is now being adapted to assist those people who will be involved in a national demonstration program dealing with tenant management.

The private consultants who organized the St. Louis training effort have been retained to assist the tenant managers on personnel matters, legal matters, management operations, program development, or housing authority operations.

The training program in St. Louis is unique because it was designed to train tenants as managers. It is, however, important to realize that training of housing authority staff personnel is a vital part of the operation of a number of authorities. For example, the King County Housing Authority (State of Washington), which was described earlier in the report in its role as a provider of technical assistance to other LHAs, has conducted a number of workshops for its own staff and has also organized weekend retreats at which the staff has several days of intensive training.

Another example of the emphasis that housing authorities place on internal training is the frequency with which the PHMIP authorities developed products relating to training. The Greensboro Housing Authority, the Dade County Housing Authority, the Detroit Housing Authority, the Hawaii Housing Authority, and the Atlanta Housing Authority all had products that dealt with personnel training listed in the Public Housing Management Improvement Program Product Catalog.

EXISTING OR PROPOSED INFORMATION SYSTEMS

The design of a housing management information system which is responsive to the needs of its users depends, in part, upon an evaluation of existing information systems. Even though the subject matter handled by such systems may differ from that to be handled by a housing management system, the advantages of evaluating other information systems are three-fold. One, this type of investigation can indicate the full range of services and products which different information systems presently provide; two, it can reveal the strengths and weaknesses of different methods of information transfer; and three, this investigation of various systems can provide some guidance to assist in the design of a new system. In the course of the research effort, eleven operational information systems and two systems still in the planning stage were studied. Instead of providing complete descriptions of each of the thirteen systems, a brief look at some of the relevant aspects of the various systems is presented.

For the purpose of discussion, it is perhaps useful to divide these thirteen systems into two categories--those which focus primarily on literature control and literature searching, and those which offer primarily other types of services, such as referral or technical assistance. These included:

- Educational Resources Information Center system
- National Clearinghouse on the Aging
- National Rehabilitation Information Center
- San Mateo Educational Resources Center
- Information Services of the U.S. Department of Housing and Urban Development's Office of International Affairs
- National Criminal Justice Reference Service
- Smithsonian Science Information Exchange
- National Referral Center
- National Center for Voluntary Action Clearinghouse
- National Clearinghouse for Poison Control Centers
- National Clearinghouse for Criminal Justice Planning and Architecture
- American Society of Planning Officials (ASPO) Planning Advisory Service

• Public Administrative Services

A. Systems Focusing on Literature Control and Literature Searching

1. Educational Resource Information Center

The Educational Resources Information Center (ERIC) system is one of the six systems studied which were heavily oriented to the control and distribution of printed matter. ERIC was created in response to the poor bibliographic control which existed over fugitive material produced in the field of education. (Fugitive material encompasses any document not generally published or otherwise made available through regular channels. Government report literature frequently falls into this category.) The volume of fugitive documents is sufficiently large that in just seven years of operation ERIC has collected and cataloged approximately 90,000 documents.

The field of housing management does not appear to have as large an uncontrolled body of literature as apparently existed in education prior to the implementation of ERIC. Even the largest projection of the possible future size of a housing management document collection only approaches 25,000. The difference in the size between the ERIC collection and that of a potential housing management collection indicates that an information system based on the ERIC system may not be applicable to housing management information transfer. One factor which could justify the institution of a system similar to ERIC would be the emergence of extremely high user demand for improved access to the literature. The cost of a system such as ERIC may be justified by the high volume of user demand for the services of the system. Such a demand is not currently apparent in the field of housing management.

The evaluation method for documents submitted to ERIC for inclusion in its collection is interesting, because, unlike some clearinghouses, clearly questionable documents are not put into the system. However, no evaluation accompanies a document once it has been accepted, abstracted, and filed in the data base. The user knows only that the document is not so devoid of substantive content as to warrant its exclusion. Recommendations of particularly valuable documents can be made in newsletters generated by the individual clearinghouses which comprise the ERIC system. For example, ERIC's Early Childhood Education Clearinghouse has run in its newsletter a column entitled "Some Publications We've Seen and Like." It is also possible for an individual clearinghouse to publish a bibliography of resources in a particular subject area, which indicates some of the most

important documents in that area of the field. This attempt to prevent an influx into the system of material lacking in substantive value is important as the products of an information system are only as good as the material which is introduced into the system.

A final aspect of the ERIC clearinghouse which has some application to the design of a housing management information system is the regionalization of the ERIC network. The central office maintains the data base, tries to eliminate duplication of effort between clearinghouses, and handles document reproduction. Each of the clearinghouses, then, is allowed relative freedom of action. Each could, for example, slightly alter the scope of its coverage, and each does do its own acquisitions, cataloging, and indexing. The site of each of the ERIC clearinghouses was determined by the capabilities of the sponsoring institution in a particular subject area rather than by the geographic location within the country.

If a housing management information system were to establish regional technical assistance centers they most likely would conform to geographic regions, as the primary goal of each center would be to serve the basic needs of the housing authorities in its region. However, the possibility of allowing each center to develop expertise in a particular subject area, which could complement similar developments in other regional centers, should not be overlooked. It is anticipated that the cost of taining each ERIC clearinghouse will be between \$175,000 and \$225,000 in 1976.

2. National Clearinghouse on Aging

The information system which has been proposed for the Administration on Aging, the National Clearinghouse on Aging, is based largely on the ERIC system. The ERIC system was selected as a model because the information needs in the area of aging were perceived to be similar to those in education, and the Administration on Aging lacked the staff to "re-invent the wheel." As the "requests for proposals" have not yet been formulated, the specific requirements for the individual clearinghouses have not yet been established. The present plan is to use existing resources as much as possible as a basis for the network.

3. National Rehabilitation Information Center

The anticipated use of existing facilities to assist in

information transfer is also being considered for the National Rehabilitation Information Center, which is also still in the planning stage. Resource centers already being funded by the Rehabilitation Services Administration will form the basis of the Rehabilitation Information Network. The use of existing resources to aid in the operation of an information system is clearly to be preferred to duplicating the efforts of those resources. This certainly seems applicable to the design of a housing management information system.

The orientation of the rehabilitation information system is planned to be slightly different from that of ERIC and the National Clearinghouse on the Aging. While providing better access to materials generated by the Rehabilitation Services Administration (RSA) is a primary goal of the proposed system, the plan is to go beyond this and provide a rapid fact retrieval service for rehabilitation administrators in the government and private sectors, and to develop information products which are custom tailored to meet the needs of Washington-based RSA administrators. It is expected that these products might subsequently be re-packaged to reach a wider audience.

4. San Mateo Educational Resource Center

Specialized packaging of information is currently offered by the San Mateo Educational Resource Center (SMERC). The aim at SMERC is to provide, "complete access for subscribing school districts to contemporary information in all areas of education." SMERC has contracts with 56 school districts in 29 California counties, and it also has five special projects in different areas of the United States. The idea of presenting information in a form custom-tailored to fit individual user needs is one that should be borne in mind in trying to design a system to help individuals involved in housing management.

SMERC has a number of information products, such as resource guides, a newsletter, and accession lists. The product, though, which is of particular interest is the Fugitive Information Data Organizer (FIDO), which carries brief descriptions of written material that is not commonly made accessible. Much of this material enters the system through the member school districts. This material is frequently identified by linking agents, who are specifically trained personnel located in each school district. The concept of the linking agent is one worthy of further examination. The linking agent is selected to represent his district once the district subscribes to SMERC. The agent is trained at SMERC and works to facilitate communication between individuals and the center. As stated earlier, this agent also facilitates input, generally in the form of printed matter, from

the participating districts. This is an interesting idea, although the age of some of the documents (some were as much as 12 years old) would be a problem in a system designed for rapid information exchange. Having someone in the field involved in locating potential resource material, though, might prove valuable.

Two other noteworthy aspects of SMERC include its policy of systematic, internal evaluation and also its relationship with the Institute for Professional Development, an educator improvement association. The goal of this association is to list available information sources potentially useful to those desirous of developing their professional competency. This may be applicable to the field of housing management, in which professionalization is becoming increasingly important. Again the emphasis here is on the provision of printed matter rather than training programs or services, but the concept of using an information system as a facilitator in the professionalization process is of interest.

5. HUD Office of International Affairs

Two final literature oriented systems, neither one of which is dependent on its users to provide funds for its operations, were studied. The first one is the system of information services offered by the HUD Office of International Affairs, and the other is the National Criminal Justice Reference Service.

The HUD Office of International Affairs serve primarily the HUD staff though its services are also available to the public. Services offered fall into two main categories. One is the maintenance and use of the data bank, and the other is the publications program. Searches of the data bank can be done for the public, though this service has not been well-publicized because of the small size of the staff which operates it. According to those who staff the system, it would receive many more requests if it were more aggressive in publicizing its efforts. However, the Office does not currently have enough staff to handle this volume of requests with expediency. From this example it is obvious that a free service is of limited value to individuals if there is inadequate staffing to make it really available to them. The publications program provides, in written form, information on the foreign experience in the fields of housing and community development. A publication may be produced as part of one of four series: 1) HUD International Information Series, 2) HUD International Country Profile Series, 3) HUD International Information Source Series, or 4) HUD International Special Report Series. These series are distributed without charge to approximately 14,000 people involved in housing and represent one method of processing information to reach a wide audience.

6. National Criminal Justice Reference Service

The National Criminal Justice Reference Service (NCJRS) also offers its services free of charge to users, but it has the staff and facilities to handle a tremendous volume of requests (around 50,000 a month). While this system is primarily oriented to printed material, other services are available to users through referral specialists who keep abreast of relevant resources existing outside the information system. Information on the 13,000 documents housed by the system is kept on a Department of Justice computer to which NCJRS has on-line access.* The length of time required to service a request can range from three days for a simple citation to 10 days for a referral request. The operating cost of the system is about \$2.8 million over a period of three years. This figure, however, excludes some major expenses that are paid for by LEAA, including \$13,000 in computer time, \$18,000 in mailing costs, and \$2.5 million in printing costs.

Though this system has a relatively small data base, it can justify using a computer by virtue of the number of requests for information that it handles. According to a staff member of NCJRS, the level of usage would drop dramatically if a fee were charged for the use of the system. Two points should be carefully considered in designing an information system. Services which are adequately publicized and offered free of charge will probably be used. It is, however, essential that the system be capable of handling the number of requests it generates for itself.

A final point of interest about NCJRS concerns the prospect of its becoming more regionalized by allowing some of the Law Enforcement Assistance Administration (LEAA)-funded agencies in various states to have on-line access to the data base. This would tend to relieve the central office of a great deal of the day to day contact with the user population. The regional offices would have microfilm copies of all NCJRS documents in addition to having referral specialists on-site.

B. Systems Offering "Non-Print" Services

The remaining seven systems we studied were not as heavily involved in the printed matter of their respective fields as the previously outlined six. A brief look at the kinds of services they provide and the potential applications these might have to the design of a housing management information system is in order.

*On-line refers to direct and immediate communication with a computer.

1. Smithsonian Science Information Exchange

The Smithsonian Science Information Exchange (SSIE), a non-profit corporation of the Smithsonian, keeps on file information covering 200,000 ongoing and recently completed projects in the physical, life, and social sciences. This information, kept on-line on an in-house computer, is in the form of one page descriptions called "notices of research projects." In addition to providing such information as the name of the principal investigator and his/her associates, the performing organization, and the sponsor of the project, a 200 word abstract of the work being done is kept on-line. The documents are also subject-indexed by specialists at the Smithsonian to grant greater access to the material needed. Cooperation with the system is purely voluntary, and there are 1,300 regular organizational contributors. Government agency support of the system is encouraged.

Among the services offered by the system are such things as custom searching and selective dissemination of information, either by customized profile or by group profile. Research information packages are kept up-to-date on a number of subjects. These packages are prepared in advance and are announced in the newsletter or in pamphlets discussing SSIE. The charge for these packages is based on the number of citations each package contains.

This operation is particularly interesting as it permits access to information on work currently being done without requiring detailed written descriptions of that work. This kind of information exchange in which experiences are recorded and shared in a standardized format would potentially have value to those involved in housing management. Through a system such as this, housing authority directors and staff might be better able to keep abreast of innovative programs being tried in other authorities.

The file of SSIE is regularly purged of projects for which no update is received. In this fashion the file is kept current. Some evaluation of the material being put into the system takes place, although a project would have to be almost totally lacking in scientific worth to be excluded from the system. SSIE's major check on the quality of information entering the system rests on the evaluation of the source of funding for the research in question. SSIE accepts information only from reputable funding agencies, which to some degree protects it from worthless material. Statements from private individuals are rarely accepted.

2. National Referral Center

A different type of evaluation, which might prove useful, is used by the National Referral Center. Letters are sent to people who have sought referrals from the center, asking the value of the sources to which they were referred. If the source did not provide the services it claimed to offer, then a follow-up is done by the National Center to determine whether or not the source should be kept in the system. This type of indirect evaluation by the system users might have some applications to an information exchange between LHA directors.

The National Referral Center does not supply substantive information on questions involving science and technology but assists its users by referring them to organizations that can answer their questions. Listings of the organizations involved are indexed by subject and their cooperation is strictly voluntary. Private profit-making organizations and individuals are generally not listed. There are approximately 12,000 active information resources currently listed with the system.

The emphasis in this system is on fast service. Many of the requests for information (60-70%) come in by phone. Almost one-quarter of the requests are answered on the same day as they are received and most requests are answered within five days. This rapid dissemination of information would be a desirable goal for any experience exchange where the main source of information was not the referring entity itself but, rather, the resource to which the user was referred.

3. National Center for Voluntary Action Clearinghouse

Another clearinghouse which was studied--the National Center for Voluntary Action Clearinghouse--also had referral service as its primary function. This clearinghouse maintained descriptions of about 6,000 projects in all areas of voluntary action. Information upon which to base the descriptions was collected by following-up, by telephone, on citations from publications. This system used no automation. Response time for answering requests was between one and three weeks. Referrals were generally made to agencies but consultants who agreed to volunteer their time were used in special circumstances. This clearinghouse closed in 1975. Its operating budget for fiscal year 1974 was approximately \$170,000.

The director of the system emphasized three critical factors in the design and implementation of a successful information system. One, it is advisable to introduce the service without charge because frequently those people who need help

the most can least afford to pay for it. Two, the quality of the information kept in the system is more important than the quantity of information the system contains. Three, an information system should be fully prepared to serve its users from the first day its services are announced as available to them.

4. National Clearinghouse for Poison Control Centers

The National Clearinghouse for Poison Control Centers (NCPCC), like the Center for Voluntary Action's Clearinghouse, does not have a charge for its services. In contrast to the Voluntary Action Clearinghouse, the element of speed is essential to NCPCC. If a piece of information on a particular subject can be found, it can generally be located within 20 minutes. This system has on-line access to a computer in which is stored such things as the product name, its ingredients, its toxicity, and the treatment for it, if ingested.

This system serves 580 area poison control centers of which nine have on-line access to the data bank. The public is not served directly by the national center. Requests are generally handled through the area centers. At present, consideration is being given to developing a system of regional centers to handle the questions posed by the area centers, leaving the national office free to concentrate on data collection and system coordination. This plan of action--having the national center coordinate the efforts of the regional centers who are responsible to the smaller centers--is certainly applicable to a prospective system of a housing management clearinghouse with regional technical assistance centers.

The director of NCPCC pointed out that one of the major hindrances to his system's effectiveness is the lack of control the national center has over the area centers. While stressing the need for some degree of control, the director was opposed to the national center assuming the functions of the smaller centers.

5. National Clearinghouse for Criminal Justice Planning and Architecture

While the services at some clearinghouses, such as those outlined above, are provided free of charge, an interesting compromise exists in the method the National Clearinghouse for Criminal Justice Planning and Architecture (NCCJPA) uses for charging for its services. As NCCJPA is amply funded by LEAA, much of the technical assistance it provides is free to its users.

If, however, extended assistance is required, it is handled on a contractual basis with a fee being charged for the service. This system of charging for services might prove useful in developing a fee schedule for services rendered by an information system providing technical assistance.

Assistance is offered by NCCJPA in four principal areas: planning; data collection and analysis; program definition and design; and facility analysis and design. This work is carried out both at the clearinghouse and on-site, and can involve any aspect of the criminal justice system.

One significant aspect of NCCJPA is that all of its users do not necessarily approach the system voluntarily. Because all funding proposals submitted to LEAA for grants must first be reviewed by NCCJPA, whose staff has developed guidelines in a number of areas of criminal justice, use of and cooperation with the clearinghouse is assured. Approximately one-third of those who request assistance do so in the process of seeking grant approval. Access to the services provided by NCCJPA is open to virtually anyone desiring assistance in dealing with any aspect of the criminal justice system. Not all information systems are equipped to assist the public to this degree.

6. ASPO Planning Advisory Service

It is interesting to look briefly at two systems that work almost solely on a contractual basis: The American Society of Planning Officials (ASPO) Planning Advisory Service and the Public Administration Service (PAS). ASPO has 1,350 agencies which subscribe to its service. The principal goal of the service is to assist planning agencies with land use and related problems. The cost to participate in the service varies depending on the population which the area in question serves.

The system uses no automation and the turnaround time between receipt of an inquiry and filling the request averages about one week.

7. Public Administration Service

Public Administration Service is a private, not-for-profit organization which works on a cost-reimbursement contractual basis to improve the quality and effectiveness of governmental organizations. It is possible for the public to get specific questions answered at the Service but PAS will not handle "fishing expeditions" for the general public.

These two services are illustrative of information systems which pay for themselves. A basic assumption in cases such as these, though, is that the user in question not only realizes his need for information but is also willing and able to pay for it.

C. Problems in Determining Costs and Benefits

It is difficult to assess the cost of operating each of the systems outlined above. Even though some systems willingly furnished budget figures, some were reluctant to do so. Even in cases where budget figures were divulged, the actual dollar amounts furnished could prove to be misleading. In systems which were heavily subsidized by a parent organization, that furnished such items as free computer time or free printing services, the budget of the system did not reflect the actual cost of maintaining its operations. A further problem in dealing with budget figures rests in the fact that the expenditure required to operate identical information systems may vary, depending upon whether or not, and to what extent, the users are charged for the services of the system.

While determining the cost of operating various systems is not easy, it is even more difficult to assess, in monetary terms, the benefits gained by the users of a particular system. Even if a system's users were to be surveyed, they would undoubtedly have trouble assigning a dollar value to the information they received from the system. If there is a way to effectively evaluate the benefits of information, it probably lies in studying the long-range improvement in the field resulting from the implementation of the system. This is particularly true in the field of housing management, which is becoming increasingly sensitive to its need for reliable and useful information.

RECOMMENDATIONS FOR A HOUSING MANAGEMENT INFORMATION SYSTEM

No matter how excellent, information alone is not a panacea for solving housing management problems. Information can be the catalyst for new ideas; it can spur waning enthusiasm; it can generate successful problem-solving techniques. It cannot, by itself, however, provide those personal and programmatic components that guarantee housing management success. Increased frustration on the part of information system users could, in fact, result were they to gain a better understanding of their responsibilities without having the accompanying tools to fulfill them. This potential pitfall is mentioned here because this report should not be viewed as isolated from and unrelated to other efforts which must be made to improve housing management and to provide the necessary resources therefor.

With this caveat in mind, it is appropriate now to address the question of providing a practical housing management information system that is relevant and responsive to the needs perceived by both on-the-job users and individuals and institutions distinguished by broad knowledge of the field.

Because there is now no single organization in the housing field that fully represents all sectors, it is essential that any proposed information system play a strong coordinating role with respect to on-going programs and existing resources of functioning institutions. It is the aim of these recommendations to avoid, insofar as possible, re-creating those facilities and services which already exist and are performing well. Dollars should be spent only where necessary for services not otherwise available. This, however, imposes an urgent need to establish at the outset a high degree of cooperation, rather than competition, among the organizations now active in the housing field. These recommendations are based on the assumption that this will, in fact, occur.

While, for practical purposes, organizing and operating responsibilities must be assigned, if a new housing management information entity is to emerge and is to serve effectively all the institutions and individuals involved in housing management, it must not, at any stage, be identified too strongly with any one organization. It is hoped that every effort will be made to convince each organization and all segments of the housing management spectrum that they have much to gain and little to lose through a shared approach to a housing management information system.

On the basis of the findings of this study, creation of an independently staffed housing management information system appears to be both needed and timely. It is the recommendation of the authors of the report that immediate steps to be taken to establish such a system. To implement this system will require a number of steps. These are presented in three sections as follows:

- Recommended services for an information system
- Alternative models of organization
- Recommended approaches to implementation

A. Recommended Services

1. Print material access

The staff of the proposed housing management information system should be familiar on a continuing basis with the collections and facilities of the existing primary collectors of print material. The system should establish working agreements with all such major resources so that users can be referred readily to the best source on an on-going basis. Primary collectors of print material include, but are not limited to:

- the Information Center of the National Center for Housing Management (NCHM)
- the library of the National Association of Housing and Redevelopment Officials (NAHRO)
- the library of HUD
- the library of the Urban Institute
- the library of the National Association of Realtors (NAR)

The information system should not attempt to develop its own collection but, where gaps appear in the collections of these existing resource centers, information system staff should alert and assist them to close these gaps. Depending upon the demand that emerges, it may become necessary for the information system to consider how best to develop more systematized and reliable methods of recording all print material and its location.

Although the demand for written information is increasing, it should not be overestimated. Findings of this study indicate that print, especially lengthy documents, will not be a primary information source for most potential users, therefore the expense of establishing an independent collection should be avoided or, at the very least, postponed until it becomes clear that the level of demand would justify such an investment. The information center must, however, be able to direct a user to the appropriate source collection promptly and accurately, thus a good inter-library network must be developed by staff of the new information system. Prior to staff's involvement, agreements on use and sharing of documents must be reached with all of the aforementioned resources. Should any of these resources be unwilling or unable to permit access to their collections, or

should it not be possible to make satisfactory arrangements concerning costs, turnaround time, frequency of use, and other ingredients or a freely-moving print exchange, a further examination will have to be made of the role of the information system in the direct provision of print services.

2. Identifying and publicizing education/training programs

As the move toward certification of those in housing management proceeds, this, along with normal information needs, is producing both a number of training programs and a number of potential enrollees. There is a real need for a systematic way to schedule these courses and training workshops within regions and nationwide, to avoid unnecessary timing conflicts. There is an equal need to publicize these schedules widely. A prime service of the information system should be to collect information and prepare and disseminate annotated schedules of all courses, by region, on a periodic calendar. Such advance knowledge would allow housing administrators to plan for their own and other staff training in an orderly way. Similarly, it would assist those who are planning the courses to know what others are offering and when.

At present, most people in housing management do not attend courses, workshops, or seminars regularly. Survey results document this fully for those in public housing management. Although there are many explanations for this, one important one is a lack of information about what is to be offered where and when. This is true of the housing management courses given by community colleges and universities and, to an extent, those given by NAHRO, NCHM, AND IREM, among others. Whereas certain audiences may be aware of these latter organizations' offerings, many know nothing about them.

One influence on participation, besides effective communication as to courses being offered, is the quality of the courses themselves. Many people are getting on the housing management training bandwagon. Their products are of uneven quality and, where the quality may be high, the applicability of a course to certain sectors and levels of housing management varies. Thus, a corollary need exists for potential users to know more than facts of time and place. An informed and objective evaluative mechanism will have to be devised at some point.

Information system organizers and staff should consider inclusion of an evaluation function, not only for training programs, but, also, for other sources of information with which the information system may become involved (print material, experience exchange, technical consultants, etc.). With training-related services, as with these other functions, phasing must be the key. All things cannot happen at once in an embryo enterprise. Therefore, evaluation cannot, in all likelihood, take place at the outset, but processes must be developed which will allow evaluation over a long period to determine the worth of each product, not only initially, at the time of contact, but at later dates, to determine carryover benefits demonstrated through usage.

In addition to compiling and communicating course offerings and evaluating them, a third service of an information system that would be of great assistance would be to identify gaps in educational programs. If courses do not exist for certain user groups, or on certain subject matter, this should begin to become apparent as information system staff compile the annotated list of what is available. It then becomes possible to call these gaps to the attention of those in the business of preparing and providing training. It is not suggested at this time that the information system itself offer extensive training, on the theory that there already are institutions able to fill the need, and duplication of effort should be avoided. Furthermore, the information system should handle each task it approaches competently and completely before undertaking related new tasks.

3. Non-print information exchange

The exchange of housing management information through verbal communication (either in-person or by telephone) is the preferred and most generally used way of gaining knowledge. Therefore, one essential service which may, in fact, become the most heavily used one if well developed over a period of time, is a kind of "institutionalized grapevine." Three facets of such an institutionalization are proposed.

a. Human Resources File-As the specialized expertise of various individuals in the field (both public and private sectors) becomes known to information system staff, a roster should be developed listing the name, address, telephone, type and size of housing with which the individual is associated, and special areas of knowledge and success. With the information center serving as a referral agency, this roster will gradually be enlarged (as well as periodically reviewed and revised), and an individual calling the center with a problem, can be directed to one or more persons whose experience corresponds to the caller's need. To keep the roster accurately updated and adequately evaluated, a simple system should be devised so that feedback is assured on assistance received from each referral.

b. Experience Exchange Descriptions-Knowledge gained and experiences exchanged on a one-to-one basis via telephone or personal encounter is valuable to the individuals involved. Its value is lost to all other potential users unless it is somehow recorded. therefore, a file of one-page descriptions of tried and proved approaches to problem-solving should be developed (and, again, periodically reviewed). It would also be useful to record unsuccessful efforts in the same way, explaining why they did not work.

One way to organize such a file would be to use the system of categories already developed by OASIS for the PHMIP Product Catalog. The service of compiling and storing such brief

descriptions is practiced by several clearinghouses. The Smithsonian Science Information Exchange, for example, now holds 200,000 single sheets on that many individual projects. With each description, a principal contact person would be named. As the TPP LHAs reach milestones in their management improvements, it might be appropriate to seek out this type of information from them. While some of their approaches are built upon PHMIP products, many of the TPP experiences will be independently innovative or will, in important respects, be modification of PHMIP techniques. These could form an excellent component of an experience exchange description file.

It should be a staff responsibility to make an initial outreach effort, canvassing as widely as possible, to seek out those individuals and housing entities where successful management experiences have taken place. This will be a way to begin developing both the human resources file and the experience exchange descriptions. It will have the further benefit of serving as a mutual introduction between the system and its staff and the system's potential users.

c. Collective Experience Exchanges

Where several inquiries on a single subject are received, a more efficient use of the resource person's time (and hence a greater degree of his/her cooperation) might result from assisting with arrangements to bring the several seekers together with the supplier(s). The fact that a number of people are making the same request, might indicate a more widespread interest, and staff might circularize a potentially larger group and coordinate this type of informal workshop at the most convenient site. This may also allow for a method to reimburse the resource person in a workshop context.

4. "Hardware" product information

A great deal of interest was expressed both by those in public housing management and those in several HUD offices in developing a mechanism to make "hardware" products known to interested users. This is an area which, in its fullest dimension, is vast and complex with many aspects to consider. On the basis of interest expressed, it would be desirable for an information

center to acquire a comprehensive collection of product catalogs relating to all aspects of housing management from light bulbs to lawnmowers, from door knobs to drainpipes. This could become a major space occupier. It would be helpful to distribute updated lists of available catalogs and how to order them. Further possibilities include arranging for displays and demonstrations or products. Such services might become a source of revenue from the manufacturers concerned which would assist in underwriting the operation of the entire information system. It would be essential, however, that, from the outset, any dissemination of product information by the information system bear a highly visible and clear disclaimer of any implication of product evaluation or endorsement, and all products would have to be treated even-handedly. Both ethics and information system credibility would dictate this. If, on the other hand, at some time evaluation of hardware products is decided to be an appropriate and feasible function, this would have to be undertaken with the prior understanding that a major financial commitment would need to be made to a consumer research effort. This would require significantly enlarged space, elaborate equipment, and highly specialized staff, unless subcontracts were let to unimpeachable product testing services to perform this function.

5. Direct technical assistance

Of all the services named by those involved with the management of public and assisted housing, direct technical assistance was most frequently requested. The need for "trouble shooters to help us when we hit a snag" capsuled the demand. Such assistance could cover a number of kinds of services. One would be the provision of on-site assistance in such basic, practical matters as maintenance or accounting. Small housing authorities, in particular, would welcome this form of help. Another kind of frequently mentioned technical assistance is help in completing complex government forms or drafting technical documents. Still another form of technical assistance is consultation from such specialists as architects or engineers. Most management entities do not have this kind of expertise on their staffs, and the very smallest of these usually cannot afford to hire competent specialists even if they are available in close geographic proximity. Here, again, careful consideration needs to be given to the appropriateness and feasibility of providing these kinds of technical assistance. Some could be better handled by referral, and here, as in the case of housing managers with expertise, a roster could be developed. This could include the further information of names of housing entities that

had used a named source. The interested prospective client could then check with previous clients for specifics as to work performed and satisfaction with the service. If various forms of direct technical assistance (rather than referral) are provided by the information system, a fee schedule could be established so that this kind of service, which is both highly personalized and time-consuming, could be at least partially self-supporting. The dimension of need for these services is not clear at this time, nor is it known how it might vary regionally. This should become more apparent as the emerging system matures.

6. Newsletter publication

Representatives of all sectors of housing management agree on the effectiveness of the newsletter format in communicating key information succinctly and readably so that it will be used. The newsletter can be the vehicle by which potential users are notified about the existence of the information system itself and the above-described services that it may be offering. The publication can include an annotated calendar of courses and workshops; capsules of successful problem-solving techniques with citations as to where fuller information can be obtained; listings of new publications and documents of use to the practitioner. The newsletter would be the information highlighter, and would call attention to the entire information system. Along with what it says, the newsletter's layout, style, format, and graphics will determine its acceptability. It will be competing for the attention of busy people. An initial investment in good graphic design is recommended, not only for the newsletter, but for all communications that will be associated with the system. In all probability, the newsletter should be distributed without charge, or with only a minimal charge, to the widest possible user group that the information system is prepared to serve. It should not, however, promote services beyond a realistic expectation of capability to deliver. This will be particularly true at the outset when there will be many unknowns about demand on the burgeoning system. Depending upon the organizational structure of the information system, it may be desirable to have regional newsletters, varying in format and content.

Each of the six services proposed above will need thorough exploration and gradual, selective implementation. The specialized skills of information system staff should give them insights about the feasibility of specific approaches. Their participation in decision-making will be vital as implementation gets underway.

B. Alternative Models of Organization

Several delivery systems, and variations on them, could provide the services identified. The numerous clearinghouses now functioning in a number of ways attest to that. Two models are being suggested here as especially feasible for a housing management information system. The first model is for a national clearinghouse which would handle all of the proposed services centrally. The second model proposes a national clearinghouse in conjunction with regional technical assistance centers. A division of responsibilities within this latter model is described later in this section of the report.

1. Advantages of a single, national clearinghouse

a. The organizational structure of a single facility would be simpler than that of a system involving a network of regional centers. Staff communication would, accordingly, be simpler.

b. The fixed costs of operating a single facility would probably be considerably less than that of operating a national clearinghouse plus regional centers--probably 10 in number--paralleling the HUD regions.

c. Administrative control is easier to maintain with one facility rather than several. It is easier to institute and enforce a uniform policy.

d. With one national clearinghouse, a larger, more impressive facility could be planned than if a clearinghouse were part of a network system. This single facility might have more stature and prestige than the smaller office that could be expected as a companion to regionalization.

e. A single center, if located in Washington, D.C., would be able to communicate with relative ease with almost every key agency whose activities relate to housing management.

2. Advantage of a national clearinghouse in conjunction with regional technical assistance centers

a. This system, with its geographic dispersion and greater proximity to users throughout the country, makes it physically and psychologically easier to have two-way contact with users.

b. A regionally-oriented system is more sensitized and can adapt its services to variations in user needs than a

nationally-based system.

c. It can be expected that there will be greater familiarity with resources and activities within the areas to be served in a regional system.

d. Travel to and from the regional centers will be far more economical than would travel between a single center and far-flung users. Accordingly, the number of users should be expected to be significantly greater in a regional system, if services are provided at a satisfactory level. As the direct technical assistance role of the information system develops, travel to housing sites by center staff may become a major budget item. It will be a smaller item per visit for regionally-based staff than it would be for a nationally based staff.

e. Like travel, the unit cost for telephone calls should be far more economical in a regional system than in one where all calls go to and from Washington. Telephone may be the principal method of information transfer, so this budget item is an important one in projecting system costs.

f. A regional system, developed to correspond to HUD's ten regions, should facilitate useful ties with HUD regional and area offices. It would be anticipated that many of the information system's regional technical assistance centers (TACs) would establish close working relationships with the HUD offices in their regions, relying upon the information and expertise of selected individuals as a major resource of the TAC. The survey of public housing executive directors indicated overwhelmingly their reliance upon HUD officials close to home as one of their principal sources of help. HUD is structured to facilitate relationships on that level rather than between HUD Central and the localities.

C. Recommended Approaches to Implementation

It is the conclusion of this study that the second model, a national clearinghouse with, ultimately, up to ten regional technical assistance centers makes more sense in the context of operating conditions within the housing management field.

The principal advantages of the single national clearinghouse are: ease of management and control and possible economies of centralization. Cost-benefit ratios are very difficult to assess in this type of operation. If a system is set up with relative ease, speed, and cost-saving, but is used by only a small percent of the potential user pool, it can hardly be termed a success in benefit-cost terms, or by any other meaningful measures. A regionalized system will involve more people in the reciprocal exchange of information. Maximizing user

participation is the point of creating the entire system.

A system of regional technical assistance centers, connected with a small national clearinghouse, may not be organized quickly or have the assurance of uniformity of its operation. That very diversity, however, being responsive to regional differences, is one factor which can be expected to provide better assurance of long-term success. When deciding upon a system, quick and total implementation is also not the best criteria for an institution still to be created to serve needs, at least in part, still to be discerned. While users may want and expect "instant answers," creating such a system is not an "instant process." A flexible and lasting instrument must be designed, meeting more than today's priorities. This should not be undertaken as an activity with a two- or three-year lifespan. The opportunity to evolve responsively and responsibly must be assured. Thus, one key to the successful implementation of a national housing management information system lies in a gradual, but deliberate, phasing-in of the various services outlined in Section A above. This incremental implementation (providing opportunities for ongoing review by sponsors, staff, and users) applies to a number of aspects of the operation:

- Regions serviced
- User populations served
- Subject areas covered
- Range of services provided
- Staffing provided

1. Regions served

It is suggested that three regional technical assistance centers be developed in three selected HUD regions as test sites for the potential ten-region system. The selection of only three sites initially will allow a more thorough approach. A number of steps must be taken before the doors of these TACs open to the public. These steps could include the following, among others:

a. Conduct in-depth survey of resources in each of the three regions, so that specific program recommendations will be based on such facts within each region as the extent of educational and technical services currently available, including those at the state level, etc. Arrange for systematized tap-in to appropriate resources and cataloging of all for referral purposes.

b. Identify a skilled liaison person, already working in each of the regions, to work with those individuals who are setting up the TAC and those individuals and groups who may become the users.

c. Develop priorities and set up services consistent with findings and recommendations contained in this report plus the unique resources of the specific region.

d. Select TAC physical facility and core staff and proceed with implementation of initial services.

e. Develop promotional and incentive strategies to encourage user participation.

f. Develop guidelines for working relationships between TACs and national clearinghouse. A closely coordinated effort should be established from the outset between key regional and national personnel so that workable methods of operation evolve from joint decision-making.

There are several advantages to going through these processes initially with only three regions. Firstly, it is a manageable number, and it is relatively easy to do the necessary preliminary work with three sites. Yet the differences likely to emerge among three regions will indicate the kinds of variations to expect if and when the system is enlarged. Therefore, various specifics can be tested in the three TACs, and then revised as needed and later applied throughout the system, with the expectation of a more condensed start-up time for the other seven. Lessons learned from the three can be readily related to the additional seven, if, indeed, experience proves that the additional seven are warranted. If, however unlikely, the contrary should emerge, substantial amounts of money and effort will have been saved by beginning with a smaller number.

2. User populations served

While the emphasis and orientation of services may well be directed toward management personnel in public housing--a readily identifiable and reachable user group whose needs have been most thoroughly documented--early contacts must also be made in each pilot region with representatives of all other sectors of the housing management field. The assisted housing group has many information needs closely related to those found among public housing personnel, and opportunities to use the TACs must be opened to them. Similarly, the private sector has certain management problems in common with all others. Problems pertaining to utilities and garbage, for example, are universal management concerns. And findings of this study indicate an

awareness that the private sector, as well as the public, needs greater skill development in handling "people problems." Each TAC must establish, at the outset, an inclusionary, rather than exclusionary, profile. Selection of initial services should be based on needs established by inquiry among the public housing constituency. Availability of such services, however, should be broadcast widely. As much time as it may take to introduce users in the public sector to the TACs, it may take still longer to draw in users in the private sector. This will be an evolving process, and the speed with which a widely cast net brings in a wide variety of user groups, will depend upon the efficacy of the services offered. Within the public sector of potential users, special attention should be given to addressing the needs of two heretofore relatively neglected groups: small housing authorities and LHA boards of commissioners generally.

3. Subject areas covered

Ultimately, the system should be prepared to deal with the broadest range of management issues. Initially, however, it will not be able to do this, and concentration of effort might well be directed toward those subject areas which public housing administrators have identified as being "very important" and for which they have also indicated a high demand for training. This would include the following subject areas:

- Budget and related matters
- Rent levels, collection, and tenant accounts
- Property maintenance
- Internal auditing and control
- Tenant application, selection, and occupancy
- Management-resident communications and relations

While these priorities were established on the basis of a statistically valid sample, it is strongly recommended that additional confirmation be sought intra-regionally as the three pilot TACs develop their services. A certain amount of variation can be expected from region to region, and responsiveness, within a balanced framework, is the key to the regional approach.

However, responding to recognized needs of users as defined by the users themselves is only one approach. In advancing professionalism, users may not always be aware of emerging

information priorities and may not be the best judges of their needs for new frontiers of knowledge. Therefore, a system must be developed which allows response to recognized user needs while introducing other subject areas of emerging, but perhaps not yet generally recognized and accepted, importance. Two possible formats for organizing subject area coverage are therefore suggested. One framework could be that established in the OASIS PHMIP Product Catalog, as mentioned earlier. Another framework could be that established by NAHRO in its extensive consideration of management knowledge and skills required in the professionalization process. Throughout 1974, NAHRO's Subcommittee on Personnel Development and Training, created in response to HUD initiatives, worked to develop what became A NAHRO Approach to the Certification of the Low-Rent Public Housing Manager. A distillation emerged which gave recognition to the need for performance skills in four areas (with defined sub-areas): 1) Management Principles, 2) Housing Administration, 3) Maintenance and Related Physical Concerns, and 4) Human Relations, Social Concerns, and Community Environment. These have been stated in other ways (e.g. Administration, Human Resources, Maintenance, Public Relations). Training programs developed by NCHM and IREM, for example, whose clientele is far broader than the public housing sector, cover these subject areas in some of their courses with variations in language, organization, and emphasis, but the areas are covered. While the emphasis of a regional TAC may focus initially on areas (2) and (3) above where high demand may suggest greater likelihood that users will respond to the TAC as a resource, the system should be designed so that its coverage is broader than (2) and (3), encompassing all of the NAHRO categories, which may well lend themselves to dovetailing with the more fully developed OASIS catalog. Whatever the subject area organizational format, it should allow for later inclusion of new subject matter in a flexible, ongoing system.

4. Range of services provided

Six kinds of services have been suggested as useful methods of providing information to users. These are:

- a. Print material
- b. Schedules of education/training programs
- c. Non-print information exchange (including: human resource file; experience exchange descriptions; collective experience exchanges)
- d. "Hardware" product information

- e. Direct technical assistance
- f. Newsletter publication

Still other services may emerge later. Not all of these can be introduced at the outset; some may be more urgently needed and more practical to offer in one region than in another. The expense of some services will require a good deal of advance evidence that they are both appropriate and financially feasible. Before each service is introduced to the public, a good deal of preparatory work will have had to have been completed so that the service is truly available. Turn-around time must be held to a minimum. Inquiries must be answered promptly and satisfactorily (real and relevant assistance which responds to the questions asked). Evaluation techniques must be developed so that each service can be monitored. Procedures must be developed and tested so that user satisfaction can be determined accurately, and adjustments can be made within the system as a whole and within each proffered service. It will take a considerable period of time to develop a human resources file and experience exchange descriptions, for example. A period for perhaps as much as one year should be spent in assembling these materials so that a strong core collection is available when each TAC opens for business. Items (a), (b), (c), and (f) appear to be services which should be offered, in whole or in part, at the outset. Probably each of these services can best be offered incrementally, feeling the users' pulse as well as determining capacity of staff, to determine where the needs and satisfactions are greatest, as guides to next steps. A method of close and continuous two-way communication must be built into each service to help the system to grow in a responsive, effective manner.

Implementation of each of the recommended services within the information system will require assignment of responsibilities between the national clearinghouse and the regional technical assistance centers (TACs). In general, the role of the national clearinghouse will be primarily a coordinating one. It will coordinate the activities of each of the regional TACs and serve as a "central switchboard" for them. The national clearinghouse will also maintain necessary linkages with the national level of organizations concerned with housing management. The major roles in the system, and almost all contact with users, will be undertaken by the TACs.

The discussion which follows describes how responsibilities for the several services might be divided.

a. Print material access

The major responsibility for keeping abreast of document resources should rest with the national facility, primarily because it will be in close geographical proximity to four of the most important document collections (HUD, NAHRO, NCHM, and the Urban Institute). As this is not a major role of the information system, it does not seem worthwhile for every center to spend a portion of its budget and staff time to deal with documents. The individual TAC's role in the document-gathering process would be limited to identifying gaps in the document collection. A TAC could call the national clearinghouse when the need for a document arises.

b. Schedules of education/training programs

Keeping abreast of available training and educational resources will be primarily the responsibility of the TACs, although the national clearinghouse should be responsible for disseminating to the regional centers any information it has on training efforts, especially those emanating from national offices of various organizations. The regional centers should be assigned the task of relaying information on training to the system users. The regional centers will be in the best position to assist in coordinating the scheduling of training efforts and will also be close enough to the user population to be able to identify their unmet training needs. The national clearinghouse would be expected to notify the regional centers as to nationwide training efforts, meetings, and conferences. It would also inform each TAC about programs offered in other TAC regions. There may well be programs of highly specialized subject matter of interest to persons scattered all over the U.S., but offered in only one or two regional locations.

c. Non-print information exchange

This job will be the function of the regional centers. The national clearinghouse will facilitate communication between regions, making sure that significant findings developed through non-print information exchange in one region are made available to all other TACs.

d. "Hardware" product information

Most of the work involved in collecting information on

"hardware" products should be done by the national clearinghouse. The number of catalogs which could be expected to be collected, precludes the duplication of this effort at each regional center. Certainly, any evaluation process should take place in only one central location. The TACs could handle and process user requests.

e. Direct technical assistance

The provision of direct technical assistance to users will be the responsibility of the TACs. The efforts of the various regional centers will be coordinated by the national center so expertise developed in one TAC may be shared with others.

f. Newsletter publication

While each region may wish to publish its own newsletter, some of the material for the newsletters may be furnished by the national clearinghouse. In this way, information affecting all regions of the country can be effectively disseminated, while allowing for matters of regional interest to be presented on a discretionary basis and with individualized styles.

5. Staffing provided

As in every other facet of building an information system, hiring of staff should also be incremental. It is imperative that the ablest people available be hired. It will be better to begin with a top-notch system director and TAC directors, for example, and only one or two other support staff at each location, similarly selected with great care, than to hire a larger number of people of mediocre abilities and personalities unsuited to this type of human contact service. Almost every staff member will, in one way or another, be creating the image of the system with its potential and actual users. No matter what the paper plans, the lists of services, the resource inventories, it is the staff and their interactions with people at every conceivable contact point that will determine the degree of favor with which the information system is regarded. Therefore, job descriptions should be carefully drawn, qualifications set high, and hiring done with great selectivity. The director, once employed, should participate in all subsequent decisions as the system moves forward.

THE QUESTION OF FUNDING

It has been suggested that the proposed information system should be self-supporting. That would be nice. It has also been suggested that the information system should seek to provide needed services for the maximum number of people possible who are involved in the management of housing, and particularly the management of housing for persons of low and moderate income. It is also known that the majority of people in such positions do not, as a matter of habit, seek training, subscribe to journals and newsletters, or in other ways seek systematically to improve their knowledge and skills. The challenge, then, becomes one of trying to assemble, package, and distribute information and information opportunities so attractively and painlessly that people whose habit has not been to reach out, will change their habits and do so. This may be an exaggerated statement of the case, and certainly it does not apply to those many, many people who read extensively, exchange information readily, and attend demanding and informative educational sessions of various kinds. These, however, are not the primary target population, for they are already sharpening their considerable skills as a matter of course. If the larger group is to be reached--and this includes many involved in quite small and isolated operations where their contacts are limited--a new and unfamiliar entity--the housing management information system--is going to have to sell itself. To do so, it will have to give away at least some of its products. The "free introductory offers" and "trial size sample packages" are time-honored ways to capture the attention and patronage of hoped for "customers." Human psychology is the same, whether it is a soap or a security system that is being "sold."

Thus, charging fees to users of services seems likely to discourage use of those services. On the other hand, totally open access to all services may create an overload and uneven use by some, beyond a "fair share." One way to overcome both of these problems might be to establish a kind of voucher system entitling each LHA to a certain number of free "service calls" beyond which the LHA would have to pay fixed charges. Even such payments could be made an allowable expense in the LHA budget. The voucher system is attractive in that it simultaneously subsidizes the system while promoting its use. This could also be applicable to management personnel in multi-family assisted housing. Although a voucher approach probably does not apply to the private sector, a compatible, financially equitable approach will need to be developed if members of the private sector are expected to use the information system.

Another question, and perhaps the most fundamental one, is who is going to subsidize those services for which fees are not charged? It is possible that if the provision of "hardware"

catalogs and product lists is offered as a service, this could become a source of revenue from manufacturers who are so listed, but it seems unlikely that this service, which has many ramifications needing careful study, could possibly underwrite the entire range of recommended forms of assistance. It is the recommendation of this report that the Department of Housing and Urban Development assume the financial responsibility to initiate this program as a natural corollary to and outgrowth of its several other efforts to improve the quality of housing management. Initiating the program also imposes an obligation to underwrite a major portion of its ongoing operating costs, at least until the level of services is developed to the point where sources of income can be readily identified and logically developed without sacrificing desired user participation in the system.

GETTING GOING

This report has emphasized how important it is to the success of the proposed information system for it to establish and maintain an impartial posture toward those organizations which are currently active in various aspects of housing management. Participation in an information system such as the one proposed, depends upon its attractiveness and indicated benefits to potential users from these various segments of the housing management field. Thus, if cooperation with the system is expected on a number of issues, including such things as publicizing the services offered and agreeing to share resources through an inter-library loan agreement, each constituency and its leadership must feel that its interests are being represented and protected fairly. Their sustained participation cannot be expected if their own programs are adversely affected by the actions of an information system. Clearly, if one of the major objectives of an information system is to foster the sharing of information between individuals and institutions in the public, publicly assisted, and private sectors, long range implementation plans must lay the groundwork for an independent entity, capable of working successfully with all of the major organizations.

Transforming an information system from the paper proposal stage into a fully functioning, mature, and independent entity will be far from easy. There are a number of questions which need answering:

- Who will be the sponsoring and primary funding agency to enable start-up and continuing operations?
- Who is empowered to receive money from the sponsoring agency?

- Who hires and fires the director and staff?
- Who determines and reviews policy?

Questions such as these may call for temporary arrangements, some of which can be expected to be significantly altered over time as experience dictates.

For the reasons outlined earlier in the report, it is clear that there must be a funding agency. It also seems inevitable to turn to HUD to play that role. HUD is the single agency in the U.S. with both the financial capacity and the concern to do this. In plain language, unless HUD does it, it won't be done. There will be no information system, at least not one in the terms described in this report, responding to the needs shown to exist. Therefore, HUD should be expected to provide both start-up monies and operating subsidies. But, HUD should NOT run the organization. The survey findings clearly show that it is to HUD's interest to keep its distance, from an operational standpoint.

If it were practical to translate this information system concept into being without singling out any one of the existing organizations to rely upon, this would be the recommendation of the report. To try to establish a new organization at this time, however, and to have it both develop widespread credibility and undertake the task of organizing and operating an information system, seems like a case of double jeopardy. Rather, a single, well-established organization, experienced in the housing field, seems a better vehicle to rely upon at this stage. It is therefore recommended that the National Association of Housing and Redevelopment Officials (NAHRO) be that organization. It should be charged with the responsibility for moving the information system from its present embryonic state to a point where it no longer needs such outside assistance. When the system becomes established, the short term role recommended in this report for NAHRO, would no longer be necessary, and the system should function without it. The reasons why NAHRO is recommended for this role are:

- NAHRO has both interest and experience in information transfer, as evidenced by its role in such programs as the PHMIP-TPP product marketing effort.
- NAHRO has experience with many aspects of a regional system, which would be relevant in establishing the TACs themselves and their relationship to the national clearinghouse. NAHRO has organized and worked with regional councils as a way to promote its own effort in behalf of its constituency which consists primarily of those involved in the public sector.

- NAHRO is located in Washington, D.C., the recommended site for the proposed national clearinghouse. At least one major institution (IREM) would probably find it difficult to provide direct staff assistance that far from its central office in Chicago.
- NAHRO, as an organization, is composed of a number of individuals who have been concerned with and actively involved in housing-related issues for several decades. This wealth of experience should be invaluable in helping to perceive and balance the interests of each of the primary institutions.
- NAHRO has had lengthy experience in working with a number of other organizations of varying outlooks on issues of mutual concern.
- NAHRO, like several other organizations, has indicated an interest in assisting the development of an information system.

The functions that NAHRO would be called upon to perform in the start-up phase of the information system would include at least the following:

- Organize an independent advisory council to develop policy and assist the staff of the information system to design programs responsive to user needs. Advisory council members should represent all of the major participants in housing management. It is essential that representatives of NCHM and IREM, as well as of NAHRO, be invited to become members of this council. As the information system grows in stature and capability, the advisory council would take on the more comprehensive duties typically performed by a Board of Directors.
- Provide staff assistance for the fledgling organization. Even before the system brings its own staff "on board," there will be a need for staff assistance. Such work as drafting job descriptions, handling correspondence, and preparing organizational minutes, must be done if the system is to be launched.
- Hire a director to manage the information system. The director, in turn, with the help of the advisory council, will appoint the TAC directors.

These and other short term services are necessary to the long term success of the system.

There is no single information system currently in operation that is sufficiently similar to the one proposed in this report to provide a source of comparison for start-up costs and annual expenditures. Nevertheless, elements of existing clearinghouses and projections of the space requirements, staffing levels, and services of the proposed management information clearinghouse and regional technical assistance centers provide some indication of the range of costs that can be anticipated. With respect to the clearinghouse function that is recommended for Washington, D.C., the first year costs are likely to be in the neighborhood of \$125,000. In subsequent years, operating costs of \$100,000 can be expected. Office equipment, telephone installation, printing, staff recruitment, and similar items account for the higher costs in the first year. Likewise, the regional technical assistance centers are estimated to cost about \$75,000 per year per center, with an additional cost of \$15,000 for each center during the initial year.

It should be emphasized that these figures are only approximations. Until job descriptions are written, center locations determined, and, most importantly, services are agreed upon, it is not possible to be any more precise. The amounts that are noted do take into account the cost of renting office space. To the degree to which any portion of the system were to operate from existing and shared space, the annual costs might run somewhat less than indicated. Finally, the cost estimates are gross estimates. They do not take into account income that might be received by the system. Therefore, if HUD were to include the cost of services purchased by an LHA as an allowable expenditure (and were to increase LHA operating budgets accordingly), the centers might require a considerably lower subsidy. Similarly, ^{publicly}~~publically~~-assisted and private housing entities are likely to purchase services from the technical assistance centers as such services are shown to be of value over time.

APPENDIX A

SAMPLE OF INTERVIEW FORM

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*****
*          TO BE FILLED IN BY          *
*          HR&D INTERVIEWER           *
*          DURING TELEPHONE INTERVIEW  *
*****
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PROMISE OF CONFIDENTIALITY: NO INDIVIDUALS OR HOUSING AUTHORITIES
WILL BE IDENTIFIED IN ANY REPORTING
OF THIS INFORMATION.

1) Please rate each of the following responsibilities in terms
of their importance to you and your housing authority. Each
responsibility may be rated: Very Important; Important,
Slightly Important; Not Important.

	<u>Very</u> <u>Important</u>	<u>Important</u>	<u>Slightly</u> <u>Important</u>	<u>Not</u> <u>Important</u>
a) Rent levels, collection and tenant accounts				
b) Property maintenance				
c) Tenant application, selection and occupancy				
d) Tenant social, health and job opportunity services				
e) Management-resident communication				
f) Management-HUD communication				
g) Management communication with state and local agencies				
h) Budget and related matters				
i) Improvement of buildings and grounds				

<u>Very</u> <u>Important</u>	<u>Important</u>	<u>Slightly</u> <u>Important</u>	<u>Not</u> <u>Important</u>
---------------------------------	------------------	-------------------------------------	--------------------------------

- j) Security arrangements
- k) Personnel administration and employee relations
- l) Public relations
- m) Internal auditing & control
- n) Other _____
(please specify)

2) For which of the following responsibilities do you feel that you and/or your staff needs more training?

<u>Definitely</u>	<u>Might Be</u> <u>Helpful</u>	<u>Not</u> <u>Necessary</u>
-------------------	-----------------------------------	--------------------------------

- a) Rent Levels, collection and tenant accounts
- b) Property maintenance
- c) Tenant application, selection and occupancy
- d) Tenant social, health and job opportunity services
- e) Management-resident communication
- f) Management-HUD communication
- g) Management communication with state and local agencies
- h) Budget and related matters

4) When you want information about any aspect of housing management, where do you turn first?

5) Rate each of the following sources of housing management information in terms of their usefulness to you.

	<u>Very Useful</u>	<u>Somewhat Useful</u>	<u>Not Useful</u>	<u>No Experience</u>
--	--------------------	------------------------	-------------------	----------------------

a) HUD workshops

b) NAHRO workshops
(National Association of Housing and Redevelopment Officials)

c) IREM workshops (Institute of Real Estate Management)

d) NCHM workshops (National Center for Housing Management)

e) Community college and/or university courses

f) Technical school courses

g) Apprenticeships

h) State Department of Community Affairs or other state agency

6) Which of the following written documents do you refer to on a regular and frequent basis? Please indicate which of these you find most useful.

	<u>Yes</u>	<u>No</u>
--	------------	-----------

a) HUD regulations and guidelines

b) HUD Challenge

c) NAHRO Newsletter

d) NAHRO Journal of Housing

e) IREM Journal of Property Management

Yes No

f) Housing Affairs Letter

g) Technical publications

h) Product catalogues

i) Other _____
(please specify)

7) What is your approximate annual budget for such non-salary administrative expenses as:

a) publications \$ _____

b) membership dues and fees \$ _____

c) travel \$ _____

d) miscellaneous \$ _____

8) Rate each of the following sources according to the extent to which you find useful the information and assistance you get from the source relative to your management responsibilities. Each position may be rated: Very Useful; Somewhat Useful, Not Useful; No Experience.

Very Useful Somewhat Useful Not Useful No Experience

a) HUD area office representatives

b) HUD regional office representatives

c) HUD Washington Office

d) NAHRO regional councils

e) NAHRO national office staff

f) Other LHA directors and managers

g) Private consultants

h) University technical resources

Very Useful Somewhat Useful Not Useful No Experience

i) State government personnel

j) Local government personnel

k) Other _____
(please specify)

9) Do you now have the opportunity to get management assistance from a state or regional technical assistance center?

Yes No

If yes, what is the name and address?

0) Do you and members of your staff attend workshops, seminars and other training sessions in your region?

Yes
 (if yes continue
 with next question)

No
 (if no skip to
 number thirteen)

1) What is the total number of such training sessions that you and your staff attended in 1974? (For example: If three staff members attended the same conference, consider that three separate training sessions.) After answering this question skip to number fifteen.

2) If neither you nor any members of your staff have attended workshops, seminars or training sessions in your region, what are the principal reasons? If you check more than one reason, please indicate the most important reason.

Not enough time

Not enough funds

Location inconvenient

Subject matter not well presented
 in the past

Subject matter not of interest

Other _____
(please specify)

National Apartment Association

National Association for
Real Estate Brokers

National Association of
Home Builders

Other _____
(please specify)

19) If there were some particularly successful aspect of your LHA operation that could be useful to other LHAs, would you be willing to help lead a one or two day workshop at a regional technical assistance center?

Yes No Maybe _____
(clarify)

20) If a national clearinghouse and regional technical assistance centers on housing management were established, what services would you most want them to provide for you and for members of your staff? *(specify)*

APPENDIX B

RESULTS OF THE RANDOM SAMPLE USER SURVEY

Listed below are the results of the user survey which was administered to executive directors of eighty housing authorities across the nation. Results are listed by size category of authority. For the purposes of this report housing authorities were categorized as: 1) Very Small (0-100 units); 2) Small (101-200 units); Medium (201-700 units); Large (701 plus units). The results for each survey question for the total sample are also listed in this appendix.

- | | |
|---------------------------------------|--------|
| a. RESULTS FOR VERY SMALL AUTHORITIES | p. 105 |
| b. RESULTS FOR SMALL AUTHORITIES | p. 114 |
| c. RESULTS FOR MEDIUM AUTHORITIES | p. 123 |
| d. RESULTS FOR LARGE AUTHORITIES | p. 132 |
| e. RESULTS FOR TOTAL SAMPLE | p. 141 |

a-1 Rating of Responsibilities

	<u>Very</u> <u>Important</u>	<u>Important</u>	<u>Slightly</u> <u>Important</u>	<u>Not</u> <u>Important</u>
a) Rent levels, collection & tenant accounts	84.4	15.6	--	--
b) Property maintenance	78.1	21.9	--	--
c) Tenant application, selection & occupancy	78.1	21.9	--	--
d) Tenant social, health & job opportunity services	15.6	53.1	28.1	3.1
e) Management-resident communication	50.0	46.9	3.1	--
f) Management-HUD communication	59.4	37.5	3.1	--
g) Management commu- nication with state & local agencies	15.6	53.1	31.3	--
h) Budget & related matters	78.1	15.6	6.3	--
i) Improvement of buildings & grounds	43.8	50.0	3.1	3.1
j) Security arrange- ments	28.1	37.5	28.1	6.3
k) Personnel adminis- tration & employee relations	43.8	40.6	9.4	6.3
l) Public relations	40.6	46.9	9.4	3.1
m) Internal auditing & control	56.3	37.5	--	6.3

a-2 Need for Training

	<u>Definitely</u>	<u>Might Be Helpful</u>	<u>Not Necessary</u>
a) Rent levels, collection & tenant accounts	25.0	25.0	46.9
b) Property maintenance	25.0	37.5	37.5
c) Tenant application, selection & occupancy	21.9	40.6	37.5
d) Tenant social, health & job opportunity services	9.4	46.9	43.8
e) Management-resident communication	21.9	43.8	34.4
f) Management-HUD communication	40.6	40.6	18.8
g) Management communication with state & local agencies	15.6	53.1	28.1
h) Budget & related matters	46.9	37.5	15.6
i) Improvement of buildings & grounds	18.8	46.9	34.4
j) Security arrangements	12.5	37.5	46.9
k) Personnel administration & employee relations	6.3	37.5	56.3
l) Public relations	25.0	50.0	25.0
m) Internal auditing & control	21.9	53.1	21.9

a-3 Type of Training Preferred

	<u>Very Helpful</u>	<u>Helpful</u>	<u>Somewhat Helpful</u>	<u>Not Helpful</u>
a) More on-the-job training	53.1	31.3	3.1	12.5
b) Pre-job short courses	31.3	40.6	15.6	12.5
c) College degree curriculum in housing management	6.3	25.0	21.9	46.9
d) Combination of classroom or workshop instruction with on-the-job training	37.5	34.4	18.8	9.4

-4 Information Source Consulted First

<u>HUD Area Office</u>	<u>Other LHA</u>	<u>Other</u>
78.1	9.4	12.5

a-5 Usefulness of Management Education and Training Resources

	<u>Very Useful</u>	<u>Somewhat Useful</u>	<u>Not Useful</u>	<u>No Experience</u>
a) HUD workshops	59.4	18.8	6.3	15.6
b) NAHRO workshops (National Association of Housing & Redevelop- ment Officials)	18.8	9.4	6.3	65.6
c) IREM workshops (Institute of Real Estate Management)	6.3	--	9.4	84.4
d) NCHM workshops (National Center for Housing Management)	6.3	9.4	12.5	71.9
e) Community college and/ or university courses	12.5	9.4	15.6	62.5
f) Technical school courses	3.1	9.4	15.6	71.9
g) Apprenticeships	3.1	9.4	18.8	68.8
h) State Department of Community Affairs or other state agency	12.5	21.9	12.5	53.1

a-6 Usefulness of Written Documents

	<u>Yes</u>	<u>No</u>
a) HUD regulations and guidelines	96.9	3.1
b) HUD Challenge	15.6	84.4
c) NAHRO Newsletter	40.6	59.4
d) NAHRO Journal of Housing	15.6	84.4
e) IREM Journal of Property Management	6.3	90.6
f) Housing Affairs Letter	31.3	68.8
g) Technical publications	31.3	68.8
h) Product catalogues	46.9	53.1

a-7 Budget Allocations

<u>Budget</u>	<u>0-50</u>	<u>51-100</u>	<u>101-200</u>	<u>201-300</u>	<u>301+</u>
Publications	90.6	6.3	3.1	--	--
Membership Dues and Fees	84.4	9.4	--	6.3	--
	<u>0-250</u>	<u>251-500</u>	<u>501-1000</u>	<u>1001-2000</u>	<u>2000+</u>
Travel	46.9	37.5	3.1	9.4	3.1

a-8 Usefulness of Assistance Resources

	<u>Very Useful</u>	<u>Somewhat Useful</u>	<u>Not Useful</u>	<u>No Experience</u>
a) HUD area office representatives	90.6	9.4	--	--
b) HUD regional office representatives	43.8	37.5	6.3	12.5
c) HUD Washington office	12.5	25.0	12.5	50.0
d) NAHRO regional councils	--	21.9	9.4	68.8
e) NAHRO national office staff	--	15.6	12.5	71.9
f) Other LHA directors & managers	53.1	25.0	6.3	15.6
g) Private consultants	15.6	15.6	6.3	62.5
h) University technical resources	6.3	6.3	12.5	75.0
i) State government personnel	6.3	18.8	9.4	65.6
j) Local government personnel	18.8	34.4	9.4	37.5

a-9 Availability of Technical Assistance

<u>Yes</u>	<u>No</u>
28.1	71.9

a-10 Attendance at Training Sessions

<u>Yes</u>	<u>No</u>
78.1	21.9

a-11 Extent of Attendance at Training Sessions

<u>1-5 Sessions</u>	<u>6-10 Sessions</u>	<u>11-15 Sessions</u>	<u>16+ Sessions</u>
91.6	8.3	--	--

a-12 Reasons for Not Attending Training Sessions

Not enough time	25.0
Not enough funds	12.5
Location inconvenient	25.0
Subject matter not well presented in the past	12.5
Subject matter not of interest	12.5
Other	12.5

a-13 Attendance at Training Sessions if Objections Overcome

<u>Yes</u>	<u>No</u>
75.0	25.0

a-14 Use of Private Consultants

<u>Yes</u>	<u>No</u>
6.3	93.8

a-15 Usefulness of Private Consultants

Very Useful	100.0
Useful	--
Somewhat Useful	--
Not Useful	--

a-16 Reasons for Not Using Private Consultants

Services not needed	40.0
No money	23.3
Not familiar with management con- sulting firms	13.3
No consulting firms in area	16.7
Other	6.7

a-17 Preferred Mode of Communication

In person	34.4
By phone	40.6
By mail	18.8

a-18 Membership in Professional Organizations

	<u>Yes</u>	<u>No</u>
NAHRO	50.0	50.0
IREM	00.0	100.0
National Society of Professional Resident Managers	00.0	100.0
National Apartment Association	00.0	100.0
National Association for Real Estate Brokers	3.1	96.9
National Association of Home Builders	3.1	96.9

a-19 Willingness to Lead a Workshop

<u>Yes</u>	<u>No</u>	<u>Maybe</u>
31.3	46.9	21.9

b-1 Rating of Responsibilities

	<u>Very</u> <u>Important</u>	<u>Important</u>	<u>Slightly</u> <u>Important</u>	<u>Not</u> <u>Important</u>
a) Rent levels, collection & tenant accounts	80.0	20.0	--	--
b) Property maintenance	73.3	20.0	6.7	--
c) Tenant application, selection & occupancy	46.7	46.7	6.7	--
d) Tenant social, health & job opportunity services	13.3	66.7	13.3	6.7
e) Management-resident communication	73.3	20.0	6.7	--
f) Management-HUD communication	60.0	33.3	6.7	--
g) Management commu- nication with state & local agencies	33.3	46.7	20.0	--
h) Budget & related matters	86.7	13.3	--	--
i) Improvement of buildings & grounds	40.0	53.3	6.7	--
j) Security arrange- ments	20.0	40.0	33.3	6.7
k) Personnel adminis- tration & employee relations	60.0	33.3	--	6.7
l) Public relations	20.0	73.3	6.7	--
m) Internal auditing & control	66.7	33.3	--	--

b -2 Need for Training

	<u>Definitely</u>	<u>Might Be Helpful</u>	<u>Not Necessary</u>
a) Rent levels, collection & tenant accounts	33.3	33.3	26.7
b) Property maintenance	40.0	40.0	13.3
c) Tenant application, selection & occupancy	26.7	46.7	20.0
d) Tenant social, health & job opportunity services	33.3	40.0	20.0
e) Management-resident communication	20.0	60.0	13.3
f) Management-HUD communication	20.0	66.7	6.7
g) Management communication with state & local agencies	13.3	53.3	26.7
h) Budget & related matters	60.0	26.7	6.7
i) Improvement of buildings & grounds	33.3	40.0	20.0
j) Security arrangements	13.3	40.0	40.0
k) Personnel administration & employee relations	26.7	46.7	20.0
l) Public relations	20.0	46.7	26.7
m) Internal auditing & control	60.0	6.7	26.7

b -3 Type of Training Preferred

	<u>Very Helpful</u>	<u>Helpful</u>	<u>Somewhat Helpful</u>	<u>Not Helpful</u>
a) More on-the-job training	53.3	26.7	20.0	--
b) Pre-job short courses	13.3	46.7	33.3	6.7
c) College degree curriculum in housing management	40.0	33.3	13.3	6.7
d) Combination of classroom or workshop instruction with on-the-job training	46.7	40.0	13.3	--

b -4 Information Source Consulted First

<u>HUD Area Office</u>	<u>Other LHA</u>	<u>Other</u>
86.7	6.7	--

b-5 Usefulness of Management Education and Training Resources

	<u>Very Useful</u>	<u>Somewhat Useful</u>	<u>Not Useful</u>	<u>No Experience</u>
a) HUD workshops	73.3	20.0	--	6.7
b) NAHRO workshops (National Association of Housing & Redevelop- ment Officials)	20.0	26.7	6.7	46.7
c) IREM workshops (Institute of Real Estate Management)	--	13.3	6.7	80.0
d) NCHM workshops (National Center for Housing Management)	13.3	13.3	--	73.3
e) Community college and/ or university courses	20.0	46.7	--	33.3
f) Technical school courses	--	26.7	--	73.3
g) Apprenticeships	33.3	13.3	--	53.3
h) State Department of Community Affairs or other state agency	13.3	40.0	--	46.7

b-6 Usefulness of Written Documents

	<u>Yes</u>	<u>No</u>
a) HUD regulations and guidelines	100.0	00.0
b) HUD Challenge	26.7	73.3
c) NAHRO Newsletter	66.7	33.3
d) NAHRO Journal of Housing	40.0	60.0
e) IREM Journal of Property Management	00.0	100.0
f) Housing Affairs Letter	40.0	60.0
g) Technical publications	46.7	53.3
h) Product catalogues	80.0	20.0

b-7 Budget Allocations

<u>Budget</u>	<u>0-50</u>	<u>51-100</u>	<u>101-200</u>	<u>201-300</u>	<u>301+</u>
Publications	66.7	6.7	6.7	6.7	13.3
Membership Dues and Fees	46.7	40.0	6.7	6.7	--
	<u>0-250</u>	<u>251-500</u>	<u>501-1000</u>	<u>1001-2000</u>	<u>2001+</u>
Travel	33.3	26.7	33.3	6.7	--

b-8 Usefulness of Assistance Resources

	<u>Very Useful</u>	<u>Somewhat Useful</u>	<u>Not Useful</u>	<u>No Experience</u>
a) HUD area office representatives	93.3	6.7	--	--
b) HUD regional office representatives	40.0	60.0	--	--
c) HUD Washington office	6.7	40.0	20.0	33.3
d) NAHRO regional councils	6.7	40.0	--	53.3
e) NAHRO national office staff	6.7	26.7	6.7	60.0
f) Other LHA directors & managers	80.0	6.7	6.7	6.7
g) Private consultants	13.3	--	13.3	73.3
h) University technical resources	6.7	46.7	--	46.7
i) State government personnel	33.3	13.3	13.3	40.0
j) Local government personnel	53.3	33.3	--	13.3

b-9 Availability of Technical Assistance

<u>Yes</u>	<u>No</u>
26.7	73.3

b-10 Attendance at Training Sessions

<u>Yes</u>	<u>No</u>
86.7	13.3

b-11 Extent of Attendance at Training Sessions

<u>1-5 Sessions</u>	<u>6-10 Sessions</u>	<u>11-15 Sessions</u>	<u>16+ Sessions</u>
63.1	7.7	15.4	7.7

b-12 Reasons for Not Attending Training Sessions

Not enough time	100.0
Not enough funds	--
Location inconvenient	--
Subject matter not well presented in the past	--
Subject matter not of interest	--
Other	--

b-13 Attendance at Training Sessions if Objections Overcome

<u>Yes</u>	<u>No</u>
50.0	50.0

b-14 Use of Private Consultants

<u>Yes</u>	<u>No</u>
00.0	100.0

b-15 Usefulness of Private Consultants

Very useful	00.0
Useful	00.0
Somewhat useful	00.0
Not useful	00.0

b-16 Reasons for Not Using Private Consultants

Services not needed	53.3
No money	12.5
Not familiar with management con- sulting firms	12.5
No consulting firms in area	12.5
Other	--

b-17 Preferred Mode of Communication

In person	33.3
By phone	40.0
By mail	13.3

b-18 Membership in Professional Organizations

	<u>Yes</u>	<u>No</u>
NAHRO	73.3	26.7
IREM	6.7	93.3
National Society of Professional Resident Managers	6.7	93.3
National Apartment Association	00.0	100.0
National Association for Real Estate Brokers	00.0	100.0
National Association of Home Builders	00.0	100.0

b-19 Willingness to Lead a Workshop

<u>Yes</u>	<u>No</u>	<u>Maybe</u>
60.0	26.7	13.3

C-1 Rating of Responsibilities

	<u>Very Important</u>	<u>Important</u>	<u>Slightly Important</u>	<u>Not Important</u>
a) Rent levels, collection & tenant accounts	100.0	--	--	--
b) Property maintenance	88.2	11.8	--	--
c) Tenant application, selection & occupancy	76.5	23.5	--	--
d) Tenant social, health & job opportunity services	23.5	58.8	11.8	5.9
e) Management-resident communication	47.1	41.2	11.8	--
f) Management-HUD communication	64.7	35.3	--	--
g) Management commu- nication with state & local agencies	29.4	52.9	11.8	5.9
h) Budget & related matters	76.5	23.5	--	--
i) Improvement of buildings & grounds	52.9	35.3	5.9	5.9
j) Security arrange- ments	29.4	41.2	17.6	11.8
k) Personnel adminis- tration & employee relations	70.6	23.5	--	5.9
l) Public relations	29.4	64.7	5.9	--
m) Internal auditing & control	52.9	41.2	--	5.9

C-2 Need for Training

	<u>Definitely</u>	<u>Might Be Helpful</u>	<u>Not Necessary</u>
a) Rent levels, collection & tenant accounts	47.1	41.2	11.8
b) Property maintenance	29.4	41.2	29.4
c) Tenant application, selection & occupancy	47.1	35.3	17.6
d) Tenant social, health & job opportunity services	17.6	70.6	11.8
e) Management-resident communication	35.3	52.9	11.8
f) Management-HUD communication	5.9	76.5	17.6
g) Management communication with state & local agencies	23.5	64.7	11.8
h) Budget & related matters	35.3	47.1	17.6
i) Improvement of buildings & grounds	17.6	64.7	17.6
j) Security arrangements	23.5	41.2	35.3
k) Personnel administration & employee relations	35.3	47.1	17.6
l) Public relations	23.5	64.7	11.8
m) Internal auditing & control	47.1	29.4	23.5

c-3 Type of Training Preferred

	<u>Very Helpful</u>	<u>Helpful</u>	<u>Somewhat Helpful</u>	<u>Not Helpful</u>
a) More on-the-job training	47.1	23.5	17.6	5.9
b) Pre-job short courses	23.5	47.1	23.5	5.9
c) College degree curriculum in housing management	23.5	29.4	29.4	17.6
d) Combination of classroom or workshop instruction with on-the-job training	76.5	--	17.6	5.9

c-4 Information Source Consulted First

<u>HUD Area Office</u>	<u>Other LHA</u>	<u>Other</u>
64.7	11.8	11.8

c-5 Usefulness of Management Education and Training Resources

	<u>Very Useful</u>	<u>Somewhat Useful</u>	<u>Not Useful</u>	<u>No Experience</u>
a) HUD workshops	58.8	35.3	5.9	--
b) NAHRO workshops (National Association of Housing & Redevelop- ment Officials)	17.6	64.7	5.9	11.8
c) IREM workshops (Institute of Real Estate Management)	11.8	5.9	5.9	76.5
d) NCHM workshops (National Center for Housing Management)	5.9	17.6	5.9	70.6
e) Community college and/ or university courses	11.8	29.4	--	58.8
f) Technical school courses	11.8	35.3	--	52.9
g) Apprenticeships	11.8	23.5	5.9	58.8
h) State Department of Community Affairs or other state agency	29.4	29.4	11.8	29.4

c-6 Usefulness of Written Documents

	<u>Yes</u>	<u>No</u>
a) HUD regulations and guidelines	100.0	00.0
b) HUD Challenge	35.3	64.7
c) NAHRO Newsletter	76.5	23.5
d) NAHRO Journal of Housing	70.6	29.4
e) IREM Journal of Property Management	---	94.1
f) Housing Affairs Letter	29.4	64.7
g) Technical publications	29.4	64.7
h) Product catalogues	52.9	47.1

c-7 Budget Allocations

<u>Budget</u>	<u>0-50</u>	<u>51-100</u>	<u>101-200</u>	<u>201-300</u>	<u>301+</u>
Publications	29.4	23.5	17.6	23.5	5.9
Membership Fees and Dues	11.8	17.6	47.1	5.9	17.6
	<u>0-250</u>	<u>251-500</u>	<u>501-1000</u>	<u>1001-2000</u>	<u>2001+</u>
Travel	17.6	11.8	11.8	41.2	17.6

c-8 Usefulness of Assistance Resources

	<u>Very Useful</u>	<u>Somewhat Useful</u>	<u>Not Useful</u>	<u>No Experience</u>
a) HUD area office representatives	82.4	17.6	--	--
b) HUD regional office representatives	23.5	47.1	11.8	17.6
c) HUD Washington office	11.8	29.4	35.3	23.5
d) NAHRO regional councils	17.6	29.4	17.6	35.3
e) NAHRO national office staff	5.9	35.3	23.5	35.3
f) Other LHA directors & managers	47.1	41.2	11.8	--
g) Private consultants	11.8	11.8	11.8	64.7
h) University technical resources	17.6	11.8	5.9	64.7
i) State government personnel	17.6	41.2	23.5	17.6
j) Local government personnel	23.5	52.9	11.8	11.8

c-9 Availability of Technical Assistance

<u>Yes</u>	<u>No</u>
23.5	76.5

c-10 Attendance at Training Sessions

<u>Yes</u>	<u>No</u>
94.1	5.9

c-11 Extent of Attendance at Training Sessions

<u>1-5 Sessions</u>	<u>6-10 Sessions</u>	<u>11-15 Sessions</u>	<u>16+ Sessions</u>
43.9	31.4	12.6	12.6

c-12 Reasons for Not Attending Training Sessions

Not enough time	100.0
Not enough funds	--
Location inconvenient	--
Subject matter not well presented in the past	--
Subject matter not of interest	--
Other	--

c-13 Attendance at Training Sessions if Objections Overcome

<u>Yes</u>	<u>No</u>
100.0	--

c-14 Use of Private Consultants

<u>Yes</u>	<u>No</u>
5.9	94.1

c-15 Usefulness of Private Consultants

Very Useful	100.0
Useful	--
Somewhat Useful	--
Not Useful	--

c-16 Reasons for Not Using Private Consultants

Services not needed	62.5
No money	12.5
Not familiar with management con- sulting firms	12.5
No consulting firms in area	12.5
Other	--

c-17 Preferred Mode of Communication

In person	35.3
By phone	52.9
By mail	5.9

c-18 Membership in Professional Organizations

	<u>Yes</u>	<u>No</u>
NAHRO	94.1	5.9
IREM	5.9	94.1
National Society of Professional Resident Managers	00.0	100.0
National Apartment Association	5.9	94.1
National Association for Real Estate Brokers	5.9	94.1
National Association of Home Builders	00.0	100.0

c-19 Willingness to Lead a Workshop

<u>Yes</u>	<u>No</u>	<u>Maybe</u>
58.8	23.5	17.6

d -1 Rating of Responsibilities

	<u>Very Important</u>	<u>Important</u>	<u>Slightly Important</u>	<u>Not Important</u>
a) Rent levels, collection & tenant accounts	71.4	28.6	--	--
b) Property maintenance	100.0	--	--	--
c) Tenant application, selection & occupancy	57.1	42.9	--	--
d) Tenant social, health & job opportunity services	42.9	42.9	14.3	--
e) Management-resident communication	85.7	14.3	--	--
f) Management-HUD communication	42.9	28.6	28.6	--
g) Management commu- nication with state & local agencies	57.1	14.3	14.3	14.3
h) Budget & related matters	85.7	14.3	--	--
i) Improvement of buildings & grounds	71.4	28.6	--	--
j) Security arrange- ments	57.1	28.6	14.3	--
k) Personnel adminis- tration & employee relations	71.4	28.6	--	--
l) Public relations	57.1	28.6	14.3	--
m) Internal auditing & control	71.4	14.3	14.3	--

d-2 Need for Training

	<u>Definitely</u>	<u>Might Be Helpful</u>	<u>Not Necessary</u>
a) Rent levels, collection & tenant accounts	14.3	57.1	28.6
b) Property maintenance	42.9	42.9	14.3
c) Tenant application, selection & occupancy	42.9	28.6	28.6
d) Tenant social, health & job opportunity services	28.6	28.6	42.9
e) Management-resident communication	14.3	85.7	--
f) Management-HUD communication	14.3	57.1	28.6
g) Management communication with state & local agencies	28.6	28.6	42.9
h) Budget & related matters	28.6	57.1	14.3
i) Improvement of buildings & grounds	14.3	71.4	14.3
j) Security arrangements	28.6	57.1	14.3
k) Personnel administration & employee relations	57.1	42.9	--
l) Public relations	28.6	57.1	14.3
m) Internal auditing & control	28.6	71.4	--

d-3 Type of Training Preferred

	<u>Very Helpful</u>	<u>Helpful</u>	<u>Somewhat Helpful</u>	<u>Not Helpful</u>
a) More on-the-job training	42.9	57.1	--	--
b) Pre-job short courses	14.3	42.9	--	42.9
c) College degree curriculum in housing management	57.1	14.3	14.3	14.3
d) Combination of classroom or workshop instruction with on-the-job training	85.7	14.3	--	--

d-4 Information Source Consulted First

<u>HUD Area Office</u>	<u>Other LHA</u>	<u>Other</u>
14.3	14.3	57.1

d-5 Usefulness of Management Education and Training Resources

	<u>Very Useful</u>	<u>Somewhat Useful</u>	<u>Not Useful</u>	<u>No Experience</u>
a) HUD workshops	57.1	42.9	--	--
b) NAHRO workshops (National Association of Housing & Redevelop- ment Officials)	85.7	14.3	--	--
c) IREM workshops (Institute of Real Estate Management)	--	14.3	14.3	71.4
d) NCHM workshops (National Center for Housing Management)	14.3	--	--	85.7
e) Community college and/ or university courses	28.6	28.6	--	42.9
f) Technical school courses	--	42.9	--	57.1
g) Apprenticeships	28.6	28.6	--	42.9
h) State Department of Community Affairs or other state agency	14.3	71.4	--	14.3

d -6 Usefulness of Written Documents

	<u>Yes</u>	<u>No</u>
a) HUD regulations and guidelines	100.0	00.0
b) HUD Challenge	42.9	57.1
c) NAHRO Newsletter	100.0	00.0
d) NAHRO Journal of Housing	85.7	14.3
e) IREM Journal of Property Management	14.3	85.7
f) Housing Affairs Letter	57.1	42.9
g) Technical publications	42.9	57.1
h) Product catalogues	42.9	57.1

d -7 Budget Allocations

<u>Budget</u>	<u>0-50</u>	<u>51-100</u>	<u>101-200</u>	<u>201-300</u>	<u>301+</u>
Publications	--	--	14.3	14.3	71.4
Membership Dues and Fees	--	--	--	--	100.0
	<u>0-250</u>	<u>251-500</u>	<u>501-1000</u>	<u>1001-2000</u>	<u>2001+</u>
Travel	--	--	--	14.3	85.7

d-8 Usefulness of Assistance Resources

	<u>Very Useful</u>	<u>Somewhat Useful</u>	<u>Not Useful</u>	<u>No Experience</u>
a) HUD area office representatives	57.1	42.9	--	--
b) HUD regional office representatives	28.6	57.1	14.3	--
c) HUD Washington office	57.1	28.6	14.3	--
d) NAHRO regional councils	28.6	71.4	--	--
e) NAHRO national office staff	42.9	42.9	14.3	--
f) Other LHA directors & managers	85.7	--	14.3	--
g) Private consultants	--	71.4	28.6	--
h) University technical resources	14.3	42.9	14.3	28.6
i) State government personnel	28.6	71.4	--	--
j) Local government personnel	42.9	28.6	28.6	--

d-9 Availability of Technical Assistance

<u>Yes</u>	<u>No</u>
28.6	71.4

d-10 Attendance at Training Sessions

<u>Yes</u>	<u>No</u>
100.0	00.0

d-11 Extent of Attendance at Training Sessions

<u>1-5 Sessions</u>	<u>6-10 Sessions</u>	<u>11-15 Sessions</u>	<u>16+ Sessions</u>
28.6	14.3	14.3	42.9

d-12 Reasons for Not Attending Training Sessions

Not enough time	NA
Not enough funds	NA
Location inconvenient	NA
Subject matter not well presented in the past	NA
Subject matter not of interest	NA
Other	NA

d-13 Attendance at Training Sessions if Objections Overcome

<u>Yes</u>	<u>No</u>
NA	NA

d-14 Use of Private Consultants

<u>Yes</u>	<u>No</u>
42.9	57.1

d-15 Usefulness of Private Consultants

Very Useful	33.3
Useful	33.3
Somewhat Useful	33.3
Not Useful	--

d-16 Reasons for Not Using Private Consultants

Services not needed	75.0
No money	25.0
Not familiar with management con- sulting firms	--
No consulting firms in area	--
Other	--

d-17 Preferred Mode of Communication

In person	28.6
By phone	57.1
By mail	--
Other	14.3

d-18 Membership in Professional Organizations

	<u>Yes</u>	<u>No</u>
NAHRO	100.0	00.0
IREM	00.0	100.0
National Society of Professional Resident Managers	00.0	100.0
National Apartment Association	00.0	100.0
National Association for Real Estate Brokers	00.0	100.0
National Association of Home Builders	14.3	85.7

d-19 Willingness to Lead a Workshop

<u>Yes</u>	<u>No</u>	<u>Maybe</u>
71.4	--	28.6

e-1 Rating of Responsibilities

	<u>Very Important</u>	<u>Important</u>	<u>Slightly Important</u>	<u>Not Important</u>
a) Rent levels, collection & tenant accounts	85.9	14.1	--	--
b) Property maintenance	81.7	16.9	1.4	--
c) Tenant application, selection & occupancy	69.0	29.6	1.4	--
d) Tenant social, health & job opportunity services	19.7	56.3	19.7	4.2
e) Management-resident communication	57.7	36.6	5.6	--
f) Management-HUD communication	59.2	35.2	5.6	--
g) Management commu- nication with state & local agencies	26.8	47.9	22.5	2.8
h) Budget & related matters	80.3	16.9	2.8	--
i) Improvement of buildings & grounds	47.9	45.1	4.2	2.8
j) Security arrange- ments	29.6	38.0	25.4	7.0
k) Personnel adminis- tration & employee relations	56.3	33.8	4.2	5.6
l) Public relations	35.2	54.9	8.5	1.4
m) Internal auditing & control	59.2	35.2	1.4	4.2

e-2 Need for Training

	<u>Definitely</u>	<u>Might Be Helpful</u>	<u>Not Necessary</u>
a) Rent levels, collection & tenant accounts	35.2	31.0	29.6
b) Property maintenance	31.0	39.4	28.2
c) Tenant application, selection & occupancy	31.0	39.4	28.2
d) Tenant social, health & job opportunity services	18.3	49.3	31.0
e) Management-resident communication	23.9	53.5	21.1
f) Management-HUD communication	25.4	56.3	16.9
g) Management communication with state & local agencies	18.3	53.5	25.4
h) Budget & related matters	45.1	39.4	14.1
i) Improvement of buildings & grounds	21.1	52.1	25.4
j) Security arrangements	16.9	40.8	39.4
k) Personnel administration & employee relations	22.5	42.3	33.6
l) Public relations	23.9	53.5	21.1
m) Internal auditing & control	36.6	39.4	21.1

e-3 Type of Training Preferred

	<u>Very Helpful</u>	<u>Helpful</u>	<u>Somewhat Helpful</u>	<u>Not Helpful</u>
a) More on-the-job training	50.7	31.0	9.9	7.0
b) Pre-job short courses	23.9	39.4	23.9	12.7
c) College degree curriculum in housing management	22.5	26.8	21.1	28.2
d) Combination of classroom or workshop instruction with on-the-job training	53.5	23.9	16.9	5.6

e-4 Information Source Consulted First

<u>HUD Area Office</u>	<u>Other LHA</u>	<u>Other</u>
70.4	8.5	14.1

e-5 Usefulness of Management Education and Training Resources

	<u>Very Useful</u>	<u>Somewhat Useful</u>	<u>Not Useful</u>	<u>No Experience</u>
a) HUD workshops	62.0	25.4	4.2	8.5
b) NAHRO workshops (National Association of Housing & Redevelop- ment Officials)	25.4	26.8	5.6	42.3
c) IREM workshops (Institute of Real Estate Management)	5.6	5.6	8.5	80.3
d) NCHM workshops (National Center for Housing Management)	8.5	11.3	7.0	73.2
e) Community college and/ or university courses	15.5	23.9	7.0	53.5
f) Technical school courses	4.2	22.5	7.0	66.2
g) Apprenticeships	14.1	15.5	9.9	60.6
h) State Department of Community Affairs or other state agency	16.9	32.4	9.9	40.8

e-6 Usefulness of Written Documents

	<u>Yes</u>	<u>No</u>
a) HUD regulations and guidelines	98.6	1.4
b) HUD Challenge	25.4	74.6
c) NAHRO Newsletter	60.6	39.4
d) NAHRO Journal of Housing	40.8	59.2
e) IREM Journal of Property Management	4.2	93.0
f) Housing Affairs Letter	35.2	63.4
g) Technical publications	35.2	63.4
h) Product catalogues	54.9	45.1

e-7 Budget Allocations

<u>Budget</u>	<u>0-50</u>	<u>51-100</u>	<u>101-200</u>	<u>201-300</u>	<u>301+</u>
Publications	62.0	9.9	8.5	8.5	11.3
Membership Fee and Dues	50.7	16.9	12.7	5.6	14.1
	<u>0-250</u>	<u>251-500</u>	<u>501-1000</u>	<u>1001-2000</u>	<u>2001+</u>
Travel	88.7	4.2	4.2	1.4	1.4

e-8 Usefulness of Assistance Resources

	<u>Very Useful</u>	<u>Somewhat Useful</u>	<u>Not Useful</u>	<u>No Experience</u>
a) HUD area office representatives	85.9	14.1	--	--
b) HUD regional office representatives	36.6	46.5	7.0	9.9
c) HUD Washington office	15.5	29.6	19.7	35.2
d) NAHRO regional councils	8.5	32.4	8.5	50.7
e) NAHRO national office staff	7.0	14.1	14.1	53.5
f) Other LHA directors & managers	60.6	22.5	8.5	8.5
g) Private consultants	12.7	16.9	11.3	59.2
h) University technical resources	9.9	19.7	8.5	62.0
i) State government personnel	16.9	28.2	12.7	42.3
j) Local government personnel	29.6	38.0	9.9	22.5

e -9 Availability of Technical Assistance

<u>Yes</u>	<u>No</u>
26.8	73.2

e-10 Attendance at Training Sessions

<u>Yes</u>	<u>No</u>
85.9	14.1

e-11 Extent of Attendance at Training Sessions

<u>1-5 Sessions</u>	<u>6-10 Sessions</u>	<u>11-15 Sessions</u>	<u>16+ Sessions</u>
66.9	15.0	8.3	10.0

e-12 Reasons for Not Attending Training Sessions

Not enough time	36.4
Not enough funds	9.1
Location inconvenient	27.3
Subject matter not well presented in the past	9.1
Subject matter not of interest	9.1
Other	9.1

e-13 Attendance at Training Sessions if Objections Overcome

<u>Yes</u>	<u>No</u>
63.6	36.4

e -14 Use of Private Consultants

<u>Yes</u>	<u>No</u>
8.5	91.5

e-15 Usefulness of Private Consultants

Very Useful	66.67
Useful	66.67
Somewhat Useful	66.67
Not Useful	--

e -16 Reasons for Not Using Private Consultants

Services not needed	50.77
No money	23.08
Not familiar with management con- sulting firms	10.77
No consulting firms in area	9.23
Other	6.15

e -17 Preferred Mode of Communication

In person	33.8
By phone	45.1
By mail	12.7

e-18 Membership in Professional Organizations

	<u>Yes</u>	<u>No</u>
NAHRO	70.4	29.6
IREM	2.8	97.2
National Society of Professional Resident Managers	1.4	98.6
National Apartment Association	1.4	98.6
National Association for Real Estate Brokers	2.8	97.2
National Association of Home Builders	2.8	97.2

e-19 Willingness to Lead a Workshop

<u>Yes</u>	<u>No</u>	<u>Maybe</u>
47.9	32.4	19.7

APPENDIX C

EXPLANATION OF CROSS TABULATION PROCEDURES

The relationship between the responses to question number one ("...rate each of the following responsibilities in terms of their importance...") and question number two ("For which of the following responsibilities do you feel that you and/or your staff needs more training") of the interview form were investigated using a contingency table (cross-tabulation) analysis. The specific computer program used was the Subprogram CROSSTABS of the Statistical Package for the Social Sciences (SPSS). The joint frequency distributions which were obtained were not statistically analyzed by any test of significance or summarized by any standard measures of association, such as the contingency coefficient, phi, tau, gamma, etc.

Contingency Table
Sample Frequency Distribution
For a Single Responsibility

	Training Definitely	Training Might be Helpful	Training Not Needed
	1	2	3
Very Important	8.5%	23.9%	1.4%
	4	5	6
Important	14.1%	26.8%	14.1%
	7	8	9
Slightly Important	1.4%	2.8%	4.2%
	10	11	12
Not Important	0.0%	0.0%	1.4%

For each of the thirteen responsibilities that the respondents were asked to rate, a summary percentage was derived and then each of the summary percentages was ranked in relation to one another. Each summary percentage is the sum of the percentages in three of the twelve cells of the contingency table. The three cells which were combined to form the summary percentage included: 1) cell #1, the percentage of all people who found a responsibility "very important" and also felt that additional training was "definitely" needed; 2) cell #4, the percentage of all people who found a responsibility

"important" and also felt that additional training was "definitely" needed; and 3) cell #2, the percentage of all people who found a responsibility "very important" and also felt that additional training "might be necessary." The percentages in the remaining nine cells were not added to form the summary percentages.

The reason only three cells were included is basically a matter of judgment by the researchers. The researchers felt that one could reasonably exclude all cells where the responsibility was considered either "slightly important" or "not important." Likewise, the researchers excluded those cells where training was considered definitely "not needed." The one cell (cell #5) which was not excluded because it fell under either of these two categories was the cell where the percentages of all people who found a responsibility "important" and also felt training "might be helpful" was recorded. It was felt that the percentages in this cell were greatly inflated due to what we detected as a reluctance on the part of the respondents to say that a responsibility was less than "important" or that training was "not needed." The degree of inflation was impossible to estimate so it was decided to omit the percentage in cell 5 entirely.

Each of the summary percentages for each responsibility, as previously mentioned, was ranked according to their relative percentages. The highest percentage was assigned the lowest number; the lowest percentage the highest number. Where percentages were identical, the same number was assigned to both.

APPENDIX D
PHMIP PRODUCT CATALOG EVALUATION

The Public Housing Management Improvement Product Catalog, the catalog organized by OASIS (or Applied Science as it is now known), is divided into four major subject areas:

- administration and management
- management information systems
- maintenance and security
- resident services

Each of these categories contains approximately the same number of products, and each is further subdivided. For example, "administration and management" has been subdivided into:

- tenant selection and occupancy
- approaches to project management
- housing services
- personnel training

These in turn have been subdivided. For example, "personnel training" has been subdivided into:

- staff development and training
- housing management training
- maintenance training

The organization of the catalog appears to have been done logically with similar products grouped together. One major problem exists, though, in the lack of information the catalog contains. This catalog was to have been followed by one containing more complete descriptions, but this second catalog has not yet appeared. The descriptions contained in the first catalog are very brief. For each product the title of the product is given, a one sentence description of the problem which the product was to solve is provided, and a multiple sentence description of the product itself is given.

Detailed descriptions of the products have not been commonly made available. HUD area offices are supposed to have detailed descriptions of the products, although at least one area office consulted did not have this information. The lack of this information was a particular problem for area offices who were counseling TPP authorities on what products to use in their TPP applications. In some cases even the catalog containing the brief descriptions was not available. In the words of one HUD area office staff member: "The PHMIP program is so alien to us that the LHAs have more knowledge in this area than we do."

Even in the cases where both the catalog and the detailed descriptions were available, HUD area and regional staff personnel complained that the content of the descriptions was inconsistent. As HUD had not specified what information should be included in the product descriptions, the PHMIP authorities were left to develop their own reporting format. As might be expected there were variations in explicitness, depth, and candor among the descriptions prepared by the participating PHMIP authorities.

The inconsistent and often inadequate descriptions made it very difficult for HUD area and regional personnel to evaluate the merits of each product. Funds were not set aside for HUD personnel to make on-site visits to substantiate the claims made in the product descriptions. The lack of evaluation has caused problems for HUD personnel who must recommend products whose quality and applicability are unknown to them. Lacking guidelines, consistency, and evaluation, TPP and other non PHMIP authorities have had difficulties in determining the relative merits of products which might be appropriately used by their authorities.

APPENDIX E

PERSONS CONTACTED IN RESEARCH EFFORT

The following list contains the names of all those contacted in the course of our research effort. They are grouped into five categories: people knowledgeable in information systems, people familiar with document resources, people working at HUD Central Office, people working at HUD regional and area offices, and people with expertise relevant to other issues raised in the report. Unless otherwise specified, all those listed were contacted in person.

PEOPLE KNOWLEDGEABLE IN INFORMATION SYSTEMS

Concetta Capoen
Chief, Documentation and
Publication Branch
Information Services Division
HUD Office of International
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U.S. Department of Housing
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Interviewed: 11-12-75

Mindy Klein
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Educational Resources
Information Center/Early
Childhood Education
(ERIC/ECE)
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Urbana, IL 61801
Interviewed: 8-28-75

John Crotty
Director
National Clearinghouse for
Poison Control Centers
5401 Westbard Ave.
Bethesda, MD 20207
Interviewed: 9-30-75

Frank Mattas
Director
San Mateo Educational Resource
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Redwood City, CA 94063
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Susan Judd
Documentation Specialist
Information Services Division
HUD Office of International
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U.S. Department of Housing
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Michael Meshenberg
Director
Planning Advisory Service
American Society of Planning
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Interviewed: 10-24-75

Eleanor O'Mara
Member, Evaluation Staff
Project Officer/Monitor for
Clearinghouse
National Clearinghouse on Aging
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Agency on Aging
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William Over
Manager of Operations
National Criminal Justice
Reference Service
Law Enforcement Assistance
Administration
U.S. Department of Justice
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Project Director
National Rehabilitation
Information Center
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Rehabilitation Research and
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Helga Roth
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Voluntary Action Clearing-
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Donald Smith
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James Trew
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Science and Technology
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Smithsonian Science
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Olga Wise
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National Clearinghouse for
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PEOPLE FAMILIAR WITH DOCUMENT RESOURCES

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HUD Program Information
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Interviewed: 9-9-75

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Deputy Director, HUD Library
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Interviewed: 9-29-75

Mabel Wong
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PEOPLE WORKING AT HUD CENTRAL OFFICE

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Programs
U.S. Department of HUD
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Director Division of Housing
Research
Office of Research and
Demonstration
U.S. Department of HUD
Washington, D.C. 20410
Interviewed: 9-10-75

Grover Durnell
Director of Program
Development Division
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U.S. Department of HUD
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Interviewed: 9-10-75

Abner Silverman
Counselor to the Assistant
Secretary for Housing
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Interviewed: 10-14-75

Julian Lowe
Director of Technical
Memoranda Staff
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Kenneth R. Moul
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PEOPLE WORKING AT HUD REGIONAL AND AREA OFFICES

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PEOPLE WITH EXPERTISE RELEVANT TO OTHER ISSUES
RAISED IN THE REPORT

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Interviewed: 10-13-75

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Manpower Demonstration Research
Corporation
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Jack Shiver
President of NAHRO
National Association of Housing
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Samuel Simmons
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Margaret Thorpe
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APPENDIX E

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