



---

## Chapter 8.3

### Towards a Strategy for Counting the Homeless

TRACY PERESSINI, LYNN McDONALD,  
AND J. DAVID HULCHANSKI

---

Conventional strategies for surveying and counting the general population (e.g., traditional probability techniques using households and census blocks) do not apply when enumerating the homeless. Although researchers have attempted to adapt conventional survey methods in estimating the size of the homeless population, their experience has demonstrated the limited utility, reliability, and accuracy, as well as the exorbitant costs involved in adapting them for use with the homeless population; particularly when attempting to sample from the street-dwelling population (see, for example, Dennis, 1993; Rossi, 1989). As a result, researchers in the United States have struggled to develop new techniques for sampling and counting the homeless population. After two decades of developing, testing, and modifying their methods, researchers have reached a consensus that *service-based methods*<sup>1</sup> produce the most accurate and reliable results.

---

<sup>1</sup> The discussion in this section has been derived from the following sources: Bentley, 1995; Dennis, 1993 and 1991; Dennis and Iachan, 1993 and 1992; Burt, 1993 and 1991; Taueber, 1991; Burnam and Koegel, 1988.

### Service-Based Methods: Description & Overview

In general, service-based methods refer to a class of survey techniques that sample from or count homeless people in a variety of service system locations, including shelters, soup kitchens, day programs (e.g. drop-in centres), congregate areas or outdoor encampments,<sup>2</sup> street and mobile health care programs, street outreach programs, casual labour offices, etc. Some studies based on these techniques also sample from street locations, which may include those individuals who sleep on the street, on river banks, under bridges, on rooftops, in vacant buildings, in a public or commercial facility (e.g., library, city hall, shopping mall), in a city park, in a car, or in any other place not meant for human habitation. While there are no hard-and-fast rules about the number of sampling frames that should be included in a study, it is clear that sampling from the broadest range of locations provides the highest degree of coverage. In this context, then, the greater the number of sampling frames included in a study, the greater the coverage of the population, and, hence, the greater the reliability and accuracy of the count. That said researchers have found that sampling from shelters, drop-in centers and soup kitchens provides approximately 90-95 percentage of coverage of the urban homeless population, and yield more reliable population estimates than the Canadian Census. Researchers have consistently demonstrated that the majority of other homeless service users can be captured in one of the sample frames noted above over a 30 day period.

Typically, two factors affect the choice of sampling frames: the definition of homelessness and the cost of sampling from a variety of locations. In general, definitions can be categorized as falling into one of two types: relative and absolute. *Relative definitions* tend to be very broad and inclusive and, therefore, use the most expansive range of sampling frames to ensure a representative sample of all the constituent groups is selected. *Absolute definitions* tend to focus on only those who are literally homeless – rough sleepers and/or those who physically live on the street.

---

<sup>2</sup> Congregate areas consist of outdoor sites where the homeless are known to gather on a regular basis during the day. Outdoor encampments, on the other hand, are parks, campgrounds, and vacant lots where the homeless not only congregate, but live as well (e.g., tent cities or squatter encampments).

Tracy Peressini, Lynn McDonald, and J. David Hulchanski.  
8.3 Towards a Strategy for Counting the Homeless



Relative definitions require the researcher to sample from all possible locations where the homeless may be found. Absolute definitions focus on the street dwelling population via a process of preliminary counts and interviews with the homeless and those who serve them (i.e. key informants) in order to create a map the geographical areas where the street homeless may be located. The preliminary interviews also allow the researcher to calculate probabilities of locating the homeless in various locations and, therefore, to maximize the likelihood of capturing the street dwelling population in a either a snap shot survey (one night) or contiguous surveys over an extended period of time.

For example, if the goal of a study is to estimate the size of the population of homeless women who are victims of family violence, it makes sense to sample locations that maximize the odds of encountering them. Therefore, an investigator may exclude shelters for runaway youth, detox centres that service alcohol and drug addicts, flop houses and men's shelters where it is very unlikely that they will find battered women and their families. The problem with approaching a study of the homeless in this way is that there will always be some margin of error involved (that cannot be predetermined or estimated) in excluding locations or subsets of the population from a study. This is not as problematic as it sounds as studies of any population, using any type of random or probability sampling technique will necessarily result in some margin of error. *The goal then would be to collect enough information at the outset to minimize sampling error while maximizing coverage of the population.*

Apart from shelters for the homeless, most of the services that the homeless use are not specifically targeted to meet just their needs. A wide variety of individuals use food services, social and community drop-in centers, health care services, and employment services and the homeless constitute only a portion of all the people serviced by these types of organizations. An investigator, therefore, may exclude organizations that service a small proportion of homeless people. In doing so, they automatically exclude that proportion of the population who do not use services and, hence, run the risk of compromising the accuracy and reliability of their count.

For example, an investigator interested in single homeless women may choose to sample from women's shelters. The problem is that single

Tracy Peressini, Lynn McDonald, and J. David Hulchanski.  
8.3 Towards a Strategy for Counting the Homeless

[www.homelesshub.ca/FindingHome](http://www.homelesshub.ca/FindingHome)  
© Cities Centre, University of Toronto, 2010  
ISBN 978-0-7727-1475-6



women do not necessarily use the women's shelter system; they can be found in men's shelters, on the streets and in welfare motels. In addition, they may use other services that address a variety of other problems that they may have. For example, they may have problems with alcohol and drug abuse, mental health problems, employment problems, etc., and may contact and use services that are designed specifically to deal with those problems. While single homeless women do not constitute the majority of their client base, many such organizations do serve a proportion of the population. Thus, excluding services where the likelihood of encountering single homeless women is low, but not zero, results in an underestimation of the size of the population. Thus, most researchers agree that it is preferable to start with as wide a net as possible, in order to capture as many homeless people as possible, and then narrow the focus of the analysis to the groups of interest *after* the data have been collected.

Cost is another factor that is directly related to the number of sampling frames to be selected for use in a study. Investigators have found that the greater the number of locations in which counts must be taken, the greater the cost of the project, for two primary of reasons. First, a census or survey must take place at roughly the same time<sup>3</sup> across all of the locations in the study in order to reduce the possibility of double-counting. Therefore, a large staff is required to carry out a simultaneous enumeration across the locations forming the basis of the study. Increasing the sampling frames, therefore, will require a proportional increase in the number of staff required to carry out the task at hand, which will, in turn, increase the cost of the project.

Second, the time frame associated with preparing, training, and coordinating both staff and the sites included in the study increases with the number of locations selected. The greater the number of sampling frames, the more time is required to contact the locations, gain entry, gather preliminary information about the client-base using the service, screen respondents about their usage of other services that makeup the other sampling frames in the study, and organize a count at that site.

---

<sup>3</sup> The same time can be interpreted in two ways: (1) either at the same time over successive days/evenings; and (2) across all locations in one evening.

Tracy Peressini, Lynn McDonald, and J. David Hulchanski.  
8.3 Towards a Strategy for Counting the Homeless



Thus, the more preparatory time and time in the field spent, the greater the overall cost of the project.

The cost of counting the homeless has varied depending on the size of the geographic area targeted for enumeration and the number of sampling frames to be used. Various researchers throughout Canada and the United States have reported project costs ranging anywhere from \$30,000 (in Calgary), to \$800,000 U.S. (the Washington DC Metropolitan Area Study), to the \$10 millions the U.S Bureau of the Census budgeted to carry out the homeless component of the decennial census. Counting the homeless is an expensive and time-consuming process.

Efforts to count the homeless at the national level require an inordinate amount of resources, both human and financial, as well as extensive advanced planning and coordination. Yet to date no national effort, Canadian or American, has been deemed successful. And, while the U.S. government is continuing its efforts to improve the coverage of the national census to include the homeless, the Canadian government has discontinued its efforts to capture the homeless in the Canadian census.

After a thorough investigation into the possible methodologies available for taking a census of the homeless population, the U.S. Bureau of the Census adopted a service-based method for use in their efforts to include the homeless in a national enumeration of the population. For the 1990 Census, counts in shelters and pre-identified street locations were carried out in a process known as the Shelter and Street Enumeration (S-Night). The S-Night enumeration counted persons in emergency shelters and visible in street locations, as well as persons who reported they had no permanent home elsewhere during the standard census of special places and group quarters (e.g., jails, institutions, etc.) on the night of March 20 and the early morning hours of March 21, 1990. Prior to S-Night, the Census Bureau compiled a national list of shelters from administrative records and requested every local jurisdiction, nationwide, to supplement the list of shelters, street, and open public locations used by homeless persons at night. As anticipated, counting the homeless in the pre-identified street locations proved to be the most problematic

Tracy Peressini, Lynn McDonald, and J. David Hulchanski.  
8.3 Towards a Strategy for Counting the Homeless

[www.homelesshub.ca/FindingHome](http://www.homelesshub.ca/FindingHome)

© Cities Centre, University of Toronto, 2010

ISBN 978-0-7727-1475-6



component of the S-Night enumeration. Indeed, the Census Bureau elected to exclude street locations from the 2000 census.<sup>4</sup>

The main criticism levelled against the S-Night efforts was with the site selection for the street component. The S-Night street counts were restricted to predesignated areas that the Census, working with local authorities, identified as high-density homeless areas. As Wright and Devine (1992) explain:

In essence, the S-Night street enumeration was restricted to homeless persons who spent the night somewhere in these predesignated areas; street people outside those areas were not enumerated. Because Census S-Night resources were limited, coverage of entire cities was clearly out of the question; at the same time, the restricted nature and number of sites that were in fact searched strictly limited the completeness of the count (362).

This problem is not restricted to the S-Night effort. Virtually every study that has attempted to count the street homeless has been limited by the difficulties inherent in trying to accurately count the number of homeless who live on the street, in abandoned buildings, on rooftops, in cars, under bridges, etc. There is no reliable method for selecting “high-density” locations or for choosing street locations in which the homeless are most likely to be found. To date, researchers have relied on service providers and local authorities to identify the most likely sites. But regardless of the accuracy of the local authorities’ knowledge about the street locations of the homeless, the homeless are extremely mobile and move on a constant basis. By the time the study goes to field, the homeless are likely to have moved to new locations not identified prior to the study. There is no reliable way of predicting the street locations where the homeless may be found on any given day.

Both Rossi (1989) and Dennis (1993) employed a stratified sampling design based on census blocks to avoid the site identification problems associated with attempts to count the street component of the homeless population. While this is the most rigorous method for counting the homeless, and is considered the most scientifically valid method, both researchers report that it is an extremely expensive and logistically diffi-

<sup>4</sup> For a detailed account of the problems and difficulties encountered during the S-Night enumeration, see Evaluation Review, 1992, Volume 16, Number 4.

Tracy Peressini, Lynn McDonald, and J. David Hulchanski.  
8.3 Towards a Strategy for Counting the Homeless



cult method to implement. Dennis (1993) reports that the costs associated with the street component of the DC\*MADS study were so high (over half of the total budget) that the project was halted and redesigned to exclude the street sampling frame.

Given these experiences, most researchers concur that the street component of any method for enumerating the homeless is extremely costly and produces the least satisfactory results. Moreover, the proportion of homeless actually living on the street is small, and the majority of street homeless can be captured in the shelter, soup kitchen and encampment sampling frames. We therefore conclude that the following sampling frames represent the minimum number of locations required to ensure the best coverage of the population: shelters, soup kitchens, day programs, and outdoor encampments.

### **The Mechanics of Service-Based Methods**

Service-based methods are principally carried out in two stages: the pre-sampling and the survey/census phases. During the pre-sampling or counting phase, detailed lists are developed of the sites and services where the homeless are to be found. Decisions are made concerning the time frame within which the count will take place (e.g., in one night, or over a period of nights). The services are contacted, information is requested on the number of homeless using the service, the optimal time for taking a count on site is determined, and permission is sought to carry out a count/survey on the site. Outdoor locations are canvassed and counts of the numbers of homeless are generated. The proportion of homeless using the services and found in the outdoor locations is estimated based on the information collected. Sample probabilities are then generated from the estimates of the numbers of homeless in each of the sampling frames. Finally, the screening tool and survey instrument are developed.

During the survey/census phase, field personnel are sent out to count and survey the population. Individuals are approached at each of the sites, their participation in the study is requested, and, if they agree to participate, they are administered a screening instrument to determine whether or not they are homeless and what services they use. Finally, if

Tracy Peressini, Lynn McDonald, and J. David Hulchanski.  
8.3 Towards a Strategy for Counting the Homeless

[www.homelesshub.ca/FindingHome](http://www.homelesshub.ca/FindingHome)  
© Cities Centre, University of Toronto, 2010  
ISBN 978-0-7727-1475-6



the project involves collecting detailed information from the homeless, the questionnaire is administered to the appropriate respondents.

The following description of the service-based method used in the Calgary survey of the homeless (McDonald and Peressini, 1991) provides a detailed example of the activities and tasks involved in implementing such a design. The goal was to survey a sample of the homeless population, not to take a census of the population. The primary difference between sampling from and taking a census of the homeless population is that because a census requires counting/surveying every individual in each of the sampling frames, it does not require probability estimates of the proportion of homeless using each of the services. Probability estimates are used to determine the number of individuals to be selected from each of the sampling frames and are, therefore, not required for a census. However, estimates of the size of the population can be generated based on the probabilities associated with the proportion of homeless in each of the sampling frames in a study.

### The Calgary Survey of the Homeless

The first Calgary survey of the homeless (CSH) was carried out as part of a larger research project from January, 1990 to 1991, for the City of Calgary. The CSH used a sampling design developed by Burnam and Koegel (1988) in their study of the Los Angeles Skid row. Burnam and Koegel note that the main stumbling block in drawing a representative sample of homeless is the construction of an accurate sampling frame (e.g., a complete list of all homeless individuals in a population), and in selecting a sample from this listing such that each person has a known probability of being chosen for inclusion in the sample (1988: 118). They developed a method of selecting homeless individuals such that every homeless person in the Los Angeles Skid row area would have an equal chance of being selected into the sample. The strategy involved:

estimating the relative proportions of the homeless population that “passed through” various facilities over a month’s time (including facilities which served the unsheltered sector of the homeless population), and then randomly sampling, within these facilities, numbers of persons that were directly proportional to the average proportion of the population utilizing the facility over the period of a month (122).

Tracy Peressini, Lynn McDonald, and J. David Hulchanski.  
8.3 Towards a Strategy for Counting the Homeless

[www.homelesshub.ca/FindingHome](http://www.homelesshub.ca/FindingHome)  
© Cities Centre, University of Toronto, 2010  
ISBN 978-0-7727-1475-6





Before selecting their sample, they had to determine which facilities were used by the homeless and what services each facility provided. After conducting an investigation into the facility and service utilization of the homeless population, they determined that for their sample to be representative, three sampling sectors had to be distinguished: (1) Beds: persons using temporary sleeping quarters or beds made available to the homeless in shelters or through the provision of hotel vouchers; (2) Meals: homeless persons receiving free meals from missions or other programs, but not using beds; and (3) Congregating areas: homeless individuals who made some use of missions and drop-in centres (Burnam and Koegel, 1988: 123).

The next phase involved collecting data from each of the facilities included in each of the sectors, as well as from surveys of homeless individuals themselves, to estimate the proportion of the population falling into each of the sectors over a month's time (1988:123). Burnam and Koegel then determined the proportion of individuals using one or more of the facilities or services (that is, the overlap between the facilities) and adjusted their estimates of the numbers of people falling into each of the sectors. Finally, they randomly selected a sample of individuals within each sector on a given day. The result was the selection of a sample that consisted of a representative cross-section of homeless individuals "on an average day" in Los Angeles's Skid row.

A preliminary survey of the homeless population in Calgary's Skid row was carried out using similar methods and procedures. The goal of the initial survey was to determine the services and facilities used by the homeless and to estimate the proportions of homeless using each of the service sectors in order to develop a sampling list from which to draw a sample.

### *Development of the Sampling Frames for the Survey*

In February 1991, the data required to determine the proportions of the homeless population using each facility included in the beds, meals and congregate area sectors were gathered. This information is needed to calculate the probabilities of homeless persons using the services and facilities in each sampling frame. First, the different type of services for the homeless in the Calgary's skid row area was determined. Then in-

Tracy Peressini, Lynn McDonald, and J. David Hulchanski.  
8.3 Towards a Strategy for Counting the Homeless

[www.homelesshub.ca/FindingHome](http://www.homelesshub.ca/FindingHome)

© Cities Centre, University of Toronto, 2010

ISBN 978-0-7727-1475-6



formation was collected on the characteristics of the facilities such as: numbers of beds, eligibility for beds, length of stay in beds, numbers and times of meals served, other services (e.g., drop-in or congregate services) and number of persons using other services during the study month. Table 1 presents a summary of this information.

**Table 1: Sampling Information for the Calgary Survey of the Homeless**

Facility	No. of transient beds	Number of beds Feb 1991	Meals served to transients	Total meals Feb 1991	Congregate areas
Single Men's Hotel	138	3,811	Breakfast Lunch Dinner	- - -	- - -
Calgary Drop-In Centre	100	2,992	Mid-morning Mid-afternoon	2,992 2,238	1,230
St. John's Soup Kitchen	-	-	Lunch	3,352	
Salvation Army Soup Line	-	-	Dinner	1,292	

Source: McDonald and Peressini, 1991.

Two facilities offered beds to the homeless, and three facilities offered meals to individuals other than those whom they were housing as part of a program, together providing approximately 233 meals per day to the homeless and transient population. However, these figures did not accurately reflect the number of homeless individuals served, because more than one meal was served per day at one of the facilities, individuals could eat at more than one facility in a day, individuals were allowed to have more than one serving during the same serving period, and meals were not restricted to homeless individuals.

Only one facility contained an indoor congregating area. Because of the constant movement of individuals in and out of the facility, the research team found it extremely difficult to determine exactly how many individuals the facility served. This facility took a daily count of the number of individuals present at noon. Using this information, the research team calculated that the total number of individuals (who may or may not have been homeless at the time) using this congregate area for the study month was no more than 1,230 people or approximately 44 people per day.

Tracy Peressini, Lynn McDonald, and J. David Hulchanski.  
8.3 Towards a Strategy for Counting the Homeless

[www.homelesshub.ca/FindingHome](http://www.homelesshub.ca/FindingHome)

© Cities Centre, University of Toronto, 2010

ISBN 978-0-7727-1475-6



The researchers concluded that, taking the size and characteristics of the homeless population into consideration, it would be redundant to partition the sample into three sectors. Because only one facility in Calgary's skid row area offered a drop-in service (that is, provided an indoor congregating area) and that same facility provided both beds and meals, it was decided that the portion of the homeless using this service would be captured, or represented, in the bed and meal sectors. Thus, the services provided to the homeless were assigned to the meals and beds sectors by the research team in the following way:

Beds Sector: The Single Men's Hostel, The Drop-In Centre (Night Program)

Meals Sector: The Drop-In Centre (Meals service), St. John Soup Kitchen, Salvation Army Soup Line

The next stage required first, the identification of all *other* congregating areas outside Calgary's Skid row attracting concentrations of homeless individuals, and second, taking a census of homeless persons in these areas. They included City Hall (on Sunday mornings), the Public Library, Devonian Gardens (part of a major shopping mall in the downtown core), and three fast-food outlets. In total, 75 people were counted in these areas over several periods between mid-February and the end of the month. This number, however, was not considered an accurate reflection of the number of people who actually passed through each of the congregate areas. Thus, similar to Burnam and Koegel's survey, it was decided that this subpopulation of the homeless would be captured in the samples of the other two sectors.

The decision not to sample from the other congregating areas allowed for the possibility that a portion of the homeless who did not use the bed and meals services and did not congregate at the drop-in centre would not be selected for inclusion in the final sample. Thus, ultimately, the final sample chosen would not represent the entire homeless population. To ensure that a minimal amount of bias was introduced into the sample by excluding this sampling sector, a short survey of the individuals in the "other" congregating areas was carried out in order to determine their likelihood of being captured in the beds and meals sectors.

Tracy Peressini, Lynn McDonald, and J. David Hulchanski.  
8.3 Towards a Strategy for Counting the Homeless

[www.homelesshub.ca/FindingHome](http://www.homelesshub.ca/FindingHome)  
© Cities Centre, University of Toronto, 2010  
ISBN 978-0-7727-1475-6



The sample design of the auxiliary survey involved sampling a quota (a set number of individuals based on their proportions, derived from the observations of the areas) of those individuals available in each of the areas at the time of the survey. The survey was conducted over four days. Individuals were asked a series of questions that established whether they were homeless (that is, they did not have a room, apartment, or house of their own, or had not been in their own place in the previous month). If they met the criteria for homelessness they were asked three additional questions to determine whether, in the previous month, they had: (1) slept in a bed in any of the facilities in the beds sector; (2) eaten a meal at any of the settings in the meals sector; or (3) spent time in the drop-in centre's congregate area.

Thirty-six persons were approached. Five refused to participate in the mini-survey, for a completion rate of 86 percent. Of the 31 individuals agreeing to participate, 25, or 80 percent, had passed through the bed sector, meal sector, or both during the study month. Only 3 people (10 percent) had used the congregating area at the drop-in centre. Furthermore, these three people reported using at least one of the facilities in both the beds and meals sectors over the month prior to being surveyed. These results, therefore, support the decision to exclude the "other" congregating areas from the overall sampling frame. The majority of people in the outdoor congregating areas would be represented in the final sample by virtue of the fact that they were also using the services available in the Bed and Meal sectors. Thus, it was concluded that allocating the sampling frame to the Bed and Meal sectors would produce a sample of homeless individuals which would be representative of the entire homeless population in the city.

#### *Allocating the Sample across the Bed and Meal Sectors*

The next step was to determine how to proportionately sample from each of the sectors. Following Burnam and Koegel's reasoning (1988: 133), the researchers concluded that the population using a bed in the bed sector was a subset of the population that receives meals (e.g., the meals sector is more inclusive than the beds sector). Thus, as Burnam and Koegel put it, "as one moves from the category of beds to meals... one casts a wider net, drawing in individuals who are less and less in-

Tracy Peressini, Lynn McDonald, and J. David Hulchanski.  
8.3 Towards a Strategy for Counting the Homeless

[www.homelesshub.ca/FindingHome](http://www.homelesshub.ca/FindingHome)  
© Cities Centre, University of Toronto, 2010  
ISBN 978-0-7727-1475-6



volved in service utilization" (1988: 134). It was decided that the strategy would be to sample those in the beds sector first, thereby allocating the maximum proportion of the sample to this category, and then sample the meals sector (accessing those individuals who would have a high probability of being excluded from the sample derived from the beds sector).

Before this step could be carried out, an estimate of the amount of overlap between the two sectors had to be determined. A third survey of the facilities included in the meals sector – the most inclusive of the sectors – was therefore completed. The Meals Enumeration consisted of four questions:

1. Do you currently have a room, apartment or house of your own?
2. Have you stayed in your own place in the last 30 days?
3. Have you slept in a bed at the Single Men's Hostel or the Drop-In Centre in the last 30 days?
4. In the last week have you eaten at any of the following places? The Salvation Army Soup Line? The 10:30 and 2:30 meals at the Drop-In Centre? and The St. John's Soup Kitchen?

A complete census of all individuals using the meal services provided at the Soup Line, Drop-In Centre and Soup Kitchen at four different times over the study month was carried out.

In total, across the three locations, 264 individuals were approached. Of these, 26 declined to be interviewed, resulting in a completion rate of 90 percent. From the survey, 61 people were defined as not homeless (e.g., they answered "yes" to questions 1 or 2). Thus, information on sector overlap was available for 177 people. Of these 177 individuals, 78 percent (138) had slept in a bed at either the Single Men's Hostel or the Drop-In Centre in the study month, while 22 percent (39) had received meals but had not slept in a bed in the beds sector in the month prior to being interviewed.

The goal of the CSH was to obtain 100 interviews of the homeless. Factoring in a refusal rate of 10 percent (based on the refusal rate obtained in the meals enumeration survey), it was calculated that a sample of 110 individuals would have to be initially selected to achieve a final sample size of 100. Knowing that 22 percent of the population used

Tracy Peressini, Lynn McDonald, and J. David Hulchanski.  
8.3 Towards a Strategy for Counting the Homeless



meals but not bed services, it was calculated that 24 people needed to be selected from the meals sector. The remaining 86 people (78 percent) would be drawn from the beds sector. All that remained to be done was to ensure that the individuals to be sampled across the different facilities within each sector had an equal probability of being selected.

### *Sampling within the Beds Sector*

Two primary facilities are available to people seeking beds for which they did not have to pay in the City of Calgary: The Single Men's Hostel (SMH) and The Calgary Drop-In Centre (CDIC). Before determining the proportions of interviews to take place in each facility, however, the degree of utilization overlap between the two facilities had to be calculated. In other words, to ensure that interviews were allotted to each facility in the correct proportion, this overlap had to be accounted for and controlled in the overall sampling design.

Using Burnam and Koegel's design, an estimate of the amount of overlap between the facilities was derived and subsequently controlled for by going through the following steps. In the first step, a list of different people using each facility for the study month was compiled. This list provided a count of the *different people* who had slept in *each* facility in a 30-day period, thus providing an estimate of the number of people that the beds in each facility represented. In total, 510 different people slept in a bed at the SMH and 529 different people slept in a bed at the CDIC.

Next, the list from each was compared to the other to see which people had slept in a bed in more than one place. Where overlap was found, it was split evenly or proportionately weighted between the two lists. For example, a person who had slept in a transient bed at the SMH and in a bed at the CDIC during the designated period (February) was counted as one-half in each of the two categories. This procedure served to adjust the estimated number of persons represented by a facility to account for the overlap between facilities. In total, 239 people out of 1,039 had slept in a bed at both the facilities in February. A weight of 0.5 was assigned to the individuals whose names appeared on both of the lists. As a result, the total number of different people using a bed in the beds sector in one month was calculated to be equal to 800; after adjusting for the overlap between the two facilities.

Tracy Peressini, Lynn McDonald, and J. David Hulchanski.  
8.3 Towards a Strategy for Counting the Homeless

[www.homelesshub.ca/FindingHome](http://www.homelesshub.ca/FindingHome)  
© Cities Centre, University of Toronto, 2010  
ISBN 978-0-7727-1475-6



Finally, using the figures derived in the first two stages, the proportion of the total population of different people using beds for each site in the beds sector, controlling for overlap, was calculated as follows: the SMH = 48.81 percent and the CDIC = 51.19 percent. The sample of desired interviews, 86, was proportionately allocated to transient beds in each of the facilities as follows: SMH, 42 interviews and CDIC, 44 interviews.

### *Sampling Within The Meals Sector*

Three organizations provide meals to homeless and transient people in the city of Calgary: the CDIC (2 meal settings at 10:30 am and 2:30 p.m.), the Salvation Army Soup Line (dinner), and the St. John's Soup Kitchen (lunch). The goal here was to control for the overlap in usage between the meals settings, such that each individual in the total population availing themselves of meals in each of the facilities would be counted only once. Burnam and Koegel's design was once again employed.

Table 2 presents a summary of the steps and calculations that were taken in the CSH to replicate Burnam and Koegel's design for deriving an estimate of the proportions of eligible persons served by each meal site, adjusted for the overlap in usage between the four sites. Using these proportions the desired number of interviews to be conducted in the meals sector, 24, was allocated as follows:

- St. John's Soup Kitchen: 19 interviews
- Drop-In Centre (10:30 am): 1 interview
- Drop-In Centre (2:30 p.m.): 1 interview
- Salvation Army Soup Line: 3 interviews
- Total: 24 interviews

Tracy Peressini, Lynn McDonald, and J. David Hulchanski.  
8.3 Towards a Strategy for Counting the Homeless



**Table 2: Summary of Steps Used to Derive Proportions of Interviews to be Conducted at Each Facility in the Meals Sector**

Procedure	Soup Kitchen	Drop-In Centre		Salvation Army	Total N
		a.m.	p.m.		
Not Homeless	23	22	10	6	61
Slept in a Bed in the Beds Sector	36	69	28	5	138
Eaten a Meal but Did Not Sleep in a Bed	27	2	4	6	39
Average # of Meals (Feb)	10.5	3.4	2.4	1.9	---
Total # of Meals Served (Feb)	3,352	2,992	2,238	1,292	9,874
Est. of the # of Different Persons served (Total/Average # of Meals)	334	883	948	663	2,828
Proportion of Eligible Persons at each site	.69	.05	.10	.15	---
Total # of Eligible Persons served by each site (Est. of Different Persons x Prop. eligible)	231	45	97	102	475
Eligible # of Persons eating at each site, adjusted for overlap	22	6.5	3	7.5	39
Proportions of Persons eating at site, adjusted for overlap	.56	.17	.08	.19	---
Total # of eligible persons served by each site, adjusted for overlap	130	8	8	20	166
Proportions of Eligible persons served by each site, adjusted for overlap	.78	.05	.05	.12	---

Tracy Peressini, Lynn McDonald, and J. David Hulchanski.  
8.3 Towards a Strategy for Counting the Homeless

[www.homelesshub.ca/FindingHome](http://www.homelesshub.ca/FindingHome)

© Cities Centre, University of Toronto, 2010

ISBN 978-0-7727-1475-6





Table 3 presents a summary of the sample of the sub-groups making up the homeless population, living in the skid row area of the city that was surveyed. The proportion of each group is outlined and the number of interviews that were conducted in each stratum specified.

**Table 3: Sampling Strata Summary**

	No. of People to be Randomly Sampled	Proportion of the Population (%)
Beds:		
Single Men's Hostel	42	38
Calgary Drop-In Centre	44	40
Sub-Total	86	78
Meals		
St. John's Soup Kitchen	19	17
Calgary Drop-In Centre (a.m.)	1	01
Calgary Drop-In Centre (p.m.)	1	01
Salvation Army Soup Line	3	03
Sub-Total	24	22
Total Number of Interviews	110	100

In all, 110 homeless men and women were administered a 14-page questionnaire containing questions that would allow us to derive a comprehensive description of the respondents, including their housing histories; specific needs for help; problems with health, drugs, alcohol and mental disorders; a demographic profile; early childhood experiences; problems with the police; work histories; and other relevant experiences.

The survey instrument was developed, pre-tested, and revised over the course of carrying out the interviews in the meals sector. The revisions involved simplifying questions and shortening the questionnaire (it was originally 25 pages long). The interviews took roughly 25 to 65 minutes to complete, with an average completion time of 45 minutes.

In total, 159 persons were approached and asked to participate in the study. Of these, 35 people refused to take part. The remaining 124 people who agreed to take part in the study were asked two screening questions designed to ensure that the individuals chosen for inclusion in the study were, in fact, homeless. As a consequence of the screening procedures used, 14 people did not meet either criteria and, hence, were excluded from the study.

Tracy Peressini, Lynn McDonald, and J. David Hulchanski.  
8.3 Towards a Strategy for Counting the Homeless



In the beds sector, 24 interviews were conducted. Altogether, 35 people were approached. Of these, four refused and seven were found not to be homeless according to the criteria used. Three interviewers carried out the survey at each of the locations in the meals sector: St. John's Soup Kitchen (N=19), the Salvation Army Soup Line (N=3), and the Calgary Drop-In Centre (a.m. N=1; p.m. N=1).

People were approached as they lined up for a meal at each of the services. Starting from the first person in the line, every fifth individual was selected and asked to participate in the survey. The selection procedure continued until the pre-determined number of individuals to be interviewed at each site had been achieved. In some instances, depending on the setting, the participants, the number of interviews to be conducted at the particular site, and the amount of time allowed the interviewers at each site, the interviewers had to return over a number of days and repeat the selection procedure until the desired number of interviews was completed.

It took five interview sessions to complete the required 19 interviews at the St. John's Soup Kitchen. The soup kitchen served only one meal per day from noon to 1 p.m. The interviewers were granted an additional hour in which to carry out their interviews. Since only two interviews could be carried out per interviewer during any one sitting, the 19 interviews were completed over five consecutive days. Both the drop-in centre and the Salvation Army soup line required only one sitting to obtain the required number of interviews.

In the beds sector, 86 interviews were completed: 44 at the drop-in centre and 42 at the Single Men's Hostel. Like the St. John's Soup Kitchen, because of time limitations, interviewing for the beds sector took place over seven days. A total of 124 people were approached and asked to participate. Of these, 31 refused and seven were found not to be homeless according to the study criteria.

Between six and eight interviewers were used, depending upon the site and the number of people to be interviewed. Only two interviews could be completed each time.

The Single Men's Hostel presented a unique problem. The residents at the hostel were required to be out of the building by 8:00 a.m. and were not allowed back into the hotel until 4:00 p.m. After dinner they

Tracy Peressini, Lynn McDonald, and J. David Hulchanski.  
8.3 Towards a Strategy for Counting the Homeless



were free to spend their time in whatever way liked, as long as they were in their bed or room for “lights-out” at 10:30 p.m. Given the limited amount of time that all of the residents would be available for interviewing, interviews were conducted as the residents lined up for breakfast (between 7 and 8 a.m.) and dinner (4 to 6 p.m.) to maximize the time the researchers had for interviewing and the pool of residents from which a sample could be selected.

Individuals were selected from the meal line-ups at both settings in the beds sector. Initially the research determined that every tenth person would be selected. However, because the residents at each facility did not use the facility at the same time, this sampling interval was too broad. The researchers therefore set the sampling interval at five. Interviewing took place over three consecutive days at the Drop-In Centre and over two days at the Single Men’s Hostel.

### **Service-Based Methods: Further Requirements**

Employing a service-based method for counting the homeless requires both a screening instrument and survey instrument (intake form and questionnaire). Screening instruments allow the interviewer to identify which of the individuals using services are homeless. For example, the Calgary Survey of the Homeless defined persons as “homeless” if they did not currently have a room, apartment or house of their own, or had not been in their own place within 30 days of participating in the study. Accordingly, the screening criteria consisted of the following two questions: (1) Do you currently have a room, apartment or house of your own for which you pay to live in? (2) Have you stayed in your own place within the last 30 days?

A screening instrument may also contain questions designed to collect information on the other services that the homeless use. Questions collecting information on the socio-demographic characteristics of the respondents may be incorporated in either the screening instrument or the survey instrument. Both types of additional information can be used to develop and assign a unique identifier to each individual counted.

Unique identifiers permit the investigator to cross-reference cases from one sampling frame to the next to eliminate the problem of double

Tracy Peressini, Lynn McDonald, and J. David Hulchanski.  
8.3 Towards a Strategy for Counting the Homeless



or multiple counting across frames.<sup>5</sup> Because the homeless may use more than one of the services included in a count, a method for identifying cases that distinguishes between individuals is required.

Unique identifiers can take a number of forms. The U.S Bureau of the Census uses the respondent's Social Security Number. Another unique identifier consists of a composite descriptor based on the individual's date of birth, gender, race, and name. For example, a person whose birth date is January 1, 1965, who is male, black, and whose name is Fred James Smith could be represented by the following number: 01016501FJS, where 010165 is their birthdate, 0 the male code for gender, 1 the black code for race, and FJS the first initials of their name. This information could be collected from everyone surveyed and the final count adjusted for multiple occurrences in the database. This type of identifier is the most common one used and has been employed in service-based methods, as well as computerized information management systems.

The last issue is that of the types of data to be collected. The most important limitations on the amount of information collected from respondents are the amount of time that the investigator has to ask questions (which may be determined by the operating procedures of the organizations involved) and the respondent's willingness to cooperate.

The questionnaire employed in the CSH included a range of questions or variables about respondents' sociodemographic and socioeconomic background, their work history, their levels of income, their health problems (mental and physical), their use of drugs and alcohol, their family background, their social networks, their daily activities, their rates of service utilization, and their history of homelessness.

Similar types of information are collected by investigators using computerized information management systems (CIMS), such as the ANCHoR system. Typically, however, those employing CIMS collect substantially less information from the homeless than researchers carry-

---

<sup>5</sup> The issue of double counting is only problematic for those designs consisting of an enumeration that takes place over an extended period of time (e.g. more than one night). For designs other than one-night blitzes, it becomes necessary to develop a unique identifier to control for the possibility of counting an individual more than once of the period in which the enumeration takes place.

Tracy Peressini, Lynn McDonald, and J. David Hulchanski.  
8.3 Towards a Strategy for Counting the Homeless

[www.homelesshub.ca/FindingHome](http://www.homelesshub.ca/FindingHome)

© Cities Centre, University of Toronto, 2010

ISBN 978-0-7727-1475-6



ing out actual surveys. The following example of the questions included on the application for hostel assistance used by the Municipality of Metropolitan Toronto shows that usually only information such as the respondent's basic demographic characteristics (e.g. age, gender, race, date of birth, last place of residence), reasons for request of services, disposition of case, and the relevant accounting information is collected.

1. Full Name
2. Gender
3. Date of Birth
4. If accompanied by spouse, give first name
5. If accompanied by children, give ages
6. Last permanent address

#### SERVICE INFORMATION

1. Major Reason for service:
  - A. Spousal abuse
  - B. Spousal abuse - psychological
  - C. Parental abuse – sexual
  - D. Parental abuse – other
  - E. Family breakdown – general
  - F. Eviction - landlord
  - G. Eviction – other
  - H. Transient lifestyle
  - I. Moving to City
  - J. Stranded in City
  - K. From treatment – psychiatric
  - L. From treatment – other
  - M. From corrections
  - N. Fire/unsafe premises
  - O. Other (specify)
2. Disposition of case:
  - A. Found new address in community
  - B. Returned to spouse/parents
  - C. Continued on at another hostel
  - D. Moved in with friends/relatives
  - E. Left the city
  - F. Admitted to hospital

Tracy Peressini, Lynn McDonald, and J. David Hulchanski.  
8.3 Towards a Strategy for Counting the Homeless



- G. Whereabouts unknown
- H. Other (specify)

## ACCOUNTING INFORMATION

1. Name of Hostel
2. Month
3. No. of persons
4. Admission date
5. Leaving date
5. Date during which client(s) slept in hostel
6. Total nights service X per diem rate = amount of this claim \$

These data collected by the Municipality of Metropolitan Toronto are most relevant to their needs. For other studies, the type of questions asked will reflect the interests and needs of those collecting the data.

### Conclusions

Conventional strategies for counting individuals based on households simply do not apply to the homeless. The homeless are a transient, mobile, and elusive population which cannot be consistently located in a single place. They do, however, tend to aggregate in known locations for short periods of time. These places include shelters, soup kitchens, medical services, outdoor congregate areas, indoor drop-in centres, employment offices, and the like.

In the mid-1980s American researchers acknowledged this fact and began to develop strategies for sampling from the population in these locations. However, carrying out counts in these types of locations required permission and cooperation from those providing the services that the homeless use. Initially, most, if not all, met with some degree of resistance. It took at least ten years to develop and build up a level of trust between the service provision community and researchers so that the methods for counting the homeless can be easily implemented and carried out. Researchers still run into resistance, but a tacit agreement has been made that, in most instances, researchers and providers are working towards the same goal.

In Canada, government officials are skeptical of the estimates of the numbers of homeless that the service community has produced. The ser-

Tracy Peressini, Lynn McDonald, and J. David Hulchanski.  
8.3 Towards a Strategy for Counting the Homeless

[www.homelesshub.ca/FindingHome](http://www.homelesshub.ca/FindingHome)  
© Cities Centre, University of Toronto, 2010  
ISBN 978-0-7727-1475-6



vice community is equally skeptical of government estimates, and questions the value of trying to count the homeless. For them, the numbers are not important, rather it is the amount and quality of care and services that they can provide which is foremost in their minds. This difference must be addressed before any progress can be achieved and a common goal devised in order to create the level of co-operation required to successfully count the homeless.

This chapter is drawn from a report called *Estimating Homelessness: Towards a Methodology for Counting the Homeless in Canada* published by CMHC, Ottawa, in 1996.

*Tracy Peressini* is an Associate Professor (Sociology and Social Development Studies) and Director of the Centre for Social and Community Development at Renison University College, University of Waterloo. *Lynn MacDonald* is a Professor in the Faculty of Social Work and Director of the Institute for Life Course and Aging at the University of Toronto. *J. David Hulchanski* is an Associate Director of Research for the Cities Centre and a Professor in the Faculty of Social Work, University of Toronto.

## References

- Bentley, D. (1995). *Measuring homelessness: A review of recent research*. Winnipeg, MB: Institute of Urban Studies.
- Burnam, M. A., & Koegel, P. (1988). Methodology for obtaining a representative sample of homeless persons: The Los Angeles skid row study. *Evaluation Review*, 12(2), 117-152.
- Burt, M. A. (1991). Causes of the growth of homelessness during the 1980s. *Housing Policy Debate*, 2(3), 903-936.
- Burt, M. A. (1992). *Practical methods for counting homeless people*. Washington, DC: Interagency Council on the Homeless and the U.S. Department of Housing and Urban Development.
- Burt, M. A. (1993). *Over the edge: The growth of homelessness in the 1980s*. New York: Russell Sage Foundation.
- Dennis, M. L. (1991). Changing the conventional rules: Surveying homeless people in nonconventional locations. *Housing Policy Debate*, 2(3), 701-732.

Tracy Peressini, Lynn McDonald, and J. David Hulchanski.  
8.3 Towards a Strategy for Counting the Homeless

[www.homelesshub.ca/FindingHome](http://www.homelesshub.ca/FindingHome)  
© Cities Centre, University of Toronto, 2010  
ISBN 978-0-7727-1475-6



- Dennis, M. L. (1993). *Coverage of service-based methodology: Findings from the DC\*MADS homelessness study*. Paper presented at the Towards Census 2000 Conference, Arlington, VA.
- Dennis, M. L., & Iachan, R. (1992). *Sampling people who are homeless: Implications of multiple definitions and sampling frames*. Paper presented to the American Psychological Association's 100th Annual Conference, Washington, D.C.
- Dennis, M. L., & Iachan, R. (1993). Multiple frame approach to sampling the homeless and transient population. *Journal of Official Statistics*, 14(5), 1-18.
- McDonald, P. L., & Peressini, T. L. (1992). *The East Village community study: Final report*. Calgary: The City of Calgary.
- Rossi, P. H. (1989). *Down and out in America: The origins of homelessness*. Chicago: The University of Chicago Press.
- Tauber, C. (Ed.). (1991) *Enumerating homeless persons: Methods and data needs* [Conference Proceedings]. Washington, DC: U.S. Department of Commerce, Bureau of the Census.
- Wright, J. D., & Devine, J. A. (1992). Counting the homeless: The Census Bureau's S-Night in five U.S. cities. *Evaluation Review*, 16(4), 355-364.

Tracy Peressini, Lynn McDonald, and J. David Hulchanski.  
8.3 Towards a Strategy for Counting the Homeless

[www.homelesshub.ca/FindingHome](http://www.homelesshub.ca/FindingHome)  
© Cities Centre, University of Toronto, 2010  
ISBN 978-0-7727-1475-6

