# ENVIRONMENTAL IMPACT ASSESSMENT AND THE QUALITY OF LOCAL DESIGN

by

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## ABSTRACT

The National Environmental Policy Act of 1969 ushered in a new era of governmental decision-making. The expenditure of federal funds is now tied to an environmental impact assessment of the activities for which those funds will be spent. The Community Development Block Grant program (CDBG) administered by the Department of Housing and Urban Development (HUD) provides community development funds to larger American towns. HUD has fulfilled its NEPA mandated environmental review requirement by turning over assessment responsibilities to CDBG recipient communities.

This thesis explores local government's preparation of environmental impact assessments of CDBG projects. Case studies of three communities illuminate the environmental issues that local officials assessed and discuss the pressures and expertise that guided the formulation of local review procedures.

The most important conclusion drawn from the case studies is that the HUD required impact assessment is not doing an adequate job of protecting the environment and encouraging environmental improvements. Local officials regard the present CDBG environmental assessments as a form of federal red-tape.

The particular focus of the study is the assessment of impacts of CDBG projects on urban design. A brief summary of urban design research is presented. Ideas from this research and the case study findings are translated into suggestions for improving the assessment process. The new environmental review procedure is based on two guiding principles; opening the environmental impact assessments to citizen participation, and making the reviews responsive to urban design.

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# INTRODUCTION

The National Environmental Policy Act of 1969 has forced federal agencies into the role of "protectors of the environment". NEPA gave birth to the tool of environmental impact assessment (EIA) which has become an essential element of public policy decision-making. The Community Development Block Grant program (CDBG) created by the Housing and Urban Development Act of 1974 and administered by the Department of Housing and Urban Development (HUD) takes the NEPA-generated requirement for impact assessment and places it squarely on the shoulders of communities that receive community development funds.

NEPA's concern for environmental protection is two-sided; the planning mechanism of EIA is intended to prevent the degradation of the environment and promote environmental improvements.[1] The HUD regulations that define the environmental review procedures for the CDBG program reiterate this dual purpose. In setting forth the topics that are to be covered in an environmental review, the procedures define environmental impact as, "Any alteration of existing environmental conditions, or creation of a new set of conditions, adverse or beneficial...." (HUD's emphasis).[2] It is thus clear from relevant legislative and administrative documents that EIA is meant to prevent environmentally damaging actions and promote projects of high environmental quality.

The question this thesis poses about the HUD regulations that shape environmental assessments prepared by CDBG recipients is: Do the EIAs required by the regulations actually protect and enhance environmental quality? In particular, do the regulations promote good urban

design*?

The research concentration on the effectiveness of environmental review with regard to urban design grew out of the realization that many of the projects funded by the CDBG program have direct ramifications on the sensory** quality of the urban environment. The research on urban design presented in the second chapter explores the possibility that the EIA requirement can be used to insure a sensitive examination of urban design issues.

My preliminary hypothesis suggested that HUD's regulations are not successfully promoting environmentally superior projects and policies at the local level. I propose that two problems prevent the EIA requirement from attaining this goal.

1. The lack of guidance from HUD and the inexperience of local officials with environmental impact assessment.

2. The EIA format suggested in the HUD publication, Environmental Reviews at the Community Level, A Program Guide,[3] focuses on inappropriate issues and poses inadequate questions.

I performed case studies of three towns to test these hypotheses and provide answers to the original questions. Information was obtained by examining environmental review records and interviewing local officials. Conversations with officials in HUD area, regional and national offices augmented my work as did the numerous government reports which

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*Urban design is the design and integration of the public, physical elements of a community.

**The term sensory quality is borrowed from Kevin Lynch's book, Managing the Sense of a Region, and means the "look, sound, smell, and feel of a place.:

analyze CDBG environmental reviews.

The case studies confirmed my hypothesis that the environmental reviews required by HUD are not doing a good job of protecting and enhancing environmental quality. Impacts on urban design are largely ignored in the environmental assessments.

The case studies indicate that HUD's lack of guidance poses a serious problem for local impact assessment. Community officials suffer as much from lack of encouragement as from inexperience. The EIA format suggested in the Guide steered reviewers neither right nor wrong; they ignored its advice completely.

Research findings are presented in Chapter Four, "Conclusions". The discovery that environmental reviews are presently of little use to local planners underlies the analysis of the review requirement.

The epilogue that follows the research findings contains recommendations for improving the CDBG environmental impact assessment process. These suggestions are relevant to both CDBG reviews and more general community planning processes.

HUD officials are presently contemplating making minor changes in the environmental review regulations. Perhaps this thesis might convince them that major changes are in order.

# CHAPTER ONE

# THE COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM AND ITS ENVIRONMENTAL REVIEW REGULATIONS

## The Community Development Block Grant Program

Title I of the Housing and Community Development Act of 1974 created the Community Development Block Grant (CDBG)[1] program. The primary objective of Title I is to develop viable urban communities by providing decent housing, a suitable living environment and expanded economic opportunities, principally for persons of low and moderate income. Local governments are supposed to use CDBG funds to:

1. Eliminate slums and blight, prevent blighting influences and the deterioration of property and neighborhood and community facilities of importance to the welfare of the community, principally persons of low and moderate income;

2. Eliminate conditions detrimental to health, safety and public welfare, through code enforcement, demolition, interim rehabilitation assistance, and related activities;

3. Conserve and expand the nation's housing stock in order to provide a decent home and a suitable living environment for all persons, but principally those of low and moderate income;

4. Expand and improve the quantity and quality of community services, principally for persons of low and moderate income, which are essential for sound community development and for the development of viable urban communities;

5. Seek a more rational utilization of land and other natural resources and the better arrangement of residential, commercial, industrial, recreational, and other needed activity centers;

6. Reduce the isolation of income groups within communities and geographical areas and promote an increase in the diversity and vitality of neighborhoods through the spatial deconcentration of housing opportunities for persons of lower income and revitalize deteriorating neighborhoods to attract persons of higher income; and

7. Restore and preserve properties of special value for historic, architectural, or esthetic reasons. 2

The CDBG program consolidated and replaced seven categorical programs that provided housing and urban development funds to cities throughout the United States. Unlike the earlier system which distributed federal funds to communities on the basis of project applications, CDBG allocations are apportioned by a formula which entitles communities with populations of more than 50,000 (and urban counties) to a precise amount of money annually. Communities with less than 50,000 inhabitants must compete for funds. A number of smaller communities have received funds under the program's 'hold-harmless' provision.* The hold-harmless funds will be eliminated in a few years. Within the confines of the broad objectives listed above the CDBG program allows communities a great deal of freedom in deciding how to spend federal money.

The Senate Committee on Banking, Housing and Urban Affairs recommended consolidation (of the seven categorical grant programs) in order to "reduce paper work and red tape; to expand state and local responsibility for planning and executing development activities, and to insure continuity of funding for programs of housing and community development in communities with critical development needs."[3] These principles are consistent with HUD's continuing effort to reduce the federal role in local affairs and to increase local autonomy in community development decisions; thereby enhancing each community's responsiveness to local needs. HUD was also eager to eliminate the competition among communities based on "grantsmanship" rather than

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*This provision provided money to finish Model City and urban renewal programs begun prior to the CDBG program.

need.

The CDBG program comes under the purview of the National Environmental Policy Act (NEPA) of 1969, which mandates the environmental impact assessment of all activities and programs funded with federal monies.[4] HUD delegated to local government the responsibilities for not only programming and planning CDBG activities but also for assessing the environmental impacts of those activities. The Housing and Community Development Act of 1974 states, in part:

> In order to assure that the policies of the National Environmental Policy Act of 1969 are most effectively implemented in connection with the expenditure of funds under this title, and to assure to the public undiminished protection of the environment, the Secretary, in lieu of the environmental protection procedures otherwise applicable, may under regulations provide for the release of funds for particular projects to applicants who assume all of the responsibilities for environmental review, decisionmaking, and action pursuant to such Act that would apply to the Secretary were he to take such projects as Federal projects. 5

After consulting with the Council on Environmental Quality,[6] HUD issued regulations governing environmental reviews. These regulations turn all NEPA responsibilities over to the block grant communities[7] and provide for the release of block grant funds based on community certification of compliance with HUD and NEPA requirements.

To comply, a community must perform a review process (of the community's own design) that identifies the environmental impacts of proposed actions. Communities are required to maintain an environmental review record which includes: a project description; documentation showing that each step in the review process was performed; evidence that the required historic preservation review was conducted; and any other information necessary to support the assertion that a complete environmen-

tal review was prepared.[8]

The CDBG program represents the first occasion on which environmental review responsibilities have been delegated to local government. This move was not made without controversy. Questions were raised about the legality of the delegation and the precedent HUD might set.[9] Some observers suggested that local governments might not be competent to carry out the environmental review responsibilities.[10]

When HUD's environmental regulations were first published, a number of commentators expressed the opinion that HUD's action would soon be challenged in court by a citizens' action group like the Sierra Club or by a local group concerned with a particular CDBG project. Thus far, there have not been court challenges of CDBG-generated environmental reviews. In fact, public comment on environmental reviews performed locally has been very sparse.

There has, however, been local controversy over the processes by which CDBG funds are allocated within communities. Environmental assessments tend to occur after the funding debates; by which time there is little energy left for involving citizens in the assessment process.

In recently published critiques of the CDBG program neither the Council on Environmental Quality[11] nor the Comptroller General of the United States[12] suggested that HUD take on the CDBG environmental review responsibilities. The increase in HUD staff that would be required to handle the reviews was probably reason enough for federal policy makers to reject an extensive federal role. Other federal agencies have not followed HUD's lead with regard to the delegation of EIA responsibilities.

The Housing and Community Development Act was passed in consider-

able haste. Notis-McConarty, writing in Environmental Affairs, indicates that "A near crisis atmosphere pervaded Congress during its consideration of housing legislation in 1974."[13] The environmental provisions of the bill were the subject of little debate in the House (less than one page of the House report accompanying the bill is devoted to the environmental provisions), and were presented to the Senate only as a part of the bill in its final Conference Committee form. "The Senate was then faced with the choice of either voting for the omnibus bill with one questionable provision which had not been considered, or jeopardizing the whole package."[14] The bill became law in spite of considerable criticism, such as that voiced by the author of NEPA, Senator Henry Jackson:

> Proponents of this NEPA extension would argue that the force and effect of NEPA is not changed, that the responsibility has simply been transferred from HUD to the State and local governments. This glib response ignores the fact that the most basic purpose of NEPA was to hold the Federal government responsible for maintaining the quality of our environment....Let no one be mistaken that this exemption, by permitting the delegation of the impact statement responsibility, denies the most basic purpose of NEPA: the requirement of Federal accountability. 15

The Environmental Review Regulations

The environmental review procedures for the CDBG program were written by HUD in consultation with CEQ. The regulations were published in the Federal Register on July 16, 1975. HUD's delegation of environmental assessment responsibilities takes the following form:

Applicants must certify that they have met all of the environmental review responsibilities established by HUD before funds may be committed. (General planning and environmental study funds are exempt from this requirement.)

Approval of the community's certification by the Secretary of HUD discharges HUD's responsibilities under NEPA and the community takes full legal responsibility for its actions.[16]

HUD's relinquishment of environmental assessment duties is stressed:

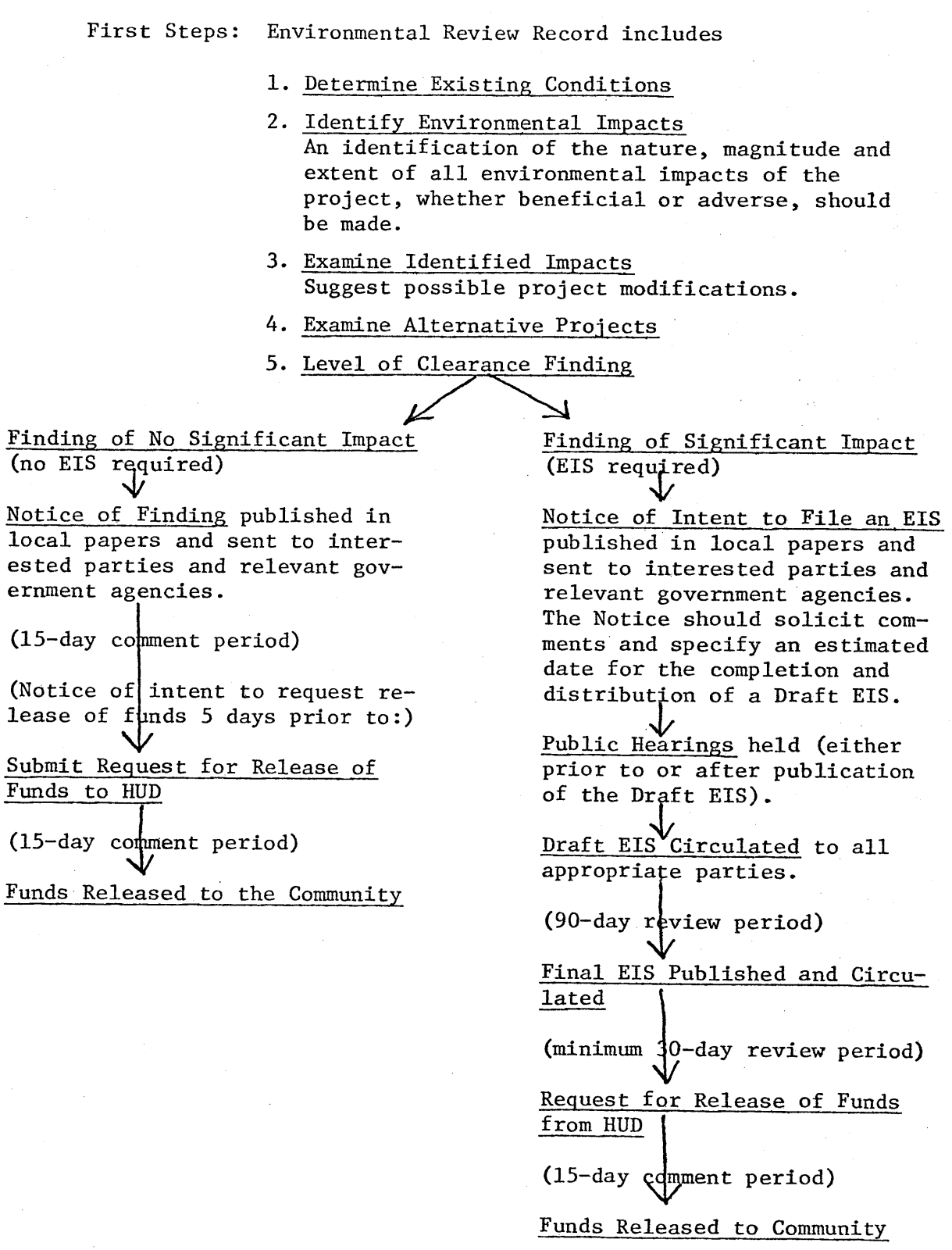
> ...all applicants for assistance under Title I shall be required to assume responsibility for carrying out all of the provisions of NEPA relating to particular projects for which the release of funds is sought. 17

The regulations establish the procedural steps that a community must follow in order to receive funds. The diagram on the following page outlines these steps.

In addition to mandating the procedural aspects of the environmental reviews, the regulations indicate in a limited way which projects will require a full-scale EPA-reviewed Environmental Impact Statement (EIS). The HUD regulations establish an EIS threshold for numbers of dwelling units involved and number of undeveloped acres served by CDBG-funded water and sewer improvements.[18] NEPA requires that an EIS be prepared for any federally-funded actions that "may significantly affect the quality of the human environment."[19] A project does not require an EIS if it exceeds neither of the thresholds, and demands no "irreversible and irretrievable commitments of resources."[20] (The above is NEPA's "definition" of a significant impact.)

Local officials (federal officials as well) have expressed a lack of confidence in their ability to decide whether or not a project will have a significant impact on the environment. A number of reports on the implementation of CDBG environmental requirements have emphasized the fact that EIS's have not been prepared for all those projects which stand to have a significant impact.[21] A clarification of the process for making

Figure 1. Environmental Review Process: A Simplified View



a finding of "no significant impact" has been suggested by most critics.

HUD's regulations also establish a number of procedural and substantive foundations that help to determine the content of all local environmental reviews. The most important requirements are:

1. Preparation and maintenance of an Environmental Review Record -- a written record of the environmental review carried out for each project. The ERR documents a community's compliance with the environmental assessment procedures.[22]

2. The exemption of certain projects from review, including environmental studies and planning studies. Additional exemptions are now being considered for social service programs, very small projects and projects involving only rehabilitation of existing structures.[23]

A project that is a continuation of an activity for which an environmental review has been completed (and where the circumstances have not changed significantly) requires no new environmental review.[24]

3. Applicants must comply with and consider all "criteria, standards, policies and regulations" which apply to noise, flood plain, coastal zone and wetland, air quality, water quality and wildlife.[25]

4. An applicant may not take actions on a project which has not yet received environmental clearance, "where such action might have an adverse environmental effect, would limit choices among competing alternatives, or might alter the environmental premises on which the pending environmental clearance is based...."[26]

A number of studies examining the environmental reviews prepared by local governments have been written. The agency that has been most critical of local government's performance is HUD. Environmental Review

Activities of Grantees Participating in the Community Development Block Grant Program, prepared by HUD's Inspector General, claims that, "Based on our review, we believe definite improvement is needed in grantee performance in preparing environmental assessments before HUD can be assured that its CDBG environmental regulations implementing NEPA requirements have been carried out effectively."[27] The Report of the Comptroller General of the United States, Environmental Reviews Done By Communities: Are They Needed? Are They Adequate?, also expresses a lack of confidence in the local reviews, stating that in many cases communities have not done satisfactory environmental assessments. The particular deficiencies which they found are: (1) Communities did not totally describe the work to be done or define the environmental conditions existing in project areas; (2) Reviews did not identify and evaluate all the environmental impacts of proposed projects; (3) Communities did not consider modifications to, or alternatives to, proposed projects; and (4) Required historic analyses of properties in project areas were not carried out.[28]

The Advisory Commission on Intergovernmental Relations has taken a more neutral position: "The performance of local governments has ranged from outstanding to inadequate."[29] The Commission also notes that the performance of local governments in areas with existing state environmental protection agencies benefited from their increased familiarity and experience with environmental issues.

EPA and CEQ, the two agencies most directly involved with environmental issues, have published the least critical evaluations. CEQ's Community Development Block Grants and NEPA states

> The most important conclusion of our review is that cities receiving community development block grants can carry out

> NEPA responsibilities effectively and that delegation of these responsibilities should continue. 30

This is the most optimistic endorsement of HUD's delegation of environmental responsibility. Urban Systems Research and Engineering, Inc. carried out a study for EPA, Analysis of Community Development Block Grant Reviews, in which they concluded that "HUD's delegation of its NEPA responsibilities for Community Development Block Grants is working, despite a rough start."[31] This may or may not reflect EPA's feelings about the program. Notis-McConarty states in his paper that EPA reported that the EIS's filed pursuant to HUD regulations indicate that applicants have no accurate sense of NEPA's requirements.[32]

The specific criticisms emerging most frequently about local performance of environmental review are the following:

- lack of complete discussion of the environmental impacts which the proposed project will cause,
- discussion of few alternatives or alternatives not "taken seriously",
- lack of technical expertise in evaluating impacts,
- finding of "no significant impact" when, in fact, an EIS would be appropriate,
- procedural errors concerning the length of comment periods.

As the previous paragraphs indicate, there is no consensus about the success of the delegating of environmental responsibility to local government. All of the reports make recommendations for improving the regulations. However, these recommendations are limited to minor items such as the timing of different steps in the review process or the exemption of insignificant projects from review. There has been no discussion

of the effectiveness of the reviews in carrying out NEPA's mandate of protecting and enhancing the environment. These are the questions addressed in the case studies.

CHAPTER TWO

# URBAN DESIGN: A BRIEF REVIEW OF RESEARCH AND HOW THE RESEARCH IS USED IN PRACTICE

I believe that environmental impact assessment (EIA) can be used to improve the quality of urban design. For the purposes of this thesis, urban design is defined rather broadly as the design and integration of the public elements of a city. These elements might include the appearance of storefronts, the micro-climate of a park or a bus stop, the design of a public plaza or the ease with which a handicapped person can cross a busy street.

Unlike some technical issues examined in an environmental review (e.g., traffic flows, air quality), assessments of urban design impacts may rely on a tentative understanding of the interactions of different pieces of the urban environment. Nothwithstanding the difficulties encountered in assessing urban design impacts, they form a critical part of any comprehensive review. Urban Systems Research and Engineering noted the importance of the non-quantifiable environment:

> Environmental quality is more than a set of numerical standards to control pollution. Especially in cities, many of the most important aspects of environmental quality are judgmental, existing as much in the perceptions and interpretations of citizens as in the physical world. 1

The National Environmental Policy Act of 1969 recognizes the importance of environmental qualities beyond those of controlling harmful impacts. NEPA declares that it is the responsibility of the federal government to "assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings."[2] NEPA also states that the environmen-

tal impact assessments carried out by the agencies of the federal government should take an interdisciplinary approach that includes the environmental design arts.[3] Furthermore, the courts have recognized that the relationship of man to the designed environment is a relevant factor in the assessment of the impacts of development.[4] Urban design thus seems to be assured a legitimate place in NEPA-mandated environmental impact assessments.

Public decisions affecting the sensory quality[5] of the city have an immediate impact on individual enjoyment and satisfaction with the urban environment; they therefore elicit strong public reaction. An awareness of urban design as an important aspect of city planning in American cities has emerged along with increased attention to public participation as a key variable in the planning process.

During the past 5-8 years, environmental impact assessment has also emerged as an important step in the planning process. As discussed in the previous chapter, communities are required to prepare environmental reviews of proposed projects in order to receive Community Development Block Grant funds. Many projects funded with CDBG money have a substantial impact on the sensory environment. Nonetheless, the reviews carried out to date do not indicate much awareness of these impacts. Local planning professionals are not as aware as they might be of how these impacts might be examined in the context of an environmental impact review.

## Review of Urban Design Research

A critical issue now confronting urban designers is, how can the new tool of EIA be used to improve the quality of urban design?

The usefulness of environmental impact assessments of large-scale, high-technology developments such as energy facilities is frequently quite obvious. For example, the Seabrook Nuclear Power Plant impact assessment prompted major changes in the plant's cooling system.[6] Smaller projects funded by the CDBG program, such as street improvements and playground construction, may also benefit from environmental reviews, but the reviews' influence on final project design is much harder to pinpoint. Technical, detailed environmental impact statements (EIS), which must be reviewed by the Environmental Protection Agency are, appropriately, a rarity in the CDBG program. A short, non-technical environmental impact assessment with a finding of "No Significant Impact" is the norm for CDBG-funded projects.

There is an emerging body of research applicable to improving the assessment of urban design impacts. This chapter summarizes two avenues of research: the first avenue is environmental theory and deals in large part with examining how different people perceive similar environments and how different environments are perceived by people with similar socio-demographic backgrounds. The second avenue of research concerns the application of environmental theory to the real-world.

<u>How can a designer know if he or she is providing the public with appropriate design solutions and have some confidence that the designs are esthetically and emotionally pleasing to their users</u>?

In previous eras, when a designer had a single patron or client who could express approval or disapproval, producing a design that could please was a relatively simple matter. For example, in the days of royal city-building (Nancy, Paris, St. Petersburg), the noble clients for whom the de-

signs were undertaken had ample opportunity to express their opinions about the work. The feelings of other people, even those who were displaced by the design, were not important.

Urban designers no longer work for clients whose wishes are law. The designer is now faced with many clients often expressing conflicting desires about the functions and esthetics of the setting undergoing change. Architects have extensively debated about the dichotomy between the client (who pays) and the user of a building. Urban designers must look at this same dichotomy, but are often faced with satisfying an even broader set of interest groups. In the case of design guidelines for a city, the designer must consider all the inhabitants and users of the city as clients.

When the size and diversity of the client group expands beyond rather constricted limits, the designer must come to grips with user needs and desires by some means other than direct interviews and design interaction. When working for a large number of users, the designer must have some confidence in his or her ability to make design choices that will fulfill the functional and esthetic needs of a diverse clientele.

Environmental psychologists have tackled two rather distinct questions:

I. Is there some agreement about what is a "good" environment? How does that opinion vary with demographic or psychological attributes?

II. How are environments used and perceived? And from this, if we can agree about "good" use and perception, can we learn to design "better" environments?

I believe that there is evidence to support the view that within

bounds people concur in their judgments about environmental quality. There is also convincing evidence that many variations in environmental perception can be correlated with social and emotional characteristics. When these two concepts are looked at together, I understand them to mean; where diversity in demographic or psychological traits is not overwhelming (as between mentally ill and mentally healthy people, or between an Indian peasant and a New Yorker) people will be in substantial agreement about whether an environment is suitable for one purpose or another, also whether the environment is pleasant or not.

The work of researchers following two paths of research has led me to these conclusions. The two paths are not particularly well-coordinated but seem to me to form the basis for an understanding of environmental perception which will be useful to practicing urban designers. When taken together, the two paths lead me to agree with the following statement from Environment and Behavior, "any action taken in the real world environment depends not only on the nature of that environment but also on the actor's personality."[7]

1. The first set of research centers around the issue of consensus in environmental judgments. A research project by Coughlin and Goldstein (1970) compared people's evaluations of different "natural" environments. Subjects were shown slides or prints of various scenes and were asked to rate their attractiveness on a variety of scales, such as quality of the landscape with reference to overall desirability, attractiveness and beauty. Questions such as, would you like to live in a house from which you could see this view?, and how would you rate this as an area to pass through and enjoy the scenery? were posed. The variations in judgments of the environ-

ments was greater between environments than between subjects. According to the authors, "The tests indicated that significant agreement on attractiveness of various scenes can be expected and that environmental attractiveness can be determined and analyzed."[8] It should be noted that natural environments provoke the strongest agreement among Americans.[9]

A series of eight studies carried out by David Lowenthal and Marquita Riel to elicit public preconceptions and attitudes toward a wide range of environmental stimuli have implications for both streams of research (see below). In Structures of Environmental Associations, they assert that certain clusters of environmental attributes form a central interlocking network of perception; that if someone judges an environment to be beautiful, he or she will also think that the environment is fresh, interesting, pleasant, clean and will like that place. The authors also state that "neither past environmental experience nor any background difference in age, sex, education, or occupation significantly affects the strength of these associations. They represent powerful and undeviating guidelines by which we seem to structure certain common modes of environmental experience."[10] The authors did not conclude, however, that there is agreement about which environments are beautiful, fresh, etc. Nor did they test the semantic differences perceived by the test subjects.

2. The second research issue having important implications for urban designers is that which illustrates and attempts to find patterns in the different perceptions of the environment held by varying socio-economic groups or by different personality types. Lowenthal compared the environmental judgments of four groups of Bostonians (Environmental Assessment: A Case Study of Boston). The four "social types" who participated in the

study were secretaries, medical technician students, boy scouts and architecture students. About twenty-five members of each group took a series of walks (individually) in different Boston neighborhoods and then rated the neighborhoods on scales of environmental attributes, such as urban, moving, quiet, chaotic, rich and poor. Lowenthal found that the agreement about environmental quality between individuals was higher within groups than between groups. When Bostonian images were compared with the judgments made by people in three other cities (New York, Cambridge, Massachusetts, and Columbus, Ohio), Lowenthal found that "where people are makes much more difference to the structure of the way they see the world than who they are.[11] In his article, "City Designers and the Pluralistic City," Donald Appleyard[12] mentions the vastly different perceptions that various residential and economic groups have of their city, Ciudad Guayana. The maps which people drew exhibited different views of the city's geographic size and texture. Wealthier people who rode in cars drew the city as it appeared from the road network, the poorer people concentrated on those routes travelled by busses or taken on foot. The structures of the mental maps of the various groups also differed in their complexity and method of structuring, in part reflecting the effects of formal schooling on the environmental perceptions of Ciudad Guyana's middle class.

George C. McKechnie has proposed an Environmental Response Inventory which would categorize the ways in which people with different psychological traits differ in their views of similar environments. The different personality types used by McKechnie include such categories as pastoral, urban and assertive. His experiments testing the premise that these differences do exist have met with some success.[13]

A question that remains to be answered is, how do psychological and socio-economic characteristics relate in their influence on an individual's environmental perception? As the research community continues to work with the topics discussed above, and as preliminary conclusions are further tested, I think we will see the formation of an important information base for urban design; perhaps a theory of environmental perception. Once we are satisfied that it is possible to test environmental preferences, developing some basic references that may serve as a framework for urban design seems possible.

For example, we could test the environmental preferences held by secretaries who eat their lunch out-of-doors. Assuming that a fairly representative group of secretaries was chosen and a well-designed test was administered, it is possible that some reasonably appropriate standards for the design of office complex courtyards (used primarily by lunching secretaries) could be established. Of course, involving the secretaries themselves in the design process is the best method we have to insure that the design will be appropriate to their needs. (Standards for architectural design, e.g., school classroom dimensions, have been in use for a long time -- although in many cases based on the inferences of administrators and architects and cost-accountants rather than on the preferences of the users.)

The use of such standards is not seen in terms of rigid specifications, but rather as a useful tool for the designer who does not always have the resources or the opportunity to work as much as she might like with the users/clients, but who is trying to create an environment that will be well-liked and well-suited to its users. Through testing the en-

vironmental preferences of a number of different users, it may become evident that an adaptable design may best meet the needs of the designer's clients.

In cases of broader, less defined environmental design issues, such as neighborhood design guidelines or city signage regulations, it would be very useful to know that there is some agreement among people about what they like in an environment. At the least, such information might allow designers to choose solutions that almost no one finds ugly. Most optimistically, one might hope that designers could produce designs that most people find pleasant. Knowing that such solutions are possible, even with diverse client groups, should spur designers to seek a much clearer understanding of people's environmental preferences. Changing or expanding preferences might be another route to finding acceptable designs. To do this, a basic understanding of environmental perception is also required.

The set of (tentative) conclusions discussed above is based on research that concentrated on finding the patterns and variations in human response to an environment. The following discussion explores research centered around inquiries into how environments are used. Researchers have questioned demographically similar people about different environments. Does the environment fit[14] its users? Is the environment used in the manner which the designer thought it would be? How can we improve the fit of the environment to the people who use it? John Zeisel has used the term "diagnostic evaluation" with reference to the way in which architects analyze their buildings;[15] this term might also be fruitfully applied to urban design research.

One book which has guided the development of research in the field

of urban design more than any other is Kevin Lynch's The Image of the City.[16] His framework for conceptualizing and structuring the city for research and design has been used and built on by many succeeding authors. Oscar Newman's Defensible Space[17] is an important example of using the idea of environmental psychology in a real-world situation that yielded dramatic illustrations of design variations that resulted in dissimilar patterns of use. Among others,[18] these two researchers reintroduced the planning profession to the idea that the configuration of the physical environment has some predictable impacts on the social environment.

A number of studies of environmental use exist. Studies such as Sommer's Personal Space[19] explore very small-scale fits between people and their environment. Studies of student housing,[20] residential development,[21] and communities[22] examine larger scale issues of environmental use. The techniques for learning how people use (or abuse) an environment are fairly well-developed, from unobtrusive observation[23] to participant observation. Why some environments successfully fill the needs of their users and why others do not is still the subject of considerable speculation. Theory-building about creating "better" environments is occurring (Lynch, Perrin, Michaelson). Perhaps a very important breakthrough within the field of urban design has already occurred to some extent. That is, heightening designers' consciousness about the need to consider the consequences of change in a community. An awareness is growing among designers that there are predictable patterns of use that can instruct their designs.

## Using Research in Practice

Designers have taken the work done by environmental psychologists,

combined it with their own "design intuition" and written the books, articles and guides which form the link between research and practice. Attempts to link theory and practice are taking a number of different forms. All of the work attempts to make design principles learned in specific case studies applicable to a range of places. Much of the work takes the form of teaching documents that convey information through standards, specifications or performance criteria.

The matrix shown below organizes the work by four criteria; site specificity, issue orientation, guidelines, and management strategies. The matrix forms a framework for discussing the various routes that urban design research-practitioners are pursuing to improve the quality of urban design. The four criteria are functional divisions in the work, but do not represent theoretical differences. There is a considerable body of work that does not fall discretely into one of the matrix's four divisions. This is discussed under the heading, Planning/Design Strategies. The two Design Improvement Strategies are discussed below. The levels of Design Concern are illustrated within each strategy.

| Level of Design Concern | Design Improvement Strategy | |
|---|---|---|
| | Guidelines | Management Techniques |
| Site-specific | Edinburgh South Side Design Guide[24]<br>Essex Design Guide[25] | NYC Bonus System<br>Design Review |
| Issue-oriented | Townscape (Cullen)[26]<br>Sign Sense, Arlington[27] | Managing the Sense of a Region (Lynch)[28] |

Guidelines

The most developed of the design improvement strategies are Design Guides. The Guides are essentially handbooks which tell the user how certain design problems can (or should) be solved. Design guides usually tackle a relatively narrow scope of design problems and concentrate on certain aspects of the environment such as the design of residential environments, the preservation of a certain area's unique historic characteristics or the design of a particular component of the environment.

Site-specific Design Guides - Most often produced by towns with a strong sense of pride in their history or a characteristic visual quality, these Guides deal with a fairly broad range of environmental concerns and are very site-specific. For example, the Edinburgh South Side Design Guide would not serve any place other than the neighborhood for which it was written. The Essex Design Guide provides specific design information for residential development in one English county.

The geographic scale of Guides varies from a neighborhood to a county or a region. The Guides often focus on visual aspects of design. Issue-oriented Design Guides - These Guides focus on a specific design issue, often one that has been the subject of controversy or poses particularly difficult problems. The Guides provide the user with specific information that can help with design decisions concerning esthetic or functional problems, or as in Sign Sense, legal requirements. The Guides may be written for a specific place, but they are often applicable to a range of locations. Gordon Cullen's Townscape looks at some very specific urban design issues, such as vistas, the texture of the street and the degree of openness on a street. The issues which Townscape addresses are applicable to

almost any American or Western European town. Vermont's Back Roads[29] by Bif Longfellow offers design suggestions to the engineers and planners who lay out rural roads. Although specifically written for Vermont, the book's information is applicable to many rural areas.

Management Strategies

Many locales and political situations are not amenable to the relatively rigid controls and well-defined criteria contained in Design Guides, nonetheless, some kind of design control may be desired. Through the use of a management strategy geared to design issues, a flexible form of design consideration can be inserted into a broader overall planning strategy. Most of these strategies rely on the existence of a local board or committee that has the legal authority to make demands on a developer, has the knowledge necessary to make decisions about design issues, and has community backing for those decisions. Site-specific Management Strategies - Three of these strategies have received the most frequent use in the United States.

1. Design Review - This strategy is by nature site-specific; each decision deals with a unique design that is evaluated on the basis of locally-defined criteria. Because this tool depends on ad hoc (although not unguided) decisions, it is very flexible and is applied when a development exceeds some base standard of size, location or other measure set by the local community. A number of towns which have not set up design guidelines use a design review process to insure that developments are consistent with community standards. Thomas Nally's recent MCP thesis, Design Review, Alternative Models of Administration,[30] presents an interesting discussion of the successes and failures of three design review processes

in Boston.

2. Incentive Systems - The best-known use of incentive systems is that of New York City. By allowing bonuses of extra floorspace, the city has "persuaded" private developers to include community-enhancing design features or facilities in their buildings.[31] In communities where the premium on space is not so high, incentives having to do with future development rights or permit procedures could be used to influence the design of private buildings.

3. Zoning Codes - Almost every American community has a zoning code that regulates many aspects of building and development. Although these codes are often written without specific attention to urban design, they profoundly influence the appearance and sensory quality of a community. Zoning codes are very powerful tools of design management. People are now beginning to consider using them to improve design quality.

4. A fourth site-specific management strategy that has not yet been extensively explored is a process-strategy. Such a strategy would outline a design process for a community that indicates the issues to be considered, the steps to be taken, and the people to be consulted in the design process. A process-strategy might be particularly helpful for neighborhood design projects or for writing community design guides.

Issue-oriented Management Strategies - Managing the Sense of a Region is Kevin Lynch's proposal for guiding the improvement of regional sensory quality. He posits three "streams" of action to lead to regional management strategies: 1) region-wide analysis of sensory quality and policy; 2) "root consultancy" with clients; and 3) a task force that picks critical but workable problems of regional sensory quality which can produce "real effects" quickly.[32] This book presents a broad scope of ideas.

More focussed management strategies include state legislation requiring the reclamation of strip-mined land[33] and the design standards imposed on public housing.[34]

Issue-oriented management strategies are particularly relevant to design problems that occur in many locations, but are administered in a centralized fashion.

Planning/Design Strategies

There are a number of recent design improvement efforts that cover a wider range of techniques than those discussed above. The publications that fall into this category have tried to directly link new understandings from research to a wide audience of practitioners. There have been two attempts to create these planning/design manuals for visual quality. Environmental Assessment of Visual Quality, written by Urban Systems Research and Engineering,[35] and one chapter of Phil Herr's Evaluating Development Impacts, written for the MIT Environmental Impact Assessment Project,[36] are still in draft form. These documents have approached the issue of visual impacts by advising the user about approaches to the problem of understanding the impacts of development on visual quality. Rather than give the reader design solutions, the documents attempt to educate the user and give her the capabilities that the authors feel are necessary for making "good" decisions about the environment. These two documents try to link research findings to environmental impact assessment through the education of the people who carry out environmental impact assessment.

The planning/design strategies are essentially capacity-building efforts. Unlike guidelines and management strategies, these new efforts do not assume that the local user must be given the answers to design

problems; instead, they bring new information to the local designer's or planner's attention and suggest how that information might be important to local decisions. These strategies are open to citizen participation and reduce the role of the 'expert' by giving expertise to a wider group of people.

Finally, an important point to stress in any discussion of environmental psychology's influence on urban design is that the direct input of the user should not be overlooked. He or she is often the best source of information about making an environment function well. Academic research cannot take the place of interaction with clients.

There have been efforts to translate what we know about how people perceive environments and about the ways environments affect behavior into techniques for improving the practice of urban design. These techniques fall into two main categories, guidelines and management strategies. A third technique that relies on teaching urban design skills to local planners is currently being explored.

In this chapter I have tried to illustrate that urban design is a legitimate and growing concern of planners. The summary of urban design research leads to three conclusions that support my contention that environmental impact assessments can be a useful tool for improving urban design. These three conclusions are:

1) Urban design deals with issues that are important to people;

2) We have some (small as yet) knowledge about how people relate to the sensory environment; that knowledge is growing;

3) We have the techniques for analyzing the sensory environment in particular situations.

It is this final conclusion which is of the most immediate importance for environmental impact assessment. If we can understand how a particular place is used and perceived, we can also begin to understand how that place will be affected by change, and how those changes will influence the use people make of that place.

Techniques for improving urban design are currently used chiefly by large cities and towns with a tourist trade, dependent on their pleasant physical appearance. Although many communities are interested in improving their physical environments, there have been no incentives for using the methods discussed in this chapter. The EIA requirement which towns must now fulfill requires the local planners to consider the impacts of CDBG-funded activities on the sensory quality of the environment.

How are the communities which receive CDBG grants presently fulfilling their environmental review responsibilities? Are the urban design impacts of CDBG activities being examined? If so, how? These are the questions which are addressed in the case studies which follow this chapter. From the answers to these questions, I hope to learn how the results of urban design research can be most fruitfully applied to the environmental impact assessment process.

# CHAPTER THREE

# CASE STUDIES

## Introduction to the Case Studies

Community response to the HUD-delegated requirement of environmental impact assessment is the subject of the case studies I prepared of Cambridge, Arlington and New Bedford, Massachusetts. The following three questions are addressed in the case studies:

1. What is each community doing to fulfill the EIA requirement?
2. Why is the EIA requirement being fulfilled as it is?
3. How is urban design addressed in the community's environmental reviews and why does it receive that particular coverage?

The research design grew out of my conviction that a detailed examination of a few communities would lead to more useful information than a wider survey. The six reports mentioned in Chapter Two are based on general reviews of many communities and chiefly address procedural issues. I felt that the survey method could not reveal whether more fundamental flaws exist in the regulations. I therefore limited my study to a detailed examination of a small number of places.

The investigation of environmental reviews done by three towns deals almost exclusively with substantive issues. It is clear that procedural regulations have an important effect on the substance of reviews. Procedural issues are addressed in the recommendations that appear in the Epilogue.

I was interested in looking at both the response generated by the

HUD regulations and the capacity of local government to handle EIA responsibilities. I therefore decided to look at towns that HUD officials believed were doing a "good job". Examining towns that have taken their environmental review roles seriously revealed the level of work HUD would like to see in EIAs and exposed the potential of local governments to prepare useful environmental reviews.

Conversations with people in HUD regional and area offices provided me with the names of eastern Massachusetts communities that take their EIA responsibilities seriously. I chose to look at three towns representing a fairly broad range of socio-economic conditions. Cambridge has a substantial population of both upper- and lower-income residents. The city is both a suburb of Boston and an employment center for the metropolitan area. Cambridge had experience with federal grants prior to the CDBG program, and the city's CDBG allocation has remained fairly stable over the program's three years. Arlington is a suburban middle-income community which had no previous experience with federal community development grants. Arlington's CDBG allocation has been gradually increasing. New Bedford is a blue-collar community and is a separate city from Boston. New Bedford received a great deal of money under the categorical grant system and the city's CDBG allocation has rapidly declined as urban renewal projects have been finished or phased out.

Notwithstanding the differences between the three towns, there is no suggestion that they form any kind of statistically accurate sample. However, I think that the case studies offer a fairly representative picture of EIAs that HUD's environmental regulations will engender, given a responsive local government.

Because the three towns that I studied were chosen on the basis of their reputations for good work, the conclusions may actually be more optimistic than a wider survey would have indicated. I do not think that this will interfere with making appropriate recommendations. Where a negative attitude toward environmental impact assessment exists in local government, it is difficult to imagine that good regulations would decrease the quality of the environmental reviews any further. However, in communities where the reviews are taken seriously, poor regulations may hamper the local review process and discourage its improvement. Therefore, the regulations and HUD's participation in the process should be geared to getting the best possible results and not merely preventing the worst.

Case Study: Cambridge

The City of Cambridge is adjacent to Boston and is one of metropolitan Boston's employment centers. The city has a population of approximately 100,000. Cambridge has a fairly large and active Department of Community Development which includes a design staff. The urban design studies that the Department has commissioned for a number of the city's neighborhoods and shopping areas[1] provide evidence of the city government's concern for urban design and environmental quality.

City residents are also interested in the process and quality of development in Cambridge. Community groups such as the Wellington-Harrington Neighborhood Association and the Riverside-Cambridgeport Community Council and representatives of the Portuguese and Spanish communities participated in the CDBG decision-making process. Involving people from many different neighborhood and interest groups in the allocation process resulted in a

wide geographic distribution of CDBG projects.

CDBG money has been used to respond to and encourage grassroots participation in improving the city's social and physical environment. Programs that involve city residents in community clean-up efforts and aid for the elderly obtained CDBG funding. Local housing, employment and social service groups (e.g., Homeowner's Rehab, Just-A-Start, and COPA) received CDBG grants.

Cambridge has received 3.5-4 million CDBG dollars annually. Figure 1 roughly indicates how this money was allocated.

Figure 1. Cambridge Use of CDBG Funds[2]

| Activity | % of Funding (Fiscal Year '77-'78) |
|---|---|
| Housing | 35 |
| Planning, Administration | 20 |
| Neighborhood Stabilization | 14 |
| Open Space | 13 |
| Streets, Sidewalks | 9 |
| Human and Social Services | 9 |

Many of the Cambridge projects are small-scale activities such as minor rehabilitation of public housing, restoration of a small historic site and refurbishment of community centers. Housing rehabilitation and neighborhood improvements have received the largest allocations. None of the Cambridge CDBG projects have required a full-blown EPA-reviewed EIS.

Cambridge has successfully used its CDBG allocation as seed money for acquiring federal, state and private funds. Figure 2 is a partial list of matching funds obtained in fiscal 1976.

Figure 2. CDBG and Matching Funds[3]

| Program | CDBG Funding ($) | Private Funds ($) | Federal Funds ($) | State Funds ($) |
|---|---|---|---|---|
| Housing Rehabilitation | 535,000 | 2,125,000 | | |
| Urban Renewal Continuation | 575,000 | | 825,000 | |
| 312 Loan Administration | 50,000 | | 312 loans 410,000 | |
| Elderly Housing Referral | 12,000 | | 4,000 | |
| Tenant Management Corporation | 75,000 | 50,000 | | 2,000,000 |
| Child Care Services | 30,000 | 30,000 | | |
| Social Services | 207,000 | | Title XX funds 540,000 | |

Environmental Impact Assessment in Cambridge

The CDBG environmental impact reviews for fiscal years 1975, 1976 and 1977 were prepared by Jim Minuto. Minuto is not trained in environmental matters (he usually does economic planning for the city). He considers himself to be aware of the importance of environmental issues in the CDBG decision-making process. He is convinced that environmental impact assessment can be an important tool in the planning and design of projects and has tried to be an advocate for environmental issues in the city's CDBG program. Had he not taken it upon himself to ensure adequate assessments, Minuto believes environmental issues would have been given scant attention in the CD planning process.

Cambridge's environmental impact assessments follow a standard format that draws heavily on the Model Cities Director's publication, A Guide to Preparing Environmental Assessments for Community Development.[4] Most of the commentary in the Cambridge Environmental Review Records (ERR) covers issues for which there are specific federal and state environmental regulations; historic properties, noise, flood plain, coastal zone, wetlands, air quality, wild life and water quality.

The environmental impact assessment of the Housing Rehabilitation and Conservation Program (which calls for the rehabilitation of 500-700 housing units in low- and moderate-income neighborhoods) describes flood plain impacts as follows:

> Flood Plain: With one exception none of the areas in which the program will be carried out are subject to flooding from rivers, streams or the ocean. The area in question is in Census Tract 3550, where Cambridge Engineering Department estimates of 100 Year Flood of Alewife Brook show the residential area near Fresh Pond Parkway and Massachusetts Avenue near the expected limit of the flood. Both sources of flooding information (FIA and Cambridge Engineering Department) are crude and serve as a warning for areas rather than a definite delineation. The FIA source, however, carries with it Federal Flood Insurance sanctions. The most appropriate policy in the one area in question would probably involve further study of the Flood Plain, Floodway and Flood Hazards before any commitments are made. 5

The environmental reviews include an evaluation of the capability of Cambridge services to deal with CDBG development. Services such as water supply, transportation, schools and shopping are rated with regard to accessibility and adequacy in each of the city's census tracts. It is unclear how the impact assessments use this information. The city has little control over many of the services. If housing redevelopment is planned in an area that has poor access to public transportation, there is no evidence that Cambridge begins discussions about improving service

with the Massachusetts Bay Transportation Authority. The ratings provide information but do not assess impacts.

Discussion of the effects of CDBG activities on such "soft" issues as "social fabric and community structure" is less detailed.

> Social Fabric and Community Structure: Will act to prevent disruptive negative impacts through neighborhood stabilization.
>
> Health Care and Social Services: Slight positive impact may result from better physical conditions in housing.[6]

The impact assessments indicate that the city hopes the housing rehabilitation program will have a beneficial effect on community residents. In their lack of specific discussion of social impacts the assessments also suggest that the reviewer is unsure of his ground. One of the rehab program's important goals is the stabilization of neighborhoods. Therefore, the impact of the program on "Social Fabric and Community Structure" is important to the program's overall success. The much more detailed assessment of flood plain impacts quoted previously does not indicate a concern for flood plains, rather an ability to deal with that issue. The inadequate discussion of impacts on social fabric does not indicate a lack of concern, rather a lack of assessment capabilities.

### The Assessments of Urban Design in Cambridge EIAs

The "analysis" of urban design considerations appearing in Cambridge's Environmental Review Records is minimal, the only statement often being "slight improvement expected". The assessment of the urban design impacts of the Housing Rehabilitation project is one of the more detailed reviews:

> Aesthetics and Urban Design: Will preserve and, in some cases, enhance the present visual quality and act to prevent

disruption from inappropriate development or decay.[7]

Minuto stated that there are no standards or measures against which he could judge the quality of the design. Therefore, any criticisms or modifications suggested in the assessment would be his own "arbitrary" opinions and would be open to legal challenge. In addition to the general problem of assessing the quality of design, the plans he reviews are typically in a preliminary state. For example, money is released for sidewalk improvements before the specific sidewalks that will be fixed are chosen. Minuto questioned how well the urban design impacts could be assessed without drawings or specifications to evaluate. The same situation is found in many CDBG projects and poses a major problem with regard to preparing a serious evaluation of impacts on urban design.

Many of the physical development projects funded with CDBG money (e.g., street and sidewalk improvements, housing rehabilitation) are reviewed by the Cambridge Historic Commission before the city releases construction money. These reviews occur after the HUD-required EIA is completed. Minuto feels that the Historic Commission's review injects historic and esthetic considerations into the overall program and that the Commission has the legal mandate to make judgments on these issues. Because much of Cambridge has some historic significance, the Commission has an impact on many projects, a fact which Minuto feels enhances the quality of the designs which actually emerge. The Historic Commission's impact on CDBG developments includes such things as: preventing changes in historic buildings undergoing rehabilitation (such as removing old windows and installing picture windows) or insuring that new street furniture is appropriate to an historic neighborhood and that brick side-

walks are not replaced by concrete.

The Commission's work, however, is carried out on a project-by-project basis; the review process entirely overlooks the cumulative effects of the many small design decisions made in the CDBG program. Minuto did not see how the question of overall design impacts could be included in environmental reviews without having city (or neighborhood) design guidelines.

An Analysis of the Cambridge EIA Process

After three years' work on CDBG environmental reviews, Minuto concluded that the quality of assessments and their impacts on project design are due solely to the efforts of the individual responsible for the work. The pressures working against an effective EIA process are:

1. No moral or technical support from HUD. If anything, HUD has created a difficult relationship between the environmental reviewer and the city's line departments. HUD offered no encouragement to Minuto, and when he asked for HUD's backing in his demands for information or compliance from the line departments, HUD responded with assurances to those departments that they were not concerned with environmental issues.

2. The A-95 process is a mere formality as regards the CDBG program. The State has no standing with regard to the program which is federal-local in nature.

3. No substantive review by HUD, EPA, or CEQ and thus no comments on the adequacy of the job or suggestions for improvements. Lack of review encourages towns to take lightly any commitment to environmental protection.

4. No citizen comment on the city's conclusions of "no significant

impact" or on any aspect of the environmental reviews. Minuto felt that this lack of response might occur because of the thorough citizen participation in the CDBG program's planning stage. Decisions about what to fund are made early, with substantial citizen input. Environmental findings tend to be accepted after the fact rather peacefully.

5. No guidance from anyone beyond the program guide and Interim Guide for Environmental Assessment (Vorhees) issued by HUD, and the publication from the Model Cities Directors. HUD was not helpful when asked for advice; in fact, Minuto felt he was given faulty answers to questions about legal responsibilities.

Overall, the legal and procedural framework set forth by HUD does not encourage the pursuit of rigorous environmental assessments. One HUD official expressed the opinion that environmental impact assessment is an exercise to confirm what the communities want. He felt that HUD is not interested in finding that a project has negative impacts and, therefore, not many negative statements result from reviews.

HUD's attitude toward the environmental assessments reduces the possibility that they can play a significant role in determining how community development funds affect the city's environmental quality. Minuto judges that the extent to which the EIA process has an effect in Cambridge depends on the perseverence of the individual charged with preparing the reviews. He suggested that giving the environmental officer authority to make project changes to enhance the environment and to strictly enforce environmental protection laws would make it reasonable to require more detailed information on the projects prior to granting environmental clearance. The information might include things like renderings of physi-

cal projects, or exact locations of street improvements. HUD's lack of interest and the lack of local legal requirements discourage the adoption of such procedures. If the manpower were available, Minuto would also stress the ongoing monitoring of projects to ensure that environmental standards (e.g., construction noise) are met.

According to Minuto, the concern about environmental issues caused by the necessity of preparing environmental reviews has affected a few projects in Cambridge. Minuto's advocacy on behalf of environmental quality has forced line departments to agree, at least verbally, to small changes in project design (he has not followed up to check on their actual performance). For example, in the planning of a small recreation area along the Alewife Brook, Minuto found that the property straddled the migratory path of some small animals. He tried to ensure that fences were not erected that blocked those paths.

Although Minuto could not pinpoint many specific changes that had occurred as a result of environmental reviews, he said that the reviews had forced the line departments to describe in some detail what they were going to do with CDBG funds. The requirement to commit themselves in writing prompted the departments to do more precise planning than they might otherwise have been inclined. For example, they might specify the dollar costs of repair work or indicate precisely what improvements would be made with CDBG funds (e.g., a new boiler, new kitchen appliances, etc.). Minuto feels that the environmental review requirement might be responsible for some increased thoughtfulness on the part of various line departments involved in community development activities.

The eagerness of the line departments to "get the work done" and

the reluctance of HUD to stress the importance of environmental issues have helped to prevent examination of the cumulative effects of development. The wish to avoid doing an EIS amounts to an unwritten policy and also discourages assessing cumulative impacts. Minuto reports that notwithstanding the complaints of the line departments, and the assurances of HUD officials in both the regional and area offices that such reviews were unnecessary, he initiated and carried out environmental reviews of projects that were continuations of previous years' work. He stressed this point because he believes that a quantitative change in a project causes a qualitative change; i.e., continuing a project of housing rehabilitation over a number of years has a greater environmental impact than one year's work. (Cambridge is approaching the need for an EIS in the Riverside housing rehab program, an event that is viewed with dismay by those people involved in the CDBG program; therefore, the program's emphasis may be shifted before the EIS threshold is reached.)

In summary, the environmental reviews carried out for the CDBG program have affected the design of specific projects only slightly. The Historic Commission review has more effect than the CDBG-required assessment. But, the mandatory CDBG review may prevent the worst proposals from ever reaching maturity and may temper those proposals that do. The proposals that emerge from the citizen participation process and the mayor's office have not been chosen without an awareness of their environmental quality. Although dissatisfied with the present situation, Minuto would not do away with the reviews for fear that the minimal environmental considerations now present would be abandoned.

Case Study: Arlington

Arlington, Massachusetts is a suburban Boston community of approximately 50,000 people. The community has a representative Town Meeting. The Board of Selectmen make day-to-day policy decisions in conjunction with a town manager. Decisions involving expenditures of town money and certain legally-defined policy decisions must be approved by Town Meeting. The Redevelopment Board and its staff in the Planning and Community Development Department have responsibility for decisions about the expenditure of Community Development Block Grant (CDBG) funds. All major decisions about CDBG projects, whether required by law or not, are presented at Town Meeting.

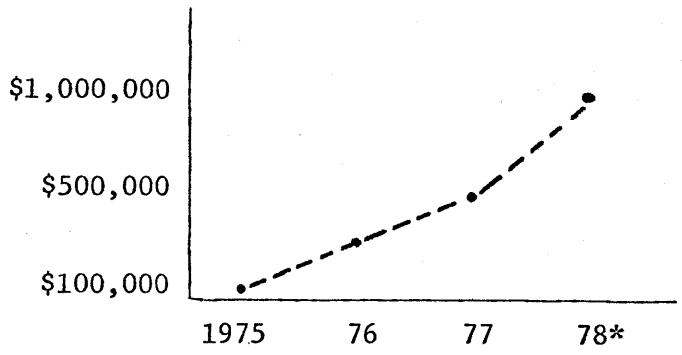
The Citizens' Involvement Committee (CIC) spearheaded an active citizen participation effort and surveyed the people of Arlington to learn about their priorities and needs. This process pinpointed citizen concern for the revitalization of the downtown shopping area. The Broadway Public Improvements Project developed into Arlington's largest CDBG project. The following description of the project appears in the CDBG environmental review:

> The program is designed to improve the traffic and pedestrian conditions in the area of Arlington Center. The town will undertake a full range of activities in a multi-year phased program, as monies become available, to install trees, shrubs and planters, improve the flow of traffic by realigning traffic lanes, provide additional parking spaces, relocate taxi stands and on-street loading areas, and provide various street acoutrements. [8]

It should be noted that the recommended design improvements spring from felt needs on the part of Arlington's residents, not from an environmental review.

Other projects funded with CDBG money include the purchase of land for recreation and downtown parking facilities, a Dial-A-Ride taxi service for the elderly, and the rehabilitation of a playground. Arlington's allotment of CDBG funds has increased each year since the program began. (See Figure 3.) There is a degree of uncertainty about Arlington's status as an entitlement community because the population is very close to the 50,000 threshold. Arlington has been assured of continued funding until the completion of the next federal Census in 1980-81; beyond that the town's status will depend on the Census results.

Figure 3. Level of Funding in Arlington




*anticipated

Environmental Impact Assessment in Arlington

Arlington's environmental impact assessments are largely descriptive. A typical environmental review (this from the Broadway project) includes the following sections: public notice, locus map, existing conditions, planning for the project, project description, citizen participation, goals, impacts, alternatives, and level of clearance. Little technical data is included, and there is no specific format outlining the

issues to be covered.

From reading the assessments and talking with the environmental reviewer, Gail Baron, it is clear that neither she nor the Redevelopment Board felt that the CDBG projects would have any substantial negative impacts on the town's environment.

Citizen response to the findings of "no significant impact" has been insignificant. Apparently, citizen participation in the early stages of decision-making resulted in agreement about projects that were actually undertaken. This eroded citizen desire for involvement in the environmental assessment processes which occurred later. Baron said that an Arlington resident occasionally comes into the office or calls after a notice appears in the paper; but overall, response is negligible. CDBG funds have frequently been used for projects that do not require town funds, a situation that probably decreases negative reactions from the community.

Most of Arlington's CDBG projects are small-scale and have little direct environmental impact. Baron felt that writing reviews of projects "which have no impact at all" is a waste of time. The examples she mentioned are acquisition of property with no planned change in land use and social service programs. About half of Arlington's projects fall into one of these two categories. The one project which Baron thought would have a real impact is the Broadway Improvements; however, she indicated that the Department had a hard time saying exactly what those impacts would be, in part because the design of the project was not in final form before the impact assessment was written. Also, the Broadway Improvements Project is perceived by Baron as having primarily positive impacts on the town and therefore requiring less documentation than would a project with negative

as well as positive impacts.

According to Baron, the task of carrying out environmental impact assessments has not forced the Department to look at any new issues. HUD's requirements are so minimal that Baron feels Arlington has exceeded them in each assessment. The laxity of the requirements is not regarded negatively. Baron surmised that more specific requirements would force the Department to waste time working on assessments of minor projects.

Arlington's environmental assessments do not specifically mention urban design impacts; although in the town's largest project, the Broadway Improvements, urban design issues are a major component. Baron suggested that design concerns surface in Arlington's CDBG process through the attention of a member of the Redevelopment Board, Mr. Edward Tsoi. Mr. Tsoi is an architect and, according to Baron, very concerned about urban design issues. He tries to ensure that project designs are "good" (using his own professionally derived standards of criticism). Baron said that Alan McClennen, the Director of the Planning and Community Development Department, is also interested in the quality of design occurring in Arlington and therefore examines projects with that in mind. For example, Tsoi and McClennen urged that the Broadway Improvements be pedestrian-oriented and suggested modifications in the project design such as including a fountain and a seating area.

Still, there is no formal process by which CDBG projects are reviewed, either individually or with regard to their cumulative effects on urban design in Arlington.

An Analysis of the Arlington EIA Process

Baron asserted that the environmental review requirement does not

add anything to the quality of CD projects. She regards the assessments as fulfillments of a technical regulation for projects that do not require a full-blown (EPA-reviewed) Environmental Impact Statement, essentially as "preludes to an EIS". In her opinion, the chief function, and most positive effect of the reviews is helping to describe the town's CDBG activities to HUD. Baron has been sending the assessments to HUD along with requests for the release of funds (under the impression that she is required to do so). She also presumed that the assessments were read by HUD officials. She has, however, never received any comments from HUD on the reviews. If the level of citizen involvement had not already been so high, she felt that the environmental assessments might have added something in that regard.

Overall, Baron's comments about the usefulness of the review process were negative. She felt that HUD's input was negligible, neither adding to nor detracting from Arlington's concern about environmental quality. The presentations the Planning Department makes before Town Meeting are more detailed and thorough than those needed to fulfill HUD's requirements. The rigor and scope of issues addressed by the Redevelopment Board constitute a far more comprehensive review of projects than HUD requires. Baron stated that the Environmental Review Records are written to fulfill HUD requirements and not used at all for internal planning.

Underlying Baron's feelings that the environmental review requirements are of no particular value to Arlington is the fact that the town already does what it feels to be a good job of protecting the town's environment. Although Baron did not express this opinion explicitly, my impression is that the town takes environmental issues rather seriously.

HUD's requirements have not augmented this concern.

One criticism that Baron had of the Environmental Review Records is that they are totally unconnected to the annual performance reports that the town must prepare for HUD. She thinks that ERRs and the performance report should be combined in some way. She also argues that the ERRs are a much better reflection of what the community is actually doing with its money than the time-consuming and tedious performance report.

Baron did not feel that a HUD review of the environmental assessments would substantially change Arlington's approach. However, she would like HUD to review the ERRs (as she already thought they did) and comment on them, if only to indicate that the town is doing an adequate job.

HUD's attitude toward the local reviews has not struck her as particularly positive or negative -- perhaps because of the lack of conflict over the environmental impacts of CDBG projects in Arlington. HUD's responses to her questions, mostly concerning procedures, have been adequate. On questions of project eligibility the answers have been less clear, but she attributed this to the cloudiness of the original legislation.

Baron was not very critical of the present environmental review process and indicated that she feels the HUD regulations are "the best we could hope for at this point." She surmised that the present situation is "a big step up" from previous programs that relied on federal rather than local review of environmental impacts.

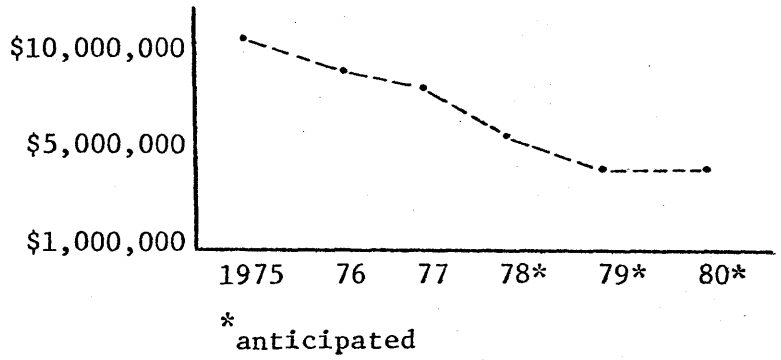
Case Study: New Bedford

The City of New Bedford is located on the southern coast of Massachusetts. At one time the premiere whaling port of the United States, New

Bedford stagnated economically for many years. The last two years have seen an improvement in the city's economic health. Fishing is the city's chief industry. As a result of its long economic decline, New Bedford suffers chronic unemployment. The city's economic problems and a rigorous campaign for grants caused the city to receive a fairly generous share of federal funds over the last fifteen years.

The city has a population of approximately 100,000 people. As shown in Figure 4, the hold harmless funds [9] allocated in the first few years of the CDBG program pushed the city's CDBG allocation out of proportion to this population. As old urban renewal programs are completed, the CDBG allocation will fall back into line with formula allotments.

Figure 4. Level of Funding in New Bedford




New Bedford's Community Development Block Grant program is administered by Richard Pline, the mayor's assistant for community development. The environmental assessments are carried out by the Department of Management, Development and Evaluation, where the environmental assessment coordinator is Robert Bowcock. The projects that receive CDBG funds are identified through a citizen participation process that includes solicitation

of ideas from a city-wide mailing and a series of public hearings. A Citizens' Advisory Committee whittles down the many proposals that are received and makes recommendations to the mayor, who then chooses the specific projects. New Bedford has used its CDBG funds in a geographically dispersed manner.

CDBG funds in New Bedford are concentrated on: Revitalization of Housing and the Physical Environment -- 63 percent; Historic Preservation and Restoration -- 12 percent; Expansion of Public Services and Public Facilities -- 12 percent; and Economic Revitalization and Expansion -- 13 percent.[10] A number of large sewer projects are included in the first category. The percentage indicates the share of 1976 allocations dedicated to each. Working in conjunction with the Waterfront Historic Area League (WHALE), New Bedford has partially funded a major revitalization of its downtown and waterfront areas with CDBG funds.

New Bedford's CDBG funds have been used to leverage federal and state monies. Attempts to leverage private funds are only now beginning in the housing rehab program. A number of projects that received a small amount of CDBG funding will be covered in major part by other grants. For example, the sewer system work will be financed 10 percent with CDBG funds and 90 percent by other federal and state programs. The planning work, including an Environmental Impact Statement for the John F. Kennedy Highway (an extension of Massachusetts Route 18) was paid for by CDBG funds. Actual construction funds will come entirely from other federal sources.

For the first time since the program's inception, HUD checked up on New Bedford's use of CDBG funds this year. As a result, they indicated that the city may not be living up to the original mandate of the legisla-

tion concerning the use of the money for the benefit of low- and moderate-income people. One project that HUD has objected to is a new sewer line for an industrial plant that happens to be located in a relatively affluent part of the city. According to Bowcock, the line would not be linked to any residential development but is solely for industrial use and will thus improve economic opportunities for low- and moderate-income persons. Regulations have now been proposed that would require the use of 75 percent of CDBG funds for the benefit of low-income persons. Bowcock felt this might work if the regulations are explicit, but said the city was troubled by HUD's criticism this year because the existing regulations are so lax.

Environmental Impact Assessment in New Bedford

New Bedford's Environmental Assessment Guide for Community Development Projects, An Administrative Handbook was written in early 1975 by members of the Department of Management, Development and Evaluation (including Bowcock) and consultants from PlanAnalysis, Inc. HUD's guide and the Model Cities Director's guide were not used. According to Bowcock, the sources used in writing the New Bedford Environmental Review Record (ERR) form and handbook were the original CDBG environmental regulations and relevant federal and state laws.

New Bedford's standardized ERR forms follow the handbook's outline. An ERR Table of Contents reads as follows:

Documentation of Relevant Dates
Exhibit A Project Description
Exhibit B Existing Environmental Conditions
Exhibit C Environmental Impact Assessment
Exhibit D Project Modifications
Exhibit E Alternative Projects

Exhibit F Consideration of Other Applicable Authorities
Exhibit G Level of Clearance Finding
Exhibit H-L are procedural steps to be completed
Appendix A Dissemination Log
Appendix B Comments Received
Appendix C Relevant Reports and Documents

Within this format a fairly clear picture of the proposed project emerges. For example, the project description for the Revitalization of the Waterfront Historic District includes:

> Changes in the Treatment of Surface Elements. In order to restore an historic atmosphere and authenticity within the District various improvements to surfaces are required. The items involved in this category include streets, sidewalks, driveways, curbings, and crosswalks. In addition, provisions will be made for streetlights, tree planting, landscaping, street signs and street furniture contemporary with the third quarter of the nineteenth century. [11]

This is one of four paragraphs describing that project in fairly complete conceptual detail.

The stated purpose of Exhibit C, Environmental Impact Assessment, is "to identify the anticipated nature, magnitude and extent of environmental impacts related to implementation of the project."[12] Within this section, many factors of environmental importance have been identified and each factor is rated on a three-point scale according to its expected level of impact, both short- and long-term. The rating A means, "the factor has low related impacts"; B, "the factor has moderate related impacts", and C, "the factor has significant related impacts."[13] Only adverse impacts are rated "B" or "C". The factors listed cover a substantial range of issues. For example, the factors listed under the category "social/service" are the following: primary and secondary educational facilities; colleges and universities; specialized educational facilities; health care facilities; social services; relocation services; sanitary sewer service; water supply

service; storm drainage; solid waste disposal; gas and electric services; communication services; police systems; fire protection systems; transportation services; accessibility and energy requirements.

The form of the review record would seem to encourage a rather wide-ranging, detailed examination of environmental impacts. However, the ratings which are applied to each factor are done so without written documentation. All of the ratings that I examined were either A/A or not applicable. Few of them were given further discussion in footnotes.

The Handbook describes what should be examined under the heading, Urban Design Features:

> Will the formal coherence of the project area or its surroundints be reduced by the project action? Is the proposed design integrated with the area in which it is to be located? Is the project compatible with the surrounding area in terms of land use, density, mass, texture, and architectural design?
>
> Will the user perceive adverse effects upon the content of visual scenes which will be associated with the project? Will the project block views? Will structures cause perpetual shadows over large areas? 14

The rating of "Urban Design Features" in the ERR for the Revitalization of the Waterfront Historic District is: short-term "A"; long-term "A" with no other explanation given. The rating of "A" signifies -- "the factor has low related impacts. There are no special problems associated with this factor. Adverse impacts are negligible; other effects are neutral or beneficial." [15] Although the city might well argue that the urban design impacts of the project will be beneficial, it is difficult to imagine that there will be only "low related impacts" on urban design. (Recall the partial project description quoted above.)

While I do not think the assessments adequately discuss the impacts

of development, I am willing to believe Bowcock that the city takes the environmental reviews seriously and makes an effort to examine the issues that seem problematical, Bowcock did not feel that there were any people involved with the CDBG program who had a particular concern for urban design. The Historic Commission apparently limits its commentary rather strictly to questions of historic authenticity and does not comment on broader issues. Urban design decisions seem to be made on a project-by-project basis by the individual designers. The cumulative effects of CDBG activities on the city's visual character have not been specifically addressed by Bowcock or anyone else.

An Analysis of the New Bedford EIA Process

New Bedford's handling of HUD's environmental impact assessment requirement seems competent and reasonably thorough. However, the effects of the EIAs on CDBG activities are negligible; according to Bowcock, the reviews have not changed projects at all. The assessments are done after project plans are conceptually complete and are seen as the last part of the process; used only as a certification process to allow the request for the release of funds. Although the EIA is the last part of the process before funds are released (and theoretically, the point at which HUD might become involved), reviews are carried out with only broad concepts in hand. The actual plans and designs for a project are usually completed after the environmental review process is over. Bowcock indicated that an EIA had never uncovered things that were later injected into a project, nor had the city ever gone back after an assessment to change a project. Once complete project designs have been drawn up, there is an informal in-house re-

view during which the mayor and people from the Planning, DPW, and Building Departments and the city's staff architect comment on drawings or blueprints.

Bowcock feels that CDBG reviews are useful to him because they help him become more familiar with New Bedford's environment. He believes that they are of no benefit to the general public. In three years, his office has received one citizen comment on a finding of "no significant impact". Contractors working on CDBG projects have never looked at the assessments.

One reason for the ineffectiveness of New Bedford's CDBG reviews lies in the city's perception of HUD's attitude. Bowcock noted that after HUD's environmental regulations were initially published in the Federal Register, the agency "stayed away" from the topic. He said that HUD did not make technical assistance available to the city. When New Bedford requested advice in deciding what to include in the assessments, HUD told them to try what they wanted and if the results were inadequate the city would be notified. The agency refused to help the city prior to their devising a local EIA format. HUD encouraged the city to treat the environmental review as a mere procedural requirement rather than a source of planning information.

HUD has looked at the environmental reviews only once, during a program audit. At that time, they concentrated solely on procedural issues. Bowcock feels that for HUD to do an adequate job, virtually every file should be reviewed. He thinks that in the present situation it would be possible to get something through HUD which had a tremendous environmental impact. Although Bowcock suggested that HUD should be more supportive of local environmental reviewers and should review local EIAs, he was careful

to note that New Bedford has enjoyed the independence of the CDBG program and would not like to see that jeopardized by federal interference.

Case Study Findings

The most important conclusion to be drawn from the three case studies is that the HUD-required environmental impact assessments of local CDBG activities contribute in a minor way to protecting the environment but not to enhancing the environment. Notwithstanding the efforts of local reviewers to carry out their duties responsibly, the present regulations have reduced the EIA requirement to a time-consuming and costly red-tape procedure.

The environmental protection that the process provides results from the caution it inspires. The knowledge that an environmental assessment process exists probably eliminates the worst projects before they reach the assessment stage. This is an important effect, but one that could likely be provided by a less cumbersome procedure. As the almost unanimous findings of "no significant impact" indicate, if a project does reach the reviewer's desk it will probably be approved. Therefore, although the process protects the environment from environmentally harmful projects that are discarded early, it is unclear whether the process protects the environment from damaging projects that reach maturity.

All of the evidence presented in the cases points to the conclusion that local EIAs are not acting to enhance the environment. The three reviewers could not provide one example of an improvement in environmental quality that resulted from a CDBG environmental review. Projects may be changed to improve environmental quality, but those changes occur outside

of the EIA procedure.

The three towns I examined seem to be genuinely concerned with improving their environmental quality. Nonetheless, all three regard the EIA requirement as a largely useless procedure. The informal evaluations that occur in meetings between city employees, consultants, and town residents apparently add more to the enhancement and protection of the environment than the formal EIA processes. From these findings I can conclude that the current HUD regulations do not fulfill the NEPA mandate of protecting and enhancing the environment. They do not seriously tackle the NEPA-stated responsibility of the federal government (in this case its agency -- HUD) to "assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings."[16] This finding does not address the question of whether the local, informal process is adequate; but it does indicate that the HUD regulations, setting forth the responsibilities of local government in carrying out NEPA's mandate, are not doing their job successfully.

These basic conclusions about the CDBG environmental reviews underly the findings presented in the remainder of this chapter and the "Conclusions" that follow. I have divided my conclusions into two parts in order to separate the specific information that the case studies revealed from the more general inferences that emerged in the course of my research. The following outlines summarize the case study findings.

I. What Are Communities Doing to Fulfill the EIA Requirement?

A. Writing lengthy review documents that assess, with some care, issues for which specific federal or state legislation exists (e.g., air

quality, water quality). Assessments of subjects for which there is less guidance and less chance of legal challenge are sketchier (e.g., social impacts, urban design impacts, community structure impacts).

B. Devising rating systems for evaluating impacts. These rating systems are not useful assessment tools.

C. Assigning the EIA task to one person, thereby reducing opportunities for discussion and project modification.

D. Avoiding projects that might require a full-blown EIS.

E. Assessing projects individually and not examining cumulative impacts.

F. Examining negative impacts almost exclusively. Beneficial impacts are mentioned without being assessed.

G. Spending a good deal of time and money on environmental reviews that are not helpful to the local community.

II. Why Are Communities Fulfilling the EIA Requirement As They Are?

A. HUD is not urging local reviewers to make CDBG assessments meaningful.

B. HUD does not review the substance of EIAs in order to assure their adequacy.

C. HUD has not offered guidance or training to local reviewers. The lack of training is particularly critical with regard to non-technical issues. (The reviewer often has access to local traffic, sanitary and civil engineers who can provide technical assistance.)

D. The reviewers perceive the EIA requirement as red-tape. This attitude is reinforced by HUD's actions (or inactions).

E. The line departments are eager to get "their" money, and therefore discourage reviews that take time.

F. There is no citizen demand for improving the process.

III.1. How Is Urban Design Addressed in the Reviews?

Assessment of the urban design impacts of CDBG activities is minimal; usually restricted to general statements that the impacts will be either good or negligible.

III.2. Why Is Urban Design Addressed in this Way?

A. Reviewers have only preliminary plans to work with, and they find it almost impossible to assess the urban design impacts of a concept.

B. The reviewers often have no professional training in urban design and are rightfully uneasy about using their personal taste as an assessment tool.

C. Unlike more technical assessments (e.g., sewer capacity, road capacity), urban design assessments rarely involve rapidly learned formulas. (Feeling comfortable with urban design may take a relatively intense exposure to concepts, and discussions with other people. HUD has not provided the information or advice that might have encouraged local reviewers to explore urban design issues.)

D. Urban design is frequently regarded as a minor aspect of environmental quality.

E. The assessment of the beneficial impacts of CDBG activities is superficial. Urban design impacts are often regarded as beneficial and are therefore not thoroughly assessed.

F. The cumulative effects of CDBG activities are overlooked. Some

of the important urban design impacts may surface largely in a cumulative assessment.

G. There are no community urban design standards or guidelines in reference to which an assessment could be made.

In addition to studying the towns with reference to my original questions, I queried the reviewers on two particular points: what were their specific criticisms of the HUD-required EIA process; and what changes would they make in the review process. Their responses provide interesting commentary on the program, in particular, the reviewers' low opinion of HUD's performance clearly surfaces.

I did not ask the reviewers for detailed critiques and recommendations, rather for their impromptu comments. They should be read as such. A bracketed note follows those comments needing some explanation. The comments are those of the reviewers; I do not concur with all of them.

CRITICISMS OF THE ENVIRONMENTAL IMPACT ASSESSMENT REQUIREMENT

| | |
|---|---|
| CAMBRIDGE | - HUD has no expertise with environmental assessment and therefore has no understanding of the problems encountered by the local reviewers.<br><br>- Incentive for good assessment solely generated in the town, not by HUD.<br><br>- Line departments are impatient with delay so are not interested in good assessments, HUD does not have any interest, so exacerbates this conflict between the reviewer and the line departments.<br><br>- HUD's commentary on the reviews is solely procedural, content is totally overlooked.<br><br>- The CDBG program is really a form of revenue-sharing; it is not an urban policy.<br><br>- Legislation is half-baked, either it should be administered like revenue-sharing, in which case there should be no federal monitoring, or, if it is a federal urban program, then the assessments should be carried out by the federal agency administering the program. (Minuto felt that the federal-local nature of the CDBG program has made both the feds and the locals regard certain problems as "the other guy's", therefore, the problems do not get solved.<br><br>- There are no objective standards with which to assess impacts (e.g., sewer capacity, water).<br><br>- Doing Environmental Impact Statements has put the "fear of God" in reviewers so they: 1. underplay the impacts which will result from the action; and 2. avoid large projects.<br><br>- To get the assessments done well, the feds have to do them, or maybe the states.<br><br>- HUD is a hindrance rather than a facilitator in the conflicts between environmental issues and other concerns, HUD is unwilling to encourage environmental concerns but by forcing towns to do EIAs (which take time and money) creates animosity towards the entire set of concerns mandated by NEPA, thus making the cause of "environmentalism" unpopular where it, in fact, is HUD's attitude and not the substantive issues which are problematic. |

CRITICISMS OF THE ENVIRONMENTAL IMPACT ASSESSMENT REQUIREMENT

| | |
|---|---|
| ARLINGTON | - Lack of coordination with the annual Performance Report. (Both are time-consuming and the EIAs are a better reflection of the town's activities than the Performance Report, so why do both.)<br><br>- Minor projects or projects with no environmental impact (land acquisition, social service programs) should not require environmental reviews.<br><br>- The exact procedural steps for carrying out the environmental reviews are not presented in a clear manner. (For example, the timing of the release of public notices is poorly explained in the regulations.)<br><br>- Lack of commentary from HUD on the environmental reviews.<br><br>- The Environmental Review Records are written only to fulfill the procedural requirement and do not add anything to the planning process in the community. |
| NEW BEDFORD | - HUD did not make technical assistance available.<br><br>- HUD did not want any part in assisting local government with the environmental review process -- stayed away from the whole issue. (Made the reviewers feel they were working in isolation.)<br><br>- The EIAs are of no use to the general public.<br><br>- There have been no substantive comments from HUD (or from the A-95 Agency); there has been no real feedback of any kind. "HUD is very inadequate in their review -- when HUD reviews a project, all they look at is the certification; they do not look at what the city has done." HUD has a "so what?" attitude to the environmental reviews. (The local reviewer would like to know whether he is doing an adequate job, maybe some positive comments would encourage him to do better.)<br><br>- HUD tends to look at the "comments" which the project has received -- if there are none, HUD assumes there is no impact. |

SUGGESTIONS

| | |
|---|---|
| CAMBRIDGE | Have the Feds carry out the assessments (they are less corruptible, have more expertise).<br><br>Generate some objective standards at the federal level with which environmental impacts can be measured.<br><br>Provide expert help when a difficult problem is encountered.<br><br>Perhaps have another agency administer the program (EPA, Treasury?).<br><br>Make the program either entirely locally administered and monitored or make it a federal program and have federal people involved in its actual operations. (To resolve the uncertainty of who is responsible for what.) |
| ARLINGTON | Coordinate the Environmental Review Record with the annual Performance Report. At present, the Performance Report is not a good reflection of what is actually going on in the community and the two together add up to a considerable amount of paperwork which could be reduced.<br><br>The gap between the projects which require only an assessment and those which require a full Environmental Impact Statement is too large. There should be three separate levels of review required.<br>1. No or very minimal review for projects which have very minor or no environmental impact, such as social service projects. These projects should be reported on in something like a Performance Report at the year's end.<br>2. Review for projects on the scale of the Broadway Improvements; there should be a certain level of quality (she did not provide any definitions of this quality) demanded from these reviews although there should not be rigid specifications because there are too many different kinds of projects to allow reasonable standard forms.<br>3. Environmental Impact Statements required for large projects such as those now specified by EPA thresholds.<br><br>HUD should provide some kind of review of the environmental assessments. (To provide feedback for the reviewers.) |
| NEW BEDFORD | Technical assistance should be available if it is desired by a community. |

| | SUGGESTIONS |
|---|---|
| NEW BEDFORD (continued) | HUD should develop an adequate review capacity and make substantive comments on the environmental assessments. (The regulations are adequate; the HUD staff procedures are not.) Essentially, every project should receive some substantive HUD review. (To prevent environmentally-damaging projects from being developed and to provide feedback to the local reviewers.) |

# CHAPTER FOUR

# CONCLUSIONS

The CDBG environmental reviews are not useful to local planners. Omissions in the reviews have stripped the process of its power as a decision-making tool. The most important of these omissions are in the failure to investigate: (1) community-wide impacts of CDBG projects; (2) specific project impacts on urban design; (3) cumulative impacts; (4) the range of alternative projects; and (5) the beneficial impacts of projects. The EIAs suffer from problems of timing; they are too late to provide planning inputs and too early to look at final project designs. Finally, by excluding citizen participation from the review process the assessments have become non-controversial certification procedures.

## Community-wide Impacts of CDBG Projects

The manner in which the case study towns spend their CDBG funds and evaluate project impacts indicates an important limitation of current community development tactics and the environmental reviews that assess them. Communities are pursuing many small-scale rehabilitation programs at full speed; they are not explicitly exploring the consequences of the programs on the quality of the built environment. Just as long-term impacts of urban renewal were not well understood at the program outset, the future impacts of the revitalization movement are also mostly a mystery. The communities are convinced that the effects are beneficial, but they are not spelling out any details.

Architects and neighborhood residents once complained bitterly that it was difficult to tell one city from another in the wake of urban renewal. The present concept of revitalization may be leading in the same direction. Arlington's new pedestrian area resembles New Bedford's mall. Neighborhood improvements in Cambridge and New Bedford are proceeding in the same style -- 1970's rustic. With the aid of the CDBG program, vernacular townscapes are fading under a Williamsburg-Newburyport veneer. Neither the local reviewers nor any government studies have hinted that the historic preservation movement might be leading to a visual homogenization of American communities. The loss of community identity and the fading of variations in esthetic values is completely unexplored.

The Main Street Revitalization Conference held in Boston, December 5 and 6, 1977 (sponsored by the Chamber of Congress of the United States) illustrated how well towns have learned to copy from each other. Residents of Bath, Maine took a bus to Newburyport, Massachusetts to see how they might proceed in Bath's revitalization. Salem, Massachusetts has served as a model for a number of New England towns. The slides shown at the conference indicated that the "quasi-historic design kit" of brick sidewalks and gas-lamp style street lights is cutting a wide swath through New England. Differences in city design that existed one hundred years ago are disappearing under the glossy revitalized image. Although towns certainly copied from each other in the past, faster communications and more mobile designers have sped the process considerably. The fact that the streets were really mud and the brickwork painted gaudy colors (remember the Acropolis) is ignored by local historic com-

missions, whose image of older America is based on trips to Williamsburg and Woodstock, Vermont. Many towns may look cleaner and more inviting following historically-inspired renewal efforts. However, I believe that we should rethink our approach to revitalization and learn how to proceed in a manner truly consistent with the community's history and the desires of local residents. Each town has a vernacular style reflecting its own traditions and regional design history. The CDBG program should encourage the maintenance of the integrity of American towns and not be the purveyor of historic preservation fix-up strategies.

Project Impacts on Urban Design

The impacts of CDBG activity on the quality of urban design was the special focus of my studies. Environmental impact assessments undertaken as part of the CDBG planning process barely mentioned urban design. None of the towns made more than a half-hearted attempt to describe visual impacts. There was no attempt to assess other design impacts such as microclimate or ease of access on the quality of communities. The assessments were not used to assure that impacts would be positive and not negative.

The Environmental Review Records (ERRs) did not include information about the urban design issues addressed by the towns during their project planning and evaluation. I learned about local consideration of design issues through conversations with environmental reviewers.

The three towns I studied are all carrying out CDBG projects that will change the appearance of their main streets, the faces they present to the world. These changes are being made with minimal consultation among designers, CDBG planning staff and town residents. Whereas

a fairly extensive citizen participation effort underlies most decisions about CDBG allocations, there was no evidence of citizen involvement in the urban design process. In Cambridge, the Historic Commission takes the lead in design review. In Arlington, individuals on the Redevelopment Board or on the Planning staff play this role. In New Bedford, an informal group of city employees provides the city's "design review".

Although the environmental reviewer in each town asserted that urban design issues were of concern to their communities, none of the towns has initiated a process to insure that CDBG projects will have a positive impact on the town's visual character. Jim Minuto of Cambridge was the only reviewer who expressed any doubts in the capacity of an informal review system to deal with urban design problems. The other two reviewers did not realize that there are issues which may not surface in an informal process. Although the reviewers are not convinced that the design solutions currently generated are the best, they seem to be unaware of the negative impacts that "wrong" decisions can have. Urban design has not surfaced as an important element in the environmental impact assessments in any of the three towns. Yet, all three communities have CDBG activities that are essentially classic examples of urban design projects.

The communities lack the expertise needed to undertake effective design assessments. The reviewers did not express confidence in their ability to write good evaluations of project impacts on urban design. In addition to the reviewers' lack of training in urban design, the towns have not established standards on which to base an urban design assessment. Without community design guidelines judgments about the

quality of design would be based largely on personal intuition. Although it might be reasonable for a designer to advise a community about the effects of a particular project on community attractiveness or cohesiveness, untrained reviewers working without community guidelines would be open to substantial criticism.

The lack of community and staff awareness of urban design issues; a dearth of design expertise; and the absence of community design standards present the most important obstacles to effective evaluation of CDBG project impacts on urban design.

Cumulative Impacts, Alternatives, Benefits

The fact that there has been no explicit discussion of cumulative impacts of CDBG projects is one of the major reasons that EIAs have not exposed the problems discussed above. Most CDBG projects are assessed singly. One street repaving effort may have little design impact on a community; a series of street improvement projects, housing rehabilitation programs and tree-planting efforts can change the face of a town. The effects of continuing a particular program over a number of years are typically addressed only once, at the beginning of the project. Continuing projects are sometimes assessed each year, as if they were single-year efforts. No attempts have been made to assess the impacts of the CDBG program over a year or a number of years.

CDBG impact assessments should include: (1) an examination of project and design alternatives; and (2) a discussion of the beneficial environmental impacts of proposed projects. All three communities did an uninspired job on both counts. In fact, based on existing HUD regulations, the most

valid criticisms of the reviews done to date would center on these two requirements.

The discussion of alternatives is typically limited to a finding that not doing the project would have a negative impact. One project very different from the original proposal is often addressed briefly. For example, in the discussion of alternatives to the Cambridge housing rehabilitation program, the two alternatives posed are: (1) not doing the work at all; or (2) building new housing instead of rehabilitating existing stock. There was no attempt to consider small changes in the proposed project, such as combining rehabilitation and new housing or rehabbing some units at a higher density and demolishing the worst buildings to make more open space. Examining a range of options might have led to interesting and potentially more successful outcomes. Alternatives were presented only to support the proposed project, not to insure a critical examination of the proposed activity.

The environmental regulations promulgated by HUD specifically call for a discussion of the beneficial as well as the harmful environmental impacts of proposed projects. In assessing beneficial impacts, the three case study communities never strayed from general and banal statements such as, "The District will function as a visible, living example of the past and therefore will provide educational benefits. It also will provide a place for leisure enjoyment and entertainment."[1] Minimal benefits are described, notwithstanding the fact that communities have great hopes that proposed projects will halt neighborhood decline, provide jobs and attract private investment. In other words, the reviewers regard project benefits as substantial, but consider the requirement to document them unimportant.

Towns could make better use of their CDBG money by specifying what they hope to gain. For example, if the real, desired benefit of providing a downtown pedestrian mall is to increase the revenues of downtown shops (and not restoring the town center to its nineteenth century appearance), then tactics geared specifically to increasing revenues should be employed. The design quality and style of a project should be evaluated with actual goals in mind.

A community might decide that a neighborhood tree-planting program would enhance the environmental quality of those areas. Other benefits could also be derived, including wind breaks, summer shade and soil stabilization. If the town identified all these possibilities, the planting program could be most effectively designed.

Timing of Assessments

The three issues discussed thus far -- cumulative impacts, examination of alternatives and specification of environmental benefits -- are closely linked to the timing of environmental reviews. CDBG reviews are by no means the only EIAs treated as part of a certification process rather than an integral part of the planning process. HUD's regulations have reinforced this unfortunate trend. Environmental certification is the last step in the application process for most towns. It is no wonder that towns do not attempt to look at alternatives. By the time environmental reviews occur, line departments are waiting for the money to begin work. Cumulative effects never enter the discussion at all. Why discuss last year's (or month's) project if the release of funds to begin this month's project is eagerly awaited? If any of the issues are to receive an airing, the EIA

process must be treated as part of the overall planning process.

This is not the only timing problem that plagues impact assessment. Projects are often assessed while they are still concepts. For example, only a general written description preceded the assessment of New Bedford's Waterfront Revitalization project. Drawings, details of the changes to be made, and the exact location of revitalization work were unavailable before the assessment was prepared. It is not possible for a reviewer to make an informed judgment about impacts without this information.

There are currently no incentives to using EIA for improving the quality of final designs or insuring that projects provide the greatest possible benefits. Under the existing review procedure, a project may be assessed on the basis of the environmental reviewer's image of how a concept will be transformed into a plan by the designer (whether an urban designer or a road engineer). The designer may plan a project with impacts significantly different from those discussed in the ERR, which would by then be filed away in the CDBG officer's cabinet.

HUD's Role

It is clear that HUD's overriding lack of concern for CDBG environmental assessments has severely limited the positive effects the environmental review process might have. Two of the reviewers felt that HUD had expressed an overtly negative attitude toward the review process, neither offering assistance, giving the environmental review credence, nor answering questions promptly and completely. The third reviewer had more neutral experiences with HUD, explained perhaps by the smaller scale of her town's allocation and the minor impacts of proposed projects.

HUD provided scant assistance to communities in the early stages of the CDBG program, when towns were devising environmental review procedures from scratch. None of the reviewers in the case study communities felt that HUD's program guide, Environmental Reviews at the Community Level, was helpful. All of the reviewers said that the procedures were confusing initially and that HUD answered questions slowly and imprecisely. At least one reviewer suggested that early in the program HUD's area and regional offices were as confused about the program as local officials.

None of the three towns studied received HUD comments on the content or quality of their ERRs. The only review role assumed by the Agency is checking that the appropriate procedural steps have been followed. HUD has not gone beyond this legal requirement -- although there is no constraint to their doing so. Each of the communities expressed a desire to receive feedback from HUD, at least an indication that their reviews cover the necessary and appropriate issues. All the reviewers said that such feedback would have been particularly helpful in the first year. Only New Bedford has had to write an EIS. This was prepared for a highway extension planned before the CDBG program existed. The EIS generated little local controversy. It is important to note that all three towns shied away from projects they thought would require an EIS. The three reviewers asserted that the hassle of preparing an EIS would waste time and money that could be better spent on smaller projects not requiring full impact statements.

I deliberately examined three communities presumed by HUD officials to be doing a "good job". Therefore, the conclusions regarding community attitudes about the EIA requirement may not be entirely representative. All three local reviewers felt that residents of their community were con-

cerned with environmental quality and that the degree of effort put into the reviews reflected this. I believe that the projects these towns have undertaken are environmentally sound, at least conceptually. Yet, even if every environmental reviewer took his or her work seriously, the context in which impact assessment occurs mitigates against the preparation of environmentally-balanced assessments. Reviewers are faced with a task they consider time-consuming, paper-producing and not very useful. EIAs are regarded as essentially more federal red-tape. Minuto (Cambridge) was the only reviewer who could think of any project changes produced by the HUD-required review; these were minor. None of the three reviewers thought that the HUD-mandated process had improved CDBG projects.

Although the reviewers are eager to receive feedback on their environmental reviews, they are also jealous of the local autonomy they currently enjoy. The local reviewers apparently want HUD to be supportive of their work (e.g., offer technical assistance, support the reviewers' demands for environmental quality), yet remain unobtrusive in local affairs.

Public Participation

Citizen reaction to the environmental reviews has been nil. All but one New Bedford project resulted in a finding of "no significant impact". The reviewers surmised that there are two reasons for the lack of public response to findings of "no significant impact". The first is the manner in which findings are publicized. Although HUD regulations require that a notice of finding and of intent to file a request for the release of funds be published in local newspapers, the form used for the announcements is a standard public notice, in small print, listed on a back page. The notices

do not describe the projects in detail and are often so vague that the precise location of projects is unclear. Apparently, not many people are intrigued enough to read these notices. To date, the three case study communities have received a total of three inquiries as a result of the newspaper notices. The reviewers feel that the money spent publishing such notices is wasted.

The towns involve many of their active citizens in the process of deciding which projects to fund. The reviewers suggested that this may be one cause of the lack of public response to the EIA process. Citizen participation in the early stages of CDBG decision-making makes it difficult to sustain public involvement in environmental reviews.

A successful EIA process must include citizen participation. A discussion of what that participation might involve can be found in the Epilogue.

Summary of Conclusions

The CDBG environmental review process suffers from a lack of connection with other local decision-making processes. The EIAs completed for CDBG projects are used only for HUD certification. They are separate from other local discussions of environmental protection or improvement. The information gathered for the CDBG assessments may duplicate that used in informal discussions or to fulfill state or local requirements. Consolidating the various planning and evaluation efforts of local government could save time and money and might make the CDBG reviews applicable to a variety of local needs. Notwithstanding the many shortcomings of the present process, it is better than none. Simply requiring assessments prob-

ably rules out projects with major negative impacts. Local officials have, of necessity, become aware of environmental issues. Line agencies know that someone is looking over their shoulders. This cannot help but improve the environmental quality of their work (e.g., it forces the use of noise-reducing construction techniques or spraying of demolition sites to reduce dust). Although environmental rules and regulations may be resented by some city workers, respect for environmental concerns is considerably greater now than ten years ago. I believe this respect will continue to grow.

One method of reinforcing public employee and citizen concern for environmental quality is to insure that environmental protection laws are reasonable. Poor regulations which require city workers to produce useless reams of paperwork only frustrate environmental protection efforts and cause resentment. Given this situation, HUD should choose between two courses of action.

The agency can reduce the environmental certification to a simple sign-off and allow towns to shoulder the NEPA responsibility on the basis of whatever process they choose. (This might be no more than a conversation between the mayor and the CDBG coordinator or, it might be a full-scale assessment similar to an EPA-reviewed environmental impact statement.) HUD's second option is to take positive steps toward increasing the agency's contribution to the local process and reformulating the environmental regulations. The rewritten regulations should encourage local environmental impact assessments that benefit overall community planning efforts in addition to fulfilling CDBG requirements.

HUD cannot abrogate its NEPA-mandated responsibilities and pursue the first option. Therefore, I have explored the second option, and present my recommendations in the Epilogue.

# EPILOGUE:

## DESIGNING A COMMUNITY DEVELOPMENT REVIEW PROCESS SENSITIVE TO CITIZEN PARTICIPATION AND URBAN DESIGN

This thesis explores deficiencies in the environmental review process HUD requires of CDBG recipient communities. Examining this process has led me to believe that designing a better EIA procedure is possible. The case studies have convinced me that environmental impact assessment should be responsive to citizen input and to urban design.

These two issues are the guiding principles underlying the reformulation of the EIA process presented here. The revised process is written in the context of the CDBG program. However, the recommendations are not a "next step" in the case study analysis. I have tried to go farther than the findings and look at local environmental impact analysis as a design problem. If the improvements are followed, they imply a revamping of local decision-making, of which CDBG is a part.

The recommendations are not blueprints for CDBG reform; they are a "rough draft" for change, not explicit in their monetary and regulatory specifications. Many of the program aids presented in the context of CDBG can add as much to other community activities. In particular, the process revisions, training programs, community design guidelines and assessment guides have a wide applicability. The epilogue should be read as a proposition for local capacity-building.

The following diagram (Figure 1) summarizes the problems addressed by the recommendations and introduces possible solutions. A proposal for a revised EIA process appears as Figure 2. The specific recommendations listed in

Figure 1 are discussed in the context of the revised process. Although some of the recommendations could be implemented on their own, they are best understood as elements of the overall procedure.

Three dominant problems characterize the process by which CDBG projects are presently assessed. The three problems cut across the entire process. Technical aids that might be offered to local reviewers can do relatively little to increase the effectiveness of EIA if these basic flaws in the process remain unsolved.

## Increased Public Participation

The first problem is the lack of sustained public participation. Citizen participation is now limited to decisions regarding distribution of CDBG funds. The allocation process often serves as the forum for competing neighborhood or interest groups. Energy generated by this debate is not presently harnessed and used in planning and designing CDBG projects. Involving residents in the examination of alternatives and assessment of project environmental costs and benefits could transform that process into something more than a pro forma approval of projects. For example, citizen involvement in the planning and design of the proposed Alewife MBTA stop resulted in the selection of an alternative that did not even appear in the original report.[1]

The revised procedure calls for citizen participation throughout the CDBG planning and design process. The three distinct roles played by citizens are:

1. Participation in initial decision-making where community development goals and general project concepts are outlined: Stage B in Figure 2. (This is the stage where citizens currently participate.)

Figure 1. Problems in the HUD-required EIA Process: Suggestions for Improvement

PROBLEMS

Overriding problems addressed by the entire set of recommendations:

EIAs are not useful to CDBG projects

(because)

1. Lack of public participation
2. EIA process too broad
3. Lack of integration of EIA with community planning process

RECOMMENDATIONS

Overriding recommendations applied to all problems:

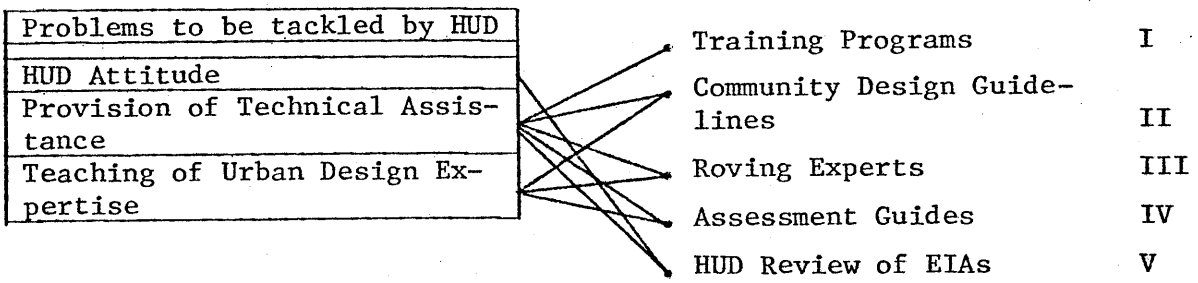
Revised review process

(includes)

1. Increased public participation
2. Separate EIA procedures
3. Integration of EIAs with planning process

Specific Problems:

Specific Recommendations:



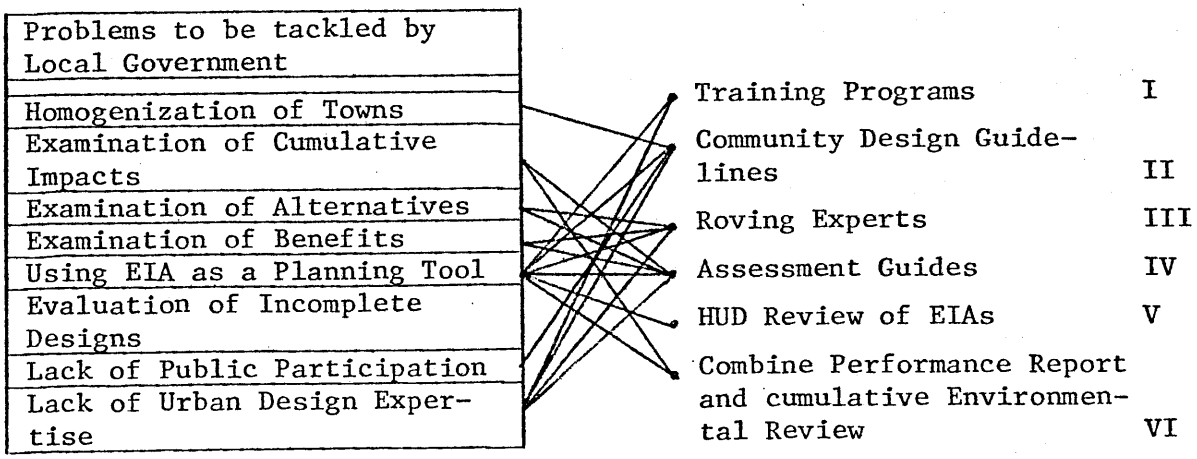
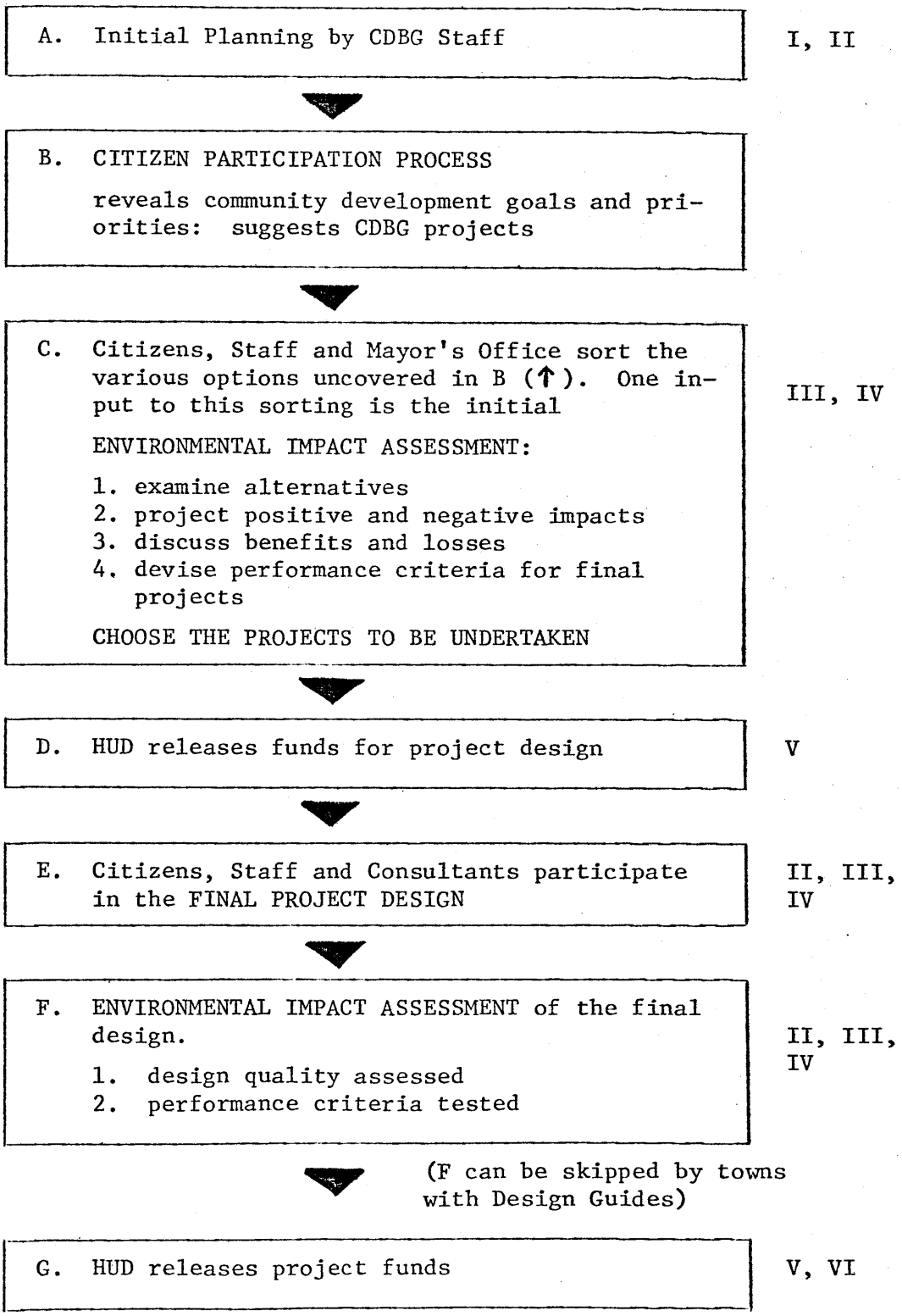



Figure 2. Proposal for a Revised EIA Process



2. Participation in conceptual planning of specific projects. (Stage C) This involves examining alternatives, specifying project impacts, evaluating beneficial and negative effects and writing performance specifications to be met by the final design.

3. Participation in final project design and assessment. (Stages E and F) Residents might participate in the design of rehabilitated housing, business people in the design of a downtown mall, and children in the design of schools. The involvement in design would continue into assessment -- thus making the process a complete cycle.

I will not outline the steps by which this citizen participation might occur.

Separate EIA Procedures

The use of one undifferentiated EIA process to accomplish two distinct tasks is the second problem. This difficulty besets many EIAs, not just those associated with the CDBG process. Two distinct tasks fall within the EIA process; first, examining alternatives and choosing the best solution to a community development problem; and second, assessing in detail the impacts of that solution and suggesting modifications, if necessary. The revised EIA process is divided into two parts.

1. Transform the community development goals and proposals into project plans. During this process, alternatives are examined. The positive and negative impacts of each alternative are assessed prior to defining the form of the particular project. Performance criteria for the final design are established. (Stage C)

2. Assess the final project design. This includes checking whether

the final design fulfills the criteria outlined in the first part of the EIA process and preparing a final design assessment to insure its environmental quality. The final assessment may call for some design adjustments but would not be used to "kill" a project. An environmentally harmful project should, in theory, never survive to this point in the process. (Stage F)

The process described above is strongly tied to increased citizen participation. Part one cannot be separated from the overall CDBG decision-making process. It is really a component of the process that determines how local CDBG funds are allocated. Part two of the EIA process may occur in conjunction with the final design, or it may occur slightly later. The citizens who participate in project design should also participate in assessing that design.

The proposed division of the environmental impact assessment process is accompanied by a revision in HUD's method of releasing CDBG funds. The unfinished project plans that reviewers now assess present an important obstacle to serious environmental review. When a project design in incomplete, it is impossible to assess the quality and precise impacts of that action. Reviewers are often presented with this dilemma because the community is unable to pay for design work without first obtaining CDBG funds.

Under the revised procedure, funds are released in two stages. Design funds are released after the initial EIA process delineates the actual project. Following completion of the final design and impact assessment, project funds are released.

Separating the release of funds into these two stages will insure that communities have enough money to pay for design services prior to their cer-

tification of environmental clearance. It will also furnish a programmatic incentive to performing both parts of the EIA procedure.

Integrate EIAs with the Local Planning Needs

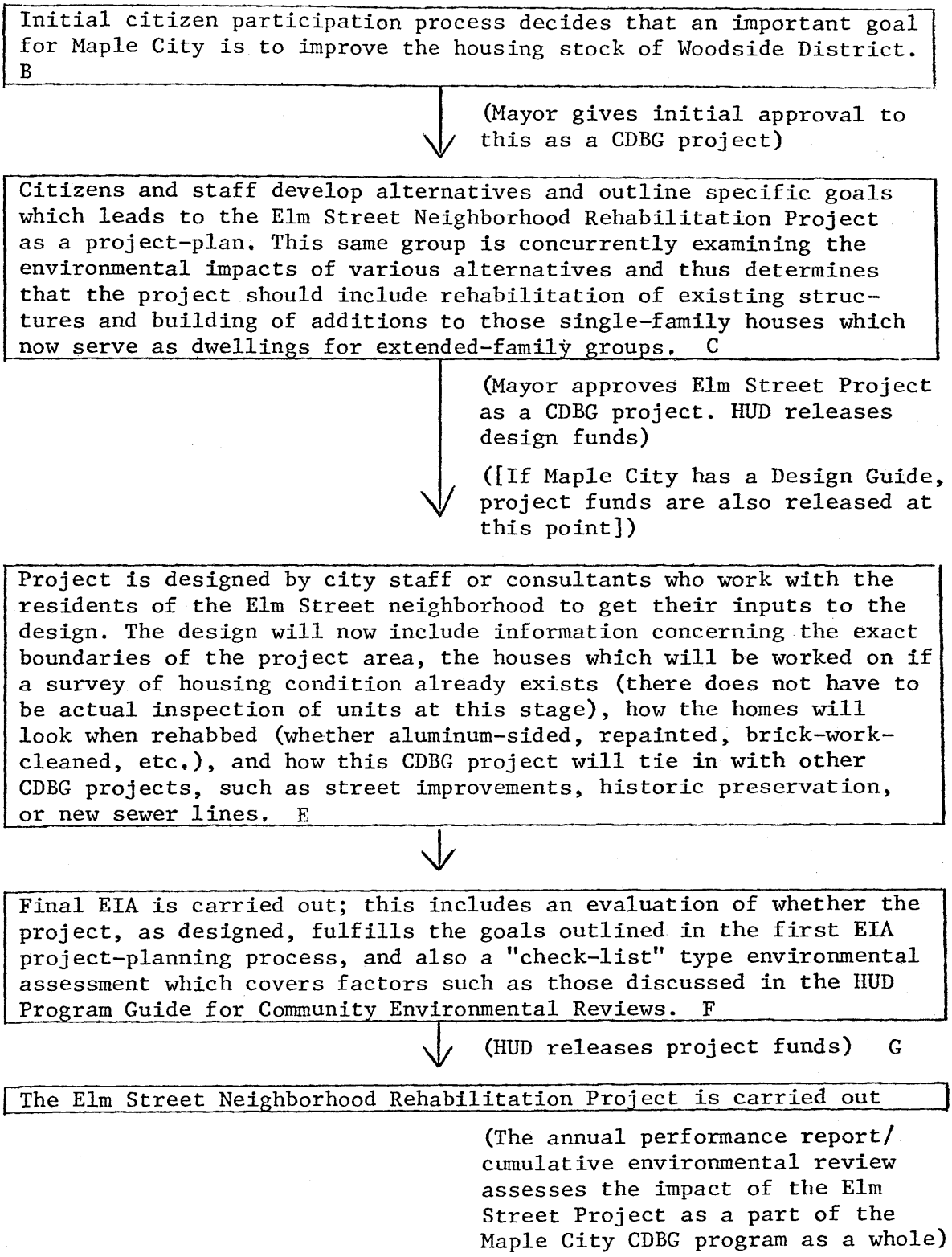
The third problem inherent in the present CDBG review process is its separation from other local planning processes. EIAs are currently prepared in isolation; gaining nothing and adding nothing to community planning efforts. The proposed procedure should make EIA a planning tool for more than CDBG activities alone.

Community development projects should be assessed as complete entities and the environmental certification for HUD drawn out of that comprehensive analysis. Where projects involve several different funding sources, the CDBG review should address the impacts of the entire project, not only of CDBG-funded portions. Where a project has several components, these should be addressed jointly in the first part of the assessment, and separately only in the final design assessment. And, if a project will continue over a number of years, the assessment should discuss long-term cumulative effects, particularly those on the overall community environment.

CDBG reviews should be integrated with community planning processes. The revised procedure encourages this by placing EIA within the project selection process. Environmental certification is not intended as an add-on process leading directly to the filing cabinet, rather as one part of the wider planning effort. The HUD requirement should encourage the use of EIA as a planning tool.

Figure 3 illustrates the revised procedure in operation.

Figure 3. The Revised EIA Process



Technical Aids

The procedural reforms discussed thus far are accompanied by a group of technical aids, and modifications in HUD's administrative role. The recommendations are addressed roughly in the chronological order they might be used in a CDBG planning process. (The Roman numerals on Figures 1 and 2 correspond to the particular innovations noted below.)

I. Training Programs

The case studies illustrate the need for increased environmental expertise at the local level. Only one of the three reviewers had studied environmental issues in school. Training local officials to prepare better environmental impact assessments is one of the recommendations proffered by a number of reports on the CDBG program.[2]

Although the people who prepare local EIAs need not be expert environmental scientists, traffic engineers or urban designers, they should possess some minimum knowledge of all these disciplines. At the least, reviewers should be able to identify projects that require more expert attention.

One form that training programs might take are one-day "mini-courses", offered in HUD area or regional offices. Included in a mini-course would be an introduction to key environmental issues, suggestions of where the reviewer might find expert help within his or her town government (e.g., traffic engineer, city architect), and instruction in the use of applicable "assessment guides" (see IV, "Assessment Guides").

Local reviewers should have access to training in (at least) the four general areas of:

1. Assessment of technical impacts, such as increased sewer loads,

water run-off, or the effects of increased traffic flow on noise levels or street trees. This course would include training in the use of the HUD Interim Guide for Environmental Assessment (Vorhees).

2. Assessment of impacts on the sensory environment. An introduction to the disciplines of landscape architecture and environmental design is called for.

3. Assessment of social impacts. Although I have not specifically addressed this issue in the thesis, the case studies reveal that local expertise in this field is sorely lacking.

4. Techniques of involving citizens in the planning and impact assessment of CDBG projects and other community activities (see II, below).

II. Community Design Guidelines

The case studies disclose that the absence of community design standards presents an obstacle to assessing impacts on urban design. Encouraging communities to write design guides is one way of addressing this problem.

Design guides are introduced in Chapter 3 as a tool for improving urban design. One method for generating community design standards is discussed here.

The majority of design guides are written by local planning staff or by consultants under contract to the city. Although these guides are not written without citizen input, their outcome depends largely on "expert" opinion. A different approach underlies Land Use and Design in Onset, prepared by Philip Herr, Associates.[3] According to Herr, these guidelines are the product of extensive citizen participation. The pro-

cess used by Herr suggests one approach communities might take in writing their own design standards.

The village of Onset is located on Cape Cod and has a considerable tourist trade. The appearance of the village is therefore important to its economic health. When selected to write guidelines for future development in Onset, the firm of Herr, Associates was not familiar with the village. Instead of writing guidelines that reinforced their own perception of Onset's character, the consultants set out to discover the design preferences of Onset's residents. Slide analogues were used to surface resident views. Onset's residents were shown two slightly different slides of a particular type of environment (e.g., commercial strips, gas stations, large homes). The differences between slides were such things as the distance between houses, the visibility of parking or the size of signs. The participants were asked to point out which of the two slides looked most like what they would like to see in Onset. The consultants surfaced resident preferences for many different environmental qualities. After narrowing the range of preferred environments, the consultants again presented pairs of slides. This time, the variations were less dramatic, such as wood or stone structures and local or exotic plantings. This process exposed the environmental preferences of Onset's residents in considerable detail. Onset's own guidelines were written on the basis of these preferences and are, therefore, an accurate reflection of what Onset's people want their town to look like.

In addition to offering communities advice on how they might generate design guidelines, HUD must also offer some incentive for producing the guides. One form that incentive might take is an exemption from the

final environmental impact assessment. The revised EIA process has two steps. The final environmental impact assessment is used to ensure that the project fulfills its performance criteria and to assess design quality. Towns possessing design guidelines would be exempt from this final review and would, therefore, receive both design and project funds after completing the first EIA process.

HUD would need to evaluate a town's design guidelines to ensure their adequacy. Perhaps a peer review process would be possible; towns that already have design guidelines would assess the sufficiency of another town's proposed guidelines.

III. Roving Experts

In addition to the provision of training programs for local reviewers, HUD should maintain a staff of roving experts responsible for answering community questions and advising local staff and citizens on environmental issues. The "experts" would be available for consultation on design issues (for example, to offer a second opinion on a design the community is considering) or to help a community devise its own EIA process. This staff of experts would include people of different specialties, such as landscape architecture, historic preservation, or interactive design techniques.

HUD's area offices might be able to provide some of the necessary expertise. It is not likely, however, that many of them have a staff that includes a full range of specialists. Therefore, HUD could establish roving teams associated with regional

The experts would divide their time among the region's CDBG recipi-

ent communities. Perhaps each community could be allocated a certain number of "expert-days" per year; or towns could be charged against their CDBG allocations. The roving experts might be quite costly to HUD. But, if the agency established a good reputation in the field, the position of roving expert might become desirable and therefore attract good people for moderate pay. A pilot project in one region might illustrate the kinds of staff most useful to communities and the number of person-hours required to adequately cover community requests for advice.

The program's most important goal is making environmental expertise available to communities that might otherwise not have access to such resources. Calling on a roving expert allows a community to get the advice of someone who is not under contract to the city. Private consultants may come under pressure to make favorable findings about city projects. Finally, a roving expert could be summoned without the bids and contract negotiations necessary when hiring private consultants. Examples of expert services that might serve as models for this program are agriculture extension specialists and state auditors who help small towns.

IV. Assessment Guides

A third tool HUD should provide for CDBG recipients is a series of non-technical environmental assessment guides. The guides should offer information to reviewers in an accessible language and format. Information on one fairly narrow topic should be contained in each guide. The assessment guides are <u>not</u> design guidelines. They provide planning and assessment advice, particularly concentrating on methods of impact evaluation.

Three types of guides are needed:

1. Guides that focus on specific types of projects.
   a. Engineering projects -- e.g., water, sewer, roads.
   b. Neighborhood environmental quality -- e.g., beautification projects, housing rehabilitation, street improvements.
   c. Land acquisition.
   d. Social service projects -- these projects should not be exempt from review, but demand different assessments than physical development projects.

The project-specific guides should include information that helps a reviewer determine whether or not a project might have a "significant impact".

2. Guides to specific issues of environmental impact, such as visual impacts, water quality impacts, noise impacts and demolition impacts.

Guides of this type should contain relevant federal standards and list those states that have applicable legislation. Methods of impact assessment are the focus of these guides.

3. Guides targeted at user groups who will be affected by the project; e.g., merchants, handicapped people, low-income renters, and children.

Techniques for involving users in the design and assessment of projects should be a prominent feature in these guides.

Communities could draw on a series of guides that are particularly relevant to the project being assessed or planned. For example, in assessing the impacts of a town center revitalization, the following set of guides might be chosen: neighborhood environmental quality; visual, traffic, recreation and shopping impacts; shoppers, merchants and teenage user groups.

The guides could be used to focus discussion among citizens and staff in the first stage of EIA, when alternatives are weighed. Hopefully, the guides' information would enable participants in this process to choose projects that best serve their community development needs.

The guides should augment the final design process by pinpointing relevant design concerns. Finally, in the second EIA process, the guides would provide methods of determining project impacts.

V. HUD Review of EIAs

The case studies revealed that local reviewers are eager to receive feedback on their work. The citizen participation that is an important part of the revised EIA process will certainly provide some feedback. However, I believe that HUD, as the program's administering agency, should play an active role.

HUD should look for three substantive qualities in the work of local reviewers.

1. The procedural accuracy of the reviews. (The agency has already demonstrated its ability in this quarter, so this is not discussed further.)

2. The specific discussion of impacts. The environmental reviews I examined did not provide evidence that the full range of impacts were explored.

3. Evidence of public participation in the EIA processes.

The environmental record maintained by a community need not be a very formal document. It might consist largely of minutes from meetings and notes jotted down by staff and citizen participants in the process. If roving experts or consultants provide input to the process, their help

should be documented. Special problems or controversies should also be recorded on the review record. The ERR should be a useful document that local planners can refer to for help in preparing other community projects and answering questions about CDBG projects.

HUD's monitoring could take the form of spot checks or annual reviews. The important aspect of HUD's reviews are the comments communities receive on their EIAs. HUD should provide recommendations where problems exist and publicize particularly good methods of review that are found. HUD's reviews should be prepared with the cooperation of the local planners. The HUD reviewers should see their role as liaison officers, offering advice and responding to questions or criticisms local reviewers may have about the program.

## VI. Combining the Annual Performance Report and a Cumulative Environmental Review

Communities are currently required to write an Annual Performance Report describing their CDBG activities to HUD. The reports deal largely with financial matters, and require the completion of a long, detailed questionnaire. Environmental issues are not included in this document.

The cumulative effects of CDBG projects are not addressed in any of the reviews that communities now prepare. In the new procedure for environmental review, cumulative effects of individual projects will be assessed. The annual report is a logical place to include a review of the effects of the entire CDBG program on the community. The report should include such things as changes in air and water quality, housing conditions and community appearance. The review might be considered an annual "state of the environment" statement. By writing this statement, local

reviewers can begin to pinpoint the successes and failures of their environmental assessment process and the quality of their community's CDBG projects. Major environmental problems should be discussed in the statement and HUD area officers should respond to problems that are raised.

Conclusion

The suggestions appearing in the Epilogue are dependent on a supportive attitude existing in both local government and HUD. If environmental impact assessment is perceived as "make-work" and not as an effective planning tool, it is unlikely to produce interesting or useful changes in physical or functional project design. Resistance to opening the local planning process to citizen input must also be overcome if we are to usher in more productive impact assessments.

I believe that environmental impact assessment can be a productive local planning mechanism. The CDBG program offers the federal government an opportunity to demonstrate its commitment to environmental quality. A positive, aggressive policy on the part of HUD can encourage increased environmental awareness in local government -- the branch of government that has the greatest influence on the environmental quality of American towns.

FOOTNOTES

Introduction

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2. The Housing and Community Development Act of 1974, 24 CFR Part 570, §570.2(a).

3. Senate Report No. 93-693, The Housing and Community Development Act of 1974.

4. National Environmental Policy Act of 1969, §4332 [NEPA §102].

5. Op. cit., 1, Section 104(h).

6. The Housing and Community Development Act of 1974 requires that HUD consult with CEQ in writing environmental regulations.

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20. Op. cit., 4, §4332 (NEPA S102) (c) (V).

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