ANALYSIS OF THE HOUSING STOCK

Introduction: The Case for Focusing on Distressed and Marginal Housing

Recent national health data have documented substantial progress on childhood lead poisoning over the past two decades due to the regulation of lead in gasoline, food cans, drinking water supplies, and other sources. At the same time, lead poisoning remains the foremost environmental health threat to children in the United States with deteriorating lead-based paint and lead-contaminated dust in older housing responsible for most poisonings. National health data estimate that 4.4% of children age 1-5 have elevated blood lead levels (10 μg/dL or above).[1] These same data indicate that poor children and minority children are at strikingly higher risk for lead poisoning: poor children are eight times as likely to be lead-poisoned as children from high-income families; black children are at five times the risk of white.[2]

These national health data also make clear the need for different strategies to respond to the highly variable risks for lead poisoning in different kinds of housing. Clearly, children whose homes contain no lead-based paint (which presumably includes all post-1979 units) are at substantially lower risk. But it is also important to note that risks vary widely in units with lead-based paint, as evidenced by the fact that 10.9 million units occupied by a child under age six contain some lead-based paint,[3] while 890,000 children have blood lead levels of 10μ/dL or above (some of whom are presumably exposed from other sources). The evidence strongly suggests that units with intact lead-based paint pose relatively low risks for lead poisoning (new data from HUD's national survey should provide further illumination by the end of 1999).

This demonstrates the need to focus attention and resources on the segment of the housing stock that poses the highest risk for lead hazards – typically older, economically distressed housing in disrepair. Because such units are typically in the least competitive tier of their local housing markets and are often located in communities subject to broader blighting forces, they are typically not financed in the mainstream market and are therefore unaffected by lender requirements for maintenance and lead safety. In the absence of property and casualty liability insurance, whether because coverage is unaffordable, unavailable, or deemed unnecessary, this housing is typically unaffected by insurance underwriting standards as well. For some rental property owners, even the threat of a lawsuit by the family of a lead-poisoned child is of no concern if there is little equity remaining in the property worth protecting, and/or if they have shielded themselves from recourse by placing ownership in a corporation without seizable assets. For all these reasons, understanding the dimensions and characteristics of highest-risk units is essential to designing effective prevention strategies.

Defining Distressed and Marginal Housing

Identifying the segment of the housing stock at highest risk for lead hazards makes it possible to determine its significant characteristics, in order to design, evaluate, and implement appropriate prevention strategies. While units obviously fall along a continuum in terms of both economic viability and physical condition, it is useful to consider units already *in extremis* separately from

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[1] US Centers for Disease Control and Prevention, "Update: Blood Lead Levels – US –1991-1994," MMWR Morb Mort Wkly Rep 46 (1997):141-146, 607.
[2] Ibid.
[3] Westat, Report on the National Survey of Lead-Based Paint in Housing EPA Report 747-R95-005 (Washington, DC: Environmental Protection Agency; 1995)

those at high risk of falling into disrepair. This distinction reflects the fact that the most troubled units typically present a greater and more immediate risk of lead poisoning. Just as importantly, this distinction recognizes that the strategies needed to stabilize marginal units are, in many cases, fundamentally different from the strategies needed to redeem units from severe distress.

A variety of factors relate to and reflect elements of properties' physical condition, economic viability, and relative risk of lead hazards. Some of these factors provide a logical means for crystallizing the problem.[4] The most useful criteria for defining the dimensions of marginal and distressed housing are a composite of four measures of a housing unit's economic and physical duress: housing age; physical condition; family income; and housing cost burden.

Housing Age. Housing age is recognized as the best available proxy for lead-based paint in housing. Because the sale of lead-based paint for residential purposes was banned in 1978, properties built after 1978 have a low likelihood of containing lead-based paint. The national survey estimated that 83% of pre-1980 properties contain lead-based paint.[5] The year 1950 is recognized as a qualitative break point relative to the use of lead-based paint. Much of the paint manufactured for residential use prior to 1950 contained high concentrations of lead.[6] By 1950, the use of lead in residential paint was being supplanted by latex paint and by titanium dioxide pigment in oil-based paints.[7] Painting practices also changed around this time and lead-based paint was more likely to be used on exterior surfaces.

Physical Condition. Research has shown non-intact lead-based paint to be a strong predictor of risk for lead poisoning, and public health practice has demonstrated that children living in dilapidated units are typically at highest risk. Units with deteriorating painted surfaces can be identified via variables in the American Housing Survey (AHS)[8] which report peeling paint and cracked plaster. Otherwise, poor physical conditions are rated in the AHS through a composite factor measuring multiple indicators of unit "adequacy." This AHS variable uses the label "severely inadequate" to denote the presence of a major problem in the plumbing, heating, or electrical system; multiple hazards in common areas; or multiple signs of insufficient maintenance. "Moderately inadequate" denotes relatively minor instances of poor physical condition, such as the periodic and short-lived breakdown in the functionality of one major system. Housing inadequacy can indicate disinvestment, deterioration, and/or poor maintenance in general, and captures specific problems such as leaks which result in peeling paint, cracked plaster, and lead hazards. By including more general signs of physical inadequacy, the definition reaches all low-income households' homes that are in poor condition regardless of the level of cost burden. Deteriorated paint is a possible factor defining inadequacy, but the condition must

[4] Other factors, while directly relevant to the design of prevention strategies, are not useful for defining the dimensions of the problem; these include: rental property economics; property ownership; multi-family/single-family; occupancy by a young child; urban/rural location; race of occupants; community-wide pressures; and presence of a lead-poisoned child.
[5] Westat, Report on the National Survey of Lead-Based Paint in Housing EPA Report 747-R95-005 (Washington, DC: Environmental Protection Agency; 1995).
[6] Lead-Based Paint Hazard Reduction and Financing Task Force. Putting the Pieces Together: Controlling Lead Hazards in the Nation's Housing, Publication HUD-1547-LBP (Washington, DC: U.S. Department of Housing and Urban Development, 1995), p. 5.
[7] U.S. Department of Housing and Urban Development. Report to Congress: Comprehensive and Workable Plan for the Abatement of Lead-Based Paint in Privately Owned Housing. (Washington, DC: US. Department of Housing and Urban Development, 1990), p. 1-2.
[8] Bureau of the Census, American Housing Survey, (Washington, DC, 1997).

be accompanied by several other "upkeep" problems to produce a rating of moderately or severely inadequate.

Household Income. Income is one of several important measures of economic distress which influence a property's risk for lead hazards. While poverty does not cause lead poisoning *per se*, it has been demonstrated to be highly correlated with risks for lead poisoning. The latest NHANES data reveal that children in low-income families (income less than 130% of the federal poverty level) are eight times more likely to be lead-poisoned as children in high-income families (above 350% of the poverty level). Data on household income in relation to the income of others in their geographical area also provide a useful means of evaluating households' capacity (or lack thereof) to spend at market levels for housing, which is one factor determining economic distress.

Housing Cost Burden. Another measure of economic distress to be considered an exacerbating burden for extremely low and very low-income households is the proportion of their household income which is used to pay monthly housing costs, including rent, mortgage, property taxes, and utilities. Cost burden reflects both the economic viability of the housing unit and the stability of the household's tenure in the unit. For example, low-income owner-occupant households with a high cost burden will not be able to invest in lead hazard control or even routine repairs,[9] and low-income renters will not be able to pay more rent to either access a better unit or support a property owner's investment in the unit. High cost-burden households are relatively constrained in many aspects of housing choice compared to their peers in the same income bracket who have lower housing costs. They are trapped in the lowest tier of housing because they cannot easily move to a more affordable or higher-quality unit, since they have the least opportunity to save money for a security deposit or mortgage down-payment. If they have to move, their economic status (including lack of savings) will continue to segregate them from homes in the mainstream market.

Based on the criteria discussed above, distressed and marginal housing are initially defined as follows:[10]

Distressed Housing units are pre-1950 units occupied by households that have an extremely low or very low income (i.e., earn less than 50% of the HUD area median income for their geographical area) and that:

- have a severe cost burden (i.e., pay more than 50% of income toward monthly housing costs); and/or
- live in a housing unit which is severely inadequate or contains a surface with more than one square foot of peeling paint or plaster.

Marginal Housing units are:

Pre-1950 units occupied by those extremely low- and very low-income households (less than 50% of the area median) that:

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[9] Christmas in April and Joint Center for Housing Studies, A Decade of Miracles (Washington, DC: 1998), p.45.

[10] Data to make such an analysis are available from the 1995 edition of the AHS, which portrays numerous characteristics of the 98 million occupied housing units in the United States. For further information about the AHS and other sources of data, see the Alliance background paper, "Data Sources."

- have a moderate cost burden (i.e., pay 30-49% of income toward monthly housing costs); and/or
- live in a housing unit which is moderately inadequate;

and units occupied by low-income households (50-80% of the HUD area median) that:

- have a moderate or severe cost burden; and/or
- are moderately or severely inadequate or contain a surface with more than one square foot of peeling paint or plaster.

Viable Housing. Viable units constitute the remainder of the pre-1980 housing stock, including:

- pre-1950 units occupied by moderate and upper-income households (80% or more of the HUD area median); and
- those pre-1950 units that are occupied by very-low and low-income households but have no apparent problems from cost burden, overall unit quality, or more than one square foot of peeling paint or plaster; and
- all units built between 1950 and 1979.

Summary: the Universe of Distressed and Marginal Housing

	Distressed	***Marginal***	
Year Built	Pre-1950	Pre-1950	
Income	Extremely or very low-income	Extremely or very low income	Low-income
Cost Burden	Severe cost burden OR	Moderate cost burden OR	Severe cost burden OR
Condition	Severely inadequate OR Peeling paint/plaster	Moderately inadequate	Severely inadequate OR Peeling paint/plaster

Dimensions of Distressed and Marginal Housing

Using the above definitions, the Alliance conducted an analysis of AHS[11] data for occupied housing units with at least one bedroom[12] which are not located in a public housing development,[13] and determined that there are approximately 4.5 million distressed units and 5.4 million marginal units. It must be noted that growth between 1995 and 1997 in the number of households with income below 30% of their area median expanded the number of distressed and marginal housing units by 5% in just two years. In all likelihood, this disturbing trend of increasing economic hardship will continue. Presented below is the distribution of all US housing units along the continuum from distressed and marginal to viable and post-1979:

[11] Bureau of the Census, American Housing Survey, (Washington, DC, 1997)
[12] Criteria added to exclude units which will not house a young child.
[13] Criteria added to exclude units which are reached by HUD regulation.

Occupied US Housing Units by Distress Status

	Housing Units	% of all
Distressed	4,540,149	5%
Marginal	5,404,998	6%
Viable	62,290,282	64%
Post-1979	24,971,138	26%
Total	97,206,567	100%

While the estimated number of units classified as distressed and marginal provide a logical and useful foundation for planning, it must be recognized that these estimates are necessarily imperfect. In all likelihood, the application of these criteria classify some units as distressed that actually are not. For example, units occupied by households with significant assets but no current income would fall within the definition of distressed based on the income criterion, even though the household and property are, in fact, under no economic distress. In addition, some portion of units classified as distressed and marginal will pose little or no risk of lead poisoning, such as units in elderly-only developments or units that contain no lead-based paint despite their construction during an era predominated by the use of lead-based paint. On the other hand, these criteria may well fail to capture units that pose serious lead hazards that are occupied by families whose incomes slightly exceed the criteria selected. On balance, the Alliance believes that these estimates provide a useful way of initially focusing on the oft-overlooked problem of distressed and marginal housing.

The Dynamic Profile of the Distressed and Marginal Housing Stock

It is important to note that US housing condition and occupancy are dynamic. There are macro and micro market forces beyond the confines of the distressed and marginal stock which affect the disposition of all units. In recent years, the overall supply of housing has expanded faster than the growth in households. New private units completed during the 10 years ending in 1997 exceeded 13 million, including 2.8 million multifamily units. Households grew by 11.4 million, and the number of occupied units grew by 11.3 million.[14] As a result of the overall growth, despite the fact that nearly 4 million units in use in 1987 left the stock, vacancies reached an all-time high. By 1997 the stock included 10 million vacant units: 4 million were for sale or rent, the other 6 million were otherwise vacant. In 1987 fewer than 9 million were vacant and not quite 5 million were vacant with no discernible plan for future occupancy.[15]

Homeownership has been growing slowly but steadily for the past decade, reaching an all time high rate of 66.3% in 1997 (vs. 64% in 1988). As of 1997, homeownership is theoretically affordable to another 10 million renter households with income at 76% of the national median: ten years ago, only those whose income exceeded 93% of the median could qualify. Concomitantly the number of owner-occupied units grew from 58 to 67 million, a ten-year expansion of 15% (while the rental stock increased 7%, to reach 35 million units).[16] If this phenomenal growth continues, as more moderate income and even low-income households leave the rental market, it carries great potential to re-structure the rental property sector, reducing

[14] US Department of Housing and Urban Development, *US Housing Market Conditions* (Washington, DC, May 1999).
[15] Ibid.
[16] Ibid.

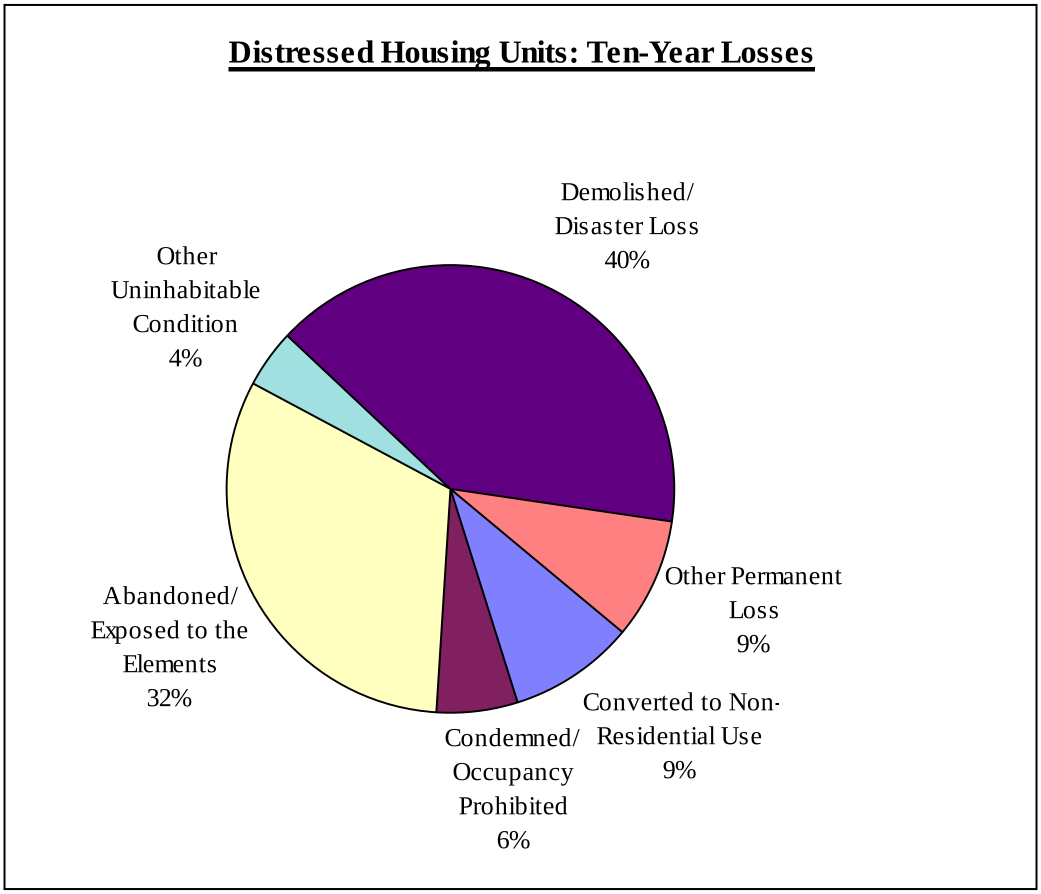
dependency on obsolete inadequate housing and possibly improving rental unit affordability in markets where supply exceeds demand.

Within this market context, the status of particular housing units, particularly older ones, can undergo radical transformation over time; thus, the universe of distressed and marginal is constantly changing. Certainly changes in tenure, from rental to owner-occupied and vice versa, can move units into or away from distress, whether or not gentrification or other economic forces are at play. The property with lead hazards that is not currently occupied by a family with young children may poison a new occupant's child tomorrow. Similarly, poor maintenance or unsafe remodeling can cause serious lead hazards in a unit that is now in good condition. Units that are currently in viable condition can become distressed as they age or with changes in the surrounding environment and the housing market. However, the ultimate prognosis must also include a gradual decrease in high-risk housing over time as the finite stock of older housing contracts due to natural patterns of retirement.

Losses from the Housing Stock Due to Unit Retirement: A longitudinal analysis enumerated losses from the distressed, marginal, and other housing stock since the time of the 1987 American Housing Survey. Of nearly 91 million occupied units, 2.8 million were lost from use between 1987 and 1997. The numbers of distressed, marginal, and other units are shown below by reasons for loss of unit and tenure:

	Unit Type in 1987 (numbers in thousands)			
	Distressed	**Marginal**	**All Other**	**Total**
Total Units in 1987	4,595,603	5,921,482	80,370,118	90,887,203
Losses Between 1987 and 1997:				
By Type of Loss:				
Demolished/Disaster Loss	223,960	185,891	703,042	1,112,893
Abandoned/Exposed to the Elements	176,097	87,932	248,294	512,323
Converted to Non-Residential Use	48,789	54,636	254,293	357,718
Other Permanent Loss	47,361	33,704	438,859	519,924
Condemned/Occupancy Prohibited	31,867	53,209	113,267	198,343
Other Uninhabitable Condition	23,294	22,073	87,582	132,949
By Tenure in 1987:				
Renter-Occupied	453,711	291,324	1,003,889	1,748,924
Owner-Occupied	97,657	146,121	841,449	1,085,227
Total Losses	551,368	437,445	1,845,338	2,834,150
Losses as Percent of Unit Type	12%	7%	2%	3%
Units Survived Since 1987	4,044,236	5,484,037	78,524,780	88,053,053

Losses from the Distressed Housing Stock: As indicated above, 12% of the distressed units were retired from residential use ten years later. At this rate, if the distressed stock were static, the problem of distress will take 83 years to dissipate. Of the 550,000 distressed units which left the housing stock, 82% were demolished or permanently removed from use; only 9% were recycled to another use. This snapshot of ten-year losses of distressed units depicts their disposition in accordance with conventional patterns of disinvestment, code enforcement, and reinvestment:



The 1997 Status of Distressed, Marginal, and Viable Units Which Persisted Since 1987: The estimated rates[17] at which units which were distressed and marginal in 1987 appear to have changed or retained the same at-risk status over ten years establish some trends from which to project the expected status of the present housing stock ten years in the future:

	1997 Status of the Same Housing Units (%)				
	Viable	Marginal	Distressed	Vacant	Total
Viable in 87	84	5	3	8	100
Marginal in 87	44	24	20	13	100
Distressed in 87	34	24	26	16	100

Improvements in status affected many units during the ten-year period: 44% of marginal units and 34% of distressed units became viable, and 24% of distressed units became marginal. These units were gentrified, improved, or had occupants whose income increases carried them out of low-income status. Of the other marginal units, 24% stayed marginal, 20% became distressed, and 13% became vacant, while 26% of the distressed units stayed distressed and 16% of them became vacant.

Retrospective data from the same analysis tell us that 45% of 1997's distressed units were viable in 1987, 24% were distressed, another 24% were marginal, and 7% were vacant.

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[17] These rates are based on a longitudinal analysis of the 1987 sample; it should be noted that numerical projections do not reliably correlate with 1997 data, due to changes in the weighting of the sample and other uncertainties.

Risk in Abeyance: Distressed and Marginal Housing Units Owned by their Elderly Occupants: More than one million distressed and marginal units are owned by an elderly person or couple. It is possible to exclude these housing units from the group requiring immediate intervention to prevent childhood lead poisoning since 99% of these households do not house a young child. However, there is a strong likelihood that families with children will occupy some of the distressed and marginal units presently occupied by an elderly homeowner, except those located in elderly-only properties. In the meantime, these properties are not getting any safer, since most extremely and very low-income elderly homeowners who live on a fixed income are not spending much money on maintenance.[18]

Neighborhood/Environmental Factors Influencing Distress

While housing units which are at once older, dilapidated, and economically distressed can lie in the midst of prosperous communities or in farmland distant from developed areas, it is commonly understood that marginal and distressed housing units are most often adjacent to other troubled properties. There, the propensity of a unit to become distressed is increased by economic stress and other pressures on the indigenous residential real estate market and the community as a whole.

Some key elements of decline that can influence distress:

- Concentration of Poverty: Census tracts with more than 40% of the population living in poverty are considered extremely distressed, borderline neighborhoods with 20-40% poverty require strong intervention to arrest their fall within a decade or two, and tracts with less than 20% are probably not at-risk.[19] [20]
- Declining Population: Vacancies don't increase if a neighborhood had numerous overcrowded units and the number of households grows as the population count falls: the quality of life and housing may even improve[21] (although gentrification may be the bi-product).
- Declining Property Values: Reductions in property valuations and real estate industry-reported home sale rates can serve as annual bellwethers for decline[22]; in the rental market, a high proportion of rent receipts going toward property taxes indicates that assessments have not been adjusted to reflect reduced property value based on falling market rent levels.[23]
- Regional Unemployment
- Change in Neighborhood Buying Power
- Confluence of Multiple Socioeconomic Risk Factors: Children are known to be at risk of failure in communities with high rates of poverty, female-headed families, unemployed males, and welfare dependence: "the negative synergy of multiple risk factors in these communities increases the likelihood that kids growing up there will be unprepared to

[18] Christmas in April and Joint Center for Housing Studies, A Decade of Miracles (Washington, DC: 1998).
[19] Rusk, David, *Inside Game Outside Game* (Washington DC: Brookings, 1999).
[20] Jargowsky, Paul A., *Ghettos, Barrios, and the American City* (New York: Russell Sage Foundation, 1997).
[21] Rusk (1999).
[22] Rusk (1999).
[23] Ford, Deborah Ann et al, "The Effect of Lead Paint Abatement on Abandonment," Univ. of Baltimore, undated paper.

parent successfully, to be productively employed, and to contribute to civic life."[24] Like high concentration of poverty alone as a criteria for guiding to neighborhoods where there are other problems, this combination of factors may point the way to the children at highest risk of "everything" that's bad for children, including lead poisoning.

- Blight: Urban blight-flight prevention and strategies to attract new residents are calling attention to the relationships between crime, increasing property vacancy in conjunction with declining public spaces, and residential stability[25]. Moves to " restore order" through the use of citizen engagement and community policing can give marginal communities a critical boost in monitoring blight and confronting obvious decline. Environmental factors surrounding distress, such as abandonment and chronic trash problems, are not sufficiently reported in the AHS to correlate these elements.

Characteristics of Distressed and Marginal Housing

The criteria discussed below, while not used to define the universe of distressed and marginal units, are critically important to comprehending the trends in this segment of the housing stock and to designing effective prevention strategies:

Selected Characteristics
of Distressed, Marginal, All Housing Units

Characteristic	*Distressed*	*Marginal*	*All Units*
Located in a Central City	53%	46%	30%
Multifamily Structure	42%	32%	24%
Rental Unit	61%	48%	33%
Housing Cost More Than 50% of Income	87%	46%	20%
Below Poverty Level	73%	26%	14%
Child under Age 6	16%	13%	16%
Elderly Householder	29%	35%	21%
Broken Plaster or Peeling Paint Reported	15%	6%	3%
Race and Hispanic Origin:	0%	0%	0%
White	56%	68%	77%
Black	25%	17%	11%
Hispanic	15%	11%	8%
Other	4%	3%	4%

Ownership (Tenure): By any measure, there is a strong correlation between renter status and poverty in the US, since most of the nation's lowest income families are tenants and a much greater proportion of all renter-occupants than owner-occupants are poor. The Alliance's distress criteria, which selected extremely and very low-income households, affirms this equation. While

[24] Annie E. Casey Foundation, *Kids Count 1998*, (Baltimore, MD, 1999).
[25] Kelling, George, and Catherine M. Coles, *Fixing Broken Windows* (New York: Simon and Schuster, 1996).

two-thirds of all US homes are owner-occupied, only 39% of the distressed housing units are owned by someone who lives there; the remaining 61% of distressed units house 3.2 million renter households. Almost half of the marginal units are occupied by tenants. Because these renter and owner-occupant households present different needs and opportunities to consumers and policy-makers alike, the analysis of other characteristics (discussed below) will include some distinctions by ownership status.

Urban-Suburban-Rural Environs: Nearly 53% of all distressed units are located in central cities, while the suburbs are the locus for 37% of distressed units, and 10% are in rural, non-metropolitan communities. Nearly two-thirds of the distressed rental units are in central cities, and more than 60% of the owner-occupied units are in suburban and rural areas.

Property Type: Single-family homes constitute more than 57% of all distressed units; however, some 91% of owner-occupied distressed units are single-family properties, while 36% of the renter-occupied units are single family. This pattern holds for marginal units as well.

Household Cost Burden: A large majority – 87% – of owner-occupant and renter households living in distressed housing spend more than one-half of their extremely or very low-income on their housing costs. Marginal units' occupants are less likely to have a severe cost burden (consistent with the selection criteria used).

Monthly Housing Costs: At least 45% of tenants and homeowners living in distressed units and tenants in marginal units spend more than $500 on their monthly housing costs; only 11% of tenants and 24% of homeowners pay less than $250 per month.

Household Income in Relation to Area Median and Poverty: The selection criteria placed the lowest-income households in the distressed and marginal categories if there was other evidence of duress; by definition all units are occupied by households with incomes which are less than half of the area median. Approximately 73% of distressed units house tenant or owner families whose income is considered extremely low (below 30% of the HUD area median income level) and below the federal poverty level, as do one-fourth of the marginal units. Fully 97% of the distressed units and two-thirds of the marginal units were occupied by households who had incomes below $20,000.

Race and Ethnicity of the Household: More than 40% of the occupants of distressed units are households of color: 25% are black and 15% are of Hispanic origin; white households are slightly more represented in marginal units (69%). One-half of the renters of distressed units are people of color.

Presence of a Young Child in the Unit: Households with a child under the age of six occupy some 14% of the distressed units and 13% of the marginal units (compared to the national average of 19%).

Elderly Householder: Some 29% of distressed units and 35% of marginal units are occupied by a household headed by a person who is over 65 years of age. More than half of the elderly householders in distressed units own their homes; two-thirds of the marginal units' elderly occupants are homeowners as well.

Household's Most Recent Move: Almost one-third of the distressed units and 25% of the marginal units are occupied by a household which has lived in the unit for one year or less. Like many other renters, more than 45% of renter households moved to their present distressed unit within the last year, while 77% of the homeowner populations have lived in the same distressed unit for at least six years. Among lowest income renter households, moving is often precipitated by economic hardship. At the same time, moves provide the opportunity for families with children to seek lead-safe housing and for rental property owners to perform turnover treatments to eliminate lead hazards from rental units.

Characteristics of At-Risk Rental Units

Additional information about rental units is available from the Property Owners and Managers Survey (POMS), a 1995 Census Bureau survey drawn from the same sample as the 1993 AHS. Unfortunately these two surveys' observations for the very same units cannot be merged for data comparison, due to a concern that making available the unique identifiers which would permit such a data merge could compromise the confidentiality of property owners' reports. Thus the precise units in the distressed and marginal rental stock identified in the AHS cannot be exposed further through the lens of the POMS. However, analysis of the POMS data set provides new insights into some characteristics of at-risk rental units which are useful in designing and evaluating strategies to address distressed and marginal housing.

Units were selected for the POMS if they were occupied as rental housing and included in the 1993 AHS, not owned by a public housing authority, and still in use as rental housing at the time of the survey (1995-1996). Some 29 million rental units are covered by the POMS data set: 11.7 million in properties with 20 or more rental units; 8.7 million single-family units; 5.5 million in duplexes, triplexes, and quads; and the remaining 3.4 million units in properties of between two and 19 units.

A proxy definition for distressed and marginal housing was required for initial use with the POMS since the data set provides considerably different data about economics and condition. "At-risk" housing is composed of those pre-1950 rental units which are located in properties occupied by households which survey respondents characterized as "low-income" in the case of single-family units, or "mostly low-income" in the case of multi-family properties. Units in properties which were built before 1950 that have diverse income bases that include some low-income households were excluded from consideration as at-risk since there was no means to identify and select only the low-income occupants' units.

More than 3 million units met the established criteria for at-risk. Some characteristics of the at-risk units:

- More than half net less than $100 per month in income (rent less expenses); one-third of single family rental units and 41% of 5-19 unit properties report zero net income.
- The owners of at-risk units were more likely than their counterparts with units not at-risk in the same property size category to perform capital improvements during the prior five years, although the level of participation was inverse to property size. Only 24% of properties with 20 or more units received any such investment.
- 50% of single family owners spent less than 10% of their rent receipts on maintenance.

- One-half of the small and medium multifamily owners spent 20% or less of the rents collected on upkeep, while owners of the largest properties were more likely to spend more than 50% and 20-50%.
- Single family property owners had the worst track record in maintenance, yet fully 65% reported painting the interior of the housing unit and/or performing lead hazard control work during the past five years, and only 5% reported doing no maintenance; more than 75% of the multifamily property owners reported maintenance work.
- Larger properties were more likely to receive the attention of code enforcement officials: owners of about one-third of all multifamily units reported the units had been inspected by a local housing inspector, while 23% of single family units were inspected.
- Housing inspection failure rates were 20% for single-family units, 25% for properties with two to 19 units, and 9% for properties with more than 20 units.

Conclusion: Policy Implications of the Data

The exercise of defining and characterizing distressed and marginal housing is the first step in setting priorities for targeting high risk housing and designing effective lead hazard control strategies. As a nation, we must focus strategies on the 9.9 million distressed and marginal housing units which constitute approximately 10% of the U.S. housing stock. Most communities will have to further prioritize units for intervention within the universe of distressed and marginal housing. Many communities will designate distressed units as the immediate focus of intervention because of the immediate hazard they pose to young children. Other communities may opt to focus on stabilizing marginal housing first, in order to make a much larger segment of the low-income housing stock lead-safe with the limited resources available. The following are some brief conclusions that can be drawn from the data related to setting priorities and designing effective strategies.

<u>Occupant Status and Mobility</u>. Occupant status, including householder age, the presence of a young child, and tenure, is a group of factors that should be taken into consideration when setting priorities. Obviously, units with young children are a higher priority than elder-occupied units. Yet ultimately the latter properties must receive attention because their extremely and very low-income elderly owner-occupants are not spending much money on maintenance, and over time families with children will occupy some of these distressed and marginal units.

<u>Retirement of Distressed and Marginal Units</u>. Analysis of changes in the distressed and marginal housing stock between 1987 and 1997 confirms that distressed and marginal housing are continually self-renewing in the dynamic process that defines the housing stock: as historically distressed units were retired from use, others became distressed. This trend suggests that condemnation and demolition are strategies that could be used more effectively to accelerate the retirement of obsolete, heavily-leaded, and severely dilapidated housing units. More aggressive condemnation and demolition should be offset by one-for-one replacement policies in tight housing markets.

<u>Change in Risk Status</u>. Experience over the past decade suggests that some 25% of the units in either at-risk category (distressed or marginal) will change classification (better or worse) during the next ten years. This is one reason why it is critical to focus attention and resources on both marginal and distressed housing – housing that is marginal today may be distressed tomorrow.

This phenomenon also illustrates the need to monitor signs of incipient decay, including outstanding taxes, exterior physical deterioration, and unpaid mortgages and utility bills and to take proactive measures (such as code enforcement and receivership) to prevent marginal units from becoming distressed.

Code Inspection and Enforcement. The high code inspection failure rate illustrated by the analysis could be attributable to the fact that in most jurisdictions inspections are triggered by complaints. However, the low rate of inspections combined with the high rate of failures argues for stepped up inspections and code enforcement. Some communities that have identified code compliance problems have set explicit cyclical goals (e.g., to inspect every rental unit once every three years). This would help track failed inspections and ensure code compliance in all at-risk housing.

Homeownership. The last ten to twelve years have seen slow but steady increases in homeownership. This trend provides an opportunity for low- and moderate-income families to leave rental housing, which tends to be higher risk (or to move to rental units in better condition). However, risk of lead poisoning for these first-time homebuyers will not be reduced if they purchase older homes, especially if they intend to perform maintenance and remodeling work themselves. Safeguards are needed to ensure that homebuyers do not purchase high risk properties without full knowledge of the dangers of lead and the likely cost of lead hazard control, and without the financial support to implement lead hazard control.

Unit Profitability. The fact that a high percentage (more than half) of property owners report that they net less than $100 per month in income, and many others report zero net income, points to the need for expanded subsidies, to cover expenses to ensure habitability including lead safety. However, the fact that more than 40% of both tenants and homeowners living in distressed units spend more than $500 on their monthly housing costs indicates that many renters are paying exorbitant prices for inadequate housing. Considering that the mean monthly operating cost for rental housing, including maintenance, is under $300 per month, it appears that many tenants in high-risk units are not getting what they pay for. Rent levels should be taken into consideration when allocating subsidies.