Articles

The Urban Homeless: Estimating Composition and Size

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Although homelessness has been recognized as a serious and growing urban social problem, scientifically acceptable methods for estimating the composition and size of the homeless population have been lacking. A new research approach to estimating the size and composition of undomiciled urban populations is presented, and its utility is illustrated through a description of the literal homeless of Chicago. The homeless in the Chicago sample are unaffiliated persons living in extreme poverty, with high levels of physical and mental disability. Homelessness is interpreted as a manifestation of extreme poverty among persons without families in housing markets with declining stocks of inexpensive dwelling units suitable for single persons.

HE PLIGHT OF THE HOMELESS IN AMERICA HAS RECEIVED a great deal of attention in the past few years (1). Despite this level of concern, empirically adequate knowledge about the extent of homelessness and the conditions that produce it have been minimal. Estimates of the size of the national homeless population vary from about a quarter million to upwards of 3 million (2); equally wide variations exist in the estimates for specific cities and states. The sources of homelessness are also not understood in any detail. Is homelessness primarily a housing problem, an employment problem, a condition created by deinstitutionalization of the chronically mentally ill, a manifestation of the breakdown of family life, a symptom of the inadequacies of our public welfare system, or a combination of these and other factors? Extant research provides few reliable answers to these questions; for example, estimates of the prevalence of psychiatric disorder among the homeless vary from about 20 to nearly 90% (3).

We have recently completed an empirical study of the numbers and conditions of the homeless population in one major American city, Chicago (4). The Chicago Homeless Study is essentially the first rigorous attempt to apply proven methods of social science research to the study of homelessness. In this article, we summarize the principal findings of our research.

Obstacles to the Study of Homelessness

Rigorous research on homelessness is unquestionably difficult. National statistical series contain little or no information on the homeless population. The U.S. Census essentially counts the popu-

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lation in homes (5); conventional surveys are ordinarily derived from samples of households and therefore miss individuals without conventional dwellings.

One significant problem is the lack of an agreed-upon definition of homelessness (6). On the most general level, the homeless can be defined as those who do not have customary and regular access to a conventional dwelling or residence. But what is a "conventional dwelling or residence," and what is "customary and regular access?" For example, does the concept of conventional dwelling unit include hotel rooms, especially in so-called SROs ("single room occupancy" hotels), shared quarters in private dwellings, beds in dormitory-like accommodations, vans, tents, or shacks made of scrap materials? Similarly, questions arise over the interpretation of "customary and regular access." What of the person who has been given temporary permission to share a conventional dwelling by its owner? If a divorcing adult child is offered temporary shelter by his or her parents "for as long as you like," does that qualify as "customary and regular access?" These examples demonstrate that there is a continuum running from the obviously domiciled to the obviously homeless, with many ambiguous cases to be encountered along that continuum. Any effort to draw a line across that continuum, demarcating the homed from the homeless, is of necessity somewhat arbitrary and therefore potentially contentious.

These definitional ambiguities are not simply scholastic issues. In a fundamental sense, a definition of homelessness is, ipso facto, a statement as to what should constitute the floor of housing adequacy below which no member of society should be permitted to fall. It is equally obvious that the number and existential conditions of the homeless depend in no small part on how the phenomenon is defined.

In dealing with these definitional problems, we have found it useful to distinguish between (i) the literal homeless, persons who clearly do not have access to a conventional dwelling and who would be homeless by any conceivable definition of the term, and (ii) the precariously (or marginally) housed, persons with tenuous or very temporary claims to a conventional dwelling of more or less marginal adequacy. This distinction, of course, does not solve the definitional problem although it does more clearly specify subpopulations of likely policy interest. We further stress that the data reported below refer to the literal homeless of the city of Chicago, that subset of the ill-housed poor who are the most seriously in need and whose conditions more closely approximate the common, public understanding of "who is homeless."

Methodology

Most conventional social research methods used in the quantitative study of modern societies depend on the assumption that persons can be enumerated and sampled within their customary

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dwelling units, an assumption that fails by definition in any study of the literal homeless. The strategy devised for the Chicago study therefore departs from the traditional sample survey in that persons were sampled from nondwelling units, and interviews were conducted at times when the separation between the homed and homeless is at a maximum. Two complementary samples were taken: (i) a probability sample of persons spending the night in shelters provided for homeless persons (the shelter survey); and (ii) a complete enumeration of persons encountered between the hours of midnight and 6 a.m. in a thorough search of nondwelling unit places in a probability sample of Chicago census blocks (the street survey). Taken together, the shelter and street surveys constitute an unbiased sample of the literal homeless of Chicago, as we define the term.

Our operational definition classified a person as one of the literal homeless at the time of our survey if that person was a resident of a shelter for homeless persons or was encountered in our block searches and found not to rent or own a conventional housing unit or was not a member of a household renting or owning a conventional dwelling unit. Conventional housing units included apartments, houses, rooms in hotels or other structures, and mobile homes.

In the street surveys, teams of interviewers, accompanied by offduty Chicago policemen, searched all places on each sampled block to which they could obtain access, including all-night businesses, alleys, hallways, roofs and basements, abandoned buildings, and parked cars and trucks (7). All persons encountered in the street searches were awakened if necessary and interviewed to determine whether or not they were literally homeless. In the shelter samples, we simply assumed that all persons spending the night in such places were literally homeless. All persons determined to be literally homeless were interviewed to obtain data on their employment and residence histories as well as their sociodemographic characteristics.

Table 1. Income, employment, and time homeless for the Chicago homeless. Total sample size, 722. Base numbers for each measure vary, depending on subsample asked questions and the proportions providing usable answers.

Factor measured	Measure	Sample size
Cash income received last month		· · · · · · · · · · · · · · · · · · ·
No income	18.1%	600
Amount received		
Mode	\$0.00	600
Median	\$99.85	600
Mean	\$168.39	600
Sources of income (percent of total income)		
Economic activity (work, trade)	29.0%	600
Pensions and disability benefits	21.0%	600
Welfare (AFDC and General Assistance)	30.2%	600
Family and friends	2.9%	600
Charity	5.1%	600
Other	11.8%	600
Employment		
Currently holds steady job*	4.2%	684
Worked last week	24.7%	716
Did not work last week but during last month	14.2%	716
Period since last steady job*		
Mode	120.0 months	684
Median	40.0 months	684
Mean	54.9 months	684
Length of time currently homeless		
Homeless <2 months	12.7%	722
Mode	1.0 month	722
Median	7.6 months	722
Mean	21.9 months	722

^{*}This group is included in "worked last week." "Steady job" is defined as full-time employment with duration of three or more months.

All cooperating respondents were paid \$5. Respondent cooperation rates exceeded those ordinarily found in sample surveys (8). A total of 722 homeless persons were interviewed in our surveys.

Two separate survey waves were conducted, the first during the 2 weeks spanning the end of September and the beginning of October 1985, and the second during a comparable period spanning February and March 1986. The surveys may be regarded as replications, being based on separately drawn but identically designed shelter and street subsamples (9). The two waves make it possible to examine seasonal effects on the size and composition of the homeless population.

The shelter surveys were based on samples of clients in all shelters in Chicago that provide sleeping accommodations primarily to homeless persons, consisting of 22 shelters in the fall and 27 shelters in the winter. Interviewing teams counted all persons present in the shelters on the nights visited and interviewed systematically chosen subsamples of them. The street surveys were based on stratified random samples of 168 blocks in the fall and 245 in the winter, drawn from among the 19,409 census blocks within the Chicago city limits. All Chicago census blocks were stratified initially by the expected number of homeless to be found on each. This stratification was accomplished with the cooperation of precinct community relations officers of the Chicago Police Department who, with the help of beat officers, rated each block in Chicago as to how many homeless persons could be expected to be on that block in the late hours of the night. The classification of expected high density blocks was reviewed by knowledgeable experts and modified accordingly (10).

The Chicago Homeless Study, so far as we know, is the first attempt to apply modern sampling methods to the study of the homeless and, as such, provides the first scientifically defensible estimates of the size and composition of the homeless population in any city. These methods can be employed in any other community and can also be extended to a national study.

The Characteristics and Conditions of the Literal Homeless of Chicago

As would be expected, the demographic characteristics of the literal homeless, as defined and sampled above, contrasted strongly with those of the general adult population of Chicago. Being homeless is predominantly a male condition; three out of four (76%) of the homeless were men, in sharp contrast to 46% male in the Chicago adult population (11). Blacks and native Americans constituted considerably more than their proportionates share of the homeless, with whites and Hispanics proportionately underrepresented. Although the average age of the homeless, 40 years, was not far from that of the general adult population, there were proportionately fewer of the very young (under 25) and the old (over 65). Nor were the homeless very different from the general population in educational attainment, the typical homeless person being a high school graduate.

The modal homeless person was a black male high school graduate in his middle thirties. Average characteristics, however, obscure an important fact—namely, that the homeless population is very heterogeneous. Especially significant was a minority of young black women (about 14% of the homeless) who were typically homeless with their young children and apparently in transition from unsatisfactory housing arrangements to establishing new households with those children. In addition, older males (over 40) tended to be white and homeless for relatively long periods of time.

In the wealth of social and economic detail contained in our interview data, three salient characteristics of the homeless stand

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out: (i) extreme poverty, (ii) high levels of disability resulting from poor physical and mental health, and (iii) high levels of social isolation, with weak or nonexistent ties to others (Tables 1 to 4).

Extreme Poverty

The literal homeless are clustered at the extreme lower boundary of the American poverty population. Within the income ranges found, there was considerable heterogeneity, as the differences among the various central tendencies show. Approximately one in five (18%) reported no income at all in the month (mode), median income for the month was \$99.85, and average (mean) income for the same period was \$168.39. The 1985 poverty level for single persons under 65 was \$5250, 2.6 times the average annual income and 4.4 times the median annual income of Chicago's literal homeless (12). On average, the literal homeless survive on substantially less than half the poverty-level income.

Affordable housing at these levels of income is for all practical purposes nonexistent. In 1985, average monthly rental for Chicago SRO rooms, among the cheapest accommodations available for single persons, was \$195 (13), \$27 above the average monthly income of the homeless. Even if the entire available income was spent on the cheapest available housing, it would still not be quite enough, much less also covering the costs of food and other necessities. That the literal homeless manage to survive at all is a tribute to the shelters, soup kitchens, and charitable organizations that provide most necessities.

This is not to say that the homeless make no contribution to their own support. Although a very small percentage (4%) held full-time jobs, almost two in five had worked for some period during the previous month, mostly at casual, poorly paid part-time jobs. Perhaps remarkably, work and other economic activity was, on average, the source of 29% of total monthly income.

Even more of a surprise, income transfer payments accounted for very little of the income of these homeless, with only about a quarter (28%) receiving Aid to Families with Dependent Children (AFDC) or General Assistance (mostly the latter). Income transfer payments

Table 2. Physical and mental disabilities and criminal justice contacts among the Chicago homeless. Overall sample size was 722. Base numbers for specific measures vary according to size of subsample and proportions of usable answers.

Measure	Percent reporting	Base number
Physical health status measures		
Unable to work for health reasons	28	371*
"Fair" or "poor" health	36	324 †
Hospital stay >24 hours last year	28	324†
Mental health status measures		
Previous mental hospital day	23	<i>717</i>
Previous suicide attempt	16	323 ⁺
Clinical levels of depression	4 7	319+
High levels of psychotic thinking	23	318†
Previous detoxification center stay	33	716
Contacts with criminal justice system		
Jail stay >48 hours	41	<i>7</i> 1 <i>7</i>
Court conviction and probation	28	71 <i>7</i>
Federal or state prison stay	1 <i>7</i>	716
Cumulative disabilities		
Reporting ≥1 disability‡	82	312†

^{*}Asked only of respondents in September 1985 survey. †Asked only of respondents in winter 1986 survey. †The disabilities consist of reported "fair" or "poor" health, having been institutionalized for mental illness, sentenced by a court, having been in a detoxification center for alcohol or drug abuse, above average score on CES-D, and above average scores on psychotic thinking scale.

Table 3. Current marital status: comparison of Chicago homeless and all Chicago adults (100% = 716).

Marital status	Homeless (%)	Chicago adults* (%)
Married	6.9	43.3
Divorced or separated	32.0	12.5
Widowed	4.3	9.4
Single, never married	56.7	34.8
Do not know	0.1	

^{*}Chicago 1980 Census data based on persons aged 15 and older.

represented 30% of the total income; another 21% was accounted for by pension and disability payments, received by about one in five (18%).

Job histories of the literal homeless suggest that they have been among the extremely poor for years. On the average it was more than 4.5 years (55 months) since their last steady job (defined as full-time employment lasting three or more months) (median, 3.3 years or 40 months). Interestingly, elapsed time since last steady job was very much greater than time currently homeless, the latter averaging about 22 months (median, 8 months) (14). This suggests that many among the literal homeless were helped by their families and friends through relatively long periods of unemployment (15), but that the patience, forbearance, or resources of these benefactors eventually ran out, with literal homelessness then added to chronic unemployment as a problem experienced daily.

Disability

The literal homeless suffer many disabling conditions that would ordinarily make it difficult or impossible for a person to lead a full life—to obtain employment, participate in social life, or maintain relationships with others. Of course, disability is a matter of degree, so that it is difficult to calculate precise proportions; nevertheless, it is abundantly clear that the proportions among the literal homeless are much higher than in the general adult population.

More than one in four said that they had some health problem that prevented their employment. Prominent among the conditions reported were mental illness, cardiovascular ailments, and gastrointestinal disorders. Likewise, more than one in three (37%) reported themselves as being in only "fair" or "poor" health, a level of self-reported ill health about twice that found in the general adult population (18%). Behavioral indicators support these self-reports, with more than one in four reporting a hospital stay of more than 24 hours during the previous year (16). High levels of alcoholism and drug abuse are also indicated by the one in three who reported stays in detoxification centers.

Our data also suggest relatively high levels of mental illness. Almost one in four (23%) reported having been in a mental hospital for stays of over 48 hours, more than eight times the level found in the general population. Among those who had been in mental hospitals, three out of five (58%) had had multiple hospitalizations. Nearly one in five (16%) reported at least one suicide attempt.

In addition to the self-report data, two short scales were administered to measure psychiatric symptomatology (17). On a scale measuring symptoms of depression, nearly half (47%) of the Chicago homeless registered levels that would suggest a need for clinical attention [compared with about 20% in the national Health and Nutrition Examination (HANES)]. On a second scale measuring psychotic thinking, one in four showed two or more signs of disturbed cognitive processes; almost every item showed significantly higher levels of psychotic thinking than a comparison group

tested in a New York City working class neighborhood.

Contacts with the criminal justice system represent yet another, albeit qualitatively different, disability that is rather widespread. (Such contacts at least indicate prior adjustment difficulties, some of a rather serious nature.) Two of five (41%) had ever experienced jail terms of two or more days, 28% had been convicted by the courts and placed on probation, and 17% had served sentences of more than 1 year in state or federal prisons (presumably for felony offenses).

The cumulative incidence of these various disabilities is staggering. More than four out of five (82%) of the homeless either reported fair or poor health, or had been in a mental hospital or a detoxification unit, or received clinically high scores on the demoralization scale or on the psychotic thinking scale, or had been sentenced by a court. A majority had had two or more such experiences or conditions. Although these data clearly do not sustain precise estimates of the degree of disability among the literal homeless, it is clear that the prevalence is several magnitudes above that encountered in the general adult population.

Social Isolation

Yet another disability suffered by the homeless is a high degree of social isolation and the consequent absence of buffering social ties. More than half (57%) never married; of those ever married, most are separated or divorced, on either count in sharp contrast to the patterns of the general adult population (18). The few (9%) who are still with families are almost exclusively homeless women with dependent children.

The literal homeless are also relatively isolated from extended family and from friends. Nearly nine in ten (88%) have surviving relatives and family members, but only three in five (60%) maintain even minimal contact with them—visiting, writing, talking with, or telephoning at least once every 2 or 3 months. Similar low levels of contact with families of procreation—spouses, ex-spouses or children—were also reported; 55% had such persons, but only one in three maintained contact with them. Overall, one in three reported no contact with any relatives and almost one in four reported no contacts with either relatives or friends.

Further evidence on strained relations with family and relatives was shown in replies to a sequence of questions on preferred living arrangements. We asked whether respondents would like to return to their families and whether their families would take them. Among the young homeless women, very few wanted to return; many of the young men would have liked to but believed they would not be welcome.

The implication of widespread social isolation is that the literal homeless lack access to extended social networks and are therefore especially vulnerable to the vagaries of fortune occasioned by changes in employment, income, or physical or mental health.

The Matter of Numbers

The samples for the Chicago Homeless Study were designed to enable statistically unbiased estimates of the size of the city's literal homeless population. The estimated average nightly number of literal homeless persons in Chicago was 2344 ± 735 in fall 1985 and 2020 ± 275 in winter 1986 (Table 5). These estimates amount to about 0.07% of Chicago's close to 3 million population. The difference between these estimates is not statistically significant (19); however, the data do show a significant increase in the winter shelter population and a corresponding decrease in the street population between the two survey periods, presumably a function of the city's

Table 4. Social contacts of the Chicago homeless.

Relationship	Percent reporting	Base number
Family of orientation (parents, siblings, other relatives) Has live members of family of orientation Is in contact* with some member	88.3 59.6†	722 722
Family of procreation (spouse and children) Has live members of family of procreation Is in contact* with some member	54.8 32.8†	722 722
Isolation measures Not in contact* with any relatives Not in contact* with family or friends	33.3† 23.7†	722 722

^{*}Contact measured by visiting, talking with, telephoning, or writing "at least once every 2 or 3 months." †Percentages based on total sample, including persons who have no relatives, spouses, or friends.

harsh winter. (Social welfare agencies opened 17 additional shelters during the winter survey period.)

The modal time homeless in these samples was 1 month (median, 7.6 months) (Table 1), indicating considerable turnover within the literal homeless population. It therefore follows that many more people are homeless over a year than are homeless on any given night. Using information on the average duration of homelessness, we can estimate annual prevalence figures (Table 5). The two resulting estimates, 6962 ± 1881 and 5051 ± 505 , appear to be far apart, but because of the very large standard error for the fall 1985 estimate, the difference is not statistically significant. Taking the average of the two estimates as a reasonable compromise, about 6000 persons suffer some episode of literal homelessness in Chicago in the course of a year.

Several groups of homeless persons are excluded by design from the estimates so far summarized. A final set of estimates (Table 6) takes these excluded groups into account. First are homeless dependent children, who were counted in the study but excluded from the other estimates appearing in Table 5. Second are homeless persons in "special purpose" shelters that were excluded from the universe sampled—detoxification centers, shelters for battered women, and facilities for the chronically mentally ill. Although these estimates are derived from the known capacities of the excluded shelters, not from actual counts, most shelters reported being used at close to full capacities. A third group are literally homeless persons who were nonetheless fortunate enough to have found temporary housing on nights when the survey was conducted, whose numbers are estimated from interview data on the sample's use of rented rooms and the homes of friends and relatives during the previous week. Finally, from interview data on recent hospitalizations and incarcerations,

Table 5. Estimates (\pm standard errors) of the prevalence of literal homelessness in Chicago. Estimates are based on probability samples of shelter residents and homeless persons on the streets and public access places in fall 1985 and winter 1986.

Survey component	Fall 1985	Winter 1986
Point preva	ence estimates	
Average daily homeless		
Shelter residents	961 ± 13	1492 ± 55
On streets or in public places	1383 ± 735	528 ± 269
Total	2344 ± 735	2020 ± 275
Annual preva	lence estimates*	
Number ever homeless annually		
Street and shelter combined	6962 ± 1881	5051 ± 505

^{*}Annual prevalence estimates are based on conservative assumptions concerning the average length of time spent in the homeless state. Alternative assumptions produce estimates that vary by almost one magnitude from those shown here.

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we can estimate the number of homeless persons likely to have been institutionalized on nights when the surveys were in the field. Averaging the fall and winter estimates and adding our best guesses about the sizes of the four groups just noted, we derive a final estimate of 2722 persons literally homeless in Chicago on the average night (20).

Estimating the size of the homeless population has proven to be a contentious business, and our study is no exception (21). Prior to this research, "expert guesstimate" put the size of the Chicago homeless population between 12,000 and 25,000. Three points can be made in this connection. First, despite considerable effort, we have never been able to locate any data from which these numbers were derived. There is no evidence that they are anything but guesses. Second, it has never been clear whether these numbers are meant to represent the nightly or the annual (or some other period) homeless population of the city. Finally, it has proven impossible to ascertain the exact definition of homelessness used to produce these prior figures; definitions more liberal than ours would obviously produce higher numbers.

This last point deserves some amplification. We have previously distinguished between the literal homeless, who have been studied in our research, and the precariously homed, who have not been. This latter is perhaps best conceptualized as the population at high risk for homelessness, and it is no doubt very much larger than the population literally homeless on any given night. There are many extremely poor persons in Chicago who are in homes only through the goodwill of friends or relatives; the General Assistance rolls in Chicago contain more than 100,000 persons whose incomes are less than \$1800 per year and who get by primarily with the help of families and friends (15). There are no doubt others as poor or poorer, who are not on the rolls; the total poverty population of the city numbers some 600,000. There are thus at least 100,000 people in Chicago in extreme poverty, and some millions of people in the nation in that condition, who might well become literally homeless in the face of the merest misfortune. There is nothing to be gained, however, in confusing these numbers with the numbers literally homeless at any given time.

An Interpretation of Homelessness

Research reported here provides a static portrait of the literally homeless in a single city; the data, however, do suggest some things about the dynamics of becoming homeless that may prove to be quite general. First, literal homelessness typically results from extreme poverty in housing markets with an inadequate supply of lowcost housing, especially for single persons. The burden of literal homelessness falls heavily on the disaffiliated—persons without access to the resources of a larger household—and upon those who have been extremely poor for long periods. The homeless are therefore best seen as the long-term very poor who cannot be taken care of by friends and family (or are rejected by them) and who have been unable, for a variety of reasons, to establish households of their own. Most of the friends and families are also likely to be among the poor, with few resources to share in any case. All of these factorschronic extreme poverty, lack of support or rejection by family and friends, difficulty establishing their own households—are in turn likely to be connected to their disabilities. Obviously, disabilities of the type and magnitude we found will interfere with employment prospects and strain the web of reciprocity that constitutes the support structure of friends and kin.

Still, the literal homeless constitute only a small fraction of the very poor, most of whom manage somehow to maintain stable housing. With the Chicago General Assistance population,

Table 6. Combined and supplemented total point prevalence estimate of Chicago literal homeless. Average number of persons homeless nightly in Chicago: fall 1985 and winter 1986 combined.

Homeless estimate component	Average number
Phases 1 and 2 sample estimates	2182
Homeless dependent children*	273
Temporarily homed†	42
Institutionalized homeless‡	80
Homeless in excluded shelters\$	145
Total	2722

*Dependent children accompanying parents in shelters. †Projected from interview reports of nights spent in previous week in rented rooms, or in homes of relatives or friends. ‡Projected from interview reports of previous hospitalizations and incarcerations in jails and prisons. \$Estimated from field reports on shelters for battered women, chronic mentally ill, and detoxification centers excluded from the sampling frame for shelters.

100,000, used as a conservative estimate of the size of the extremely poor population of Chicago, as the denominator, the literal homeless constitute only about 3% of the extremely poor (22). Properly to understand how the 3% became literal homeless, we need to know how the 97% manage to avoid that condition. The appropriate research has yet to be undertaken; we speculate on this broader question (on the basis of some knowledge) that they mainly do so by overspending on housing or through subsidies from families and friends.

Overspending on housing. Some of the extremely poor avoid literal homelessness by spending all or nearly all of their income on housing, in turn relying on food stamps, handouts from soup kitchens, clothing from charitable sources, and medical care from free clinics and Medicaid to provide for other necessities. To pursue this pattern of life, one must of course have a consistent source of income, such as small pensions, General Assistance, disability payments, and perhaps small remittances from relatives or ex-spouses. And there must be housing of some sort (SROs, rooming houses, cheap apartments) that can be obtained with that income. Within these constraints, one can be extremely poor and still keep a roof above one's head.

The literature on homelessness regularly notes persons in extreme poverty who spend all they have on housing but find that it is still not quite enough. Their small pensions or welfare checks can be stretched to cover, say, all but the last few days of the month. These are the "part-time" homeless, living in rented quarters when they can afford to, spending their other nights in the shelters or on the streets—no doubt, the most precarious among those we have called the precariously housed.

Private housing and subsistence subsidies. Most of the extremely poor, we suspect, avoid literal homelessness through housing and subsistence provided at little or no cost by relatives (mainly parents and siblings). Households that provide these subsidies incur the marginal costs of adding another person to the family unit, but these costs may be only modest, especially if the person provides some payment to the subsidizing household or shares in household chores. Indeed, considering the typical level of income maintenance payments (in Illinois, the General Assistance payment is \$154 per month), private subsidies may be virtually the only way for the extremely poor to avoid literal homelessness; \$154 per month is simply not enough to enter the private housing market at any level. That so many of the extremely poor do manage to avoid homelessness is therefore almost certainly the result of the generosity of family and friends.

On the above reasoning, the principal determinants of the size of the literal homeless population would be factors that (i) impinge on the ability or willingness of poverty-level families to accommodate

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their disabled or unemployed members or (ii) directly influence the numbers of disabled or unemployed. Among the most relevant of these factors would therefore be real-dollar decreases in the level of income maintenance support for poor families (income transfer payments during the past two decades have not kept pace with inflation); changes in the coverage of income maintenance and other support programs for disabled persons (including admission into total care institutions, such as mental hospitals); quantitative and qualitative changes in the supply of very low-cost housing [much of which has been lost in the revitalization of the central cities (23)]; changes in the demand for low-skill workers and consequent unemployment; and direct changes in the numbers of the disabled (for example, increasing drug and alcohol use, deinstitutionalization of the mentally ill, and related factors). These (and possibly other) factors determine the size of the population at risk of homelessness; each has doubtlessly contributed its share to the recent increase in the numbers of homeless persons in this country.

REFERENCES AND NOTES

1. The rather sudden welling up of concern can be indexed by the number of listings under "homelessness"in the Reader's Guide to Periodical Literature (Wilson, New York, 1976, and 1983 to 1985). In 1975, there were no listings; in 1981, 3; in 1982, 15; in 1983, 21; and in 1984, 32.

1982, 15; in 1983, 21; and in 1984, 32.

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 1980 Census included some partial attempts to enumerate persons living in shelters and in public places, such as train and bus stations, but this effort did not cover all places where homeless persons might be found nor did the census cover all cities [Bureau of the Census, Persons in Institutions and Other Group Quarters. 1980 Census of Population. (Publ. PC80-2-4D, U.S. Government Printing Office, Washington, DC, 1984]. Virtually all survey or census-based estimates omit homeless persons and most pass over institutionalized persons as components of such estimates, leading to corresponding underestimations of populations affected
- On the definitional problem, see E. Baxter and K. Hopper, Private Lives/Public Spaces: Homeless Adults on the Streets of New York City (Community Service Society, Institute for Social Welfare Research, New York, 1984); S. Crystal, Chronic and Situational Dependence: Longtern Residents in a Shelter for Men (Human Resources Administration of the City of New York, New York, 1982). Instructions to interviewers were to enter all places until they encountered locked
- doors or were forbidden to go further (for example, by managers or proprietors).
- Police escorts were hired to protect interviewers.

 Cooperation rates were 81% in the shelter surveys and 94% in the street surveys. The majority of the shelter respondents not interviewed were not present at the time of interview, being temporarily out of the shelter for one reason or another. The design of the second survey was slightly different from that of the first, being
- based on a larger sample of blocks and a more extended age coverage. The early survey was restricted to persons 18 and over; the second had no age restriction. The sample size for blocks in the first survey was determined on the basis of preliminary guesses about the probable size of the literally homeless population, guesses that proved much too large and resulted in unacceptably large standard errors, a defect

remedied in the second survey by enlarging the number of sampled blocks. In each survey, a few individuals were interviewed more than once, usually in shelters covered on different nights. The overlap was taken into account in computing the estimates shown in Tables 5 and 6.

The use of such experts was only to classify blocks for the purpose of stratification, with the intention of improving the efficiency of the resulting block samples. The blocks searched were chosen randomly within each stratum in the resulting classification. Any classification errors on the part of the experts may have resulted in a lowering of the efficiency of the resulting sample but could not have introduced any biases, since all Chicago blocks had known, nonzero probabilities of being

selected in the samples.

11. The percentage of women (24%) among the homeless is also in stark contrast to the homeless (Skid Row) population of Chicago as studied in the late 1950s, virtually all of whom were men [D. Bogue, Skid Row in American Cities (University)]

of Chicago, Chicago, IL 1963)

 Poverty levels for households of various sizes and for various years are given in The Statistical Abstract of the United States (U.S. Government Printing Office, Washington, DC, 1986).

Jewish Council on Urban Affairs, SRO's: An Endangered Species. Single Room Occupancy Hotels in Chicago (Jewish Council on Urban Affairs and Community Emergency Shelter Organization, Chicago, 1985).

"Time currently homeless" is counted as months elapsed since last domiciled. Many homeless people have been homeless more than once; among those who had become homeless sometime in the year before the interview, 11% had had one or

more homeless episodes in previous years.

Research on recipients of General Assistance in Chicago documents that many of the extremely poor survive mainly through the good will of family and friends [M. Stagner and H. Richman, General Assistance Profiles: Findings from a Longitudinal Study of Newly Approved Recipients (NORC, University of Chicago, Chicago, IL 1085).

1985).
16. For self-reported health status of the U.S. adult population for 1982, see R. W. Johnson Foundation [Special Report 1 (1983)]. Additional data on the health status of the homeless are reported by P. W. Brickner, L. K. Scharer, B. Conanon, A. Elvy, M. Savarese, Eds., Health Care of Homeless People (Springer, New York, 1985); J. Wright et al., in Research in Social Problems and Public Policy, M. Lewis and J. Miller, Eds. (JAI Press, Greenwich, CT, in press), vol. 4.
17. The first scale was a shortened version of the CES-D scale measuring symptoms of depression, developed by the Center for Epidemiological Studies of the National Institute of Mental Health for HANES; the second was a shortened version of the Psychiatric Epidemiological Research Interview (PER) I. I. Dobrenwend, B. P.

Psychiatric Epidemiological Research Interview (PERI) [B. Dohrenwend, B. P. Dohrenwend, B. Link, I. Levav, *Arch. Gen. Psychiatr.* **40**, 1174 (1983); B. Dohrenwend, P. E. Shrout, G. Egri, F. S. Mendelsohn, *ibid.* **37**, 1229 (1980)].

Despite the marital histories, more than half (54%) have had children, but current contact with these children tended to be minimal.

Note the much larger standard error in the fall 1985 estimate. As noted (9), we designed the initial sample of blocks assuming that there were between 5,000 and 10,000 homeless persons in Chicago and consequently fixed the block sample size too small. Enlarging the block sample in winter 1986 brought the standard error

down to more acceptable levels.

Most estimates of "excluded groups" are based on more or less plausible assumptions, chief among them that persons in our sample with characteristics similar to those of the excluded groups are representative of the excluded groups themselves. These estimates must therefore be treated with special caution (4, pp. 49–56). The HUD report (2), which estimated the national homeless population to be

- about a quarter million persons, has been under more or less continuous attack; a recent census of the homeless in Boston has suffered the same fate (Boston Globe, 12 October 1986, p. 1), as have other efforts to estimate the extent of homelessness in the nation [(B. Hall, *Perspective 3*, 1 (1986)]. Our Chicago study has also caused some uproar ("Agencies rally around homeless, hit study," *Chicago Tribune*, 30 August 1986, p. 1). In general, empirically credible attempts to estimate the size of
- Adjust 1966, p. 1). In general, empirically credible attempts to estimate the size of the homeless population have produced numbers well below the expectations of the advocacy community [C. Marwick, J. Am. Med. Assoc. 253, 3217 (1985)]. More inclusive estimates would cover persons covered in other income maintenance programs, such as AFDC and persons with very low incomes who are not covered by any such programs. Hence, that 3% of the extremely poor are literally homeless is undoubtedly an overestimate.

nomeless is undoubtedly an overestimate. See J. Wright and J. Lam, Soe. Policy, in press.

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