



July 2001

Assessing Homeless Population Size Through the Use of Emergency and Transitional Shelter Services in 1998: Results from the Analysis of Administrative Data from Nine US Jurisdictions

Stephen Metraux
University of Pennsylvania

Dennis P. Culhane
University of Pennsylvania, culhane@upenn.edu

Stacy Raphael
University of Pennsylvania

Matthew White
Columbus Community Shelter Board

Carol Pearson
Department of Health and Human Services

Follow this and additional works at: https://repository.upenn.edu/spp_papers
See next page for additional authors

Recommended Citation

Metraux, S., Culhane, D. P., Raphael, S., White, M., Pearson, C., Hirsch, E., Ferrell, P., Rice, S., Ritter, B., & Cleghorn, J. (2001). Assessing Homeless Population Size Through the Use of Emergency and Transitional Shelter Services in 1998: Results from the Analysis of Administrative Data from Nine US Jurisdictions. Retrieved from https://repository.upenn.edu/spp_papers/85

Reprinted with permission. Published in *Public Health Reports*, Volume 116, Issue 4, July 2001, pages 344-352.
Publisher URL: <http://www.pubmedcentral.nih.gov/tocrender.fcgi?iid=132425>

This paper is posted at ScholarlyCommons. https://repository.upenn.edu/spp_papers/85
For more information, please contact repository@pobox.upenn.edu.

Assessing Homeless Population Size Through the Use of Emergency and Transitional Shelter Services in 1998: Results from the Analysis of Administrative Data from Nine US Jurisdictions

Abstract

Objectives. This study reports findings from the first-ever systematic enumeration of homeless population size using data previously collected from administrative records of homeless services providers in nine US jurisdictions over a one year period. As such, it provides the basis for establishing an ongoing measure of the parameters of the homeless population and for tracking related trends on the use of homeless services over time.

Methods. Each participating jurisdiction collected data through its homeless services management information systems for persons and families who use emergency shelter and transitional housing. The jurisdictions organized the data by a standardized reporting format. These data form the basis for reporting homeless population size, both in raw numbers and as adjusted for each jurisdiction's overall population size, as well as the rate of turnover and average annual length of stay in emergency shelters and transitional housing.

Results. Individual jurisdictions had annual rates of sheltered homelessness ranging from 0.1% to 2.1% of their overall population, and 1.3% to 10.2% of their poverty population. Annual population size was 2.5 to 10.2 times greater than the point-prevalent population size. Results are broken down for adults and families.

Conclusions. The prevalence of homelessness varies greatly among the jurisdictions included in this study, and possible factors for this diversity are discussed. Future reports of this nature will furnish similar series of homeless enumerations across a growing number of jurisdictions, thereby providing a basis for exploring the effects of different contextual factors on local prevalence rates of homelessness.

Comments

Reprinted with permission. Published in *Public Health Reports*, Volume 116, Issue 4, July 2001, pages 344-352.

Publisher URL: <http://www.pubmedcentral.nih.gov/tocrender.fcgi?iid=132425>

Author(s)

Stephen Metraux, Dennis P. Culhane, Stacy Raphael, Matthew White, Carol Pearson, Eric Hirsch, Patricia Ferrell, Steve Rice, Barbara Ritter, and J. Stephen Cleghorn

Assessing Homeless Population Size Through the Use of Emergency and Transitional Shelter Services in 1998: Results from the Analysis of Administrative Data from Nine US Jurisdictions

STEPHEN METRAUX, MA^a
DENNIS CULHANE, PhD^b
STACY RAPHAEL, MSW^b
MATTHEW WHITE, MA^c
CAROL PEARSON, PhD^d
ERIC HIRSCH, PhD^e
PATRICIA FERRELL, RN^f
STEVE RICE, BA^g
BARBARA RITTER, MA^h
J. STEPHEN CLEGHORN, PhDⁱ

SYNOPSIS

Objectives. This study reports findings from the first-ever systematic enumeration of homeless population size using data previously collected from administrative records of homeless services providers in nine US jurisdictions over a one year period. As such, it provides the basis for establishing an ongoing measure of the parameters of the homeless population and for tracking related trends on the use of homeless services over time.

Methods. Each participating jurisdiction collected data through its homeless services management information systems for persons and families who use emergency shelter and transitional housing. The jurisdictions organized the data by a standardized reporting format. These data form the basis for reporting homeless population size, both in raw numbers and as adjusted for each jurisdiction's overall population size, as well as the rate of turnover and average annual length of stay in emergency shelters and transitional housing.

Results. Individual jurisdictions had annual rates of sheltered homelessness ranging from 0.1% to 2.1% of their overall population, and 1.3% to 10.2% of their poverty population. Annual population size was 2.5 to 10.2 times greater than the point-prevalent population size. Results are broken down for adults and families.

Conclusions. The prevalence of homelessness varies greatly among the jurisdictions included in this study, and possible factors for this diversity are discussed. Future reports of this nature will furnish similar series of homeless enumerations across a growing number of jurisdictions, thereby providing a basis for exploring the effects of different contextual factors on local prevalence rates of homelessness.

^aSociology Department, University of Pennsylvania, Philadelphia, PA

^bSchool of Social Work, University of Pennsylvania, Philadelphia, PA

^cCommunity Shelter Board, Columbus, OH

^dCrisis, Income and Victim Services, Montgomery County (MD) Department of Health and Human Services, Rockville, MD

^eDepartment of Sociology, Providence College, Providence, RI

^fHomeless Services Program, Saint Louis County Department of Human Services, Clayton, MO

^gHousing Information Office, St. Paul/Ramsey County, St. Paul, MN

^hDepartment of Human Services, Spokane, WA

ⁱThe Community Partnership, Washington, DC

Address correspondence to: Stephen Metraux, MA, Sociology Dept., Univ. of Pennsylvania, 3718 Locust Walk, Philadelphia, PA 19104; tel. 215-349-8487; fax 215-349-8715; e-mail <metraux@sas.upenn.edu>.

©2001 Association of Schools of Public Health

The question of how many people are homeless represents one of the basic parameters that has defined homelessness as a social problem. Over the past 20 years, numerous methods have been used to answer this question, few of which lend themselves to any regular, ongoing enumeration. While enumerating the homeless population is a methodologically challenging task, having accurate and consistent measures over time of homeless population size and service use is important for planning and providing services. This study uses existing administrative data from nine jurisdictions and represents the first-ever systematic collation of homeless population size and the use of homeless services across a broad range of US jurisdictions over a one year period. As such, it provides the basis for establishing an ongoing measure of homeless population size, and for tracking related trends over time.

Homeless enumerations have predominantly consisted of “point-prevalent” studies that yield a cross-sectional snapshot of who is homeless at a particular point in time. This has been the case in both nationwide¹⁻³ and local⁴⁻¹³ counts. Such an approach minimizes the risk of double-counting homeless people and allows researchers to focus their resources over a limited time. Despite these efforts at simplification, enumerators still face challenges that include finding the non-services-using segments of the homeless population and the lack of a traditional sampling frame.^{6,14-16}

The point-prevalence approach also has limitations. Such enumerations provide a time-limited, static representation that stands in contrast to the dynamic nature of homelessness. Studies of shelter use indicate that three-quarters of single adult shelter users experience only one or two periods of shelter use totaling, on average, less than 60 days.¹⁷ Furthermore, based on Wong’s review of nine survey-based research findings, those individuals and families who are homeless for longer periods commonly drift in and out of homelessness, as shelter use and living “on the streets” become part of a serial progression of different living arrangements that include staying with family and friends and renting places by the night or by the week.¹⁸ Such turnover is confirmed by findings that, in Philadelphia, the average shelter bed was occupied by 6.12 different people in 1992.¹⁹ This means that, for sheltered homelessness, the unduplicated annual prevalence was over six times greater than the point-prevalent sheltered homeless population count. Point-prevalent enumerations thus understate the extent of homelessness. Furthermore, one-night counts are highly sensitive to daily and seasonal fluctuations in the size of the homeless population. Finally, because point-prevalent enumerations require significant cost

and effort, they are undertaken in most jurisdictions only rarely and with little continuity over time, and thus quickly become outdated.

In describing the homeless population, point-prevalent methods are inherently biased toward over-representing the characteristics of the long-term homeless person. Someone who is homeless for an extended time will have a greater likelihood of being counted on a given day than someone who is homeless for only a given point in time. As Kuhn and Culhane’s study of shelter use patterns in New York City and Philadelphia have shown, approximately half of the shelter population on a given day are “chronic” stayers and approximately one-third are short-term, “transitional” stayers.¹⁷ However, these proportions change drastically when the enumeration covers a three year period, with the chronic stayers comprising only 10% of the overall population and the transitional stayers representing three-quarters of the total enumerated population. Although this study is limited to shelter users, similar differences in composition by tenure would exist in the general homeless population, as it is the temporal perspective that largely drives these differences. Taken a step further, point-prevalent analyses of the characteristics of homeless populations on a given day tend to confound characteristics associated with becoming homeless and characteristics associated with remaining homeless.

To overcome these limitations, two approaches emerged in the 1990s for developing alternative estimates of the magnitude and characteristics of the homeless population. One approach has been to survey random samples of the housed population, usually by telephone, about prior experiences of homelessness.²⁰⁻²² The advantages to this approach are that it is convenient and relatively inexpensive, thereby lending itself to large-scale sampling and extrapolation to larger populations. However, it underrepresents people without a telephone, relies on retrospective recall for data on quality and duration of homelessness, is poorly suited to monitor current trends in homelessness program use, and would need very large sampling frames to render detailed demographic breakouts of population groups at risk.

The second approach is to use data that is compiled in computerized management information systems that record the use of homeless services. Here data on homeless services use is first collected on-site and then transferred to a centralized computer database. A feature of such databases is that records are constantly updated by adding new data to the existing database in a cumulative fashion. This cumulative set of records on the use of homeless services provides

the basis from which to develop enumerations of service users, their characteristics, and their patterns of service use. These databases enable tracking the use of homeless services by individuals and families over time and link services to particular people. Because of this, unduplicated counts can be derived for any time period in which continuous data are available. Client characteristics, to the extent that they are collected in the administrative database, can be linked to service use patterns to identify factors that are particularly associated with short-term and long-term homelessness, as well as with repeat homelessness.²³

Studies based on administrative data also have their limitations. Most important, they limit their definition of homeless to whoever uses the homeless services that are covered by that data system. Considering people who use homeless services as being “homeless” is consistent with other enumerations; but most other enumerations also incorporate means by which to include people in other living situations (e.g., living in parks or abandoned buildings) as homeless, although they use no homeless services. Research indicates that, over time, most people considered homeless under broader definitions will use shelter or some other homeless service, so this shortcoming may be ameliorated by including a longer time frame for enumeration. However, it cannot, by definition, include people who are entirely non-service-using.^{8,16} Second, administrative records cannot track periods of homelessness that are outside the boundaries of the officially tracked service system, and may lead to unaccounted for periods of homelessness among persons with records of service use. Finally, the size of the homeless population is sensitive to local service system configurations, including shelter policies such as time limits on shelter use, capacity limitations, co-payments, and the overall quality of shelter facilities.

Nevertheless, using information systems for tracking homeless services stands to become the most prevalent, comparable, systematic, and timely means of getting information on the size and characteristics of the homeless population. More than 50 US cities and localities have either implemented or are in the process of implementing coordinated management information systems among their networks of homeless services providers. These data sources, although not collected for research purposes, hold the promise of providing the most current local, regional, and (eventually) national information on the homelessness problem with very little marginal cost. Insofar as these information systems are the only practical means for providing data on a large segment of the homeless

population over a long period of time, they offer a new perspective from which to research homelessness.

METHODS

This report provides the results of an analysis of the annual prevalence of homelessness, gauged from the use of shelters and transitional housing beds in nine jurisdictions that collect data through homeless services management information systems. These participants represent all the known US jurisdictions that have the capacity to “unduplicate” service users across 80% or more of the emergency shelter and transitional housing beds in their area for 1998 (calendar or fiscal year). The 80% coverage criterion was selected to assure that a clear majority of these beds—the common core of the homeless service system—was being tracked, and so could offer a defensible, minimal, and provisionally comparable estimate of the unduplicated count of homeless service users.

Although not selected on the basis of their geographical representativeness, the jurisdictions are heterogeneous in terms of size, location, and type. Based on 1998 population estimates from the US Bureau of the Census, four of the sites—New York City, Philadelphia, Washington, DC, and St. Paul/Ramsey County, MN—are located in metropolitan areas that rank among the nation’s top 20 largest. Two sites are smaller cities: Columbus, OH (fifteenth largest US city), and Spokane, WA (101st largest US city). Of the remaining three sites, two are suburban—Montgomery County, MD, and St. Louis County, MO (not including the city of St. Louis)—and the third is the state of Rhode Island. The sample is also geographically diverse, with jurisdictions in the Eastern, Midwestern, and Western parts of the US.

Each jurisdiction organized data into a standardized reporting format that permitted cross-site comparisons of the use of homeless services across a geographically and demographically diverse set of jurisdictions. Although the final data from each jurisdiction reported were in a standard format, the data-collection methods were unique to each jurisdiction. This led to some unavoidable variation in coverage levels (above the 80% criterion), in what types of facilities were covered, and in the criteria for inclusion as homeless. The term as used here includes all persons and families who used emergency shelter and transitional housing facilities.

These two types of housing have in common that they provide temporary (i.e., non-permanent) respite in situations where this represents the best housing

option for service consumers. Such an integrative definition also recognizes that, operationally, these beds are often difficult to distinguish from each other. Although emergency shelters are supposed to provide short-term housing, stays in these facilities are often open-ended. In contrast, transitional housing programs usually provide extended, though often time-limited stays. New York City designates all of its homeless beds as transitional housing, although many of the beds have more in common with what other jurisdictions consider emergency shelter beds. Finally, some homeless facilities operate both emergency and transitional programs and fail to indicate in their record keeping which residents are in each program.

Coverage is often dependent on what facilities fall under the local rubric of homeless services. All jurisdictions agree that a facility whose objective is the provision of lodging for families and individuals who have no other housing options constitutes a homeless service; these beds represent the large majority of services reported in each jurisdiction. Alternately, all jurisdictions do not include records of youth facilities as homeless, although in many cases children housed in such facilities meet commonly used criteria of homelessness. Primary differences are reflected by whether jurisdictions consider specialized facility types such as domestic violence shelters or short-term detoxification facilities to be homeless service providers. Often the determinant of such a classification is based less on philosophical grounds than on administrative protocols under which particular facility types receive funding as, and interact with, other homeless service providers.

Data reporting by the individual jurisdictions includes (a) the total number of unduplicated individuals and families using emergency shelter (and other agency-provided temporary housing arrangements) or transitional housing beds (i.e., service users); and (b) the bed-nights consumed during 1998 (i.e., service days). Each participating jurisdiction records service users on the basis of their household status: *family* indicates a household with one or more adults and children, and a *single* household indicates a person unaccompanied by children. Each jurisdiction used the same table format to report its services-use statistics on the provision of homeless housing. These data provide the basis for annual prevalence results, and the raw prevalence results, cast as a proportion of each jurisdiction's overall population and poverty population, provide prevalence rates of the use of homeless services among the local population. The prevalence rates control statistically for the population size and

poverty rate of the jurisdiction and permit interjurisdictional comparisons of rates of homelessness. Other measures that are reported here include the average daily census (service days divided by 365); the average annual length of stay (service days divided by service users); and the annual rate of turnover (service users divided by the average daily census).

RESULTS

Table 1 summarizes the annual prevalence of shelter use in the nine jurisdictions, and Tables 2 and 3 summarize overall population and poverty population estimates for each jurisdiction. Of the nine jurisdictions, New York City, the most populous, had by far the largest sheltered homeless population. The five jurisdictions containing cities with populations over 250,000 had the highest annual prevalence counts of the sheltered homeless population. The county of St. Louis, however, while the third most populous jurisdiction among the sites, was lowest in annual prevalence figures. A similar but more muted contrast between overall population and annual prevalence occurred in Montgomery County, MD, and the state of Rhode Island, with Rhode Island's population being 17% greater and its total annual sheltered homeless prevalence count 33% greater. Compared to its size, Washington, DC, had a relatively low number of sheltered families, which may reflect limited shelter capacity and did not take into account families who were on a relatively lengthy waiting list for shelter. With the exception of Spokane, jurisdictions with higher annual population prevalences also showed higher average daily census (ADC) rates.

Table 4 adjusts for population disparity among the jurisdictions by casting annual prevalence as an annual ratio of shelter users to overall population. Rates per total population living under the poverty guidelines in each jurisdiction provide an additional equalizing measure. As virtually all of the homeless households and individuals came from the poverty population, the latter measure may give a more consistent rate for the use of homeless services across jurisdictions. And indeed, rates of shelter utilization among the overall population were more varied, ranging from 2.1% in Washington, DC, to 0.1% in St. Louis County (a 21:1 ratio), than rates among the poverty population, where extremes of 10.2% in Washington and 1.3% in St. Louis County yielded a 7.8:1 ratio.

Comparing Tables 1 and 4 shows little consistency between the size of the shelter-using population and the rate of shelter use among the general population

Table 1. Annual prevalence and average daily census (ADC) for homeless shelter and transitional housing services across nine locales: 1998

	<i>Homeless individuals</i>		<i>Homeless families</i>		<i>Homeless single adults</i>	
	<i>Prevalence</i>	<i>ADC</i>	<i>Prevalence</i>	<i>ADC</i>	<i>Prevalence</i>	<i>ADC</i>
New York City	62,633	21,508.2	12,898	4,669.2	23,712	6,801.6
Philadelphia, PA	13,455	3,587.9	2,021	752.3	6,970	1,048.7
Washington, DC	10,995	2,558.8	504	141.0	9,390	2,120.3
Columbus, OH	8,895	888.7	974	96.1	5,353	539.3
St. Paul/Ramsey County, MN	3,664	740.8	429	161.6	2,165	240.2
Rhode Island	3,580	350.4	514	NA	2,280	NA
Montgomery County, MD	2,688	NA	601	99.9	1,036	79.9
Spokane, WA	1,914	778.1	352	161.6	789	284.1
St. Louis County (excluding City of St. Louis), MO	931	180.8	210	NA	271	NA

NOTE: Figures for Montgomery County, Rhode Island, and Washington, DC, are based on shelter utilization only (excluding transitional housing), and consequently are conservative estimates.

ADC = Average daily census.

NA = Not applicable

or among the poverty population. However, Table 4 shows similar poverty-adjusted rates of shelter use between similar jurisdictions. For example, the two smaller cities, Columbus (8.0%) and Spokane (6.2%),

and the two counties that contain both suburban and urban populations, St. Paul/Ramsey County, MN (7.0%), and Montgomery County, MD (6.1%), all had comparable rates. Curiously, the rates for the two ar-

Table 2. Overall population estimates for nine jurisdictions

	1998 <i>Population</i> ^a	1990–1998 <i>Change</i>	1990 <i>Families</i> ^b	1998 <i>Families</i> ^c	1990 <i>Adults</i> ^d	1998 <i>Adults</i> ^e
Columbus, OH	670,031	5.30%	75,679	79,688	483,028	508,615
New York City	7,404,140	1.11%	809,180	818,195	5,638,943	5,701,763
Montgomery County, MD	839,158	10.00%	96,274	105,901	579,907	637,894
Philadelphia, PA	1,434,968	-9.50%	165,386	149,677	1,206,290	1,091,708
Rhode Island	987,704	-1.57%	118,231	116,374	777,459	765,249
St. Louis County (excluding City of St. Louis), MO	997,347	0.39%	125,366	125,850	749,676	752,573
St. Paul/Ramsey County, MN	485,709	-0.01%	59,813	59,807	365,768	365,730
Spokane, WA	185,174	3.96%	22,177	23,055	133,929	139,233
Washington, DC	521,426	-14.08%	51,062	43,871	490,276	421,227

^a1998 population estimates are from the US Bureau of the Census, available from: URL: <http://www.census.gov/population/www/estimates/citypop.html> (for incorporated cities and states) and <http://www.census.gov/population/www/estimates/countypop.html> (for counties that include multiple incorporated cities). Change in population in each jurisdiction is derived by comparing 1998 estimates with the 1990 US census population enumeration, which also can be found at these Web sites.

^bDefined as total family households with own children under 18 years of age (item #P19), taken from 1990 Census Summary Tape File 3 (STF3), available from URL: <http://homer.ssd.census.gov/cdrom/lookup>.

^c1998 Families extrapolated by adding the estimated change in families (1990 Families multiplied by 1990–1998 Change) to 1990 Families.

^dDefined as total persons 18 years of age or older (item #P13), taken from 1990 Census Summary Tape File 3 (STF3), available from: URL:<http://homer.ssd.census.gov/cdrom/lookup>.

^e1998 Adults extrapolated by adding the estimated change in families (1990 Adults multiplied by 1990–1998 Change) to 1990 Adults.

Table 3. Poverty population estimates for nine jurisdictions

	1995 Population ^a	1990–1995 change	1995 Adults ^b	1990 Families ^c	1995 Families ^d
Columbus, OH	105,494	NA	69,798	15,799	NA
Montgomery County, MD	44,078	+39.3%	28,826	4,352	6,062
New York City	1,742,416	+25.8%	1,008,574	224,988	283,035
Philadelphia, PA	351,002	+12.0%	209,868	47,692	53,415
Rhode Island	113,471	+22.5%	72,401	14,371	17,604
St. Louis County (excluding City of St. Louis), MO	73,757	+35.1%	46,518	8,440	11,402
St. Paul/Ramsey County, MN	52,239	–3.1%	31,401	8,520	8,262
Spokane, WA	29,863	NA	20,470	4,577	NA
Washington, DC	107,616	+11.8%	67,244	12,926	14,451

^aFor state and countywide jurisdictions, 1995 poverty population estimates can be downloaded from the US Census Bureau at <http://www.census.gov/housing/saibe/estmod95/>. For the remaining two jurisdictions (Columbus and Spokane) only 1990 figures are available for total population (and for adults and families). All 1990 poverty data used in this table is derived from items #P117 (individuals) and #P123 (families) in the 1990 Census Summary Tape File 3 (STF3), available at <http://homer.ssd.census.gov/cdrom/lookup>.

^bFigures extrapolated using 1995 estimates for total population and children under 18; for Spokane and Columbus, 1990 estimates are used.

^cDefined as family households under poverty income guidelines with related children under 18 years (U.S. Bureau of the Census).

^dFigures extrapolated using 1990 data multiplied by 1990–1995 total poverty rate change. For Spokane and Columbus, 1990 estimates are used in the absence of 1995 estimates.

eas with large non-urban populations (St. Louis County, 1.3%, and Rhode Island, 3.2%) were comparable not only with each other but also with the two largest cities among the jurisdictions, Philadelphia (3.8%) and New York City (3.6%). The similarity in rates between Philadelphia and New York City, however, contrasts with the overall rate found in the remaining jurisdiction, Washington, DC (10.2%). Also noteworthy is that Montgomery and St. Louis counties each had much higher rates of shelter use among their poverty populations

as compared to the overall population, possibly a function of the low poverty rates in each of these counties.

Table 3 shows annual rate of turnover (AROT) and average annual length of stay (AALOS) statistics for the nine sites. These two statistics are inversely related—the longer the AALOS is, the lower the AROT will be. A considerable range existed among the jurisdictions. Three—Columbus, Montgomery County, and the state of Rhode Island—had system-wide AALOS of approximately 35 to 40 days, while Spokane and New

Table 4. Adjusted rates of homelessness: 1998

	Percent of total population			Percent of poverty-level population		
	Population	Families	Adults	Population	Families	Adults
Washington, DC	2.1	1.1	2.4	10.2	3.5	14.8
Columbus, OH	1.3	1.2	1.3	8.0	5.8	9.0
Spokane, WA	1.0	1.5	0.9	6.2	7.4	5.7
Philadelphia, PA	0.9	1.4	0.8	3.8	3.8	4.3
New York City	0.8	1.6	0.7	3.6	4.6	4.1
St. Paul/Ramsey County, MN	0.7	0.7	0.7	7.0	5.3	8.4
Rhode Island	0.4	0.4	0.4	3.2	2.9	3.9
Montgomery County, MD	0.3	0.6	0.3	6.1	9.9	5.9
St. Louis County (excluding City of St. Louis), MO	0.1	0.2	0.06	1.3	1.8	1.0

NOTE: Rates based on 1998 local homelessness prevalence results (Table 1) and general and poverty population estimates (Tables 1 and 2).

Table 5. Turnover rates and average length of stay: 1998^a

	Annual rate of turnover (AROT)			Average annual length of stay (AALOS) in days		
	Total ^b AQ6	Adults	Families	Total	Adults	Families
Spokane, WA	2.5	2.8	2.2	148.4	131.4	167.5
New York City	2.9	3.5	2.8	125.3	104.7	132.1
Philadelphia, PA	3.7	6.6	2.7	97.3	54.9	135.9
Washington, DC	4.3	4.4	3.6	85.0	82.0	102.0
St. Paul-Ramsey County, MN	4.9	9.0	2.6	73.8	40.5	137.5
St. Louis County (excluding City of St. Louis), MO	5.1	N/A	N/A	70.9	N/A	N/A
Montgomery County, MD	9.1	13.0	6	40.1	28.2	60.7
Columbus, OH	10.0	9.9	10.1	36.5	36.8	36
Rhode Island	10.2	N/A	N/A	35.7	N/A	N/A

^aFigures based on shelter utilization only in Washington, DC, Montgomery County, and Rhode Island (i.e., lack transitional housing data), and thus are conservative estimates.

^bFigure for Montgomery County is based on total households, not total persons.

York City, at the other extreme, had overall AALOS of 148 and 125 days. Looking at AROT, Columbus was the only city with comparatively high rates for both turnover and shelter use (from Table 2). AROTs also varied across the jurisdictions, ranging from 2.5 in Spokane to 10.2 in Rhode Island. There are two groupings for AROT that correspond to the results from the AALOS; Columbus, Rhode Island, and Montgomery County fell in the 9 to 10 range, and the remaining six sites had rates in the 2 to 5 range.

Also interesting are the disparities between families and single adults with respect to these statistics, with single adults having considerably shorter average stay lengths than families. This was especially the case in Philadelphia, St. Paul, and Columbus. In contrast, the AALOS in Spokane of 131 days and that in New York City, 105 days, were the only sites where single adults had AALOS longer than 90 days. Among families, only two sites (among those where breakdowns are available) had an AALOS lower than 90 days (Columbus and Montgomery County); the rest were over 100 days. This may have reflected both emergency shelter policies and a greater supply of transitional housing available to families, where stays generally exceed three months.

DISCUSSION

The prevalence results obtained represent the first collaborative measurement of the extent of homelessness and the use of homeless services across multiple jurisdictions through the use of automated individual

client service records. This represents a significant advance toward systematically reporting data on homeless service use across multiple sites, and perhaps even nationally. Looking at the findings, several conclusions can be drawn about the nature of the homeless population in these nine jurisdictions.

First, there is little correlation between a jurisdiction's population size and the prevalence of homelessness as a proportion of the overall population. As measured here, homelessness is not a phenomenon that is necessarily most prevalent in the largest cities; smaller cities such as Spokane and Columbus, after controlling for population size, can be shown to have a higher incidence of homeless services use among the overall population than either New York City or Philadelphia. One explanation for this may be that Spokane and Columbus receive more people from surrounding areas, which are rural and services-poor.

Second, the size of the population that uses homeless services within a given jurisdiction is not necessarily determined by the capacity of that jurisdiction's services system. For example, results from Spokane and St. Paul show that both have about the same number of people receiving shelter and transitional housing on a given day, but St. Paul's homeless population is almost twice as large over the course of a year. In another example, New York City is the only jurisdiction in this study with a policy of shelter-on-demand, yet its prevalence rates are not among the highest of the nine jurisdictions. Thus, although it is conceivable that a small supply of shelter and transitional housing beds could function to reduce the number of home-

less persons enumerated in a jurisdiction, the results here argue against making such a straightforward association.

The third conclusion places this point in a broader context—that local homeless policies are at least partly responsible for the disparity in the results of this analysis. The nine jurisdictions in this study each possess different services systems and different information systems for tracking the provision of homeless services. The contrasts arise from the qualitative differences in the nature of and response to the local homelessness problem in such different settings as large cities and suburban counties, and among similar jurisdictions whose homeless service systems have developed on different trajectories. Factors leading to cross-site variation in this study include the ratio of emergency to transitional shelter beds available, restrictions in shelter use (e.g., time limits and curfews), types of facilities included as providing homeless services, and the number of shelter beds available in a jurisdiction. Furthermore, while each jurisdiction had at least 80% coverage, variation in local coverage rates could also contribute to cross-jurisdictional variation. Additional research is needed to explore how both this balance of transitional housing and emergency shelter and the differences in implementing local access restrictions (limits on stays and payment for shelter, among other factors) affect the number of people using shelters, average lengths of stay, and turnover rates. In this sense, different jurisdictions act as natural experiments, and the results give jurisdictions one measure of the effects brought on by their homeless policies.

Such experimentation can lead to the establishment of typologies based on similar patterns of services provision and services utilization. As more jurisdictions with management information systems reach the coverage capability shown by these nine jurisdictions, studies like this one will be able to include more jurisdictions with greater diversity. This increase in the number and variation of jurisdictions to be studied should provide the basis for more generalizable conclusions, more complex statistical analyses, and more insights into the effects of such contextual factors as population size, degree of urbanization, and regional variation on the demand for homeless services. The reporting sites can then compare their data with those from other sites and ascertain possible reasons for variation in rates of homelessness or in the range of AALOS. In one example, St. Louis County, with a markedly lower rate of shelter use than the other study sites, could make more detailed comparisons based on these results with demographically similar jurisdic-

tions such as Montgomery County. Through making such comparisons, practices can then be better evaluated in light of local homeless policy.

It is to be hoped that future reports will contain a broader array of data on those persons and families who use emergency and transitional shelter services, as well as other homeless services such as outreach and food/meal programs. As more elements from administrative data sets are used, however, data quality will become more of a concern because administrative data collection does not receive the same rigorous scrutiny that is typically given to data collected for research purposes. For example, although it is considered important to correctly collect basic data pertaining to identity and household status (such as is used here) in administrative data sets, other elements (e.g., disability, income, employment, and health) can be considered extraneous by staff who are not oriented to the research applications of this data.

More data on services-using individuals will enable more refined comparisons of demographic groups across sites, as well as insights into the role of such factors as race, mental health, income, and more on homelessness. Culhane and Metraux's²⁴ detailed demographic breakdown of shelter users by race/ethnicity, age, and gender in two cities is one example of an analysis that could be extended to a much larger number of jurisdictions. In this regard, studies like this one, using one of the few sources of longitudinal data available for informing homelessness research, policy, and services planning, provide a prototype for similar reports that could capitalize on more extensive data available from a greater number of jurisdictions.

This article is from a series of symposia on collecting automated homeless data funded by two entities within the US Department of Health and Human Services: Substance Abuse and Mental Health Services Administration's Center for Mental Health Services (Homelessness Programs Branch) and the Office of the Assistant Secretary for Policy and Evaluation. The authors acknowledge the vision and guidance of Walter Leginski (CMHS/ASPE), Mary Ellen O'Connell (ASPE), and Deborah Dennis (Policy Research Associates, Inc.) in arranging these meetings and encouraging the participating jurisdictions to pool their data into this paper. Also thanks to Matthew Berg (Office of Emergency Shelter and Services, Philadelphia, PA), Gail Clott and Jill Berry (New York City Department of Homeless Services), and Richard A. Chase (Wilder Foundation, St. Paul, MN) for data support on this project.

REFERENCES

1. Burt MR, Aron LY, Douglas T, Valente J, Lee E, Iwen B. Homelessness: programs and the people they serve. Washington (DC): Urban Institute; 1999.
2. Taeuber CM, Siegel PM. Counting the nation's home-

- less population: 1990 Census. Washington: Bureau of the Census (US), Population Division; 1990.
3. Burt MR, Cohen BE. America's homeless: numbers, characteristics, and programs that serve them. Washington: Urban Institute; 1989.
 4. Metraux S. Enumerating homeless persons in Tarrant County, Texas. Fort Worth (TX): Tarrant County Department of Human Services; 1995.
 5. Lee B. Stability and change in an urban homeless population. *Demography* 1989;26:323-34.
 6. Rossi PH, Wright JD, Fisher GA, Willis G. The urban homeless: estimating composition and size. *Science* 1987;235:1336-41.
 7. Robertson MO. Homelessness in Albuquerque. Albuquerque (NM): City of Albuquerque Department of Human Services; 1987.
 8. Dennis ML. Coverage of a service based methodology: findings from the DC*MADS homelessness study. In: *Towards Census 2000: research issues for improving coverage of the homeless population*. Research Triangle Park (NC): Research Triangle Institute; 1993.
 9. Koegel P, Burnam MA, Morton SC. Enumerating homeless people: alternative strategies and their consequences. *Evaluation Rev* 1996;20:378-403.
 10. Dockett KH. Street homeless people in the District of Columbia. Washington: University of the District of Columbia; 1989.
 11. James F. Numbers and characteristics of the homeless: a preliminary application in Colorado of a new methodology. Denver (CO): University of Colorado at Denver, Graduate School of Public Affairs; 1988.
 12. Robinson FG. Homeless people in the nation's capital. Washington: University of the District of Columbia Center for Applied Research and Urban Policy; 1985.
 13. Wright JD, Devine JA. Counting the homeless. *Evaluation Rev* 1992;16:355-64.
 14. Burt MR. Practical methods for counting homeless people: a manual for states and local jurisdictions. Washington: Department of Housing and Urban Development (US); 1992.
 15. Salo MT. Why the homeless are undercounted: an insider's perspective. Presented at the American Sociological Association Annual Meeting; 1992 Aug 11-16; Pittsburgh, PA.
 16. Burnam MA, Koegel PM. Methodology for obtaining a representative sample of homeless persons: the Los Angeles Skid Row Study. *Evaluation Rev* 1988;12:117-52.
 17. Kuhn RS, Culhane DP. Applying cluster analysis to test a typology of homelessness by pattern of shelter utilization: results from the analysis of administrative data. *Am J Community Psychol* 1998;26:207-32.
 18. Wong YLI. Patterns of homelessness: a review of longitudinal studies. In: Culhane DP, Hornburg SP, editors. *Understanding homelessness: new policy and research perspectives*. Washington: Fannie Mae Foundation; 1997. p. 135-64.
 19. Culhane DP, Dejowski E, Ibanez J, Needham E, Macchia I. Public shelter admission rates in Philadelphia and New York City: the implications of turnover for sheltered population counts. *Housing Policy Debate* 1994;5:107-40.
 20. Phelan JC, Link BG. Who are "the homeless?" reconsidering the stability and composition of the homeless population. *Am J Public Health* 1999;89:1334-8.
 21. Link BG, Susser E, Stueve A, Phelan J, Moore RE, Struening E. Lifetime and five-year prevalence of homelessness in the United States. *Am J Public Health* 1994;84:1907-12.
 22. Novacek K, Raskin R, Behlinger D, Rybicki S, Nail C, Firth L. Citizens' opinions about Tulsa's homeless. Tulsa (OK): Tulsa Institute of Behavioral Sciences; 1991.
 23. Culhane DP, Metraux S. Where to from here: a policy research agenda based on the analysis of administrative data. In: Culhane DP, Hornburg SP, editors. *Understanding homelessness: new policy and research perspectives*. Washington: Fannie Mae Foundation; 1997. p. 341-61.
 24. Culhane DP, Metraux S. Assessing relative risk for homeless shelter usage in New York City and Philadelphia. *Population Res Policy Rev* 1999;18:219-36.