BEST PRACTICES FOR EFFECTING THE REHABILITATION OF AFFORDABLE HOUSING

VOLUME 1: FRAMEWORK AND FINDINGS

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

PD&R

Visit PD&R's Web Site

www.huduser.org

to find this report and others sponsored by
HUD's Office of Policy Development and Research (PD&R).
Other services of HUD USER, PD&R's Research Information Service, include listservs;
special interest, bimonthly publications (best practices, significant studies from other sources);
access to public use databases; hotline 1-800-245-2691 for help accessing the information you need.

BEST PRACTICES FOR EFFECTING THE REHABILITATION OF AFFORDABLE HOUSING

Volume 1: Framework and Findings

Prepared for:
U.S. Department of Housing and Urban Development
Office of Policy Development and Research

SEPTEMBER 2006

Best Practices for Effecting the Rehabilitation of Affordable Housing

—

Volume I: FRAMEWORK AND FINDINGS

Prepared for:

U.S. Department of Housing and Urban Development

Office of Policy Development and Research

JUNE 2005

***Prepared by*:**

Center for Urban Policy Research (CUPR)
Edward J. Bloustein School of Planning and Public Policy
Rutgers, The State University of New Jersey
New Brunswick, New Jersey

and

National Trust for Historic Preservation

The Enterprise Foundation

National Center for Healthy Housing

***Primary Authors* (CUPR):**

DAVID LISTOKIN

with

KRISTEN CROSSNEY

and **(CUPR):**

Alan Cander
Tim McManus
Matthew Camp
David Downs
Mary Uschak
Ian Litwin
Zachary Kushel

***Research Assistance Provided by*:**

National Trust for Historic Preservation
Public Policy Department
Laura Skaggs, Patrick Lally, Sydney Becker
Northeast Office
Wendy Nicholas, Elaine Finbury, Adele Fleet Bacow (NE Office Consultant)
Community Revitalization Department
Constance E. Beaumont, Elizabeth Pianca, Harry K. Schwartz, Erica Stewart
Nixon Peabody LLP
Andrew Potts

The Enterprise Foundation
Planning, Design, and Development
Peter Werwath

National Center for Healthy Housing
Jonathan Wilson

Heritage Preservation Services, National Park Service
Elizabeth Moore Rossi

Building Technology, Inc.
David Hattis

Building Futures Institute, Ball State University
Steven Kendall

ACKNOWLEDGMENTS

We would like to acknowledge the critical assistance of the National Rehab Study Housing Resource Group who aided the identification of both the challenges to rehab and best practices to foster renovation:

Robert Adams, VMH, Inc.
Randall P. Alexander, The Alexander Company
DeWayne H. Anderson, Anderson Development Company
Bennett Applegate, Applegate & Thorne-Thomsen
Alfred Arezzo, Hoboken, New Jersey
William Asdal, Asdal Builders
James E. Babbitt, Flagstaff, Arizona
Richard Baron, McCormack Baron & Associates
Eddie Belk, Belk Architects
Peter Bell, National Housing & Rehabilitation Association (NHRA)
Bruce Block, Milwaukee, Wisconsin
Jim Bonar, Skid Row Housing Trust
William Brenner, National Institute of Building Sciences (NIBS)
Thurman Burnette, Rural Development
Andrew Chaban, Princeton Properties
William Connolly, New Jersey Department of Community Affairs, Division of Codes and Standards
Karen A. Danielsen, Director of Housing Policy and Practice, Urban Land Institute (ULI)
William F. Delvac, Latham & Watkins
Linda Dishman, LA Conservancy
Dan Dole, Scottsdale, Arizona
Carl Dranoff, Dranoff Properties
Mel Ellis, Rural Development
David Engel, Office of Policy Development and Research
Dan Falcone, New Economics for Women
Mario Fonda-Bonardi, Fonda-Bonardi & Hohman, Architects
Joan Galleger, Garsten Management Corporation
Terry Goddard, Law Offices of Terry Goddard
Tony Goldman, Goldman Properties, Inc.
Dean Graves, FAIA
Frank Grey, Chattanooga Neighborhood Enterprise (CNE)
Cissy Gross, Kansas City, Missouri
George Haecker, Bahr Vermeer & Haecker, Architects
David Harder, Executive Director, Little Haiti Housing Association (LHHA)
James Harger, Winn Management
David Hattis, Building Technology, Inc.
Curt Heidt, Federal Home Loan Bank
Michael Hervey, Jackson, Mississippi
Darryl Hicks, National Housing and Rehabilitation Association (NHRA)
Kitty Higgins, National Trust for Historic Preservation
Bill Huang, Community Partners (National Trust)
Lawrence Jacobsen, Mortgage Bankers Association
Marty Johnson, Isles, Inc.
Anthony Jones, Clearwater, Florida
Will Jones, Research Officer, National Association of Housing and Redevelopment Officials
Wendall C. Kalsow, McGinley Hart & Associates
Kevin Kelley, Leon Weiner Associates
C. Theodore Koebel, Center for Housing Research, Virginia Tech
Karl K. Komatsu, AIA Komatsu Architecture
John Kromer, University of Pennsylvania's Fels Institute of Government
Richard Kuchnicki, International Code Council
Robert Kuehn, Keen Development Corporation
Michael Lappin, The Community Preservation Corporation (CPC)
John Leith-Tetrault, Community Partners (National Trust)
Aaron Lewit, Enterprise Foundation
Kelley Lindquist, Artspace Projects, Inc.
Stanley Listokin, Executive Director, Masada Construction
Stanley Lowe, Executive Director, Pittsburgh Housing Authority
Weiming Lu, Lowertown Redevelopment Corporation
Alan Mallach, City of Trenton, New Jersey, Department of Housing and Development
Daniel Mackay, Preservation League of New York State
Christy McAvoy, Historic Resources Group
Bob McLoughlin and Helen Lopez, Albuquerque Housing Services
Michael Mills, Ford Farewell Mills & Gatsch Architects
D. Thomas Mistick, Mistick Construction
Susan West Montgomery, Preservation Action
William Mosher, Mile High Development
Ronald F. Murphy, Stickney Murphy Romine Architects
Jerry Myers, Pocatello, Idaho
James Paley, Executive Director, Neighborhood Housing Services of New Haven
Bryan Park, Northwest Housing Resources (NHR)
Sharon Park, Heritage Preservation Services, National Park Service
Brian Patchan, National Association of Home Builders (NAHB)
Mary Helen Petrus, Cleveland Neighborhood Development Coalition
Perry Poyner, Alley Poyner Architects
Paula Robinson
Jonathan F. P. Rose, Affordable Housing Construction Corp.
Donovan Rypkema, Washington, D.C.
Jacques Sandberg, Pusateri Development
Ken Sandler, U.S. Environmental Protection Agency
Susan Schlanlaber, The Landmark Group of Companies
Bruce Schiff, Friduss, Lukee, Schiff & Co.
Clark Schoettle, Providence Preservation Society Revolving Fund
Howard B. Slaughter, Jr., Pittsburgh, Pennsylvania
Kennedy Smith, National Main Street Center (National Trust)
Robin Snyder, U.S. Environmental Protection Agency
Gary Stenson, MetroPlains Properties, Inc.
Kathleen Taylor, Owner, Taylor Construction Services
Pat Tiller, National Park Service
Stephen Turgeon, Memphis, Tennessee
Mike Turner, Professional Remodeler
George Vallone, West Bank Realty
Ronald Wells, Spokane, Washington
Kathleen H. Wendler, Southwest Detroit Business Association
Jim Wheaton, Chicago Neighborhood Housing Services (NHS)
Bradford J. White, Esq., Project Management Advisors, Inc.
David Wood, Professional Remodeler
Eric Youngberg, Neighborhood Reinvestment Corporation

We also gratefully acknowledge the patience and critical assistance provided by Edwin Stromberg, GTR at the U.S. Department of Housing and Urban Development, Office of Policy Development and Research. Mr. Stromberg is a consummate professional. Importance assistance was also provided by Laura Skaggs of the National Trust for Historic Preservation; Peter Werwath of the Enterprise Foundation; Jonathan Wilson of the National Center for Healthy Housing; as well as other contributors to the study (Elizabeth Moore Rossi of the National Park Service, Steven Kendall of Ball State University, and David Hattis of Building Technology, Inc). We also thank numerous unnamed professionals who attended two national review panels held in conjunction with the annual conference of the National Trust for Historic Preservation as well as the National Housing and Rehabilitation Association.

Lastly, we thank those working in the case study organizations for participating in this study. They gave generously of their time and expertise.

Final responsibility for the contents of this report, however, rests with the authors alone.

Foreword

The rehabilitation of affordable housing faces many institutional and regulatory barriers. Because the existing stock varies so much in condition, age, and construction methods, the rehab process is far less predictable and in many ways more challenging than new construction. Nevertheless, the rehabilitation of the country's aging stock is a major resource for meeting the Nation's affordable housing needs.

Despite the demonstrated benefits of rehabilitation, there is potential for even greater use for the existing stock, not only to address affordable housing needs, but to promote broader community revitalization goals as well. However, to date there has been a lack of in-depth practical guidance on the many regulatory and other factors that act as barriers to rehabilitation of housing that is affordable. Gaining a sound grounding of these issues has been difficult because barriers vary from project to project and from community to community.

To address these concerns, HUD, as part of its *American's Affordable Communities Initiative*, entered into a cooperative agreement with the National Trust for Historic Preservation to identify and document workable solutions to the major barriers to urban rehabilitation. The product of this collaboration is this report, *Best Practices for Effecting the Rehabilitation of Affordable Housing*, which is intended to fill this information gap and, in so doing, empower decision-makers and housing professionals to begin work to eliminate these barriers.

This two-volume report distills the practices that have been shown to work in many settings to implement the renovation of affordable housing. These best practices are designed to address the challenges to rehab at its development, construction, and occupancy stages. Volume I is a comprehensive resource guide to state, local, and federal tools for overcoming barriers. Volume II provides analyses of key rehab resources and barriers, and case studies of state and local efforts to overcome major regulatory impediments.

The rehabilitation needs of our communities will continue to grow. The comparative advantages of housing made available through the rehabilitation of existing buildings will enhance the character of our housing stock in the years to come. Through this report and other activities HUD will continue to encourage rehabilitation as a significant way to provide affordable housing and to renew our communities.

Darlene F. Williams

Darlene F. Williams
Assistant Secretary for Policy
Development and Research

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The rehabilitation of affordable housing (hereinafter "rehab" or "renovation") faces many barriers. It is concerned inherently with existing, typically older buildings, making the rehab process less predictable and in many ways more challenging than new construction.

Rehab faces a major economic barrier, namely the gap that often exists between the costs of renovation and the financial resources available for those buildings requiring improvement. Of the $1.3 trillion in rehab needed nationwide in 2003—a conservative estimate—$569 billion, or about four-tenths, is unaffordable without some measure of subsidy or other means of support (e.g., using "sweat equity" or staggering the improvements over time).

Accomplishing rehab also is a challenge. The development process can entail difficulties in acquiring properties, estimating costs, dealing with restrictive land-use requirements (e.g., limitations on mixed use and adaptive reuse), and other issues. The construction phase involves assembling qualified tradespeople and abiding by myriad codes regulating asbestos, construction, fire safety, energy efficiency, historic preservation, lead paint, radon, and so on. Although development and construction requirements are essential for the public's welfare and in many respects foster rehab efforts (e.g., historic preservation often encourages upgrading), they can be challenging.

Yet, the barriers to rehab are far from insurmountable. The roughly $200 billion of renovation done annually in the United States attests to this. The public and private sectors are working together on many fronts to resolve lingering issues. More rehab-friendly building code regulations ("smart codes") have been adopted in New Jersey, Maryland, and other states. Banks have become more receptive to financing renovation. There are promising collaborations between the public sector and industry that are improving the collection of data on rehab so that it can be better understood.

This report distills the practices that have been shown to work in many settings to implement the renovation of affordable housing. These best practices are designed to address the challenges to rehab at its development, construction, and occupancy stages. For example, receivership can improve property acquisition, recently developed software can aid cost estimation, and context-sensitive requirements (e.g., requiring less parking in areas served by mass transit) can reduce the land-use conflicts and other hurdles to rehab at the development stage. Renovation's construction can be abetted through such means as enacting "smart codes," adopting more flexible historic preservation regulations, and improving the coordination and implementation of lead-based paint, accessibility, and other mandates. Finally, property tax abatements and rent controls that recognize the need for a financial return from capital investment can enhance the long-term occupancy viability of the renovated affordable housing units.

The report's recommendations emphasize a holistic and collaborative framework. A comprehensive array of supportive actions are needed on the development, construction, and occupancy fronts. Further, these actions require broad and cooperative participation by government at all levels as well as the private and nonprofit sectors involved in affordable housing rehab.

Synthesis and Findings

A. STUDY PERSPECTIVE: THE CRITICAL ROLE OF HOUSING REHAB

- About \$100 billion to \$200 billion[1] in housing rehabilitation (hereinafter rehab or renovation) is carried out each year in the United States. Rehab activity thus approaches or even exceeds investment in new housing construction and constitutes about 2 percent of the nation's economic activity.[2]

- Rehab is essential for sustaining the useful life of America's housing stock—which, like its population, is aging. In 2003, the median housing unit in the United States was "thirty-something" (built 1969), and in central cities, it was "forty-something" (built 1961). In a decade or two, much of America's housing stock will be in advanced middle age, and central-city housing will be geriatric. Rehab is a matter of life or death to these aging housing units.

- While rehab takes place throughout metropolitan areas, it is especially prevalent in central cities. If these places and other older centers are to be invigorated—as is contemplated under smart growth—then a vital rehab industry is essential.

- The overwhelming share of rehab in the United States is done without government intervention or support. The public sector, however, does play a role through regulations, and in some cases, with subsidies.

- Several major programs of the U.S. Department of Housing and Urban Development (HUD) have a large rehab component. About one-quarter of HUD's Community Development Block Grant (CDBG) funds and nearly half of its HOME program monies are used for renovation.

- Given the above, it is important for the private and public sectors involved in housing to better understand rehab. Unfortunately, rehab—especially in comparison to new construction—has received relatively little attention in housing research and the housing literature.

- This study examines best practices to effect the rehabilitation of affordable housing.

[1]The wide range is due to variations in how rehab is defined (e.g., whether it includes or excludes repairs and whether conversions from nonresidential use, such as loft conversions, are included).
[2]These data are from the Joint Center for Housing Studies and the National Association of Home Builders (2000).

B. STUDY OBJECTIVE, DEFINITIONS, AND METHODOLOGY

Our charge is to examine the best practices to implement the renovation of affordable housing. The elements of the study objective are defined as follows:

- *Best Practices* are defined as a series of effective actions that help realize a specific objective—in this instance, affordable housing rehab.

- *Affordable housing* is defined as housing that is targeted to the middle- and lower-income markets (approximately 80 percent to 120 percent of area median income).

- *Rehabilitation* is defined as repairs, improvements, replacements, alterations, and additions to existing properties. While the study considers all levels of renovation—minor, moderate, and substantial—the focus is on the moderate and substantial categories. Adaptive reuse, from nonresidential to residential, is considered briefly as well.

The best practices to affordable housing rehab cited in this study are ascertained from multiple sources.

- *Literature.* The study reviews pertinent literature on housing rehab, including previous studies examining renovation best practices.

- *Case studies.* Since the literature on rehab is limited, 14 case studies in cities across the United States were carried out for this report.

- *Study resource group.* The current investigation provides insight into the "real world" procedures to accomplish renovation through communication[3] with a range of individuals and organizations knowledgeable about affordable rehab. This "housing resource group" of nationwide contacts includes for-profit developers, nonprofits, knowledgeable industry groups, architects, and other professionals.

- *Technical analyses.* We perform a number of technical investigations on such topics as building codes and housing tax credits.

- *Research team experience.* The Enterprise Foundation has decades of experience in the development and construction of rehabbed housing, and other members of the research team-- Rutgers University and the National Trust for Historic Preservation-- have done a great deal of work pertinent to the current investigation.

---

[3]The resource group members are identified in the acknowledgements. The resource group was contacted by telephone and at multiple national meetings (in Washington, D.C., Denver, CO and elsewhere) conducted as part of this study.

Because there are so many facets to rehabilitation, we present an analytic framework of the hurdles as a means of organizing the information. The understanding of the constraints to rehabilitation is important for formulating the best practices needed to address these barriers.

C. ANALYTIC FRAMEWORK OF BARRIERS TO THE REHABILITATION OF AFFORDABLE HOUSING

Renovation is often carried out in the face of daunting barriers. Summary Exhibit 1 outlines the obstacles to affordable-housing rehab.

- The characteristics inherent to rehab make it different from new construction and underlie many of rehab’s difficulties. For instance, renovation typically does not “start from scratch,” and it generally must take into consideration unique features. These characteristics make rehab less predictable than new construction and mean that it requires more intensive management in order to be properly executed.

- The traits of rehab contribute to many subsequent constraints. For example, rehab’s customization requirements and greater administrative demands drive up costs. Higher expenses aggravate an overarching economic barrier, namely, the gap that often exists between the costs of renovation and the financial resources available to property owners and/or tenants of buildings requiring rehab.

- Economic constraints, in turn, aggravate barriers related to the various stages of renovation. We show these barriers, labeled development, construction, and occupancy, in Summary Exhibit 1.

    — Development encompasses all the activities performed before construction can begin, including acquiring properties, estimating costs, and securing insurance and financing.

    — In the construction phase, the major concerns are assembling qualified tradespeople and abiding by the myriad codes and regulations (e.g., building, housing, and environmental) governing the “bricks and mortar” work on a property.

    — Following construction, the rehabbed property may be subject to numerous occupancy considerations, such as rent control (i.e., to what extent rents on the renovated property can be raised) and property taxes (i.e., to what extent taxes on the rehabbed building will be increased).

This study examines how the economic, development, construction, and occupancy barriers can be addressed. To accomplish that goal first requires understanding of the barriers. Both the barriers and their resolution are summarized below.

D. STUDY FINDINGS: THE CHALLENGE TO AFFORDABLE HOUSING REHAB

Economic Constraints: The Need for and Affordability of Rehab

Rehab Need

- Of the some 100 million occupied, permanent (non-mobile home), year-round houses or apartments in the United States reported on in the 2003 *American Housing Survey* (AHS), the study estimates (Summary Figure 1) [4] that
  - — 3.9 million, or slightly less than one in 20 (4 percent), require substantial rehab;
  - — 13.7 million housing units, or about one in 7 (13.8 percent), need moderate rehab;
  - — approximately 58 million housing units, or slightly less than six in 10 (58 percent), can make do with minor rehab; and
  - — 23.5 million housing units, or slightly less than one in 4 (23.7 percent), require no rehab.
- Rehab need is related to various housing-unit and household characteristics. Compared with the overall nationwide figures cited above, somewhat greater renovation need (Summary Figure 1) is suggested
  - — for rental as opposed to owner-occupied units;
  - — for units occupied by minorities and the poor; and
  - — for older housing units
- The estimated total national rehab investment need for occupied, permanent housing in the United States as of 2003 was $1.3 trillion. Both this dollar amount and the percentage of housing units described previously as needing rehab are conservative estimates[5]–that is, they likely underestimate the full measure of necessary renovation.

---

[4] In fact, every housing unit needs some measure of repairs each year. Our determination of rehab need, based on AHS data, is a crude gauge that probably better captures the need for improvements, replacements, and alterations as opposed to ongoing repairs and maintenance. We also do not include any of the rehab need for unoccupied housing, mobile homes, vacation homes, and other units. Thus, our estimates of rehab need in this section are very conservative and understate the true need for renovation.

[5] See note 4.

Rehab Affordability—The Economic Constraint

- We estimate the ability to afford housing and measure affordability by employing the housing expense to income ratio (HEIR). An HEIR of 40 percent or more is deemed unaffordable or excessively burdensome. We estimate excessive housing costs versus affordable housing costs under two conditions: (1) current, or before any minor, moderate, or substantial rehab is effected, and (2) post-rehabilitation (Summary Figure 2). The former figures are those reported in the 2003 AHS; the latter figures were calculated by the study team.

  — Currently, without factoring added expenses for renovation, 20 million housing units, or 20.4 percent of the 100 million total housing units studied here, have an excessive cost burden, as defined above.

  — The number of households experiencing an excessive burden rises to 29 million, or 29 percent of the total, when the costs for rehab are factored in (Summary Figure 2).

  — Thus, there is an affordability gap even before considering rehab need, and that affordability problem worsens if the estimated rehab occurs. Rehab affordability is an even greater problem for certain types of households and housing units, such as minorities and older units, respectively (Summary Figure 2).

- Of the estimated $1.3 trillion in rehab needed nationwide

  — $741 billion, or about 57 percent, is deemed affordable (i.e., with rehab, the HEIR is less than 40 percent); and

  — $569 billion, or about 43 percent, in unaffordable (i.e., post-rehab, the HEIR is 40 percent or more). The greatest financial burden is faced by renters versus owners; central-city residents; the poor and minorities; and those living in the oldest housing units (Summary Figure 3).

- The calculations on rehab affordability did not factor in subsidies, such as CDBG, HOME, low-income housing tax credits (LIHTC), and historic rehab tax credits (HTC), that can help bridge the affordability gap. Nationwide, these major subsidies for rehab amount to about $4 billion annually and stimulate about $12 billion in total rehab investment. Yet, subsidies are in short supply. Also, if more than one subsidy is utilized, additional challenges may be posed (e.g., subsidy requirements may contradict one another).

Development, Construction, and Occupancy Barriers to Rehab

- In addition to economic constraints, the barriers to affordable-housing rehab at the development, construction, and occupancy stages are synopsized in Summary Exhibit 2.

- The barriers are interrelated and often reinforcing. For example, "excessive" building codes raise costs—and higher costs widen the economic gap. "Unclear" building codes make it harder to estimate costs, often limiting the contractor pool. Reduced market competition and a small contractor pool can lead to increased construction costs—again aggravating the economic gap. The economic gap, in turn, magnifies the impact of many of the barriers encountered in effecting affordable rehab. Delays, excessive codes, rising property taxes, and other issues would be less daunting if the margins in doing affordable-housing renovation were not as critical as they are.

- The barriers are diverse and encompassing.

  — Economic constraints include the inability to afford the rehab, to pay for a professional to estimate costs, to properly abate environmental hazards, and to restore historic elements.

  — Professional inadequacies involve such matters as the ability of real estate agents to locate properties suitable for rehab, insurance agents to secure affordable coverage, contractors and architects to estimate costs, and appraisers to identify suitable "comparables" to the subject property.

  — Regulatory and programmatic problems range from prolonged property tax foreclosure impeding property acquisition to the building code's "25–50 percent rule," which can demand that new-construction building standards be met when undertaking rehab.

  — Miscellaneous constraints. In general, the smaller, less-capitalized, less-experienced contractors do rehab work, whereas the larger, better-capitalized, and more-experienced contractors do new construction. Consider these facts in light of the reality that many rehab jobs are much more complex than new construction projects. A rehab project is more difficult to manage due to its complexity, smaller size (which makes construction less efficient), and the fact that the contractor needs to know old ("archaic") construction techniques and building codes as well as current techniques and codes. A recurring problem is that the better rehabbers "graduate" to become new-home builders. This "brain drain" is a major problem for the rehab industry.

- The barriers to rehab are often most problematic in those cases with the greatest potential social, economic, and planning benefits. Rehab is particularly challenging in mixed-use, adaptive reuse, and historic situations (Summary Exhibit 2). The building code alone can stop these types of efforts in their tracks. Conversion of upper-story space from commercial to housing may be thwarted by the building code's demand that reuse and rehab satisfy new-construction standards—a near impossibility. The building code can also complicate mixed-use planning, as we found in Seattle where code requirements for renovating mixed-use apartments in buildings often means that commercial uses, such as first-floor restaurants, be retrofitted to new-building standards, which would involve expensive and extensive work on smoke dampers, air changes, and the like.

- While the barriers shown in Summary Exhibits 1 and 2 reflect practitioner experiences, their specific incidence and degree of difficulty vary by jurisdiction, project type, and so on. As just noted, rehab is often more difficult in adaptive and mixed-use situations. Many other influencing conditions can add to the challenge.

  — *Variability in local codes and their administration.* While the building code can be a major impediment in some cities—those with archaic codes and inspectors demanding compliance "by the book"—it may be of little concern in communities with more flexible codes and code administrators.

  — *Subsidy utilization.* Davis-Bacon, while irrelevant to unsubsidized rehab, can pose a challenge to federally aided affordable rehab. In general, the more subsidies are drawn upon, the greater the potential barriers to affordable renovation projects. However, subsidies are often essential.

  — *Environmental conditions.* Rehabbers of contemporary buildings do not confront issues of lead paint and asbestos abatement, yet regulations governing these materials can bedevil the renovation of older properties.

  — *Experience.* Estimating cost is often very challenging to the novice renovator; it may be of little issue to a more experienced counterpart.

  — *Issues of ownership acquisition.* Property acquisition is irrelevant for the owner wanting to upgrade his or her property, but can be challenging for outsiders wishing to buy and renovate (i.e., those doing "acquisition rehab"). Acquisition is also more challenging for those seeking to focus their renovation efforts in selected blocks or neighborhoods (i.e., those doing "targeted rehab").

  — *Urban issues*. Identifying and obtaining clear property title as well as problems securing insurance and financing may be more challenging in urban locations than in suburban locations.

  — *Rehab scale.* Moderate-scale rehab is more challenging in many respects than smaller- and larger-scale renovation.[6]

[6]Renovating a few properties is generally quite manageable, and at the opposite end of the spectrum, the large-scale rehab outfit is typically professionally staffed and well capitalized, and benefits from scale economies. Moderate-scale rehab, falling between the two polar cases just described, is often more problematic. The activities and scheduling are more demanding than with small-scale jobs, yet the resources and competence of the larger operation are not at hand, nor are the economies of scale.

— *Rehab level.* A moderate amount of rehab—more than minor but less than substantial renovation—often poses relatively more difficulty.[7]

— *Other variables.* The presence of a basement can increase radon risk. Even topography can influence the issues confronted in doing rehab. For example, the access mandate is harder to satisfy in cities with sloped streets.

- Given the variability in the barriers to rehab, there is no uniform ranking of the severity of the hurdles. What is a minor or nonexistent issue in one situation may be a moderate to significant problem in another context. Nonetheless, we rate on a rough ordinal scale of "minor," "moderate," and "significant" those barriers that the study suggests are more or less troubling. Most of the barriers are minor, including estimating costs, obtaining insurance, dealing with minimum housing standards, radon, energy, regulations, and rent control and property tax issues. The most significant problems include the economics of affordable rehab projects, regulations, and the related ability to secure financing. Lead-paint abatement is a moderate to significant problem. The remaining issues identified in Summary Exhibits 1 and 2 are of minor to moderate concern—again subject to tremendous variability.

- The barriers must be considered in the broader context of their main purpose. Historic preservation is illustrative of this reality. While renovation may sometimes be impeded by certain preservation provisions (e.g., protracted local historic commission review), historic preservation contributes to housing rehab by encouraging investment in older housing and neighborhoods and through various preservation-targeted subsidies, such as property tax abatement. Also, although affordable-housing advocates would prefer more accommodating standards for the historic rehab tax credits (HTC), the HTC's goal is fundamentally preservation, not housing.

  Perspective is also needed in viewing lead-paint abatement and asbestos abatement, access, building code, and other regulatory mandates that affect rehab. These provisions are essential for serving the public's health, safety, and welfare. At the same time, these mandates can pose challenges to rehab. The issue is one of balance. One objective of this study is to foster further dialogue on this subject.

- The challenges of rehab must be acknowledged. Rehab is sometimes viewed as "easier" than new construction. That view is inappropriate. Realism should prevail and proper support be accorded to renovators. Realism about the task and appropriate support are especially critical in tackling difficult assignments, for example, when a nonprofit is ratcheting up activity from small-scale to moderate-scale rehab.

[7]Minor rehab is more straightforward, its costs are easier to predict, and the expenses are more affordable. Moderate rehab shares the economic challenge of substantial rehab (Duncan 1991) yet in many respects is harder to do: more decisions have to be made on what to retain and what to replace (with substantial rehab, the entire housing unit is often gutted); costs are harder to predict than with minor or substantial rehab; and with moderate rehab, some regulations may be more of an issue or harder to predict. For instance, the building code's "25–50 percent rule" is typically not triggered with minor rehab, is usually triggered with substantial rehab (and thus the impact of the rule may be anticipated), and may or may not be applicable with moderate rehab.

- While the barriers to rehab are challenging, they are far from insurmountable. Rehab in the United States is being done on a large scale, about $150 billion worth annually. As one member of the housing resource group commented, "There are always issues to resolve and we deal with them." Further, the barriers are more serious for affordable rehab. Finally, the hurdles to renovation are being addressed on many fronts. Building codes are being reformed; receivership laws (for securing neglected properties) are being adopted; lenders are more comfortable granting rehab loans; and regulators increasingly are working with the housing industry to foster flexibility in enforcement. Maryland, New Jersey, Vermont, and several other states are actively working to further statewide rehab, historic preservation, and related activities. These responses are the basis for the best practice recommendations.

E. STUDY FINDINGS: BEST PRACTICES FOR EFFECTING AFFORDABLE HOUSING REHAB

Overview of the Best Practices

- The best practices are designed to address the challenges to rehab at its development, construction, and occupancy stages.

- The best practices are synopsized in the *Strategy Guide* and are organized into actions applicable at the development (I), construction (II), and occupancy (III) stages and within each of these categories, is further targeted to specific issues as follows:

I. Development
   A. Property Acquisition
   B. Cost Estimation
   C. Insurance
   D. Financing
   E. Land-use

II. Construction
   A. Building Code
   B. Minimum Housing Standards
   C. Historic Preservation
   D. Lead-based Paint
   E. Asbestos
   F. Radon
   G. Energy
   H. Accessibility
   I. Davis-Bacon
   J. Effecting Construction

III. Occupancy
   A. Rent Control
   B. Property Tax

- Each of the best practices is synopsized in a four section arrangement as follows:

  A. Strategy: The action is briefly identified.

  B. Description: The strategy is described in greater detail and background information is included.

  C. Example: Illustrations of the strategy's applications are presented.

  D. Evaluation/Comments: The strategy's advantages and disadvantages are discussed and/or comments are provided regarding the example.

- Resource materials—supporting, often technical information, for some of the best practices are contained in the *Resource Guide*. For example, one best practice for financing affordable housing rehab is to have state qualified application plans (QAPs) favor rehab applications for low-income housing tax-credits (LIHTCs). To provide further information on that topic, resource materials on the QAP is presented in the Resource Guide. Included are all the QAP criteria, how these criteria changed between 1990 and 2001, and the implications of each QAP factor for rehab projects applying for LIHTC funding.

  As another example, the historic rehabilitation tax credit (HTC) is already an important subsidy for rehab—yet its potential as a funding source could be enhanced through changes to its current provisions. Potential modifications described in the resource materials include changes in the manner in which the tax basis is calculated, allowing a greater subsidy in distressed areas, and enhancing the "workability" for smaller HTC projects. The full list of subjects contained in the Resource Guide include:

  A. Low Income Housing Tax Credit (LIHTC) qualified allocation plan (QAP) criteria

  B. Structural changes to enhance the historic rehab tax credit availability for housing rehab

  C. State tax credits for low-income housing

  D. State tax credits for historic rehab

  E. State property tax incentives for historic rehab

  F. Overview of accessibility laws

  G. Overview of housing receivership statutes

  H. Analysis of contemporary national-state model building code regulation of housing rehab

I. Construction practices and technologies for rehab

- As a further resource, a *Literature Guide* is also included. That section cites and annotates books, studies, and articles on the barriers to and best practices for affordable housing rehab.

Guide to and Comments on the Best Practices

- As the barriers to affordable housing rehab are interrelated and often reinforcing, so too is the efficacy of the best practice solutions. For example, "smart" or rehab-oriented building codes should: reduce costs (by removing unnecessary requirements and by expediting the work), make it easier to estimate expenses (because the new codes are clearer), expand the rehab contractor pool (because more firms will be capable of fulfilling the clearer-specified renovation requirements), and reduce property taxes (because of economies in the dollar improvements to the property).

- Since the barriers to affordable housing rehab are diverse and encompassing, so too are the best practices. This study purposely provides a broad menu of solutions. It is incumbent, however, for practitioners to identify to the specific barriers to rehab in any given situation and then to "select" from the best practice menu accordingly. For example, when working in a jurisdiction with archaic building codes and inflexible inspectors, then the building code best practice actions (Strategy Guide, section II.A) should be considered. When renovating buildings with lead-paint or asbestos, or if the rehab involves an historic building, then the best practices in the Strategy Guide, sections II.D, II.E, and II.C respectively should be perused. In a high property tax jurisdiction, the potential tax abatement provisions for rehab (found in the Resource Guide, section E) would be useful.

Needed: A Collaborative and Holistic Framework to Further Affordable Housing Rehab

- As a further guide for action, a menu of strategies are specified for fostering affordable housing rehab applicable to the major entities influencing this housing activity including:

  A. U.S. Department of Housing and Urban Development (HUD)

  B. State and local governments

  C. Community development entities (non-profit and for-profit)

  D. Lenders

The potential HUD actions, some of which have been or shortly will be implemented, are listed below:

- Encourage and evaluate pilot efforts to acquire properties for rehab through such innovative means as fast-take property foreclosure, receivership, and a torrens title system. Consider awarding points in the HUD Notice of Funding Availability (NOFA) for efforts expediting the acquisition and disposition of government-owned land for the purpose of rehabilitation.

- Apply Federal Housing Administration (FHA) property disposition policies to further renovation. For example, consider expanding the Direct Sales Program to allow government authorities and approved non-profits: a) the right of first refusal of all HUD-owned properties; and b) application of discounts in areas beyond the designated Revitalization Areas. HUD-designated Revitalization Areas should be coordinated with state and local governments to maximize community resurgence efforts and allow the layering of financing.

- Support and encourage local efforts to improve the pace of the planning and approval process of affordable housing projects. Consider awarding NOFA points for the presence of "affordable housing expedite programs" similar to that of San Diego's Development Services Department which accelerate processing.

- Encourage state and local governments to dedicate a portion of their property tax gains in redevelopment areas to affordable housing. Consider awarding NOFA points for actions similar to a California law that mandates at least 20 percent of the appreciation in redevelopment areas be spent on affordable housing.

- Encourage local adoption of the National Applicable Recommended Rehabilitation Provisions (NARRP), developed under HUD auspices to improve the building code climate for renovation. Also, encourage state and local governments to formulate their own "smart codes", similar to New Jersey's Rehab Subcode. Continue awarding points in NOFA for the existence of land-use regulations and building codes that encourages reuse and rehab of existing buildings for affordable housing.

- Encourage communities to examine the impact of land-use requirements on rehab feasibility and to identify ways these standards can be made more rehab-supportive. For example, reduce off-street parking requirements for rehab projects located in areas served by transit and encourage zoning that permits adaptive reuse. Continue awarding points in NOFA for the existence of land-use regulations and building codes that encourages reuse and rehab of existing buildings for affordable housing.

- Evaluate how HUD standards themselves affect rehab and continue to reinforce the implementation of land-use regulations furthering the provision of affordable housing and removal of regulatory barriers. For example, the one-space-per-unit parking requirement for HUD-financed Section 202 projects may be too high, particularly in urban areas. As with local mandates, the HUD parking requirements are especially critical in a rehab context because it is difficult to retrofit off-street spaces for an existing building.

- HUD underwriting standards can be reviewed. Section 221(d)(4) underwriting currently limits the amount of allowable nonresidential space to 10 percent of the project's income (Section 220 allows up to 20 percent). These limitations can be a problem for a mixed-use rehab project because ground-floor tenants for commercial space improve project economic feasibility—and also further smart-growth objectives. Flexibility on the nonresidential ceilings should be encouraged while recognizing that HUD's primary mission is housing.

- Encourage HUD underwriting practices and mortgage products (e.g., 223 [a] [7] versus 221 [d] [4]) that capitalize on the remaining economic life (REL) of major building systems and components (e.g., HVAC, windows, and roof). The latter should be retained where they have a REL of at least 5 years and appropriate capital reserves should be set aside to fund the eventual replacement of retained components. Data compiled through the study of facilities management can help craft the actuarial determination of appropriate replacement reserves.

- Consider a limit on professional and other fees in affordable rehab housing development. Fees on a tax credit project are illustrative. These fees can amount to over 50 percent of the project cost. When tax credit "deals" were new, such fees may have been justified because many uncertainties had to be researched and solutions crafted. Today, however, tax credit development is much more routine yet high fees often remain—and take away from the funds directly available for the housing rehab.

- In an effort to encourage renovation of public housing and assisted units, consider shifting subsidies to being asset-based in order to increase the amount of debt capital that may be raised. Also consider altering the Exit Tax Penalty which inhibits the transfers of older assisted properties in need of rehab.

- As part of HUD's larger initiative to maintain its affordable housing stock, (e.g., Section 8 units with expiring contracts), the rehab needs of that stock needs to be analyzed and addressed.

- Improve existing HUD supports for rehab. The 203(k) mortgage, which is granted by private lenders and insured by the FHA, is illustrative. This program dates to 1961, yet has experienced uneven and for the most part modest usage. That is unfortunate, because by offering purchase-rehab financing as well as refinancing for renovation, the 203(k) loan offers much potential. While it has encountered some problems of abuse, with tightened oversight, greater publicity, and revisions (perhaps the ban on use by investors might be lifted on a pilot basis), the 203(k) program can be invigorated as an important support for rehab financing.

- Reduce the "costs" of HUD subsidies derived from ancillary requirements. With congressional action, the Davis-Bacon requirements can be modified, or at least its administration improved. For instance, the eight-housing-unit trigger for Davis-Bacon in CDBG might be raised to the HOME program's 12-unit threshold. To encourage more mixed use, HUD might also limit when commercial wage rates are triggered in mixed-use projects. In a similar vein, participating jurisdictions (PJs) involved in CDBG and other HUD-supported programs should be discouraged from effectively increasing improvement standards when a housing unit is improved with government support (e.g., PJs sometimes strictly enforce minimum housing standards [MHS]).

- Encourage states to review their selection criteria for the low-income housing tax credit projects. Our research indicates that certain selection criteria contained in state LIHTC Qualified Application Plans (QAPs) may discourage rehab applications and that other QAP criteria can encourage renovation projects. States should review their QAPs to identify potential influences on rehab projects and should incorporate rehab-supportive criteria.

- Evaluate how the new lead-based-paint regulations, fully implemented in April 2001, affect affordable rehab.

- Continue to support and research capacity building efforts and training for community organizations undertaking the rehab of affordable housing.

- Publicize and promote implementation of the Advisory Council on Housing Preservation's (ACHP) June 1998 policy statement on "Affordable Housing and Historic Preservation" (HUD participated in the formulation of, and was a signatory to, this statement). Research should be supported that seeks to better identify methods to furthering the joint goals of affordable housing and historic preservation. Support should be provided for the development of locally-specific historic district guidelines to achieve these goals, similar to those guidelines developed under the auspices of the National Demonstration Project for Affordable Housing Design Guidelines in Historic Districts funded by the Pew Foundation.

- HUD should continue to work with sister federal agencies, such as the Department of Energy, National Park Service, the Environmental Protection Agency, and OSHA, on such mutually important matters, as affordable housing, historic preservation, energy efficiency and protection from lead, asbestos, and other health hazards in a rehab context.

- HUD should continue its efforts to improve data on rehab. It can begin by annually identifying how much rehab (dollar amount and units) its major subsidy programs are supporting. Those data are already readily available from the HOME subsidy, and, with some additional work, data can be developed for CDBG as well. With the addition of rehab data from Title I, HOPE's renovation component, and a few other programs, it would be possible to annually compile HUD's rehab contribution from its major subsidies. Additionally, HUD can continue its collaboration with the U.S. Bureau of the Census, the remodeling industry, and others to improve the geographical, financial, and housing dimensions of rehab information.

Recommendations for state and local governments, community development entities (both non-profit and for-profit), and lenders are contained in Summary Exhibit 3. These recommendations constitute policy options and potential strategies to foster the rehab of affordable housing. The table is organized first by the rehab stage (development, construction, and occupancy) and then by barrier. Issues and ameliorative strategies are identified by barrier, while "X"s indicate the actor who may pursue each strategy.

For example, property acquisition is often a challenge because of the practical inability to obtain a property and the time and cost attendant to the process. Summary Exhibit 3 provides numerous suggestions for improving property acquisition by addressing transfer of title or control of property hurdles and by enhancing the rehab economics. There are many ways to do this. Receivership (authorized by government enabling legislation) can lead to the appointment of public and non-profit receivers. Government can accelerate the foreclosure of tax and mortgage delinquent properties. Lenders can negotiate the bulk sale of properties. The addressing of lienfields, and providing bridge loans and other upfront capital can relieve the financial pressures bedeviling property acquisition.

- A final recommendation concerns rehab data, specifically the need and availability of information related to rehab activity and need. Summary Exhibit 4 presents a holistic view of the matter. Ideally, one would start by analyzing the need for residential rehab based on housing and demographic forces. Only a portion of the gross rehab need materializes. Many poor families live in deteriorated housing units that need upgrading. However, the necessary work may not be done because these families have limited financial resources and because of other challenges. It would be useful to determine what data would facilitate study of rehab affordability. Demographics also have an impact on what rehab is effected. For instance, seniors and long-term homeowners may defer renovation despite having the financial means necessary for the upgrading. Thus, study of the demographic and housing life-cycle influences on rehab is critical and has its own data requirements.

  The net remaining from the gross rehab need less affordability and the influence of demographics (and other factors) is the actual rehab activity. Data for measuring the latter are available from the American Housing Survey (AHS) and census materials (e.g., C-30 and C-50 reports), as well as from industry sources (e.g., NAHB's Consumer Practices Survey). Measuring rehab activity and improving upon information sources (e.g., maintaining the C-40 survey based on building permits and providing better geographic detail in the C-50) were topics discussed at the February 2000 Remodeling Industry Information Summit sponsored by Harvard University's Joint Center for Housing Studies.

  A portion of the rehab activity that occurs is financed, and government entities are involved in a share of the rehab financing and the broader rehab intervention. Financing and the role of government are part of a broader stream of rehab subjects and data, and a holistic perspective of data rehab and needs must be kept in mind. The sense of a whole also suggests the premier data sources for accessing and improving our knowledge of rehab.

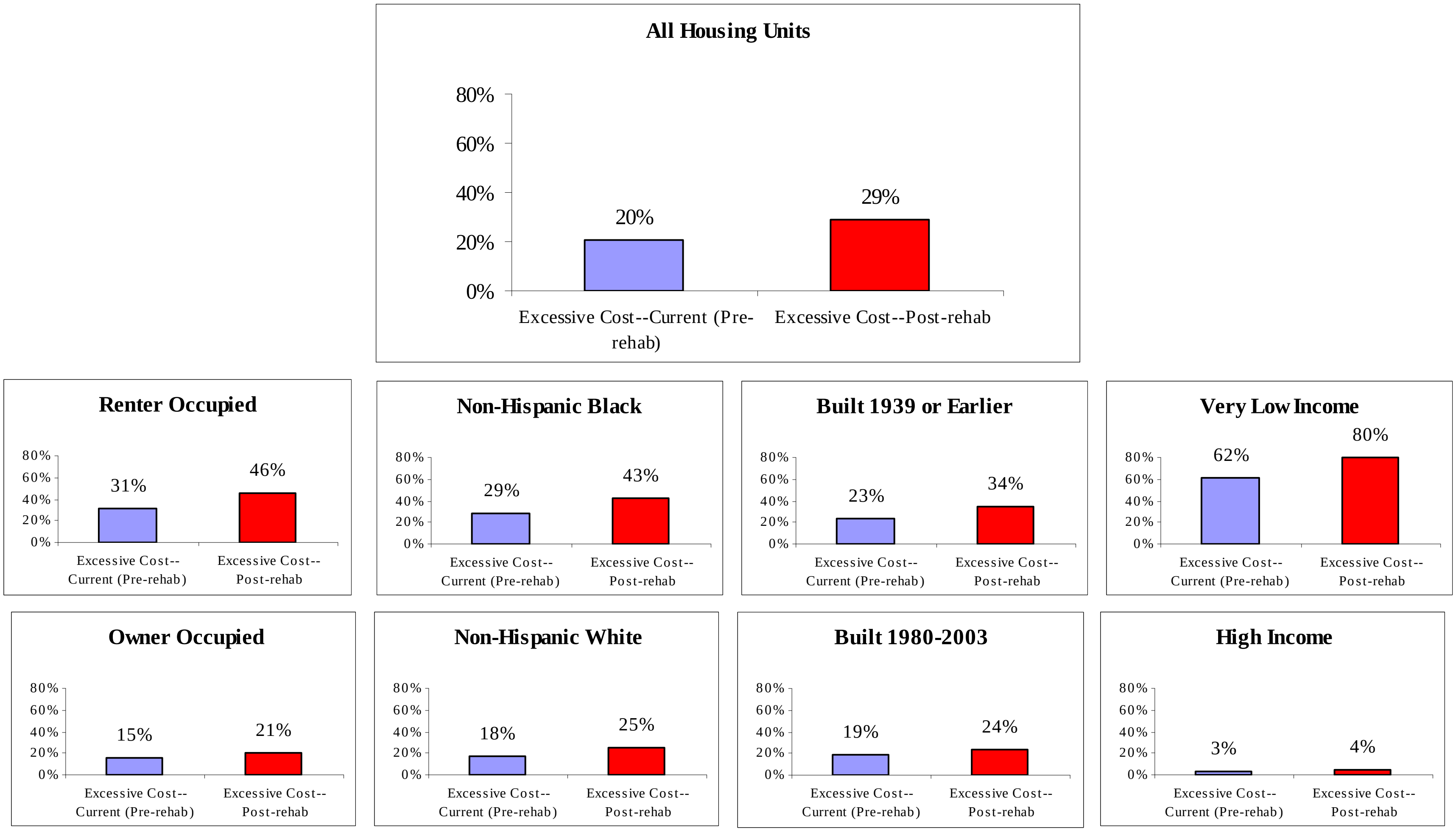
  The American House Survey (AHS) stands out as a prime candidate; it is the only broad-based source, as shown in Summary Exhibit 4. The AHS can provide information on rehab need and inform on rehab affordability and demographic influences, is a prime source for data on rehab activity, and potentially could improve our knowledge of rehab financing and government involvement in that financing. An expanded Consumer Practice Survey could inform the dual rehab activity and rehab financing components; it is thus an important resource for improving the quality and availability of data. See Summary Exhibit 4 for further details.

- In sum, working collaboratively with HUD, state and local governments, private developers, community development entities, lenders, and others can foster affordable housing rehab. An enhanced data system can track the progress made and can identify the need for continued policy changes and other actions in the future to encourage heightened affordable housing renovation.

SUMMARY FIGURE 1
Estimate of National Rehab Need
Share of All Occupied, Permanent (Non-Mobile Home) Year-Round
U.S. Housing Units Needing Rehab (2003)

Source: 2003 American Housing Survey and calculations done by the Center for Urban Policy Research, Rutgers University.
Note: Figures presented are a *very conservative* estimate of rehab needed.

SUMMARY FIGURE 2
Percentage of Excessive Cost Housing Units in the United States
Current (Pre-Rehab) and Post-Rehab (2003)



Source: 2003 American Housing Survey and calculations done by Center for Urban Policy Research, Rutgers University
Note: Excessive cost = housing expense to income ration (HEIR) of 40 percent or more.

SUMMARY FIGURE 3
Estimate of Rehab Investment Needed Nationwide
By Affordability (2003)

Source: 2003 American Housing Survey and calculations done by the Center for Urban Policy Research, Rutgers University.
Note: Affordable = with rehab, the housing expense to income ration (HEIR) for the occupant is less than 40 percent Unaffordable = with rehab, the HEIR is 40 percent of more

Summary Exhibit 1—Analytic Framework
Barriers to the Rehabilitation of Affordable Housing

I. Overall Rehab Characteristics
Frame the Process and Underpin Many of the Barriers

Compared with new construction,
rehabilitation is often

- nonstandard
- less predictable
- smaller scaled
- challenged in other ways

↓

II. Economic Constraints
Are Key Barriers Affecting All Stages of the Rehab Process

The gap between the costs of rehab and the available financial resources of property owners/tenants impedes rehab investment and aggravates development, construction, and occupancy issues.

↓

III. Specific Barriers along the Continuum of Rehab Implementation Stages

A. Development

1. *Acquiring Properties*— difficulty obtaining sufficient and appropriately located and priced properties
2. *Estimating Costs*—difficulty estimating precise rehab expenses
3. *Obtaining Insurance*— difficulty obtaining various forms of insurance (e.g., hazard and bonding)
4. *Obtaining Financing*— difficulty obtaining sufficiently leveraged, affordable financing
5. *Land-Use Restrictions*—e.g., disallowing change or intensification of use

B. Construction

1. *Codes/Regulations*—building, housing, fire, lead, asbestos, energy, historic, and access regulations are sometimes problematic in retrofit situations
2. *Trades*—difficulty obtaining qualified tradespersons
3. *Other*—e.g., technology, security issues

C. Occupancy

1. *Rent Control*—restricts income necessary to meet rehab outlays
2. *Property Tax Increases*—increases following rehab can discourage investment

Summary Exhibit 2—Barriers
Summary of the Barriers to Rehabilitation at the Development, Construction, and Occupancy Stages

Barriers by Rehab Stage	Barrier Profile	Barrier Incidence (Where Problems Are Most Challenging)
I. Development Stage Barriers		
A. Property Acquisition	• Acquisition from owners—owners difficult to locate; complications (e.g., estate); expense; "lienfields" (e.g., unpaid taxes) • Property tax foreclosure—time-consuming, weak title • Bank foreclosure—time-consuming and sometimes limited to "bulk" sales • Other—limitations with eminent domain, owner donation, and other acquisition strategies	Acquisition rehab (properties are acquired and then renovated) and targeted-area rehab (rehab is done in targeted locations)
B. Cost estimation	*Uncertainty Concerning Needed Improvements* • Hidden problems (e.g., termite and water damage) exacerbated by building code issues • Time uncertainties (inflation and damage) *Estimating-Process Difficulties* • Limited access and building plans • Time and budget limitations constrain a comprehensive estimate	Moderate rehab, special situations (e.g., historic or adaptive reuse), and novice rehab entity
C. Insurance	*During Rehabilitation* • Premium for hazard-liability insurance in rehabilitation projects • Difficulty in obtaining surety bonding *After Rehabilitation* • Difficulty in securing coverage	Special situations and novice/small rehab entity
D. Financing	*Appraisal Issues* • Difficulty in identifying "comps" and making adjustments • Discrepancy between rehab cost and supportable property values *Higher-Cost Financing Terms* • Loan to value ratio, income-expense ratio, fees, credit enhancement, and other provisions are more stringent for rehabilitation *Other* • Public funding constrained by limited supply of, and competition for, public assistance; the "costs" of subsidies from ancillary requirements; the timing of subsidies (e.g., deadline conflicts), and other issues (e.g., LIHTC selection criteria may be problematic to rehab)	"Pioneer and lower-income rehab," "special situations" (e.g., historic and adaptive reuse), and novice rehab entity
E. Land-use restrictions	*Limitations on* • Intensification of use • Change of use • Mixed use *Requirements for* • Off-street parking, open space, etc.	Adaptive reuse, mixed-use, and historic situations

Summary Exhibit 2—Barriers

Summary of the Barriers to Rehabilitation at the Development, Construction, and Occupancy Stages

Barriers by Rehab Stage	Barrier Profile	Barrier Incidence (Where Problems Are Most Challenging)
II. Construction Stage Barriers		
A. Building code	*Questionable Standards* • Scale (“25%–50% rule”) • Excessive minimum standards *Administrative Problems* • Inflexible administration • Conflicts between agencies (e.g., building code vs. fire code)	Novice rehab entity, moderate rehab, subsidized rehab, and “special situations”
B. Minimum housing standards (MHS)	*Questionable Application* • Heightened MHS enforcement when rehab is effected reduces the ability to capitalize on remaining economic life for roofs, windows, and other components	Moderate, subsidized rehab
C. Historic preservation	*Historic preservation controls and programs, e.g., Section 106, tax credits, and local landmarking, contribute to housing rehab by* • encouraging rehab investment • fostering a rehab industry • providing incentives *Historic preservation can sometimes be a barrier to rehab due to* • inflexible 106 review • inflexible tax credit review • stringent local regulations	Historic properties, novice rehab entity, small rehab projects, and selected instances of inflexible enforcement
D. Lead-based paint	*Regulatory Issues* Many regulations because of severe health hazard associated with lead: • HUD (where HUD assistance is involved) • OSHA—for worker safety • EPA; local health and building codes *Liability Issues* • Citations and lawsuits • Property owner disclosure • Liability insurance *Cost Issues* • Testing, abatement, and disposal costs can be expensive	Most residential units built before 1960. Generally, the older the home, the greater the amount of lead-based paint. HUD estimates that 60 million occupied homes have some lead-based paint
E. Asbestos regulations	*Regulatory Issues* *Regulations to address health hazards:* • EPA • OSHA *Cost Issues* • Can be expensive, though typically not as daunting as the costs of dealing with lead-based paint	Apartment buildings with friable asbestos constructed before 1970; adaptive reuse of larger commercial or institutional buildings is also problematic

Summary Exhibit 2—Barriers
Summary of the Barriers to Rehabilitation at the Development, Construction, and Occupancy Stages

Barriers by Rehab Stage	Barrier Profile	Barrier Incidence (Where Problems Are Most Challenging)
II. Construction Stage Barriers (continued)		
F. Radon	*Regulatory and Cost Issues* • Recommendation for testing (EPA and Surgeon General) • Minor cost for abatement if necessary	Construction materials, building techniques, local geology, and other factors (presence of a basement) affect radon levels
G. Energy	*Regulatory Issues* *Numerous regulations to reduce energy consumption:* • HUD/PATH[a] • Model Energy Code *Cost Issues* • While energy efficiency reduces housing costs over time, retrofitting for energy efficiency can be expensive	Moderate to substantial rehab with HUD subsidies
H. Accessibility	*Regulatory Issues* To satisfy a vital national mandate, there are various regulations: • Architectural Barriers Act • Rehab Act of 1973 • Fair Housing Act • Americans with Disabilities Act • State access provisions *Cost Issues* • Retrofitting access can be expensive (regulations recognize this)	Public accommodations, publicly financed rehab, historic properties, and other situations (e.g., projects with small-sized units and cities with highly sloped streets)
I. Davis-Bacon wage requirements	*Regulatory and Cost Issues* • Prevailing wage requirements for projects with federal funding boosts labor costs	Federally funded (CDBG and HOME) multiunit projects over certain thresholds: eight or more units for CDBG, 12 or more for HOME
III. Occupancy Stage Rehab Barriers		
A. Rent control	Presence of stringent as opposed to moderate controls. (The latter allow sufficient rent increases to economically support rehab.)	Jurisdictions (very few) with stringent rent control
B. Property tax	Rehab increases the property tax obligation on the buildings that are renovated	Problems are most severe in high property tax jurisdictions and where property tax abatement for rehab is unavailable

[a]Partnership for Advanced Technology in Housing (PATH) is a private/public effort to develop, demonstrate, and gain market acceptance of innovative technologies

Summary Exhibit 3—Summary of Best Practice Recommendations for Rehabilitation (See Strategy and Resource Guides for Details)

Barriers by Rehab Stage	Strategies for Addressing Barriers	Usual Agents Involved		
		State and Local Governments	Community Development Entities	Lenders
Property acquisition	• Receivership—This legal process would enable a receiver to be appointed to secure and repair a badly deteriorated property	X	X	
	• Accelerated Tax Foreclosure—A process that permits the expeditious acquisition of tax delinquent property.	X		
	• Proactive Favoring of Rehab—Rehab should be favored over demolition in the dsiposition of tax-foreclosed properties.	X	X	X
	• Eminent Domain—The governmental power to take private property for a public purpose (that may include rehab) as long as the owner is provided just compensation for the taking.	X	X	
	• Address "Lienfields"—Properties with considerable unpaid taxes ("lienfields") can be made more attractive to rehab entities by permitting the tax liens to be removed or reduced.	X		X
	• Land Banks—These consist of properties, typically neglected or underutilized, that are held, or "banked," for a specified future use, which may include rehab.	X	X	X
	• Enhanced Property Identification—This includes Geographic Information Systems (GIS) or other information gathering approaches to assemble and integrate property data (e.g., location, assessed values, and liens).	X	X	X
	• Negotiated Bulk Purchase—A negotiated bulk purchase entails a rehab entity acquiring properties in volume from public or private sources.	X	X	X
	• Property "Hold"—In a property "hold," a rehab entity negotiates the right of first refusal on properties for renovation.	X	X	
	• Property Swap/Land Swap—A negotiated process in which two or more owners swap each other's holdings in order to better meet their respective needs for space, location, or marketability.	X	X	X
	• Bargain Sales—These are sales of property in which the sellers make a partial donation in equity (e.g., selling houses for nominal fees) to nonprofit buyers and then claim these donations as charitable contributions to reduce their own tax liabilities.		X	X
	• Bridge Loans—Such financing provides the "up-front" capital to permit timely property acquisition.	X		X

Summary Exhibit 3—Summary of Best Practice Recommendations for Rehabilitation (See Strategy and Resource Guides for Details)

Barriers by Rehab Stage	Strategies for Addressing Barriers	Usual Agents Involved		
		State and Local Governments	**Community Development Entities**	**Lenders**
Cost estimation	• Cost estimating software—Industry software can potentially be a great resource for cost estimation.		X	
	• Customized rehab checklist—Rehab entity develops custom checklist, "spec sheet," and other materials for estimating the rehab costs of the type of buildings being renovated.		X	
	• Rehab entity acts as general contractor (GC)—Performing as a GC gives rehab entity better expertise to estimate costs and the GC "mark-up" can then be captured by the rehab entity.		X	
	• Work with similar group of construction professionals—Tap the expertise of the subcontractors in estimating costs.		X	
	• Careful initial cost estimation—Allow resources for careful cost estimation before rehab project commences.		X	
	• Retain experienced cost estimator.		X	
	• Provide cost guidelines--City or other public institution can disseminate information on prior rehab costs by property type, location, and rehab category.	X		
Insurance	• Cultivate services of competent professionals—Obtaining insurance coverage for rehab projects can be problematic, so working with a knowledgeable insurance professional is helpful.		X	
	• Reduce insurance risk (e.g., secure site).		X	
	• Request insurance flexibility from lenders and insurers.		X	X
	• Educate underwriters and insurance companies—Education is necessary because insurance underwriters may view rehab as "having a greater risk factor exposure" relative to new construction. Thus, premiums may be higher.	X	X	X
Financing	• Address rehab property appraisal issues—Since financing often is secured at a share of value, the appropriate determination of the value of properties being rehabilitated is a prerequisite for obtaining adequate-sized mortgage loans for rehab.	X	X	X
	• Encourage lenders to meet the credit needs of their service areas, including the need to finance affordable housing rehab.	X	X	X
	• Maintain good relationship with lenders—Lenders may perceive rehab as being "more difficult" and "harder to realize its goals" relative to new construction. Thus, lenders may demand more equity in rehab cases. It therefore is imperative that rehab entities maintain favorable relationships with lenders to assist in their funding.		X	X
	• Limit liability—Lenders would be more amenable to fund rehab if liability from brownfields and other potentially litigious situations were limited.		X	X

Summary Exhibit 3—Summary of Best Practice Recommendations for Rehabilitation (See Strategy and Resource Guides for Details)

Barriers by Rehab Stage	Strategies for Addressing Barriers	Usual Agents Involved		
		State and Local Governments	Community Development Entities	Lenders
Financing (continued)	• Use layered financing—Apply all available and appropriate sources of rehab funding (e.g., government programs, tax increment financing, and property tax abatement).	X	X	X
	• Use creative financing—Examples include sale of development rights and "sweat equity."	X	X	X
	• Alter Qualified Allocation Plans (QAPs) to favor rehab efforts—States should proactively establish preferences for rehab projects in the awarding of Low Income Housing Tax Credits (LIHTCs).	X		
	• Expand use of federal Historic Rehabilitation Tax Credit (HTC)—Effect structural changes to enhance the HTC's availability for housing rehab.	X		
	• Provide state version of Historic Rehabilitation Tax Credit (HTC).	X		
	• Provide state version of Low Income Housing Tax Credit (LIHTC).	X		
Land-use restrictions	• Enact rehab-supportive land-use regulations (e.g., allow mixed-use and altered density).	X		
	• Require "reasonable" parking requirements—Parking requirements imposed by local, county, or other governments, should reflect the realistic need for off-street parking.	X		
	• Exempt certain developments from parking requirements—Exempt "high priority" or other "appropriate" housing developments (e.g., historic or affordable) from providing off-street parking.	X		
	• Provide context-sensitive parking requirements—The requirement for off-street parking should be sensitive to the contextual factors of project type and location.	X		
Building code	• "Smart Codes"—Adopt building and construction codes that encourage the alteration and reuse of existing buildings.	X		
	• Limit local amendments of the building code that impede rehab.	X		
	• Flexible administration—Flexibility is imperative as even a rehab-sensitive building code can still pose a barrier to renovation if it is applied by code officials in an overly strict or otherwise inappropriate fashion.	X		
	• Foster coordination between building regulatory agencies (e.g. building and fire departments).	X		
	• Allow sensitive building code treatment of historic buildings.	X		

Summary Exhibit 3—Summary of Best Practice Recommendations for Rehabilitation (See Strategy and Resource Guides for Details)

Barriers by Rehab Stage	Strategies for Addressing Barriers	Usual Agents Involved		
		State and Local Governments	Community Development Entities	Lenders
Building code (continued)	• Education of code officials—Comprehensive training fosters knowledgeable and flexible code administration.	X		
	• Preliminary meetings with building code officials avoid problems later on.	X	X	
Minimum housing standards (MHS)	• Provide flexible MHS enforcement.	X		
Historic preservation	• Provide guidance on historically appropriate rehab.	X		
	• Allow for flexibility and broader context when rehabilitating historic affordable housing. Work to realize the federal "Policy Statement on Affordable Housing and Preservation."	X		
	• Effect early and ongoing contact with the multiple agencies regulating the rehab of historic properties.	X	X	
	• Historic preservation commissions should be adequately staffed, given appropriate resources, and should meet in a timely fashion.	X		
	• Enhance the application of federal Historic Rehabilitation Tax Credits (HTC) and provide state HTCs.	X		
	• Provide property tax incentives for historic properties.	X		
	• Provide building code flexibility when renovating historic properties.	X		
	• Enhance utilization of Low-Income Housing Tax Credits for historic rehab.	X		
	• Build preservation-affordable housing partnerships.	X	X	X
Lead-based paint and asbestos regulations	• Provide lead paint- and asbestos-focused programs.	X		
	• Coordinate regulatory agencies.	X		
	• Provide education.	X	X	
	• Increase number of specialized trades people.	X	X	
	• Assuage liability concerns.	X	X	X
	• Foster certification training.	X		
	• Provide subsidies as needed.	X		

Summary Exhibit 3—Summary of Best Practice Recommendations for Rehabilitation (See Strategy and Resource Guides for Details)

Barriers by Rehab Stage	Strategies for Addressing Barriers	Usual Agents Involved		
		State and Local Governments	Community Development Entities	Lenders
Radon	• Provide education.	X	X	
	• Provide subsidies as needed.	X		
Energy	• Coordinate regulatory agencies.	X		
	• Provide education.	X	X	
	• Provide subsidies as needed.	X		
Accessibility	• Consolidate codes and regulations.	X		
	• Improve regulatory coordination.	X	X	
	• Coordinate regulatory agencies.	X		
	• Provide subsidies as needed.	X		
Davis-Bacon wage requirements	• Increase housing unit threshold for Davis-Bacon mandate.	X		
	• Engage union workers and contractors.		X	
	• Provide current and accurate wage scales.	X		
Rent control	• Allow reasonable rent increases to cover rising operating costs and renovation outlays.	X		
Property tax	• Provide tax exemption and/or reduction as appropriate.	X		
	• Assess properties at their current use and to reflect encumbrances.	X		

Summary Exhibit 4—Rehab Data and Needs

Rehab Component	Rehab "Need" and Affordability		Actual Rehab Activity, Financing, and Government Participation		
	(1) Rehab Need	(2) Rehab Affordability	(3) Rehab Activity	(4) Rehab Financing	(5) Government Programs and Government Participation in Financing
Current Data Sources (National–Regional)	• AHS (various housing quality measures)		• AHS • C-50 • C-30 • CPS	• AHS • SCF • RFS • HMDA	• Abt-HUD LIHTC data base • NPS HTC data base • HUD CDBG-HOME data; other sources
Local Data "Enhanced" National Data Sources and Procedures	• Local surveys • "Connect" AHS housing quality measures to levels of rehab need (e.g., "minor," "moderate," and "extensive") • "Restart" annual housing goal rehab need projections by HUD and others.	• Local surveys • "Cost out" rehab levels based on AHS measures and relate costs to affordability	• Local building permits • C-40 Building Permit Survey for rehab[a] • Improve C-50 reporting (e.g., better geographic detail)	• Local data • "Enhance" AHS (e.g., link financing questions to *specific* home improvements) • "Enhance" other data sources (e.g., in SCF—improve linkage between finance question [QD37] and *specific* home improvement and differentiate in HMDA whether refinancing was used for home improvement) • Expand CPS to include financing component • Expand HIRI Remodeler Survey to include consumer financing component	• Local data • "Expand" current data sources (e.g., add more financial detail in LIHTC-HTC data) • "Enhance" access to available data (e.g., NPS HTC data base) • Add parallel financing fields to available data (e.g., LIHTC and HTC should incorporate common subsidy identifications) • Improve rehab "identification" in existing programs (e.g., CDBG) • "Enhance" other data sources to include government participation in financing rehab (e.g., in AHS)

Key:
AHS = American Housing Survey
CPS = Consumer Practices Survey of the National Association of Home Builders
HMDA = Home Mortgage Disclosure Act
HIRI = Home Improvement Research Institute
HTC = Historic rehab tax credit
LIHTC = Low income housing tax credit
NPS = National Park Service
RFS = Residential Finance Survey
SCF = Survey of Consumer Finance

[a] C-40 Building Permit Survey for rehab had been suspended in 1994, but was reinstituted in 2002.