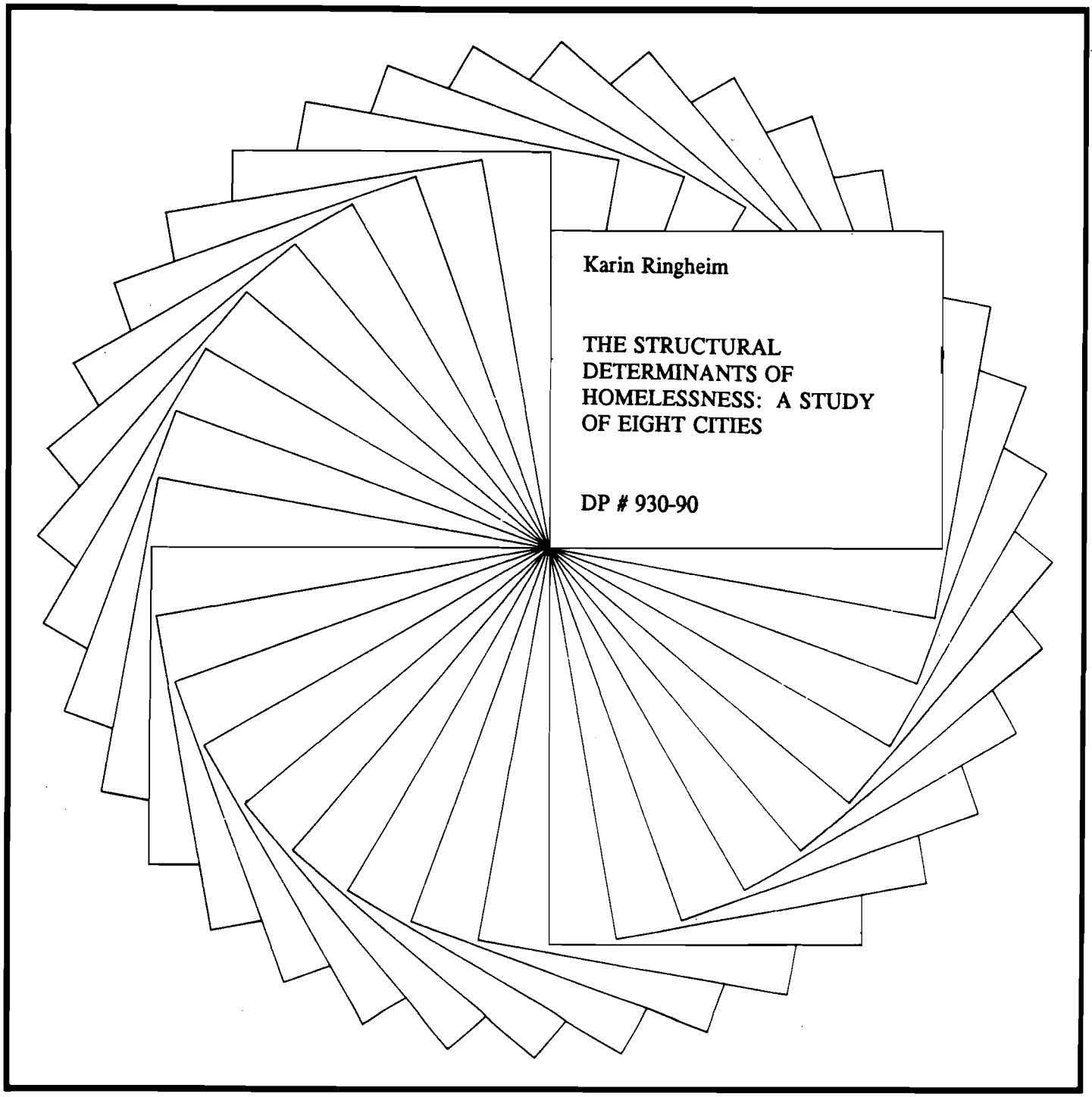
University of Wisconsin-Madison

Institute for Research on Poverty

Discussion Papers



Abstract

This paper examines the incomes and rents of the low-income renter population in eight large cities and metropolitan areas and identifies a population at risk of homelessness based on low incomes and very high rent-to-income ratios. The per capita rate of homelessness is hypothesized to be primarily a function of the percentage of low-income renters who are vulnerable, and of the percentage of the total population who are renters. Although these factors explain most of the variation in the extent of homelessness across these cities, their effects are conditioned by supply and demand factors which tend to mitigate or promote the extent of homelessness in each area. Rent burdens of the low-income population are found to be unprecedentedly high by recent historical standards, and the separate effects of income and rent on the rent-to-income ratio are found to vary across metropolitan areas.

INTRODUCTION

A substantial variation in the extent of homelessness across American cities has been noted in the 1984 U.S. Department of Housing and Urban Development (HUD) report and other studies. HUD estimated that in 1983 metropolitan areas of over one million averaged 13 homeless per 10,000 persons.[1] For areas of this size it found, however, that the per capita rate of homelessness ranged from 3 per 10,000 in Baltimore to 43 per 10,000 in Los Angeles.[2] This paper presents a hypothesis to account for such variation in the extent of homelessness.

A controversy surrounds the role that behavioral deviance may play in causing people to become homeless.[3] Most studies of the homeless have had as their focus the personal characteristics of those who have become homeless rather than the structural conditions that may have led to that state. These studies report that a high proportion, but less than a majority, of the homeless have serious personal problems, primarily substance abuse and a history of mental illness.[4] Because research has generally not addressed the extent to which alcoholism and mental illness have been caused or aggravated by persistent poverty, rather than the reverse, focusing on the zero order correlations between homelessness and the personal characteristics of the homeless may divert attention from important structural antecedents.

The present study is premised on the assumption that the homeless, for all of their diversity and personal problems, are united by a common need. They are, by definition, without a permanent home.[5] Whether or not the event of homelessness appears to be precipitated by mental illness, substance abuse, interpersonal conflict, or destruction of the home, literal homelessness results from a mismatch between incomes and the cost of housing. Given affordable housing, these problems in and

of themselves would not have led to homelessness. Although an increasing shortage of affordable housing has been speculated to play a central role in the growing phenomenon of homelessness (Carliner, 1987; Clay, 1987; Wright and Lam, 1987), an association between the extent of homelessness and the factors of income and rent within cities or metropolitan areas has not been clearly established.

This study hypothesizes that a growing mismatch between the cost of available rental housing and the incomes of low-income renters within metropolitan areas is central to understanding the growth of homelessness over the period of the study. The mismatch has been aggravated by a convergence of demographic and structural changes affecting both the demand for and the supply of low-cost housing. Conditioning the effect of the housing squeeze will be the political will and fiscal ability of the locality to offset homelessness, as well as other factors of supply and demand which impede or augment the growth of homelessness in individual metropolitan areas.
The proposed relationship between these structural determinants and homelessness is depicted in Figure 1.

LIMITATIONS OF THE DATA

A researcher addressing this problem would prefer to have high-quality retrospective data on the living circumstances and incomes of the homeless prior to their entry into that state, or prospective data which would follow individuals from a housed to a homeless state. However, longitudinal surveys fail to follow up any individuals who may have become homeless. In the existing data on the homeless, there is little comparability in the methodology or information collected across cities, and rarely have the prior incomes and rents of the homeless been more than a peripheral interest of the research.[6] Because homelessness remains a statistically rare event, samples are small and generally nonrandomly selected.

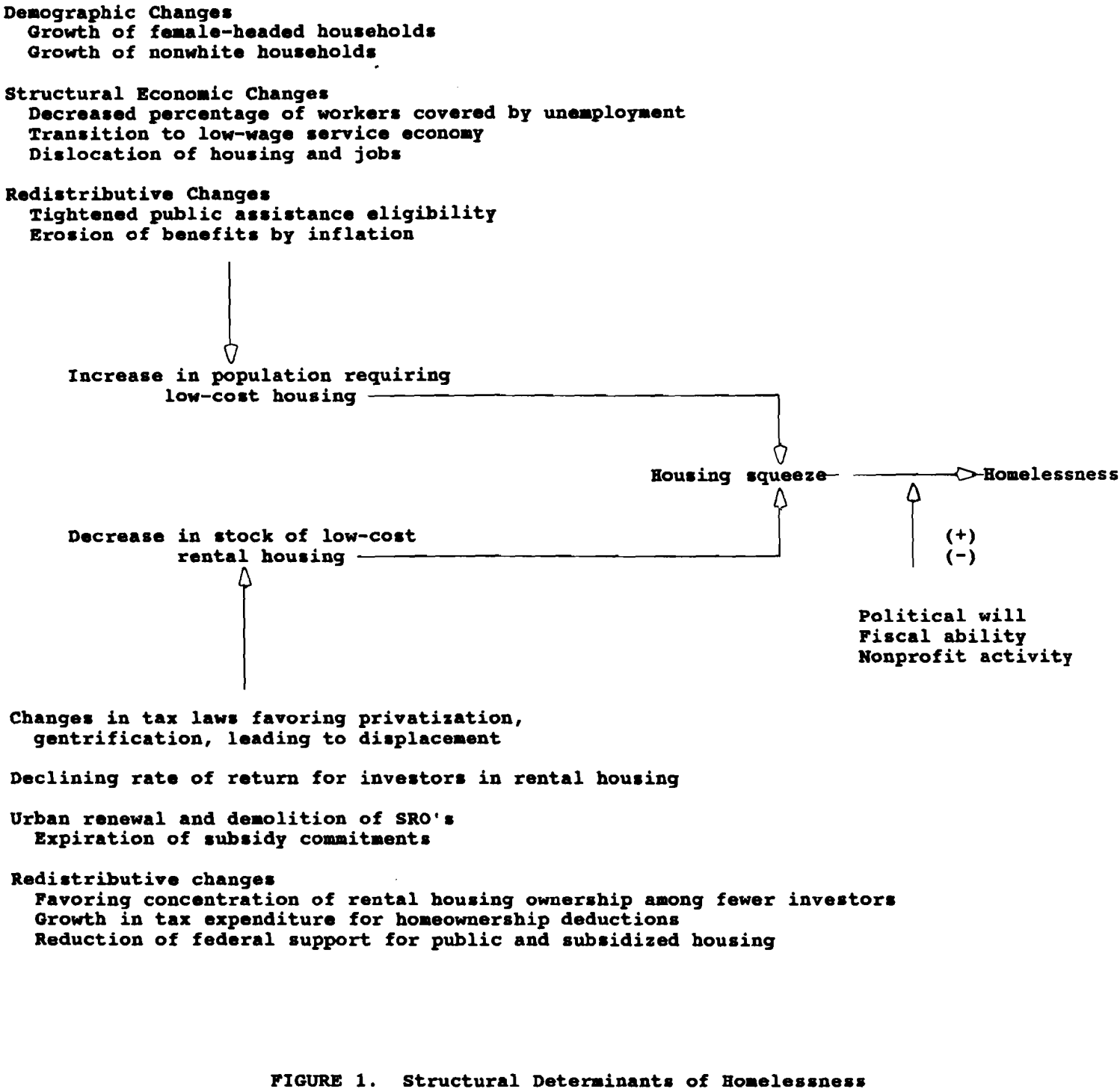


FIGURE 1. Structural Determinants of Homelessness

As an alternative to studying the homeless directly, a case can be made for using the good-quality data available on those currently housed, and relating the changes in demographics, incomes, and rents of an identified "at risk" population to the extent of homelessness in individual metropolitan areas. The variation in the per capita rate of homelessness offers a comparative mechanism through which structural determinants may be studied. Its utility is limited by the fact that there is no reliable information on the extent of homelessness in most areas prior to 1983, although the evidence strongly suggests that homelessness began to emerge as a significant social problem at the beginning of the decade (New York Times editorial, 3/6/89).[7]

In the absence of trend data, a point estimate of homelessness is compared with the extent of a mismatch between incomes and rents of low-income renters in a comparable time period. However, much valuable information would be lost if attention were not drawn to both growth in the mismatch and changes in its components within local areas during the previous decade. The contribution of this study is to demonstrate that although the relationships described are necessarily associational rather than causal, the parallels between vulnerability and homelessness are striking and plausible.[8]

The study provides empirical evidence of the housing squeeze for eight large cities. In addition I rely on historical evidence and macro-level data to put the contemporary situation in perspective, and on interviews with key informants working with the homeless in these cities to help interpret the findings. The data tell a story of a population of high-risk renters whose size and characteristics have changed over time. The source of their vulnerability, changes in income or rent, varies across areas. Ultimately, this variability suggests that policy responses to avert the growth of homelessness should, to some extent, be metropolitan-specific.

Following the discussion of the proposed relationship between homelessness and vulnerability, I define the criteria of vulnerability, and the method used to select a sample of cities for analysis. The

empirical findings are followed by a discussion of mitigating supply and demand factors. I conclude with some brief policy implications.

THE RELATIONSHIP BETWEEN HOMELESSNESS AND VULNERABILITY

The relationship between the extent of homelessness and the population at risk is identified as follows:

$$\frac{\text{Homeless}}{\text{Total Pop.}} = \frac{\text{Renters}}{\text{Total Pop.}} \times \frac{\text{Low-Income Renters}}{\text{All Renters}} \times \frac{\text{Vulnerable}}{\text{Low-Income Renters}} \times \frac{\text{Homeless}}{\text{Vulnerable}}$$

The per capita rate of homelessness is hypothesized to be a function of the proportion of the population who are vulnerable (low-income, highly cost-burdened) renters. The analysis is limited to renters, not only because the majority of the poor are renters rather than owners,[9] but also because those who become homeless are nearly always exiting a rental unit or a household in which they were doubled up with the primary tenant.[10] A high proportion of renters within a metropolitan area can lead to keen competition for low-income households as they vie with those of higher income for a limited stock of inexpensive housing. Changes in the proportion of renters can be expected to promote changes in the per capita rate of homelessness.[11]

The primary determinant of vulnerability to homelessness is a very high rent-to-income ratio. Renters have become increasingly disadvantaged over time relative to owners, both in terms of income, and in the percentage of income spent on housing.[12] This trend has in the past been attributed to a movement toward ownership among higher-income renters (Farley, 1983), a process which has presumably always taken place as those who can afford it, choose the tax advantages and other advantages of homeownership. But the rate of homeownership nationwide has been declining

since 1980 and was only one percentage point higher in 1985 than in 1970 (McGough and Casey, 1986). Thus the conclusion that the growing disadvantage of renters is due to the attrition of higher-income renters into ownership does not seem as compelling as it had been prior to 1970, when the rate of homeownership was increasing.

The proportion of the vulnerable who become homeless is expected to vary according to the demographic characteristics and rate of growth of the vulnerable population. Rapid growth of the vulnerable population may overwhelm the capacity of municipalities and service providers to contain the growth of homelessness. The race, sex, age, and family status of the vulnerable also affect the success with which they may compete in the housing market.

The racial composition of an area influences the "efficient match of households and dwellings" (Struyk, Marshall, and Ozanne, 1978) to the extent that racial discrimination and residential segregation affect the ability of minorities to exercise their housing choices. Most minority households are renters rather than owners,[13] and substantial evidence indicates that qualified blacks are prevented from becoming owners by discrimination in mortgage lending practices (Shlay, 1985), and thus must remain renters. It has been demonstrated that renters do not compete within a unified housing market and that within submarkets to which they may be limited, minorities may pay more than whites for housing of comparable quality (Kain and Quigley, 1975; Schafer, 1979; King and Miezkowski, 1973). Low-income blacks are the most severely affected by housing segregation (Wilson, 1979) as well as by job discrimination and lack of human capital. All else equal, we would expect them to have higher rent-to-income ratios and consequently to be more at risk of homelessness than whites.[14] Once vulnerable, minorities may command less political effort and the commitment of fewer resources to offset the possibility of homelessness.

Similarly, female-headed households with children are disproportionately renters and face price and location discrimination in the housing market (National Council of Negro Women, 1975;

Ringheim, forthcoming). On the other hand, the elderly, while predominantly homeowners, should find that their opportunities in the rental housing market have improved, owing both to a reduction of poverty among those over 65 (Ellwood and Summers, 1986) and to the targeting of public and subsidized housing to this age group. Two-thirds of all public and subsidized units under construction in 1986 were specified for the elderly or disabled, and the percentage of the federally owned housing stock that was occupied by the elderly had grown from 3 percent in 1960 to 27 percent in 1986 (U.S. Bureau of the Census, 1989b).

The size and makeup of the vulnerable population, while not a specification of who may become homeless, is hypothesized to provide a forecast of how the homeless population is likely to grow and change. Given the increasing proportion of minorities and female-headed families with children, and a declining proportion of elderly among the homeless (Cohen and Burt, 1989; Rossi, 1989; Sosin, Colson, and Grossman, 1988), we would expect to see similar patterns among the vulnerable.

DATA AND METHODOLOGY

The data for this study come from the Annual Housing Survey of Metropolitan Areas (now called the American Housing Survey--AHS). The survey is conducted in 44 metropolitan areas on a three- to four-year rotation. It is a stratified cluster sample of addresses drawn from the 1970 U.S. Census, with some modifications in the 1985 survey. The unit of analysis is the dwelling, with good demographic detail on the occupant household provided as well.

Total money income reported in the AHS is estimated to be 94 percent of that gathered in the Current Population Survey (CPS).[15] Income and rent are adjusted to 1986 dollars using the CPI-XI, the "rental equivalency method" in which the investment component of housing has been removed (Horrigan and Haugen, 1988). Rent adjusted with this measure will not be contaminated by

investment inflation as it is if inflated by the standard Consumer Price Index. Use of this index also provides a conservative estimate of the low-income population, in that the poverty line established by the CPI-XI is lower than the official line, which is based on the CPI.

For this study, a selection of metropolitan areas are analyzed in some depth. The 15 large metropolitan areas for which HUD made estimates of the number of homeless, and which were included in American Housing Surveys of Metropolitan Areas for 1983 or 1985, are divided in four quadrants, based on whether or not the percentage of nonwhites exceeds that of the national average of 16.6 percent (high minority), and whether the percentage of homeowners exceeds 60 percent (high rate of homeownership).[16] (See Table 1.)

The fifteen areas are ranked according to the percentage of households that are renters, and according to the per capita rate of homelessness, based on the midpoint of HUD's estimated "most reliable range." The rank order correlation coefficient between percentage of renters and per capita rate of homelessness is .63. A total of eight cities were selected from the four quadrants, based in part on the compatibility of survey dates. All but Baltimore and the Twin Cities of Minneapolis and St. Paul are among the 10 urban areas with the largest numbers of homeless according to HUD's 1983 estimates. The sample areas vary in the extent of homelessness, from 3 per 10,000 in Baltimore to 28 per 10,000 in Chicago.

Definition of Vulnerability

Households with incomes below 125 percent of the poverty line and paying more than 45 percent of their income in rent will be considered **vulnerable** to homelessness. This rent-to-income ratio exceeds by 15 points the current ratio of affordability established by the U.S. government, a standard that was raised from 25 percent in 1981, and was originally a more reasonable and flexible 15 to 25 percent, based on the adequacy of income, for occupants of public or subsidized housing

Table 1

Fifteen SMSA's Categorized by Relative Minority Status,
Percentage Who Own Homes; and Rate and Rank of Homelessness

SMSA	Nonwhite[a] (%)	Homeowners[b] (%)	Renter Rank (Proportion of Renters)	Homelessness[c] Rate /10,000	Homelessness[c] Rank (Proportion of Homeless)
1980 High Minority, Low Percentage of Homeowners					
Chicago	26	57.4	7	28	4
Los Angeles	31	46.4	2	43	1
Miami	23	54.5	6	37	2
New York	32	41.5	1	33	3
San Francisco	27	52.5	4	25	5
Washington, D.C.	34	54.3	5	15	9
1980 Low Minority, Low Percentage of Homeowners					
Boston	9	51.9	3	13	10
1980 High Minority, High Percentage of Homeowners					
Baltimore	27	61.2	9	3	15
Detroit	22	71.2	15	17	8
Houston	27	60.9	8	22	6
Philadelphia	21	68.5	14	8	13
1980 Low Minority, High Percentage of Homeowners					
Minneapolis	5	64.7	12	5	14
Phoenix	12	68.7	13	8	12
Portland	6	61.2	9	12	11
Seattle	12	62.3	11	20	7

Sources:

[a]U.S. Bureau of the Census (1982).
[b]U.S. Bureau of the Census, AHS, 1983; U.S. Bureau of the Census (1982).
[c]U.S. Department of Housing and Urban Development (1984).

(Lowry, 1983). Note that even a rent-to-income ratio of 30 percent may not leave a household with sufficient income for nonhousing necessities. When the latter are taken into consideration, Stone (1989) estimated that many families are too poor to pay anything for housing.

The **severely vulnerable** have less than $50 per person per month remaining in residual income after rent is paid. To the extent that these criteria identify households whose residuals do not provide a realistic level of income with which to purchase the nonhousing necessities, I hypothesize that housing itself may ultimately have to be forgone. Once housing has been lost, whether through eviction, condemnation, or personal crisis, it is the lack of savings with which to secure new housing that causes these households to become homeless. While the criteria of vulnerability are somewhat arbitrary, use of the same standard over time will capture changes in the size and composition of the population considered to be at risk.

Table 2 presents the multivariate analysis of the relationship between the per capita rate of homelessness and the percentage of renters and of vulnerable renters. While the limitations of multivariate techniques with an N of 8 are acknowledged, the adjusted R-squared of .66 lends support to the proposed relationship.

DEMOGRAPHIC CHARACTERISTICS OF THE RENTER POPULATION

In Table 3, changes in the demographic characteristics of severely vulnerable renters (those with less than $50 per person per month in residual income) are compared to those of all renters over the seven to eight-year period between surveys. It can be seen that demographic changes in the renter population as a whole would lead us to predict an increase in the percentage of renters who are vulnerable. The higher rates of poverty among black, female, and never-married household heads contributed to a growing at-risk population in all 8 cities. In the three cities where the total number of renter households fell, severely vulnerable households increased by 21 percent in Baltimore,

Table 2

Regression of the HUD per Capita Homelessness Rate
on Percentage of Renters and Percentage of
Vulnerable among Low-Income Renters (N = 8)

Independent Variable	b	t
Vulnerable/Low-income renters	.82	3.68**
Renters/Total population	.54	2.22*
Constant	-62.87	-2.93
R square		.76
Adjusted R square		.66
F		7.89
Significance of F		.03

* $p < .10$

** $p < .05$

Table 3

Demographic Characteristics of All Renters and Severely Vulnerable Renters for Central Cities

	Baltimore		Chicago		Houston		Seattle	
	1976	1983	1975	1983	1976	1983	1976	1983
All Renters								
Number of households	146,700	143,100	664,100	634,200	253,500	292,000	103,500	117,200
Black	56.4	61.7	36.8	41.8	24.8	26.8	8.9	11.4
Hispanic	-	-	9.7	14.2	12.9	17.1	1.9	2.4
Female heads of households	51.4	55.5	42.2	49.3	31.9	39.6	43.3	46.8
Age < 25	10.8	8.2	12.1	9.9	21.2	15.3	21.1	15.5
Age 25-39	34.8	36.0	31.7	37.2	46.2	52.2	37.5	48.7
Age > 65	16.8	19.0	23.6	24.4	7.4	7.4	18.4	16.1
Married	33.5	27.3	37.9	31.6	43.8	37.6	27.7	26.2
Never married	23.1	27.8	23.4	31.0	23.7	29.5	35.6	40.0
Mean household size	2.6	2.4	2.5	2.5	2.4	2.4	1.8	1.9
Mean number of children	.9	.9	.9	.9	.8	.8	.4	.4
Head dropout	51.6	48.5	44.1	39.9	30.7	28.2	20.0	18.7
Head employed[a]	55.1	55.4	56.0	55.6	80.4	80.0	57.3	67.1
Severely Vulnerable Renters								
Number of households	15,200	18,400	49,100	110,900	15,200	29,600	4,700	8,300
Black	62.4	63.1	55.0	60.9	43.8	49.4	16.1	26.2
Hispanic	-	-	10.9	17.9	14.6	17.8	3.3	1.7
Female heads of household	73.9	75.0	67.7	70.9	64.8	61.5	58.3	54.7
Age < 25	16.6	18.9	19.2	17.0	24.9	14.0	28.1	17.6
Age 25-39	35.2	35.8	28.7	42.4	38.1	48.5	33.5	53.4
Age > 65	9.2	12.0	19.9	10.4	7.0	7.2	15.2	6.8
Married	13.5	16.1	18.4	20.3	23.6	29.5	16.6	23.9
Never married	29.6	33.7	22.2	32.5	24.8	29.0	42.1	35.4
Mean household size	3.2	3.2	2.6	3.2	2.4	3.2	1.7	2.5
Mean number of children	1.7	1.8	1.1	1.7	1.0	1.6	.5	1.1
Head dropout	64.0	62.4	55.4	55.3	51.0	47.5	30.9	32.5
Head employed[a]	19.5	10.6	20.3	16.1	48.0	60.3	32.0	39.3

[a]Employed = head employed last week in 1975-77. Any wages or salary in 1983 and 1985.

Table 3, Continued

	Boston		Detroit		Minneapolis/St. Paul		Washington, D.C.	
	1977	1985	1977	1985	1977	1985	1977	1985
All Renters								
Number of households	146,000	155,900	172,800	169,300	117,700	129,600	173,000	153,500
Black	21.0	26.9	58.1	71.2	6.4	8.7	65.9	64.7
Hispanic	5.3	5.3	1.5	2.1	1.0	2.2	2.2	3.1
Female heads of households	47.5	53.4	49.5	62.5	49.7	51.6	51.2	58.0
Age < 25	16.3	9.2	16.9	12.3	23.4	17.3	11.2	9.6
Age 25-39	37.1	39.9	38.4	47.0	35.8	48.0	42.9	42.7
Age > 65	17.8	26.1	16.2	15.6	21.9	17.8	13.3	17.1
Married	30.2	27.6	27.1	18.1	21.0	20.8	24.1	17.6
Never married	36.9	36.9	28.8	37.2	46.0	49.9	37.5	41.5
Mean household size	2.23	2.28	2.28	2.19	1.80	1.98	2.14	2.15
Mean number of children	.71	.52	.86	.52	.35	.29	.66	.39
Head dropout	29.6	24.8	44.8	37.1	22.7	21.3	11.2	27.8
Head employed[a]	63.3	60.0	48.1	43.9	59.9	68.0	72.3	71.9
Severely Vulnerable Renters								
Number of households	12,500	15,500	15,900	53,400	4,800	9,100	8,200	13,100
Black	32.1	29.2	76.6	81.0	9.6	15.3	81.1	78.3
Hispanic	9.9	19.7	1.6	2.7	0	5.7	0	13.2
Female heads of households	67.9	87.0	76.9	76.4	64.5	67.6	67.1	71.7
Age < 25	24.3	14.7	25.0	20.1	28.9	24.3	8.9	13.6
Age 25-39	35.5	34.9	38.2	55.5	29.3	45.2	35.9	40.2
Age > 65	15.4	26.4	5.3	3.7	12.8	11.9	17.7	19.0
Married	21.1	13.6	8.3	7.6	6.4	13.3	13.1	8.4
Never married	36.2	34.1	38.6	47.6	41.8	50.6	25.6	44.5
Mean household size	2.51	2.74	2.64	2.47	1.83	2.35	2.43	2.61
Mean number of children	1.12	.87	1.40	.74	.65	.52	.99	.82
Head dropout	38.0	41.3	52.2	48.5	29.3	36.5	49.4	48.8
Head employed[a]	34.0	30.3	12.0	10.3	29.1	37.3	22.4	41.7

59 percent in Washington, D.C., and by 126 percent in Chicago. Near doubling of the numbers of severely vulnerable renters occurred in Houston, Seattle, and Minneapolis/St. Paul, while in Detroit, the number more than tripled between 1977 and 1985.

In all cities, the severely vulnerable are more likely than renters overall to be black. Although the percentage of the severely vulnerable who were female household heads declined in Seattle and Houston, female heads continued to make up a much higher percentage of the vulnerable than of renters overall in all 8 cities. Household size among all renters remained quite stable over the period, but among the severely vulnerable it grew significantly in all but Baltimore and Detroit. This growth is seen to be primarily due to an increase in the mean number of children in severely vulnerable households in Chicago, Houston and Seattle. In Boston, the Twin Cities, and Washington, D.C., where the mean number of children has fallen, increased household size may be indicative of doubling up. Severely vulnerable renters are generally younger than renters overall, and are much less likely to be over age 65 in all but Washington, D.C., and Boston. As speculated earlier, the effect of the aging of the population on vulnerability has likely been offset by disproportionate targeting of housing and income benefits to the elderly.[17]

Table 4 presents the limited information that is known about the homeless population in these eight areas. While the populations surveyed, methodologies, and data collected differ, a comparison with the demographic characteristics of the severely vulnerable shows considerable similarity in the race and age composition of the two populations. The major discrepancy lies in the sex composition. Whereas females make up at most 48 percent of the homeless in these surveys, women represent a majority of the vulnerable in all areas. That women are disproportionately represented among the vulnerable but not among the homeless is attributable, I hypothesize, to the greater physical vulnerability of women, which compels them go to greater lengths than men to avoid homelessness. Women may also have more sources of social support on which to draw for help.

Table 4

Demographic Characteristics of the Homeless Population in Eight Cities

	Baltimore	Chicago	Houston	Seattle	Boston	Detroit	Minneapolis/ St. Paul	Washington, D.C.
Black	63%	53%	44%	20%	28%	85%	34%	81%
White	34%	31%	42%	51%	64%	-	50%	8%
Hispanic	-	7%	10%	13%	6%	-	8%	-
Other	3%	10%	4%	16%	2%	15%[a]	8%	11%
Female	29%	18%	29%	48%	29%	25%	20%	23%
Age	< 18 16%	< 25 11%	< 19 2%	< 18 20%	17-25 26%	18-29 34%[b]	< 18 33%	18-25 12%[b]
	18-30 37%	25-39 38%	20-39 57%	18-44 49%	26-35 41%	30-39 43%	18-30 31%	26-34 41%
	31-60 38%	40-55 30%	40-65 38%	45-59 25%	36-45 14%	40+ 23%	31-50 32%	35+ 48%
	61+ 9%	55+ 19%	65+ 3%	60+ 8%	46+ 19%		> 50 4%	
Dropout	n.a.	38%	47%	n.a.	54%	33%	19%	45%
Employed	37%	32%	30%	11%	10%	19%	24%	27%

Sources:

Baltimore: Maryland Dept. of Human Resources and Health and Welfare Council of Central Maryland (1986).
Boston: Boston Emergency Shelter Commission (1989); Schutt (1988).
Chicago: Rossi (1989).
Detroit: United Community Services, Inc. (1990).
Houston: Andrade (1988).
Minneapolis/St. Paul: Minnesota Coalition for the Homeless (1989).
Seattle: Seattle King County Emergency Shelter Commission (1986).
Washington, D.C.: Dockett (1989), and Milburn and Booth (1989).
[a]All others including whites.
[b]Percentage of homeless adults only.

RENT-TO-INCOME RATIOS

The rent-to-income ratios of all renters and low-income renters who receive no housing subsidies are shown in Table 5. Very substantial increases in the ratio occurred for all renters in the eight-year period in all but Boston, Minneapolis/St.Paul, and Washington, D.C. Except in Washington, D.C, 40 percent or more of all renters exceeded federal affordability guidelines by 1983 or 1985. Among low-income renters who receive no housing subsidies, 82 to 97 percent exceeded the 30 percent ratio of "affordability." More startling is the finding that for at least 52 percent of these renters in all eight cities more than 60 percent of income is spent on rent. Ratios are highest in Detroit, where 76 percent of all low-income unsubsidized renters pay more than 60 percent of income to rent.

HISTORICAL EVIDENCE ON THE RENT-TO-INCOME RATIO

Rent burdens of this magnitude among a majority of the low-income population appear to be unprecedented in recent historical times. The rent-to-income ratio of those at the very bottom of the economic ladder has always been high. At the very lowest levels of income, surveys frequently find that rent exceeds income. But evidence suggests that even during the Depression, rent burdens of those at just above the lowest levels of income were less severe than they are for the low-income population today.

Duncan and Hauser (1960) report Department of Labor statistics for Chicago households in the 1935-36 Depression years. An average rent-to-income ratio of 64 percent for nonrelief households with annual incomes of between $250 and $499 was reported. About 14 percent of Chicago households had incomes below $500 at this time. For households with slightly higher incomes, $500 to $749 and $750 to $999, mean rent-to-income ratios fell to 41 percent and 31 percent respectively.

Table 5

Percentage of Income Spent on Rent by All Renters
and Low-Income Unsubsidized Renters for Central Cities

Percentage of Income	Baltimore 1976	Baltimore 1983	Chicago 1975	Chicago 1983	Houston 1976	Houston 1983	Seattle 1976	Seattle 1983
All Renters								
> 30%	37	45	35	45	30	41	33	49
> 45%	29	27	22	30	15	21	16	21
> 60%	14	17	12	20	9	13	7	10
Low-Income Unsubsidized Renters								
> 30%	85	87	88	95	80	82	78	85
> 45%	60	65	70	78	60	64	68	75
> 60%	38	52	48	61	46	53	42	55

Percentage of Income	Boston 1977	Boston 1985	Detroit 1977	Detroit 1985	Minneapolis/ St. Paul 1977	Minneapolis/ St. Paul 1985	Washington, D.C. 1977	Washington, D.C. 1985
All Renters								
> 30%	44	42	42	58	41	41	29	30
> 45%	26	22	26	46	22	20	16	19
> 60%	17	12	16	37	13	13	10	11
Low-Income Unsubsidized Renters								
> 30%	94	91	94	97	99	91	91	88
> 45%	80	81	72	88	87	80	72	73
> 60%	62	65	45	76	58	65	49	57

Source: U.S. Bureau of the Census, AHS machine readable files (1975, 1976, 1977, 1983, and 1985).

In 1956, Duncan and Hauser found that the average rent burden of the lowest-income quintile of Chicago renters was 31 percent. The Chicago Tenants Relocation Bureau (1961) reported that the "homeless" man on skid row in 1960 paid $1.00 per day for a room in a new single-room-occupancy hotel room (SRO). With a median income at that time of $1000 per year, the rent-to-income ratio was 36 percent.

Elliot Liebow (1967) noted that the poor black "street corner men" of his Washington, D.C., ethnographic study paid about 30 percent of income to rent in 1960 for an SRO, while the Boston west-end population studied about the same time by Gans (1962) had rent-to-income ratios of only about 12 percent for an apartment of several rooms. Before the turn of the century, a census of skid-row districts in Chicago, New York, Baltimore, and Philadelphia, found that median rent-to-income ratios within these poverty areas were well below 30 percent. Nor, although shared plumbing was common, were housing units in these areas necessarily substandard or overcrowded (Wright, 1894).

By comparison, in 1983, one in four central-city Chicago households was a low-income renter, and 17 percent of all central-city households had rent burdens in excess of 60 percent of income to rent. Similarly in Detroit, 22 percent of all such households were low-income renters, and 15 percent of all such households spent more than 60 percent of income in rent. Such astoundingly high rent-to-income ratios for this proportion of the population suggests that those of already marginal income are increasingly impoverished by rising market rents.

RENT, INCOME, AND RESIDUAL INCOME

The rent-to-income ratio is affected by both the numerator, rent, and the denominator, income. Table 6 shows that the components of change in the ratio for low-income renters who receive no housing assistance varied considerably across metropolitan areas. All figures are in constant 1986

Table 6

Median Monthly Income, Rent, and per Person Residual Income in Constant 1986 Dollars for Low-Income Unsubsidized Renters in Eight Central Cities

City	Income		Rent		Per Person Residual	
	1975-76	1983	1975-76	1983	1975-76	1983
Baltimore	$472	$462	$260	$303	$97	$63
Chicago	442	405	275	308	85	50
Houston	420	425	245	325	80	50
Seattle	406	458	234	308	135	87
	1977	1985	1977	1985	1977	1985
Boston	466	459	330	443	72	33
Detroit	457	339	271	297	94	20
Minneapolis/ St. Paul	462	439	294	307	95	85
Washington, D.C.	442	369	265	301	94	53

dollars as inflated by the CPI-XI. Rents increased beyond the rate of inflation across the board, but by the largest percentages (32-34 percent) in Boston, Houston, and Seattle.

Median monthly income for low-income renters fell slightly in Baltimore and substantially in Detroit (26 percent) and Washington, D.C. (17 percent). Income fell more moderately in Chicago and Minneapolis, remained nearly constant in Houston and Boston, and increased by 13 percent in Seattle. Thus increases in the rent-to-income ratios for low-income unsubsidized renters in Houston, Seattle, Baltimore, and Boston were almost entirely attributable to increases in rent, while for Chicago, Washington, D.C, and Minneapolis, falling income and rising rent both contributed to the increase. For Detroit, falling income was clearly the more significant factor.

Although the rise in gross rent exceeding the rate of inflation remains as yet unexplained, a related study verifies that this increase was not generally associated with an increase in the size or quality of the median housing unit (Ringheim, forthcoming), as would be expected if rising rents were exclusively due to the removal from the stock of dilapidated and less costly units. Renters do not appear to be paying more because they are "getting more."[18]

An important corollary to the rent-to-income ratio is residual income, or what remains after rent is paid. If the residual is insufficient to meet essential nonhousing needs, the household may be in danger of becoming homeless. Median household and per person residuals fell significantly across the board. Per person monthly residuals among low-income unsubsidized renters of only $20 in Detroit, $33 in Boston, and about $50 in Chicago, Washington, D.C., and Houston, would appear to be unsustainable for the long term. Given the expenses of moving, as well as security and utility deposits, households with such inadequate residuals would be especially hard-pressed should they be forced to find alternative housing.

MULTIVARIATE ANALYSIS OF VULNERABILITY

In order to examine whether changes have occurred over time in who is likely to be to be vulnerable to homelessness, logit models are used to estimate the likelihood of being vulnerable, given that one is a renter. Vulnerability is a dummy variable coded one for low-income renters who pay more than 45 percent of income to rent and zero for all others. In order to examine whether changes have occurred over time in who is likely to be vulnerable to homelessness, logit models are used to estimate the likelihood of being vulnerable, given that one is a renter. Table 7 shows this relationship for Baltimore, Chicago, Houston, and Seattle. Independent variables include whether the household occupies a unit that is inadequate or severely inadequate, according to standards suggested by HUD (see Milgram and Bury, 1987). Seattle is the only metropolitan area among these four where the association between vulnerability and inadequate housing has grown stronger over time. This may indicate that in Seattle, even those living in substandard housing are unable to escape a high rent-to-income ratio. Female headship remains highly predictive of vulnerability, but less strongly so in 1983 than in 1976. Black heads of households were more strongly likely to be vulnerable over time in Houston, while Hispanic heads were not. Living in the central city was more predictive of vulnerability in 1983 than in 1976, with the exception of Baltimore. The association between young age and vulnerability increased significantly in all four metropolitan areas, while the effect of low education increased in all cities but Houston. Whereas children were negatively associated with vulnerability in three of the four cities in 1976, the presence of children was positively and significantly predictive of vulnerability in all four areas by 1983.

To examine how the conditional relationships might be altered by looking separately at the three components of the relationship between homelessness and vulnerability given earlier, separate logit models were run for these three components for the four metropolitan areas studied in 1977 and 1985. The first two regressions in Tables 8 through 11 show that being a female, black or Hispanic

Table 7

Logit Models of Homeless Vulnerability for Baltimore, Chicago, Houston, and Seattle SMSA's

	Baltimore				Chicago				Houston				Seattle			
	1976		1983		1975		1983		1976		1983		1976		1983	
Variable	Coefficient	t	Coefficient	t	Coefficient	t	Coefficient	t	Coefficient	t	Coefficient	t	Coefficient	t	Coefficient	t
Inadequate	.32	3.09***	.16	1.40	.16	3.09***	.16	2.41***	.15	1.69*	.10	.60	.18	2.34**	.26	1.94*
Female head	.62	7.23***	.56	5.49***	.62	15.54***	.49	9.82***	.77	14.36***	.53	5.91***	.64	12.03***	.36	4.42***
Black head	.15	1.51	.03	.24	.28	6.51***	.23	4.35***	.16	2.47*	.40	3.84***	.16	1.75*	.14	1.06
Hispanic head									-.01	-.06	-.18	-1.25				
Children	-.03	-.83	.11	3.24***	-.05	-3.25***	.09	5.05***	-.03	-1.68*	.15	4.92***	.007	.25	.12	3.27***
Central city	.23	2.53**	.12	1.04	.18	3.72***	.36	6.26***	.22	3.81***	.26	3.09***	.22	3.94***	.26	3.11***
Head age	.002	.60	-.005	-1.63	.001	.59	-.004	-2.59***	-.001	-.64	-.000	-.18	-.004	-2.62***	-.005	-2.13**
Head education	-.11	-3.38***	-.30	-6.74***	-.14	-9.21***	-.17	-9.44***	-.18	-8.38***	-.16	-4.56***	-.16	-7.46***	-.22	-6.50***
Intercept	3.73	15.81***	4.61	16.36***	4.10	38.92***	4.40	34.23***	4.22	30.93***	4.21	17.81***	4.22	31.77***	4.73	22.86***
Degrees of freedom	1676		1587		5687		3372		5430		1400		4463		1636	

Log (p/(1-p)/2+5)=Intercept+BX

*** = p < .01 ** = p < .05 * = p < .10

Table 8

Logit Model of Homeless Vulnerability: Boston

	Renters/Total Population				Low-Income Renter/All Renters				Vulnerable/Low-Income Renters			
	1977		1985		1977		1985		1977		1985	
Variable	Coefficient	t	Coefficient	t	Coefficient	t	Coefficient	t	Coefficient	t	Coefficient	t
Inadequate	.43	9.42***	.31	3.31***	.24	5.11***	.34	2.65***	-.27	-3.57***	.15	.72
Female head	.67	26.39***	.53	12.68***	.58	16.28***	.76	9.07***	.08	1.30	-.46	-2.89***
Black head	.14	3.03***	.29	2.68***	.15	3.09***	.19	1.41	-.18	-2.42**	-.44	-2.08**
Hispanic head	.53	5.66***	.63	4.12***	.36	4.31***	.72	4.44***	.01	.06	-.16	-.73
Children	-.67	-25.83***	-.48	-10.40***	.57	14.24***	.59	5.82***	-.70	-8.45***	.10	.48
Central city	-.26	-21.88***	-.07	-7.58***	-.09	-4.96***	-.02	-1.43	.06	1.73***	.03	1.14
Head age	-.03	-34.19***	-.02	-15.68***	.00	1.49	.01	5.21***	-.01	-7.00***	-.01	-1.17
Head education	-.04	-10.34***	-.08	-10.96***	-.09	-14.89***	-.11	-8.14***	.04	1.73*	.03	1.60*
Intercept	7.41	91.83***	7.29	47.61***	5.00	42.85***	4.27	16.25***	5.88	28.55***	5.40	12.59***
Degrees of freedom	11699***		3321		6094		1476		1383		278	

Log (p/(1-p)/2+5)=Intercept+BX

*** = p < .01 ** = p < .05 * = p < .10

Table 9

Logit Model of Homeless Vulnerability: Detroit

	Renters/Total Population				Low-Income Renter/All Renters				Vulnerable/Low-Income Renters			
	1977		1985		1977		1985		1977		1985	
Variable	Coefficient	t	Coefficient	t	Coefficient	t	Coefficient	t	Coefficient	t	Coefficient	t
Inadequate	.56	10.76***	.26	3.91***	.45	6.13***	.40	4.67***	-.08	-.84	-.04	-.30
Female head	.64	25.31***	.57	16.53***	.73	15.10***	.49	8.79***	.48	5.48***	.26	2.28**
Black head	.11	3.56***	.24	4.66***	.24	4.37***	.44	5.88***	-.30	-3.16***	.03	.19
Hispanic head	.21	1.85***	-.05	-8.87***	.32	1.65*	.16	.85	-.49	-1.76***	.33	.77
Children	-.42	-14.76***	-.54	-14.33***	.65	11.12***	.28	4.59***	-.63	-5.48***	-.34	-2.40**
Central city	.27	9.58***	.22	4.54***	.38	6.62***	.26	3.55***	-.03	-.84	-.08	-.57
Head age	-.03	-28.07***	-.03	-21.23***	.01	5.58***	-.004	-2.05**	-.02	-6.20***	-.03	-7.48***
Head education	-.04	-9.50***	-.05	-8.87***	-.09	-10.24***	-.11	-10.57***	.04	2.94***	.003	.19
Intercept	5.89	74.55***	6.49	56.75***	4.08	26.00***	5.47	29.69***	5.97	22.68***	6.99	20.02***
Degrees of freedom	11194		5016		3236		2029		918		706	

Log (p/(1-p)/2+5)=Intercept+BX

*** = p < .01 ** = p < .05 * = p < .10

Table 10

Logit Model of Homeless Vulnerability: Minneapolis/St. Paul

	Renters/Total Population				Low-Income Renter/All Renters				Vulnerable/Low-Income Renters			
	1977		1985		1977		1985		1977		1985	
Variable	Coefficient	t	Coefficient	t	Coefficient	t	Coefficient	t	Coefficient	t	Coefficient	t
Inadequate	.29	2.86***	.36	3.44***	.16	1.14*	.23	1.67*	.85	1.97**	.20	.86
Female head	1.01	21.95***	.60	14.05***	.44	5.39***	.54	6.81***	.36	2.04**	-.19	-1.27*
Black head	.30	2.59***	.49	3.62***	.23	1.39*	.42	2.77***	-.13	.46	.08	.38
Children	-.64	-12.84***	-.49	-10.72***	.48	4.83***	.67	7.36***	-.78	-3.31***	-.46	-2.57***
Central city	.45	11.20***	.44	10.24***	.40	4.69***	.44	5.56***	-.48	-2.52**	-.31	-2.16**
Head age	-.03	-20.81***	-.02	-15.36***	.005	2.27**	.009	4.19***	-.03	-5.03***	-.01	-3.42***
Head education	-.03	-.007	-.04	-4.93***	-.09	-5.84***	-.07	-5.63***	.01	.02	.01	.70
Intercept	6.02	45.53***	5.97	44.33***	4.48	16.49***	4.04	16.66***	6.95	12.49***	6.14	14.41***
Degrees of freedom	4256		3242		1349		1363		229		272	

Log (p/(1-p)/2+5)=Intercept+BX

*** = p < .01 ** = p < .05 * = p < .10

Table 11

Logit Model of Homeless Vulnerability: Washington, D.C.

	Renters/Total Population				Low-Income Renter/All Renters				Vulnerable/Low-Income Renters			
	1977		1985		1977		1985		1977		1985	
Variable	Coefficient	t	Coefficient	t	Coefficient	t	Coefficient	t	Coefficient	t	Coefficient	t
Inadequate	.56	12.64***	.46	6.36***	.28	6.02***	.24	2.52**	-.02	-.23	-.00	-.02
Female head	.58	23.55***	.42	12.44***	.51	12.38***	.40	5.36***	.23	2.86***	-.02	-.15
Black head	.06	2.33**	.25	6.17***	.27	4.94***	.05	.55	-.25	-2.16**	-.33	-1.74*
Hispanic head	.50	5.46***	.33	3.40***	.05	.33	.22	1.31	-.15	-.56***	.27	.81
Children	-.62	-25.36***	-.40	-11.97***	.44	9.66***	.51	6.30***	-.82	-8.32***	-.52	-2.84***
Central city	.39	14.43***	.34	7.79***	.21	3.85***	.43	5.05**	-.38	-3.31***	.11	.59
Head age	-.03	-38.92***	-.03	-24.35***	.01	4.70***	.01	3.16**	-.01	-4.95***	-.02	-3.52***
Head education	-.06	-16.53***	-.06	-12.08***	-.09	-13.66***	-.10	-8.75***	.01	.49	.03	1.64
Intercept	7.09	94.34***	6.84	63.88***	4.11	18.30***	4.24	29.69***	6.58	24.13***	6.14	13.84***
Degrees of freedom	12087		5454		6381		5454		931		268	

Log (p/(1-p)/2+5)=Intercept+BX

*** = p < .01 ** = p < .05 * = p < .10

head, living in inadequate housing, and, with the exception of Boston, living in the central city are highly predictive of being a renter rather than an owner. The negative association between renting and presence of children grew less strong over time in all areas other than Detroit, indicating an increasing likelihood of households with children being renters now than in the past. The middle two regressions compare low-income renters to all renters. Here it is seen that households with children are significantly more likely to be low-income renters than renters overall, and this has become more true over time except in Detroit. Female heads in the Twin Cities and Boston are more likely to be low-income renters in 1985 than in 1977. In all areas except the District of Columbia, black headship is more predictive of being a low-income renter in the later year.

Finally, the last two logit models show the likelihood of being vulnerable, conditional on being a low-income renter. Given that a household is below 125 percent of the poverty line, black households are less likely to pay more than 45 percent of income in rent in Boston and Washington, D.C., but more likely to do so in the Twin Cities and Detroit, in 1985 than in 1977. By 1985, those outside of the central city are as likely to be vulnerable as those in the central city, and in the Twin Cities, low-income suburban renters are more likely to be vulnerable than their central city counterparts.

Except in Detroit, female heads are less likely than males to be vulnerable given that they are low-income renters. We know that although the proportion of the homeless who are females has grown substantially from near zero in the historic homeless population studied by Bogue (1963), Bahr and Caplow (1974) and others, single males still comprise about 80 percent of the homeless population nationally (Cohen and Burt, 1989). This regression shows that when vulnerable renters are compared to the low-income population instead of to renters as a whole, as in Table 7, females heads emerge as the more vulnerable group only in Detroit.

Households with children are less likely to be vulnerable than childless households except in Boston in 1985. However, the strength of this relationship has declined over time, indicating that low-income families with children are more likely than in the past to be vulnerable. This finding would be predictive of the increasing representation of families with children among the homeless.

DISCUSSION

This paper has documented the growth in the population of severely vulnerable renters in eight cities. If, as hypothesized, the incomes and rents of the low-income population are the primary structural determinants of homelessness, we can expect, as national estimates have found, that substantial growth will have occurred in the numbers of homeless since 1983, but that broad variation across metropolitan areas will be maintained. The roles that income and rent have played in this growth have been shown to vary substantially.

The OLS regression in Table 2 showed that most of the variation in the per capita extent of homelessness is explained by the percentage of low-income renters who are vulnerable, and the percentage of all households that are renters. The income of the vulnerable is presumed to incorporate such structural economic conditions as the level of unemployment[19] and adequacy of welfare benefits.[20] Rapid growth in the vulnerable population is conducive to growth of homelessness because growth implies increased demand for the limited resources available to prevent literal homelessness.

On the supply side, median rent is presumed to reflect such factors as the percentage of the housing stock that is publicly owned and the percentage that is substandard, both factors which are positively associated with the availability of low-cost housing. Vacancy rates, while poorly correlated with median rent,[21] become an important supply factor when they are very low. Under these conditions, a tight rental market favors keen competition and higher rents.[22]

Supply of low-cost housing is also a function of the political will and fiscal ability of a metropolitan area or city to offset vulnerability. Homelessness as a social problem emerged after the massive urban renewal projects in major cities had drastically reduced the supply of SRO's and other forms of low-cost housing that had been occupied by the (primarily single male) urban poor (Hoch and Slayton, 1989). To the extent that local governments failed to relocate their urban indigent populations into comparably priced housing, these urban renewal efforts are likely to have fueled the growth of homelessness. Even more important is the decline during the Reagan administration of federal support for low-income housing programs by nearly 80 percent (Dreier, 1987). The loss of federal funds for housing clearly forced the poor to be more dependent on the market at a time when the housing market was both shrinking and experiencing an as yet unexplained inflation. Had federal housing appropriations remained at the 1980 level, one-and-a-half million more households would have currently been receiving housing assistance (Gonzales, 1988).

In the absence of federal assistance, the responsibility for caring for the growing homeless population fell to charitable organizations, much as had been the case before the advent of social welfare legislation (Fabricant, 1987). The continued growth of homelessness led to an increasing involvement of local and state governments. While even a willing municipal government does not have the fiscal resources to compensate for the withdrawal of federal housing support,[23] "political will" to address homelessness may be evidenced by the aggressiveness with which a municipality has sought its fair share of federal assistance for public and subsidized housing in the past, and by its own efforts to fill the federal gap by providing low-cost housing and housing allowances for poor renters.[24]

A fiscally troubled city will have less ability to fight homelessness. Thus political will and fiscal ability are two factors which may affect the extent to which vulnerability is translated into literal homelessness.[25] Undoubtedly the two may be correlated, as fiscal ability allows a community to

exercise political will more freely. In many communities, the development of low-cost housing by private and charitable organizations compensates to some extent for lack of political will or fiscal ability. Most of these efforts are small in scale and difficult to measure, but where they are widespread, such as in Boston (McAfee, 1986; Dreier, 1987), they undoubtedly do decrease the percentage of vulnerable who become homeless.

In Table 12, the proposed demand and supply effects are summarized. The cities are arranged in columns from the highest to the lowest per capita rate of homelessness.

It is perhaps most useful to examine cities that are similar along demographic dimensions but vary in the extent of homelessness, to isolate factors that seem to be influencing the extent of homelessness. Compare, for example, Chicago, Detroit, and Baltimore, all cities with high percentages of minorities and female-headed households, but which represent the top, upper-middle, and bottom of per capita homelessness in this study.[26] In all three cities, the percentage of renters who are below 125 percent of the poverty line exceeded 40 percent. Chicago and Detroit had rapid growth in the percentage of the low-income population that was vulnerable[27] while this percentage in Baltimore remained fairly stable over the eight years. In spite of the large number of vulnerable Baltimore renters who appear to be teetering on the brink of homelessness, stability in the size of this group may have enabled providers in Baltimore to more effectively prevent those at risk from becoming literally homeless. A much higher percentage of housing is publicly owned in Baltimore than the other two cities. While all three cities had fiscal constraints, the political will of Detroit to prevent homelessness was judged to be not as strong as that in Chicago and Baltimore.[28] Keeping the size of Detroit's homeless population lower than might be expected based on its adverse economic circumstances are a high percentage of low-cost housing on the supply side, and a low percentage of renters on the demand side. Table 13 shows that the effect of the extent of vulnerability in a given metropolitan area can be offset by the proportion of the population that rents. These two factors are

Table 12

Summary of Supply and Demand Factors Influencing Level of Homelessness

	Chicago	Seattle	Houston	Wash., D.C.	Detroit	Boston	Minneapolis	Baltimore
Demand Factors								
Vulnerable in cities (%)	69.9	60.4	62.3	55.8	75.5	50.6	50.6	50.1
Vulnerable growth	rapid	rapid	rapid	stable	rapid	decline	stable	stable
Nonwhite (%)	26.2	12.1	27.4	31.9	22.1	8.5	4.7	27.1
Female heads (%)	18.8	12.6	13.2	17.7	17.9	16.9	12.2	18.8
Renters (%)	42.6	37.7	39.1	45.7	28.8	42.4	32.4	38.8
Welfare benefits/poverty line	73	90	55	72	90	82	91	74
Unemployment rate	6.8	4.7	9.9	2.9	7.3	2.5	4.6	4.7
Supply Factors								
Public housing	1.8	1.7	.3	1.4	1.0	2.1	1.5	2.7
Political will	moderate	high	low	moderate	low	high	high	moderate
Fiscal ability (cities)	low	high	moderate	n.a.	low	low	high	low
Substandard stock (cities)	high	moderate	moderate	high	high	moderate	low	high
Vacancy rate	moderate	low	high	low	high	low	moderate	moderate

Sources:

Renters, vulnerable, and vulnerable growth; U.S. Bureau of the Census, AHS (1975-1977, 1983, 1985).
Nonwhite: U.S. Bureau of the Census (1982).
Female heads: U.S. Bureau of the Census (1984).
Welfare benefit/poverty line=Benefit level as a percentage of poverty line, U.S. Congress, House of Representatives, Committee on Ways and Means (1986).
Unemployment rate: U.S. Department of Labor (1987).
Public housing: Massey and Bickford (1987).
Political will: Interviews with key informants, published and unpublished sources.
Fiscal ability in 1984: Dearborn (1988); High = balance as percent of revenue > 5.0. Low = < 1.0 or net deficit.
Substandard stock in central city: U.S. Bureau of the Census, AHS (1983, 1985). High = > 14 percent. Low = < 10 percent.
Vacancy rate: U.S. Bureau of the Census, AHS (1983 and 1985). High = > .10; Low = < .05.

Table 13

Eight Large SMSA's Ranked by per Capita Homelessness
and by Percentage of Renters Times Percentage of
Low-Income Renters Who Are Vulnerable

SMSA	Homeless[a] per 10,000 Persons (1)	Rank (2)	% Renters in SMSA (3)	% Vulnerable Low-Income Renters (4)	Col. 3x4 (5)	Rank (6)
Chicago	28	1	42.6	69.9	.298	1
Houston	22	2	39.1	62.3	.244	2
Seattle	20	3	37.7	60.4	.228	4
Detroit	17	4	29.0	75.5	.219	5
Washington, D.C.	15	5	41.7	55.8	.233	3
Boston	13	6	41.9	50.6	.212	6
Minneapolis	5	7	32.4	50.6	.164	8
Baltimore	3	8	38.8	50.1	.194	7

[a]HUD.

[b]U.S. Bureau of the Census, AHS (1983 and 1985).

shown to maintain the relative rank-order position of cities by the extent of homelessness quite well. The unusually low rate of rentership in Detroit for example, offsets the very high level of vulnerability of the renter population, yielding a lower per capita rate of homelessness than one might otherwise predict.

Seattle and Minneapolis/St.Paul are also quite similar along a number of dimensions including political will and fiscal ability, but Seattle's much higher per capita rate of homelessness is hypothesized to be attributable to a higher percentage of renters, a larger, more rapidly growing vulnerable population, and to a higher percentage of nonwhites among the vulnerable.[29] On the supply side, Seattle has a very low vacancy rate.

CONCLUSION

To become homeless represents an almost unfathomable loss, not only of a physical address, space, privacy, and safety, but also of virtually all of one's worldly possessions, the facilities needed to fill basic needs, and external identity. The extent of this trauma should tell us that homelessness is truly a level of deprivation most people most people will go to any lengths to avoid. Wright (1988) notes the very small percentage who are homeless by choice, and hence "unworthy" of assistance. The literal homeless are likely to represent, as the numbers of severely vulnerable renters would indicate, a small portion of the population that verges on homelessness. We may expect that some people drift in and out of literal homelessness as they move from independent living to doubling up, to the streets or shelters, and back. There is little in the structure of the current response to homelessness that favors anything but a further proliferation of shelters and emergency services, or maintenance of the status quo.[30]

It has been shown that growing levels of vulnerability, based on income and the ratio of income to rent, are associated in all eight cities with increases in median rent, and in the majority of cities

with a concomitant decline in median income. Rent burdens of the low-income population have reached levels unprecedented at least in the last century, and homelessness has given rise to a massive institutional structure of extremely marginal housing in the form of homeless shelters.

Housing, income, and services have been called the three-legged stool on which the elimination of homelessness and risk of homelessness depend (Vesaas, 1990). The evidence presented here indicates that the appropriate mix of income generation, public and cooperative housing, housing allowances, and services needed both to prevent homelessness among those at risk and to return the homeless to permanent housing will vary across metropolitan areas. A more equitable distribution of housing subsidies could fund much of this effort. Otherwise, we may expect that rental tenure will become increasingly a stratified and permanent rather than a life-cycle transitional state,[31] and that homelessness will continue to be one of our most significant social problems.

Notes

[1]One criticism of the HUD report was that it employed the uncommonly used Rand McNally Metropolitan Areas (RMA) rather than SMSA's for its estimates. A RMA incorporates most of the population but not all of the area of the SMSA. Thus it might be thought of as a mid-range category between a central city and an SMSA.

[2]The HUD estimates, based on telephone interviews with local experts and providers, suffered from a number of methodological shortcomings, but they have been both criticized and defended (Appelbaum, 1986; Redburn and Buss, 1987; Freeman and Hall, 1987; Hartman, 1986). Subsequent local surveys using more reliable estimation techniques have often closely substantiated the HUD estimates (Cowan, Breakey, and Fischer, 1987; McKinsey & Co., 1989; Seattle Human Services Strategic Planning Office, 1988).

[3]A sizable proportion of the homeless, according to most studies, could be identified as behaviorally deviant, in having spent time in prisons and mental institutions, being long-term welfare recipients, or alcohol and drug abusers. (See Rossi, 1988, and Piliavin, Sosin, Westerfelt, and Matsueda, 1990.) The extent to which homelessness can be attributed to mental illness is examined by Snow, Baker, and Anderson (1986).

[4]The Urban Institute study of 1704 randomly selected adult users of soup kitchens and shelters in 20 cities with populations over 100,000 found that 19 percent had been previously hospitalized in a mental institution, 33 percent had been treated for chemical dependency, and 43 percent had a history of either or both (Cohen and Burt, 1989).

[5]A commonly used definition is one employed by the State of New York, which defines a homeless person as "an undomiciled person who is unable to secure permanent and stable housing without special assistance" (Governor Mario Cuomo, as cited in the United Community Services of Metropolitan Detroit staff report: Homeless Persons in the Metropolitan Detroit Area, May, 1984).

The staff report further suggests that a home should be a place where a person's basic needs can be met, where there is a legal right to stay for a definite period of time, providing a sense of permanence, where protection from the elements is assured, where safety from personal or physical danger is afforded, and where mail can be received.

[6]An exception is the study of Chicago homeless by Sosin, Colson, and Grossman (1988).

[7]Bassuk (1984) notes that of 18 public shelters existing in New York City in 1984, 16 did not exist before 1980. In 1982, 10 churches provided a total of 113 beds to the homeless; by 1984, 172 churches and synagogues provided 660 beds in 60 shelters. By 1990, the New York Times (January 22, 1990) reported that the city had 326 public and private shelters with a capacity of 29,600 people. The Emergency Housing Coalition of Seattle reported a fourfold increase in the numbers served and a threefold increase in the numbers turned away for emergency shelter between 1980 and 1983 (Seattle King County Housing and Community Development Division, 1986). The City of Seattle began to fund emergency shelter in 1978 and King County began in 1982. Similar anecdotal evidence of the growth of homelessness, such as the formation of local Coalitions for the Homeless, growth in the number of and types of shelters, and increased funding levels between 1980 and 1983, exists for the other cities.

[8]In the larger study from which this paper is drawn, I have found nearly unanimous support for the causal argument in interviews with key informants knowledgeable about shelters, housing, and services for the mentally ill and substance abusers.

[9]Overall, 63.5 percent of all households own the places where they live, but only 30 percent of the urban poor were homeowners between 1977 and 1987 (Blank and Rosen, 1989). The average age of poor homeowners is 62 years as compared to 48.6 for owners at large (Leonard, Dolbeare and Lazere, 1989, and U.S. Bureau of the Census, 1989b).

[10]A Maryland study found that less than .03 percent of the homeless it surveyed had become so through foreclosure on an owned dwelling (Maryland Department of Human Resources, 1983).

[11]One effect of limiting the analysis to renters may be to underestimate the numbers of elderly who are at risk of homelessness, since the great majority of those over 65 are homeowners. However, poverty among the elderly has been declining (Ellwood and Summers, 1986), due in part to the indexing of social security benefits, and the elderly have been the primary beneficiaries of dwindling federal appropriations for public and subsidized housing. These factors should be reflected in a declining percentage of vulnerable renters at the older ages. Studies of the homeless confirm that the elderly make up a smaller proportion of those who become homeless now than in the past (Rossi, 1989; Bogue, 1963).

[12]National files of the Annual Housing Survey, 1973-1983 show that the median income of renters relative to owners fell from about two-thirds in 1970 to about half in 1983. The percentage of income that owners with a mortgage paid for all housing costs advanced slowly from 18 percent in 1976 to 20 percent in 1983, while renters experienced an increase in median gross rent as a percentage of income from 20 percent in 1970 to 29 percent in 1983.

[13]Fifty-six percent of black households and 60 percent of Hispanics were renters in 1985 as compared to 36.5 of the total population. Rentership increases somewhat in the older ages, from 20 percent at age 55 to 27 percent above age 65 (U.S. Bureau of the Census, 1989b). Among female heads, 55 percent are renters in 1987, but among those with children under 18, 66 percent are renters (U.S. Bureau of the Census, 1989a).

[14]Whereas the "homeless" skid-row population of the late 1950s and 1960s, studied by Bogue (1963), Bahr and Caplow (1974) and others, was predominantly composed of older white males, the "new homeless" are younger, more likely to be female, and are disproportionately minority, particularly black (Rossi, 1989).

[15]Underreporting of income is a fairly substantial problem. Estimates of total income derived from the CPS, and to a greater extent from the AHS, are less than from such independent sources as the Bureau of Economic Analysis. Given that the study focuses on changes in median income over time rather than absolute income, underreporting of income should not seriously affect the results if it can be assumed that underreporting of income has been stable over the three years of the survey.

[16]Struyk, Marshall, and Ozanne (1978) used a similar format in developing housing policies for the urban poor. They divided metropolitan areas into quadrants based on percentage nonwhite and growth in the proportion of households with incomes of less than $10,000 between 1960 and 1970. In updating this format to the 1970-1980 decade, I found that growth of low/moderate income households was less successful in predicting homelessness than homeownership ($r = .59$ when cities are ranked by the percentage of minorities).

[17]For example, Rossi (1989) notes that about 18,000 SRO's in Chicago were destroyed between 1973 and 1984. At the same time, 11,000 subsidized units for the elderly were added to the stock, and 8500 housing vouchers were issued to the elderly. Thus the stock that was replaced was for the benefit of only a small percentage of the renter population.

[18]The 1982 Report of the President's Commission on Housing alleged that renters are actually better off now than in the past. When improved quality of the housing stock and shift of higher income renters into homeownership were taken into account, the report claimed that "rental housing has actually become more affordable" (p. 9). This remains an important topic for future research.

[19]Detroit continues to be plagued with one of the highest levels of unemployment in the country. The mayor's 1987 Emergency Relief Program (Detroit, Mayor's Office, 1988) distinguishes between official unemployment of 10.4 percent and "actual" unemployment of 20.7 percent.

[20]The living standards of social welfare beneficiaries (excluding social security recipients) have been eroded both by the failure of all but three states to fully index for inflation (U.S. Congressional

Budget Office, 1988) and by rising market rents. Rossi (1989) found that erosion of general assistance benefits in Illinois left individuals in 1985 with only 48 percent of the income they would have had in 1968, insufficient to purchase most independent housing given the inflation in rents. The skid-row resident of the 1950s in Chicago had about three times as much income in constant dollars as Rossi found among the homeless in 1986. It has been estimated that the average recipient of AFDC or General Assistance in Seattle would need to spend 97 percent of income on the typical one-bedroom or efficiency apartment (Seattle Human Services, 1988).

[21]Houston is a case in point. Despite a vacancy rate which was more than twice as high as found in the other cities, the median gross rents of all renters in Houston increased 18 percent beyond the rate of inflation in eight years. Since vacancies typically rise monotonically with increasing rent, the vacancy rate is a poor indicator of the housing available to the low-income population, particularly when size of the unit needed is taken into consideration. Only 4 percent of the 67,450 Houston vacancies in 1983 rented for less than $200, and the 275 units which had as many as four bedrooms rented for more than $900 apiece in constant 1986 dollars (U.S. Bureau of the Census, AHS calculations, not shown).

[22]In Seattle, for example, a very low vacancy rate of 3.5 percent, coupled with rapid population growth and high ownership costs, have led to a competitive market in which more renters vied for a limited stock, thus driving up prices. Sternlieb (1989:66) notes that as buying power declines relative to housing costs, "increased competition for units at the bottom rung of the ladder . . . only intensifies the problems faced by those with the fewest resources." Increases in both rent and homelessness are easier to understand in Seattle and Boston in terms of "normal" market functions than in Houston, where rents and vacancies increased simultaneously.

[23]The impact of the loss of federal funds can be illustrated by Seattle, a city which has made a greater investment in low-cost housing than many of the other cities examined here. Because of these

efforts, the case of Seattle effectively illustrates the inability of even a prosperous and progressive community to fully compensate for the withdrawal of federal funds from housing programs. For example, the recently passed levy in Seattle will provide $6.25 million per year for eight years for low-cost housing, whereas the federal housing contribution to Seattle had been $42 million in 1979 alone. By 1985, the federal input had fallen to only $5 million (Seattle Human Services, 1988).

[24]Houston, for example, does not appear to have a strong network of nonprofit agencies working to secure housing for low-income households, and the city has been less than aggressive in pursuing its fair share of federal housing dollars (Gilderbloom, Rosentraub, and Bullard, 1987) or in attempting to make up for the decline in federal dollars with local housing initiatives. Racial discrimination is presumed to be a factor in the lack of political initiative in Houston (Feagin, 1988). The (recently overturned) "right to shelter" law in Washington, D.C., was actively opposed by the mayor (Boo, 1989).

[25]The determination of political will is based on interviews with service providers, funding agencies, and other key informants, as well as on published and unpublished reports cited here. Fiscal ability is based on an analysis by Dearborn (1988) of the financial reports of major cities (Washington, D.C., not included in the analyses). In assessing fiscal ability however, it must be recognized that even an insolvent city sets priorities as to its expenditures.

[26]Baltimore's surprisingly low per capita rate of homelessness as found in the 1983 HUD study was largely corroborated by two subsequent studies. Surveys conducted by Cowan, Breakey and Fischer (1987) and the Health and Welfare Council of Central Baltimore (1986) as cited in Institute of Medicine (1988), both reported estimates which would retain Baltimore as the city with the lowest per capita rate of homelessness among the 15 metropolitan areas. It is interesting to note that in Baltimore, which had a very high percentage (75 percent) of vulnerable households headed by a

female, the proportion of homeless who are female far exceeds the national average of 19 percent (Cohen and Burt, 1989). Thirty-four to 36 percent of Baltimore's homeless were found by these studies to be women.

[27]Economic vulnerability is exacerbated by continuing residential segregation, which is more pronounced in Chicago than virtually any other city (Massey and Denton, 1989). The evidence is at least suggestive of a relationship between segregation and discrimination in housing and the disproportionate representation of blacks among both the homeless and the population at risk.

[28]Detroit's mainly black central city residents are largely trapped by residential segregation in a central city surrounded by prosperous, overwhelmingly white suburbs. Suburban voters have successfully vetoed housing proposals for the poor and minorities (Darden et al., 1987). Detroit has a smaller percentage of public units than most comparably sized cities (except Houston). About half of them are vacant, and as many as a third are scheduled for demolition, largely because of their proximity to the revitalizing downtown business district rather than to inherent structural defects (Phillips interview, 1989).

[29]Seattle's severely vulnerable population was 26 percent black as compared to 15 percent in the Twin Cities. Because of the relationship between race and vulnerability discussed earlier, we would expect that a higher proportion of Seattle's vulnerable would become homeless.

[30]Washington, D.C., for example, spends 95 percent of its homeless assistance budget on emergency services rather than on permanent income and housing solutions (Williams, 1990).

[31]Blank and Rosen (1989) have demonstrated, for example, that the ability of the poor to become homeowners has declined by three percentage points in the last 11 years.

References

Andrade, Sally. 1988. Living in the Grey Zone: Health Care Needs of Homeless Persons. Austin: Texas Department of Human Services.

Apgar, William, and Brown, James. 1988. "The State of the Nation's Housing." Joint Center of Housing Studies of Harvard University, Boston.

Appelbaum, Richard. 1986. Testimony on a Report to the Secretary on the Homeless and Emergency Shelters In J. Erickson and C. Wilhem (eds.), Housing the Homeless. New Brunswick, N.J.: Rutgers Center for Urban Policy Research.

Bahr, Howard, and Caplow, Theodore. 1974. Old Men Drunk and Sober. New York: New York University Press.

Bassuk, Ellen. 1984. "The Homelessness Problem." Scientific American, 251:40-45.

Blank, Rebecca, and Rosen, Harvey. 1989. "Recent Trends in Housing Conditions among the Urban Poor." National Bureau of Economic Research, Working Paper No. 2886.

Bogue, Donald. 1963. Skid Row. Chicago: University of Chicago Community and Family Study Center.

Boo, Katherine, 1989. "Homeless Economics," City Paper, Washington, D.C., September 29.

Boston Emergency Shelter Commission. 1984. "Seeing the Obvious Problem," City of Boston.

Boston Emergency Shelter Commission. 1988. "Making Room for Boston's Homeless," City of Boston.

Boston Emergency Shelter Commission. 1989. "State of Homelessness in the City of Boston, Winter, 1989-90," City of Boston.

Bratt, Rachel. 1986. "Public Housing: The Controversy and the Contribution." In R. Bratt, C. Hartman and A. Meyerson, Critical Perspectives on Housing. Philadelphia: Temple University Press.

Carliner, Michael. 1987. "Homelessness: A Housing Problem?" In R. Bingham, R. Green and S. White (eds.), The Homeless in Contemporary Society. Newbury Park, Calif.: Sage Publications.

Castillo, Kathleen, and Paine, Perry. 1990. "Cruel Winter, Cruel Spring." A Community Study and Plan to Address Homelessness in Detroit and Wayne County, Detroit/Wayne County Homeless Strategy Committee, Detroit.

Chausse, Sr. Deborah. 1990. Long Island Shelter, Boston, Interview, June.

Chicago Tenants Relocation Bureau. 1961. The Men on Skid Row, Chicago. Chicago: Tenants Relocation Bureau.

Clay, Phillip. 1987. "At Risk of Loss: The Endangered Future of Low Income Rental Housing." Neighborhood Reinvestment Corporation, Washington, D.C.

Cleghorn, Steve, Director. 1989. Transitional Housing, Inc., Baltimore, Maryland, interview, March.

Cohen, Barbara, and Burt, Martha. 1989. "Demographic Characteristics of the Homeless Derived from a New National Survey." Washington, D.C.: The Urban Institute.

Collier, Ellie, Director. 1989. Houston Coalition for the Homeless, interview, May.

Cowan, D.; Breakey, W.; and Fischer, P. 1987. "The Methodology of Counting the Homeless." Proceedings of the American Statistical Association Survey Research Section.

Darden, Joe; Hill, Richard; Thomas, June; and Thomas, Richard. 1987. Detroit. Philadelphia: Temple University Press.

Dearborn, Phillip. 1988. "Fiscal Conditions in Large American Cities." In M. McGeary and L. Lynn (eds.), Urban Change and Poverty. Washington, D.C.: National Academy Press.

Detroit, Mayor's Office. 1988. Mayor's Emergency Relief Program, December 1987 Report.

District of Columbia Government, Office of the Mayor. 1989. "Doubled-up Households in the District of Columbia." D.C. Government.

Dockett, Kathleen. 1989. "Street Homeless People in the District of Columbia." Washington, D.C.: University of the District of Columbia.

Dreier, Peter. 1987. "Community-Based Housing: A Progressive Approach to a New Federal Policy." Social Policy, 18 (12):18-22.

Duncan, Beverly, and Hauser, Phillip. 1960. Housing a Metropolis: Chicago. Glencoe, Ill.: The Free Press.

Ellwood, D., and Summers, Lawrence. 1986. "Poverty in America: Is Welfare the Answer or the Problem?" In S. Danziger and D. Weinberg (eds.), Fighting Poverty: What Works and What Doesn't. Cambridge, Mass.: Harvard University Press.

Fabricant, Michael. 1987. "The Political Economy of Homelessness." Catalyst, 21: 11-28.

Farley, Reynolds. 1983. "Is There a Crisis in Rental Housing?" Unpublished manuscript, University of Michigan.

Feagin, Joe. 1988. Houston: Free Enterprise City. New Brunswick, N.J.: Rutgers University Press.

Freeman, Richard, and Hall, Brian. 1987. "Permanent Homelessness in America?" Population Research and Policy Review, 6: 3-27.

Gale, Dennis. 1987. Washington, D.C. Inner City Revitalization and Minority Suburbanization. Philadelphia: Temple University Press.

Gans, Herbert. 1962. The Urban Villagers. New York: Free Press.

Geist, John (Director). 1989. Health and Welfare Council of Central Maryland, Baltimore, interview, March.

Gilderbloom, J.; Rosentraub, M.; and Bullard, R. 1987. "Financing, Designing and Locating Housing and Transportation Services for the Disabled and Elderly." Houston: University of Houston Center for Public Policy.

Gonzales, Henry. 1988. Letter to the Editor concerning federal housing budget cuts, Washington Post, 11/1.

Hadden, Louise, and Leger, Mireille. 1988. Codebook for the Annual Housing Survey Data Base. Cambridge, Mass: Abt Associates.

Hartman, Chester. 1986. Testimony on a Report to the Secretary on the Homeless and Emergency Shelters in J. Erickson and C. Wilhem, (eds) Housing the Homeless, New Brunswick, N. J.: Rutgers Center for Urban Policy Research.

Horrigan, M. and Haugen, S. 1988. "The Declining Middle Class Thesis: A Sensitivity Approach." Monthly Labor Review, 11 (5), May.

Hughes, A.; Drew, J; and Chatman, E. 1989. The Third Washington, Homelessness in the District of Columbia, University of the District of Columbia, February.

Human Services Research Institute. 1985. "Homelessness Needs Assessment Study, Findings and Recommendations." Report prepared for the Massachusetts Dept. of Mental Health, Boston.

Institute of Medicine. 1988. Homelessness, Health and Human Needs, Washington, D.C.: National Academy Press.

Johnson, Carol, Director of Homeless Services. 1990. State of Massachusetts Department of Mental Health, Boston, interview, June.

Kain, John, and Quigley, John. 1975. Housing Markets and Racial Discrimination: A Microeconomic Analysis. New York: National Bureau of Economic Research.

King, A., and Miezkowski, P. 1973. "Racial Discrimination, Segregation and the Price of Housing." Journal of Political Economy, 81: 590-6060.

Kivisto, Peter. 1989. "Homelessness in the Frostbelt: The Case of Illinois." In J. Momeni (ed.), Homelessness in the United States. New York: Greenwood Press.

Leonard, Paul; Dolbeare, Cushing; and Lazere, Paul. 1989. "A Place to Call Home: The Crisis in Housing for the Poor." Center on Budget and Policy Priorities, Washington, D.C.

Liebow, Elliot. 1967. Tally's Corner. Boston: Little Brown and Company.

Lowry, Ira (ed.). 1983. Experimenting with Housing Allowances: The Final Report of the Housing Assistance Supply Experiment. Cambridge, Mass.: Oelgeschlager, Gunn and Hain, Publishers.

McAfee, Kathy. 1986. "Socialism and the Housing Movement: Lessons from Boston." In R. Bratt, C. Hartman and A. Meyerson, Critical Perspectives on Housing. Philadelphia: Temple University Press.

McIntire, James. 1989. University of Washington, Seattle, interview, May.

McGerigle, Paul, and Lauriat, Alison. 1983. "More Than Shelter: A Community Response to Homelessness." Boston: United Community Planning Corporation.

McGerigle, Paul. 1990. Formerly United Community Planning Corporation, Boston, interview, June.

McGough, D. and Casey, C. 1986. "National Supply of and Demand for Rental Housing in the United States." Unpublished report. Washington D.C.: Department of Housing and Urban Development.

McKinsey and Company, Inc. 1989, Addressing the Problem of Homelessness in Houston and Harris County. Houston: Coalition for the Homeless of Houston/Harris County.

Maryland Department of Human Resources. 1983. Homelessness in Baltimore. Baltimore: Health and Welfare Council of Central Baltimore.

Maryland Department of Human Resources. 1986. Where Do You Go from Nowhere? Baltimore: Health and Welfare Council of Central Maryland.

Massey, Douglas, and Bickford, Adam. 1987. "The Effect of Public Housing on Black Segregation in U.S. Metropolitan Areas." Paper presented to the Population Association of America annual meetings, New Orleans, April.

Massey, Douglas, and Denton, Nancy. 1989. "Hypersegregation in U.S. Metropolitan Areas: Black and Hispanic Segregation along Five Dimensions." Demography, 26 (3): 373-392.

Melvin, Carol (Director of Women's Housing Coalition). 1989. Interview, Baltimore, March.

Milburn, N. G. and Booth, J. 1989. "Dispelling the Myth about Homeless People: A Shelter Sample in Washington, D.C." Paper presented to the annual meeting of the Southeastern Psychological Association, Washington, D.C.

Milgram, Grace, and Bury, Robert. 1987. "Existing Housing Resources Versus Need." Congressional Research Service Report for Congress, No 87-81E. Washington, D.C.: Congressional Research Service (mimeo.).

Moss, Harold (Assistant Director). 1989. Community for Creative Nonviolence, Interview, Washington, D.C., March.

National Council of Negro Women. 1975. "Women and Housing--A Report on Sex Discrimination in Five American Cities." Washington, D.C.: U.S. Department of Housing and Urban Development.

Phillips, Ted (Executive Director, United Housing Coalition). 1989. Interview, Detroit, May.

Piliavin, Irving; Sosin, Michael; Westerfelt, Herb; and Matsueda, Ross. 1990. "Conditions Contributing to Long-Term Homelessness: An Exploratory Study." Madison, Wisconsin: Institute for Research on Poverty, University of Wisconsin, unpublished manuscript.

Posa, Peggy (Executive Director, Coalition on Temporary Shelter). 1989. Interview, Detroit, June.

President's Commission on Housing. 1982. Report to the President. Washington D.C.: GPO.

Redburn, F. Stevens, and Buss, Terry. 1987. Responding to America's Homeless: Public Policy Alternatives. New York: Praeger.

Ringheim, Karin. 1990. Forthcoming. At Risk of Homelessness: The Roles of Income and Rent. New York: Praeger.

Robinson, Frederic. 1985. "Homeless People in the Nation's Capital." University of the District of Columbia Center for Applied Research and Urban Policy.

Rossi, Peter. 1988. "Minorities and Homelessness." In G. Sandefur and M. Tienda (eds.), Divided Opportunities: Minorities, Society and Social Policy. New York: Plenum Press.

Rossi, Peter. 1989. Down and Out in America: The Origins of Homelessness. Chicago: University of Chicago Press.

Schafer, R. 1979. "Racial Discrimination in the Boston Housing Market." Journal of Urban Economics, 6: 176-196.

Schutt, Russell. 1988. "Boston's Homeless, 1986-1987: Change and Continuity." Report to the Long Island Selter, Boston (unpublished).

Seattle Human Services, Strategic Planning Office. 1988. "1989-90 Overall Housing Development Plan, Seattle Housing Levy Program." City of Seattle.

Seattle King County Emergency Shelter Update. 1986. "Homelessness Revisited." Seattle: King County Housing and Community Development Division.

Shlay, Anne. 1985. Where the Money Flows: Lending Patterns in the Washington, D.C. - Maryland - Virginia SMSA's. Chicago: The Woodstock Institute.

Shlay, Anne. 1987. "Credit on Color: The Impact of Segregation and Racial Transition on Housing Credit Flows in the Chicago SMSA from 1980-1983." Fair Housing Alliance, Chicago.

Snow, David; Baker, Susan; and Anderson, Leon. 1986. "The Myth of Pervasive Mental Illness among the Homeless." Social Problems, 33 (5): 407-423.

Sosin, Michael; Colson, Paul; and Grossman, Susan. 1988. Homelessness in Chicago--Poverty and Pathology, Social Institutions and Social Change. Chicago: The Chicago Community Trust.

Steinbruck, Erna (Director, Carpenter's Shelter for Men, Women and Children). 1989. Interview, Alexandria, October.

Sternlieb, George. 1989. "Recent Trends in Housing Quality and Affordability." In S. Rosenberry and C. Hartman (eds.), Housing Issues of the 1990's. New York: Praeger.

Stone, Michael. 1989. "Shelter Poverty in Boston: Problem and Program." In S. Rosenberry and C. Hartman (eds.), Housing Issues of the 1990's. New York: Praeger.

Struyk, Raymond; Marshall, Sue; and Ozanne, Larry. 1978. Housing Policies for the Urban Poor. Washington, D.C.: The Urban Institute Press.

United Community Services of Metropolitan Detroit. 1990. "A Profile of Homeless People in Detroit and Wayne County." Detroit: United Community Services.

U.S. Bureau of the Census. Various years. American (formerly Annual) (AHS) Housing Survey machine readable data tapes for Metropolitan Areas, 1975, 1976, 1977, 1983 and 1985.

U.S. Bureau of the Census. 1982. General Social and Economic Characteristics of the Population, 1980. Washington, D.C.: GPO.

U.S. Bureau of the Census. 1984. Statistical Abstract of the United States, 1982-83. Washington, D.C.: GPO.

U.S. Bureau of the Census. 1989a. Poverty in the United States, 1987. Current Population Reports. Washington, D.C.: GPO.

U.S. Bureau of the Census. 1989b. Statistical Abstract of the United States, 1989. Washington, D.C.: GP0.

U.S. Congress, U.S. House of Representatives, Committee on Ways and Means. 1986. Background Material and Data on Programs within the Jurisdiction of the Committee on Ways and Means. Washington, D.C.: GPO.

U.S. Congressional Budget Office. 1988. Trends in Family Income, 1970-1986. Washington, D.C.: GPO.

U.S. Department of Housing and Urban Development. 1984. "A Report to the Secretary on the Homeless and Emergency Shelters," Washington D.C.

U.S. Department of Labor. 1988. Geographic Profile of Employment and Unemployment. Washington, D.C.: GPO.

Vesaas, Mitch (Director, Tellurian Shelter, Madison, Wis.). 1990. Interview, February.

Wiley, Martha (Director, Traveler's Aid, Detroit, Mich.). 1989. Interview, March.

Williams, Terry. 1990. Address to the Interagency Council on the Homeless Region V Workshop. Chicago, April 2.

Wilson, Franklin. 1979. Residential Consumption, Economic Opportunity and Race. New York: Academic Press.

Wright, Carroll. 1894. The Slums of Baltimore, Chicago, New York and Philadelphia. Special Report of the Commissioner of Labor. New York: Negro Universities Press (reprinted in 1967).

Wright, James. 1988. "The Worthy and Unworthy Homeless." Society, 25 (5): 64-69.

Wright, James, and Lam, Julie. 1987. "Homelessness and the Low Income Housing Supply." Social Policy, 17: 48-53.