First Steps Towards a Survey of Homelessness in Canada – Lessons from Previous Studies

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During the last decade much has been written on the issue of homelessness – how to define it, policies and options to improve the situation, and methods of counting the homeless. This is a reflection of the increasing importance that our society places on this issue, as well as concerns that the extent of homelessness is growing.

Statistics Canada (STC) has been approached by Human Resources Development Canada (HRDC) to look into the feasibility of conducting a survey of homelessness in several Canadian cities. The primary objective of this survey would be to obtain accurate counts of the numbers of homeless persons making use of the shelter system, of those living "on the streets" who make use of other services such as soup kitchens or drop-in centres, and of the street population that does not make any use of these services. Some basic demographics such as age/sex and aboriginal status would also be collected.

The purpose of this document is to review, particularly from a methodological perspective, previous experiences with such studies in both a Canadian and a non-Canadian context. We first summarize the methodologies used for several studies performed in various cities in the United States and in Canada. We then discuss the lessons learned from these studies and from our reading of other articles related to surveying the homeless population. We then present some preliminary options for how the HRDC/STC study on homelessness might be conducted. Finally we append an annotated bibliography of related papers.

1. Some Previous Studies

Several studies performed in the United States have been well documented (the Chicago Study by Rossi, the Urban Institute Study and the DC*MADS study); however, similar studies in Canada are few and far between. While a national count of the homeless has never been attempted in Canada, the 1991 Census of Population collected data in shelters and soup kitchens in sixteen cities across Canada. The goal of this collection was not to estimate the number of homeless but rather to improve the census counts of the Canadian population. In addition to this work performed by Statistics Canada, the Canadian Mortgage and Housing Corporation (CMHC) hosted an international workshop on the subject of homelessness in 1995. As well, small studies have been performed in the cities of Calgary, Montreal and Quebec City with varying results.

In this section we give brief methodological reviews of three of the most important American studies and of two previous Canadian studies.

1.1. *American Studies*

The Chicago Study

The Chicago study took place between June 1985 and August 1986, with the collection taking place in September 1985 and February 1986. The purpose of the study was to evaluate methods of estimating the size and composition of the homeless population in urban areas. Each survey consisted of two samples:

- 1. Shelter sample an exhaustive list of shelters was developed in co-operation with welfare agencies and advocacy groups. Shelters were then sampled with probability proportional to shelter capacity. Within sampled shelters, individuals were sampled systematically from rosters of residents. Specialized shelters such as detoxification, battered women's and juvenile shelters were excluded.
- 2. Street sample census blocks for the Chicago area were stratified by the expected density of homeless to be found on the block (as estimated by police precinct community relations officers) into high, medium and low density strata. Strata were sampled proportional to expected homeless density. Within each sampled block, interviewers screened all persons encountered and interviewed all positives.

Note that in both the shelter and street samples, name and social security numbers were obtained in order that the duplicates could be eliminated.

The resulting estimates of the two phases of the study indicated a homeless population in Chicago of 2,344 in Phase I (September 1985) and 2,020 in Phase II (February 1986). Although the estimated population sizes were similar, it was noted that the distribution of the homeless was markedly different between the two phases. During Phase I, 41% of the homeless were found in shelters; in contrast, in Phase II, 74% of the homeless were found in shelters. A corresponding shift in the opposite direction was observed in the estimates of the street population.

The Urban Institute Study

The Urban Institute study took place during the month of March 1987 in twenty different cities across the United States of America. The official purpose of the study was to evaluate the impact of the Prepared Meals Provision legislation that enabled homeless to exchange food stamps for prepared meals in soup kitchens and shelters. The unofficial reason was to get good national estimates of characteristics and needs of the homeless populations.

The sampling frame included: all shelters for the homeless; all domestic violence shelters; subsidized temporary voucher programs run by several cities; private programs that offered vouchers for hotels or apartments; and soup kitchens or feeding programs of any kind (as long as they were within the city limits of one of the twenty cities covered by the study). Note that the sampling frame did not include an area or street component. However, in each city interviews were conducted in five locations, identified by local providers or police, which were not included in the sampling frame. Data from these

non-random interviews indicated that 32% of the homeless identified had **not** used a soup kitchen or shelter during the previous week.

Once constructed, the sampling frame was stratified by type (soup kitchen, shelter with meals, shelter without meals) and by size (under 26, 26 to 100, over 100). Within each stratum, samples were selected with probability proportional to size to fill a sample of 400 facilities. Within each sampled facility, individuals were randomly selected as follows: after obtaining the expected number of clients from the providers, a skip interval was calculated to obtain five completed interviews (based on all clients at a shelter being homeless and 65% of the clients at a soup kitchen being homeless) and a random start point was determined. Screening commenced with the random start point, with positives being interviewed. After screening, or interviewing, the skip interval was applied to identify the next interviewee. The contribution of people who used both shelters and soup kitchens (duplicates) was removed through adjustments to the sampling weights.

The resulting estimates indicated that in cities with a population over 100,000, 194,000 adults used shelters or soup kitchens during any given week of March 1987.

The Washington, DC Metropolitan Area Drug Study (DC*MADS)

The collection for the DC*MADS study took place between February 1991 and June 1991. Independent samples were selected for 64 days: 4 days in each of 4 weeks in each of 4 months. The sample on any given day was quite small, but by averaging across all 64 sampled days an accurate estimate was derived for an average day during this time period. The DC*MADS study attempted to sample and interview homeless individuals from four major sampling frames.

- 1. Shelter sample the shelter frame consisted of emergency housing facilities in the DC metropolitan area, including shelters for abused persons and runaways and hotels and motels from which jurisdictions purchased rooms. The frame was assembled from information obtained from local providers and government sources. Separate frames were obtained for the winter and spring surveys. Both frames were stratified into five size strata (based on the number of beds) with equal probability samples of shelters selected within strata. Residents of each sampled shelter were randomly selected with equal probabilities from an intake or resident roster. Shelters were randomly assigned to 1 of the 16 sampled days in the month.
- 2. Soup kitchen sample like the frame of shelters, the soup kitchen frame was assembled from information obtained from local providers and government sources. The soup kitchen sample was selected in two stages. At the first stage site meals (breakfast, lunch, and dinner) were selected with probabilities proportional to size (expected number of persons served) and at the second stage, an equal number of persons was selected from each sampled meal unit. Soup kitchens were randomly assigned to 1 of the 16 sampled days in June.

- 3. Street sample the street frame was constructed as follows. Experts were asked to identify census tracts in their municipalities with high concentrations of homeless street people. Jurisdictional experts were then asked to rate the census blocks as high, medium or low depending on the number of homeless people in a given block. Random samples of tracts and blocks were then selected with those rated high or medium having a greater probability of being selected. All individuals found in the selected blocks were screened. The selected blocks were randomly assigned to one of the two months in each season and then randomly assigned to 1 of the 16 sampled days in the month.
- 4. Encampments sample encampments were identified by local experts and were contiguous census blocks where homeless people appeared to stay. The encampments often contained more than one census block, included parks, vacant buildings, underpasses and places in forests and along rivers. The encampments were geographically clustered into 18 groups and randomly assigned to 1 of the 16 days sampled in June.

Given the multiple frames, multiplicity adjustments were used to account for multiple probabilities of selection in the survey components. These multiplicity adjustments were based on questions asked of respondents about their use of shelters and soup kitchens.

The DC*MADS study estimated the homeless population at 8,356 but more interestingly, the study estimated that 91.5% of the homeless population could be covered by surveying shelters and soup kitchens.

1.2. Canadian Studies.

In most Canadian cities information about the numbers of homeless comes primarily from shelter counts (derived from administrative records?). However, there were two studies done to attempt to more systematically and completely enumerate the homeless population.

The Calgary Survey

In Calgary a one-night count was attempted on May 21, 1998. This was in fact the fourth in a series of biennial surveys of downtown shelters and non-shelter service providers. Twenty-two organizations participated in the survey including men's hostels, women's shelters, emergency services, police services, hospitals and outreach services. Participating organizations were asked to record the total number of homeless persons spending the night in their facility or that they had observed sleeping on the street. Basic demographics and data on the number of families were also collected. The resultant count was 988 homeless persons.

The Montreal and Quebec City Surveys

These surveys covered the period from January 1 to December 31, 1996. There were three components: a shelter component, a soup kitchen component, and a drop-in centre component. The soup kitchen component attempted to count clients of soup kitchens, who were not also clients of the shelter system, while the drop-in centre component attempted to count those who used neither the shelters nor the soup kitchens. Data collection in the shelters used the shelter's own administrative records when the shelter permitted it. These records were then unduplicated within and across shelters to get counts of distinct persons. If the shelter would not permit access to their administrative records then the shelter's own counts of distinct clients over a 12-month period was used. A questionnaire was then administered (by shelter personnel) to a sample of clients to determine their frequency of use of this and other shelters, which was needed for estimation of the overlap between client bases of this shelter and others. For the soup kitchen component estimates were based on the number of meals served during a sample of 30 days from October to December. A sample of clients was asked about their homelessness status, their frequency of use of soup kitchens, and their use of shelters, to allow unbiased estimation of the number of distinct clients and of the overlap with the shelter component. The method for the drop-in centres was similar to that for the soup kitchens. The estimated number of distinct people who were homeless at some point during the twelve-month period was 12,666 for Montreal, of which 4,413 had not used the shelter system. The corresponding numbers for Quebec City were 3,589 and 1,471.

2. Some Lessons from Previous Work

All studies that try to enumerate the homeless use a variety of approaches to reach different parts of the population. In urban settings, working through the shelter system is probably the most efficient and effective way to reach a large part of the homeless population, and all studies take this as a starting point. However, because there is a significant portion of the population that does not use the shelter system, other frames must also be used if complete coverage of the homeless population is desired. Most typically a secondary frame is based on other services that may serve the homeless, such as soup kitchens or drop-in centres. Many surveys of homelessness use two frames, a shelter frame and a second based on services. However, complete coverage of the population – those homeless people who use neither the shelters nor services. This "street" population is not only found on the streets, but also in parks, abandoned buildings, bus shelters, *etc*.

One issue that arises when multiple frames are used is double counting, *i.e.* some of the homeless people may be present on more than one of the frames. One approach to handling this problem is to have enough variables available from both frames so that each person is essentially uniquely identified and duplicates can be identified. The quality of the information, in terms of response errors, is also important for the success of this unduplication. Another approach is to try to determine directly, by asking, if people on one of the frames are also on the other. For example, people contacted through soup kitchens could be asked about their use of shelters. Again, quality of the responses is important for validity of this approach. In the case of a complete enumeration either of

these approaches might be considered. When only a sample of the homeless is taken from each frame, the direct approach is probably more efficient since the expected overlap of the two samples may be very small, even if the overlap of the two frames is large. The following example will clarify this last point. Suppose that there are two frames, each of which covers a population of 1000 and that the overlap is 800. Then if we have simple random samples of size 100 from each frame, the expected overlap of the samples is only 8 units, with a standard deviation of 2.7. Thus any estimate of the overlap of the frames which is based only on the observed overlap of the samples would be very unstable, and the estimate of the total population would be correspondingly unstable, even though the estimates for each frame total might be relatively stable.

Another issue that arises when using other frames such as soup kitchens or the "streets" is that of identification. It can usually be assumed, by definition, that clients of homeless shelters are homeless. This is not the case for other frames. Thus for non-shelter frames a degree of cooperation is required even to identify the homeless.

As mentioned above, virtually all urban surveys of homelessness begin with the shelter system. This is because the majority of homeless persons can usually be contacted through the shelters, and this is the most efficient frame since all shelter clients are homeless. Secondary frames such as soup kitchens or drop in centres are considered next, since a significant proportion of persons using these services would be homeless and it is also relatively efficient since large concentrations of people can be contacted at a few specific places and times. Contacting the non-shelter, non-service component of the homeless population is the most difficult and expensive, and few of the surveys have attempted to cover this component of the population. The DC*MADS survey is one major survey that did have a pure street component; however, the street component was dropped after three of four waves of the survey were completed because it was extremely expensive and did not add much to the overall estimate. The DC*MADS study also found relatively low rates of cooperation for the street component (57% for the homeless screener and 80% for the survey) compared to the shelter and service components. There is also some evidence that most of the homeless population may be covered by shelter or service frames (over 90% in the DC*MADS study, though great variation was observed from one area to another). Nevertheless, this pure "street" component may be of considerable interest as it may differ significantly from other components.

Cooperation of shelters, service providers, local police and other agencies that work with the homeless is crucial to the success of any survey of the homeless. Participation of clients of shelters or services is best elicited through the shelter or service staff. As well, if the "street" component is included in the survey, those who know most about this population can help to locate them most efficiently. In the DC*MADS study knowledgeable people helped to stratify city blocks into high, medium and low density strata. The success of this stratification was limited, but the survey would have been much less efficient without such expert help.

3. Possible Options for the HRDC/STC Study

As mentioned in the previous section, the majority of studies performed in the past used a multiple frame approach (shelters, service providers and street sample). Although the DC*MADS study achieved over 90% coverage from the shelter and service frame, it is felt that the HRDC/STC study should attempt to cover the 'purely' street component of the homeless population due to the interest expressed by HRDC and the fact that this population may be different than the shelter or service populations. We now present options being investigated for the HRDC/STC study on homeless. We are currently investigating these options but are not restricting ourselves to only these options.

3.1 Shelter Population

There are currently two options that are being investigated for the shelter population: administrative data from the CMHC developed Homeless Individuals and Families Information System (HIFIS) and traditional sampling of shelters as was performed in the three American studies discussed above.

- The HIFIS system is a data collection and management system designed to help shelters and municipalities develop useful and comparable information on homeless people. The HIFIS system is currently being pilot tested in several cities in Canada, with full implementation in major urban centres scheduled to begin in 2001. However, at this point in time it is uncertain whether the HIFIS system will cover all shelters in the urban centres nor is it known when the HIFIS system will be implemented. There are also legal issues, such as informed consent, data sharing, and permission to link data files, which may need to be considered. The effects of this uncertainty on the HRDC/STC study will have to be evaluated.
- Traditional sampling of shelters would involve the construction of an exhaustive list of shelters within each of the major urban centres being considered for the study. Once sampling frames are constructed and verified for accuracy, traditional probability sampling techniques (stratification, random sampling) can be applied as was done in the Urban Institute or DC*MADS studies.

Due to the uncertainty of the implementation of the HIFIS system, the traditional sampling approach maybe the only option. In addition, it is possible that a combination of the two options may be necessary depending on the coverage of the HIFIS system if it is implemented.

3.2 Service Population

Probability-based sampling methods suggested for the shelter population can be used for the service population also. Exhaustive lists of service providers need to be compiled for each of the major urban centres in the study and then verified for accuracy. Once verified, service providers can be selected using sampling techniques similar to the ones employed by previous studies.

3.3 *Street Population*

As mentioned earlier, the street population is the most difficult and expensive of the three populations to cover. Due to the transient nature of the street population, non-traditional sampling techniques may be necessary. We are currently investigating non-traditional techniques such as capture-recapture methods and snowball sampling. The use of sampling blocks and streets, as was done by the DC*MADS and Chicago studies, is also being considered.

4. Annotated Bibliography

In this section we present an annotated bibliography of some of the papers that have been written which discuss surveys of homelessness, or methods which may be useful for our survey, or the problem of homelessness in general. In most cases we include a short summary of the important methods or results described in the paper. The bibliography is divided into three sections: first is a section of papers with significant methodological content; second are some documents describing enumeration of the homeless population in the Canadian Census of Population (1991); third is a section with some other related papers. This bibliography should not be considered exhaustive, and it may be added to over the next few months.

4.1. Papers With Methodological Content:

4.1.1. Key Methodological References:

Ardilly, P. and le Blanc, D. (1999). Enquête auprès des personnes sans domocile: éléments techniques sur l'échantillonage et le calcul de pondérations individuelles. INSEE, Direction des Statistiques Démographiques et Sociales - document de travail F9903.

Methodology review of a survey to take place in 2001 in France of people using services intended for the homeless. A sample of services is proposed, and methods of estimation and non-response adjustment are discussed.

Burt, M. R. (1991). Overview of Seven Studies that Counted or Estimated Homeless Populations. Proceedings of the Conference on Enumerating Homeless Persons: Methods and Data Needs, 30-76.

This report presents overviews of seven studies performed in the late 80's and early 90's in the US. The author developed a grid of questions that were then given to the principle investigators of the seven studies. The questions covered major topics such as development of sampling frames, selection of respondents, finding the 'hidden homeless' and weighting and estimation procedures.

Kalton, G., Levine, D., Marker, D., and Sharp, L. (1994). Methods to Enumerate Persons with No Usual Residence Using Sampling and Estimation. WESTAT document

This report discusses the methods and problems encountered by several studies in the U.S. (1990 Census S-Night enumeration, Chicago Homeless Study, Urban Institute study,

DC*MADS, Rural Homelessness in Ohio). Many of the studies used incentives for the shelters/service providers and/or for the homeless. The DC*MADS study attempted to sample street locations, but found very low cooperation rates (57.3% for the screener and 80% for the survey), very high costs, and also that most of the homeless (93%) could be reached through shelters, soup kitchens or encampments. However the proportion of homeless that can be reached through shelters or services varies quite a lot from one jurisdiction to another, both within cities and between cities, possibly related to the level of services available. Another general observation is that the homeless population is highly transient, moving between different components of homelessness and also geographically mobile. The report also gives a brief overview of the use of and assumptions underlying multiple frames, sampling over time and capture-recapture methods, time to first capture models, and mark-capture methods.

Peressini, T., McDonald, L., and Hutchanski, D. (1996), Estimating Homelessness: Towards a Methodology for Counting the Homeless in Canada – Background Report CMHC

This report gives a good introduction to the problems we will face and some of the methodologies attempted in the past. It begins with the definition of homelessness debate and the effects different definitions can have on a study. Next it gives an overview of methods for estimating homelessness such as key person surveys, partial counts, heroic extrapolations from partial counts, windshield street surveys and censuses, area probability designs and, finally, service based techniques. It then discusses two studies: the DC*MADS study and the ANCHoR System project (similar to HIFIS). Also included is a summary of the 3 day workshop on homeless held in June 1995 (sponsored by CMHC) and a review of the Calgary Survey of the Homeless (1988). Section IV of the report contains some general conclusions and recommendations.

Rossi, P.H. (1991). Lessons from the 1985-1986 Chicago Homeless Study. Proceedings of the Conference on Enumerating Homeless Persons: Methods and Data Needs, 147-155.

This report presents the design of the Chicago Study in more detail than other reports. As well, it gives a critical appraisal of the study. Comments made in the report include that the study was a political failure, the surveys were very costly with the street component being the most expensive, the classification of the census blocks by homeless density was very poorly done and that service providers such as soup kitchens should have been included in the sample. In conclusion, Rossi states that if he was asked to '…design a definitive study of the problem of homelessness without budget and time constraints, I would certainly opt for a multi-method approach consisting of a street sample, a service-provider sample and a household sample…'.

US Department of Health and Human Services (1993). Prevalence of Drug Use in the Washington, DC, Metropolitan Area Homeless and Transient Population, 1991.

This is an extensive report on the DC*MADS project (Washington, DC, Metropolitan Area Drug Study) which includes a chapter on methodology and an extensive appendix on methodological issues including data collection procedures.

Frank, O. and Snijders, T. (1994), Estimating the Size of Hidden Populations Using Snowball Sampling. *Journal of Official Statistics*, **10**, 53-67

This article describes a snowball sampling approach for enumerating the street population. The article provides the concepts of snowball sampling, as well as point estimation and variance estimation.

Pollock, K.H., Turner, S.C., and Brown, C.A., (1994), Use of Capture-Recapture Techniques to Estimate Population Size and Population Totals when a Complete Frame is Unavailable. *Survey Methodology*, **20**, 117-124.

This article describes the capture-recapture method for enumerating the street population. There is a brief review of capture-recapture methods (for closed, open and combination of closed and open populations), some illustrations of the methods and major assumptions of each method. While the article does not give enough details to implement the different methods, the references should provide all necessary details.

4.1.2. Other Methodological References:

Brecht, M.-L. (1993) Multiple Capture Estimation of Numbers of Homeless. *Proceedings of the Social Statistics Section of the American Statistical Association*, 183-188.

Describes a study using three years of client records to estimate the size of the homeless populations served by a health centre in Los Angeles. Capture-recapture estimates derived from open and closed population models are compared.

Cowan, C.D. (1986). The Methodology of Counting the Homeless. *Proceedings of the Section* on Survey Research Methods of the American Statistical Association, 170-175.

Contains a short summary of three general approaches to estimating the homeless population: indirect estimation, single contact censuses, and capture-recapture studies. Ten assumptions underlying the capture recapture method are then discussed in some detail.

Dennis, M.L., and Iachan, R. (1992). Sampling People Who Are Homeless: Implications of Multiple Definitions and Sampling Frames. *Proceedings of the Social Statistics Section of the American Statistical Association*, 87-96.

Discusses the difficulties in defining the homeless population and implications for the adequacy of different survey frames. Then the DC-MADS survey is described in some detail. May be superseded by the DC-MADS report by US Department of Health and Human Services (1993) discussed above.

Fienberg, S. (1992), Bibliography on Capture-Recapture Modelling with Application to Census Undercount Adjustment. *Survey Methodology*, **18**, 143-154.

The article is a bibliography of the literature on capture-recapture methods in the context of census undercover estimation.

Goldmann, L. M. (1999). How to Count: A Comprehensive Methodology for Counting Unaccompanied Youth, unpublished MA thesis, Carleton University. This report is a good introduction to the subject as it poses several interesting questions. The proposed methodology has some issues that would need to be addressed before it could be implemented.

Henry, N.W. (1993). Using Statistical Models to Estimate the Size of a Homeless Population. Proceedings of the Social Statistics Section of the American Statistical Association, 850-855.

Describes a study to estimate the number of homeless school-age children in Virginia via monthly censuses of a comprehensive list of shelters that provided services for children. Three different models to adjust for shelter non-response are discussed.

Iachan, R., and Dennis, M.L. (1991). The Design of Homeless Surveys. Proceedings of the Section on Survey Research Methods of the American Statistical Association, 181-185.

Explores design issues relevant to homeless surveys, illustrated using the DC-MADS survey. Superseded by the DC-MADS report by US Department of Health and Human Services (1993) discussed above.

Iachan, R., and Dennis, M.L. (1993). A Multiple Frame Approach to Sampling the Homeless and Transient Population. *Journal of Official Statistics*, 9, 747-764.

Describes the design of the DC-MADS survey. Superseded by the DC-MADS report by US Department of Health and Human Services (1993) discussed above.

Iachan, R, Dennis, M.L., and Bray, R.M. (1994). Estimating the Prevalence of Substance Abuse Among People Who Are Homeless. *Proceedings of the Section on Survey Research Methods of the American Statistical Association*, 1094-1099.

Describes the design of the DC-MADS survey. Superseded by the DC-MADS report by US Department of Health and Human Services (1993) discussed above.

Johnson, T.P., and Parsons, J.A. (1993). Measuring Interviewer Effects on Self-reports from Homeless Persons. *Proceedings of the Section on Survey Research Methods of the American Statistical Association*, 1189-1194.

Using data from a study on alcohol and drug use among homeless persons in Cook County, Illinois, the effects of interviewers age, race and sex, and interactions with respondents age, race and sex, are investigated using structural equation modelling. For the "homeless experiences" variable no significant interviewer effects were found.

Rossi, P.H. (19). Estimating the Number of Homeless in Chicago. *Proceedings of the Section on Survey Research Methods of the American Statistical Association*, 1-7.

Describes the methodology and operations of a 1985/86 survey of homelessness in Chicago. Also includes a general discussion of the problems of surveying the homeless. Followed by a discussion by Eugene Ericksen.

Schindler, E., Griffen, R., and Navarro, A. (1993). Sampling and Estimation for the Homeless Population. Proceedings of the Section on Survey Research Methods of the American Statistical Association, 468-473. Considers two different strategies for estimating number of homeless persons in the context of the 2000 U.S. census – capture/recapture and site use history questions. A model based analysis of CVs and sensitivity to response errors is presented. Concludes that the site use history approach can work well if response error can be controlled, but difficulty of matching makes capture/recapture approach less appealing.

- Shores, R., Cantwell, P. and Kohn, F. (1999). Variance Estimation for Multiplicity Estimator in the Service Based Enumeration Program, paper presented at JSM in Baltimore, August 1999.
- Stasney, E.A., Toomey, B.G., and First, R.J. (1994). Estimating the Rate of Rural Homelessness: A Study of Nonurban Ohio. *Survey Methodology*, 20, 87-94.

A 1990 survey to estimate rural rates of homelessness in Ohio is described and simulations are used to estimate the likely magnitude of bias in the estimates. This is of limited relevance for measuring urban homelessness.

- 4.2. Canadian Census of Population Documents:
- Gauthier, P., and Carley, D. (1999). Report on Potential Ways to Improve Enumeration of "Homeless Persons", internal Statistics Canada document.

This report deals with the procedures that will be used in the 2001 Census for enumerating the homeless. It give some background information on what was done in the 1991 and 1996 Censuses and what should be done for the 2001 Census. Their recommendations include that the term "Persons lacking a fixed address" be used instead of homeless, enumerate the homeless in shelters using the usual Census procedure and assign a unique identifier to all shelters.

- Giles, Philip (1989), 1991 Census Enumeration for the Homeless. Internal Statistics Canada document
- Giles, Philip (1990), Census Test of Enumeration in Soup Kitchens, Spring 1990. Statistics Canada Methodology Branch working paper SSMD-90-006 B
- Giles, P. (1990, September 21). Defining the Homeless Population. Statistics Canada, internal document.
- Giles, Philip (19??), 1991 Canadian Census of Population Enumeration in Shelters and Soup Kitchens. Internal Statistics Canada document
- **4.3.** Other Reference Documents:
- Begin, P. (1996), Homelessness in Canada. Library of Parliament, Research Branch.

This report deals mostly with the current state of affairs of the homeless in Canada.

Bruckner J.C. (1991), Pathways into Homelessness: An Epidemiological Analysis. *Evaluating Programs for the Homeless*, Debra J. Rog (ed.), no. 52, Winter 1991.

- Burt, M.R. (1992). The Importance of Definitions in Research on the Homeless. *Proceedings of the Social Statistics Section of the American Statistical Association*, 79-86.
- Burt, M.R., Schack, L.R., and Cavanagh, S.E. (1993). New Data on Homeless Families: a Review. Proceedings of the Social Statistics Section of the American Statistical Association, 608-613.
- Canadian Broadcasting Corporation (1999). "No Place Like Home", transcript of CBC Radio program "Ideas" (1999, October 25 and November 1)
- Canadian Housing Information Centre (July, 1996). Biobligraphy on Homelessness.
- CMHC (1995). Inventory of Projects and Programs Addressing Homelessness
- Cordray, David S. (1991), Estimating the Number of Homeless: The Need for Mixed Methods. *Evaluating Programs for the Homeless*, Debra J. Rog (ed.), no. 52, Winter 1991.

Discusses the results of a study done by General Accounting Office (GAO). Major points made are that the definition of homelessness is important and that a mixed-methods approach (sample of hotels and shelters, experts opinions and comparison to other studies) should be used.

- Frankel, M.R. (1992). A Probability Sample of the Homeless Population of Chicago. *Proceedings of the Section on Survey Research Methods of the American Statistical Association*, 176-177.
- Goulden, A., and Lastman, M. (1999). Terms of Reference for the Homelessness Action Tack Force, Appendix A from the Report of the Mayor's Homelessness Action Task Force "Taking Responsibility for Homelessness", January 1999.
- Iachan, R., and Ringwalt, C. (1993). A National Study of Runaway and Homeless Youth. Proceedings of the Social Statistics Section of the American Statistical Association, 845-849.
- Iachan, R, Ringwalt, C.L., and Greene, J.M. (1994). Substance Abuse Among Runaway and Homeless Youth. Proceedings of the Section on Survey Research Methods of the American Statistical Association, 1083-1087.
- Messeri, P., Aidala, A., Abramson, D., Healton, C., Jones-Jessop, D., and Jetter, D. (1995), Recruiting Rare and Hard to Reach Populations: A Sampling Strategy for Surveying NYC Residents Living with HIV/AIDS, Using Agency Recruiters. *Proceedings of the Survey Research Methods Section, ASA*, 1064-1068.

This article deals with the operational aspects of recruiting HIV positive patients into a study.

Wright, J.D., and Devine, J.A. (1992). The United States Census Effort to Count the Homeless: An Assessment of Street Enumeration Procedures During "S-Night" in New Orleans.

Describes an experiment to evaluate the S-Night enumeration of homeless people in New Orleans. Similar experiments were conducted in Phoenix, Los Angeles, Chicago and New York.