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UNITED STATES GENERAL ACCOUNTING OFFICE  
WASHINGTON, D.C. 20548

COMMUNITY AND ECONOMIC  
DEVELOPMENT DIVISION

B-199825

AUGUST 29, 1980

The Honorable Moon Landrieu  
The Secretary of Housing and  
Urban Development

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Dear Mr. Secretary:

SUBJECT: More Improvements Can Be Made in HUD's  
Research and Technology Activities  
(CED-80-134)

We recently completed a review of the Department of Housing and Urban Development's (HUD's) research and technology activities. The purpose of our review was to identify actions HUD can take to improve its research and technology programs. Our review concentrated on those activities initiated within the past 3 years. Our observations are discussed below. More information on HUD's research and technology program is presented in the enclosure.

HUD has taken several positive steps over the past few years to strengthen its research and technology program. Such actions include improved in-house research capabilities, better product dissemination, and improved management procedures. Most representatives of research user groups with whom we talked also believe HUD research has improved.

HUD has also made progress in achieving a more focused and responsive research program--a goal which research managers have striven to achieve for the last several years. However, further progress is limited by the fragmentary nature of HUD's research. The result is still some dissatisfaction among the many HUD and non-HUD user groups. More clearly defined research objectives, coupled with the development and use of project strategies to guide project selection, would help focus HUD research and make it responsive to user group needs. We believe the development and use of specific objectives is not only common to well-run programs but is especially important in HUD research because of the broad authority under which HUD operates. In addition, several management issues warrant continued attention, such as the need for more program office involvement in planning and managing research projects and the need to intensify oversight of procurement activities.

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RESEARCH AND TECHNOLOGY  
BUDGET FRAGMENTED

HUD's Office of Policy Development and Research (PDR) conducts an extremely diverse research program which includes hundreds of projects spread among many subject areas to achieve a wide variety of objectives, not all of which are strictly research oriented. Responding to the diverse needs of many research user groups is the principal reason for this fragmentation.

PDR's total number of projects is growing, as are the numbers of subjects covered by the projects. In late 1979, PDR had 453 projects in progress, compared to 335 at the end of 1978 and 277 at the end of 1977. Projects were budgeted over nine major categories such as "housing assistance" and "community development." Within the 9 major categories, however, are 30 subcategories into which projects fall. Within these many categories, great diversity exists. For example:

- Under the subcategory "state and local economic development and public finance," 50 projects representing nearly \$8 million in contract and grant agreements were active in late 1979. Topics studied ranged from developing an "Economic Model of California Mexican Trade Flows" to a "Survey of Citizens Views About Urban Life."
- For "evaluations of community development programs," another subcategory, 10 separate evaluations were underway, each addressing a different aspect of the Community Development Block Grant Program.
- Under "residential safety and technology," 39 projects valued at more than \$9 million were active, ranging from developing building techniques for earthquake resistance to evaluating homesite and sewage issues.

Sharp increases in the number of projects reflect PDR's strategy of diversifying its program by reducing the dollar size of projects and spreading awards among a broader group.

The current scope of PDR's research appropriation extends beyond strictly research and technology issues. For example:

- PDR pursues numerous "assistance" projects designed to support groups beyond HUD, such as State and local governments. PDR's "state and local policy analysis and management" activities (41 agreements for \$6.9

million) are designed to improve the management capacity of State and local governments. Included in this total are several agreements valued at nearly \$1 million designed to improve the capacity of women and minorities. While some of these projects are designed to develop and promote innovative techniques and methods for improved local government management, others appear to be more support oriented. For example, in fiscal years 1979 and 1980, PDR provided over \$500,000 to an association of municipal financial offices for operating HUD's Local Government Financial Management Resource Center. The Center's purpose is to

"provide a national focal point of technical support to aid those organizations that provide information, training and technical assistance to state and local officials."

We identified several other similar projects. PDR views these activities as transfer and dissemination activities that build upon previous work.

--PDR funds projects whose principal purpose is to advise PDR of issues important to housing and urban development. We identified at least six separate agreements totaling \$500,000 for the purpose of advising PDR on research needs in such subject areas as handicapped housing, public housing, property tax, public finance, economic development, urban policy, and areas of concern to local governments.

--PDR funds organizations to help plan, design, and monitor certain ongoing projects. We identified six such agreements totaling several hundred thousand dollars--four to one group representing the 26 largest cities and counties in America.

--Research money has also been used to support the operations of such nonresearch entities as the Housing Assistance Council (\$700,000 in 1979) and the U.S. National Commission on Neighborhoods (\$1 million in 1978). These are mandated programs beyond PDR's control.

The many user groups to which PDR is held accountable include:

--The Congress, for specific demonstrations, evaluations, and studies required by law.

- Departmental policy makers, who seek to answer policy problems and to improve overall effectiveness of programs and activities.
- Departmental program managers, who need information to better manage their programs.
- State and local governments, which use research to help them better manage their municipalities.
- Research and academic institutions, which seek some measure of support to assure a strong research foundation.
- PDR research managers, who have their own needs and judgments regarding research priorities.

Satisfying the needs of these groups while developing a well-focused research program is a difficult challenge--a challenge we believe cannot be fully met until a better consensus exists among PDR, its user groups, and top HUD management regarding how research money should best be spent. Although PDR believes reaching a consensus among its users is difficult if not impossible, we believe a continuing effort, through improved priority setting and other recommendations discussed later, will help bring about a consensus.

#### DISSATISFACTION WITH RESEARCH PROGRAM

Dissatisfaction with PDR's research program exists in HUD program offices and throughout other user groups. Among the many users and observers of PDR research we interviewed in and out of HUD, very few expressed a high degree of satisfaction with PDR's research efforts in general. Levels of continuing dissatisfaction further strain the working relationships between PDR and program offices and probably contribute to the large number of demonstrations planned and managed by program offices--without PDR assistance (these issues are discussed later).

Although some dissatisfaction can be attributed to honest differences of opinion on issues such as methodology, the principal source of dissatisfaction stems from a general belief that PDR researches many subjects and issues unrelated to departmental needs, especially the needs of program offices. PDR's strategy of meeting a great many needs with its budget has no doubt resulted in many individual groups being dissatisfied--especially program offices.

PDR believes dissatisfaction over its program stems from a poor research image, a general bias against research institutions, and a natural desire among program offices to want a greater share of the research budget. We agree that these are important factors causing dissatisfaction and believe that increased attention to priority setting will help improve the relationship between PDR and its user groups.

#### PRIORITY SETTING COULD IMPROVE

PDR's research goals, established in 1978 to limit the scope of its research program, are not fully achieving their purpose. Some goals are receiving little attention while others are too broad to be a meaningful guidance tool for project selection.

For example, for projects relating to "cost of housing," a priority area frequently cited by PDR as especially important, we identified projects representing over \$1.3 million in 1979 obligations. Thus, despite the importance of housing costs as a priority area, only about 4 percent of PDR's 1979 budget was devoted to this issue. Also, goals set by PDR relating to the elderly and handicapped, freedom of choice in housing, and alternative financing account for only about 7 percent of PDR's total 1979 budget.

Other PDR goals are overly broad and thus lack precise criteria from which project choices can be made. Within "urban economic development, public finance and tax policy" for example, we identified over 60 active projects covering 20 separate subtopics. Projects funded ranged in scope from examining urban water conservation strategies to measuring the impact of shopping malls on economic development. Although PDR believes its goals should remain broadly scoped to allow a diversified research program to evolve, articulating specific objectives and project strategies within each goal would give needed focus to each goal.

Given PDR's strategy to spread many projects among broad goals, we wonder how successful PDR goals would have been in limiting the scope of research among fewer areas of highest need. A major factor PDR claims limits its ability to fully satisfy its goals and the needs of user groups is the amount of its "fixed" appropriation from congressionally mandated studies and from multiyear projects committed to in prior years. These commitments have absorbed well over 50 percent of PDR's annual appropriation in recent years. However, since many of these multiyear projects stemmed originally from discretionary

spending, over a multiyear period, most of PDR's projects have resulted from departmental priorities. Mandated studies are taking a declining share of PDR's budget--14 percent in fiscal year 1979.

The cornerstone of PDR's project selection is the annual budget call, a means of soliciting ideas and research needs from many sources. The "call" is a useful and improved technique but still needs to be improved.

Every year HUD program and regional offices are requested to submit to PDR their research and evaluation requirements. These are to reflect judgments of important policy questions and problems specific to the responding office and to HUD as a whole. Responses to the call are extensive--nearly 200 projects suggested for fiscal year 1981--and cover a wide range of issues that mostly reflect specific needs of the responders. Responses are combined with other project ideas to eventually form the basis of HUD's research budget.

Despite its potential usefulness, the budget call presents several problems.

- PDR officials discount much of the quality of the responses since they tend to be limited, unresearchable, or reflective of immediate rather than long-term concerns.
- Many responders view the process with skepticism, characterizing it as more of a paper exercise than a real opportunity to influence PDR thinking.
- PDR's followup to responders at the working level, the level at which much of the call is prepared, is inconsistent. Many preparers of research suggestions never learn how their suggestions are used. PDR's communication of final priorities tends to be informal and limited to top managers of PDR and responding groups.

PDR's use of major research goals and the budget call procedure are positive approaches to establishing project priorities. However, the absence of more specific, measurable objectives and strategies showing how objectives will be met by specific projects limits the usefulness of PDR's current goal descriptions and the budget call.

PDR SHOULD HAVE A ROLE IN ALL HUD DEMONSTRATIONS

Although PDR has responsibility for planning and conducting HUD research, other HUD offices perform their own research, especially demonstrations. HUD has no guidelines defining what PDR's role should be in demonstrations other HUD offices conduct. PDR's Director of Management and Program Control told us that occasionally he has learned about new demonstrations conducted by other HUD offices through articles in trade publications.

We noted the following examples of other HUD demonstrations:

- The Office of Housing conducts demonstrations of congregate services, mortgage loan insurance programs, and public housing security.
- The Office of Neighborhood, Voluntary Associations, and Consumer Protection has demonstrations of neighborhood self-help development and livable cities.
- The Office of Community Planning and Development has demonstrations of neighborhood business development and urban impact analysis.

We identified several demonstrations being managed outside of PDR. PDR was not involved in some of these demonstrations; it was extensively involved in conducting evaluations of others. The reasons why program offices rather than PDR conduct so many demonstrations vary, but typically, top management will locate a demonstration in the office whose programs and activities are directly related. Program offices often view the demonstration as being more programmatic than research oriented and thus feel they are best suited to manage the project. The distinction between a "research" demonstration and a "programmatic" demonstration is not clear and is not dealt with in HUD policy.

The Office of Community Planning and Development is conducting research similar to PDR's. For example:

- The Office recently initiated a task order contract very similar to those employed by PDR. The statement of work cites the need to "design research studies," conduct "survey research," and do other research similar to that found in PDR research contracts.
- The Office has an urban studies group which has research responsibilities. Recent reports generated

from this group cover such topics as "The Impact of Foreign Direct Investment on U.S. Cities and Regions" and "Pockets of Poverty."

We believe research and demonstration activities currently conducted beyond the oversight and apparent awareness of top PDR officials violate the Congress' intent when, in 1970, it consolidated all previous HUD research authorities into one general mandate. This was done to better coordinate HUD research efforts, and HUD internal policy makes it clear that PDR is the sole administrator of HUD research and demonstration activities.

Although it is appropriate to house demonstrations in program offices, we believe some PDR involvement in planning and evaluating all demonstrations is important. Although we were unable to show adverse effects from non-PDR demonstrations, they further fragment the Department's research program and prevent optimal use of research and evaluation expertise.

#### OPPORTUNITIES EXIST FOR IMPROVING PROGRAM MANAGEMENT

PDR has taken several recent steps to improve its research program management; however, we believe attention should be given to

- more constructive program office involvement in PDR research projects,
- more aggressive oversight of the procurement process, and
- establishment of a self evaluation system.

The lack of constructive program office involvement in some research evaluations runs the risk of unnecessarily harming the potential usefulness of project results. This problem is especially evident in PDR's ongoing evaluation of the Community Development Block Grant Program--a 4-year, \$10 million effort involving a university and a private research firm. Community Planning and Development Program officials disagree with many study objectives and much of its design, fearing the evaluation results might be less useful than alternative evaluation designs, given a similar sum of money. PDR's own paid monitor (Public Technology, Inc.) is critical of the evaluation and so were many of the experts we talked to in and out of HUD. Community Planning and Development also discounts PDR's claim of the comprehensiveness of their



many active block grant evaluations. Lack of agreement on what issues to evaluate and how to do it could seriously hamper the eventual transfer and credibility of the results.

Other evaluation studies we examined also had similar patterns of weak program involvement. For example, for the homesteading program evaluation, the results were being generated by a private contractor but not used by the operating program. In a major evaluation of fair housing, involvement by program officials was largely absent throughout all stages of the evaluation project, despite the importance and sensitivity of the potential research findings.

Although rarely used by PDR for involving program offices in research, the Government Technical Monitor (GTM) is available. These GTM's are usually interested program officials. Use of a GTM helps to assure that a potential user has input into the research process and represents a means by which final research results might be better utilized. Ironically, PDR has paid significant sums to outside organizations for project consultant services yet does not extensively use the GTM for internal advice--a device they themselves created. Within the past year, PDR has sharply increased its use of the GTM--a practice which should be accelerated.

Regarding procurement matters, newer methods of purchasing services from outside performers (contractors, grantees, etc.) are improving PDR's ability to make research programs more responsive but more attention is needed to assure their proper use. Our review of how agreements (contracts, grants, task orders, etc.) are chosen led to these observations:

--PDR estimates its current level of sole-source work at just less than 50 percent of all awards--a level which is declining but still has generated justifiable concern within PDR. These figures exclude contract modifications, which are sole sourced and should technically be included as noncompetitive awards. Also, PDR includes task order contracts as competitive awards, which is technically correct. We believe, however, that these types of contracts are not fully competitive since individual task orders are essentially sole sourced even though the general contract is awarded competitively.

--PDR officials state that, for most projects, choice of agreement instrument does not result from systematically matching need to instrument. Several factors influence

what instrument is chosen, including the nature of potential performers, degree of uncertainty in the work, and program discretion.

The circumstances under which PDR chooses a task order, a grant, or a cooperative agreement from the same organization is not always clear. The convenience of the task order contract--it requires minimal paperwork and little departmental oversight--is a major factor influencing its use. Although a powerful and highly useful tool, enabling PDR to be more responsive, task order contracts have a high potential for abuse, and adequate guidelines are crucial. Our recent report, "Controls Over Consulting Service Contracts in Federal Agencies Need Tightening" (PSAD-80-35, Mar. 20, 1980), also raised concerns regarding the use of task order contracts.

PDR has, within the past 2 years, taken a much-needed step to provide guidelines on selecting and using these various instruments. More effort, however, is needed to justify precisely under what circumstances particular devices can and cannot be used, especially between task orders and other forms of agreements which could accomplish the same thing on a more competitive basis.

A final area needing attention is the absence of an ongoing evaluation system in PDR. Measuring program effectiveness is common to well-run programs. PDR could benefit from more aggressive self-evaluation by analyzing past mistakes and using this data to improve the design and operation of future projects. The key to self-evaluation is having specific, measurable objectives against which progress can be gauged. As previously discussed, objectives of this type are currently not developed and used in PDR as part of an effective priority-setting system.

#### POSITIVE STEPS HAVE STRENGTHENED RESEARCH PROGRAM

PDR has taken several steps to improve the overall management of its research program within the past few years. For example:

- Product distribution has been improved by using a new computerized system for disseminating and promoting past research reports. Methods of disseminating research results have been formally included in the early stages of project planning.

- In-house research has been strengthened by using resident scholars, a program in which academic researchers are hired for a limited time.
- More use of various procurement devices--although they have created some problems--has also given PDR the ability to be potentially more responsive to user needs.

### CONCLUSIONS

HUD's complex and diversified research program is designed to address many needs for many audiences. As a result, HUD research is fragmented, and dissatisfaction with the research program exists among many user groups. Although some positive steps have been taken to improve the program, further progress is limited by the lack of specific and meaningful research objectives which clearly define how and to what extent HUD research will address user needs.

PDR has also improved its research management, but more attention is needed to involve program offices in research planning and management, to improve the selection of procurement instruments, and to develop a self-evaluation system.

### RECOMMENDATIONS

We recommend that the Secretary of Housing and Urban Development:

- Develop guidelines specifying the circumstances under which research and demonstrations can be performed in program offices and the role the Office of Policy Development and Research should have in such activities. PDR Research should, as a minimum, have a role in shaping the objectives and research design of all HUD research activities, especially demonstrations.
- Direct the Assistant Secretary for Policy Development and Research, in conjunction with departmental top management, to develop specific, measurable research objectives defined in terms of major research questions to be addressed and user groups to be served by the research program.
- Direct the Assistant Secretary for Policy Development and Research to improve other aspects of priority setting, such as

- developing research strategy papers which describe how research objectives will be met by individual projects, and
- requesting HUD program officials to present their research needs in terms of meeting objectives in a format more compatible with PDR's budget-setting process.

To improve research management, the Secretary should direct the Assistant Secretary for Policy Development and Research to:

- Intensify internal oversight of its use of various procurement devices, especially task order contracts and sole-source agreements, with a goal to increase competition to the fullest extent possible.
- Use Government Technical Monitors to a much greater extent, especially in those areas where program offices have an interest.
- Develop a self-evaluation system for measuring research results against specific objectives on a regular basis.

The Assistant Secretary for Policy Development and Research, except as noted, agrees with the conclusions and recommendations of this report.

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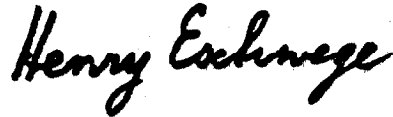
As you know, section 236 of the Legislative Reorganization Act of 1970 requires the head of a Federal agency to submit a written statement on actions taken on our recommendations to the House Committee on Government Operations and the Senate Committee on Governmental Affairs not later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

Copies of this letter are being sent to the above committees; the Senate Committee on Banking, Housing, and Urban Affairs; and the House Committee on Banking, Finance,

B-199825

and Urban Affairs. We are also sending copies to your Assistant Secretary for Policy Development and Research and to your Inspector General.

Sincerely yours,

A handwritten signature in cursive script that reads "Henry Eschwege".

Henry Eschwege  
Director

Enclosure

1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that this is crucial for ensuring the integrity of the financial statements and for providing a clear audit trail.

2. The second part of the document outlines the various methods used to collect and analyze data. It includes a detailed description of the sampling process and the statistical techniques employed to ensure the reliability of the results.

3. The third part of the document presents the findings of the study. It shows that there is a significant correlation between the variables being studied, and it provides a clear explanation of the reasons behind this relationship.

4. The final part of the document offers conclusions and recommendations based on the findings. It suggests that further research is needed in certain areas and provides practical advice for improving the accuracy of the data collection process.

HUD'S RESEARCH AND TECHNOLOGY PROGRAMBACKGROUND

Congressional interest in housing and urban research began in the early post-World War II years of housing policy. In 1945 the Senate and a joint committee recommended that a research program be authorized to lower housing costs by researching construction methods, markets, and needs. The 1948 Housing Act formalized a housing research program and encouraged the Government to develop and promote affordable homes. Subsequent research authorities continued this theme and, starting in the mid-1950s, the Congress began expressing the need for research on a wide variety of socioeconomic issues.

By the late 1960s the country had a new executive agency--the Department of Housing and Urban Development--and a growing research program, bolstered by passage of the Demonstration Cities and Metropolitan Demonstration Act of 1966. Research funding increased rapidly, from \$500,000 in 1967 to \$11 million in 1969, the year the Office of Urban Research and Technology was created to centralize the management and focus of various research efforts. Concern over housing costs and urban social problems were important priorities of the new research office.

The 1970 Housing and Urban Development Act repealed seven existing research provisions and gave HUD one broad mandate:

"The Secretary of Housing and Urban Development is authorized and directed to undertake such programs of research, studies, testing, and demonstrations relating to the mission and programs of the Department as he determines to be necessary and appropriate."

By 1972 HUD research funding had increased to over \$50 million and was dominated by big money activities such as the Operation Breakthrough and Experimental Housing Allowance Programs. These and other large dollar programs continued to absorb much of HUD's research budget through the 1970s. Only in the last few years has HUD had flexibility to allocate most of its research budget based on its own priorities.

The research budget has averaged just over \$50 million since 1972, with a fiscal year 1980 appropriation of \$44.6 million. These amounts exclude several million dollars transferred from the Department of Energy for HUD management

of the residential solar energy program. Among the Federal cabinet departments, HUD's research budget ranks relatively low. By comparison, the research budgets of the Departments of Agriculture, Commerce, Transportation, and the Interior range around \$300 million or more.

#### Current research authority

In addition to its basic research mandate, HUD has additional "specific purpose" authorities. Most important among these are demonstrations of housing allowances, solar heating and cooling, homeowner counseling, and lead-based paint. Other legislatively based requirements addressed by HUD's research and technology program include special studies, program evaluations, and demonstrations covering a wide range of subjects.

The Office of Policy Development and Research administers HUD's research and technology program. The program is headed by an Assistant Secretary who is HUD's principal advisor on "overall Departmental policy, program evaluation, and research." PDR has principal responsibility for developing and executing HUD's research and demonstration program, performing program evaluations and economic and policy analyses, and assisting in policy development. PDR shares some of these responsibilities and has the lead in others.

Almost all PDR projects, be they studies or demonstrations, technological or socioeconomic in nature, are performed by non-HUD organizations under a contract, assistance, or interagency agreement.

#### Past concerns

Over the last several years, HUD's research program has been criticized for a number of reasons and from a variety of sources in and out of HUD. Criticism has focused primarily on

- research projects not essential or not related to HUD programs,
- project results not used by HUD, and
- projects costing too much.

The Assistant Secretary for Policy Development and Research in congressional hearings in 1978 stated that some past PDR research was wasteful, irrelevant to HUD needs and, in general, lacking in focus. To correct these deficiencies, HUD initiated actions to redirect its research by making projects more relevant to its policy and programs.



Purpose and scope

We reviewed HUD's research and technology program to identify areas in which PDR could improve its research program. We analyzed over 40 ongoing research projects--at different levels--in every major budget category and subject area in HUD's research program. Discussions were held with numerous HUD research managers and users, performers of HUD's research, and outside officials and users of HUD research.

Although we concentrated on how PDR uses its appropriation to procure research services, we recognize that PDR's in-house research is an important part of its total research effort.

OVERVIEW OF HUD RESEARCH

PDR's research program covers a wide variety of subjects and issues and is designed to achieve a number of objectives and needs of several constituent groups. With research funds obligated to over 450 separate projects in fiscal year 1979, PDR strives to achieve a great deal with its appropriation.

As illustrated in the following table, research projects are budgeted among nine major subject areas:

PDR Research Obligations by Subject Area  
1977-80

	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u> <u>est.</u>
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Housing assistance	\$10,691	\$12,592	\$ 8,661	\$ 9,050
Housing safety and standards	3,312	3,736	3,994	2,400
Housing economic data and analysis	13,026	15,965	12,500	15,570
Consumer and equal opportunity	4,103	4,398	5,622	2,945
Community conservation	7,324	8,018	11,530	2,955
Community development	4,817	9,295	5,584	6,680
Energy conservation and standards	164	1,928	2,348	1,450
Program evaluation	1,348	3,545	6,118	4,800
Program support and utilization	914	1,811	1,664	2,800
Total	<u>\$45,699</u>	<u>\$61,288</u>	<u>\$58,201</u>	<u>\$44,650</u>

PDR's pattern of spending among these major categories has remained relatively stable over the past few years, with the following exceptions:

- The winding down of expensive programs such as the Experimental Housing Allowance Program and support for the Urban Reinvestment Task Force, now a separate corporation.
- Increases in program evaluations, especially evaluations of community development programs.
- Increased efforts to improve product dissemination and enhanced in-house analyses.

To achieve objectives in these subject areas, PDR conducts and/or provides demonstrations, evaluations, data collection, analyses, technical activities, assistance, and internal support. These are briefly described below.

#### Demonstrations

PDR's demonstration and experimental programs account for over 20 percent of its yearly budget. In 1979 we identified 30 demonstrations covering a wide variety of topics. Many of these, such as the \$1.7 million Land Title Recording System demonstration, are required by law or are used to meet legislative requirements. In earlier years the Experimental Housing Allowance and Operation Breakthrough programs dominated the research budget and through 1979 had cost about \$85 million.

#### Evaluations

According to HUD figures, over 50 percent or nearly \$30 million of its 1979 budget was obligated to evaluation-related activities. Evaluations of HUD programs, the responsibility for which is shared among PDR and operating programs, command a much smaller share--less than 15 percent. Dominating PDR's evaluation budget are eight ongoing evaluations of the Community Development Block Grant Program. These evaluations are further dominated by a single \$10 million effort. HUD's evaluation system was the subject of one of our previous reports. PDR's evaluations are expensive--several cost over \$1 million--due primarily to the high cost of collecting data.

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1/"HUD's Evaluation System--An Assessment" (PAD-78-44, July 20, 1978).

Data collection

Contracts and grants for collecting data for general research consume significant amounts of PDR's research budget. The Annual Housing Survey alone costs nearly \$10 million per year and since 1975 has cost over \$83 million. Other data collection add \$5 million annually and include surveys of housing completions, mobile homes placements, public housing tenants and mortgage loans. When data collection components of other projects (principally evaluations) are added, PDR estimates the cost of collecting data at about one-third of its total research budget.

Analyses

PDR provides funds for many studies designed to evaluate policy choices and issues and discovers or explains relationships between variables. Although studies are numerous, their cost represents less than 10 percent of PDR's research budget.

Technical activities

Over the years PDR has funded a substantial number of technical projects relating to residential safety, mobile homes, code administration, noise abatement, lead-based paint, and energy conservation. HUD also operates the solar heating and cooling demonstration funded by the Department of Energy.

Building research studies have historically played a relatively minor role in HUD research, never accounting for more than about 10 percent of its budget in any one year since Operation Breakthrough dominated PDR's budget in the early 1970s.

Assistance

PDR also provides a substantial amount of direct and indirect support for the benefit of several non-HUD organizations-principally State and local governments. Included are the development of manuals, training and educational materials, demonstration programs, workshops, and other forms of self-help and supporting analyses. Much of this activity is "capacity building" or "capacity sharing" and has a history of PDR research involvement. In 1979 PDR obligated about 10 percent of its budget to assistance-related activities.

Internal support

To assist its internal research efforts, PDR is spending an increasing amount of its budget on computer support and activities--from less than \$1 million in 1977 to \$2.7 million million estimated for 1980.