

**1981 CENSUS COVERAGE OF THE NATIVE
POPULATION IN MANITOBA AND SASKATCHEWAN**

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There have been continuing problems for Census officials in Canada in attempting to fully and accurately identify the native population in Canada. Perhaps the most significant problem they have faced is the question of definition: who is considered "native"? While the definition of status or registered Indians is contentious it is reasonably clear and articulated in statutes. The definition of non-status Indians and Metis, however, is defined by social relationships and affiliations and is therefore more fluid and subjective. Many who have some native ancestry may choose not to identify with native social groupings. Moreover, the definition of what it means to be Metis, for instance, may change over time (Sawchuk, 1978).

In addition there may be a more favourable climate at certain times for publicly identifying with a particular ethnic group. In the United States, Passel (1976) identified increases in American Indian age cohorts over the decade of the 1960's as shown in the 1960 and 1970 U.S. Censuses. He has advanced the hypothesis that during this period it became much more acceptable and in some ways advantageous to be identified as Indian, and that therefore more people declared themselves as such.

Apart from problems of definition and self-declaration, there are also problems in actually reaching the native population via contemporary Census survey methods. The native population is disproportionately poor and in urban areas includes a large transient component. Frequent movement of native households from one dwelling to another have been identified by Clatworthy (1982). On the other hand, a relatively large proportion of the native population lives in remote areas of northern Canada. All of these factors make it difficult to enumerate the native population and are likely to lower both contact rates and response rates to the Census. Six Indian reserves were not enumerated at

all in the 1981 Census because of deliberate decisions by local government authorities not to allow enumeration to take place.

These problems and a number of others have been identified by Statistics Canada. For the Metis and non-status Indian populations the primary problems appear to be the question of self-enumeration, the difficulty of reaching the rural/remote population, difficulties in enumerating a population with a higher proportion of individuals of low socio-economic status, and the lack of Census enumeration of the ethnic status of prison inmates. Using the preferred population estimates provided by Taylor (1979), Saskatchewan and Manitoba Census coverage rates of this population are 26% and 31% respectively, well below the Canadian coverage rate of 40%.

There is a different set of problems which Statistics Canada has identified with respect to status Indian population counts. These include differences in the definition of on-reserve residence between Indian Affairs and the Census, late reporting of births, deaths and marriages to the Indian Affairs Department, financial incentives to individuals and reserves in reporting on-reserve residency, possible failure of parents to report the status of foster or adopted Indian children, and failure of women without Indian ancestry who are married to status Indian men to report their legal Indian status.

Statistics Canada has concluded, however, that overall Census coverage of status Indians at 92.4% is within an acceptable margin of error, particularly in view of the failure to identify the ethnicity of the institutionalized population (see Statistics Canada, *Native Peoples Tape Documentation*, Section D.). Nevertheless, Manitoba and Saskatchewan coverage rates were, again, lower than for other provinces. Census counts were 78% of Indian Affairs figures in Saskatchewan, and 84% in Manitoba. More specifically, Statistics Canada has looked at on-reserve and off-reserve status Indian population counts, and found the following rates of coverage by Census in comparison to Indian Affairs data:

Saskatchewan, off-reserve	79%
Manitoba, on-reserve	78%

Given this brief treatment of some of the general concerns surrounding Census coverage of the native population, this paper will examine two surveys which provide independent estimates of the native population - one in northern Manitoba, and the other in the cities of Regina and Saskatoon. The results of each of these surveys suggest that there were substantial undercounts of the native population in the 1981 Census.

The Northern Flood Area Survey

During the period from October, 1983 to January, 1984, I conducted a survey for the Northern Flood Committee of northern Manitoba. The survey covered five predominantly native communities which have been affected by hydro electric development on the Nelson River and Lake Manitoba. Three of the five communities include both an Indian reserve and an adjacent Metis and non-status Indian community.

The survey questionnaire was designed to be administered in-house with

the adult members of each household, by bilingual (English/Cree) interviewers. The questionnaire focused largely on employment and educational questions for the labour force age group, but it also documented other characteristics of each household, including household composition, housing characteristics, and a few other economic aspects. The age, sex, and family relationships of all household residents were documented.

A total of 2,164 individuals between the ages of sixteen and sixty-four responded to the survey questions, representing 1,040 households with a total population of 5,246. The average response rate was 75% for men, and 77% for women in the households which were contacted. Response rates were 80% or higher for all age groups except for the 16 - 20 year old group which was about 65%.

Not all households were contacted. Therefore, in order to estimate the total labour force age population in each community, the total number of occupied dwellings was obtained from the Department of Indian Affairs and the Manitoba Department of Northern Affairs. Table 1 summarizes the data used to calculate [he labour force population in each of the communities.

However, this total labour force age population estimate was 1,000 greater than the estimate provided by the 1980 Census for the same communities, as shown in Table 2. It should be noted that the populations are not exactly comparable. However, the adjustments for the 2½ year difference in timing cannot account for the large differences between the two sets of figures.¹

From an examination of the data in Table 2, it is apparent that coverage varied substantially from community to community. Overall, the Census data appears to be about 20% low. However, in three of the eight communities, the two sets of data are reasonably consistent, while in another 3, the Census is more

TABLE 1: Northern Manitoba Population Estimates

Community	16 - 64 Year Old		16- 64
	Populated	Contacted	Population
		% of Houses	Estimates
		Contacted	
Nelson House (Reserve)	429	76.2%	563
Nelson House (MNSI)	42	92.9%	45
Cross Lake (Reserve)	639	51.0%	1,253
Cross Lake (MNSI)	179	74.0%	242
Norway House (Reserve)	1,117	84.4%	1,323
Norway House (MNSI)	61	11.6%	526
Split Lake	280	59.0%	475
York Landing	65	44.6%	146
Total	2,812	62.4%	4,511

Note: MNSI = Metis and non-status Indian communities.

TABLE 2: Comparison of Survey and Census Population Estimates
(Labour Force Age Group)

Community	A. Survey Estimate (16-64, 1983)	B. Census Estimate (15-64, 1981)	B/A
Nelson House (Reserve)	563	375	.67
Nelson House (MNSI)	45	50*	1.11
Cross Lake (Reserve)	1,253	825	.66
Cross Lake (MNSI)	242	255	1.05
Norway House (Reserve)	1,323	1,065	.80
Norway House (MNSI)	526	356	.68
Split Lake	475	480	1.01
York Landing	146	105	.72
Total	4,511	3,511	.78

Note: MNSI = Metis and non-status Indian communities.

*Data from 1982 Northern Affairs Community Reports.

than 30% below the survey estimates. In two cases (Nelson House Reserve and Norway House Reserve) the survey actually contacted more people than were given as the population by the Census.

There is, of course, substantial room for error in the survey estimation procedures. The number of houses, for example, is crucial to the survey population estimates. These numbers were provided by the Winnipeg office of the Department of Indian Affairs, and are slightly different from numbers provided by survey workers. At Nelson House Reserve for example, workers drew a map identifying 180 dwellings on the reserve. However, Indian Affairs indicated that there were 189 dwellings at Nelson House Reserve. If the former figure had been used, the population estimate would have been 536 rather than 563, and the undercoverage of the Census would have been estimated at 30% instead of 33%. Given the size of the discrepancies between population estimates, these differences are not of major significance.

It is also possible that there is some bias in the survey sample. It is more likely that at least one member of a larger household will be found at home, and therefore the average size of the households we contacted is probably larger than those we missed. On the other hand, we arrived at an average figure of 1.1 persons per room, which is comparable to the Census data which showed 1.2 persons per room (see Hull, 1984:115, 121).

In order to provide a third perspective on the same communities, Indian Affairs on-reserve population data has been compared to Census data for the five reserve communities (see Table 3). This data shows a somewhat similar

TABLE 3: Comparison of Indian Affairs and
1981 Census Population Data

Reserve	A 1981 Census Population	B. 1981 Indian Affairs Population*	A/B
Nelson House	761	1,298	.59
Cross Lake	1,567	1,918	.82
Norway House	1,812	2,273	.80
Split Lake	985	1,023	.96
York Landing	230	294	.78
Total	5,355	6,806	.79
All Manitoba Reserves	24,755	32,477	.76

*On reserve population, not including residents living on Crown lands.

pattern to the comparison with the survey estimates in Table 2. That is, the Census appears to be 20% below the Indian Affairs figures, and is especially low at Nelson House. However, the comparison in Table 3 suggests that Cross Lake Reserve may not have had as great an undercount as suggested by the survey. Nonetheless it is still close to 20% low.

Urban Native Survey Data²

Surveys conducted by Stewart Clatworthy and myself in Regina and Saskatoon provide a second point of comparison for native population estimates. Estimating urban native populations is more difficult than arriving at rural or reserve population figures. Indian Affairs data is not available for particular cities, and even the provincial "off-reserve" data refer to the province of origin rather than the province of current residence. Until recently estimates of urban native populations were based on sketchy information, on administrative records kept for other purposes, or on special surveys which focused on particular social issues and particular sections of the native population.

Recognizing these inadequacies, Clatworthy developed a sampling procedure in Winnipeg to arrive at estimates of the native population, and to describe the group's characteristics (Clatworthy, 1981). His approach was to contact a large proportion of the households in a given geographical sampling area (census tract) at random using a screener question to determine whether there were any native residents in the household. In-house interviews were conducted for those households with native residents. When a respondent at a native household refused to answer the questionnaire or when a person who was suspected to be of native ancestry refused to respond at all, a second interviewer was sent back at a later

date. Although not all of the interviewers hired were of native ancestry, an effort was made to have these return visits conducted by native interviewers. This procedure resulted in positive identification of native ethnicity for several households, and increased the response rate. However, data on the number of non-responding native households were then used to adjust native population estimates for non-response. In the summer of 1982 Clatworthy and I replicated the Winnipeg survey in the cities of Saskatoon and Regina. Except for a small area of downtown Regina with few residents, the surveys covered all areas of each urban centre. Overall sampling levels were 21.6% in Regina and 18.9% in Saskatoon. Central city sampling areas (census tracts) were more heavily sampled than outlying areas. Response rates of 70.6% and 74.3% were achieved in Regina and Saskatoon respectively (see Clatworthy and Hull, 1983).

Table 4 provides a comparison of 1981 Census native population estimates with those derived from the Regina and Saskatoon surveys. The survey estimates have been adjusted to reflect 1981 population figures by subtracting the estimates for annual net migrants derived from the survey data itself. It will be seen that generally, the Census population estimates are about 40% below the survey estimates. This is similar for the two cities. However, there is a greater discrepancy for status Indians than for Metis and non-status Indians, particularly in Saskatoon.

TABLE 4: Comparison of Urban Native Population Estimates

Urban Native Group	A. 1981 Census Number (%) (All Ages)	B. Survey* Number % (All Ages)	Ratio A/B
<u>Regina</u>			
Status Indian	3,675 (57.5%)	6,635 (60.9%)	.55
MNSI+	2,720 (42.5%)	4,253 (39.1%)	.64
Total	6,395	10,888	.59
<u>Saskatoon</u>			
Status Indian	2,065 (49.2%)	4,325 (62.0%)	.48
MNSI+	2,135 (50.8%)	2,647 (38.0%)	.81
Total	4,200	6,982	.60

*Clatworthy/Hull survey, 1982, adjusted for 1981 by subtracting estimated annual net migration (see Clatworthy and Hull, 1983:38-39).

*MNSI data includes Inuit.

TABLE 5: Comparison of Urban Native Population Estimates
Unadjusted for Non-Response³

	A. 1981 Census	B. Survey*	Ratio A/B
<u>Regina</u>			
Status Indian	3,675	4,684	.78
MNSI	2,720	3,003	.91
Total	6,395	7,687	.83
<u>Saskatoon</u>			
Status Indian	2,065	3,213	.64
MNSI	2,135	1,967	1.09
Total	4,200	5,180	.81

*Clatworthy/Hull survey, 1982.

A substantial proportion of the difference in these two estimates may have resulted from the procedure described above which attempted to identify native people who did not identify themselves as such. Thus, we used a combination of self-identification and interviewer identification of native vs. non-native status. This procedure may be justified on two grounds. First, how individuals appear is a very real factor in their social and economic lives. Discrimination is based on external characteristics rather than on a knowledge of a person's ethnic background and affiliation.

Second, many native people have been known to deny native ancestry, particularly to strangers. Motivations for such denial may be diverse, but are generally related to the negative stereotypes and the discriminatory reactions associated with being native. Moreover, there have been some native people who refused, on principle, to answer the questions concerning their native identity on the Census, and a similar response may have also been given to our survey.⁴

In order to show the degree to which our Regina and Saskatoon population estimates are based on the adjustments made for non-responses, Table 5 gives the unadjusted estimates in comparison to Census estimates. It will be seen that, overall, there is still a 17 to 19 percent gap between our data and the Census data. However, the gap is much smaller with respect to the Metis and non-status Indian population, for which the Census figure in Saskatoon is higher than the figure we arrived at. These results would suggest that our survey was no more successful than the Census in overcoming the reluctance of this group to identify

themselves as native, or alternatively, that there simply are not a great many more people who consider themselves Metis or non-status Indian.

Other elements of our survey which may have had an effect on the resulting population estimates included the use of in-house interviews and the hiring of a number of native interviewers. In-house interviews may well have elicited more complete and accurate responses than the self-administered questionnaire used by the Census. Mail surveys normally have a lower response rate than verbal interviews, and this would be particularly true among those with less formal schooling. Since we know that many natives have had low educational attainments, and a substantial proportion may be functionally illiterate, this concern becomes even greater.

The racial group of the interviewer is also often thought to play a part in the response of minorities. In our survey some of our interviewers were native (about one-third). We could not detect any general difference in response rates due to the ethnic status of the interviewers, although the use of native interviewers to follow up non-respondents and "suspected natives" was more successful.

Conclusions

Although the coverage of the native population in the 1981 Census is much improved over previous years, evidence from recent large scale surveys suggests that the Census continues to undercount this population by a significant amount. Moreover, the size of this undercount seems to vary substantially from community to community. Reasons for this undercoverage problem are varied, but appear to result from reliance on a more cost-efficient, mail-out, survey technique, as well as on the reluctance or difficulty many native people have in responding to the questionnaire. Moreover, rural and remote communities present particular problems of accessibility which hamper the enumeration process.

While the present paper has focused on population size, there are important questions which should also be addressed concerning the possibility of systematic bias in the Census results. An initial comparison of Census data with Northern Flood Survey data, for instance, found somewhat higher educational attainment reported by the Census. It is hoped that future research will undertake an analysis of this and related questions.

NOTES

1. The Northern Flood Area survey was conducted 2½ years after the 1981 Census, during which time the labour force age population would be expected to increase as shown below:

Number turning 15 in 1981/82	=	200
Number turning 15 in 1982/83	=	200

Number turning 15 from June to November, 1983	=	100
		500
Number turning 66 in 1981/82	=	20
Number turning 66 in 1982/83	=	20
Number turning 66 from June to November, 1983	=	10
		50
Estimated population increase	=	450

However the Northern Flood survey does not include 15 year-olds in the labour force age group. This group numbers about 200. Therefore the adjusted discrepancy between the figures is $450 - 200 = 250$.

2. This section of the paper has benefitted from a review by Stewart Clatworthy, who also provided the data for Table 5.
3. Population estimates were arrived at by multiplying the number of native observations (individuals) in each sampling area by the inverse of the proportion of households contacted for the sampling area. For example, if we contacted 20% of the households in a given area, and identified 30 native individuals, then we would estimate the native population of the area as $30 \times 1/.20 = 150$. The sum of these products for each area of the city provided the unadjusted population estimates, as shown in Table 5. Adjustment for non-response was made at the aggregate city level, such that if we encountered a 25.8% refusal rate (as we did in Saskatoon) then the adjusted population estimate was multiplied by $1/(1 - .258)$. For Saskatoon this resulted in the following adjustment for the total native population figure: $5180 \times 1/.7419 = 6,982$. It should be noted that Clatworthy in his Winnipeg survey had compared this procedure to the procedure of adjusting the population estimates for each sampling area prior to aggregating the totals. However he found no substantial difference in the results of the two procedures.
4. This view was expressed to me by Mary Pitawanakwat of the Department of the Secretary of State, Regina.

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