

## **Public Shelter Admission Rates in Philadelphia and New York City: The Implications of Turnover for Sheltered Population Counts**

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### *Abstract*

Previous estimates of the size and composition of the U.S. homeless population have been based on cross-sectional survey methodologies. National enumeration efforts have yielded point-prevalence estimates ranging from 0.11 to 0.25 percent of the population. This study reports data from shelter databases in Philadelphia and New York City that record identifiers for all persons admitted and so make possible unduplicated counts of users.

Unduplicated counts of shelter users yield annual rates for 1992 of about 1 percent for both cities and rates near 3 percent over three years in Philadelphia (1990–92) and over five years (1988–92) in New York City. The annual rates are three times greater than rates documented by point-prevalence studies. Shelter bed turnover rates are reported, as are average monthly first admission and readmission counts over a two-year period. Implications for future research and public policy are discussed.

### **Introduction**

For the past decade, researchers, policy analysts, advocates for the homeless, and officials from the federal government have been engaged in the daunting challenge of estimating the size of the homeless population in the United States. Unfortunately, the imprecision in defining and locating a transient, often hidden population has frustrated enumeration efforts. Divergent estimates have inspired debate as to whether homelessness affects thousands or millions of Americans and, consequently, whether the problem requires emergency remedies or more fundamental

changes in the nation's social policies. This article demonstrates that the homelessness numbers debate has been inappropriately framed from the outset. Using estimates at a single point in time (point-prevalence estimates), derived from cross-sectional survey methodologies, as the primary approach to measuring the size and composition of the population does not capture the magnitude of the problem over time; is likely to overrepresent persons with long periods of homelessness (e.g., people with disabilities; see Dennis et al. 1993); and, by implication, portrays the population as more stable than dynamic. This article reviews existing estimates of the homeless population and reports shelter utilization data from New York City and Philadelphia that provide new evidence on the scope of the homelessness problem.

### **Literature review**

Advocates for the homeless have consistently maintained that the number of homeless people in the United States is far greater than that reported by government researchers or other social scientists. The numbers debate began in 1983, when members of the Community for Creative Non-Violence (CCNV) in Washington, DC, issued a report (Hombs and Snyder 1982) placing the number of homeless Americans at 2.2 million, or 1 percent of the population. The estimate was based on an extrapolation of data from a key-informant survey of 14 cities conducted by CCNV, but the survey lacked any explicit, let alone uniform, data standards. The CCNV report was advanced primarily for advocacy purposes and led Kondratas (1991, 633) to conclude that "this [methodology] was a clear leap of fantasy." It nevertheless established a benchmark that was widely reported in the media and against which subsequent estimates have been measured.

The U.S. Department of Housing and Urban Development (HUD 1984) provided a counterpoint to the CCNV estimate in 1984 with the first study of homelessness by the federal government. HUD estimated that 250,000 to 350,000 people (0.11 to 0.15 percent of the U.S. population) were living either in shelters or on the streets on an average night between December 1983 and January 1984. However, HUD researchers, while using four different estimation techniques, also relied on a key-informant survey methodology. Results were derived from a larger sample of cities ( $N = 60$ ) and applied to the nation's metropolitan and nonmetropolitan populations, but were still based on the estimates of experts and shelter providers, not on a systematic count. Consequently, the methodology was criticized by

advocates and by members of the subcommittee in testimony before the U.S. House of Representatives Subcommittee on Housing and Community Development (1984) and later by researchers (Appelbaum 1987; Parsons 1986) and the U.S. General Accounting Office (GAO 1988). HUD's and CCNV's divergent estimates (0.11 versus 1 percent) served as the frame of reference for the numbers debate that ensued.

Results from succeeding enumeration studies by social scientists have been far more convergent, but have nonetheless conflicted with estimates by advocates for the homeless. Rossi, Fisher, and Willis's (1986) study in Chicago was among the more widely cited local surveys, particularly because it included a systematic count of street homeless as well as a shelter census. The researchers were able to document 2,344 homeless people, or 0.09 percent of the population, although advocates from the Chicago area had maintained that the number was closer to 15,000 (Rossi 1987). Similarly, a one-night survey of the street and shelter population in Boston in 1986 (City of Boston 1986) enumerated 2,863 homeless people, or a rate of 0.50 percent, although the Massachusetts Coalition for the Homeless had estimated the number to be 15,000. In a summary of other local counts, Burt and Cohen (1989) report a range of estimates from 0.02 percent in rural Ohio to 0.41 percent in Washington, DC, as well as the 0.50 percent found in Boston. A more recent enumeration by Dennis et al. (1993) in the Washington metropolitan area found that 1.05 percent of the population aged 12 and older were homeless—the highest rate among the enumerations to date. Nevertheless, despite the wide variation in local estimates, reported homelessness rates have consistently been closer to HUD's estimate than to CCNV's (Kondratas 1991).

Although there is agreement that the homeless or "sheltered" population on a given night more than doubled in the 1980s (Burt 1992; Freeman and Hall 1987; HUD 1989; Kondratas 1991), two recent national studies have again confirmed that while there is significant local variation in the rate of homelessness, the national numbers do not approach advocates' estimates of 2 million to 3 million persons. One study (Burt and Cohen 1989) was based on a probability sample of shelter providers and people using shelters and soup kitchens in U.S. cities of 100,000 or more population. The authors estimated that 229,000 people, or 0.37 percent of the population of these 178 cities, used homeless services in March 1987. Projecting to the United States as a whole, adjusting for urban and nonurban areas, and assuming that for every 100 who used homeless services there were 50 who did not, Burt and Cohen reported a national estimate of

567,000 to 600,000 homeless, or a national rate of 0.235 to 0.249 percent. This estimate has since been accepted by federal officials for planning purposes, although Kondratas (1991) regarded it as an overestimate.

As part of the 1990 census, the Census Bureau conducted a count of homelessness in the nation. The bureau reported that in the 200 largest cities, approximately 230,000 people were identified as living in shelters, on the streets, or in public places not intended for habitation (U.S. Department of Commerce 1991). In an analysis of results for the 50 largest cities, Barrett, Anolik, and Abramson (1992) found sheltered population rates below 0.20 percent for 35 cities and between 0.20 and 0.40 percent for 11 cities. Only four cities had sheltered population rates exceeding 0.40 percent: Seattle (0.44 percent); San Francisco (0.57 percent); Atlanta (0.62 percent); and Washington, DC (0.78 percent). The Census Bureau estimates were denounced by advocates and social scientists, some of whom evaluated the enumeration by surveying homeless people to ascertain whether they had been interviewed by census takers and by placing confederates in street locations to see whether they would be counted (see National Coalition for the Homeless 1991 for a summary). The evaluations revealed that the Census Bureau's effort, albeit the largest and most ambitious of its kind, failed to count many of the street homeless and even missed entire shelters. However, as Kondratas (1991, 640–41) has remarked, "even if the count were increased by 100 percent, that would mean 460,000 homeless persons; a 200 percent increase would result in a figure of 690,000.... The bottom line is that the range of legitimate estimates of the homeless population is 230,000 to 600,000."

The convergence of enumerations near 230,000 by Burt and Cohen (1989; largest 178 cities) and the Census Bureau (U.S. Department of Commerce 1991; largest 200 cities) led Kondratas (1991) to conclude that advocates overstated the numbers to support a structuralist interpretation of homelessness and that, in reality, the problem afflicts a small number of troubled individuals, not the new homeless of ordinary working Americans described by advocates. According to Kondratas (1991, 634), advocates' inflated estimates are partly to blame for a misguided federal homelessness policy:

The concept "millions of homeless" was inconsistent with a relatively small proportion of extremely poor persons beset with multiple ongoing problems. If millions were homeless, it was plausible that unemployment and social program cuts were driving ordinary working Americans to the streets....

In other words, the exaggerated number had a strong bearing on this misperception of the causes of homelessness and characteristics of the homeless, which in turn led to ill-conceived policy.

Kondratas goes on to declare that “for those who understand numbers, the so-called numbers debate has long been over” (p. 643).

The evidence appears to suggest that a much smaller number of people are homeless at any point in time than advocates have claimed. However, cross-sectional methods for measuring homelessness have been applied primarily for research, not advocacy, and have been the preferred approach to date because they avoid the duplication problems inherent in longer time frames and because they are useful for meeting immediate planning needs (i.e., planning shelter capacity). Unfortunately, cross-sectional methods also have limitations. They do not capture the magnitude of the problem over time, and they are likely to overrepresent people with long periods of homelessness, such as those with disabilities (see Dennis et al. 1993), relative to longitudinal research designs. Consequently, some people may use the results of cross-sectional research to conclude erroneously that the population over time is composed of more disabled and chronically homeless persons than is actually the case. Indeed, Kondratas’s declaration that the numbers debate is over and that unemployment and cuts in social programs are not causes of homelessness appears to derive from a belief that most homeless people are persistently homeless and beset with multiple ongoing problems. A number of empirical findings suggest that those assumptions deserve more careful examination.

Demographic surveys of the homeless have consistently shown that, in addition to being younger and including families with children, the recent homeless report having been homeless for a far shorter duration than their skid row counterparts of the 1950s and 1960s. For example, while Blumberg, Shipley, and Shandler (1973) report that 78 percent of their skid row sample from Philadelphia in 1960 had been skid row residents for more than 1 year and 33 percent for more than 10 years, a survey of Philadelphia’s homeless in 1988 (Ryan, Bartelt, and Goldstein 1989) found that 75 percent had been homeless for less than 1 year and 50 percent for less than six months. A study in Phoenix (Brown et al. 1983) found that 60 percent had been homeless for less than six months. In Ohio, Roth et al. (1985) reported that 49 percent had been homeless for less than 60 days. Similar findings in New York City (Hoffman et al. 1982) and Chicago

(Rossi, Fisher, and Willis 1986), as well as a meta-analysis by Shlay and Rossi (1992) covering 14 studies, confirm that a majority of the recent homeless report having been homeless for relatively brief periods (less than six months).

Researchers have applied estimation techniques to data on length of homelessness to project the annual prevalence of homelessness (that is, the number or proportion of persons experiencing homelessness over the course of a year) by varying assumptions regarding turnover. Rossi's (1989) method yielded annual prevalence estimates 2.3 to 3.4 times greater than point-prevalence estimates, and Vernez et al. (1988) estimated annual turnover rates in California of 5.8, 3.4, and 2.3 in Orange, Alameda, and Yolo Counties, respectively. Unfortunately, because these data are derived from cross sections of the population, there is no way to accurately estimate actual rates of turnover, particularly since such rates would be influenced by the proportion of shelter users with short episodes of homelessness. Nevertheless, these data suggest that turnover among the homeless population is significant and that many more people are likely to be homeless over time than at a single point in time.

Longitudinal research would provide more conclusive evidence of the dynamic nature of homelessness, although little such research has been published. The one published study to date, by Sosin, Piliavin, and Westerfelt (1990)—two additional longitudinal studies are in progress (Burnam, Koegel, and Duan 1990; Robertson, Piliavin, and Westerfelt 1990)—was based on a two-wave, two-sample survey of homeless adults in Minneapolis. In a preliminary analysis of their data, Sosin, Piliavin, and Westerfelt found that homelessness is much more episodic than chronic and that neither previous episodes of homelessness nor an episode of long duration reduces a person's chance of making a stable exit from homelessness. These findings led the authors to conclude that "attempts to enumerate the homeless population through counts at any point in time clearly underestimate the intermittently homeless population" (Sosin, Piliavin, and Westerfelt 1990, 172). This conclusion was consistent with their critique of cross-sectional studies that "tend to misrepresent the length of time individuals are in one status [and] tend to overestimate the proportion of individuals who have long stays" (p. 158). The results also led the authors to question the efficacy of the current emphasis on temporary and transitional approaches to reversing homelessness and to argue instead that "policy strategies...might focus attention on moving individuals from temporary dwellings to *permanent* ones, or...turn[ing]

temporary exits [from homelessness] into permanent ones” (p. 172, emphasis in original).

The final and perhaps most interesting evidence of the turnover in the homeless population comes from a rather unexpected source: telephone surveys of the general population assessing their attitudes toward homelessness. Three such surveys have been conducted, in each of which respondents were asked whether they had ever been homeless. Quite surprisingly, researchers have found convergent and high estimates of prior homelessness among the general population. Toro and McDonell (1992) report that among their sample of persons from Buffalo, New York, selected by a random-digit dialing method, 4.2 percent indicated having been homeless in the past. Novacek et al. (1991) found that 5 percent of a random sample of people from the Tulsa, Oklahoma, telephone directory reported a prior experience of homelessness. A national study by Link et al. (1993) polled 1,507 people and found that 12 percent reported having been homeless. Because these data are significantly qualified by respondents’ interpretation of the term “homeless,” Link et al. specifically asked whether the respondents had been homeless while living doubled up with friends or relatives, whether they had stayed in a shelter, and whether they had slept in public spaces. The researchers found that if they excluded persons who have doubled up with friends or relatives and included only those who have stayed in a shelter or slept in public spaces (the “literal” homeless), then more than half, or 7 percent of the total, had a prior homelessness episode. The authors reported that 3.2 percent of the respondents had suffered literal homelessness in the past five years.

Compared with point-prevalence surveys, these prevalence estimates are remarkably high, particularly when one considers that only people with telephones are interviewed in such studies. Assuming that most of the prior homelessness episodes occurred after 1980, when the nation’s shelter capacity experienced its largest growth (Burt 1992; HUD 1989), this evidence—combined with data on the reported length of time homeless and from the longitudinal research of Sosin, Piliavin, and Westerfelt (1990)—suggests that point-prevalence studies may have captured only a fraction of the population that has experienced homelessness in the past decade.

### **The research question**

Would data systems that register every person who stays in a shelter over a specified period and within a defined geographic

area help to reconcile the 4 to 7 percent rates of prior homelessness from telephone surveys with the 0.1 to 0.4 percent point-prevalence estimates from enumeration studies? This article addresses that question by reporting shelter utilization data from Philadelphia and New York City, both of which register every person who enters the public shelter system.

## Data and methods

### *Shelter systems and databases*

Both Philadelphia and New York City have standardized admissions procedures for persons requesting public shelter. Public shelters are defined as emergency housing facilities for the homeless that are owned, administered, or contracted through city government; this definition does not include transitional housing facilities. Philadelphia's public shelter system had a census of 2,490 persons (including children) at the end of the 1992 fiscal year.<sup>1</sup> By contacting not-for-profit shelter providers listed with local charitable agencies, we identified an additional 451 private beds, or 15.3 percent of the total ( $N = 2,941$ ), as outside Philadelphia's public shelter system and thus untracked by the city's shelter registry system (see table 1). In New York

*Table 1. Average Daily Census in Philadelphia and New York City Shelters, 1992*

Type of Shelter	Philadelphia <sup>a</sup>		New York City	
	Persons	Percent	Persons	Percent
Public (tracked) <sup>b</sup>	2,490	84.7	23,752	82.1
Private (untracked) <sup>c</sup>	451	15.3	5,179	17.9
Total	2,941	100	28,931	100

<sup>a</sup> The census of the Philadelphia shelter system at the end of the 1992 fiscal year (June 30, 1992) is used as a proxy for Philadelphia's average daily census.

<sup>b</sup> The public shelter census is equivalent to the number of people using the shelter system, because each city contracts for occupied beds only.

<sup>c</sup> The average daily census of private, untracked facilities is a measure of bed capacity at a single point in time.

City the average daily census of the public shelter system in fiscal 1992 was 23,752 persons (including children). A match of the New York City public shelters with facilities listed as homeless shelters by the New York City Department of City Planning (1992) yielded a count of 5,179 private beds, or 17.9 percent of

<sup>1</sup> See footnotes to table 1 for explanation of censuses.



the total ( $N = 28,931$ ), outside the public shelter system. Thus, the reported data for both cities underestimate the actual number of shelter users because client movement in private facilities is not included, although it is noteworthy that the proportion of untracked beds in the two cities is similar.

*New York City Adult Shelter System.* When single adults enter the New York City Adult Shelter System, they go through an intake process that establishes their file in the Shelter Care Information Management System (SCIMS); at that time, a system identification number is assigned to each new client. Next, the client's needs are assessed to determine whether the client is better suited to a specialized or general shelter. Intake and assessment take place at designated assessment shelters. A client who makes initial contact with a nonassessment shelter is given a subway token, directions, and a referral to an assessment shelter.

During the intake process, a client is asked for name, Social Security number, date of birth, citizenship, and veteran status to open the SCIMS record. (A client who declines or is unable to provide any of the information is logged in as John or Jane Doe.) In addition, data are collected on presenting medical and psychiatric conditions, previous residence, marital and family status, status of children, and reasons for termination or suspension of services.

Since its inception in 1986, SCIMS data entry has been done by social service staff (or designated data entry staff) in the shelters. During client interviews, information is written on paper forms for later data entry. The data entry system has continued to operate as designed, with only minor changes. Since April 1989, new client entries are generally done only at assessment shelters.<sup>2</sup> Record updates are done at the clients' shelter location. Lodging history is preserved and includes dates of admission and authorized discharge. For the period encompassed by this study, if a client still required service at the end of one authorization period, a new authorization period was added to the client's lodging history. If a client left before the end of the authorization period, the "end date" is the date the client left. Readmission and subsequent discharge dates were thus similarly maintained.

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<sup>2</sup> A few exceptions exist, such as clients referred to the system by a hospital and identified as requiring specialized services (e.g., wheelchair accessibility); these clients are entered into the system by administrative staff.

*New York City Family Shelter System.* The New York City Family Shelter System database, the Homeless Emergency Referral System (HOMES), was designed primarily as a reservation system. Its secondary function is to provide information for case management. Since HOMES' inception, its data entry has been done through a centralized data entry unit. All information is transmitted by telephone or fax to this unit, where entries are made. This centralization has provided a higher level of quality control than is available for SCIMS. Family clients and household members must report identifiers (name, date of birth, Social Security number, and citizenship) and other demographic information (e.g., race, marital status). Additional information tracked in HOMES includes pregnancy and newborn status, referral sources, reasons for homelessness, last known address, income support (welfare) status, and types of permanent housing placements. The database tracks entry and exit from the system by recording dates of admission, discharge, and subsequent readmission and discharge.

Homeless families enter the New York City shelter system through either Income Support (IS) Centers or Emergency Assistance Units (EAUs). Families must prove their legal or biological relationships. To be considered a family, cohabiting adults must be legally married or be on the same IS grant; a marriage certificate or proof of a shared IS grant must be provided to the EAU or IS staff. In the case of children, parents must provide documentation that the children are their own. Information can be compared with entries in the New York State public assistance database<sup>3</sup> if the family is recorded in that system. If adults are not legally married and no children or pregnancy is involved, they are referred to the Adult Shelter System. Every woman who states that she is pregnant is given a urine test to substantiate the pregnancy before placement. Only families or pregnant women are allowed into the Family Shelter System.

*Philadelphia Office of Services to the Homeless and Adults.* Philadelphia has a centrally administered shelter system that includes a single portal of entry for all adults and families requesting shelter between 7:30 a.m. and 4:30 p.m. Both families and single adults seeking shelter during these hours must go to the Office of Services to the Homeless and Adults (OSHA) office in downtown Philadelphia, which coordinates shelter placements. To be seen by caseworkers at OSHA, a client must

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<sup>3</sup> A state-owned and state-maintained database, the Welfare Management System, is used by the IS program. The database maintains records on all persons applying for and receiving public assistance in New York State.

present two forms of identification, which together must include a Social Security number and a Philadelphia street address. A client who presents appropriate identification is assigned to a caseworker for an intake interview. A client who lacks verification of a Social Security number is directed to a nearby Social Security Administration office to obtain a temporary identification card. A client who has been in Philadelphia for less than six weeks is referred to the Travelers Aid Society.

Intake interviews are designed to assess client needs, record client information, and, whenever possible, help clients avoid shelter placement. At intake, caseworkers record client information directly in the Client Information System (CIS). This information includes identifiers (name, date of birth, Social Security number, and Medicaid number), initial intake date, demographics, marital and family status, reasons for homelessness, last two addresses, characteristics of prior housing arrangement, emergency contact persons, names and ages of accompanying children, medical problems, reasons for restricted access to shelter (if any), case close date, and subsequent and current intake dates. A maximum of two readmission dates can be recorded in CIS; the most recent readmission overwrites the last when a client has had more than two readmissions.

If a shelter assignment is deemed necessary at intake, caseworkers call shelter facilities to locate beds. In general, the Philadelphia shelter system has two types of beds: short term and long term. A short-term bed is assigned and renewed on a day-by-day basis; a long-term bed is assigned and renewed monthly. Depending on the client's needs and what is available, matches between client and facility are attempted (Culhane 1993). However, because long-term beds are usually scarce, most clients must first cycle through a series of short-term beds. Short-term and long-term beds are reimbursed on the same per diem basis. A client's status can be determined by the length of time indicated on the Purchase of Services (POS) form obtained at intake.

Two shelters, one for single men and one for single women and families, are designated as the after-hours intake sites and offer both initial intake and short-term shelter placements. Both sites collect identifying information from clients and require identification for admission. The data are later entered at the central intake site (OSHA). To obtain a long-term shelter placement, after-hours clients must go through the more thorough intake process with caseworkers at Adult Services. Families and single women are not admitted to a short-term bed on the next night if

they have not gone through the intake process at OSHA during the day. Single men, however, may access short-term beds through the after-hours intake site indefinitely, thus avoiding an intake interview at OSHA.

Because this study was designed to calculate rates of admission and readmission to the shelter system—not to analyze patterns of stay—discharge or case closure dates were not part of this analysis. Although it is possible to derive discharge dates that accurately indicate the day a client left New York City shelters, in Philadelphia case closure dates are recorded either at the end of the client's authorization period (the client may have left before that date) or after 45 days without follow-up contact by a case manager. To correct for this problem and the limited readmission fields in the Philadelphia case registry, a separate shelter tracking database was created in Philadelphia on July 1, 1991. Those data were not analyzed for this study, although the authors are planning future longitudinal data analyses to compare stay patterns in New York City and Philadelphia.

### *Unduplication and aggregation procedures*

Because the databases were designed to create one record per client, they theoretically should not include duplicate cases. Identification requirements for families and singles in the Philadelphia shelter system and for families in the New York City shelter system provide some assurance that duplication is minimized. However, given the potential for data entry errors and the use of nicknames, an unduplication procedure was undertaken at both sites. Unfortunately, the procedure may not detect the use of pseudonyms or false identification, so some duplication may remain.

In Philadelphia, automated sorting was employed to identify matches by last name and first initial. All matches were then searched manually by first name, birth date, and Social Security number. Any match of last name with Social Security number (seven of nine numbers) or with first name (variants included) *and* birth date (month and year) was noted as a duplicate case. An overall duplication rate of 1.2 percent was found, most of which appeared to result from keystroke errors in the entry of Social Security numbers. For this study, only the record with the earliest initial intake date was retained among the duplicate records.

In New York City, both the Family Shelter System and the Adult Shelter System have identified duplicate entries through Social Security number, name, and birth date matches.<sup>4</sup> The Family Shelter System cross-checks all entries at the time of data entry against Social Security numbers, the first five letters of the last name plus the first four letters of the first name, and the year and month of birth. Possible duplicate entries appear on the monitor and are checked before the intake process continues. In addition, all records are verified for duplication each month, and a monthly overlay of Social Security numbers from the Welfare Management System database identifies any children or adults who are included in the database under a different name. Because the Adult Shelter System, unlike the Family Shelter System, requires no personal identification for admission, it had a greater problem with multiple records caused by aliases and misspellings. A built-in safeguard prevents two entries from being made with the same Social Security number. Periodic matches produce suspect lists of duplicates for a final manual determination of whether the records are duplicates. Records of people suspected of using aliases are matched by all existing personal identification fields, including mother's maiden name.

The Philadelphia case registry was initiated on December 21, 1989, for singles and families. The New York City databases were initiated in three stages: First on line were women (December 12, 1985), followed by men (September 8, 1986), and finally the Family Shelter System (April 1, 1987). However, the Family Shelter System, unlike the Adult Shelter System, not only included known origination dates for the system but back-entered lodging information for all families active in the system when the database went on line.

For this study, two years of admissions data were selected: June 1, 1990, through May 31, 1992. To make the data on first admissions roughly comparable between the two sites, the New York City databases were reset to a January 1, 1990, start date (by disregarding any admission or discharge activity before that date). First admission counts by month were created from both databases by aggregating client records by initial intake date over the selected period. Readmission counts by month were similarly created by aggregating client records by readmission dates. In New York City, discrete episodes of shelter use were obtained by consolidating individual uses of the facilities into

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<sup>4</sup> Either an eight- or nine-digit Social Security number match or a match with the first five letters of the last name, the first four letters of the first name, and the birth month and year identify duplications.

stays. The end of a stay is defined by at least one day out of the shelter system before the start of a subsequent stay; one stay may include the use of multiple shelter facilities. In Philadelphia, an episode of shelter use ends (case closure) only when the client has been out of the shelter system for 45 days, and a maximum of two readmissions can be recorded per client. Both these factors are likely to result in the Philadelphia database showing fewer readmissions than that of New York City.

In addition to two years of admission and readmission counts by month, an unduplicated annual count for the second year of the study period (June 1, 1991, to May 31, 1992) was calculated for Philadelphia, and yearly unduplicated counts by calendar year (from 1988 to 1992) were calculated for New York City. The unduplicated annual count in Philadelphia was determined by adding all first admissions in the second year of the study period (year 2) to the number of people in the database having both a first admission before year 2 and any readmission in year 2. (For this purpose, the presence of a readmission in year 2 in the Philadelphia data was accurately determined because the Philadelphia data were current only to the end of the selected study period—that is, before they could be overwritten by later readmissions.) The unduplicated count for New York City was determined by adding all persons with any shelter service record for the 1992 calendar year. The family person count by month in New York City was derived by multiplying the number of families each month by the average family size each month.

The likelihood that a person with a first admission in year 1 would be readmitted in year 2 was also calculated for both cities. Annual rates of turnover were calculated by dividing the unduplicated client counts in year 2 (or 1992 for New York City) by the average daily census (New York City) or the end-of-year bed capacity (Philadelphia) of the systems. Finally, unduplicated counts over three and five years of the New York City data and three years of the Philadelphia data were calculated, and select race/ethnicity- and age-adjusted rates were determined by dividing unduplicated counts by population data from the 1990 census (U.S. Bureau of the Census 1991).

One final caveat should be noted regarding the data. The Philadelphia CIS does not reliably distinguish between persons receiving shelter and those requesting but not receiving shelter. In part, this is because the more recently established tracking system was intended to track shelter assignment and usage. Therefore, while the Philadelphia data accurately reflect the number of people requesting shelter, approximately 5 percent of

those requesting shelter every month do not receive it but are still included in this study's results. The New York City data do reliably distinguish between those receiving and those not receiving shelter, and only those receiving shelter are included in the data reported here.

## Results

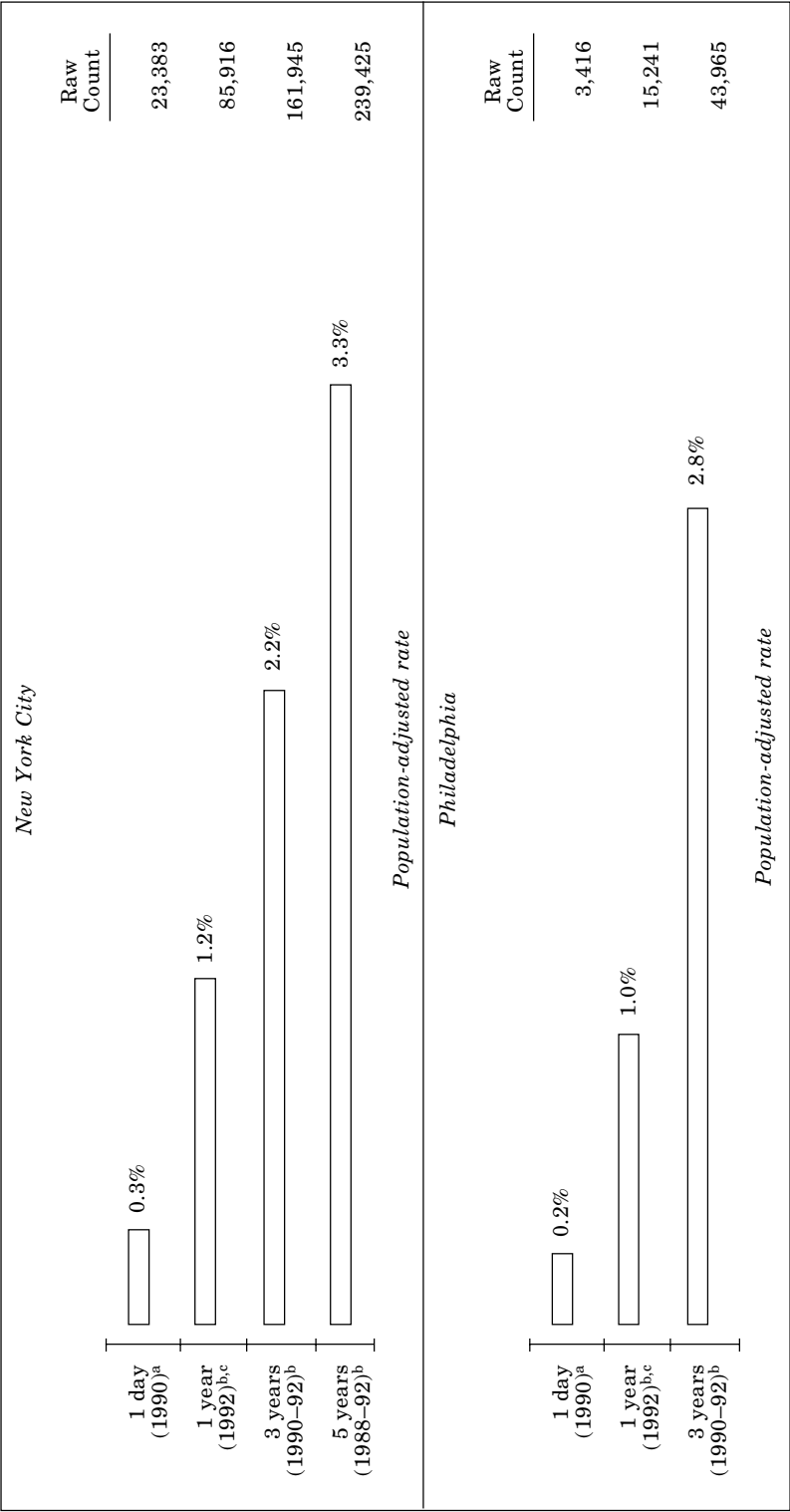
### *Unduplicated counts and population-adjusted rates*

As shown in figure 1, nearly 1 percent of Philadelphia's population and more than 1 percent of New York City's population used the public shelter system in 1992. Nearly 3 percent of Philadelphia's population requested services from the city shelter system from 1990 to 1992, and more than 2 percent of New York City's population received shelter over the same period. Over five years, 3.27 percent of New York City's population spent time in a public shelter. Even though data before 1988 are incomplete, 4.37 percent of New York City's population has been registered in a public shelter since the inception of the databases. Given that these data exclude private, untracked facilities (15 percent of the bed total in Philadelphia and 18 percent in New York City [table 1]), these data presumably reflect an undercount of shelter users, although the data remain qualified by clients' potential use of pseudonyms and false identification.

Although both cities have previously reported point-prevalence rates for people in shelters (between 0.22 and 0.3 percent; see figure 1) that are within the point-prevalence range reported nationally, both cities have annual prevalence rates exceeding any previously published estimate. Roughly three and a half to four and a half times as many people were registered as shelter users in Philadelphia and New York City over the course of a year as were enumerated at a single point in time by two recent studies (Burt 1992; U.S. Department of Commerce 1991).

Three-year and five-year data adjusted for selected race/ethnicity and age groups are presented in table 2 (five years of data are not yet available for Philadelphia). The data demonstrate the disproportionate impact of homelessness on minorities (particularly African Americans) and children, as well as the similar risk for homelessness by subgroup in the two cities. In both cities, African Americans are more than twice as likely to become homeless as the general population. In a three-year period, African Americans are 15 times more likely than whites in Philadelphia and 20 times more likely than whites in New

Figure 1. Unduplicated Shelter Population Counts and Admission Rates in Philadelphia and New York City, by Varying Sources and Time Frames, in Persons



<sup>a</sup> U.S. Department of Commerce (1991), Census Bureau public and private shelters.  
<sup>b</sup> Present authors, rates use 1990 population.  
<sup>c</sup> Philadelphia data are for 6/1/91-5/31/92 and include all persons requesting shelter. New York City data are for calendar year 1992 and include only persons sheltered.



Table 2. Unduplicated, Population-Adjusted Shelter Utilization Rates in Philadelphia and New York City

	Philadelphia 3 years (1990–92)		New York City 3 years (1990–92)		New York City 5 years (1988–92)	
	Raw Number <sup>a</sup>	Pop.-Adjusted Percent	Raw Number <sup>a,b</sup>	Pop.-Adjusted Percent	Raw Number <sup>a,b</sup>	Pop.-Adjusted Percent
Total persons	43,965	2.77	161,945	2.21	239,425	3.27
Black (not of Hispanic origin)	38,557	6.18	103,995	5.63	147,469	7.98
White (not of Hispanic origin)	3,473	0.42	8,846	0.28	14,663	0.46
Hispanic	1,495	1.68	44,001	2.47	63,589	3.57
Other	440	0.94	5,102	0.96	13,702	2.59
Total children (< 18)	15,053	3.97	55,114	3.27	77,782	4.61
Black (not of Hispanic origin)	14,270	7.88	34,887	5.76	47,353	7.82
White (not of Hispanic origin)	467	0.30	1,274	0.26	2,086	0.43
Hispanic	256	0.77	17,454	3.20	24,399	4.48
Other	60	0.57	1,499	3.28	3,944	8.64
Poverty <sup>c</sup>						
Persons	43,965	14.00	161,945	11.69	239,425	17.29
Families	6,402	10.50	31,315	10.97	44,194	15.48
Children	15,053	13.60	55,114	11.24	77,782	15.86

<sup>a</sup> The number of children by race/ethnicity was interpolated by distributing the total number of children across racial/ethnic groups according to the distribution of family households by race/ethnicity (assumes family sizes are equal across groups). Philadelphia includes all persons requesting shelter, and New York City includes only persons receiving shelter.

<sup>b</sup> The number of homeless children in New York City was calculated by multiplying the number of families by race by the average family size (1.760), derived from a random sample of daily census reports from 1990 to 1992.

<sup>c</sup> Poverty population figures are based on 1990 data (U.S. Department of Commerce 1991). The poverty rate is based on a single-point-in-time measure and does not capture the number of people experiencing poverty longitudinally; therefore, the proportion reported as experiencing homelessness over time will be inflated.

York City to become homeless. In both cities, about 6 percent of the African-American population has been registered in the shelter system in the past three years, and the number reaches almost 8 percent in New York City over five years. Children are also more likely to become homeless than the general population. Indeed, African-American children represent the most vulnerable of the subpopulations listed here; nearly 8 percent of both cities' African-American children have used the public shelter system (over three years in Philadelphia and five years in New York City). Poverty-adjusted rates were also calculated, although it should be noted that the poverty rate is measured at a single point in time and will therefore overestimate the proportion of poor who become homeless. Thus, assuming stability in the poverty population, between 11 and 14 percent of the poor in both cities have used the shelters in the past three years, with comparable proportions among poor families and poor children. The similarity in rates reported for both cities, across demographic groups, is noteworthy.

In table 3 is presented the distribution of client demographic characteristics at a single point in time and over three years, showing how turnover affects the proportionate representation of subpopulations. Of particular note is the reduction in the proportion of sheltered households among families when viewed over time, suggesting that the higher turnover among single adults leads to their lower proportionate representation at a given point in time. Likewise, the proportion of clients who are children in both cities decreases to approximately one-third of the total when viewed over three years, because families turn over at a lower rate than single adults.

### *Admission patterns*

Although the above data are suggestive of the significant turnover in the shelter system, those patterns can be more clearly shown by examining monthly admissions to shelters. In table 4 are shown the average number of persons admitted monthly to the New York City and Philadelphia public shelter systems over the two-year study period and the average daily census in the second year of the study period. As can be seen by comparing the total admissions with total average daily census, in both cities approximately half the beds turn over, on average, every month. In Philadelphia nearly half the beds are emptied and filled again every month with people *new* to the shelter system.

**Table 3. Characteristics of Shelter Users, Single Point in Time versus Three-Year Counts, Philadelphia and New York City**

	Philadelphia <sup>a</sup>		New York City <sup>b</sup>	
	Point in Time	3 Years	Point in Time	3 Years
Household type (%)				
Single	66	77	54	67
Families	34	23	46	33
Race of household head (%)				
Black	91	88	65	65
White	6	8	5	8
Hispanic	3	3	29	24
Other	0	1	1	3
Children (% of total)	46	35	41	34
Single adults (%)				
Male	69	77	83	82
Female	31	23	17	18

<sup>a</sup> Philadelphia's single point in time was December 21, 1993. The count includes all active cases; thus, people who may have left shelter but have not been out for the 45-day cutoff period are included.

<sup>b</sup> New York City's point in time was January 9, 1993.

**Table 4. Average Monthly Shelter Admissions for Philadelphia and New York City, in Persons, June 1990 through May 1992**

	First Admissions		Readmissions		Total Admissions		Average Daily Census 1992
	Mean	SD	Mean	SD	Mean	SD	
Philadelphia							
Singles	592	90	279	55	871	110	1,249
Families	572	109	218	83	790	134	1,241
Total	1,164	172	497	128	1,661	214	2,490
New York City							
Singles	1,401	242	5,686	369	7,086	500	7,286
Families	1,796	493	3,719	612	5,515	496	16,466
Total	3,197	690	9,405	666	12,601	698	23,752

*Note:* Subtotals may not total because of rounding.

Because the two sites have different definitions of readmission, readmission counts are not comparable between the cities. New York City's data reveal a much higher proportion of the total admissions considered readmissions because, for the purposes of this study, an episode ends with one day out of the shelter system and another episode may begin the next day. For this

reason, the New York City data illustrate how frequently people leave and reenter the shelter system, with three times as many readmissions as first admissions. Philadelphia, on the other hand, while potentially experiencing the same phenomenon, shows a much lower monthly average readmission count. The count is lower because Philadelphia counts readmissions only after the client spends 45 consecutive days out of the shelter system and because Philadelphia's data code for a maximum of two readmissions. Provisionally, the New York City figures could be considered a better estimate of the administrative burden of turnover to providers and clients because they better capture the frequency of exit and reentry. However, the Philadelphia figures may be a more accurate measure of the number of episodes of homelessness served by providers, since one day out of the system is not considered a true exit from homelessness.

Until now, data have been reported in persons, not household units. However, because people entering the shelter system are typically treated as households, for policy planning and management purposes it is often more useful to examine shelter utilization counts by household. For example, caseloads for intake workers and social workers are likely to be determined by household rather than person units. The differences that result when the two-year total admission counts are calculated by persons and households in Philadelphia and New York City are presented in table 5 (recall that "total admissions" combines first admissions and readmissions and therefore is not an unduplicated count). The resulting difference is primarily a consequence of children included as members of family households not being counted as separate persons, which reveals that, in both sites, approximately one-third of the total admissions in persons are accounted for by children and other family members (although, again, because of the different definitions of readmission, the

*Table 5. Total Admissions to Shelters in Philadelphia and New York City, June 1990 to May 1992 (in Persons and Households)*

City	Persons	Households
Philadelphia		
Singles	20,910	20,130
Families	18,969	5,701
Total	39,879	25,831
New York City		
Singles	170,074	170,074
Families	132,358	42,572
Total	302,432	212,646

total admission rates for Philadelphia and New York City are noncomparable). For Philadelphia singles, the number of households is slightly lower than the number of persons because married couples without children were previously coded as two single adult households in the database, while in New York City they were treated as members of one family household.

In figures 2 and 3, household units are used to show the trend of monthly admissions and readmissions for families and single adult households for the two-year study period. In general, and disregarding any potential effects of policy changes on admission rates, the trend for first admissions would be predicted to decline and the trend for readmissions to increase over time as the persons at risk for homelessness experience their first episode and are counted as readmissions on subsequent episodes. However, if the pool of potential homeless households replenishes or even increases over time, then this downward trend among first admissions would be attenuated and possibly reversed.

Time series regression analyses were conducted on first admission and readmission rates for singles and families in both cities over the two-year study period, adjusting for seasonal variation. Results reveal that first admission rates for families in both cities show a significant downward trend (Philadelphia, adjusted  $R^2 = 0.23$ ,  $F = 7.87$ ,  $p < 0.02$ ,  $\beta = -0.513$ ; New York City, adjusted  $R^2 = 0.46$ ,  $F = 20.66$ ,  $p < 0.001$ ,  $\beta = -0.695$ ). Thus, the pool of families experiencing a first-time shelter stay in Philadelphia and New York City has been declining. For singles, however, only New York City had a significant downward trend of first admissions (adjusted  $R^2 = 0.70$ ,  $F = 54.01$ ,  $p < 0.0001$ ,  $\beta = -0.843$ ), suggesting either that Philadelphia's pool of single adults experiencing a first shelter admission has been replenishing over time or that there simply is no discernible trend among single admissions in Philadelphia. Results for the analyses of readmission rates similarly reveal the predicted increasing trend for families in both cities (Philadelphia, adjusted  $R^2 = 0.57$ ,  $F = 31.63$ ,  $p < 0.0001$ ,  $\beta = 0.768$ ; New York City, adjusted  $R^2 = 0.66$ ,  $F = 45.58$ ,  $p < 0.0001$ ,  $\beta = 0.821$ ). Because of definitional differences, the trends for family readmissions are not comparable for the two cities; however, both demonstrate the predicted increasing proportion of admissions accounted for by readmissions over time as families with first admissions reappear in the system. For single adults, however, only Philadelphia had the predicted increasing rate of readmissions (adjusted  $R^2 = 0.60$ ,  $F = 35.02$ ,  $p < 0.0001$ ,  $\beta = 0.784$ ); in New York City, single adults with previous shelter experience had a nonsignificant decreasing rate of readmission over the study period (adjusted  $R^2 = 0.03$ ,  $F = 1.63$ ,  $p = 0.2145$ ,  $\beta = -0.263$ ).

Figure 2. First Admission and Readmission Counts for Singles and Families  
(in Households) for Philadelphia, June 1990 to May 1992

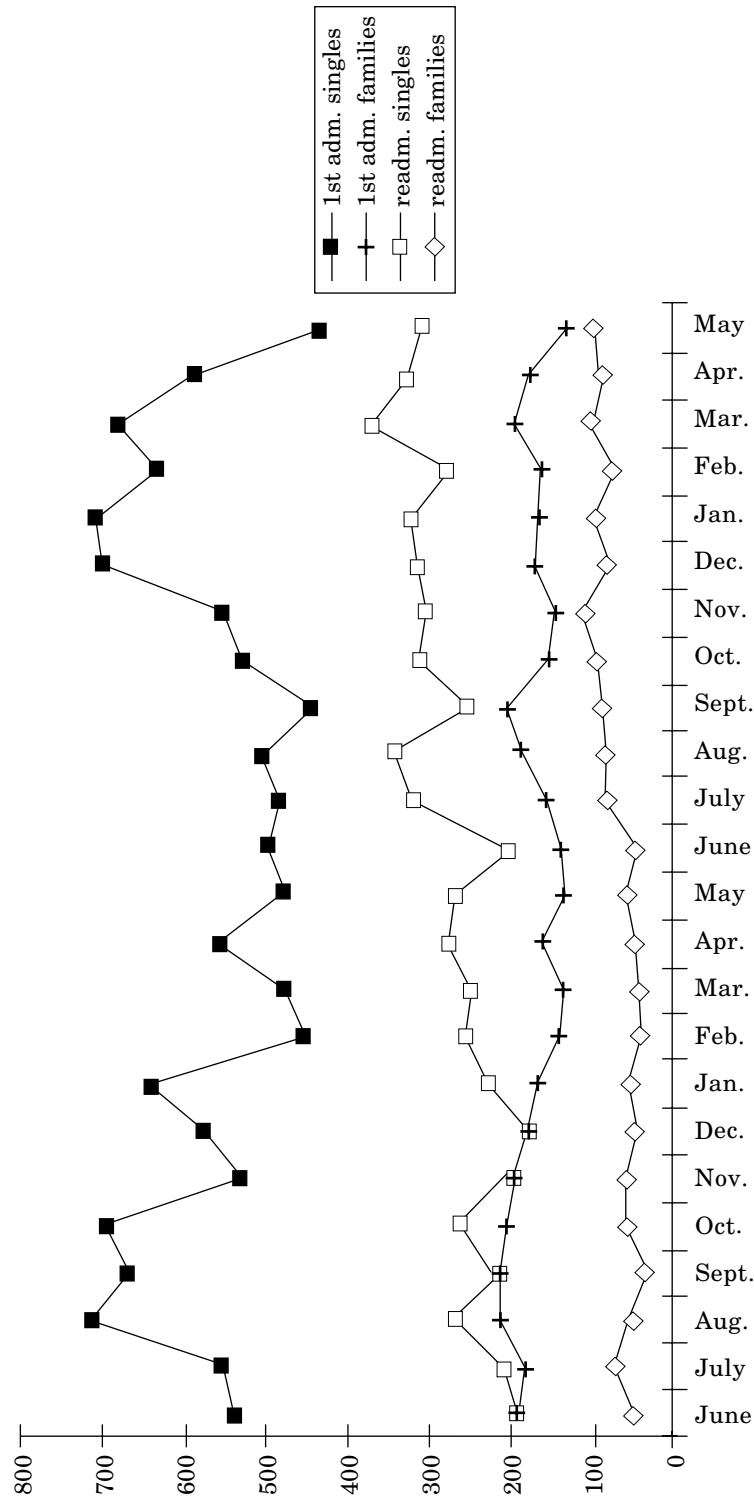
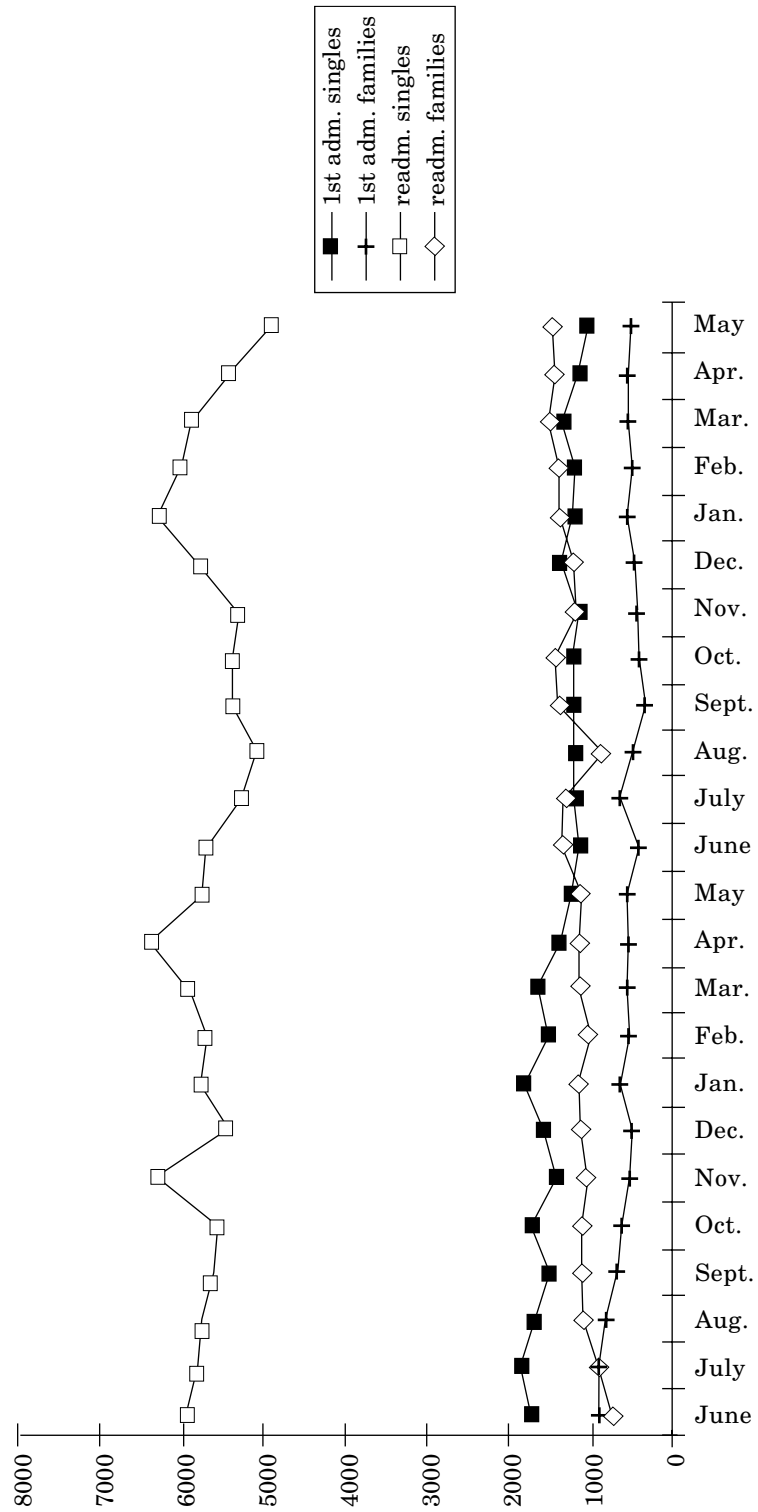


Figure 3. First Admission and Readmission Counts for Singles and Families  
(in Households) for New York City, June 1990 to May 1992



Because New York City has five complete years of admission data, unduplicated first admission and system user counts by year for the past five years were also computed (table 6).

*Table 6. Unduplicated First Admissions and System Users in New York City, in Households (by Calendar Year)*

	1988	1989	1990	1991	1992
First admissions <sup>a</sup>					
Singles	42,658	20,989	14,326	12,862	11,337
Families	13,827	7,106	7,925	7,834	7,830
Total households	56,485	28,095	22,251	20,696	19,167
System users <sup>b</sup>					
Singles	42,658	42,822	35,334	32,508	29,259
Families	13,827	14,144	14,957	15,205	18,220
Total households	56,485	56,966	50,291	47,713	47,479

<sup>a</sup> Represents clients' first stay in the shelter system. Shelter stay history is traced as if no client entered the system before January 1, 1988. Only the first stay during the period is counted.

<sup>b</sup> Represents annual users of shelter system. Clients may be represented in multiple years.

The data on first admissions show much higher counts for 1988 than for the other years because the database was reset to a January 1, 1988, start date. Thus, people whose first admission was before 1988 and who had a readmission in 1988 are counted in 1988 as a first admission, inflating the number of first admissions. While the number of first admissions appears relatively stable for families across the remaining four years (aggregated by year rather than month), the first admissions for single adults again show a significant downward trend. The unduplicated count of system users by year similarly shows a substantial decline in the number of homeless singles who have used the New York City shelter system, dropping 31 percent from 1988 to 1992. In contrast, the unduplicated annual number of families has been steadily rising across the five-year period, increasing 32 percent from 1988 to 1992. Because families include more than one person, the total number of system users by year has been increasing.

### *Annual turnover and readmission rates*

If annual turnover is defined as the unduplicated count of persons served in a year divided by the average daily census in that year, Philadelphia had an annual rate of turnover of 6.12 in 1992 (15,241/2,490), while New York City had an annual rate of turn-



over of 3.62 (85,916/23,752).<sup>5</sup> Thus, for every person in shelter on a given night of 1992, more than six people in Philadelphia and nearly four people in New York City used the shelter system at some time during the year. Three-year turnover rates could be calculated similarly, dividing the unduplicated three-year count by the average daily census from 1992. In Philadelphia the three-year turnover rate is 17.66, and in New York City the three-year turnover rate is 6.82.

While shelter stay patterns were not the focus of study here, the likelihood of a household experiencing an admission in both years of the data was examined as a preliminary to more extensive longitudinal analyses of stay patterns by the authors. A readmission rate was therefore calculated for households with a first admission in year 1 (June 1, 1990, to May 31, 1991) in the two-year study period and a readmission in year 2 (June 1, 1991, to May 31, 1992). In Philadelphia 11.6 percent of the households first admitted in year 1 had another admission in year 2, which compares with the overall readmission rate (readmission could occur in the same year) of 27 percent. In the aggregate (without adjusting each client to his or her own baseline admission date), most households with a readmission in Philadelphia are likely to experience that readmission in the same year as the first admission, and a much smaller proportion of households (less than half) experience a readmission in the year following the first admission.

The corresponding measure in New York City was calculated for family households, revealing that 27 percent of the families with a first admission in year 1 had a readmission in year 2, while the overall readmission rate (readmission could be in the same year as first admission) for families was 65 percent. Hence, in New York City as in Philadelphia, fewer than half the families with a readmission will have a readmission in the year following their first admission, although families in New York City are more than twice as likely as those in Philadelphia to enter a shelter in the year following their first admission (again, note that

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<sup>5</sup> The Adult Shelter System in New York City has one large facility that shelters persons who tend to have long stays. On an average night it accommodates approximately 1,000 persons on long-term stays. The stay patterns of these clients will skew turnover rates and systemwide average lengths of stay. The population at this facility comprises primarily older men. The actual turnover rate in Philadelphia is likely to be closer to New York City's than this comparison indicates because the numerator is inflated (approximately 5 percent) by persons requesting but not receiving shelter, and the denominator is a proxy for an average daily census taken from a single-night count in the summer (and therefore is lower than it would be if it accounted for the higher numbers sheltered in winter months).

definitional differences make readmission data noncomparable between the two cities). In general, however, shelter use in consecutive years appears to be the exception, not the rule, in both cities.

## Discussion

Although social scientists have repeatedly proved them wrong, advocates for the homeless appear to have been correct in insisting that homelessness affects a much larger pool of persons than has been documented by cross-sectional research. Indeed, more people have stayed in New York City and Philadelphia shelters in the past several years than have ever been enumerated on a single night in the United States. While public shelters in Philadelphia and New York City have average daily utilization rates of 0.16 and 0.31 percent of the population, respectively, on an annual basis the rates approach 1 percent in Philadelphia and exceed 1 percent in New York City. These annual homelessness rates are three times greater than rates previously documented for either city by point-prevalence studies (Burt 1992; U.S. Department of Commerce 1991). Those rates increase for multiple years, to nearly 3 percent in three years in Philadelphia and to 3.3 percent in five years in New York City—consistent with the five-year estimate from the national telephone survey by Link et al. (1993).<sup>6</sup>

The critical factor that cross-sectional enumerations cannot capture but that is clearly demonstrated in this study is the

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<sup>6</sup> It is interesting to note that despite significant differences in the average daily census between New York City and Philadelphia, the cities have comparable one- and three-year rates of shelter utilization. Thus, the different rates of turnover probably reflect differences in local shelter policies (which in turn influence admission and stay patterns) as much as variations in local conditions that produce homelessness. Several policy differences between the two cities might help explain the differences in turnover. In 1988 Philadelphia had a public shelter system similar in size (32 beds per 10,000 population) to the New York City public shelter system in 1992. But in response to city budget cuts, the number of public shelter beds in Philadelphia declined by nearly half between 1988 and 1990, from 5,100 to 2,800. To continue serving even roughly the same number of clients annually, shelter stays would have had to have declined proportionately to the bed decline. Philadelphia achieved this shortened average length of stay by significantly qualifying its previous commitment to a right to shelter (renegotiated through a consent decree) and by establishing much more restrictive shelter policies, including the creation of a copayment and savings requirement and stricter enforcement of behavioral standards, such as mandated participation in mental health and substance abuse treatment programs (see Culhane 1992). In contrast, the New York City shelter system has generally continued

magnitude of turnover in the sheltered population. It is this high rate of turnover that accounts for much higher rates of homelessness over time than at a single point in time and that demonstrates a substantially higher risk for homelessness in the community.

Because this study does not include persons in privately funded shelters or on the street—the Census Bureau enumerated the point prevalence of street homelessness at 10,447 in New York City and 1,069 in Philadelphia in 1990 (U.S. Department of Commerce 1991)—the findings underestimate the true prevalence of homelessness in both cities. Moreover, because this study is limited to two cities, and given the wide intercity variability found in previous research (Burt 1992; U.S. Department of Commerce 1991), the shelter utilization rates identified here cannot be generalized to other cities. However, recent data from St. Paul, Minnesota (Chase 1993), and from the state of Rhode Island (Rhode Island Emergency Food and Shelter Board 1992), as well as unpublished data from other municipalities (see comment by Burt, this issue), confirm that similar and even higher rates of turnover have been found elsewhere. Thus, convergent with other sources of evidence, this study demonstrates that homelessness is a far more common experience among poor people, particularly African Americans and their children (at least in these two cities), than has been evidenced by point-prevalence enumerations. These findings suggest that future research and policy should consider the implications of turnover when estimating the risk for homelessness.

Regarding future research directions, the turnover identified here suggests that our conceptions of the relative proportion of subpopulations among the homeless, informed as they are by a large body of cross-sectional research, may now be open to reassessment. For example, there is evidence that people with mental disabilities or substance abuse problems are homeless for

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to provide some level of shelter even to persons who refuse to participate in treatment programs. There are no limitations on how long clients may stay or how frequently they may use the system. Single adults are provided shelter in a general or specialized shelter (e.g., veterans' shelters, short-term substance abuse treatment, employment shelters). Specialized shelters have various restrictions—such as savings requirements, length-of-stay limitations, and program participation requirements—that general shelters do not. However, clients can move between specialized and general shelters as availability and readiness allow. The Family Shelter System has also established standards for shelter conditions that can include a private room with private bath and kitchen facilities. These standards and the lack of stay restrictions have likely led to a greater daily census and longer lengths of stay in the Family Shelter System.

longer periods than others and so turn over at a lower rate (see Dennis et al. 1993), which would significantly inflate their proportionate representation among the population when examined at a single point in time. Correspondingly, employed and recently unemployed people—the “ordinary working Americans” hypothesized as nonrepresentative of the homeless by Kondratas (1991)—may turn over at a higher rate, meaning that their proportionate representation has been significantly underestimated in cross-sectional research.

Further longitudinal analyses of shelter stay patterns are needed to clarify the personal characteristics associated with varying lengths of stay, the probability of multiple admissions, and the time between admissions. Event history or survival analyses can be used to develop profiles of client characteristics associated with various stay histories, enabling planners to target services designed to reduce lengthy shelter stays and the likelihood of readmission. Longitudinal analyses of stay patterns can also be used to examine the costs of various stay patterns and how stays are influenced by various types of shelter facilities. In addition, interrupted time series analysis can be used to examine how policy changes affect stay patterns and admission rates. The tracking databases described in this study are ideal for these purposes, and given the information they would provide researchers and planners, their replication in other sites should be considered.

Registry and tracking databases are useful not only for shelter system-specific analyses; their potential for answering other important questions regarding subpopulations among the homeless expands substantially if they are integrated with other service system databases. For example, the client identifiers from these databases can be matched with identifiers in welfare, mental health, housing, AIDS, and other service system databases, allowing researchers to identify the eligibility and service utilization patterns that predict homelessness and to assess the impact of homelessness on those service systems. Likewise, the prior address information reported by those who enter the shelter system can be used to calculate admission rates by neighborhood or census tract and to identify the factors from other geographic databases (census, housing, health statistics, crime, etc.) that correspond to that distribution. Thus, geographic areas with high homelessness rates or with socioeconomic characteristics that predict high homelessness rates can be identified for the targeting of homelessness prevention and residential stabilization interventions, and the efficacy of these interventions can be measured by assessing changes in shelter admission rates.

From a policy perspective, the results of this study provide a basis for questioning the limited emphasis of reform proposals that argue for reducing homelessness primarily through the creation of transitional housing and other stabilization programs that target the chronically homeless (HUD and District of Columbia 1993; New York City Mayoral Commission on the Homeless 1992). In both Philadelphia and New York City, most people who use shelters do so on a short-term or intermittent basis and are therefore not chronically homeless. Forcing such persons into transitional housing in order to access housing support and social services is likely to lead to many unintended consequences while doing little to reduce homelessness. Assuming that reduced utilization of the emergency housing system is a goal, one must presumably decrease lengths of stay in and admissions to that system. By linking more services to the shelter and transitional housing system, a municipality risks increasing both lengths of stay and admissions, either of which alone would significantly increase the daily demand for emergency housing. Anecdotal evidence suggests that some families already enter shelter to receive priority placement on Section 8 or public housing waiting lists (Dugger 1991). Similarly, requiring that people be homeless to be eligible for transitional housing or stabilization services is likely to tap latent demand for such services and could lead to the dumping of clients on the shelter system by other agencies. Indeed, converting the shelter system into a more service-intensive system risks institutionalizing a costly and potentially substandard secondary public health, welfare, and housing system while failing to address directly the deficiencies in the existing systems that presumably contribute to shelter utilization. Finally, given the volume of shelter users identified in this study, such a system would also require significant new resources to site new facilities and to develop the administrative capacity necessary to monitor provider performance and contain system costs.

An alternative policy, while recognizing the need for transitional housing for the long-term homeless, might seek to support people with short-term or intermittent housing emergencies in maintaining and stabilizing their residential options in the community, rather than provide incentives for entering a separate institution of residential care. As Hopper (1990, 444) has observed, the dominant adaptation of the poor and unemployed to displacement and housing instability historically has been through the maintenance of “makeshift” arrangements of “custom and kinship,” with family members “bearing the brunt of makeshift shelter.” Hopper therefore asks, “Can [we] mute the damage and enhance the supportive capacity of such networks,

and thus avoid the ever more costly mushrooming of the shelter system?”

A community-based strategy could be envisioned that would have the goal of reducing shelter utilization by rebuilding (or creating) the community and social support infrastructure that would enable people to stay in their own homes when possible or that would attempt to resettle them as soon as possible. Such a strategy could be targeted geographically (based on the distribution of the prior addresses of people currently entering the shelter system) or demographically (based on household risk factors for homelessness). Intervention programs might include the provision of community-based case management, health, mental health, substance abuse, and other social services (including crisis intervention, respite services, home care, and residential treatment programs); time-limited and permanent housing subsidies; benefits counseling; employment training and placement; and other targeted economic and community development programs. By placing those programs outside the shelter system and under the authority of existing health, housing, and human service departments, such a policy would have the advantages of addressing the more proximal community conditions leading to homelessness and of addressing the gaps in the existing systems that need to be bridged, rather than duplicating those systems in shelters. It would also reduce some of the perceived incentives for shelter admissions and lengthy shelter stays that would likely come with an enhanced services emerging housing model. The present “shelter diversion” initiative under way in New York City—in which most families are assessed before or soon after shelter admission to determine whether they can be diverted from shelter with a time-limited housing subsidy or other intervention—is one example of movement in this direction. Other homelessness prevention program models have been described (Jahiel 1992; Lindblom 1991; U.S. Department of Health and Human Services 1991).

In conclusion, future policy should reconsider the scope of the homelessness problem and the role of turnover when conceptualizing appropriate interventions. In particular, this study’s findings suggest the potential benefits of a prevention-oriented approach to reducing homelessness. Programs that attempt to divert people from shelters or to reduce unnecessarily long shelter stays are integral to such an approach, as are transitional housing programs that help long-term homeless persons reconnect with community housing and services. However, such programs may have little effect without more broad-based social welfare policies that increase opportunities for and access to

affordable housing, jobs, income supports, social services, and quality health care.

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### *References*

- Appelbaum, Richard P. 1987. *Counting the Homeless*. Chicago: Center for Urban Research and Policy Studies, University of Chicago.
- Barrett, Diane F., Irwin Anolik, and Florence H. Abramson. 1992. The 1990 Census Shelter and Street Night Enumeration. Paper read at the annual meeting of the American Statistical Association, Boston.
- Blumberg, Leonard, Thomas Shipley, and Irving Shandler. 1973. *Skid Row and Its Alternatives: Research and Recommendations from Philadelphia*. Philadelphia: Temple University Press.
- Brown, Carl E., Steven W. McFarlane, Ronald Paredes, and Louisa Stark. 1983. *The Homeless of Phoenix: Who Are They? And What Should Be Done?* Phoenix: Phoenix South Community Mental Health Center.
- Burnam, M. Audrey, Paul Koegel, and T. S. Duan. 1990. Los Angeles Study of Mental Illness among Homeless People. National Institute of Mental Health grant application. Santa Monica, CA: RAND Corp.
- Burt, Martha R. 1992. *Over the Edge: The Growth of Homelessness in the 1980s*. New York and Washington, DC: Russell Sage Foundation and The Urban Institute Press.
- Burt, Martha R., and Barbara E. Cohen. 1989. *America's Homeless: Numbers, Characteristics, and the Programs That Serve Them*. Washington, DC: The Urban Institute Press.
- City of Boston. 1986. *Making Room: Comprehensive Policy for the Homeless*. Boston: Emergency Shelter Commission.

Chase, Richard A. 1993. *Emergency Shelters, Transitional Housing, and Battered Women's Shelters Data Collection Project, Second Annual Report*. St. Paul, MN: Wilder Research Center.

Culhane, Dennis P. 1992. The Quandaries of Shelter Reform: An Appraisal of Efforts to Manage Homelessness. *Social Service Review* 66(3):428–40.

Culhane, Dennis P. 1993. The Organization and Utilization of the Shelter System in Philadelphia: Estimating Average Length of Stay and Annual Rate of Turnover. *Journal of Health and Social Policy* 4(4):55–78.

Dennis, Michael L., Ronaldo Iachan, Jutta P. Thornberry, Robert M. Bray, Lisa E. Packer, and Gayle S. Bieler. 1993. *Prevalence and Treatment of Drug Use and Correlated Problems in the Homeless and Transient Population: 1991*. Final report under NIDA contract no. 271-89-8340. Rockville, MD: National Institute on Drug Abuse.

Dugger, Celia. 1991. Benefits of System Luring More Families to Shelters. *New York Times*, September 4, A1.

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

Hoffman, Stanley, David Wenger, J. Nigro, and R. Rosenfeld. 1982. *Who Are the Homeless? A Study of Randomly Selected Men Who Use the New York City Shelters*. New York: State Office of Mental Health.

Hombs, Mary E., and Mitch Snyder. 1982. *Homelessness in America: A Forced March to Nowhere*. Washington, DC: Community for Creative Non-Violence.

Hopper, Kim. 1990. The New Urban Niche of Homelessness: New York City in the Late 1980s. *Bulletin of the New York Academy of Medicine* 66(5):435–50.

Jahiel, René. 1992. *Homelessness: A Prevention-Oriented Approach*. Baltimore: Johns Hopkins University Press.

Kondratas, Anna. 1991. Estimates and Public Policy: The Politics of Numbers. *Housing Policy Debate* 2(3):631–47.

Lindblom, Eric N. 1991. Toward a Comprehensive Homelessness-Prevention Strategy. *Housing Policy Debate* 2(3):957–1025.

Link, Bruce G., Ezra Susser, Anne Stueve, J. Phelan, R. Moore, and Elmer L. Struening. 1993. Reconsidering the Debate about the Numbers of Homeless People in the United States. Paper read at the annual meeting of the American Public Health Association, October, San Francisco.

National Coalition for the Homeless. 1991. *Fatally Flawed: The Census Bureau's Count of Homeless People*. Washington, DC.

New York City Department of City Planning. 1992. *Residential Facilities in New York City, 1992: An Index of Beds by Type of Facility and Community District*. New York.

New York City Mayoral Commission on the Homeless. 1992. *The Way Home: A New Direction in Social Policy*. New York: Office of the Mayor.



Novacek, Jill, Robert Raskin, David Behlinger, Suzanne Rybicki, Christie Nail, and Linda Firth. 1991. *Citizens' Opinions about Tulsa's Homeless*. Tulsa, OK: Tulsa Institute of Behavioral Sciences.

Parsons, Lynn. 1986. *Literature Review of Studies Which Deal with Estimating the Size of the Homeless Population*. Amherst: University of Massachusetts Social and Demographic Research Institute.

Rhode Island Emergency Food and Shelter Board. 1992. *Serving Rhode Island's Homeless: Three-Year Report of the Rhode Island Emergency Shelter Information Project*. Providence.

Robertson, Marjorie, Irving Piliavin, and Herb Westerfelt. 1990. Alameda County Study of Mental Illness among Homeless Adults and Families. National Institute of Mental Health grant application. San Francisco: Alcohol Research Group.

Rossi, Peter H. 1987. No Good Applied Social Research Goes Unpunished. *Society* 25:73–80

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

Rossi, Peter, Gene A. Fisher, and Georgiana Willis. 1986. *The Condition of the Homeless in Chicago*. Amherst: University of Massachusetts Social and Demographic Research Institute.

Roth, Dee, Jerry Bean, Nancy Lust, and Saveanu Trian. 1985. *Homelessness in Ohio: A Study of People in Need*. Columbus: Ohio Department of Mental Health, Office of Program Evaluation and Research.

Ryan, Phyllis, David Bartelt, and Ira Goldstein. 1989. *Homelessness in Pennsylvania: How Can This Be?* Philadelphia: Temple University Institute for Public Policy Studies.

Shlay, Anne, and Peter H. Rossi. 1992. Social Science Research and Contemporary Studies of Homelessness. *Annual Review of Sociology* 18:129–60.

Sosin, Michael, Irving Piliavin, and Herb Westerfelt. 1990. Toward a Longitudinal Analysis of Homelessness. *Journal of Social Issues* 46(4):157–74.

Toro, Paul A., and Dennis M. McDonell. 1992. Beliefs, Attitudes, and Knowledge about Homelessness: A Survey of the General Public. *American Journal of Community Psychology* 20(1):53–80.

U.S. Bureau of the Census. 1991. *Statistical Abstracts of the United States, 1991*. 111th ed. Washington, DC: U.S. Government Printing Office.

U.S. Department of Commerce. 1991. Census Bureau Releases 1990 Decennial Census Counts for Persons Enumerated in Emergency Shelters and Observed on the Streets. *U.S. Department of Commerce News* CB91:117.

U.S. Department of Health and Human Services. 1991. *Homelessness Prevention Programs*. Washington, DC: Office of the Inspector General.

U.S. Department of Housing and Urban Development. 1984. *A Report to the Secretary on the Homeless and Emergency Shelters*. Washington, DC: Office of Policy Development and Research.

U.S. Department of Housing and Urban Development. 1989. *A Report on the 1988 National Survey of Shelters for the Homeless*. Washington, DC.

U.S. Department of Housing and Urban Development and District of Columbia. 1993. *The D.C. Initiative: Working Together to Solve Homelessness*. Washington, DC: HUD Office of Community Planning and Development.

U.S. General Accounting Office. 1988. *Homeless Mentally Ill: Problems and Options in Estimating Numbers and Trends*. GAO/PEMD-88-24. Washington, DC.

U.S. House of Representatives Subcommittee on Housing and Community Development. 1984. *Joint Hearing on the HUD Report on the Homeless*. House Subcommittee on Housing and Community Development with the Subcommittee on Manpower and Housing of the Committee on Government Operations. 98th Cong., 2nd sess., May 24.

Vernez, George, M. Audrey Burnam, Elizabeth A. McGlynn, Sally E. Trude, and Brian S. Mittman. 1988. *Review of California's Programs for the Homeless Mentally Disabled*. Santa Monica, CA: RAND Corp.