THE IMPACT OF THE UNDER-REPORTING OF VITAL EVENTS UPON EPIDEMIOLOGICAL AND DEMOGRAPHIC MEASURES OF THE MANITOBA REGISTERED INDIAN POPULATION: AN EXERCISE IN DATA QUALITY.

by

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The Impact of the Under-Reporting of Vital Events Upon Epidemiological and Demographic Measures of the Manitoba Registered Indian Population: An Exercise in Data Quality

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ABSTRACT

In order for the various levels of government, the biomedical research community, and Aboriginal leadership to more carefully assess the needs of the Canadian Aboriginal population they must have an accurate picture of its demographic and epidemiological characteristics. Researchers of Aboriginal health have often used various data sources without a full appreciation of the flaws inherent in the data. This thesis examines the effect of the under-reporting of vital events upon one such data source, namely the Indian Register, and subsequent ramifications for the epidemiological and demographic analysis of the Manitoba Status Indian population. The study compares the magnitude of the problem for the aggregate of six bands from 1979 through 1983 with further differentiation into sex, residential and regional categories. Each of these populations was adjusted for the late- and under-reporting of vital events in order to obtain a corresponding set of population data for comparison purposes. The principal methodologies employed include direct and indirect standardization of mortality rates, life table analysis of mortality, and analysis of fertility and reproduction. These analyses reveal a preponderance of both birth and death reporting problems associated with the off-reserve populations although all populations were affected to some degree. Demographic and epidemiological calculations for all populations were affected to an extent depending upon the magnitude of the reporting problems and the age strata in which they were concentrated. Mortality rates tended to be inflated as a result of reporting problems.

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Any errors and omissions in this work are entirely mine.

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CHAPTER 1

INTRODUCTION AND LITERATURE REVIEW

The demographic compositions of Canadian Aboriginal populations are not well known or documented. While there is no scarcity of data concerning the populations, the data sources upon which analyses and inferences must be based have been increasingly scrutinized and criticized over the last two decades. Epidemiologists and demographers alike have used the various data sources in their research, often without a full appreciation of the flaws inherent in the data (Sugerman et al, 1993; Sugerman & Lawson, 1993; Snipp, 1986; Frost et al, 1992). These data quality issues must be addressed, especially if the research results are to be considered in program and policy planning, implementation, and evaluation. Implications of these for planning and programming employment, housing, social assistance, education, and health care delivery are especially profound.

Issues pertaining to the health of the Canadian Aboriginal populations are prominent among the interests of various levels of government, the biomedical research community, as well as Aboriginal leadership. In order for these parties to more carefully assess the needs of the populations they must have an accurate picture of demographic and epidemiological characteristics (e.g. population size and age/sex structure, mortality, fertility, and residential distribution). Several authors have mentioned the need for more reliable, meaningful data concerning the Aboriginal population (Mao et al., 1992:350; Piche & George, 1973: 367; Cook, 1980:3). As well, various studies indicate that this population is not as healthy as the general Canadian population (e.g. Mao et al., 1986; Young, 1992; Mao et al., 1992; Morrison et al., 1986; Evers & Rand, 1982). As of 1993 the infant mortality rate among Aboriginal infants had decreased but was still 1.7 times that of the larger population. Suicide rates, especially for ages 15 through 24 are five to eight times greater than the national rates (Lemchuk-Favel, 1996). Mortality rates in general tend to be higher for every age group and category. The need for accurate, reliable data concerning the Aboriginal population in Canada is clear.

Two major problem areas complicate the task of the researcher of Aboriginal health. The first of these is associated with the seemingly straightforward problem of defining the population of interest. The second area includes problems of a methodological nature. Each source of information concerning Canada's Aboriginal population has its own inherent advantages and disadvantages. Nevertheless, lack of synchrony between data resources confound methodological considerations as well as interpretations of results.

A Note on Terminology: For this analysis the Canadian "Aboriginal" population will include all descendents of the original inhabitants of what is now Canada. This includes those groups designated by the Canadian government as Indian, Metis and Inuit. The primary focus of the research will be specifically the Status or Registered Indian population and this designation is described below.

PROBLEMS FACED BY THE RESEARCHER OF ABORIGINAL HEALTH

Problem I: Defining the Registered Indian Population:

A first stage in any demographic or epidemiological investigation involves a definition of the population of interest and herein lays the first problem confronted by the researcher of Aboriginal health. The problem has its roots in the very nature of ethnic identity. How is the Status "Indian" defined? Unfortunately when it comes to the definition of an Indian one notes the blurring of legislative and biological meanings. As will become clear the "Status" Indian definition is based substantially upon legislative and legal criteria rather than upon biological or sociological criteria. Another difficulty encountered in defining the Indian population is related to the ever-changing nature of the definition. From its legislative origins to the present day the Status Indian population has changed not only in real demographics but also as a simple result of changes in definition.

Who is a Status Indian?:

The population of interest for this research is the Status or Registered Indian population of Manitoba. In 1962, Ferd Owl attempted to address the question of "Who and what is an American Indian"? The answer to this question was long and complex and displayed a large number of labels that are applied to people of Native descent. The question is equally appropriate, and the results as complicated, if it is asked of the Canadian Indian. Snipp (1986:237) comments on the difficulty of analyzing a phenomenon such as ethnic identity. What criteria must an individual meet in order to be considered a member of Canada's Status Indian population? To be brief, if an individual meets the criteria embodied in government legislation (in its original and/or revised forms) then that individual is considered a "Status", "Treaty" or "Registered" Indian. The individual's name and unique treaty number is recorded upon a band-organized list and then, he or she is granted treaty or legislative rights and privileges that are not available to "non-Status" Indians, other individuals of Aboriginal ancestry, or non-Indians.

Presently these rights and privileges include, but are not restricted to, access to post-secondary education assistance, uninsured health benefits, and hunting, fishing and trapping rights. In many respects therefore the "Indian" population has been defined in large part by the Canadian government and not by Canadian Aboriginals themselves. As a consequence it is incorrect to assume that this "legislatively-defined population" is a realistic portrayal of Canada's Aboriginal population. Instead it is an attempt by the Canadian government to define a service population (Isfeld,1997). This will become ever more apparent through an illustration of the government legislation related to the Canadian Aboriginal.

Another aspect of the problem has already been alluded to and concerns the consequences of the ever-changing nature of the Status Indian definition. Government legislation concerning Canadian Aboriginals has periodically changed over time and so has the definition of an "Indian". As a result the Indian Register has undergone changes as well. This has had the effect of essentially changing the size and characteristics of the population. For example, the impact of Section 12 (and the resulting enfranchisements) of the Indian Act of 1951 would be most felt by young to middle-aged women and their children. Depending on government legislation individuals may gain or lose Indian Status. This continuous change in legislation therefore leads to changes in the nature of the Indian population as defined by the Department of Indian and Northern Affairs Canada (INAC). Halli, Trovato and Driedger (1990) have commented on the difficulty of describing a population that can gain and lose members simply through changes in the legal status of individuals. In order to illustrate the legislative and ever-changing nature of the Indian definition it is necessary to briefly examine the government legislation pertaining to it.

Government Legislation in the Beginning:

The first statutory definition of an "Indian" was set forth in 1850 through the Act for the Better Protection of the Lands and Property of the Indians in Lower Canada. An Indian was defined as:

1. First - All persons of Indian blood, reputed to belong to the particular Body or Tribe of Indians interested in such lands, and their descendents.
2. Secondly - All persons intermarried with any such Indians and residing amongst them and the descendants of all such persons.
3. Thirdly - All persons residing among such Indians, whose parents on either side were or are Indians of such Body or tribe, or entitled to be considered as such; and
4. Fourthly - All persons adopted in infancy by any such Indian, and residing in Village or upon the lands of such Tribe or Body of Indians, and their Descendents (Frideres, 1998: 20).

It is important to note the biological, cultural and inclusive nature of this definition. With time the definition of who is to be considered an Indian has narrowed in scope and become increasingly legislative or legal to the exclusion of biological or cultural considerations (Frideres, 1998). This can be illustrated by comparing the four points above to the "Indian definition" outlined much later in the Indian Act of 1951. Section 11 of the Indian Act outlined inclusionary guidelines for Registered Indian Status. According to this legislation the following individuals were eligible for Indian Status:

(a) Anyone who, on May 26 1874 was.....considered to be entitled to hold, use or enjoy the lands and other immovable property belonging to or appropriated to the use of the various tribes, bands, or bodies of Indians in Canada.

(b) Is a member of a band,
 (i) for whose use and benefit, in common, lands have been set apart since May 26 1874, have been agreed by treaty to be set apart, or
 (ii) that has been declared by the governor in Council to be a band....

(c) Is a male person who is a direct descendent in the male line of a male person described in paragraph (a) or (b).

(d) Is the legitimate child of,
 (i) a male person described in paragraph (a) or (b), or
 (ii) a person described in paragraph (c).

(e) Is the legitimate child of a female person described in paragraph (a),(b) or (d).

(f) Is the wife or widow of a person who is entitled to be registered by virtue of paragraph (a), (b), (c), (d), or (e).

Two important observations are apparent in a comparison of the two legislative definitions. First, in 101 years the criteria used by the government to define an Indian changed drastically. Secondly, the changes have been at the expense of any cultural or biological considerations. From an inclusive definition focusing on land, residence, biology and relationships the legislation has moved to a focus upon treaty and legitimacy with a clear bias towards males. The patrilineal bias is as unmistakable as the change from biological and cultural considerations to legal and legislative ones. Section 12 of this same piece of legislation can further illustrate the ever-changing and legislative nature of the Indian definition. Increasingly complex guidelines were presented concerning who was not considered an Indian and who could be "enfranchised" or stripped of their Indian Status.

Enfranchisement:

Enfranchisement is a term given to the process by which an individual may voluntarily give up their Indian Status or have it legally removed. The beginnings of this process came with the 1850 *Act for the Better Protection of the Lands and Property of the Indians in Lower Canada*; the same document that first attempted to define the Indian. An amendment to this legislation in 1851 was the first to make the distinction between Status and non-Status Indians. Not only were white males excluded from living with Indians, but the provision also excluded white males married to Indian women from obtaining legal status as Indians (Leslie & Maguire, 1978). The 1857 *Act to Encourage the Gradual Civilization of the Indian Tribes in the Canadas* was the first to provide for the voluntary surrender of Indian status and band membership (INAC, 1991). Other amendments to the legislation regarding enfranchisement were made periodically. A few of the most significant changes included:

1876: The *British North American Act* - presented the original incarnation of the modern *Indian Act*. This *Act* detailed the removal of Status from Indian women and their children if they married a non-Status man.

1880: Amendment - allowed the automatic enfranchisement of any individuals that gained a university degree.

1933: Amendment - further empowered the government to order the enfranchisement of individuals as it saw fit (INAC, 1991).

1951: *Indian Act* - involuntary enfranchisement provisions were retained, including those that discriminated against Aboriginal women.

1985: *Bill C-31* Amendment - allowed Aboriginal people who had been voluntarily or involuntarily enfranchised under the discriminatory provisions of the *Indian Act* to apply for reinstatement of their Indian Status.

Enfranchisements reached a peak of 13,760 between the period 1948 and 1968 primarily due to the tabling of the *Indian Act* of 1951 (Frideres, 1998: 25). This large number was likely a result of two things. First, new provisions allowed for the enfranchisement of more individuals than previously. Secondly, with the establishment of the Indian Register and Office of the Registrar the entire registration process, while becoming exceedingly complex also became more efficient. The Department of Indian Affairs was able to apply a greater number of eligibility rules and other regulations to the incoming applications for Indian Status (INAC, 1991). Some of the enfranchisements were processed voluntarily upon application to Indian Affairs in order that Indians and their minor unmarried children might be privy to certain perceived privileges, for example voting rights. Others were enfranchised as a direct result of the sexually discriminatory provisions in Section 12 of the *Indian Act*. For example, an Indian woman (and her children) could have her Status revoked if she married other than a Status Indian man. The process of enfranchisement further illustrates the difficulty involved in defining the Canadian Indian. Complex legislative guidelines decided who could no longer be called Indian. These guidelines also changed often, allowing for the enfranchisement of more and more individuals, until the passing of *Bill C-31* in 1985.

Bill C-31:

The latest changes to the *Indian Act* were enacted in 1985 with the passing of *Bill C-31*. The changes were introduced for the following reasons: a) the elimination of sexually discriminatory registration criteria; b) provisions for restoration of Status and band membership; c) provision for first time registration of first generation descendents; d) elimination of enfranchisement provisions, and; e) provisions for transfer of control over band membership to band councils (Isfeld, 1997:31).

Summary: Defining the Registered Indian Population:

In summary then, the definition of the Status/Registered Canadian Indian is legislative in nature and has undergone many significant changes. The first definition to be used was based primarily on biological attributes while later definitions became more narrow in scope and legal in context. Isfeld (1997:2) notes "...the term Indian is essentially a legal concept, developed over 100 years ago as a means of regulating the relationship between a colonial and an indigenous population". Therefore the "Indian" category has been and still is, defined and described by the European-Canadian majority and not by Canadian Aboriginals themselves. The resulting Status Indian population therefore may not be a realistic depiction of the Indian population, but rather an attempt by the Euro-Canadian government to define a serviceable population. Similarly Halli, Trovato, and Driedger (1990) note that, "A closer examination of the criteria employed in the legal definition of Indian.... reveals little or no overlap between these and either cultural and biological variables". Researchers carrying out epidemiological and demographic investigations of Canada's Aboriginal population have continued to use this Status Indian population when other data on Aboriginal ancestry is unavailable (Moffat et al., 1988).

It should also be noted here that the definition of an "Indian" might also be different depending on the data source being used. For example, the census tabulates those individuals whom have self-identified as Aboriginal. On the other hand, the Indian Register, which will be discussed in detail below, recognizes as Indians only those that meet the criteria and stipulations set forth by current government legislation. The First Nations and Inuit Health Branch (formerly the Medical Services Branch of Health and

Welfare Canada) also utilizes this definition. Unfortunately, there exists a paucity of literature pertaining to the potential consequences of using such data sources in the evaluation of native health and demography. The importance of recognizing these issues cannot be overstated. As Aboriginal people become more involved in managing their government and health care systems, it is crucial that all parties be able to accurately define those demographic and epidemiological parameters that aid in administrative decision-making.

Problem 2: Describing the Registered Indian Population

Even after one is able to accurately define the Aboriginal population in Canada it is still often difficult to describe this population. This leads us to the second major problem associated with the study of Aboriginal health. Different data sources are often not directly comparable, transposable or mutually transparent. Several authors have noted the importance of accurately characterizing the Aboriginal population (Siggner & Locatelli, 1980:7; Cook, 1980:3). The ramifications of not doing so could be very serious. A study carried out by Frost et al. (1992) indicates that the lower cancer incidence observed in Native Americans compared to Caucasians is partially due to racial misclassification. Similarly, Rosenberg et al. (1999) blame racial misclassification for the understated mortality rates exhibited for American Indians in the United States.

The primary sources of data concerning Canada's Aboriginal population are the Indian Register, the First Nations and Inuit Health Branch, as well as census and post-census surveys conducted by Statistics Canada. Each of these has its own advantages and disadvantages and the data obtained from one is often not comparable to the corresponding data from another. The following is a brief description of these information sources and how useful or misleading they can be in Aboriginal research.

Census:

The census is carried out every five years by Statistics Canada. Data from the census includes information on age, sex, marital status, as well as cultural, socio-economic, family and household aspects. It is used for many purposes, from calculating population and migration projections to analyzing the impact of social programs. Information on the Aboriginal population of Canada derives from the responses to questions on ethnic origins and/or membership in an Aboriginal Band. Cross-tabulation of Aboriginal origin with demographic, social and economic data represents an important source of information on Registered Indian conditions (Boyd & Rosenberg, 1987:4). A multitude of limitations have been identified in the use of census data for the purpose of demographic and epidemiological analysis. Some of these are purely methodological problems while others are related to the lack of comparability of the census data from year to year and with other data sources. They include the problems of non-response to, and respondent error in the interpretation of, specific questions with consequent over- or under-enumeration, the very nature of the self-reporting process, and other miscellaneous difficulties.

First Nations and Inuit Health Branch:

The First Nations and Inuit Health Branch (FNIHB), previously the Medical Services Branch of the Department of Health and Welfare Canada, is assigned the task of administering the health of Canada's Aboriginal peoples. It is a good source of information regarding births and deaths, primarily because the reporting takes place locally. It is also not very susceptible to the problem of late reporting (Murray, 1980:81). FNIHB data does have another outstanding advantage. Data are, conditional upon the adequacy of event reporting, subject to continuous updating. For example, if the department in 1979 became aware of a birth that occurred in 1977, then that birth would have been reallocated to the 1977 birth cohort in the database and the numbers amended in subsequent publications. Therefore, vital events data, given the passage of sufficient time for recovery of late-reported births and deaths, are considered to be quite accurate (Rokala, 1999: Personal Communication). Census data and Indian Register data are not continuously updated in this manner.

Still however, this data source is subject to some limitations. The most notable problem is the variation in coverage and collection procedures that one encounters from region to region across Canada. As far as coverage is concerned, in the Atlantic Provinces, Quebec, and Ontario field staff collect information for only those First Nations people living on reserves. On the other hand, for Manitoba, Saskatchewan, Alberta, British Columbia and the Yukon, data are obtained from the respective provincial and territorial databases and includes events that occurred both on the reserves and off (Lemchuk-Favel 1996:2). Other idiosyncrasies exist as well from region to region. For example, those communities in Quebec that are subject to the James Bay Agreement do not provide data to the FNIHB nor do those bands currently involved in the transfer of their own health care management. For the Pacific region data is unavailable for the years 1985 and 1986 (Lemchuk-Favel, 1996:4). Manitoba and Saskatchewan have a unique system. Births occurring among Aboriginals are tracked through the Provincial

Health Insurance Department. Lists of births are sent to the FNIHB to obtain a Medicare number and parents must register new births in order for the child to be covered by Medicare (Ram & Romaniuc, 1985:6).

While the above problems simply make it difficult to make regional comparisons there are other problems inherent in the FNIHB data. Boyd & Rosenberg (1987:26) outline several other problems not directly related to larger demographic and epidemiological analyses. Briefly, these include changes in the International Classification of Diseases (ICD), miscounting of medical resource usage on and off reserve, along with the aggregation of all data to larger regional levels. When all is said and done the database maintained by the FNIHB is a valuable source of information for use in demographic and epidemiological analyses, particularly because of the continuous updating process that they are subject to.

The Indian Register:

The Indian Register is maintained by the Department of Indian and Northern Affairs Canada (INAC). It represents a list of all individuals who have been granted Indian Status through the provisions in the Indian Act. This is quite unlike the self-identification of ethnic origins that characterizes the census. Information recorded within the Register includes name, age, sex, marital status, band status, and occasionally information regarding religion and place of residence (Murray, 1980:72). Events such as births, deaths and marriages are also tracked. It is continuously updated and maintained throughout the year. The Indian Register was established in 1951 for administrative purposes along with the Office of the Registrar and was subsequently computerized in

1965. The Registrar is responsible for determining the eligibility of individuals for Indian Status. The Register is considered by some to be one of the most useful sources of demographic data available to the researcher of native health. It is used by INAC to supply population counts, the denominators in demographic and epidemiological analyses. Like the other information sources mentioned however, the Register has its own inherent limitations. The inconsistent reporting of vital events is the most serious problem associated with using the Indian Register as a source of demographic data. Data are often subject to lengthy reporting delays and in some cases events may never be reported at all. This is evident in the case of both deaths as well as births.

Irregularities in the Reporting of Deaths:

Mortality data is crucial to the examination of population health. One particular report suggests that the late reporting of deaths is the single largest problem associated with Indian Register data (INAC, 1993:6). In some instances it may take up to 3-5 years for a death to be reported (Boyd & Rosenberg, 1987:2; INAC, 1984:9). There are two methods by which INAC adjusts the Indian Register data in order to account for these instances. If both reporting dates and actual event dates are available then the researcher can simply reallocate the deaths to the year in which they occurred, thereby reducing the population count in that year and thereafter. One can also estimate the expected number of late-reported deaths in one year by extrapolating from previous trends. The under-reporting of deaths is also thought to contribute to Indian Register data problems. The procedures used by INAC to correct for this phenomenon are complex.

Irregularities in the Reporting of Births:

The discrepancies in the reporting of vital events can also compromise fertility data. The under-reporting of births can adversely affect Indian Register data. It is quite possible that a child may die before being registered, in which case the birth will go completely unreported. While it is not thought to be as serious a problem as late-reporting, Ram and Romaniuc (1985:13) note that this under-reporting has probably led to an underestimate of Aboriginal fertility rates for most provinces from 1971-1976 and for select provinces from 1976-1978. While not as serious a problem as in the first half of the century the researcher still must address this under-reporting. The adjustment procedures used by INAC for the under-reporting of births are similar to those carried out for the case of deaths and are far too complex to elaborate upon here.

The late reporting of births to INAC is perhaps the largest problem associated with using the Indian Register as a source of demographic data. It is first important to illustrate the magnitude of the problem. This phenomenon was first considered by Graham-Cummings (1968), and since then several authors have recognized the need to address it. Piche & George (1973:381) and Ram & Romaniuc (1985:33) even suggested that some fertility measures might be underestimated for some time periods due to the late reporting of births. They found that for births between 1971 and 1982, between 45 and 92% were not reported in the same year that they occurred. Nault et al (1993:6) illustrate the problem quite well. They note that in 1980 there were 5172 Registered Indian children less than one year of age in Canada. Surprisingly however, in 1981 that cohort (now aged 1 year) was 7215. The size of the cohort therefore increased by 2043 children. This is puzzling because mortality should be the only factor involved in dictating the size of this segment of the population. The reason for this discrepancy is the inconsistency associated with birth reporting or registration. Most births are reported within 6 years of their occurrence. However, some may continue to be reported even up to 18 years following the event (Nault et al 1993:7). Even more troubling is the fact that the extent of the late reporting has varied markedly from year to year, actually increasing with time (Ram & Romaniuc 1985:6). In 1965, 81% of births were reported in the same year they occurred, 11.8% were reported one year later, 1.5% two years later and the remaining 5.7% were reported three or more years later. In 1971 however the percentages were 69.1, 18.7, 3.2 and 9% respectively. As a further example, for 1990 the end-year Statistics Canada Registered Indian population as measured by the census was reported as 490,178. Once the births were reallocated to the correct year however the national total was 511,382, or 4.3% higher (INAC, 1993). Of course the majority of the impact would be upon the youngest age groups, those under 5 years of age.

The reasons behind the late reporting of births are not well known but some suggestions have been made. The increased out-migration from reserves may make it difficult for Band administrators to keep track of those births occurring off the reserve. Another possible explanation for the apparent late reporting of births is simply the time of year during which a birth occurs. If a birth occurs in November or December for example, it may not be reported to INAC until the following year. Since the Indian Register population totals are end-year then the individual will show up in the following year's total rather than the current. The problem is a very real one and must be addressed by the health researcher.

There are two different methods by which INAC adjusts their numbers for the late reporting of births, depending upon the situation. If the event is registered at some point in time then the birth can be reallocated to the year in which it occurred, as long as the actual birth-date has been recorded. If the event has not yet been registered a different procedure is carried out. For example the researcher may, in the year 2000 wish to know how many births from the year 1999 still have not been reported. The approach is then one of estimation based on previous trends.

Research Objectives:

The objective of this research is to address the problem of describing Manitoba's Registered Indian population. An attempt will be made to accurately define this population for the period of time between 1979 and 1983 and provide more realistic estimates of some demographic and epidemiological indicators within that time period. In so doing I hope to accomplish two things. First, I will address the limitations of data sources, particularly the Indian Register, currently used for these purposes. Secondly, I will attempt to establish an accurate baseline, free of idiosyncrasy, from which long-term trends may be more realistically portrayed in Manitoba.

Research Questions:

1. What is the magnitude of the problem of the inconsistent reporting of vital events for Manitoba's Status Indian population for the period 1979-1983?

2. How do the adjusted population totals for Manitoba compare to those totals presented by INAC?

3. How do the adjusted totals affect the age-sex structure of this population and subsequent fertility and mortality measures?

4. Can the adjusted population totals obtained be used to set a convenient, reliable baseline population from which further trends may be considered?

CHAPTER 2

MATERIALS

DATA SOURCES:

Two primary sources of demographic and epidemiological data were used in this study. Mortality and fertility data were derived from the databases of the First Nations and Inuit Health Branch, as previously reported by Isfeld (1997). During the time period of interest the Medical Services Branch of the Department of National Health and Welfare (the previous form of the FNIHB) was responsible for the collection, collation, and reporting of this data. For this reason the MSB designation will be utilized for the remainder of the analysis. Mortality and fertility events are reported to the MSB via the local health care community, from band reports and also from nursing stations in most communities. Data pertaining to descendents and members are then crosschecked with the Indian Register in order to confirm Indian Status. End-year population counts for this analysis were obtained from Indian Register-based summary reports. These are published on a yearly basis by Indian and Northern Affairs Canada (INAC).

DATA ABSTRACTION:

Data abstraction was undertaken for the years 1979 through 1983 for an aggregate of six bands considered to be among the largest in the province of Manitoba and assumed to be representative of the Manitoba Status Indian population. Separately these populations were too small to allow reliable statistical analyses, but in the aggregate it was assumed that their condition was representative of the larger Manitoba Aboriginal condition as a whole (Isfeld, 1997). MSB birth and death data for the six bands were aggregated and averaged over the five-year period to produce standard counts of births and deaths (Appendix I). There are both advantages and disadvantages to using MSB data for research purposes. These have been outlined in detail in the introductory section but it is worth repeating that the data are subject to continuous revision when new information becomes available. Therefore one can be reasonably confident of the accuracy of the databases.

Information Supplied:

MSB: For each mortality record the following information was available from the database: a) year of death; b) band affiliation; c) residence at time of death (on/off reserve); d) sex; and e) age at death. This included those deaths occurring within the afore-mentioned bands only. For each birth record data provided are similar and included: a) band affiliation at time of birth; b) sex; c) date of birth; d) maternal age at time of birth; e) and residential status of mother at time of birth (on/off-reserve).

INAC: Total Registered Indian population counts were obtained from the Indian Register summary reports published by INAC. This data suffers from several limitations, primarily the late- and under-reporting of vital events, but one goal of this research was to analyze and minimize these limitations.

Standard: For comparative purposes the 1992 Manitoba population was used. Post-censal population estimates were taken from publications of the Population Estimates Section of the Demography Division of Statistics Canada. Mortality data for this population was obtained from the Health Statistics Division.

ADJUSTMENTS TO THE DATA:

In order to carry out the intended research it was necessary to make some adjustments to the data supplied. These adjustments took into account: a) residence categories; b) cases in which age was recorded as "unknown"; c) the standard conversion of end-year populations to mid-year; d) and the aggregation of the data into appropriate age categories; e) construction of standard schedules of mortality and fertility.

Residence Categories: INAC differentiates between six primary residence categories based on band administration and location. These are as follows: a) living on a reserve that is administered by the person's own band; b) a reserve administered by a band other than their own; c) living on crown land administered by their own band; d) crown land administered by another band; e) crown land not administered by any specific band; f) and off-reserve. For this research the six categories were collapsed into two, being simply **on**- and **off**-reserve. The former consisted of those individuals falling into the on-reserve own band category and those living on crown land administered by their own band. All others were placed into the off-reserve category. The justification for this grouping procedure was two-fold. If one assumes that each band has its own distinct cultural and geographical characteristics then it can be suggested that the "own" band categories may be combined to represent the on-reserve population. Also, it was still necessary to identify a relatively large off-reserve population in order to make comparison with the on-reserve population more meaningful. For any situation in which the residential status was unknown then the individual was identified as off-reserve. Since this total number was quite small it was unlikely to have any noticeable detrimental effect upon the analyses.

Unknown: In cases where age was recorded as unknown the record was placed in the age 85+ category. It was possible that due to memory loss, the subject simply could not remember their precise age.

Mid-Year Totals: It is standard demographic convention to convert end-year population counts to mid-year counts. This was carried out with the INAC data for the sake of comparison to other research materials.

Age Categories: For the analysis it was necessary to keep the data in single age categories as well as group it into standard demographic age categories (<1, 1-4, 5-9, 10-14...80-84, 85+). One of the foci of this research was an illustration of the problem of the late reporting of births and so it was especially important to keep the data in one-year age strata for the younger ages (i.e. ages <1 through 5). To begin with the birth cohort was referred to as age cohort 0. Subsequently this cohort became the 1980 age 1 cohort, the 1981 age 2 cohort and so on until the termination of the data set at 1983. For the purpose of abridged life table analysis, and for comparison to the Manitoba 1992 population it was necessary to aggregate the data into standard age categories as well.

Organization of the Data:

Fertility Data: The fertility data was organized into a spreadsheet compatible with Excel, Quattro Pro and NCSS and the following extra columns of information were added to that already mentioned. Based upon band affiliation, a code was established to identify each record as either **Northern** or **Southern**. This facilitated the evaluation of any role of inaccessibility in the inconsistent reporting of vital events. This was not a foolproof method for defining "remoteness". However, if any anomalies presented themselves they may have suggested avenues for possible future research. The birth records were also allocated according to the time of the year in which they occurred, in three-month intervals. These adjustments were made in order to explore the possible effects of seasonality upon vital events reporting.

Mortality Data: The Northern versus Southern distinction was also added to the mortality spreadsheet. While the deaths could not be allocated according to the time of the year in which they occurred, the age-at-death field was rounded to the nearest year.

Inconsistent Reporting of Vital Events: The third and final spreadsheet incorporated both INAC population counts and MSB birth and death data. For each year and single age category, it was possible to compare "expected" population totals in the given year to "actual" population totals suggested by the INAC summary reports.

CHAPTER 3

METHODOLOGY

The methods utilized in this research were similar in many respects to those employed by Isfeld (1997) in an analysis of Manitoba's Registered Indian population, with the primary difference being the emphasis upon delays and other discrepancies in the reporting of vital events. Otherwise, the demographic, statistical and epidemiological procedures used were suitable for the purpose of answering the research questions posed.

THE ERROR OF CLOSURE:

As will be illustrated, births and deaths do not always accurately account for the changes in a population's size from one year to the next. In the case of Manitoba's Aboriginal population certain data quality issues, particularly within the time period of interest in this study, virtually guarantee that mortality and fertility data alone would not account entirely for the changes in population size from year to year. The Error of Closure (E_c) was used to measure this phenomenon. It takes into account factors other than mortality and fertility that may be involved in the population's apparent decrease or increase in size. It may have included the inconsistent reporting of births and deaths. It was calculated by taking one year's population as reported by INAC, subtracting its deaths, adding its births (both as reported by the MSB), and then dividing this result by the following year's population total. This number was then subtracted from 1, giving the proportion of population growth not accounted for by natural increase. Unfortunately this procedure did not allow for the differentiation between the effects of various types of reporting discrepancies and migration. While the E_c may outline the magnitude of the problem of the inconsistent reporting of vital events, regional (north/south) and residential (on-/off-reserve) migration must be considered as a potential source of error. For this research, E_c calculations were completed for each population of interest (north, south, males, females, on-reserve, off-reserve) for the period of time from 1979-1983. If irregularities in the reporting of vital events were related to the characteristics that differentiated these subpopulations then the respective Ec may have demonstrated it.

IRREGULARITIES IN THE REPORTING OF VITAL EVENTS:

The primary focus of this research was the problem of discrepancies in the reporting of vital events. The MSB data were informative in this regard as a source of demographic and epidemiological data. The problem was analyzed using the following methods.

A Note on Nomenclature: In order to describe the population changes from one year to the next within a cohort the following designation was applied: $YEAR_x$ denoted any year of interest where **x** was the age of the cohort in that particular year. It followed then that the 1979 age 12 cohort, designated 1979_{12} became the 1980_{13} cohort, the 1981_{14} cohort, and so on.

a) Under-reporting of births:

Consider the following example. According to the Indian Register the 1979 total population birth cohort went through the following changes in size:

$1979_0 = 255$
$1980_1 = 379$
$1981_2 = 387$
$1982_3 = 392$
$1983_4 = 393$

The problem is illustrated quite clearly here. The cohort size of 393 in 1983 suggests that at least that many births occurred in 1979. By 1980, 379 of these births were reported, and more were reported in subsequent years. This accounting procedure was carried out in order to illustrate the magnitude of the problem of under-reporting births. The results were presented as "the percentage of births being reported within 1,2,3, and 4 years", with the denominator being the maximum cohort size achieved within the window of time available for the research (1979 through 1983).

Other methodological notes concerning the late reporting of births:

In all instances MSB-reported deaths occurring within each cohort were taken into account. It was hoped that through analyzing the occurrence of under-reported births it would be possible to directly or indirectly adjust the population counts for Manitoba's Status Indian population.

One explanation for the observation of under-reported births may have been a large proportion of births occurring late in the year. For example, if a birth occurred in December it may not have been reported to INAC until the following year. As a result the birth would have shown up in the MSB database as a December birth but would not have been counted in that particular year's Indian Register population total (Rokala, 2000: *pers* comm). In order to assess the potential impact of differential monthly fertility the births were aggregated into three-month intervals for each population of interest. If for some reason there was a substantially large proportion of late-year births off-reserve compared to on-reserve, then it may have explained an apparent excess of late-reported births. A standard chi-square test was used for this portion of the analysis with the null hypothesis assuming equal proportions of births in each three-month interval.

b) Under-reporting of deaths:

The examination of the problem of death-reporting discrepancies was quite complicated, especially in the short time period being considered within this research. Most deaths are reported within 5 years of their occurrence. The data did not allow a check of monthly mortality intervals but it was possible to get an idea of the magnitude of the problem. The mortality data supplied by the MSB made it possible to follow a cohort through time just as the fertility data did. These numbers were then compared to the corresponding population totals supplied by the INAC summary reports. For example, the age 52 cohort in 1979 (1979_{52}) reported by INAC numbered 58 and apparently remained static through 1983. Interestingly however the MSB mortality data reported three deaths within this cohort in 1980 and one more in 1981. It was very likely therefore that these deaths were not yet reported to INAC or perhaps may never be reported.

Appearance in the Data Tables:

One can gain a better understanding by observing the following example:

Year	**IR Count**	**MSB Deaths**
1978	46	0
1979	46	1
1980	45	0

Example: Period 1978-1979: The cohort population, according to INAC, remained unchanged. Peculiarly enough however the MSB reported one death to the cohort in

1979. There is a good reason for this observation. While the death may have occurred in 1979, it was not reported promptly in that year. Consequently, when the death was reported at a later date the record would have been immediately deleted from the Indian Register for the year in which it was finally reported. On the other hand, the MSB would have revised their data to show that a death occurred in 1979. It is quite plausible therefore that a situation could exist in which the INAC population count remained unchanged even while the MSB reported one or more death events.

Other methodological notes concerning late reported deaths:

The discrepancies observed were divided into two types. If the MSB reported a death within a specific cohort without a corresponding decrease occurring in the corresponding Indian Register population it was classified as a type 1 discrepancy. If however the MSB did not report a death while a decrease was noted in the Indian Register then it was classified as a type 2 discrepancy.

This accounting procedure was completed for every cohort of every population starting from age 10 to age 84, followed by a 5-year age stratum summary. The age 10 minimum was set because the majority of late births would have been accounted for by age 10 and therefore should not confound the analysis of death-reporting irregularities. It was assumed therefore that the only process affecting the size of this age 10+ population was mortality. The age 85+ category was disregarded for this portion of the analysis. The all-inclusive nature of the category did not allow the same accounting procedure to be carried out. In cases where there was an apparent increase in cohort size from one year to the next this change was disregarded and a situation of "no late-reported deaths" was noted. It was also important to note the potential confounding effects of migration in this portion of the analysis. If an individual moved from a reserve to an off-reserve location and died then the record may have shown an on-reserve death while the Indian Register may have counted the person as off-reserve. Unfortunately it was not feasible within this study to track the migration of individuals.

ADJUSTING THE POPULATION COUNTS:

Two sets of data were available for comparison. The first constituted the unadjusted data set and consisted of the aggregated data taken directly from the Indian Register summary reports. The adjusted data set was obtained through the replacement of births and deaths into the appropriate year according to the MSB data. These adjustments were performed under the following guidelines.

Age 0 Cohort: This consisted of the maximum cohort size exhibited for this particular cohort over the available time-span minus the deaths reported up to that particular maximum cohort size.

Ages 1-10: Any apparent additions to the cohort throughout the period of interest were reallocated to the respective 1979 cohort. Deaths occurring over the period of analysis were accounted for. In each year after 1979 the cohort size was then reduced according to the number of MSB-reported deaths taking place within that cohort.

Ages 10-85+: After age 10 it was assumed that all births had been reported. Therefore any apparent population increases were disregarded. Using the 1979 population as a base the population counts for each cohort in each year were reduced according to the number of deaths reported by the MSB.

The adjusted and unadjusted population counts were then subjected to the analyses described below. The values obtained using both sets of data were then compared in order to assess the impact of vital event-reporting discrepancies upon the epidemiological and demographic analysis of the Manitoba Registered Indian population. The unadjusted counts used in this analysis represented the respective population and cohort sizes that resulted from reporting discrepancies. The adjusted counts represented the more accurate and realistic population sizes that could be expected had the effect of reporting discrepancies been minimized.

Mortality Analysis:

In order to analyze the effect of reporting irregularities upon the demography and epidemiology of the Registered Indian population some commonly used mortality and fertility calculations were carried out. Each process is described below. In every case a standard schedule of vital events was used. It was then possible to isolate the effect of the changing denominators resulting from the adjustment procedures, and therefore the effect of reporting discrepancies upon these calculations. The resulting parameters do not reflect the actual demographic and epidemiological experience of each population in question. They do however provide a means by which the relative affect of reporting discrepancies upon the populations can be compared.

Three types of mortality rates were calculated for each population of interest, both adjusted and unadjusted. This included the crude mortality rate (CMR), indirectly standardized rate and directly standardized rate. In addition, a decomposition of the crude mortality rates based upon the direct standardization procedure was also completed.

Crude Mortality Rate (CMR): The CMR is simply a measure of the average death rate calculated over all age categories.

Indirectly Standardized Mortality Rates (ISMR): The adjustment procedures described above were carried out upon the Indian Register-based population counts, which served as the denominators in the mortality analysis. It was preferable to observe the effect of these adjustment procedures and hence, changing denominators, upon the mortality measures for each age category and population of interest. For this reason indirectly standardized mortality rates were calculated. This procedure was carried out using both the gross and age <1 to 9 populations using both adjusted and unadjusted counts. The 1992 Manitoba population was used as the standard, and the standard schedule of deaths described in Appendix I was also employed in this portion of the analysis. The methodology followed that described by Rothman (1986).

Directly Standardized Mortality Rates (DSMR): If the age distributions of two populations are relatively different then a simple comparison of crude rates can be very misleading. The seemingly lower mortality rate for one population may be a product of the greater proportion of one population being in younger age categories. Investigators generally make it a point to use "standardized" rates (Pollard et al.,1974:64). The choice of a standard population for this procedure is completely arbitrary. The resulting mortality rates are simply for comparison purposes. For this procedure the standard population was the 1992 Manitoba population.

Several standardization procedures were carried out in this research with the 1992 Manitoba population being used as the standard. In each case the calculations were completed for both the gross populations and for the age <1 to 9 population. Mortality rate comparisons included north versus south populations, on- versus off- reserve populations, and male versus female populations. The adjustment procedures described above impacted the population totals, the denominators in the mortality analysis.

Further calculations were carried out upon the standardized rates, including the binomial variance, standard error and 95% confidence intervals. The variation was estimated by calculating the binomial variance via the method of Armitage (1971). The standard error then followed as the square root of this variance. This is a measure of the average amount of variation exhibited in the data set and is depicted in standard units. Finally, 95% confidence intervals were computed.

This standardized rate was essential for making meaningful comparisons. It did not however give any indication of the principal contributor to the difference in the crude rate. For this reason a decomposition of the mortality differences was also carried out. Of the difference in the crude rates of two populations some is a result of the difference in their age distributions while some was due to real differences in the death rates. The composition component reflects the effect of age structure on the difference in crude rates. It is a weighted average of the difference in the two age distributions. The rates component is the actual difference in mortality and it is a weighted average of the differences in age-specific death rates. The direct standardization and decomposition techniques were based upon the formulae and procedures presented by Das Gupta (1993).

LIFE TABLE CONSTRUCTION AND ANALYSIS:

The life table provides the investigator with an invaluable tool for studying the mortality experience of the population of interest. It portrays the progress of a cohort of individuals as it is reduced by mortality until every individual has died. The final table consists of a record of mortality rates, the probabilities associated with dying, the actual number of deaths and survivors, and the life expectancies experienced by each age category of the given population (McVey Jr. & Kalbach, 1995:427).

As with many demographic modeling procedures some assumptions are necessary: a) The life table is closed to in- and out- migration; b) each age category is subject to a fixed schedule of age-specific mortality rates; c) the cohort originates from a standard number of births (100 000 is generally used in order to aid in comparison); d) deaths are distributed evenly within the year for each age category; e) the life table is constructed for only one sex at a time (due to the small population sizes in this analysis it was necessary to circumvent this assumption for the sake of the fertility analysis); f) and finally, these are expected numbers. There will of course be some variation and this will generally depend on the size of the population. Statistics show that the smaller the population the greater the potential for variations and consequently deviations from the expected values. The following is a brief summary of the variables required for the construction of the life table.

$\mathbf{q_x}$: probability of dying for an individual of exact age **x**, before reaching age **x + n**.
$\mathbf{S_x}$: number surviving to exact age **x** out of 100,000 born.
$\mathbf{d_x}$: number dying between age **x** and **x + n** out of 100,000 born.
$\mathbf{L_x}$: total years lived in the interval between age **x** and **x + n** per 100,000 born; also the life table stationary population.
$\mathbf{T_x}$: total years lived beyond age x, per 100,000 born.
$\mathbf{a_x}$: average number of years lived within the interval by those $\mathbf{d_x}$ who died within it. For the sake of consistency with Isfeld (1997) **a** will equal 0.07 for the <1 age category. This small value reflects the fact that most deaths in this category occur very early in the first

year. For the other age categories (excluding 85+), the individuals dying have lived, on average, half of the year, hence the **a** value of 0.50.
e_x : expectation of life at age **x**.

The life table calculations were carried out for both the adjusted and unadjusted populations. Standard schedules of mortality were utilized so that differences in the probabilities associated with mortality became a function only of cohort size. It was hoped that this would better illustrate the impact of the adjustment procedures, and therefore the impact of reporting discrepancies, upon the mortality measures. In a few circumstances the number of deaths in the standard schedule of mortality exceeded the actual population total for the corresponding age category, thereby compromising the resulting survivorship and expectation of life calculations. This was the case for the south male (1981 & 1982), off-reserve female (1981), and off-reserve male (1980-1982) populations. In order to carry out some portions of the fertility analysis it was necessary to have viable survivorship data. Therefore unisex life tables were produced for each of the total, and overall north, south, on- and off-reserve populations. The methodology used was based upon that described by McVey Jr. & Kalbach (1995).

REPRODUCTION AND FERTILITY ANALYSIS:

The final analyses and comparisons carried out upon both the adjusted and unadjusted populations consisted of a detailed analysis of fertility and reproduction. All calculations were carried out upon the gross populations, using a standard schedule of fertility. The following measures were obtained.

Crude Birth Rate (CBR): This value was calculated by dividing the total number of births by the total mid-year population. This measure was of limited use since the denominator included those segments of the population that were not "at risk" of giving birth, for example females outside the childbearing ages and males.

General Fertility Rate (GFR): This was a more meaningful measure of fertility than the CBR as it divided the total number of births by the mid-year female population within the childbearing years. For the fertility analysis this population included all females from the age of 15 to 49. Births occurring for females aged less than 15 were included into the 15-19 age category. Those occurring for females over the age of 49 were allocated to the 45-49 age category.

Total Fertility Rate (TFR): This was used to express the total number of births a woman would have within her childbearing years if the age-specific fertility rates were to remain constant. It was calculated by summing the female age-specific fertility rates and multiplying by five (for the number of years represented in each age group).

Gross Reproductive Rate (GRR): This measure was derived from the TFR. It represented the average number of daughters that would be born to a hypothetical female if she experienced the characteristic age-specific fertility rates. The GRR was a useful indication of the replacement of females in the childbearing segment of the population (McVey & Kalbach, 1995).

Net Maternity Function: This value was a product of the age-specific fertility rates for female births, and the corresponding survivorship probabilities associated with females surviving to that particular age obtained from the life table.

Mean Age at Childbearing (MAC): This value was calculated by weighting the net maternity function by the average age within each category and then dividing the total of weighted values by the un-weighted ones (Keyfitz & Flieger, 1971).

Net Reproductive Rate (NRR): This measure was similar to the GRR in that it also considered female births only. In this case however further consideration was given to the effect of mortality. The NRR was calculated by summing the measures obtained for net maternity function for each age stratum and then dividing this by five in order to obtain the average number of daughters produced by a woman during her complete lifetime.

Intrinsic Rate of Natural Increase (r): This measure represented an estimate of the growth rate experience of the populations of interest, based upon a stable population model.

CHAPTER 4

RESULTS

The Populations:

The total study population was divided into six sub-populations for analysis: male, female, north, south, on-reserve and off-reserve. End-year age-specific population counts for 1979 through 1983 were adjusted for reporting discrepancies using the methods described to obtain end-year adjusted population counts for the same years. These data sets were then converted to mid-year adjusted and unadjusted age-specific population counts. The complete data set therefore, disaggregated by sex, consisted of 15 end-year adjusted and 15 end-year unadjusted populations for the years 1979 through 1983, as well as 15 mid-year adjusted and 15 mid-year unadjusted populations for 1980 through 1983. These are all available in standard age categories (Appendix II). In some cases population totals were too small to carry out meaningful analyses, particularly in the case of life table calculations and fertility measures. These will be noted, although not discussed, where appropriate.

The average percentage difference between adjusted and unadjusted end-year age-specific population counts for each population from 1980 through 1982 are presented in Table 1. Positive values were produced when the adjustment procedures increased the size of an age stratum while negative values resulted from decreases. In all populations the youngest age strata experienced the most significant increases in size. After the age of 4 the values indicated a general decrease in the proportions.

Table 1: Average % Difference Between Adjusted and Unadjusted Population Counts for All Populations, 1980-1982.

Age	male	female	total	north	south	on-res	off-res	north male	north female	south male	south female	on-res male	on-res female	off-res male	off-res female
<1	0.69	0.67	0.68	0.58	0.76	0.58	0.87	0.62	0.54	0.76	0.77	0.59	0.57	0.91	0.83
1-4	0.20	0.24	0.22	0.16	0.23	0.10	1.03	0.21	0.11	0.16	0.31	0.07	0.12	1.05	1.00
5-9	-0.03	-0.01	-0.02	0.01	-0.06	0.04	0.43	0.02	-0.01	-0.05	-0.08	0.12	-0.05	0.22	0.62
10-14	-0.21	-0.15	-0.18	-0.16	-0.24	-0.15	-0.32	-0.20	-0.11	-0.22	-0.26	-0.15	-0.16	-0.39	-0.25
15-19	-0.22	-0.18	-0.20	-0.15	-0.29	-0.32	-0.09	-0.22	-0.08	-0.24	-0.35	-0.30	-0.35	-0.20	0.00
20-24	-0.11	-0.12	-0.11	-0.04	-0.21	0.21	-0.96	-0.08	0.00	-0.14	-0.29	0.18	0.25	-0.87	-1.06
25-29	-0.08	-0.22	-0.15	-0.10	-0.23	0.10	-0.81	-0.01	-0.18	-0.16	-0.30	0.13	0.06	-0.66	-0.95
30-34	-0.08	-0.10	-0.09	-0.11	0.04	-0.09	-0.15	-0.09	-0.13	-0.08	0.18	-0.13	-0.04	0.01	-0.30
35-39	-0.08	-0.04	-0.06	-0.08	0.09	-0.18	0.10	-0.09	-0.07	-0.05	0.23	-0.18	-0.18	-0.01	0.21
40-44	-0.06	-0.02	-0.04	-0.05	-0.03	-0.11	0.01	-0.07	-0.04	-0.04	-0.02	-0.13	-0.09	-0.08	0.09
45-49	-0.03	-0.04	-0.03	-0.02	-0.05	-0.07	-0.03	-0.03	-0.02	-0.03	-0.07	-0.09	-0.04	0.00	-0.06
50-54	-0.01	-0.02	-0.01	-0.03	0.00	-0.01	-0.07	-0.02	-0.05	0.00	0.00	-0.02	0.01	-0.04	-0.10
55-59	-0.03	-0.01	-0.02	-0.02	-0.02	-0.03	-0.04	-0.04	0.00	-0.01	-0.03	-0.06	0.01	-0.01	-0.08
60-64	0.00	0.00	0.00	-0.02	0.03	-0.02	0.04	-0.04	0.00	0.06	0.00	0.01	-0.05	-0.02	0.09
65-69	0.06	-0.05	0.01	0.01	0.00	-0.02	0.01	0.07	-0.04	0.07	-0.07	0.05	-0.09	0.00	0.02
70-74	-0.01	0.03	0.01	0.00	0.01	0.03	-0.05	-0.06	0.05	0.02	0.00	-0.01	0.07	-0.02	-0.08
75-79	0.00	-0.01	0.00	0.02	-0.03	-0.02	0.02	0.03	0.01	-0.04	-0.03	-0.04	0.00	0.08	-0.03
80-84	-0.01	0.04	0.01	0.01	0.02	0.00	0.04	0.00	0.01	-0.02	0.07	-0.04	0.04	0.05	0.04
85+	-0.01	-0.02	-0.01	-0.01	-0.02	-0.03	-0.01	-0.03	0.01	0.02	-0.06	0.00	-0.07	-0.03	0.02

Figure 1: Average Percentage Difference Between Adjusted and Unadjusted Total, Male and Female Population Counts.

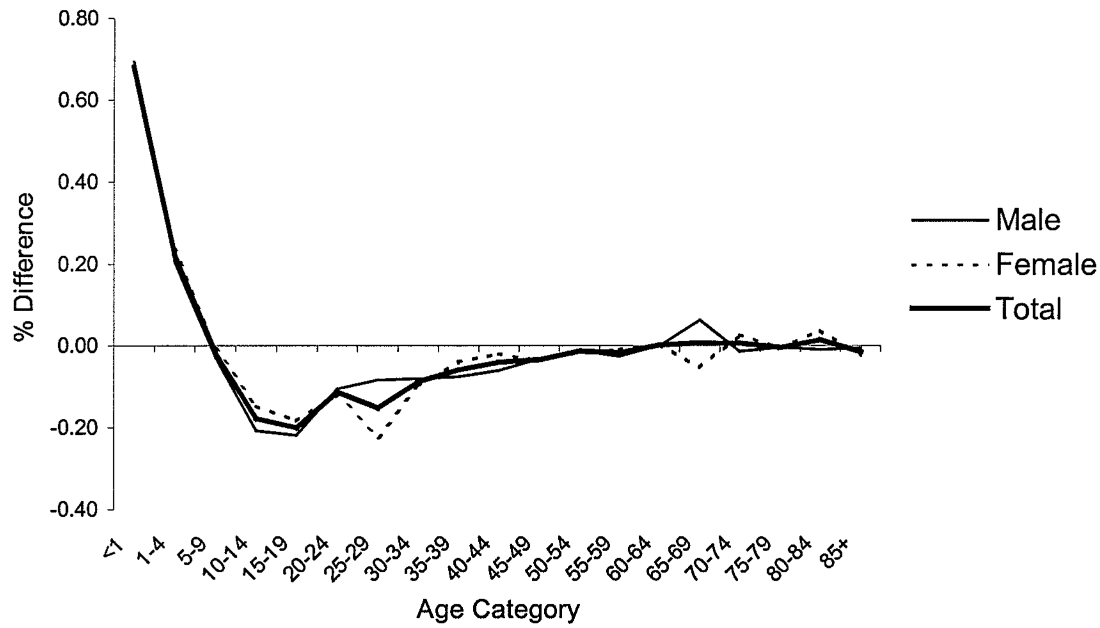


Figure 2: Average Percentage Difference Between Adjusted and Unadjusted On-Reserve and Off-Reserve Population Counts.

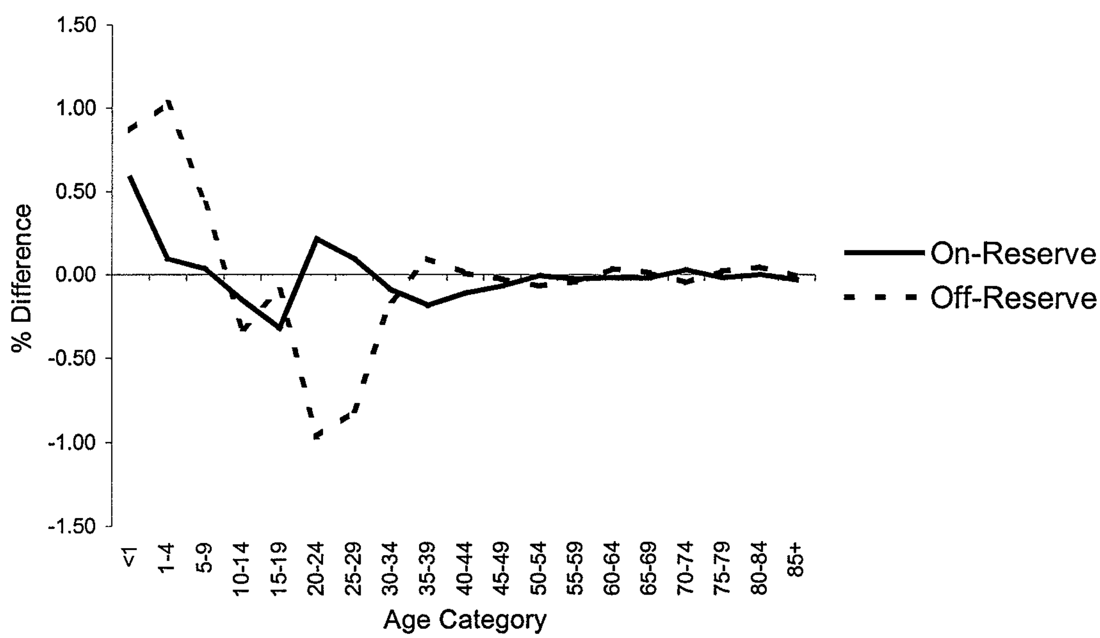


Table 1 shows that for males under the age of 1 the adjustments resulted in this cohort constituting 0.69% more of the population than in the unadjusted case. For ages 1-4 this proportion was increased by 0.20%. The same age categories within the female population averaged approximately 0.67% and 0.24% respectively. Noteworthy patterns were not observed at other ages. After plotting the average difference between the adjusted and unadjusted population counts the patterns became clearer (Figure 1). An increase in size was associated with the youngest cohorts while in most cases older cohorts, particularly those from age 10 to 34 experienced decreases as a result of the adjustment procedures. In this case the plots run along a nearly identical path. The increases and decreases in cohort sizes associated with the adjustments were similar for the male, female and total populations.

There appeared to be no significant differential impact of the adjustments upon the total north population compared to the south. This could also be said after separate analysis of males and females within these groups.

The most notable differential effects of the adjustment procedures were upon the overall on- and off-reserve populations (Figure 2). The average proportion difference between adjusted and unadjusted end-year populations for the on-reserve population aged <1 was relatively small at 0.58%. For the off-reserve population the adjusted proportion for the age category was 0.87%%. Differences in the proportion were also observed within separate analyses of males and females. They were much larger for both off-reserve populations (0.91% for males, 0.83% for females) than they were on-reserve (0.59% for females, 0.57% for females). The average differences between adjusted and unadjusted on- and off-reserve counts associated with the adjustment procedures are plotted in Figure 2. As in the male, female and total comparison the youngest age strata experienced the most significant increases in size. Older strata experienced both increases and decreases in size, including one very notable observation. From age 15 to 39 the off-reserve population experienced a marked decrease in size. The corresponding on-reserve population was actually increased in size. A similar pattern, albeit to a lesser degree was noted in older age strata as well. This speaks to the potential role of residential mobility in the late- and under-reporting of vital events.

Error of Closure:

Errors of closure (E_c) for end-year unadjusted populations are presented in Table 2. These assess the ability or inability of natural increase to account for overall population growth. Normally the calculation of E_c would also entail a consideration of in- and out-migration. It was not possible to isolate the effect of regional and residential migration. Therefore, any inability of natural increase to account for population growth was a reflection of both reporting discrepancies and migration effects. E_c calculations must be considered cautiously, especially upon separate consideration of males and females within residential and regional sub-categories and the relatively small accompanying populations. Positive E_c values indicated that more population growth occurred than would have been expected through natural increase. Negative values were produced if population growth was less than would have been expected by natural increase.

From 1979-1980 and 1980-1981 the E_c averaged approximately one half of a percent. E_c's for the male population were 0.37% for the 1979-1980 time period and

Table 2: Annual Increase/Decrease of End-Year Populations by Natural Increase and Error of Closure.

A. Total:

Period	P(0)	P(1)	P(1)-P(0)	Births	Deaths	Nat. Inc.	E_c
1979-80	13787	14216	429	423	55	368	**0.43%**
1980-81	14216	14635	419	444	104	340	**0.54%**
1981-82	14635	14953	318	434	74	360	**-0.28%**
1982-83	14953	15391	438	533	76	457	**-0.12%**

B. Males:

Period	P(0)	P(1)	P(1)-P(0)	Births	Deaths	Nat. Inc.	E_c
1979-80	7112	7320	208	218	37	181	**0.37%**
1980-81	7320	7517	197	245	63	182	**0.20%**
1981-82	7517	7676	159	221	48	173	**-0.18%**
1982-83	7676	7885	209	280	50	230	**-0.27%**

C. Females:

Period	P(0)	P(1)	P(1)-P(0)	Births	Deaths	Nat. Inc.	E_c
1979-80	6675	6896	221	205	18	187	**0.49%**
1980-81	6896	7118	222	199	41	158	**0.90%**
1981-82	7118	7277	159	213	26	187	**-0.38%**
1982-83	7277	7506	229	253	26	227	**0.03%**

D. Northern:

Period	P(0)	P(1)	P(1)-P(0)	Births	Deaths	Nat. Inc.	E_c
1979-80	6616	6811	195	207	28	179	**0.23%**
1980-81	6811	7024	213	217	41	176	**0.53%**
1981-82	7024	7177	153	190	37	153	**0.00%**
1982-83	7177	7387	210	263	40	223	**-0.18%**

E. Southern:

Period	P(0)	P(1)	P(1)-P(0)	Births	Deaths	Nat. Inc.	E_c
1979-80	7171	7405	234	216	27	189	**0.61%**
1980-81	7405	7611	206	227	63	164	**0.55%**
1981-82	7611	7776	165	244	37	207	**-0.54%**
1982-83	7776	8004	228	270	36	234	**-0.07%**

F. On Reserve:

Period	P(0)	P(1)	P(1)-P(0)	Births	Deaths	Nat. Inc.	E_c
1979-80	9641	9967	326	266	45	221	**1.05%**
1980-81	9967	10185	218	295	78	217	**0.01%**
1981-82	10185	10259	74	285	63	222	**-1.44%**
1982-83	10259	10588	329	361	65	296	**0.31%**

G. Off Reserve:

Period	P(0)	P(1)	P(1)-P(0)	Births	Deaths	Nat. Inc.	E_c
1979-80	4146	4249	103	155	10	145	**-0.99%**
1980-81	4249	4450	201	148	26	122	**1.78%**
1981-82	4450	4694	244	149	11	138	**2.26%**
1982-83	4694	4803	109	172	11	161	**-1.08%**

H. North Males:

Period	P(0)	P(1)	P(1)-P(0)	Births	Deaths	Nat. Inc.	E_c
1979-80	3357	3446	89	99	21	78	**0.32%**
1980-81	3446	3556	110	117	23	94	**0.45%**
1981-82	3556	3637	81	105	25	80	**0.03%**
1982-83	3637	3736	99	136	24	112	**-0.35%**

I. North Females:

Period	P(0)	P(1)	P(1)-P(0)	Births	Deaths	Nat. Inc.	E_c
1979-80	3259	3365	106	108	7	101	**0.15%**
1980-81	3365	3468	103	100	8	92	**0.32%**
1981-82	3468	3540	72	85	12	73	**-0.03%**
1982-83	3540	3651	111	127	16	111	**0.00%**

J. South Males:

Period	P(0)	P(1)	P(1)-P(0)	Births	Deaths	Nat. Inc.	E_c
1979-80	3755	3874	119	119	16	103	**0.41%**
1980-81	3874	3961	87	128	40	88	**-0.03%**
1981-82	3961	4039	78	116	23	93	**-0.37%**
1982-83	4039	4149	110	144	26	118	**-0.19%**

K. South Females:

Period	P(0)	P(1)	P(1)-P(0)	Births	Deaths	Nat. Inc.	E_c
1979-80	3416	3531	115	97	11	86	**0.82%**
1980-81	3531	3650	119	99	23	76	**1.18%**
1981-82	3650	3737	87	128	14	114	**-0.72%**
1982-83	3737	3855	118	126	10	116	**0.05%**

N. On Reserve Males:

Period	P(0)	P(1)	P(1)-P(0)	Births	Deaths	Nat. Inc.	E_c
1979-80	5034	5191	157	141	30	111	**0.89%**
1980-81	5191	5290	99	160	47	113	**-0.26%**
1981-82	5290	5358	68	150	42	108	**-0.75%**
1982-83	5358	5509	151	186	43	143	**0.15%**

O. On Reserve Females:

Period	P(0)	P(1)	P(1)-P(0)	Births	Deaths	Nat. Inc.	E_c
1979-80	4607	4776	169	125	15	110	**1.24%**
1980-81	4776	4895	119	135	31	104	**0.31%**
1981-82	4895	4901	6	135	21	114	**-2.20%**
1982-83	4901	5079	178	175	22	153	**0.49%**

L. Off Reserve Males:

Period	P(0)	P(1)	P(1)-P(0)	Births	Deaths	Nat. Inc.	E_c
1979-80	2078	2129	51	77	7	70	**-0.89%**
1980-81	2129	2227	98	85	16	69	**1.30%**
1981-82	2227	2318	91	71	6	65	**1.12%**
1982-83	2318	2376	58	94	7	87	**-1.22%**

M. Off Reserve Females:

Period	P(0)	P(1)	P(1)-P(0)	Births	Deaths	Nat. Inc.	E_c
1979-80	2068	2120	52	80	3	77	**-1.18%**
1980-81	2120	2223	103	64	10	54	**2.20%**
1981-82	2223	2376	153	78	5	73	**3.37%**
1982-83	2376	2427	51	78	4	74	**-0.95%**

0.20% for 1980-1981. The corresponding female values were 0.49% and 0.90% respectively. In most cases the E_c's were negatively signed for the 1981-1982 and 1982-1983 periods.

E_c's for the first two years were slightly larger for the overall south population compared to the north. For the south, from 1979-1980 natural increase failed to account for approximately 0.60% of the growth. No difference was observed upon comparison of the north and south male populations but the same could not be said for the females. Substantial differences were observed in both the 1979-1980 and 1980-1981 periods. In fact, for 1980-1981 well over 1.00% of population increase could not be attributed to natural increase. As in the overall male and female comparison the E_c's were either negative or close to zero for the latter two years.

The largest values, both negative and positive, occurred in the on- and off-reserve categories. The total, male and female on-reserve E_c's for the 1979-1980 period were all positive. For females specifically, 1.24% of the population growth could not be accounted for by natural increase. For the periods 1980-1981 and 1982-1983 the E_c's were less significant. From 1981-1982, especially for females the E_c's were considerably larger and negative in value, indicating that less growth occurred than would have been expected by natural increase. This was especially true for females. The off-reserve values were very different from those for the on-reserve population. In most cases off-reserve E_c's for each time period were the opposite of those for the corresponding on-reserve population. For example, the 1979-1980 E_c for the off-reserve females was -1.18% while for on-reserve females the it was +1.24%; for the off-reserve total population it was -0.99% and for the on-reserve total population it was +1.05%. The highest E_c in the analysis was obtained for off-reserve females from 1981-1982 when 3.37% of the growth could not be accounted for by natural increase.

Irregularities in the Reporting of Births:

Table 3 displays the cumulative average percentage of births reported within one to five years of their occurrence throughout the time period. The percentages varied widely, especially for births reported within the 1st year, being as low as 50% and as high as 70%. In each reporting year the percentage reported for males was approximately 1-2% lower than the total and female populations.

Nearly 66% of births in the north population were reported within the first year but for the south populations it was just under 63%. The situation was less clear upon separate consideration of males and females. Inter-regional comparison revealed that the percentages in each category were slightly higher for south males compared to north males. In addition, the percentage reported in the first year for south females was also slightly lower than for north females. A comparison of on- and off-reserve populations was equally interesting. For the first and second reporting years the percentage-reported

Table 3: Average Cumulative Percentage of Births Reported Within One to Five Years, 1979-1983.

Population	% Reported 1st Year	% Reported 2nd Year	% Reported 3rd Year	% Reported 4th Year	% Reported 5th Year
Total	64.56	96.19	98.22	99.49	100.00
Male	65.05	96.59	99.02	100.00	-
Female	64.02	95.77	97.35	98.94	100.00
North	66.13	95.14	98.92	100.00	-
South	63.16	97.13	97.61	99.04	100.00
On-Reserve	67.38	100.00	-	-	-
Off-Reserve	51.18	77.17	86.61	99.21	100.00
North Male	61.96	94.51	98.90	100.00	-
South Male	67.54	98.25	99.12	100.00	-
North Female	70.21	95.74	98.94	100.00	-
South Female	57.89	95.79	95.79	97.89	100.00
On-Res Male	69.18	100.00	-	-	-
Off-Res Male	50.00	80.30	90.91	98.48	100.00
On-Res Female	65.44	100.00	-	-	-
Off-Res Female	52.46	73.77	81.97	100.00	-

for on-reserve populations greatly exceeded those of the corresponding off-reserve populations. These were as high as 65% for on-reserve females and as low as 52% for off-reserve females.

Seasonality of Births: Chi-square values were calculated in order to compare the seasonal distribution of births throughout the year. The values for each population are presented in Table 4. Those that exceeded the critical value of 7.81 (p=0.05, 3 degrees of freedom) have been highlighted. Statistically significant differences in three-month interval fertility existed for the male, off-reserve, north, north male, and off-reserve male populations for 1982, as well as for the 1980 on-reserve population. The excess births were primarily concentrated within the periods from January to March and October to December.

Table 4: Chi-square Calculations: Seasonality of Births, 1979-1983.

Population	1979	1980	1981	1982	1983
Total	3.496	1.444	4.450	7.180	3.218
Male	0.955	5.339	4.878	8.484*	6.029
Female	4.557	1.498	2.226	2.455	0.107
On-Reserve	2.212	2.331	2.125	2.144	5.416
Off-Reserve	6.712	3.076	2.919	7.913*	0.558
North	2.660	1.599	2.594	9.874*	4.118
South	1.353	0.852	2.022	1.803	6.207
North Male	2.333	7.061	5.222	9.400*	4.294
South Male	0.664	0.765	1.813	1.862	3.667
North Female	6.571	0.889	0.880	1.824	2.354
South Female	1.417	0.856	2.455	2.313	3.905
On-Res Male	2.371	9.213*	2.250	2.693	7.161
On-Res Female	3.587	5.080	2.807	1.622	1.251
Off-Res Male	7.641	7.000	4.271	7.930*	2.170
Off-Res Female	1.176	1.100	1.625	5.179	3.436

* denotes statistical significance at $p<0.05$, 3 degrees of freedom.

Irregularities in the Reporting of Deaths:

Table 5 provides a summary of MSB-reported deaths for each population of interest during the time period as well as the total number of reporting discrepancies observed. The latter included two types of situations; those in which the Indian Register cohort size did not decrease although a death was reported by the MSB; and those in which a decrease in the Indian Register cohort size was noted in the absence of a corresponding MSB-reported death. For the sake of comparison a ratio of reporting irregularities to reported deaths is also included for each population in the table. A higher ratio suggested a more serious problem of death-reporting discrepancies. A comparison of female and male populations showed a consistently higher ratio for the former. In each year the ratios for the north population were also slightly higher than for the south. Upon separate analysis of males and females however no obvious patterns presented

Table 5: Irregularities in the Reporting of Deaths.

Population	Period	Deaths	Discrepancies Type 1	Type 2	Total	Ratio Total/Deaths
Total	1979-80	41	18	42	60	**1.46**
	1980-81	69	43	25	68	**0.99**
	1981-82	58	30	41	71	**1.22**
	1982-83	54	21	42	63	**1.17**
Male	1979-80	28	17	30	47	**1.68**
	1980-81	47	31	24	55	**1.17**
	1981-82	39	22	26	48	**1.23**
	1982-83	41	18	30	48	**1.17**
Female	1979-80	13	9	28	37	**2.85**
	1980-81	22	14	16	30	**1.36**
	1981-82	19	8	28	36	**1.89**
	1982-83	13	7	32	39	**3.00**
North	1979-80	21	11	31	42	**2.00**
	1980-81	23	18	20	38	**1.65**
	1981-82	27	17	31	48	**1.78**
	1982-83	26	16	27	43	**1.65**
South	1979-80	20	11	28	39	**1.95**
	1980-81	46	33	23	56	**1.22**
	1981-82	31	17	26	43	**1.39**
	1982-83	28	11	29	40	**1.43**
On-Reserve	1979-80	35	17	58	75	**2.14**
	1980-81	51	30	60	90	**1.76**
	1981-82	48	23	105	128	**2.67**
	1982-83	46	21	27	48	**1.04**
Off-Reserve	1979-80	6	2	71	73	**12.17**
	1980-81	18	14	19	33	**1.83**
	1981-82	10	8	41	49	**4.90**
	1982-83	8	6	33	39	**4.88**
North Male	1979-80	16	11	19	30	**1.88**
	1980-81	14	13	13	26	**1.86**
	1981-82	19	13	14	27	**1.42**
	1982-83	19	10	22	32	**1.68**

North Female	1979-80	5	3	18	21	**4.20**
	1980-81	9	7	10	17	**1.89**
	1981-82	8	6	22	28	**3.50**
	1982-83	7	7	13	20	**2.86**
South Male	1979-80	12	7	18	25	**2.08**
	1980-81	33	24	18	42	**1.27**
	1981-82	20	12	18	30	**1.50**
	1982-83	22	12	16	28	**1.27**
South Female	1979-80	8	7	20	27	**3.38**
	1980-81	13	10	15	25	**1.92**
	1981-82	11	5	15	20	**1.82**
	1982-83	6	3	23	26	**4.33**
On-Reserve Male	1979-80	23	14	38	52	**2.26**
	1980-81	36	20	38	58	**1.61**
	1981-82	33	18	45	63	**1.91**
	1982-83	12	9	39	48	**4.00**
On-Reserve Female	1979-80	14	11	39	50	**3.57**
	1980-81	15	11	35	46	**3.07**
	1981-82	15	7	88	95	**6.33**
	1982-83	11	7	20	27	**2.45**
Off-Reserve Male	1979-80	5	2	42	44	**8.80**
	1980-81	11	8	22	30	**2.73**
	1981-82	6	5	40	45	**7.50**
	1982-83	6	5	20	25	**4.17**
Off-Reserve Female	1979-80	1	1	43	44	**44.00**
	1980-81	7	5	11	16	**2.29**
	1981-82	4	2	18	20	**5.00**
	1982-83	2	2	18	20	**10.00**

themselves. The ratios were quite high for the off-reserve population compared to on-reserve, and this was also true in most cases for males and females within these categories. For example, from 1979 to 1980 there were six deaths reported to the MSB. For the same time period there were two instances whereupon these deaths were not recorded in the Indian Register and 71 instances when the Indian Register decreased without any apparent death being reported by the MSB. In the most extreme case one death was recorded by the MSB for off-reserve females 1979-1980 while in 44 cases the changes in Indian Register cohort size did not correspond to the reported deaths.

Mortality Analysis I. Crude Mortality Rates (CMR):

All calculations in the mortality analysis have been summarized in Appendix III. Crude Mortality Rates for the gross populations and the populations aged <1 to 9 have been summarized in tables 6 and 7 respectively.

Gross Population: In nearly every case the CMR's were decreased as a result of the adjustment procedures. Males and females did not differ markedly in this respect. Both were decreased by less than two percent in each year.

The situation was very similar for the north and south comparison. Upon disaggregation however CMR's for the north male population were more strongly and consistently affected by the adjustments than their south counterparts. The opposite was true for females. Changes in the south population were more significant for males.

The on-reserve population CMR's were only minimally affected by the adjustments. Total, male and female on-reserve CMR's were decreased by 0.62% to 1.72%. Off-reserve rates on the other hand were markedly affected by the adjustments. For example, after adjustment the off-reserve 1980 CMR was reduced from 18.32 to 17.41 deaths per thousand people. This represented a decrease of nearly 5%. Similar changes were observed upon separate consideration of males and females.

Ages <1 to 9: The adjustment procedures greatly affected the CMR's for the population aged <1 to 9. This was a reflection of the significant increases in population size associated with the adjustments to these particular age groups. As in the case of the gross

Table 6: Crude Mortality Rates per 1000 Population, Adjusted* and Unadjusted Population Counts, 1980-1982.

Population	1980	1980*	%Diff	1981	1981*	%Diff	1982	1982*	% Diff
Total	5.50	5.40	**-1.81**	5.34	5.28	**-1.12**	5.20	5.17	**-0.72**
Male	10.66	10.47	**-1.82**	10.37	10.25	**-1.17**	10.13	10.05	**-0.82**
Female	11.34	11.13	**-1.85**	10.98	10.86	**-1.07**	10.69	10.63	**-0.58**
North	11.46	11.23	**-1.97**	11.12	10.97	**-1.35**	10.84	10.74	**-0.91**
South	10.56	10.37	**-1.71**	10.25	10.12	**-1.21**	10.00	9.90	**-1.07**
On-Reserve	7.85	7.76	**-1.18**	7.64	7.59	**-0.69**	7.53	7.43	**-1.26**
Off-Reserve	18.32	17.41	**-4.95**	17.68	17.03	**-3.69**	16.82	16.70	**-0.74**
North Male	22.62	22.10	**-2.30**	21.96	21.64	**-1.43**	21.39	21.16	**-1.07**
South Male	20.16	19.87	**-1.47**	19.63	19.42	**-1.11**	19.23	19.06	**-0.87**
North Female	23.22	22.81	**-1.75**	22.50	22.24	**-1.18**	21.94	21.77	**-0.76**
South Female	22.14	21.68	**-2.06**	21.41	21.13	**-1.32**	20.82	20.56	**-1.28**
On-Reserve Male	15.05	14.88	**-1.08**	14.68	14.59	**-0.64**	14.45	14.33	**-0.82**
Off-Reserve Male	36.53	34.64	**-5.17**	35.29	33.85	**-4.09**	33.82	33.22	**-1.77**
On-Reserve Female	16.40	16.19	**-1.26**	15.91	15.81	**-0.62**	15.71	15.44	**-1.72**
Off-Reserve Female	36.67	34.95	**-4.68**	35.37	34.19	**-3.33**	33.41	33.49	**0.26**

populations the effect was not very different for males compared to females.

South population CMR's were decreased to a larger extent than those for the north as a result of adjustments. Intra-regional comparison for the population aged <1 to 9 revealed a pattern similar to the gross analysis. CMR's for the north population were more noticeably affected than females. In the south population females were affected to a greater degree than males.

Overall, male and female off-reserve CMR's were dramatically affected by the adjustment procedures. For example the 1980 rate was decreased from 19.86 to 16.87 deaths per thousand people which represented a decrease of approximately 15%. Corresponding on-reserve CMR's did not change appreciably. Intra-residential comparison showed no significant differences between males and females.

Table 7: Crude Mortality Rates per 1000 Population, Adjusted* and Unadjusted Population Counts, Ages <1 to 9, 1980-1982.

Population	1980	1980*	%Diff	1981	1981*	%Diff	1982	1982*	%Diff
Total	2.88	2.70	**-6.25**	2.85	2.72	**-4.40**	2.85	2.75	**-3.70**
Male	5.60	5.26	**-6.17**	5.50	5.26	**-4.45**	5.49	5.29	**-3.70**
Female	5.91	5.54	**-6.30**	5.89	5.63	**-4.35**	5.95	5.73	**-3.65**
North	5.71	5.35	**-6.18**	5.64	5.40	**-4.22**	5.64	5.46	**-3.08**
South	5.80	5.43	**-6.37**	5.74	5.48	**-4.68**	5.78	5.53	**-4.37**
On-Reserve	4.10	3.91	**-4.45**	4.06	3.94	**-2.97**	4.12	3.96	**-3.81**
Off-Reserve	9.67	8.22	**-15.02**	9.53	8.35	**-12.38**	9.31	8.55	**-8.16**
North Male	11.24	10.46	**-6.94**	11.01	10.51	**-4.58**	10.93	10.56	**-3.45**
South Male	11.17	10.55	**-5.56**	10.99	10.52	**-4.30**	11.01	10.56	**-4.13**
North Female	11.59	10.96	**-5.48**	11.54	11.10	**-3.83**	11.63	11.32	**-2.67**
South Female	12.07	11.19	**-7.32**	12.02	11.42	**-4.98**	12.15	11.60	**-4.54**
On-Reserve Male	7.97	7.63	**-4.30**	7.87	7.64	**-2.99**	7.97	7.67	**-3.76**
Off-Reserve Male	18.87	16.01	**-15.14**	18.24	16.06	**-11.97**	17.60	16.15	**-8.22**
On-Reserve Female	8.42	8.04	**-4.53**	8.35	8.12	**-2.80**	8.51	8.18	**-3.87**
Off-Reserve Female	19.86	16.87	**-15.03**	19.93	17.41	**-12.66**	19.71	18.12	**-8.07**

Mortality Analysis II. Indirectly standardized mortality rates (ISMR):

Indirectly standardized rates were calculated in order to illustrate the effect of the adjustment procedures upon mortality measures. In most cases the adjusted population rates were lower than those for the unadjusted population counts. This was not surprising because the adjustments generally resulted in an increase in population size. These rates are summarized in Tables 8 and 9.

Gross Population: Male and female rates were affected equally by the adjustment procedures. The same was true for the overall north and south populations. Upon disaggregation the indirectly standardized rates for the south male population were decreased to a larger extent than their north counterparts as a result of the adjustments. In addition, intra-regional comparison showed that the adjustments more strongly affected the north female and south male rates compared to the north males and south females respectively.

Large differentials were exhibited between the indirectly standardized rates for the on- and off-reserve populations. Off-reserve rates were substantially reduced compared to those for the on-reserve population. Upon separate consideration of

Table 8: Indirectly Standardized Mortality Rates, Adjusted* and Unadjusted Gross Population Counts (deaths per thousand people).

Population	1980	1980*	%Diff	1981	1981*	%Diff	1982	1982*	%Diff
Total	15.97	15.44	**-3.30**	15.44	15.14	**-1.93**	15.06	14.90	**-1.05**
Male	31.96	30.63	**-4.14**	31.00	30.48	**-1.69**	30.41	30.27	**-0.45**
Female	31.91	30.89	**-3.20**	30.72	30.02	**-2.25**	29.63	29.35	**-0.97**
North	30.31	29.44	**-2.87**	29.15	28.39	**-2.59**	28.32	27.80	**-1.84**
South	33.60	32.37	**-3.69**	32.71	32.26	**-1.36**	32.05	31.91	**-0.44**
On-Reserve	21.12	20.47	**-3.06**	20.40	20.17	**-1.12**	19.99	20.20	**1.08**
Off-Reserve	65.01	61.34	**-5.64**	63.06	60.21	**-4.53**	60.95	58.54	**-3.96**
North Male	62.45	60.36	**-3.35**	59.59	58.91	**-1.13**	58.02	57.69	**-0.56**
South Male	64.93	62.04	**-4.45**	64.49	61.94	**-3.94**	63.12	61.66	**-2.32**
North Female	58.87	56.58	**-3.88**	56.18	54.74	**-2.56**	54.25	53.22	**-1.90**
South Female	69.50	66.79	**-3.90**	65.77	66.17	**0.60**	65.10	64.31	**-1.20**
On-Reserve Male	40.67	39.66	**-2.48**	39.97	39.67	**-0.75**	39.41	39.94	**1.35**
Off-Reserve Male	144.40	133.06	**-7.85**	136.62	128.35	**-6.05**	129.51	124.95	**-3.52**
On-Reserve Female	43.37	41.88	**-3.43**	41.22	40.86	**-0.89**	39.97	40.67	**1.74**
Off-Reserve Female	116.93	113.54	**-2.90**	115.00	111.58	**-2.97**	114.56	107.79	**-5.91**

males and females the pattern was similar to the overall on- and off-reserve population comparison. Off-reserve male and female rates were generally reduced more noticeably than their on-reserve counterparts. Within the on-reserve population female rates were slightly more affected than their male counterparts. Off-reserve male rates for 1980 and 1981 were decreased to a larger extent than females after adjustment.

Ages <1 to 9: Male and female rates were again equally affected by the adjustment procedures. The same could not be said for the north and south comparison. In each year the south indirectly standardized rates were more strongly affected than the north. South female rates were more markedly affected by the adjustment procedures than their north counterparts but the opposite was true for males. Intra-regional comparison showed that

Table 9: Indirectly Standardized Mortality Rates, Adjusted* and Unadjusted Population Counts, Age <1 to 9 (deaths per thousand people).

Population	1980	1980*	%Diff	1981	1981*	%Diff	1982	1982*	%Diff
Total	3.68	2.75	**-25.33**	3.47	2.77	**-20.18**	3.41	2.79	**-18.14**
Male	7.22	5.37	**-25.63**	6.79	5.35	**-21.14**	6.59	5.39	**-18.21**
Female	7.49	5.64	**-24.64**	7.08	5.72	**-19.14**	7.09	5.81	**-18.05**
North	7.49	5.70	**-23.87**	6.98	5.66	**-18.91**	6.80	5.81	**-14.50**
South	7.21	5.31	**-26.35**	6.88	5.41	**-21.39**	6.86	5.38	**-21.52**
On-Reserve	5.00	3.88	**-22.38**	4.74	3.94	**-16.93**	4.72	4.00	**-15.36**
Off-Reserve	14.05	8.93	**-36.45**	12.88	9.14	**-29.03**	12.33	9.16	**-25.71**
North Male	15.97	11.53	**-27.80**	14.25	8.97	**-37.06**	12.93	8.83	**-31.70**
South Male	13.17	10.04	**-23.76**	12.97	10.23	**-21.14**	13.42	10.44	**-22.18**
North Female	14.12	11.29	**-20.04**	13.68	11.40	**-16.66**	14.32	12.17	**-15.01**
South Female	15.95	11.28	**-29.28**	14.67	11.49	**-21.66**	14.03	11.11	**-20.78**
On-Reserve Male	9.69	7.57	**-21.85**	9.41	7.73	**-17.87**	9.34	7.90	**-15.43**
Off-Reserve Male	28.30	17.47	**-38.25**	24.41	17.19	**-29.59**	21.97	16.50	**-24.91**
On-Reserve Female	10.23	7.94	**-22.39**	9.50	8.03	**-15.40**	9.54	8.08	**-15.28**
Off-Reserve Female	27.89	18.03	**-35.37**	27.27	19.54	**-28.34**	27.54	20.29	**-26.32**

the adjustments more strongly affected the male rates within the north population while in the south population both sexes were affected equally.

As in the gross population analysis the largest differentials were exhibited between the on- and off-reserve populations. Off-reserve rates were reduced to a larger extent compared to those for the on-reserve population as a result of the adjustments. Upon separate consideration of males and females the pattern was not unlike the overall on- and off-reserve population comparison. Off-reserve male and female rates were more strongly affected than their on-reserve counterparts. Within the on-reserve population female and male rates were similarly affected, and the same was true for the corresponding off-reserve populations.

Mortality Analysis III. Directly standardized mortality rates (DSMR):

Tables 10 and 11 provide a summary of the directly standardized rates along with the percentage difference between the age-standardized mortality rates (DSMR's) for adjusted and unadjusted population counts. These differences were an indication of the effect of vital event reporting inconsistencies. Positive values resulted if the adjustment procedures led to a higher standardized rate while negative values indicated a decrease in the rate.

A. Gross Population: In each year the adjustments led to decreases in the directly standardized mortality rate of the total population, from as large as 2.15% in 1980 to a negligible 0.15% in 1982. A similar effect was observed for the female population with the exception of 1982 when a more notable decrease was observed. The male population showed increases in the DSMR for 1981 and 1982, and a decrease in 1980.

The north population also experienced a decrease in DSMR's for each year while in two years the south rates were increased as a result of adjustments. The south male rates were decreased significantly, as much as 5.99% in 1981, while for two years the corresponding north male rates actually increased. A comparison of the north and south female populations showed slightly more significant increases in mortality rates for the latter in 1981 and 1982.

The differential effect of the adjustments upon directly standardized mortality rates was illustrated by the on- and off-reserve comparison. In each year the off-reserve rates decreased by no less than 3.37% while on-reserve rates decreased in 1980 but increased thereafter. After plotting the adjusted and unadjusted gross on- and off-reserve rates this differential effect became clearer (Figure 3, pg. 63). In the on-reserve case the plots were nearly identical. On the other hand the DSMR's were consistently lower after adjustment for the off-reserve population. Large changes, both increases and decreases, were associated with the off-reserve males and females compared to their on-reserve counterparts.

Table 10: Directly Standardized Mortality Rates, Adjusted* and Unadjusted Gross Population Counts (deaths per thousand people).

Population	1980	1980*	%Diff	1981	1981*	%Diff	1982	1982*	%Diff
Total	12.68	12.41	**-2.15**	12.26	12.15	**-0.84**	11.88	11.90	**0.15**
Male	26.25	25.26	**-3.77**	25.62	25.74	**0.45**	25.50	26.41	**3.53**
Female	25.82	25.34	**-1.83**	24.79	24.49	**-1.22**	23.69	23.51	**-0.79**
North	24.08	23.62	**-1.94**	23.14	22.72	**-1.80**	22.43	22.10	**-1.45**
South	27.18	26.47	**-2.63**	26.72	27.10	**1.43**	26.17	27.33	**4.47**
On-Reserve	16.91	16.56	**-2.08**	16.27	16.29	**0.11**	15.81	16.36	**3.45**
Off-Reserve	55.24	52.82	**-4.39**	53.59	51.47	**-3.96**	51.45	49.71	**-3.37**
North Male	51.70	50.58	**-2.16**	48.08	48.56	**0.98**	47.23	47.73	**1.07**
South Male	54.02	51.59	**-4.50**	56.92	53.51	**-5.99**	58.68	58.15	**-0.91**
North Female	48.88	47.69	**-2.43**	46.46	45.60	**-1.86**	44.59	43.83	**-1.71**
South Female	56.25	55.35	**-1.60**	53.53	55.69	**4.04**	52.18	52.93	**1.44**
On-Reserve Male	33.26	32.45	**-2.43**	32.86	32.83	**-0.11**	32.87	34.03	**3.52**
Off-Reserve Male	127.97	120.51	**-5.83**	121.77	132.41	**8.74**	118.21	131.78	**11.47**
On-Reserve Female	34.91	34.15	**-2.17**	33.18	33.17	**-0.03**	31.98	32.61	**1.98**
Off-Reserve Female	112.62	115.02	**2.13**	110.50	112.92	**2.19**	104.07	100.03	**-3.88**

B. Ages <1 to 9: The adjustment procedures most directly affected the youngest age categories. Therefore it came as no surprise that the DSMR's were reduced for every population in every year as a result of the adjustments. The total population rates were decreased by approximately 17% to 25% over the time period. For each year the male and female populations were nearly equally affected by the adjustments.

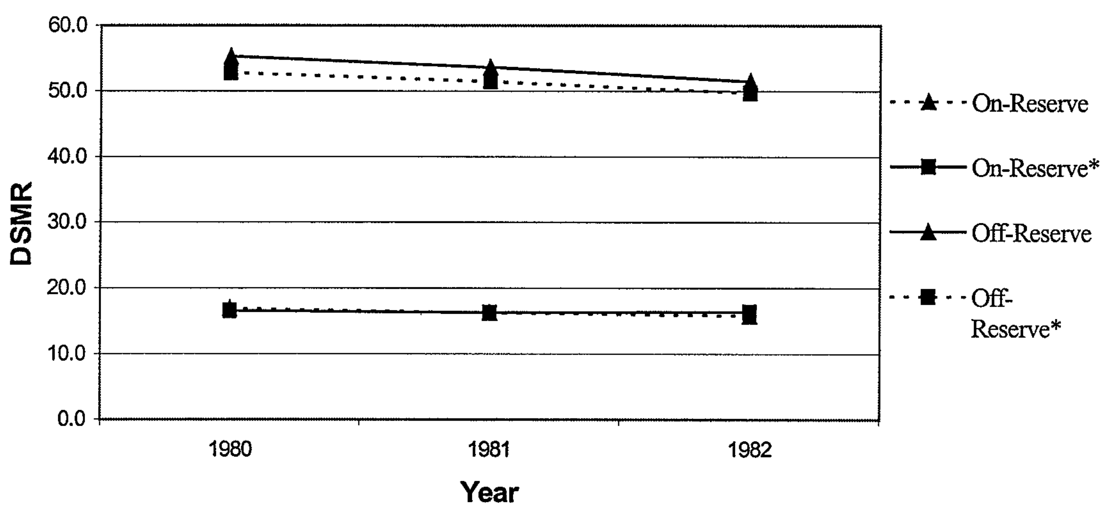
Mortality rates for the south population in each year were more strongly affected by the adjustments than those for the north population. Decreases in the DSMR's were more significant for south females compared to north females and also for north males versus north females.

Table 11: Directly Standardized Mortality Rates, Adjusted* and Unadjusted Population Counts, Ages <1 to 9 (deaths per 1000 people).

Population	1980	1980*	%Diff	1981	1981*	%Diff	1982	1982*	%Diff
Total	3.67	2.75	**-24.91**	3.43	2.77	**-19.38**	3.38	2.79	**-17.25**
Male	7.18	5.35	**-25.38**	6.73	5.35	**-20.41**	6.52	5.39	**-17.29**
Female	7.46	5.67	**-24.01**	7.01	5.72	**-18.31**	7.00	5.80	**-17.20**
North	7.48	5.68	**-24.08**	6.92	5.65	**-18.39**	6.74	5.80	**-13.95**
South	7.16	5.35	**-25.23**	6.80	5.42	**-20.30**	6.77	5.40	**-20.23**
On-Reserve	4.94	3.89	**-21.25**	4.67	3.93	**-15.87**	4.66	3.99	**-14.43**
Off-Reserve	14.34	8.89	**-38.03**	12.97	9.13	**-29.65**	12.34	9.17	**-25.69**
North Male	16.14	11.42	**-29.25**	14.20	11.22	**-21.00**	12.88	11.10	**-13.76**
South Male	13.02	10.14	**-22.17**	12.79	10.26	**-19.82**	13.24	10.44	**-21.19**
North Female	14.03	11.31	**-19.40**	13.53	11.39	**-15.84**	14.15	12.06	**-14.78**
South Female	15.94	11.35	**-28.82**	14.53	11.50	**-20.82**	13.87	11.20	**-19.21**
On-Reserve Male	9.56	7.57	**-20.85**	9.27	7.69	**-17.01**	9.22	7.86	**-14.68**
Off-Reserve Male	29.09	17.33	**-40.44**	24.63	17.26	**-29.93**	22.01	16.75	**-23.89**
On-Reserve Female	10.13	7.99	**-21.11**	9.38	8.05	**-14.19**	9.42	8.08	**-14.17**
Off-Reserve Female	28.33	18.06	**-36.26**	27.42	19.40	**-29.24**	27.73	20.12	**-27.44**

Substantial differences existed between the on- and off-reserve adjusted and unadjusted rates for the population aged <1 to 9. This effect is illustrated clearly in Figure 4 (Pg. 64). Rates for both populations were decreased after adjustment, although in the off-reserve case these decreases were nearly two times more than those for the on-reserve population. this was true after separate consideration of males and females as well. In fact, the 1980 adjusted rate for the off-reserve male population declined by nearly 45%. The effect of the adjustments upon the mortality rates was more noticeable for the on-reserve male population than for the on-reserve females.

Figure 3: Directly Standardized Mortality Rates for **On-** and **Off-Reserve** Populations, Adjusted* and Unadjusted Population Counts, 1980-1982.



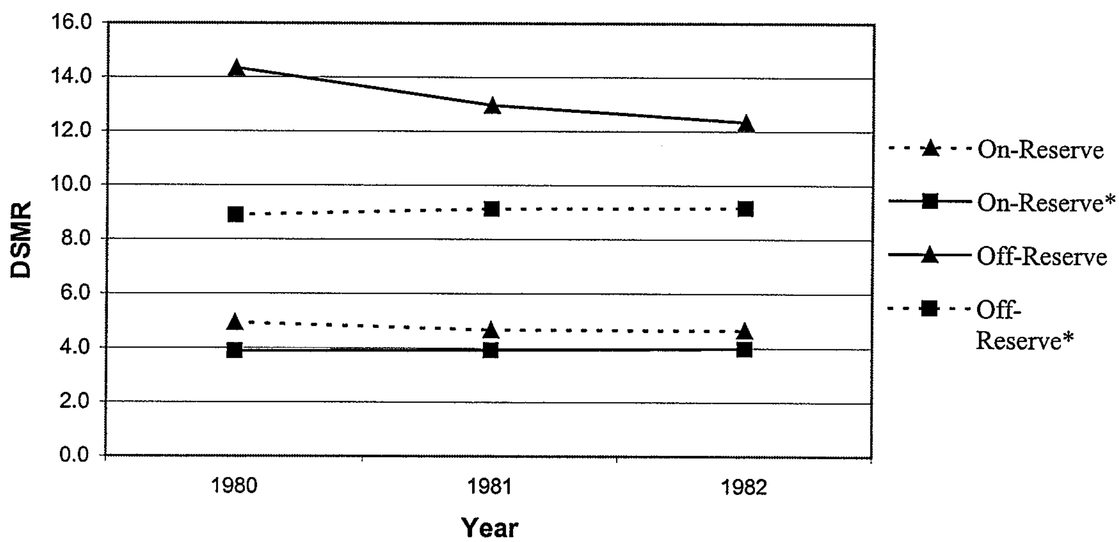
Mortality Analysis III. Decomposition of the difference in crude rates:

Decomposition ratios were calculated in order to determine the extent to which the difference between the standard and given population's mortality rates was a result of real mortality differences or simply age composition differences. These ratios are summarized in Table 12. They were obtained for two different scenarios:

A. Gross population, using the adjusted as the standard population and unadjusted as the given population; and

B. Population aged <1 to 9, using the adjusted as the standard population and unadjusted as the given population.

Figure 4: Directly Standardized Mortality Rates for **On-** and **Off-Reserve** Populations, Adjusted* and Unadjusted Population Counts, Ages <1 to 9, 1980-1982.



A. Gross Population; Adjusted as Standard: The total decomposition ratios averaged approximately 0.63, indicating that 63% of the difference in adjusted and unadjusted crude mortality rates was due to age composition differences and not real mortality differences. A comparison of the male and female populations revealed higher decomposition ratios for the latter in 1981 and 1982.

For the same years decomposition ratios for the north population were higher than those for the south, and separate consideration of males and females revealed more interesting trends. The ratios were higher for south males compared to north males and were also very high for north females compared to their southern counterparts for the years 1981 and 1982. Intra-regional comparison revealed higher ratios for south males compared to south females and for north females compared to north males.

As in other portions of this analysis the most striking differences occurred between the on- and off-reserve populations. For 1980 and 1981 decomposition ratios for the on-reserve population were approximately 0.70 and 0.66, while the corresponding off-reserve ratios did not exceed 0.40. In most cases the on-reserve values for both males and females were larger than those for the off-reserve population. Intra-residential comparisons showed a slight difference between males and females on-reserve but no discernible patterns emerged off-reserve. In three cases in 1982 the ratios were well over 1.00%. These included the on-reserve male, off-reserve female, and overall on-reserve populations. This was a result of the relatively significant increases in the size of the age 20-24 and 25-29 cohorts resulting from the adjustment procedures.

B. Ages <1 to 9; Adjusted as Standard: In most cases the decomposition ratios were higher than those for the corresponding gross population. For example, the decomposition ratio for the gross 1980 female population indicated nearly 58% of the difference between the adjusted and unadjusted crude rates was due to age composition dissimilarities, which in turn resulted from the adjustment procedures themselves. It stands to reason therefore that the decomposition ratio would be higher for those populations which were most affected by the inconsistent reporting of vital events. Accordingly, the corresponding 1980 age <1 to 9 female decomposition ratio was higher at nearly 0.76. Male and female values within this age range did not differ significantly.

Table 12: Decomposition Ratios from Direct Standardization Analysis, Gross, and Ages <1 to 9.

	A. Gross Population			B. Age <1 to 9 Population		
Population	1980	1981	1982	1980	1981	1982
Total	0.6051	0.6333	0.6649	0.7668	0.7838	0.7940
Male	0.6616	0.5936	0.4104	0.7742	0.7933	0.7948
Female	0.5773	0.6512	0.7456	0.7561	0.7728	0.7960
North	0.5387	0.6027	0.6499	0.7570	0.7785	0.7823
South	0.6519	0.5126	0.2288	0.7694	0.7833	0.7977
On-Reserve	0.7032	0.6613	1.9467	0.8038	0.8196	0.7429
Off-Reserve	0.3860	0.4015	0.8390	0.6499	0.6113	0.7014
North Male	0.5635	0.4558	0.3906	0.7782	0.7905	0.7560
South Male	0.5712	0.6077	0.7093	0.7311	0.7653	0.8195
North Female	0.7204	0.7850	0.7485	0.7695	0.7964	0.8169
South Female	0.6056	0.2218	0.4259	0.7701	0.7746	0.7801
On-Reserve Male	0.7143	0.7067	1.8929	0.8054	0.8302	0.7488
Off-Reserve Male	0.4657	0.0796	0.1909	0.6733	0.6322	0.6811
On-Reserve Female	0.6931	0.6506	1.2309	0.7998	0.8099	0.7368
Off-Reserve Female	0.0884	0.1969	1.0486	0.6299	0.5911	0.7198

A comparison of the overall north and south populations showed no discernible patterns, and neither did the north male versus south male comparison. The decomposition ratios for south females averaged 0.2 to 0.4 higher than their north counterparts but this was the only notable result. Intra-regional comparisons showed no apparent differences between males and females.

Once again large discrepancies presented themselves within the on- and off-reserve comparison. The overall ratio differences ranged from 0.04 to 0.21. This pattern was true for the individual sexes as well. Intra-residential comparison revealed slightly higher ratios for on-reserve females compared to males but there were no significant findings within the off-reserve populations.

Life Table Analysis:

Appendix IV contains all pertinent life tables. As mentioned in the methodology some life tables were omitted if, in any age category, the number of deaths (taken from the standard schedule of mortality) exceeded the total size of that age stratum. Separate unisex tables for the total, north, south, on- and off-reserve populations were created in order to obtain the requisite survivorship probabilities for use in the fertility analysis.

Survivorship: Survivorship functions, derived from the S_x column of the life table were increased in nearly every case after the populations were subjected to the adjustment procedures. Male survivorship functions were increased to a larger extent than females.

There was no noticeable difference in the effect of the adjustments upon north survivorships compared to south. Within the male population, measures for the north were more noticeably increased than the south, although this comparison was based upon one year only. For the corresponding female populations survivorship increases were larger in magnitude for the south population in all three years. North male survivorships were affected more than those for north females in 1980 and 1981 although the differences were quite negligible. In addition, south population survivorship increases were more substantial for females compared to males, however this again was based upon one year only.

Comparison of the effect of the adjustment procedures upon survivorships between the on- and off-reserve populations showed some notable patterns. In the overall comparison the off-reserve population exhibited a very substantial improvement in survivorship compared to the on-reserve population. The same was true for females specifically. Within the on-reserve population male survivorships were increased slightly but consistently compared to females.

Expectation of Life (e_0): Total population e_0's were increased after adjustment in 1980 and 1981 while decreases were noted in 1982. Male values increased to a larger degree than females for each year in most age categories. In some instances, particularly in 1981 and 1982 the female population experienced decreased e_0's after adjustment.

In the first two years e_0's for the south population experienced more significant increases than the north. Expectations of life for the youngest north categories decreased after adjustments to a much larger degree than the south. In other age strata decreases in e_0's were generally more significant for the south compared to the north. Available data showed that in almost all instances the adjustments led to improvements in e_0's for both north and south populations. South female e_0's were actually decreased in several age strata after adjustment. In other cases, for each year the south female values were increased to a larger degree than those for the north female population with the latter also experiencing some decreased e_0's. Intra-regional comparison was not particularly meaningful for the south because there was only a 1980 male life table, although more significant improvements were noted for the females in that year with the exception of those cohorts over the age of 70. Considering the north population, male e_0's were increased to a larger degree than their female counterparts in 1980 and 1981 in nearly all age categories with the latter even experiencing decreasing e_0's in several cases.

The off-reserve populations were greatly affected by the adjustments and so the associated e_0's experienced larger improvements compared to the on-reserve populations, especially within the youngest age strata. For example, the 1980 off-reserve e_0 for the age <1 category increased by 5.34% while the corresponding on-reserve e_0 increased by only 1.08%. Two other interesting patterns emerged. On-reserve e_0's for 1981 and 1982 decreased for nearly all age categories although the changes were not particularly substantial. The same situation was observed in 1982 for the off-reserve population aged 5-24 although in this case the changes were quite significant. Separate analysis of males and females revealed very different situations in each year. In both cases the youngest age strata experienced decreases in their e_0's after adjustment. In 1981 on-reserve male values almost uniformly increased while female life expectancies decreased. This situation was reversed in 1982. Direct comparison between off-reserve males and females was not possible due to the small size of the populations.

Life tables were not obtained for those populations in which one or more cohorts were smaller than the corresponding age-specific deaths totals extracted from the standard schedule of mortality. This included the south male (1981-1982), off-reserve female (1981), and off-reserve male (1980-1982) populations.

<u>Fertility and Reproduction Analysis:</u>

A standard schedule of fertility was used in the fertility and reproduction analysis, so that any differences in calculated values were a reflection of the adjustment procedures, and therefore an indirect result of discrepancies in the reporting of vital events. It was necessary to use overall total, north, south, on- and off-reserve survivorships in the analysis due to the problems reported in the methodology. In most cases, and for most years, the adjustments led to increased fertility and reproduction variables. All results in this portion of the analysis, including the percentage difference between adjusted and unadjusted calculations are summarized in Table 11.

Crude Birth Rate (CBR): Total population crude birth rates averaged approximately 20 births per one thousand people throughout the period of interest. Adjusted figures were elevated by nearly 6 to 8 births per thousand. Similar results were noted for the other four populations. These increases were slightly greater in magnitude for the south and off-reserve populations compared to their counterparts.

Total Fertility Rate (TFR): Differences in TFR's reflected the adjustments made to the childbearing female population, and therefore inconsistencies in the reporting of deaths. The differences were larger for the south compared to the north population. In 1982 adjustments to the former increased the expected births (per one thousand women) by approximately 73. Adjusted on-reserve rates did not differ significantly from unadjusted for at least 1980 and 1981 although in 1982 the rate was actually decreased by 1.80%. The effect of the adjustments was quite striking upon consideration of the off-reserve population. In 1982 for example the number of expected births increased by almost 9%.

Gross Reproduction Rate (GRR): The GRR differed from the TFR in that it utilized female births only. Any differences in calculated values were a result of changes in the denominators and hence changes resulting from irregularities in death-reporting. The patterns observed were similar to those mentioned above for the TFR.

Net Reproduction Rate (NRR): The adjustment procedures affected two of the variables that were used in the calculation of the NRR. The first of these was the size of the population of childbearing age (15-49). This was used in the determination of the net maternity function portion of the calculation. The adjustments also affected the survivorship functions of the same age categories. The largest contributor to the difference in adjusted and unadjusted NRR measures was the survivorship, which in turn was most affected by the discrepancies in the reporting of births. In each year the difference between adjusted and unadjusted measures was larger for the south population compared to the north population. On-reserve differences were quite insignificant compared to those for the off-reserve population. The adjustments actually led to an

Table 13: Fertility and Reproductive Measures for All Populations, Adjusted* and Unadjusted Population Counts, 1980-1982.

Population	Year	CBR	CBR*	%Diff	TFR	TFR*	%Diff	GRR	GRR*	%Diff
Total	1980	31.98	31.41	**-1.81**	3561.5	3561.9	**0.01**	1.706	1.706	**0.01**
	1981	31.04	30.70	**-1.12**	3358.0	3374.1	**0.48**	1.608	1.616	**0.49**
	1982	30.27	30.05	**-0.72**	3175.3	3207.2	**1.01**	1.520	1.536	**1.03**
North	1980	66.68	65.36	**-1.97**	7626.2	7617.2	**-0.12**	3.657	3.652	**-0.11**
	1981	64.72	63.84	**-1.35**	7216.4	7231.5	**0.21**	3.458	3.466	**0.24**
	1982	63.05	62.47	**-0.91**	6838.6	6859.7	**0.31**	3.275	3.286	**0.35**
South	1980	61.41	60.36	**-1.71**	6683.7	6692.5	**0.13**	3.198	3.202	**0.13**
	1981	59.63	58.91	**-1.21**	6283.4	6278.0	**-0.09**	3.007	3.002	**-0.16**
	1982	58.20	57.58	**-1.07**	5921.2	5940.2	**0.32**	2.834	2.840	**0.19**
On-reserve	1980	45.68	45.14	**-1.18**	5333.1	5337.7	**0.09**	2.564	2.567	**0.10**
	1981	44.45	44.14	**-0.69**	5015.5	5022.3	**0.14**	2.410	2.414	**0.16**
	1982	43.81	43.26	**-1.26**	4829.1	4741.9	**-1.81**	2.319	2.277	**-1.82**
Off-reserve	1980	106.59	101.31	**-4.95**	11433.9	11449.2	**0.13**	5.440	5.448	**0.14**
	1981	102.87	99.07	**-3.69**	10686.9	10948.7	**2.45**	5.090	5.216	**2.49**
	1982	97.88	97.16	**-0.74**	9633.7	10489.9	**8.89**	4.590	5.004	**9.01**

increase of over 13% in 1982. It was also interesting to note that in 1982 the NRR was decreased by 1.12% as a result of the adjustments.

Mean Age at Childbearing (MAC): Like the NRR's the MAC was calculated using the net maternity function. Therefore, differences between adjusted and unadjusted values were a result of the changing survivorship functions as well as the changing childbearing population size. The adjustments resulted in quite negligible changes in MAC's. Slight increases were noted for the north and on-reserve populations while south and off-reserve values were decreased.

Table 13 Continued:

Population	Year	NRR	NRR*	%Diff	MAC	MAC*	%Diff	*r*	*r**	%Diff
Total	1980	1.503	1.617	**7.58**	25.18	25.18	**0.00**	1.727	1.760	**1.91**
	1981	1.427	1.564	**9.60**	25.17	25.18	**0.04**	1.592	1.634	**2.64**
	1982	1.352	1.486	**9.91**	25.17	25.19	**0.08**	1.383	1.443	**4.34**
North	1980	2.853	3.263	**14.37**	25.25	25.26	**0.04**	4.381	4.444	**1.44**
	1981	2.725	3.104	**13.91**	25.21	25.24	**0.12**	4.193	4.250	**1.36**
	1982	2.578	2.946	**14.27**	25.17	25.22	**0.20**	3.998	4.046	**1.20**
South	1980	2.485	2.895	**16.50**	25.12	25.12	**0.00**	3.906	3.978	**1.84**
	1981	2.377	2.718	**14.35**	25.15	25.06	**-0.36**	3.687	3.733	**1.25**
	1982	2.263	2.576	**13.83**	25.18	25.03	**-0.60**	3.465	3.525	**1.73**
On-reserve	1980	2.348	2.374	**1.11**	25.73	25.75	**0.08**	3.195	3.238	**1.35**
	1981	2.215	2.235	**0.90**	25.69	25.74	**0.19**	2.973	3.006	**1.11**
	1982	2.135	2.110	**-1.17**	25.66	25.69	**0.12**	2.832	2.788	**-1.55**
Off-reserve	1980	4.383	4.620	**5.41**	24.14	24.13	**-0.04**	5.600	5.809	**3.73**
	1981	4.168	4.425	**6.17**	24.25	24.23	**-0.08**	5.401	5.638	**4.39**
	1982	3.798	4.254	**12.01**	24.35	24.34	**-0.04**	5.033	5.482	**8.92**

Intrinsic Rate of Natural Increase (*r*): Here again the two variables affected by the adjustments were the survivorship probabilities and the childbearing population size. In all but one case, specifically the 1982 on-reserve female population, the *r* values were increased after adjustment. Total population growth rates ranged from approximately 4% to 8% throughout the time period of interest. The south growth rates were more strongly affected by the adjustments than the north. Changes in the on-reserve growth rates were relatively small, especially compared to those for the off-reserve population. In fact, the off-reserve rate in 1982 was raised by approximately 10%.

CHAPTER 5

DISCUSSION

I. Isolation of the Problem

Error of Closure:

The E_c was used to assess the ability of natural increase to account for overall population growth from one year to the next. A calculation of natural increase should always entail a consideration of migration. Migration data was not available so it was not possible to isolate the effect of migration. Therefore, any inability of natural increase to account for population growth was a reflection of both reporting discrepancies and the effect of regional (north/south) and residential (on-/off-reserve) migration. While it was not possible to meaningfully quantify the relative contribution of each of these factors to the E_c it was still useful as an indicator of the severity of these events. Discrepancies between population increase according to the Indian Register and that described by natural increase were evident for all populations in practically all years. For various reasons however, specifically irregularities in the reporting of vital events, the experiences of some populations were markedly different in some years. E_c measures were split almost evenly between negative values (less population growth than expected by natural increase) and positive values (more growth than expected).

Two general patterns presented themselves in this portion of the analysis. In most cases E_c's for females were larger in absolute value than their male counterparts. This suggested a higher likelihood of reporting problems within the female populations. Similarly, off-reserve E_c's tended to be larger than the corresponding on-reserve values, again suggesting a more significant reporting problem. Another interesting observation was made concerning the on- versus off-reserve comparison. For those years in which a positive E_c was obtained for the on-reserve population, a negative E_c was obtained for the corresponding off-reserve population. The reverse situation was true as well. In essence, when less growth occurred in one population than natural increase would suggest, the *opposite* population experienced more growth than expected. This pattern may have been a product of residential mobility. For example, if a substantial number of on-reserve individuals moved to off-reserve locations without the opposite situation occurring in the same period then a negative on-reserve E_c may be observed.

On-Reserve: From 1980 to 1981 the Indian Register summary reports showed an increase in the end-year on-reserve population from 9967 to 10185. This increase of 218 individuals was quite similar to that suggested by natural increase. According to the MSB birth and death data, specifically 295 births and 78 deaths, natural increase was 217. The resulting E_c was a very negligible 218. This suggested good correlation between the Indian Register and the reporting of births and deaths by the MSB, at least compared to the variation seen in 1980, 1982 and 1983 when E_c's were +1.05%, -1.44% and 0.31% respectively. The E_c however only gave an indication of the net change in population size from one year to the next so that discrepancies in individual cohorts remained hidden.

Off-Reserve: During the same time period the Indian Register showed an increase in the end-year off-reserve population from 4249 to 4450. This change of 201 individuals was very different from the calculated natural increase of only 122 obtained from the MSB data. Unlike the on-reserve population therefore the E_c was relatively substantial. A value of 1.78% suggested very poor correlation between the Indian Register and MSB data sources. As in the on-reserve case, examination of the net change in population sizes failed to reveal trends within different cohorts.

Irregularities in the Reporting of Births:

The results obtained were comparable to those of other researchers in so far as the total population was concerned. Ram & Romaniuc (1985:33) noted that among births in the Canadian Registered Indian 1971 population 69.1% were reported in the year they occurred. The corresponding average percentage calculated in this study was 64.6%. Disaggregation into subpopulations revealed some striking patterns, not the least of which were the on- and off-reserve results. The cumulative percentage of births reported within each year was relatively low for all off-reserve populations compared to those for the on-reserve populations. This suggested a very significant problem of reporting delays associated with the former.

Seasonality: If a larger proportion of a population's births were to occur late in the year then one might expect reporting delays to be more likely. The chi-square values showed that indeed there were statistically significant differences in the proportion of births reported within different three-month intervals. Of the six populations that showed statistically significant chi-square values five of them did exhibit a large proportion of births within the October to December interval. When compared to the corresponding late-reported birth totals for those particular populations however no significant patterns emerged. While there was certainly reason to presume that births occurring later in the year were more likely to go unreported until the following year, in this analysis there was nothing of particular note.

On-Reserve: The Indian Register showed a cohort size of 220 in 1981 (1981_0). After adjustment an expected cohort size of 270 was obtained. Therefore, approximately 81% of the births occurring in that year were reported promptly. This percentage was quite high compared to the corresponding values for other populations in the analysis. There was not sufficient evidence to suggest that a large proportion of births occurring late in the year could have led to the under-reporting exhibited in this year.

Off-Reserve: The Indian Register showed a cohort size of 82 in 1981. An adjusted cohort size of 121 was obtained, showing that only 67.8% of births occurring in the year were promptly reported. This percentage was much lower than those for most other populations, especially compared to the 81% obtained for the on-reserve population in this year. As in the case of the on-reserve population there was not sufficient evidence to suggest that patterns of seasonality could have led to this low reporting percentage.

Irregularities in the Reporting of Deaths:

Both the reporting date and the actual date of occurrence of each death event were unavailable for this study. Therefore indirect means were utilized in order to analyze the problem of death-reporting irregularities. One may note that male and female events from Table 3 (pg. 51) did not add up to the appropriate totals. In the accounting procedure any apparent increases in cohort size from one year to the next for ages over 11 were disregarded. This was done for two reasons. First, it was assumed that all births were reported by age 10. Secondly, the effects of migration were disregarded simply because the available data did not allow an accurate portrayal of the movement of individuals from one population to the next. Note the following example. The female cohort underwent an apparent increase of 276 to 278 from one year to the next. Two deaths were recorded by the MSB. The accounting procedure therefore showed two

	P_0	P_1	d	Type 1	Type 2
Males	274	271	0	3	0
Females	276	278	2	0	2
Total	550	549	2	0	1

Type 2 discrepancies in the reporting of deaths. During this period the male cohort of the same age decreased by three with no deaths being reported, leading to a sum of three Type 1 discrepancies. In the total population accounting however, a change from 550 to 549 was noted, with two deaths occurring. As a result the accounting showed only one death going unreported. Thus the total number of Type 1 and Type 2 discrepancies was essentially an artificial measure of the severity of the irregularities associated with the reporting of deaths. Due to the use of inherently flawed baseline populations, along with the problems associated with apparent cohort size increases (possibly due to migration) the data could not be used to construct a meaningful "adjusted" set of deaths for each population. The Type 1 and Type 2 totals however were used as an indirect measure of the relative magnitude of reporting discrepancies associated with each population.

The results of this portion of the analysis were consistent with those for the birth-reporting irregularities. Most notably, the ratio of MSB-reported deaths to total death-reporting discrepancies suggested a substantially larger death-reporting problem for off-reserve populations compared to on-reserve. As shown in this research the end result of these discrepancies was an apparent increase in the size of the population in question. In particular the effect was noted in those strata from age 20 through 35. In the absence of birth-reporting discrepancies this could therefore lead to a decrease in resulting mortality and fertility rates. This effect will be explored further in the discussion dealing with these rates.

On-Reserve: A total number of 90 reporting inconsistencies were noted. On 60 occasions the Register cohort size decreased with no corresponding death being reported by the MSB (Type 1). On 30 occasions the MSB reported a death within a cohort while no corresponding decrease was observed in the Indian Register (Type 2). These reporting problems were concentrated within the age 15-19, 20-24 and 25-29 strata. The resulting ratio of 1.76 (discrepancies to deaths) indicated that for every death recorded by the MSB nearly two reporting discrepancies were exhibited.

Off-Reserve: In the off-reserve case a total of 33 discrepancies were noted between MSB-recorded deaths and changes in the Indian Register population. This was broken down into nineteen Type 1 and fourteen Type 2 discrepancies, and they were not concentrated within any particular age stratum. The ratio for this population was similar to that for the 1981 on-reserve population, at 1.83. The severity of reporting problems associated with death events therefore seemed to be relatively equal for both the 1981 on- and off-reserve populations.

Adjustments:

Each population analyzed in this study was subjected to a meticulous adjustment process in order to minimize the impact of irregularities associated with the reporting of births and deaths. These adjustments were carried out directly upon single age cohorts and took into account population totals from Indian Register summary reports as well as death totals from the MSB. After obtaining adjusted cohorts sizes from the unadjusted cohorts these were then divided by the appropriate population total in order to determine the percentage contribution of each of these age strata to that total. The difference between each adjusted and unadjusted percentage was then obtained. This step was completed for 1980, 1981 and 1982 data and a set of average percentages was obtained, for each population. These average differences were presented in Table 1, and indicated which of the populations were more likely subject to reporting inconsistencies. In every case the age <1 and 1-4 strata experienced positive increases in their contribution to the total population after the adjustments were carried out. This was a direct result of the reallocation of births into the correct year in which they occurred. The most substantial post-adjustment increases in these cohort sizes were associated with those populations in which the late-reporting of births was a significant problem.

Comparison of the overall north and south populations suggested both were similarly affected by the irregularities in the reporting of vital events. Upon disaggregation into males and females it was interesting to note that both north and south males in the earliest age groups appeared to be more vulnerable to reporting problems. The adjustments also appeared to have a relatively significant impact upon those individuals aged 20 to 29 residing in the south. For both males and females those particular age groups were decreased further than their north counterparts, again suggesting a more substantial problem of death reporting. This difference could compare in no way to those exhibited between the on- and off-reserve populations however. The magnitude of the increase in cohort size for the youngest off-reserve age strata suggested a very significant problem of delayed birth-reporting. Unlike the north and south comparison the impact of the adjustments was no different for females than it was for males. Similar patterns in the cohorts aged 20-29 were noted however. Again within this age range, and particularly for females, the on-reserve population showed an increase in size after adjustment (a rarity considering adjustments to these ages only took into account deaths) while off-reserve populations were decreased. All of this pointed to significant reporting irregularities.

The adjustment procedures themselves were not without problems. Until the age of ten, cohorts were adjusted for birth-reporting irregularities, even for those cases in which there was no available MSB birth data; for example in adjusting the 1979_1 cohort, the same cohort in 1983 (1983_5) was "taken back" under the assumption that most births had been reported by that time. While this assumption may not have held true in every case it was a necessary step. After the age of ten the 1979 population was used as the baseline cohort size. This base population was then reduced in each subsequent year according to the deaths reported by the MSB. It was for these reasons that in the following analysis of these adjusted and unadjusted populations only the years 1980, 1981 and 1982 were utilized. It was hoped that through these means it was possible to minimize the problems of the late- and under-reporting of vital events and thereby allow a meaningful comparison of each of the populations of interest in this research.

On-Reserve: The net end-year population size was increased by 58 individuals from 10185 to 10243 as a result of the adjustments, representing a change of less than one percent. This masked several interesting observations. Adjusting for birth-reporting discrepancies led to the addition of a total of 70 individuals to the youngest cohorts of the population. This included a substantial increase of nearly 23% in the size of the age <1 cohort. The remainder of the adjustments led to 60 reductions and 48 additions for a net decrease of 12 individuals. A more detailed breakdown showed relatively significant decreases in cohort size after adjustment for ages 10 through 19 as well as ages 30 through 44. Increases in size were noted from ages 20 to 24. The remainder of the age strata experienced both minor increases and decreases in no particular order.

Off-Reserve: In this case the net end-year population size was increased dramatically by 119 individuals from 4450 to 4569 which represented a change of nearly 2.5%. As in the on-reserve population the effect of the adjustments depended upon the particular age stratum being considered. Adjusting for irregularities in birth-reporting led to the addition of 143 individuals to the population under the age of 10. In fact the birth cohort was increased by nearly 48%. Adjusting for the discrepancies in the reporting of deaths led to 60 deletions and 36 additions. The resulting net decrease therefore was 24 individuals. Further analysis showed significant decreases in the age 20-24 and 25-29 strata, as well as a slight increase in the 35-39 stratum. Other strata only experienced very minor increases and decreases.

II. Effect of the Reporting Discrepancies Upon Epidemiological and Demographic Variables:

The following discussion of the 1981 on-reserve and off-reserve populations explains in detail the potential effect of reporting discrepancies upon some demographic and epidemiological variables.

A. Mortality Analysis: Crude Mortality Rates (CMR)

On-Reserve: Reporting discrepancies led to a slightly inflated CMR of 17.68 deaths per thousand people compared to an adjusted rate of 17.03. The identical mortality schedule was applied in both cases and therefore the increase in the crude rate reflected a net increase in the population size after being adjusted for the irregularities in the reporting of vital events. It is worth noting here that in most other cases, for other populations in the analysis, crude mortality rates were also inflated as a result of reporting problems. This was further illustrated upon consideration of the population aged <1 to 9. The crude rate was elevated considerably as a result of reporting irregularities. The rate of 9.53 was decreased to 8.35 deaths per thousand people after adjustment of the data. This inflated rate was a result of the inconsistencies associated with the reporting of births.

Off-Reserve: In this case the CMR was again increased as a result of reporting discrepancies. The original rate of 7.64 deaths per thousand was decreased after adjustment to obtain rate of 7.59. This was also a result of the decreased net mid-year population size (4355 from 4522) resulting from primarily the birth-reporting discrepancies. The crude rate for the population aged <1 to 9 was also elevated as a result of reporting irregularities, from 3.93 to 4.67 deaths per thousand people. In both the on- and off-reserve situations the effect of reporting discrepancies upon the crude mortality rate was predictable. As in the case of most other populations net population sizes were underestimated. The CMR calculations utilized a standard mortality schedule so that the rates depended only upon the net size of each population.

B. Mortality Analysis: Indirectly Standardized Mortality Rates (ISMR):

On-Reserve: A more meaningful way to analyze the effect of the late- and under-reporting of vital events upon mortality rates was through indirect standardization. In this case the standard population (1992 Manitoba) age-specific death rates were applied to the given population (1981 adjusted and unadjusted on-reserve) so that the difference in the calculated rates was a product of the changes in cohort size resulting from the procedures to minimize the reporting discrepancies. Unlike the crude rate however some allowance was made for the different age structures. In this case the indirectly standardized rate for the on-reserve population was elevated from 20.17 to 20.40 deaths per thousand people as a result of the reporting problems. This was a relatively small increase but it was still more significant than the negligible increase in crude mortality rates determined previously. Not unexpectedly, the indirectly standardized rate for the population aged <1 to 9 experienced a dramatic increase as a result of reporting discrepancies (from 3.94 to 4.74 deaths per thousand population). This was a reflection of the substantial undercounting of individuals in the birth cohort. In the gross analysis this effect was masked by increases in age-specific mortality experienced in several cohorts as a result of the population adjustments. This was an important observation. While the individual contribution of either birth-reporting problems or death-reporting problems upon the mortality rates may have been significant, when the net aggregate results were analyzed the effect was much less so.

Off-Reserve: The effect of reporting discrepancies was more evident upon consideration of the 1981 off-reserve population. In this case the indirectly standardized rate was elevated from 60.21 to 63.06 deaths per thousand people as a result of reporting problems. For the age <1 to 9 population a dramatic increase was noted. The unadjusted rate was 12.88 deaths per thousand people and after adjusting for reporting problems it was decreased to 9.14. Inaccurate reporting of births and the inaccurate reporting of deaths did less to "cancel" each other out than in the case of the on-reserve population. This was primarily a result of the apparently much more severe problem of birth reporting.

<u>C. Mortality Analysis: Directly Standardized Mortality Rates (DSMR):</u>

On-Reserve: These rates were calculated for two reasons. First, in order to verify those calculated through the indirect standardization procedure; and second and more importantly, to carry out a decomposition analysis for the sake of analyzing the relative contribution of age structure changes resulting from the adjustment procedures compared to real mortality differences. The overall on-reserve 1981 directly standardized rate was actually deflated (16.29 per thousand people) as a result of reporting irregularities. This was a relatively unusual observation in the standardization analysis. In every case the adjustments led to net increases in the end-year, and therefore mid-term populations used in the calculation. The significant reporting discrepancies occurring within certain cohorts, particularly the age 20-24 and 25-29 cohorts led to much lower sizes than expected and it was these particular age-specific mortality rates that contributed to the lower-than-expected unadjusted standardized mortality rate. Upon consideration of ages <1 to 9 the opposite situation was observed. This elevated rate of 4.67 deaths per thousand people, compared to a revised rate of 3.93, also reflected the exclusion of a significant proportion of individuals within the youngest cohorts resulting from irregularities in birth-reporting.

Off-Reserve: The off-reserve 1981 directly standardized rate was increase from 51.47 to 53.59 deaths per thousand people as a result of reporting irregularities. Note that in this case reporting discrepancies did not affect the age 20-24 and 25-29 cohorts to the extent seen in the on-reserve analysis. Therefore the problems associated with the reporting of births were primarily responsible for the inflated mortality rate. A similar situation was observed for the population aged <1 to 9. The elevated rate of 12.97 deaths per thousand people, compared to the adjusted rate of 9.13 reflected the exclusion of a significant proportion of individuals within the youngest cohorts due to irregularities in birth-reporting.

D. Mortality Analysis: Decomposition of the Difference in Crude Rates:

On-Reserve: Of the difference in adjusted and unadjusted population crude mortality rates part was due to real mortality differences (rates component) and part was due to changes in age structure (composition component). By utilizing the adjusted population as the standard in the direct standardization procedure, the unadjusted population as the given, and the standard schedule of mortality it was possible to examine the effect of the changes in age structure resulting from reporting discrepancies. The adjusted and unadjusted crude rates were 7.59 and 7.64 deaths per thousand people respectively. The resulting decomposition ratio (ratio of composition to rates components) for the on-reserve 1981 population was 0.6613, indicating that approximately 66% of the difference in these crude rates could be attributed to the change in age-structure associated with the late- and under-reporting of births and deaths. Similarly, for the corresponding age <1 to 9 population the on-reserve ratio was 0.8196.

Off-Reserve: In the case of the 1981 off-reserve population the adjusted and unadjusted crude rates were 17.03 and 17.68 deaths per thousand people respectively. Of the total difference of 0.65 between these two rates only 40% could be attributed to differences in age structure associated with the adjustment procedures. The decomposition ratio for the age <1 to 9 off-reserve population was 0.6613.

E. Life Table Analysis: Survivorship Probability (S_x):

On-Reserve: Here again the standard schedule of mortality was utilized so that any changes in life table variables were a reflection of the adjustment procedures and therefore a reflection of discrepancies in the reporting of vital events. Of particular interest in the life table analysis were the survivorship probabilities because they were then utilized in the fertility analysis. The changes in the 1981 on-reserve survivorships resulting from the late- and under-reporting of vital events are summarized below. Unadjusted population survivorship functions for this population were lower as a result of reporting problems, indicating that the characteristic age-specific mortality rates for the stationary population would have resulted in a smaller proportion of individuals living within each cohort. Reporting discrepancies within the youngest age categories affected the survivorship functions to a larger extent than those taking place for ages 10 and over. In fact, if cohort sizes for the age <1, 1-4 and 5-9 were kept constant, in many cases

Age	Adjusted S_x	Unadjusted S_x
<1	1.0000	1.0000
1-4	0.9756	0.9687
5-9	0.9654	0.9584
10-14	0.9619	0.9549
15-19	0.9551	0.9482
20-24	0.9415	0.9348
25-29	0.9208	0.9139
30-34	0.8967	0.8899
35-39	0.8802	0.8736
40-44	0.8494	0.8441
45-49	0.8135	0.8089
50-54	0.7732	0.7690
55-59	0.7113	0.7072
60-64	0.6785	0.6743
65-69	0.6052	0.6022
70-74	0.4865	0.4818
75-79	0.4225	0.4167
80-84	0.2817	0.2808
85+	0.1536	0.1532

reporting irregularities resulted in higher S_x functions for those cohorts aged 10 and over. The net result however was still an underestimate of survivorship for the 1981 on-reserve population. These observations show the substantial impact that the late- and under-reporting of births and deaths may have upon subsequent mortality measures.

Off-Reserve: The following chart presents the adjusted and unadjusted survivorship probabilities for the 1981 off-reserve population. These probabilities, like the on-reserve population, were also underestimated as a result of reporting problems. Discrepancies in the reporting of vital events within the youngest cohorts affected the survivorship functions noticeably for all strata. Due to the greater magnitude of reporting discrepancies within the youngest segment of the off-reserve population, particularly those associated with births, the S_x functions were underestimated further than the on-reserve population.

Age	Adjusted S_x	Unadjusted S_x
<1	1.0000	1.0000
1-4	0.9433	0.9141
5-9	0.9211	0.8887
10-14	0.9145	0.8819
15-19	0.9016	0.8694
20-24	0.8710	0.8395
25-29	0.8134	0.7874
30-34	0.7664	0.7438
35-39	0.7428	0.7205
40-44	0.6999	0.6764
45-49	0.6493	0.6266
50-54	0.5814	0.5597
55-59	0.4577	0.4419
60-64	0.4005	0.3859
65-69	0.2549	0.2430
70-74	0.1019	0.0911
75-79	0.0468	0.0432
80-84	0.0015	0.0000
85+	0.0001	0.0000

F. Life Table Analysis: Expectation of Life (e_0):

On-Reserve: The effect of reporting irregularities upon expectation of life measures for the 1981 on-reserve population was quite different from the pattern shown by the survivorship probabilities. The e_0 at birth was lower than expected while for nearly every other age stratum the e_0 was inflated. This was a reflection of the combined effects of two different phenomena. The late-reporting of births led to a much smaller than expected age <1 cohort. On the other hand, death-reporting inconsistencies led to exaggerated cohort sizes in older age strata.

Age	Adjusted e_0	Unadjusted e_0
<1	64.16	63.74
1-4	64.77	64.80
5-9	61.43	61.47
10-14	56.64	56.68
15-19	52.03	52.07
20-24	47.74	47.78
25-29	43.76	43.82
30-34	39.87	39.93
35-39	35.57	35.63
40-44	31.77	31.79
45-49	28.06	28.06
50-54	24.39	24.39
55-59	21.30	21.30
60-64	17.21	17.21
65-69	13.99	13.98
70-74	11.79	11.84
75-79	8.20	8.30
80-84	6.05	6.11
85+	4.00	4.13

Off-Reserve: The off-reserve life expectancies were affected in a similar way as those for the on-reserve population although once again the changes were slightly more significant. These are shown below. The more substantial problem of late birth reporting was manifested in a lower than expected e_0 for the age <1 cohort. In addition the existence of death-reporting inaccuracies generally contributed to higher than expected expectations of life.

Age	Adjusted e_0	Unadjusted e_0
<1	48.00	46.30
1-4	49.88	49.64
5-9	47.03	47.00
10-14	42.35	42.35
15-19	37.93	37.92
20-24	34.17	34.18
25-29	31.41	31.28
30-34	28.18	27.97
35-39	24.00	23.79
40-44	20.32	20.18
45-49	16.71	16.58
50-54	13.37	13.27
55-59	11.30	11.14
60-64	7.56	7.39
65-69	5.45	5.26
70-74	4.88	4.87
75-79	2.67	2.50
80-84	2.88	0.00
85+	1.63	0.00

G. Fertility Analysis: Crude Birth Rate (CBR):

On-Reserve: Reporting discrepancies resulted in a slightly inflated CBR for this population; 44.45 versus the adjusted rate of 44.14. This difference was a result of the offsetting effects of two different processes. The occurrence of late- and under-reported births resulted in a decreased population size and therefore an increase in the CBR. On the other hand, death-reporting discrepancies tended to bring about increases in population size and therefore decreases in the CBR. This was illustrated by the overall mid-year population size change from 10079 (without discrepancies being taken into account) to 10149 after adjustments. This was a negligible difference of 70 individuals, indicating that the overall effect of reporting problems was therefore quite minimal.

Off-Reserve: The off-reserve population CBR was increased to a larger extent than the on-reserve population as a result of reporting problems. This reflected the substantial underestimate of the total mid-year population size of 4355 compared to the adjust total of 4522. Based upon the adjusted population size and the standard schedule of mortality a CBR of 99.07 births per thousand people would have been expected. Instead, reporting discrepancies led to an increase of 3.69% and a rate of 102.87. As in the case of the on-reserve population for this year an overall decrease was noted for the population over the age of 9 as a result of adjustments while the youngest cohorts experienced increases. The nearly 4% increase in the crude rate (compared to 0.70% for the corresponding on-reserve population) was a result of the significant underestimation of the population aged <1 to 9 and therefore of the undercounting of births. While the size of the remainder of the population was slightly overestimated the effect of this upon the CBR was not significant enough to offset that of the undercounting.

H. Fertility Analysis: Total Fertility Rate (TFR):

On-Reserve: The effects of reporting discrepancies upon the TFR were relatively minimal as well. According to the results a hypothetical cohort of 1000 women of reproductive age, experiencing the characteristic age-specific birth rates, would expect to give birth to approximately 5016 children. The standard schedule of births was also utilized in this case. The denominators in the calculations however consisted of only those women of childbearing age, in this case 15 to 49. The TFR was actually depressed as a result of discrepancies in the reporting of deaths. The consequent increase in the denominator, from a more realistic, adjusted value of 3001 to 3011, led to the decreased TFR of 5016 compared to 5022.

Off-Reserve: As a result of reporting discrepancies the expected number of births for the hypothetical cohort off-reserve was also underestimated although in this case it was by a more significant margin than the on-reserve population. Based upon the unadjusted data the TFR suggested that 10687 children would be born to a hypothetical cohort of 1000 women. After repairing the data however an expected TFR of 10949 was obtained. Reporting discrepancies therefore resulted in an underestimate of approximately 261 births, a decrease of 2.45%. The on-reserve population TFR was underestimated as well but only by 0.12%. Like the on-reserve population, changes in the childbearing population size were affected by reporting problems and this in turn affected the calculation of the TFR. While the change in overall size of this particular population was quite small, from 1480 to 1476, relatively significant changes were noted in the 20-24 and 25-29 age strata. It was primarily the overestimation of these cohort sizes that contributed to the underestimate of the TFR.

I. Fertility Analysis: Gross Reproduction Rate (GRR):

On-Reserve: Calculation of the GRR differed from the TFR in that it utilized female births only. Again, in this case a standard set of female births was utilized so that any consequences of the late- and under-reporting of vital events (deaths in this case) were manifested in changes in the size of the female childbearing population. Not surprisingly then the adjusted and unadjusted GRR's were virtually identical. Whether including or excluding the death-reporting discrepancies, the GRR indicated that approximately 2.4

female births could be expected for each female in the population in her lifetime, given the characteristic fertility experience.

Off-Reserve: Like the TFR, reporting discrepancies led to inflated cohort sizes for the age 20-24 and 25-29 strata. This resulted in a depressed GRR of 5.09 rather than an expected value of 5.22.

J. Fertility Analysis: Net Reproduction Rate (NRR):

On-Reserve: The effect of reporting discrepancies upon the NRR for this population was relatively minimal. The average number of daughters produced by a woman during her lifetime, given the characteristic fertility and mortality conditions, was 2.215. After minimizing the effect of the reporting discrepancies a higher NRR of 2.235 was obtained. The lower NRR was a result of the combined effects of two factors involved in the calculation. Survivorship probabilities, obtained from the unisex life table were affected by irregularities occurring in the reporting of births and deaths. The effects of these reporting discrepancies upon the survivorship probabilities have been described in great detail previously. In addition, age-specific birth rates were determined using a standard set of births which was constant, and the female age-specific childbearing population. The latter was slightly inflated from 3001 to 3011 as a result of reporting discrepancies. The end result therefore was a slightly lower than expected NRR.

Off-Reserve: The effect of reporting discrepancies upon the off-reserve NRR was somewhat predictable given those upon the previous fertility measures. The average number of daughters produced by a woman was lower than expected as a result of reporting problems at 5.401. After adjustment the NRR was slightly higher at 5.638 and this represented an underestimate of approximately 4.20% as a result of reporting discrepancies. In contrast the on-reserve NRR was underestimated by less than 1.0%. This came as no surprise because the two primary variables used in the calculation of the NRR were both affected in a different way by reporting discrepancies, depending upon the population being considered. Off-reserve survivorship probabilities and age-specific fertility rates based upon the childbearing population were affected to a larger degree than their on-reserve counterparts.

K. Fertility Analysis: Mean Age at Childbearing (MAC):

On-Reserve: The MAC was hardly affected by the reporting discrepancies within this population. Only a slight decrease to 25.69 years of age compared to an expected of 25.74 was observed. Like the NRR, determination of the MAC utilized the net maternity function that was calculated using the age-specific childbearing population in conjunction with the standard set of female births. Therefore the slight decrease in the MAC resulting from reporting discrepancies was not unlike that exhibited for the NRR.

Off-Reserve: The off-reserve MAC was also largely unaffected by reporting discrepancies. A minimal decrease from 24.25 to 24.23 years of age was observed. Unlike the case of the GRR and NRR, the calculation of the MAC involved weighting the net maternity function by the average age within each category and then dividing the total of weight values by the unweighted ones. These steps essentially "smoothed out" the effect of the reporting discrepancies upon the childbearing population. The result was that very little difference was observed between the original and adjusted MAC's for this off-reserve population.

L. Fertility Analysis: Intrinsic Rate of Natural Increase (*r*):

On-Reserve: As in the case of the GRR and NRR a slight decrease in the intrinsic rate of natural increase from 3.006 to 2.973 was noted due to reporting discrepancies. This represented a change of just over 1.0%. Reporting irregularities affected two specific variables involved in the calculation of the ***r***, namely the survivorship probabilities and the age-specific childbearing population totals. The resulting growth rate for the 1981 on-reserve population was actually decreased.

Off-Reserve: A more significant decrease in the ***r*** was noted for the off-reserve population compared to that for the on-reserve population. Reporting discrepancies led to a 4.3% decrease, from 5.638 to 5.401. The more significant effect of reporting problems for the off-reserve population was the culmination of the combined effects upon the survivorship functions and the childbearing population.

Note on the use of standard fertility schedules: A standard schedule of fertility was used for two reasons. First, it was necessary to retain some consistency in the calculations. The survivorship functions extracted from the life table analysis were originally obtained using a standard schedule of mortality. In addition, the use of a standard set of births was required in order to meaningfully isolate and assess the differential impact of reporting discrepancies upon these fertility calculations. The resulting values were not realistic depictions of the actual reproductive experience of the population in question. Rather, they were used to compare the situations of different populations.

CHAPTER 6

SUMMARY AND CONCLUSIONS

The Indian Register has continuously come under scrutiny as a data source. The purpose of this study was to assess the utility of such data in the demographic and epidemiological analysis of Manitoba's Registered Indian population. The research questions posed in chapter one are addressed below.

1. Inconsistencies in the reporting of vital events: Magnitude of the problem.

Through the calculation of the error of closure it became clear that births and deaths did not account for the change in size of each population from one year to the next. This was the case for every population in each year, although the E_c was relatively large in some instances. E_c's tended to be high for females and off-reserve populations, suggesting that these populations were subjected to a more significant number of reporting inconsistencies. However, great care was necessary in the interpretation of these error values. It was not possible to isolate the contribution of in- and out-migration to the error of closure. Residential (on-/off-reserve) and regional (north/south) migration may have affected the calculations, as shown for the 1980 on- and off-reserve comparison in chapter five. It was necessary therefore to examine separately the birth and death reporting inconsistencies.

Delays in the reporting of births were most significant for the off-reserve populations. While the majority of on-reserve births were reported within two years, it took nearly four or five years for all off-reserve births to be reported. This suggested that significant difficulties existed in "keeping track" of births occurring off-reserve. In no case did seasonal fertility patterns correlate with the existence of birth-reporting discrepancies.

The determination of the number of births being reported from one year to the next was not without its own source of error. With only a five-year window with which to work, any births occurring outside of this time frame will have gone uncounted. As a result of the procedures that were followed the expected or corrected total number of births for each population, in each year was taken to be the largest size achieved by that cohort within this five year span. In reality it is quite likely that the cohort reached higher total sizes outside of the years of interest, in which case the percentages reported here would be overestimated.

The ratios obtained from Table 5 suggested that the off-reserve populations were subject to the most severe problems of death-reporting discrepancies. The absolute number of discrepancies was lower for the off-reserve populations in every case. Upon weighting these by the deaths however the ratio of discrepancies to actual reported deaths ranged from approximately 2:1 to a substantial 44:1 in the case of off-reserve females.

The reader is again cautioned about the artificial nature of these ratios. While it did indicate the severity of death-reporting discrepancies it did not allow the construction of an "adjusted" mortality schedule. It was just not possible to determine the actual year of occurrence of a death based upon the data.

2. Adjusting the populations to correct for discrepancies in vital events reporting:

The adjusted populations, from which subsequent mortality and fertility estimates were calculated, represented the populations that would have been expected if the irregularities associated with vital event-reporting were not present. The effect of the reporting discrepancies could be divided into two primary categories. First, discrepancies in birth-reporting led, in every case to decreases in the size of the population aged <10. Discrepancies in the remainder of the population generally led to inflated population sizes. Notable differential effects were exhibited in the on- and off-reserve comparison. It was no surprise that the off-reserve population experienced the largest problems associated with reporting problems. Upon direct comparison with the on-reserve population the pattern was unlike any others in the analysis and Figure 2 (pg. 44) illustrated this. Every time discrepancies led to a decrease in certain cohorts in one population, a corresponding increase was noticed in the other. This speaks to the potential role of residential (on-/off-reserve) mobility in the inconsistent reporting of vital events.

The adjustment procedures carried out in this analysis were problematic in two ways. First, in adjusting for birth-reporting irregularities, only a relatively short time-span was available. For example, determination of the "corrected" number of births in 1979 depended upon cohort sizes reported through 1983. On the other hand, obtaining an adjusted set of 1982 births involved a consideration of only that year along with 1983. As a result the adjusted sizes for these particular cohorts in later years in the period of interest were likely underestimated.

The second potential problem was associated with the discrepancies in death reporting. It was not possible to allocate type 1 or type 2 reporting discrepancies into the appropriate year. Therefore it was necessary to utilize the 1979 population as a baseline from which to adjust each population based upon the occurrence of deaths. Like the other years however the 1979 populations were still not realistic. It was desirable to minimize the effect of reporting discrepancies upon each population. However, the inherently flawed nature of this 1979 population virtually guaranteed that the corrections that were carried out would not completely account for the reporting discrepancies.

3. Effect of reporting discrepancies upon selected epidemiological and demographic calculations.

The effect of vital event-reporting irregularities upon the mortality and fertility estimates calculated in this study depended upon two factors. The first of these was the actual magnitude of the birth or death-reporting discrepancies. Secondly, the effect depended upon the age stratum in which the problems occurred. It was the combination of these factors that influenced the calculation of these estimates. As a general rule, discrepancies in the reporting of births led to an underestimate of overall population size while death-reporting irregularities led to an overestimate. The epidemiological and demographic variables calculated in this analysis were affected by reporting discrepancies in the following general ways.

Mortality - These rates (CMR, ISMR, DSMR) tended to be overestimated while survivorship probabilities tended to be underestimated. Expectation of life at birth was underestimated while those for other strata were overestimated.

Fertility and Reproduction - Given a standard schedule of births, the TFR, GRR, NRR and r were underestimated as a result of reporting problems. The CBR was generally overestimated.

4. Utilization of these methods for establishment of a reliable, convenient baseline population:

The adjustment procedures were useful in two ways. First, the resulting population counts were helpful for comparison reasons. As long as each population of interest was "corrected" in the same way the relative differential effect of reporting discrepancies within each could be meaningfully considered. In addition, the procedures themselves allowed the isolation of the two types of reporting discrepancies, those affecting birth events and those related to deaths. Much of the discussion has emphasized the problematic nature of these adjustment procedures. It can be stated with some certainty that the effect of reporting discrepancies upon the age structure of each population and subsequent calculations was minimized to some degree. However, it would not be prudent to attempt to utilize these "adjusted" populations as a source of reliable baseline data.

Appendix I

Standard Data Sets for Use in Mortality and Fertility Calculations

	(I) MANITOBA 1992		(II) STANDARD SCHEDULE***
Age	**Population***	**Deaths****	**Deaths**
<1	16600	113	7
1-4	66900	23	3
5-9	81900	16	1
10-14	78500	14	2
15-19	80800	54	4
20-24	82900	67	5
25-29	91000	78	4
30-34	96400	90	2
35-39	88600	102	3
40-44	78400	121	3
45-49	64600	197	3
50-54	50700	218	4
55-59	45900	318	2
60-64	45900	542	4
65-69	44800	825	6
70-74	38800	1126	4
75-79	30400	1339	6
80-84	19600	1404	6
85+	15800	2332	8
Totals	**1118500**	**8979**	**77**

(III) STANDARD FERTILITY SCHEDULES***

Age	**All Births**	**Female Births**
10-14	6	2
15-19	144	65
20-24	163	78
25-29	82	40
30-34	37	19
35-39	13	7
40-44	3	1
45-49	0	0
Totals	**448**	**212**

SOURCES:
* Demography Division, Population Estimates Section,
Adjusted for net census undercoverage and includes non-permanent residents.
Estimates rounded to nearest 100.

** Health Statistics Division, Statistics Canada

*** First Nations and Inuit Health Branch, Five year averages obtained from Total Manitoba Registered Indian population 1979-1983

Appendix II:

Adjusted and Unadjusted Populations in Standard Age Categories, 1979 - 1983.

1A. End-Year Unadjusted Population, 1979.

	Total			North			South		
	Males	Female	Total	Males	Female	Total	Males	Female	Total
<1	134	121	255	57	66	123	77	55	132
1-4	772	707	1479	386	363	749	386	344	730
5-9	1036	1018	2054	527	512	1039	509	506	1015
10-14	1078	1040	2118	494	504	998	584	536	1120
15-19	957	909	1866	420	428	848	537	481	1018
20-24	691	636	1327	321	306	627	370	330	700
25-29	522	510	1032	242	230	472	280	280	560
30-34	409	386	795	194	181	375	215	205	420
35-39	330	301	631	153	132	285	177	169	346
40-44	263	235	498	116	119	235	147	116	263
45-49	223	188	411	98	92	190	125	96	221
50-54	160	155	315	65	66	131	95	89	184
55-59	148	132	280	77	71	148	71	61	132
60-64	106	98	204	48	58	106	58	40	98
65-69	98	73	171	58	41	99	40	32	72
70-74	90	69	159	50	37	87	40	32	72
75-79	51	38	89	26	19	45	25	19	44
80-84	28	29	57	18	15	33	10	14	24
85+	16	30	46	7	19	26	9	11	20
	7112	6675	13787	3357	3259	6616	3755	3416	7171

	On-Reserve			Off-Reserve		
Age	Males	Female	Total	Males	Female	Total
<1	101	89	190	33	32	65
1-4	562	516	1078	210	191	401
5-9	704	687	1391	332	331	663
10-14	697	708	1405	381	332	713
15-19	685	668	1353	272	241	513
20-24	542	469	1011	149	167	316
25-29	384	307	691	138	203	341
30-34	268	215	483	141	171	312
35-39	221	179	400	109	122	231
40-44	171	151	322	92	84	176
45-49	163	125	288	60	63	123
50-54	119	111	230	41	44	85
55-59	105	111	216	43	21	64
60-64	80	79	159	26	19	45
65-69	79	63	142	19	10	29
70-74	76	57	133	14	12	26
75-79	39	30	69	12	8	20
80-84	25	24	49	3	5	8
85+	13	18	31	3	12	15
	5034	4607	9641	2078	2068	4146

2A. End-Year Unadjusted Population, 1980.

	Total			North			South		
Age	Males	Female	Total	Males	Female	Total	Males	Female	Total
<1	137	144	281	59	77	136	78	67	145
1-4	811	737	1548	399	373	772	412	364	776
5-9	1034	992	2026	528	506	1034	506	486	992
10-14	1050	1061	2111	490	526	1016	560	535	1095
15-19	1018	937	1955	446	426	872	572	511	1083
20-24	742	691	1433	324	334	658	418	357	775
25-29	533	532	1065	248	241	489	285	291	576
30-34	433	408	841	208	190	398	225	218	443
35-39	338	321	659	159	140	299	179	181	360
40-44	294	236	530	138	120	258	156	116	272
45-49	231	201	432	97	97	194	134	104	238
50-54	160	149	309	67	69	136	93	80	173
55-59	146	133	279	73	63	136	73	70	143
60-64	114	103	217	54	62	116	60	41	101
65-69	87	77	164	50	48	98	37	29	66
70-74	92	76	168	50	40	90	42	36	78
75-79	53	35	88	30	19	49	23	16	39
80-84	32	33	65	17	15	32	15	18	33
85+	15	30	45	9	19	28	6	11	17
	7320	6896	14216	3446	3365	6811	3874	3531	7405

	On-Reserve			Off-Reserve		
Age	Males	Female	Total	Males	Female	Total
<1	106	108	214	31	36	67
1-4	593	533	1126	218	204	422
5-9	692	679	1371	342	313	655
10-14	693	724	1417	357	337	694
15-19	727	684	1411	291	253	544
20-24	554	509	1063	188	182	370
25-29	398	326	724	135	206	341
30-34	294	236	530	139	172	311
35-39	234	192	426	104	129	233
40-44	191	154	345	103	82	185
45-49	171	133	304	60	68	128
50-54	121	105	226	39	44	83
55-59	104	106	210	42	27	69
60-64	85	87	172	29	16	45
65-69	68	64	132	19	13	32
70-74	76	63	139	16	13	29
75-79	46	30	76	7	5	12
80-84	26	24	50	6	9	15
85+	12	19	31	3	11	14
	5191	4776	9967	2129	2120	4249

3A. End-Year Unadjusted Population, 1981.

Age	Total Males	Total Female	Total Total	North Males	North Female	North Total	South Males	South Female	South Total
<1	158	144	302	79	73	152	79	71	150
1-4	800	762	1562	382	395	777	418	367	785
5-9	1056	955	2011	549	482	1031	507	473	980
10-14	1041	1084	2125	489	536	1025	552	548	1100
15-19	1043	959	2002	464	435	899	579	524	1103
20-24	790	760	1550	344	363	707	446	397	843
25-29	568	570	1138	265	260	525	303	310	613
30-34	450	423	873	223	201	424	227	222	449
35-39	358	330	688	158	144	302	200	186	386
40-44	299	265	564	145	131	276	154	134	288
45-49	231	196	427	100	94	194	131	102	233
50-54	176	162	338	72	80	152	104	82	186
55-59	156	133	289	77	59	136	79	74	153
60-64	114	109	223	55	61	116	59	48	107
65-69	80	92	172	45	58	103	35	34	69
70-74	91	72	163	52	42	94	39	30	69
75-79	55	39	94	28	20	48	27	19	46
80-84	35	31	66	19	14	33	16	17	33
85+	16	32	48	10	20	30	6	12	18
	7517	7118	14635	3556	3468	7024	3961	3650	7611

Age	On-Reserve Males	On-Reserve Female	On-Reserve Total	Off-Reserve Males	Off-Reserve Female	Off-Reserve Total
<1	109	111	220	49	33	82
1-4	589	543	1132	211	219	430
5-9	703	658	1361	353	297	650
10-14	686	735	1421	355	349	704
15-19	724	679	1403	319	280	599
20-24	586	554	1140	204	206	410
25-29	412	366	778	156	204	360
30-34	311	245	556	139	178	317
35-39	254	191	445	104	139	243
40-44	198	160	358	101	105	206
45-49	161	129	290	70	67	137
50-54	137	115	252	39	47	86
55-59	109	101	210	47	32	79
60-64	87	94	181	27	15	42
65-69	60	78	138	20	14	34
70-74	78	59	137	13	13	26
75-79	45	32	77	10	7	17
80-84	28	23	51	7	8	15
85+	13	22	35	3	10	13
	5290	4895	10185	2227	2223	4450

4A. End-Year Unadjusted Population, 1982.

	Total			North			South		
Age	Males	Female	Total	Males	Female	Total	Males	Female	Total
<1	152	143	295	81	66	147	71	77	148
1-4	798	754	1552	379	388	767	419	366	785
5-9	1043	940	1983	540	486	1026	503	454	957
10-14	1020	1074	2094	479	527	1006	541	547	1088
15-19	1106	1005	2111	502	466	968	604	539	1143
20-24	823	804	1627	364	368	732	459	436	895
25-29	601	601	1202	287	281	568	314	320	634
30-34	469	446	915	219	205	424	250	241	491
35-39	377	349	726	167	167	334	210	182	392
40-44	305	270	575	148	123	271	157	147	304
45-49	233	206	439	104	102	206	129	104	233
50-54	185	180	365	76	86	162	109	94	203
55-59	164	128	292	75	64	139	89	64	153
60-64	118	110	228	61	54	115	57	56	113
65-69	84	93	177	43	58	101	41	35	76
70-74	85	66	151	54	39	93	31	27	58
75-79	63	43	106	33	22	55	30	21	51
80-84	37	32	69	16	17	33	21	15	36
85+	13	33	46	9	21	30	4	12	16
	7676	7277	14953	3637	3540	7177	4039	3737	7776

	On-Reserve			Off-Reserve		
Age	Males	Female	Total	Males	Female	Total
<1	110	109	219	42	34	76
1-4	554	526	1080	244	228	472
5-9	694	638	1332	349	302	651
10-14	663	727	1390	357	347	704
15-19	763	690	1453	343	315	658
20-24	592	567	1159	231	237	468
25-29	439	368	807	162	233	395
30-34	335	254	589	134	192	326
35-39	261	197	458	116	152	268
40-44	207	166	373	98	104	202
45-49	161	137	298	72	69	141
50-54	149	117	266	36	63	99
55-59	115	97	212	49	31	80
60-64	85	96	181	33	14	47
65-69	67	78	145	17	15	32
70-74	71	53	124	14	13	27
75-79	55	34	89	8	9	17
80-84	27	24	51	10	8	18
85+	10	23	33	3	10	13
	5358	4901	10259	2318	2376	4694

5A. End-Year Unadjusted Population, 1983.

	Total			North			South		
Age	Males	Female	Total	Males	Female	Total	Males	Female	Total
<1	187	176	363	99	97	196	88	79	167
1-4	812	765	1577	378	368	746	434	397	831
5-9	1051	952	2003	536	500	1036	515	452	967
10-14	1023	1052	2075	514	516	1030	509	536	1045
15-19	1091	1029	2120	479	480	959	612	549	1161
20-24	884	866	1750	398	408	806	486	458	944
25-29	635	617	1252	290	280	570	345	337	682
30-34	483	480	963	226	227	453	257	253	510
35-39	396	372	768	176	171	347	220	201	421
40-44	312	283	595	155	130	285	157	153	310
45-49	242	214	456	105	111	216	137	103	240
50-54	198	186	384	91	84	175	107	102	209
55-59	157	133	290	66	61	127	91	72	163
60-64	131	117	248	67	66	133	64	51	115
65-69	83	91	174	38	55	93	45	36	81
70-74	84	65	149	57	41	98	27	24	51
75-79	67	45	112	33	18	51	34	27	61
80-84	33	31	64	17	17	34	16	14	30
85+	16	32	48	11	21	32	5	11	16
	7885	7506	15391	3736	3651	7387	4149	3855	8004

	On-Reserve			Off-Reserve		
Age	Males	Female	Total	Males	Female	Total
<1	146	141	287	41	35	76
1-4	558	543	1101	254	222	476
5-9	694	656	1350	357	296	653
10-14	683	692	1375	340	360	700
15-19	730	707	1437	361	322	683
20-24	638	615	1253	246	251	497
25-29	474	400	874	161	217	378
30-34	347	278	625	136	202	338
35-39	265	203	468	131	169	300
40-44	214	180	394	98	103	201
45-49	167	137	304	75	77	152
50-54	157	122	279	41	64	105
55-59	111	95	206	46	38	84
60-64	99	102	201	32	15	47
65-69	64	74	138	19	17	36
70-74	70	53	123	14	12	26
75-79	56	36	92	11	9	20
80-84	24	24	48	9	7	16
85+	12	21	33	4	11	15
	5509	5079	10588	2376	2427	4803

1B. End-Year Adjusted Population, 1979.

	Total			North			South		
Age	Males	Female	Total	Males	Female	Total	Males	Female	Total
<1	206	189	395	92	94	186	114	95	209
1-4	845	767	1612	431	394	825	413	373	786
5-9	1044	1037	2081	533	518	1051	514	519	1033
10-14	1078	1040	2118	494	504	998	584	536	1120
15-19	957	909	1866	420	428	848	537	481	1018
20-24	691	636	1327	321	306	627	370	330	700
25-29	522	510	1032	242	230	472	280	280	560
30-34	409	386	795	194	181	375	215	205	420
35-39	330	301	631	153	132	285	177	169	346
40-44	263	235	498	116	119	235	147	116	263
45-49	223	188	411	98	92	190	125	96	221
50-54	160	155	315	65	66	131	95	89	184
55-59	148	132	280	77	71	148	71	61	132
60-64	106	98	204	48	58	106	58	40	98
65-69	98	73	171	58	41	99	40	32	72
70-74	90	69	159	50	37	87	40	32	72
75-79	51	38	89	26	19	45	25	19	44
80-84	28	29	57	18	15	33	10	14	24
85+	16	30	46	7	19	26	9	11	20
	7265	6822	14087	3443	3324	6767	3824	3498	7322

	On-Reserve			Off-Reserve		
Age	Males	Female	Total	Males	Female	Total
<1	146	136	282	66	61	127
1-4	584	532	1116	280	247	527
5-9	713	703	1416	343	348	691
10-14	697	708	1405	381	332	713
15-19	685	668	1353	272	241	513
20-24	542	469	1011	149	167	316
25-29	384	307	691	138	203	341
30-34	268	215	483	141	171	312
35-39	221	179	400	109	122	231
40-44	171	151	322	92	84	176
45-49	163	125	288	60	63	123
50-54	119	111	230	41	44	85
55-59	105	111	216	43	21	64
60-64	80	79	159	26	19	45
65-69	79	63	142	19	10	29
70-74	76	57	133	14	12	26
75-79	39	30	69	12	8	20
80-84	25	24	49	3	5	8
85+	13	18	31	3	12	15
	5110	4686	9796	2192	2170	4362

2B. End-Year Adjusted Population, 1980.

Age	Total Males	Total Female	Total Total	North Males	North Female	North Total	South Males	South Female	South Total
<1	201	201	402	91	100	191	110	101	211
1-4	845	771	1616	419	387	806	425	384	809
5-9	1042	1005	2047	536	513	1049	509	492	1001
10-14	1050	1060	2110	491	527	1018	559	533	1092
15-19	1015	938	1953	446	426	872	569	512	1081
20-24	742	692	1434	326	339	665	416	353	769
25-29	533	527	1060	251	238	489	282	289	571
30-34	433	410	843	208	190	398	225	220	445
35-39	337	323	660	158	140	298	179	183	362
40-44	293	237	530	138	120	258	155	117	272
45-49	232	201	433	98	97	195	134	104	238
50-54	159	150	309	66	68	134	93	82	175
55-59	148	132	280	74	63	137	74	69	143
60-64	113	103	216	53	62	115	60	41	101
65-69	94	77	171	51	48	99	43	29	72
70-74	91	78	169	50	43	93	41	35	76
75-79	52	33	85	29	19	48	23	14	37
80-84	35	38	73	20	17	37	15	21	36
85+	17	30	47	8	20	28	9	10	19
	7432	7006	14438	3513	3417	6930	3921	3589	7510

Age	On-Reserve Males	On-Reserve Female	On-Reserve Total	Off-Reserve Males	Off-Reserve Female	Off-Reserve Total
<1	146	143	289	55	58	113
1-4	595	541	1136	271	247	518
5-9	699	681	1380	357	341	698
10-14	686	724	1410	366	336	702
15-19	722	675	1397	293	263	556
20-24	566	516	1082	176	176	352
25-29	398	324	722	135	203	338
30-34	286	236	522	147	174	321
35-39	230	184	414	107	139	246
40-44	188	154	342	105	83	188
45-49	169	131	300	63	70	133
50-54	120	107	227	39	43	82
55-59	105	107	212	43	25	68
60-64	84	86	170	29	17	46
65-69	74	63	137	20	14	34
70-74	75	65	140	16	13	29
75-79	43	29	72	9	4	13
80-84	27	29	56	8	9	17
85+	14	19	33	3	11	14
	5227	4814	10041	2242	2226	4468

3B. End-Year Adjusted Population, 1981.

	Total			North			South		
Age	Males	Female	Total	Males	Female	Total	Males	Female	Total
<1	208	183	391	101	92	193	107	91	198
1-4	820	784	1604	391	400	791	428	384	812
5-9	1065	961	2026	556	488	1044	511	473	984
10-14	1033	1083	2116	487	538	1025	547	545	1092
15-19	1037	953	1990	463	439	902	574	514	1088
20-24	791	761	1552	346	365	711	445	396	841
25-29	567	552	1119	267	253	520	300	299	599
30-34	449	420	869	223	197	420	226	253	479
35-39	357	329	686	158	143	301	202	186	388
40-44	297	266	563	144	131	275	155	135	290
45-49	232	196	428	100	94	194	133	102	235
50-54	177	161	338	73	79	152	105	82	187
55-59	157	135	292	77	60	137	81	75	156
60-64	114	110	224	54	62	116	63	48	111
65-69	85	88	173	49	56	105	37	32	69
70-74	93	74	167	52	44	96	41	30	71
75-79	57	39	96	30	21	51	27	18	45
80-84	31	33	64	16	14	30	15	19	34
85+	13	29	42	9	20	29	4	9	13
	7583	7157	14740	3596	3496	7092	4001	3691	7692

	On-Reserve			Off-Reserve		
Age	Males	Female	Total	Males	Female	Total
<1	137	133	270	71	50	121
1-4	595	550	1145	239	249	488
5-9	707	661	1368	377	319	696
10-14	680	736	1416	357	347	704
15-19	720	668	1388	317	285	602
20-24	599	574	1173	192	187	379
25-29	423	362	785	144	190	334
30-34	305	246	551	144	174	318
35-39	247	182	429	110	147	257
40-44	194	157	351	103	109	212
45-49	159	130	289	73	66	139
50-54	137	115	252	40	46	86
55-59	108	103	211	49	32	81
60-64	86	94	180	28	16	44
65-69	65	73	138	20	15	35
70-74	80	63	143	13	11	24
75-79	45	33	78	12	6	18
80-84	22	24	46	9	10	19
85+	12	18	30	1	11	12
	5321	4922	10243	2299	2270	4569

4B. End-Year Adjusted Population, 1982.

	Total			North			South		
Age	Males	Female	Total	Males	Female	Total	Males	Female	Total
<1	200	194	394	96	83	179	104	111	215
1-4	816	770	1586	388	392	780	428	378	806
5-9	1053	947	2000	549	488	1037	505	459	964
10-14	1014	1075	2089	478	529	1007	537	546	1083
15-19	1099	998	2097	498	467	965	601	531	1132
20-24	823	797	1620	365	372	737	458	425	883
25-29	601	592	1193	291	280	571	310	312	622
30-34	466	438	904	218	201	419	248	237	485
35-39	373	349	722	165	165	330	208	214	422
40-44	304	271	575	147	123	270	157	148	305
45-49	231	204	435	104	103	207	127	101	228
50-54	188	181	369	77	85	162	111	96	207
55-59	160	129	289	73	65	138	87	64	151
60-64	123	113	236	61	55	116	62	58	120
65-69	89	88	177	47	57	104	42	31	73
70-74	84	70	154	50	41	91	34	29	63
75-79	63	45	108	37	23	60	26	22	48
80-84	37	34	71	17	17	34	20	18	38
85+	13	32	45	8	22	30	5	10	15
	7737	7327	15064	3669	3568	7237	4070	3790	7860

	On-Reserve			Off-Reserve		
Age	Males	Female	Total	Males	Female	Total
<1	138	141	279	62	53	115
1-4	572	551	1123	254	232	486
5-9	719	652	1371	356	309	665
10-14	668	733	1401	351	349	700
15-19	742	687	1429	357	311	668
20-24	610	600	1210	213	197	410
25-29	460	398	858	141	194	335
30-34	336	257	593	134	181	315
35-39	249	195	444	116	154	270
40-44	198	162	360	98	109	207
45-49	154	137	291	72	67	139
50-54	150	121	271	36	60	96
55-59	108	100	208	49	29	78
60-64	90	94	184	33	19	52
65-69	65	73	138	18	15	33
70-74	70	60	130	14	10	24
75-79	53	36	89	10	9	19
80-84	27	25	52	10	9	19
85+	10	17	27	3	11	14
	5419	5039	10458	2327	2318	4645

5B. End-Year Adjusted Population, 1983.

	Total			North			South		
Age	Males	Female	Total	Males	Female	Total	Males	Female	Total
<1	187	176	363	99	97	196	88	79	167
1-4	812	765	1577	378	368	746	434	397	831
5-9	1052	953	2005	538	500	1038	514	453	967
10-14	1022	1053	2075	515	516	1031	509	537	1046
15-19	1082	1024	2106	479	483	962	603	541	1144
20-24	885	853	1738	400	408	808	485	445	930
25-29	642	612	1254	298	283	581	344	329	673
30-34	476	469	945	222	219	441	254	250	504
35-39	395	370	765	175	168	343	220	232	452
40-44	309	286	595	153	131	284	156	155	311
45-49	238	210	448	105	111	216	133	99	232
50-54	202	188	390	93	83	176	109	105	214
55-59	152	135	287	64	62	126	88	73	161
60-64	136	116	252	68	66	134	68	51	119
65-69	84	90	174	39	55	94	45	35	80
70-74	87	70	157	57	43	100	30	27	57
75-79	72	49	121	38	21	59	34	28	62
80-84	32	31	63	8	14	22	15	18	33
85+	15	29	44	9	22	31	6	7	13
	7880	7479	15359	3738	3650	7388	4135	3861	7996

	On-Reserve			Off-Reserve		
Age	Males	Female	Total	Males	Female	Total
<1	146	141	287	41	35	76
1-4	564	551	1115	254	222	476
5-9	719	673	1392	357	296	653
10-14	689	699	1388	340	364	704
15-19	716	697	1413	366	327	693
20-24	642	643	1285	246	210	456
25-29	506	432	938	136	180	316
30-34	342	277	619	134	192	326
35-39	256	204	460	139	166	305
40-44	200	173	373	109	113	222
45-49	163	138	301	75	72	147
50-54	154	127	281	48	61	109
55-59	106	96	202	46	39	85
60-64	99	102	201	37	14	51
65-69	61	70	131	23	20	43
70-74	72	61	133	15	9	24
75-79	59	38	97	13	11	24
80-84	22	26	48	10	6	16
85+	9	12	21	4	13	17
	5525	5160	10685	2393	2350	4743

1C. Mid-Year Unadjusted Population, 1980.

	Total			North			South		
Age	Males	Female	Total	Males	Female	Total	Males	Female	Total
<1	136	133	268	58	72	130	78	61	139
1-4	792	722	1514	393	368	761	399	354	753
5-9	1035	1005	2040	528	509	1037	508	496	1004
10-14	1064	1051	2115	492	515	1007	572	536	1108
15-19	988	923	1911	433	427	860	555	496	1051
20-24	717	664	1380	323	320	643	394	344	738
25-29	528	521	1049	245	236	481	283	286	568
30-34	421	397	818	201	186	387	220	212	432
35-39	334	311	645	156	136	292	178	175	353
40-44	279	236	514	127	120	247	152	116	268
45-49	227	195	422	98	95	192	130	100	230
50-54	160	152	312	66	68	134	94	85	179
55-59	147	133	280	75	67	142	72	66	138
60-64	110	101	211	51	60	111	59	41	100
65-69	93	75	168	54	45	99	39	31	69
70-74	91	73	164	50	39	89	41	34	75
75-79	52	37	89	28	19	47	24	18	42
80-84	30	31	61	18	15	33	13	16	29
85+	16	30	46	8	19	27	8	11	19
	7220	6790	14007	3404	3312	6719	3819	3478	7295

	On-Reserve			Off-Reserve		
Age	Males	Female	Total	Males	Female	Total
<1	104	99	202	32	34	66
1-4	578	525	1102	214	198	412
5-9	698	683	1381	337	322	659
10-14	695	716	1411	369	335	704
15-19	706	676	1382	282	247	529
20-24	548	489	1037	169	175	343
25-29	391	317	708	137	205	341
30-34	281	226	507	140	172	312
35-39	228	186	413	107	126	232
40-44	181	153	334	98	83	181
45-49	167	129	296	60	66	126
50-54	120	108	228	40	44	84
55-59	105	109	213	43	24	67
60-64	83	83	166	28	18	45
65-69	74	64	137	19	12	31
70-74	76	60	136	15	13	28
75-79	43	30	73	10	7	16
80-84	26	24	50	5	7	12
85+	13	19	31	3	12	15
	5117	4696	9807	2108	2100	4203

2C. Mid-Year Unadjusted Population, 1981.

	Total			North			South		
Age	Males	Female	Total	Males	Female	Total	Males	Female	Total
<1	148	144	292	69	75	144	79	69	148
1-4	806	750	1555	391	384	775	415	366	781
5-9	1045	974	2019	539	494	1033	507	480	986
10-14	1046	1073	2118	490	531	1021	556	542	1098
15-19	1031	948	1979	455	431	886	576	518	1093
20-24	766	726	1492	334	349	683	432	377	809
25-29	551	551	1102	257	251	507	294	301	595
30-34	442	416	857	216	196	411	226	220	446
35-39	348	326	674	159	142	301	190	184	373
40-44	297	251	547	142	126	267	155	125	280
45-49	231	199	430	99	96	194	133	103	236
50-54	168	156	324	70	75	144	99	81	180
55-59	151	133	284	75	61	136	76	72	148
60-64	114	106	220	55	62	116	60	45	104
65-69	84	85	168	48	53	101	36	32	68
70-74	92	74	166	51	41	92	41	33	74
75-79	54	37	91	29	20	49	25	18	43
80-84	34	32	66	18	15	33	16	18	33
85+	16	31	47	10	20	29	6	12	18
	7424	7012	14431	3507	3422	6922	3922	3596	7513

	On-Reserve			Off-Reserve		
Age	Males	Female	Total	Males	Female	Total
<1	108	110	217	40	35	75
1-4	591	538	1129	215	212	426
5-9	698	669	1366	348	305	653
10-14	690	730	1419	356	343	699
15-19	726	682	1407	305	267	572
20-24	570	532	1102	196	194	390
25-29	405	346	751	146	205	351
30-34	303	241	543	139	175	314
35-39	244	192	436	104	134	238
40-44	195	157	352	102	94	196
45-49	166	131	297	65	68	133
50-54	129	110	239	39	46	85
55-59	107	104	210	45	30	74
60-64	86	91	177	28	16	44
65-69	64	71	135	20	14	33
70-74	77	61	138	15	13	28
75-79	46	31	77	9	6	15
80-84	27	24	51	7	9	15
85+	13	21	33	3	11	14
	5245	4841	10079	2182	2177	4355

3C. Mid-Year Unadjusted Population, 1982.

Total

Age	Males	Female	Total
<1	155	144	299
1-4	799	758	1557
5-9	1050	948	1997
10-14	1031	1079	2110
15-19	1075	982	2057
20-24	807	782	1589
25-29	585	586	1170
30-34	460	435	894
35-39	368	340	707
40-44	302	268	570
45-49	232	201	433
50-54	181	171	352
55-59	160	131	291
60-64	116	110	226
65-69	82	93	175
70-74	88	69	157
75-79	59	41	100
80-84	36	32	68
85+	15	33	47
	7601	7203	14799

North

Age	Males	Female	Total
<1	80	70	150
1-4	381	392	772
5-9	545	484	1029
10-14	484	532	1016
15-19	483	451	934
20-24	354	366	720
25-29	276	271	547
30-34	221	203	424
35-39	163	156	318
40-44	147	127	274
45-49	102	98	200
50-54	74	83	157
55-59	76	62	138
60-64	58	58	116
65-69	44	58	102
70-74	53	41	94
75-79	31	21	52
80-84	18	16	33
85+	10	21	30
	3600	3510	7106

South

Age	Males	Female	Total
<1	75	74	149
1-4	419	367	785
5-9	505	464	969
10-14	547	548	1094
15-19	592	532	1123
20-24	453	417	869
25-29	309	315	624
30-34	239	232	470
35-39	205	184	389
40-44	156	141	296
45-49	130	103	233
50-54	107	88	195
55-59	84	69	153
60-64	58	52	110
65-69	38	35	73
70-74	35	29	64
75-79	29	20	49
80-84	19	16	35
85+	5	12	17
	4005	3698	7697

On-Reserve

Age	Males	Female	Total
<1	110	110	220
1-4	572	535	1106
5-9	699	648	1347
10-14	675	731	1406
15-19	744	685	1428
20-24	589	561	1150
25-29	426	367	793
30-34	323	250	573
35-39	258	194	452
40-44	203	163	366
45-49	161	133	294
50-54	143	116	259
55-59	112	99	211
60-64	86	95	181
65-69	64	78	142
70-74	75	56	131
75-79	50	33	83
80-84	28	24	51
85+	12	23	34
	5330	4901	10227

Off-Reserve

Age	Males	Female	Total
<1	46	34	79
1-4	228	224	451
5-9	351	300	651
10-14	356	348	704
15-19	331	298	629
20-24	218	222	439
25-29	159	219	378
30-34	137	185	322
35-39	110	146	256
40-44	100	105	204
45-49	71	68	139
50-54	38	55	93
55-59	48	32	80
60-64	30	15	45
65-69	19	15	33
70-74	14	13	27
75-79	9	8	17
80-84	9	8	17
85+	3	10	13
	2277	2305	4577

4C. Mid-Year Unadjusted Population, 1983.

Total

Age	Males	Female	Total
<1	170	160	330
1-4	805	760	1565
5-9	1047	946	1993
10-14	1022	1063	2085
15-19	1099	1017	2116
20-24	854	835	1689
25-29	618	609	1227
30-34	476	463	939
35-39	387	361	748
40-44	309	277	586
45-49	238	210	448
50-54	192	183	375
55-59	161	131	292
60-64	125	114	239
65-69	84	92	176
70-74	85	66	151
75-79	65	44	109
80-84	35	32	67
85+	15	33	48
	7781	7392	15173

North

Age	Males	Female	Total
<1	90	82	172
1-4	379	378	757
5-9	538	493	1031
10-14	497	522	1019
15-19	491	473	964
20-24	381	388	769
25-29	289	281	570
30-34	223	216	439
35-39	172	169	341
40-44	152	127	279
45-49	105	107	212
50-54	84	85	169
55-59	71	63	134
60-64	64	60	124
65-69	41	57	98
70-74	56	40	96
75-79	33	20	53
80-84	17	17	34
85+	10	21	31
	3687	3596	7283

South

Age	Males	Female	Total
<1	80	78	158
1-4	427	382	809
5-9	509	453	962
10-14	525	542	1067
15-19	608	544	1152
20-24	473	447	920
25-29	330	329	659
30-34	254	247	501
35-39	215	192	407
40-44	157	150	307
45-49	133	104	237
50-54	108	98	206
55-59	90	68	158
60-64	61	54	115
65-69	43	36	79
70-74	29	26	55
75-79	32	24	56
80-84	19	15	34
85+	5	12	17
	4094	3796	7890

On-Reserve

Age	Males	Female	Total
<1	128	125	253
1-4	556	535	1091
5-9	694	647	1341
10-14	673	710	1383
15-19	747	699	1446
20-24	615	591	1206
25-29	457	384	841
30-34	341	266	607
35-39	263	200	463
40-44	211	173	384
45-49	164	137	301
50-54	153	120	273
55-59	113	96	209
60-64	92	99	191
65-69	66	76	142
70-74	71	53	124
75-79	56	35	91
80-84	26	24	50
85+	11	22	33
	5434	4990	10424

Off-Reserve

Age	Males	Female	Total
<1	42	35	77
1-4	249	225	474
5-9	353	299	652
10-14	349	354	703
15-19	352	319	671
20-24	239	244	483
25-29	162	225	387
30-34	135	197	332
35-39	124	161	285
40-44	98	104	202
45-49	74	73	147
50-54	39	64	103
55-59	48	35	83
60-64	33	15	48
65-69	18	16	34
70-74	14	13	27
75-79	10	9	19
80-84	10	8	18
85+	4	11	15
	2347	2402	4749

1D. Mid-Year Adjusted Population, 1980.

Total

Age	Males	Female	Total
<1	204	195	399
1-4	845	769	1614
5-9	1043	1021	2064
10-14	1064	1050	2114
15-19	986	924	1910
20-24	717	664	1381
25-29	528	519	1046
30-34	421	398	819
35-39	334	312	646
40-44	278	236	514
45-49	228	195	422
50-54	160	153	312
55-59	148	132	280
60-64	110	101	210
65-69	96	75	171
70-74	91	74	164
75-79	52	36	87
80-84	32	34	65
85+	17	30	47
	7354	6918	14265

North

Age	Males	Female	Total
<1	92	97	189
1-4	425	391	816
5-9	535	516	1050
10-14	493	516	1008
15-19	433	427	860
20-24	324	323	646
25-29	247	234	481
30-34	201	186	387
35-39	156	136	292
40-44	127	120	247
45-49	98	95	193
50-54	66	67	133
55-59	76	67	143
60-64	51	60	111
65-69	55	45	99
70-74	50	40	90
75-79	28	19	47
80-84	19	16	35
85+	8	20	27
	3484	3375	6854

South

Age	Males	Female	Total
<1	112	98	210
1-4	419	379	798
5-9	512	506	1017
10-14	572	535	1106
15-19	553	497	1050
20-24	393	342	735
25-29	281	285	566
30-34	220	213	433
35-39	178	176	354
40-44	151	117	268
45-49	130	100	230
50-54	94	86	180
55-59	73	65	138
60-64	59	41	100
65-69	42	31	72
70-74	41	34	74
75-79	24	17	41
80-84	13	18	30
85+	9	11	20
	3876	3551	7422

On-Reserve

Age	Males	Female	Total
<1	146	140	286
1-4	590	537	1126
5-9	706	692	1398
10-14	692	716	1408
15-19	704	672	1375
20-24	554	493	1047
25-29	391	316	707
30-34	277	226	503
35-39	226	182	407
40-44	180	153	332
45-49	166	128	294
50-54	120	109	229
55-59	105	109	214
60-64	82	83	165
65-69	77	63	140
70-74	76	61	137
75-79	41	30	71
80-84	26	27	53
85+	14	19	32
	5173	4756	9924

Off-Reserve

Age	Males	Female	Total
<1	61	60	120
1-4	276	247	523
5-9	350	345	695
10-14	374	334	708
15-19	283	252	535
20-24	163	172	334
25-29	137	203	340
30-34	144	173	317
35-39	108	131	239
40-44	99	84	182
45-49	62	67	128
50-54	40	44	84
55-59	43	23	66
60-64	28	18	46
65-69	20	12	32
70-74	15	13	28
75-79	11	6	17
80-84	6	7	13
85+	3	12	15
	2223	2203	4422

2D. Mid-Year Adjusted Population, 1981.

	Total			**North**			**South**		
Age	Males	Female	Total	Males	Female	Total	Males	Female	Total
<1	205	192	397	96	96	192	109	96	205
1-4	833	778	1610	405	394	799	427	384	811
5-9	1054	983	2037	546	501	1047	510	483	993
10-14	1042	1072	2113	489	533	1022	553	539	1092
15-19	1026	946	1972	455	433	887	572	513	1085
20-24	767	727	1493	336	352	688	431	375	805
25-29	550	540	1090	259	246	505	291	294	585
30-34	441	415	856	216	194	409	226	237	462
35-39	347	326	673	158	142	300	191	185	375
40-44	295	252	547	141	126	267	155	126	281
45-49	232	199	431	99	96	195	134	103	237
50-54	168	156	324	70	74	143	99	82	181
55-59	153	134	286	76	62	137	78	72	150
60-64	114	107	220	54	62	116	62	45	106
65-69	90	83	172	50	52	102	40	31	71
70-74	92	76	168	51	44	95	41	33	74
75-79	55	36	91	30	20	50	25	16	41
80-84	33	36	69	18	16	34	15	20	35
85+	15	30	45	9	20	29	7	10	16
	7512	7088	14594	3558	3463	7017	3966	3644	7605

	On-Reserve			**Off-Reserve**		
Age	Males	Female	Total	Males	Female	Total
<1	142	138	280	63	54	117
1-4	595	546	1141	255	248	503
5-9	703	671	1374	367	330	697
10-14	683	730	1413	362	342	703
15-19	721	672	1393	305	274	579
20-24	583	545	1128	184	182	366
25-29	411	343	754	140	197	336
30-34	296	241	537	146	174	320
35-39	239	183	422	109	143	252
40-44	191	156	347	104	96	200
45-49	164	131	295	68	68	136
50-54	129	111	240	40	45	84
55-59	107	105	212	46	29	75
60-64	85	90	175	29	17	45
65-69	70	68	138	20	15	35
70-74	78	64	142	15	12	27
75-79	44	31	75	11	5	16
80-84	25	27	51	9	10	18
85+	13	19	32	2	11	13
	5279	4871	10149	2275	2252	4522

3D. Mid-Year Adjusted Population, 1982.

	Total			North			South		
Age	Males	Female	Total	Males	Female	Total	Males	Female	Total
<1	204	189	393	99	88	186	106	101	207
1-4	818	777	1595	390	396	786	428	381	809
5-9	1059	954	2013	553	488	1041	508	466	974
10-14	1024	1079	2103	483	534	1016	542	546	1088
15-19	1068	976	2044	481	453	934	588	523	1110
20-24	807	779	1586	356	369	724	452	411	862
25-29	584	572	1156	279	267	546	305	306	611
30-34	458	429	887	221	199	420	237	245	482
35-39	365	339	704	162	154	316	205	200	405
40-44	301	269	569	146	127	273	156	142	298
45-49	232	200	432	102	99	201	130	102	232
50-54	183	171	354	75	82	157	108	89	197
55-59	159	132	291	75	63	138	84	70	154
60-64	119	112	230	58	59	116	63	53	116
65-69	87	88	175	48	57	105	40	32	71
70-74	89	72	161	51	43	94	38	30	67
75-79	60	42	102	34	22	56	27	20	47
80-84	34	34	68	17	16	32	18	19	36
85+	13	31	44	9	21	30	5	10	14
	7664	7245	14907	3639	3537	7171	4040	3746	7780

	On-Reserve			Off-Reserve		
Age	Males	Female	Total	Males	Female	Total
<1	138	137	275	67	52	118
1-4	584	551	1134	247	241	487
5-9	713	657	1370	367	314	681
10-14	674	735	1409	354	348	702
15-19	731	678	1409	337	298	635
20-24	605	587	1192	203	192	395
25-29	442	380	822	143	192	335
30-34	321	252	572	139	178	317
35-39	248	189	437	113	151	264
40-44	196	160	356	101	109	210
45-49	157	134	290	73	67	139
50-54	144	118	262	38	53	91
55-59	108	102	210	49	31	80
60-64	88	94	182	31	18	48
65-69	65	73	138	19	15	34
70-74	75	62	137	14	11	24
75-79	49	35	84	11	8	19
80-84	25	25	49	10	10	19
85+	11	18	29	2	11	13
	5374	4987	10357	2318	2299	4611

4D. Mid-Year Adjusted Population, 1983.

	Total			North			South		
Age	Males	Female	Total	Males	Female	Total	Males	Female	Total
<1	194	185	379	98	90	188	96	95	191
1-4	814	768	1582	383	380	763	431	388	819
5-9	1053	950	2003	544	494	1038	510	456	966
10-14	1018	1064	2082	497	523	1020	523	542	1065
15-19	1091	1011	2102	489	475	964	602	536	1138
20-24	854	825	1679	383	390	773	472	435	907
25-29	622	602	1224	295	282	577	327	321	648
30-34	471	454	925	220	210	430	251	244	495
35-39	384	360	744	170	167	337	214	223	437
40-44	307	279	586	150	127	277	157	152	309
45-49	235	207	442	105	107	212	130	100	230
50-54	195	185	380	85	84	169	110	101	211
55-59	156	132	288	69	64	133	88	69	157
60-64	130	115	245	65	61	126	65	55	120
65-69	87	89	176	43	56	99	44	33	77
70-74	86	70	156	54	42	96	32	28	60
75-79	68	47	115	38	22	60	30	25	55
80-84	35	33	68	13	16	29	18	18	36
85+	14	31	45	9	22	31	6	9	15
	7809	7403	15212	3704	3609	7313	4103	3826	7929

	On-Reserve			Off-Reserve		
Age	Males	Female	Total	Males	Female	Total
<1	142	141	283	52	44	96
1-4	568	551	1119	254	227	481
5-9	719	663	1382	357	303	660
10-14	679	716	1395	346	357	703
15-19	729	692	1421	362	319	681
20-24	626	622	1248	230	204	434
25-29	483	415	898	139	187	326
30-34	339	267	606	134	187	321
35-39	253	200	453	128	160	288
40-44	199	168	367	104	111	215
45-49	159	138	297	74	70	144
50-54	152	124	276	42	61	103
55-59	107	98	205	48	34	82
60-64	95	98	193	35	17	52
65-69	63	72	135	21	18	39
70-74	71	61	132	15	10	25
75-79	56	37	93	12	10	22
80-84	25	26	51	10	8	18
85+	10	15	25	4	12	16
	5472	5100	10572	2360	2334	4694

Appendix III:

Directly Standardized Mortality Rates with Associated Statistical and Decomposition Calculations.

Appendix IIIA: Mortality Rates and Associated Calculations for Adjusted and Unadjusted Populations Counts, 1980-1982.

Total	1980	1980*	1981	1981*	1982	1982*
Standard Crude	8.03	8.03	8.03	8.03	8.03	8.03
Given Crude	5.50	5.40	5.34	5.28	5.20	5.17
ASMR:	12.68	12.41	12.26	12.15	11.88	11.90
Binomial Variance	2.621E-06	2.5483E-06	2.468E-06	2.458E-06	2.3221E-06	2.3614E-06
Standard Error	0.00162	0.00160	0.00157	0.00157	0.00152	0.00154
95% C.L. (+/-)	3.17	3.13	3.08	3.07	2.99	3.01
Comp. Component	-6.22	-6.12	-6.09	-6.05	-5.96	-5.99
Rates Component	3.69	3.49	3.39	3.30	3.14	3.13
Overall	-2.53	-2.63	-2.69	-2.75	-2.82	-2.86
Decomp. Ratio	-1.69	-1.75	-1.79	-1.83	-1.90	-1.92

Male	1980	1980*	1981	1981*	1982	1982*
Standard Crude	8.03	8.03	8.03	8.03	8.03	8.03
Given Crude	10.66	10.47	10.37	10.25	10.13	10.05
ASMR:	26.25	25.26	25.62	25.74	25.50	26.41
Binomial Variance	9.7137E-06	9.2347E-06	9.3528E-06	9.3801E-06	9.1984E-06	9.4077E-06
Standard Error	0.00312	0.00304	0.00306	0.00306	0.00303	0.00307
95% C.L. (+/-)	6.11	5.96	5.99	6.00	5.94	6.01
Comp. Component	-10.47	-10.04	-10.30	-10.41	-10.36	-10.86
Rates Component	13.11	12.48	12.64	12.63	12.47	12.88
Overall	2.64	2.44	2.34	2.22	2.10	2.02
Decomp. Ratio	-0.80	-0.80	-0.81	-0.82	-0.83	-0.84

Female	1980	1980*	1981	1981*	1982	1982*
Standard Crude	8.03	8.03	8.03	8.03	8.03	8.03
Given Crude	11.34	11.13	10.98	10.86	10.69	10.63
ASMR:	25.82	25.34	24.79	24.49	23.69	23.51
Binomial Variance	1.0263E-05	1.0096E-05	9.5765E-06	9.4779E-06	8.754E-06	8.6279E-06
Standard Error	0.00320	0.00318	0.00309	0.00308	0.00296	0.00294
95% C.L. (+/-)	6.28	6.23	6.07	6.03	5.80	5.76
Comp. Component	-9.83	-9.67	-9.48	-9.38	-9.07	-9.00
Rates Component	13.14	12.78	12.44	12.21	11.73	11.60
Overall	3.31	3.10	2.95	2.84	2.66	2.60
Decomp. Ratio	-0.75	-0.76	-0.76	-0.77	-0.77	-0.78

North	1980	1980*	1981	1981*	1982	1982*
Standard Crude	8.03	8.03	8.03	8.03	8.03	8.03
Given Crude	11.46	11.23	11.12	10.97	10.84	10.74
ASMR:	24.08	23.62	23.14	22.72	22.43	22.10
Binomial Variance	8.4643E-06	8.2674E-06	7.9079E-06	7.6971E-06	7.4793E-06	7.3007E-06
Standard Error	0.00291	0.00288	0.00281	0.00277	0.00273	0.00270
95% C.L. (+/-)	5.70	5.64	5.51	5.44	5.36	5.30
Comp. Component	-8.81	-8.67	-8.49	-8.34	-8.27	-8.15
Rates Component	12.24	11.88	11.59	11.28	11.08	10.86
Overall	3.43	3.21	3.10	2.95	2.81	2.71
Decomp. Ratio	-0.72	-0.73	-0.73	-0.74	-0.75	-0.75

South	1980	1980*	1981	1981*	1982	1982*
Standard Crude	8.03	8.03	8.03	8.03	8.03	8.03
Given Crude	10.56	10.37	10.25	10.12	10.00	9.90
ASMR:	27.18	26.47	26.72	27.10	26.17	27.33
Binomial Variance	1.1056E-05	1.0718E-05	1.0716E-05	1.0929E-05	1.0197E-05	1.0728E-05
Standard Error	0.00333	0.00327	0.00327	0.00331	0.00319	0.00328
95% C.L. (+/-)	6.52	6.42	6.42	6.48	6.26	6.42
Comp. Component	-11.07	-10.77	-10.99	-11.24	-10.84	-11.49
Rates Component	13.59	13.12	13.21	13.34	12.82	13.36
Overall	2.53	2.35	2.22	2.10	1.98	1.87
Decomp. Ratio	-0.81	-0.82	-0.83	-0.84	-0.85	-0.86

On-Reserve	1980	1980*	1981	1981*	1982	1982*
Standard Crude	8.03	8.03	8.03	8.03	8.03	8.03
Given Crude	7.85	7.76	7.64	7.59	7.53	7.43
ASMR:	16.91	16.56	16.27	16.29	15.81	16.36
Binomial Variance	4.4078E-06	4.2847E-06	4.1086E-06	4.1692E-06	3.8843E-06	4.2371E-06
Standard Error	0.00210	0.00207	0.00203	0.00204	0.00197	0.00206
95% C.L. (+/-)	4.11	4.06	3.97	4.00	3.86	4.03
Comp. Component	-7.05	-6.89	-6.83	-6.86	-6.64	-7.00
Rates Component	6.88	6.62	6.44	6.42	6.14	6.40
Overall	-0.18	-0.27	-0.39	-0.44	-0.50	-0.59
Decomp. Ratio	-1.03	-1.04	-1.06	-1.07	-1.08	-1.09

Off-Reserve	1980	1980*	1981	1981*	1982	1982*
Standard Crude	8.03	8.03	8.03	8.03	8.03	8.03
Given Crude	18.32	17.41	17.68	17.03	16.82	16.70
ASMR:	55.24	52.82	53.59	51.47	51.45	49.71
Binomial Variance	4.1233E-05	3.8989E-05	3.9766E-05	3.7107E-05	3.696E-05	3.5378E-05
Standard Error	0.00642	0.00624	0.00631	0.00609	0.00608	0.00595
95% C.L. (+/-)	12.59	12.24	12.36	11.94	11.92	11.66
Comp. Component	-21.34	-20.58	-20.84	-20.10	-20.22	-19.37
Rates Component	31.64	29.96	30.50	29.10	29.01	28.05
Overall	10.29	9.39	9.65	9.00	8.80	8.67
Decomp. Ratio	-0.67	-0.69	-0.68	-0.69	-0.70	-0.69

North Male	1980	1980*	1981	1981*	1982	1982*
Standard Crude	8.03	8.03	8.03	8.03	8.03	8.03
Given Crude	22.62	22.10	21.96	21.64	21.39	21.16
ASMR:	51.70	50.58	48.08	48.56	47.23	47.73
Binomial Variance	2.2041E-05	2.1373E-05	2.4662E-05	2.3081E-05	2.4032E-05	2.2194E-05
Standard Error	0.00469	0.00462	0.00497	0.00480	0.00490	0.00471
95% C.L. (+/-)	9.20	9.06	9.73	9.42	9.61	9.23
Comp. Component	-17.10	-16.78	-15.60	-16.00	-15.45	-15.83
Rates Component	31.69	30.86	29.53	29.61	28.81	28.96
Overall	14.59	14.07	13.93	13.61	13.36	13.13
Decomp. Ratio	-0.54	-0.54	-0.53	-0.54	-0.54	-0.55

North Female	1980	1980*	1981	1981*	1982	1982*
Standard Crude	8.03	8.03	8.03	8.03	8.03	8.03
Given Crude	23.22	22.81	22.50	22.24	21.94	21.77
ASMR:	48.88	47.69	46.46	45.60	44.59	43.83
Binomial Variance	3.1722E-05	3.0935E-05	2.8965E-05	2.8267E-05	2.7002E-05	2.6205E-05
Standard Error	0.00563	0.00556	0.00538	0.00532	0.00520	0.00512
95% C.L. (+/-)	11.04	10.90	10.55	10.42	10.18	10.03
Comp. Component	-15.26	-14.83	-14.39	-14.07	-13.72	-13.40
Rates Component	30.45	29.62	28.86	28.27	27.63	27.14
Overall	15.19	14.79	14.47	14.21	13.91	13.74
Decomp. Ratio	-0.50	-0.50	-0.50	-0.50	-0.50	-0.49

South Male	1980	1980*	1981	1981*	1982	1982*
Standard Crude	8.03	8.03	8.03	8.03	8.03	8.03
Given Crude	20.16	19.87	19.63	19.42	19.23	19.06
ASMR:	54.02	51.59	56.92	53.51	58.68	58.15
Binomial Variance	2.5915E-05	2.7302E-05	9.8048E-06	1.9023E-05	-1.5826E-05	-1.6372E-05
Standard Error	0.00509	0.00523	0.00313	0.00436	-	-
95% C.L. (+/-)	9.98	10.24	6.14	8.55	-	-
Comp. Component	-19.70	-18.59	-21.44	-19.80	-22.52	-22.32
Rates Component	31.83	30.43	33.04	31.19	33.72	33.35
Overall	12.13	11.84	11.61	11.39	11.20	11.03
Decomp. Ratio	-0.62	-0.61	-0.65	-0.63	-0.67	-0.67

South Female	1980	1980*	1981	1981*	1982	1982*
Standard Crude	8.03	8.03	8.03	8.03	8.03	8.03
Given Crude	22.14	21.68	21.41	21.13	20.82	20.56
ASMR:	56.25	55.35	53.53	55.69	52.18	52.93
Binomial Variance	3.8527E-05	3.837E-05	3.6652E-05	3.7508E-05	3.474E-05	3.3735E-05
Standard Error	0.00621	0.00619	0.00605	0.00612	0.00589	0.00581
95% C.L. (+/-)	12.17	12.14	11.87	12.00	11.55	11.38
Comp. Component	-19.79	-19.54	-18.76	-20.01	-18.41	-18.92
Rates Component	33.90	33.20	32.15	33.11	31.20	31.45
Overall	14.11	13.66	13.38	13.10	12.79	12.53
Decomp. Ratio	-0.58	-0.59	-0.58	-0.60	-0.59	-0.60

On-Reserve Male	1980	1980*	1981	1981*	1982	1982*
Standard Crude	8.03	8.03	8.03	8.03	8.03	8.03
Given Crude	15.05	14.88	14.68	14.59	14.45	14.33
ASMR:	33.26	32.45	32.86	32.83	32.87	34.03
Binomial Variance	1.3818E-05	1.3721E-05	1.3635E-05	1.372E-05	1.3162E-05	1.3445E-05
Standard Error	0.00372	0.00370	0.00369	0.00370	0.00363	0.00367
95% C.L. (+/-)	7.29	7.26	7.24	7.26	7.11	7.19
Comp. Component	-11.64	-11.29	-11.63	-11.66	-11.75	-12.42
Rates Component	18.66	18.15	18.28	18.22	18.17	18.72
Overall	7.02	6.86	6.65	6.56	6.42	6.30
Decomp. Ratio	-0.62	-0.62	-0.64	-0.64	-0.65	-0.66

On-Reserve Female	1980	1980*	1981	1981*	1982	1982*
Standard Crude	8.03	8.03	8.03	8.03	8.03	8.03
Given Crude	16.40	16.19	15.91	15.81	15.71	15.44
ASMR:	34.91	34.15	33.18	33.17	31.98	32.61
Binomial Variance	1.6827E-05	1.6367E-05	1.5512E-05	1.5456E-05	1.4563E-05	1.4732E-05
Standard Error	0.00410	0.00405	0.00394	0.00393	0.00382	0.00384
95% C.L. (+/-)	8.04	7.93	7.72	7.71	7.48	7.52
Comp. Component	-11.75	-11.44	-11.10	-11.14	-10.57	-11.07
Rates Component	20.12	19.60	18.98	18.92	18.25	18.49
Overall	8.37	8.16	7.88	7.78	7.68	7.41
Decomp. Ratio	-0.58	-0.58	-0.58	-0.59	-0.58	-0.60

Off-Reserve Male	1980	1980*	1981	1981*	1982	1982*
Standard Crude	8.03	8.03	8.03	8.03	8.03	8.03
Given Crude	36.53	34.64	35.29	33.85	33.82	33.22
ASMR:	127.97	120.51	121.77	132.41	118.21	131.78
Binomial Variance	-0.00023442	-0.00022326	-0.00021632	-0.00111889	-0.0002127	-0.00111684
Standard Error	-	-	-	-	-	-
95% C.L. (+/-)	-	-	-	-	-	-
Comp. Component	-48.72	-45.91	-46.22	-52.24	-45.16	-52.23
Rates Component	77.22	72.52	73.48	78.06	70.95	77.42
Overall	28.50	26.61	27.26	25.82	25.79	25.19
Decomp. Ratio	-0.63	-0.63	-0.63	-0.67	-0.64	-0.67

Off-Reserve Female	1980	1980*	1981	1981*	1982	1982*
Standard Crude	8.03	8.03	8.03	8.03	8.03	8.03
Given Crude	36.67	34.95	35.37	34.19	33.41	33.49
ASMR:	112.62	115.02	110.50	112.92	104.07	100.03
Binomial Variance	0.00010972	9.6297E-05	9.3924E-05	5.6232E-05	0.00010804	0.0001085
Standard Error	0.01047	0.00981	0.00969	0.00750	0.01039	0.01042
95% C.L. (+/-)	20.53	19.23	19.00	14.70	20.37	20.42
Comp. Component	-40.73	-42.81	-40.34	-42.15	-38.17	-36.03
Rates Component	69.37	69.74	67.69	68.31	63.55	61.50
Overall	28.64	26.92	27.34	26.16	25.38	25.47
Decomp. Ratio	-0.59	-0.61	-0.60	-0.62	-0.60	-0.59

Appendix IIIB: Mortality Rates and Associated Calculations for Adjusted and Unadjusted Populations Counts, Ages >1 to 9, 1980-1982.

Total	1980	1980*	1981	1981*	1982	1982*
Standard Crude	0.92	0.92	0.92	0.92	0.92	0.92
Given Crude	2.88	2.70	2.85	2.72	2.85	2.75
ASMR:	3.67	2.75	3.43	2.77	3.38	2.79
Binomial Variance	1.2286E-06	6.807E-07	1.0698E-06	6.8753E-07	1.0337E-06	7.0142E-07
Standard Error	0.00111	0.00083	0.00103	0.00083	0.00102	0.00084
95% C.L. (+/-)	2.17	1.62	2.03	1.63	1.99	1.64
Comp. Component	-0.49	-0.04	-0.38	-0.03	-0.34	-0.03
Rates Component	2.45	1.82	2.30	1.83	2.27	1.86
Overall	1.96	1.78	1.93	1.80	1.94	1.83
Decomp. Ratio	-0.20	-0.02	-0.16	-0.02	-0.15	-0.02

Male	1980	1980*	1981	1981*	1982	1982*
Standard Crude	0.92	0.92	0.92	0.92	0.92	0.92
Given Crude	5.60	5.26	5.50	5.26	5.49	5.29
ASMR:	7.18	5.35	6.73	5.35	6.52	5.39
Binomial Variance	4.624E-06	2.5462E-06	4.0437E-06	2.5458E-06	3.7904E-06	2.5854E-06
Standard Error	0.00215	0.00160	0.00201	0.00160	0.00195	0.00161
95% C.L. (+/-)	4.21	3.13	3.94	3.13	3.82	3.15
Comp. Component	-0.89	-0.06	-0.70	-0.06	-0.59	-0.06
Rates Component	5.57	4.40	5.28	4.40	5.16	4.43
Overall	4.68	4.34	4.58	4.34	4.57	4.37
Decomp. Ratio	-0.16	-0.01	-0.13	-0.01	-0.11	-0.01

Female	1980	1980*	1981	1981*	1982	1982*
Standard Crude	0.92	0.92	0.92	0.92	0.92	0.92
Given Crude	5.91	5.54	5.89	5.63	5.95	5.73
ASMR:	7.46	5.67	7.01	5.72	7.00	5.80
Binomial Variance	4.9563E-06	2.8494E-06	4.3622E-06	2.9042E-06	4.3584E-06	2.9797E-06
Standard Error	0.00223	0.00169	0.00209	0.00170	0.00209	0.00173
95% C.L. (+/-)	4.36	3.31	4.09	3.34	4.09	3.38
Comp. Component	-0.87	-0.07	-0.64	-0.05	-0.60	-0.04
Rates Component	5.86	4.69	5.61	4.77	5.63	4.85
Overall	4.99	4.62	4.97	4.71	5.03	4.81
Decomp. Ratio	-0.15	-0.01	-0.11	-0.01	-0.11	-0.01

North	1980	1980*	1981	1981*	1982	1982*
Standard Crude	0.92	0.92	0.92	0.92	0.92	0.92
Given Crude	5.71	5.35	5.64	5.40	5.64	5.46
ASMR:	7.48	5.68	6.92	5.65	6.74	5.80
Binomial Variance	5.0194E-06	2.8573E-06	4.2785E-06	2.8323E-06	4.0391E-06	2.9788E-06
Standard Error	0.00224	0.00169	0.00207	0.00168	0.00201	0.00173
95% C.L. (+/-)	4.39	3.31	4.05	3.30	3.94	3.38
Comp. Component	-0.99	-0.19	-0.73	-0.15	-0.63	-0.19
Rates Component	5.78	4.62	5.45	4.63	5.35	4.74
Overall	4.79	4.43	4.72	4.48	4.72	4.55
Decomp. Ratio	-0.17	-0.04	-0.13	-0.03	-0.12	-0.04

South	1980	1980*	1981	1981*	1982	1982*
Standard Crude	0.92	0.92	0.92	0.92	0.92	0.92
Given Crude	5.80	5.43	5.74	5.48	5.78	5.53
ASMR:	7.16	5.35	6.80	5.42	6.77	5.40
Binomial Variance	4.5707E-06	2.5502E-06	4.1202E-06	2.6123E-06	4.081E-06	2.5952E-06
Standard Error	0.00214	0.00160	0.00203	0.00162	0.00202	0.00161
95% C.L. (+/-)	4.19	3.13	3.98	3.17	3.96	3.16
Comp. Component	-0.77	0.05	-0.61	0.03	-0.57	0.07
Rates Component	5.65	4.46	5.43	4.52	5.43	4.53
Overall	4.88	4.51	4.83	4.56	4.86	4.61
Decomp. Ratio	-0.14	0.01	-0.11	0.01	-0.10	0.02

On-Reserve	1980	1980*	1981	1981*	1982	1982*
Standard Crude	0.92	0.92	0.92	0.92	0.92	0.92
Given Crude	4.10	3.91	4.06	3.94	4.12	3.96
ASMR:	4.94	3.89	4.67	3.93	4.66	3.99
Binomial Variance	2.1996E-06	1.3523E-06	1.9644E-06	1.3826E-06	1.9456E-06	1.4198E-06
Standard Error	0.00148	0.00116	0.00140	0.00118	0.00139	0.00119
95% C.L. (+/-)	2.91	2.28	2.75	2.30	2.73	2.34
Comp. Component	-0.50	0.02	-0.38	0.00	-0.33	-0.02
Rates Component	3.68	2.98	3.51	3.02	3.53	3.06
Overall	3.18	3.00	3.14	3.02	3.20	3.04
Decomp. Ratio	-0.14	0.01	-0.11	0.00	-0.09	-0.01

Off-Reserve	1980	1980*	1981	1981*	1982	1982*
Standard Crude	0.92	0.92	0.92	0.92	0.92	0.92
Given Crude	9.67	8.22	9.53	8.35	9.31	8.55
ASMR:	14.34	8.89	12.97	9.13	12.34	9.17
Binomial Variance	1.7904E-05	6.9017E-06	1.4625E-05	7.2748E-06	1.3271E-05	7.348E-06
Standard Error	0.00423	0.00263	0.00382	0.00270	0.00364	0.00271
95% C.L. (+/-)	8.29	5.15	7.50	5.29	7.14	5.31
Comp. Component	-2.48	-0.37	-1.84	-0.43	-1.63	-0.34
Rates Component	11.23	7.67	10.45	7.86	10.02	7.97
Overall	8.76	7.30	8.61	7.43	8.40	7.63
Decomp. Ratio	-0.22	-0.05	-0.18	-0.05	-0.16	-0.04

North Male	1980	1980*	1981	1981*	1982	1982*
Standard Crude	0.92	0.92	0.92	0.92	0.92	0.92
Given Crude	11.24	10.46	11.01	10.51	10.93	10.56
ASMR:	16.14	11.42	14.20	11.22	12.88	11.10
Binomial Variance	2.2461E-05	1.125E-05	1.7335E-05	1.0884E-05	1.4231E-05	1.0688E-05
Standard Error	0.00474	0.00335	0.00416	0.00330	0.00377	0.00327
95% C.L. (+/-)	9.29	6.57	8.16	6.47	7.39	6.41
Comp. Component	-2.59	-0.52	-1.70	-0.39	-1.04	-0.29
Rates Component	12.90	10.06	11.79	9.97	11.06	9.93
Overall	10.32	9.54	10.09	9.59	10.02	9.64
Decomp. Ratio	-0.20	-0.05	-0.14	-0.04	-0.09	-0.03

North Female	1980	1980*	1981	1981*	1982	1982*
Standard Crude	0.92	0.92	0.92	0.92	0.92	0.92
Given Crude	11.59	10.96	11.54	11.10	11.63	11.32
ASMR:	14.03	11.31	13.53	11.39	14.15	12.06
Binomial Variance	1.6818E-05	1.1058E-05	1.567E-05	1.1205E-05	1.7165E-05	1.2514E-05
Standard Error	0.00410	0.00333	0.00396	0.00335	0.00414	0.00354
95% C.L. (+/-)	8.04	6.52	7.76	6.56	8.12	6.93
Comp. Component	-1.30	-0.19	-1.07	-0.16	-1.35	-0.40
Rates Component	11.97	10.23	11.69	10.34	12.06	10.80
Overall	10.67	10.04	10.62	10.18	10.71	10.40
Decomp. Ratio	-0.11	-0.02	-0.09	-0.02	-0.11	-0.04

South Male	1980	1980*	1981	1981*	1982	1982*
Standard Crude	0.92	0.92	0.92	0.92	0.92	0.92
Given Crude	11.17	10.55	10.99	10.52	11.01	10.56
ASMR:	13.02	10.14	12.79	10.26	13.24	10.44
Binomial Variance	1.4557E-05	8.9787E-06	1.4078E-05	9.1672E-06	1.51E-05	9.4696E-06
Standard Error	0.00382	0.00300	0.00375	0.00303	0.00389	0.00308
95% C.L. (+/-)	7.48	5.87	7.35	5.93	7.62	6.03
Comp. Component	-1.00	0.23	-0.97	0.14	-1.20	0.06
Rates Component	11.25	9.40	11.04	9.46	11.29	9.57
Overall	10.25	9.63	10.07	9.60	10.09	9.64
Decomp. Ratio	-0.09	0.02	-0.09	0.02	-0.11	0.01

South Female	1980	1980*	1981	1981*	1982	1982*
Standard Crude	0.92	0.92	0.92	0.92	0.92	0.92
Given Crude	12.07	11.19	12.02	11.42	12.15	11.60
ASMR:	15.94	11.35	14.53	11.50	13.87	11.20
Binomial Variance	2.1652E-05	1.1163E-05	1.8003E-05	1.1444E-05	1.6408E-05	1.0914E-05
Standard Error	0.00465	0.00334	0.00424	0.00338	0.00405	0.00330
95% C.L. (+/-)	9.12	6.55	8.32	6.63	7.94	6.48
Comp. Component	-2.05	-0.08	-1.34	-0.04	-0.92	0.22
Rates Component	13.20	10.35	12.44	10.55	12.15	10.46
Overall	11.16	10.27	11.10	10.50	11.24	10.68
Decomp. Ratio	-0.15	-0.01	-0.11	0.00	-0.08	0.02

On-Reserve Male	1980	1980*	1981	1981*	1982	1982*
Standard Crude	0.92	0.92	0.92	0.92	0.92	0.92
Given Crude	7.97	7.63	7.87	7.64	7.97	7.67
ASMR:	9.56	7.57	9.27	7.69	9.22	7.86
Binomial Variance	8.0441E-06	5.0432E-06	7.5538E-06	5.1991E-06	7.4496E-06	5.4279E-06
Standard Error	0.00284	0.00225	0.00275	0.00228	0.00273	0.00233
95% C.L. (+/-)	5.56	4.40	5.39	4.47	5.35	4.57
Comp. Component	-0.88	0.03	-0.77	-0.03	-0.69	-0.11
Rates Component	7.93	6.68	7.73	6.75	7.74	6.86
Overall	7.05	6.71	6.96	6.72	7.05	6.75
Decomp. Ratio	-0.11	0.00	-0.10	0.00	-0.09	-0.02

On-Reserve Femal	1980	1980*	1981	1981*	1982	1982*
Standard Crude	0.92	0.92	0.92	0.92	0.92	0.92
Given Crude	8.42	8.04	8.35	8.12	8.51	8.18
ASMR:	10.13	7.99	9.38	8.05	9.42	8.08
Binomial Variance	8.9807E-06	5.6213E-06	7.6896E-06	5.6957E-06	7.7445E-06	5.7397E-06
Standard Error	0.00300	0.00237	0.00277	0.00239	0.00278	0.00240
95% C.L. (+/-)	5.87	4.65	5.44	4.68	5.45	4.70
Comp. Component	-0.94	0.03	-0.57	0.04	-0.51	0.05
Rates Component	8.44	7.09	8.00	7.16	8.09	7.21
Overall	7.50	7.12	7.43	7.20	7.59	7.26
Decomp. Ratio	-0.11	0.00	-0.07	0.01	-0.06	0.01

Off-Reserve Male	1980	1980*	1981	1981*	1982	1982*
Standard Crude	0.92	0.92	0.92	0.92	0.92	0.92
Given Crude	18.87	16.01	18.24	16.06	17.60	16.15
ASMR:	29.09	17.33	24.63	17.26	22.01	16.75
Binomial Variance	6.6513E-05	2.5143E-05	4.8844E-05	2.5065E-05	3.9553E-05	2.3828E-05
Standard Error	0.00816	0.00501	0.00699	0.00501	0.00629	0.00488
95% C.L. (+/-)	15.98	9.83	13.70	9.81	12.33	9.57
Comp. Component	-5.27	-0.70	-3.31	-0.63	-2.29	-0.31
Rates Component	23.22	15.79	20.63	15.77	18.98	15.54
Overall	17.95	15.09	17.32	15.14	16.68	15.23
Decomp. Ratio	-0.23	-0.04	-0.16	-0.04	-0.12	-0.02

Off-Reserve Femal	1980	1980*	1981	1981*	1982	1982*
Standard Crude	0.92	0.92	0.92	0.92	0.92	0.92
Given Crude	19.86	16.87	19.93	17.41	19.71	18.12
ASMR:	28.33	18.06	27.42	19.40	27.73	20.12
Binomial Variance	6.3123E-05	2.7302E-05	5.9439E-05	3.1174E-05	6.0802E-05	3.3389E-05
Standard Error	0.00794	0.00523	0.00771	0.00558	0.00780	0.00578
95% C.L. (+/-)	15.57	10.24	15.11	10.94	15.28	11.33
Comp. Component	-4.37	-0.62	-3.87	-1.05	-4.14	-1.05
Rates Component	23.31	16.57	22.88	17.54	22.93	18.25
Overall	18.94	15.95	19.01	16.49	18.79	17.20
Decomp. Ratio	-0.19	-0.04	-0.17	-0.06	-0.18	-0.06

Appendix IIIC: Mortality Rates and Associated Calculations for Adjusted and Unadjusted Populations Counts, 1980-1982. (Adjusted as Standard Population)

	Total			**Male**			**Female**		
	1980	1981	1982	1980	1981	1982	1980	1981	1982
Standard Crude	5.40	5.28	5.17	10.47	10.25	10.05	11.13	10.86	10.63
Given Crude	5.50	5.34	5.20	10.66	10.37	10.13	11.34	10.98	10.69
ASMR:	5.69	5.46	5.30	11.12	10.60	10.24	11.70	11.25	10.91
Binomial Variance	4.105E-07	3.768E-07	3.543E-07	1.479E-06	1.355E-06	1.266E-06	1.673E-06	1.539E-06	1.454E-06
Standard Error	0.00064	0.00061	0.00060	0.00122	0.00116	0.00113	0.00129	0.00124	0.00121
95% C.L. (+/-)	1.26	1.20	1.17	2.38	2.28	2.21	2.53	2.43	2.36
Comp. Component	-0.15	-0.10	-0.07	-0.38	-0.18	-0.06	-0.29	-0.22	-0.18
Rates Component	0.25	0.16	0.11	0.57	0.30	0.14	0.50	0.34	0.24
Overall	0.10	0.06	0.04	0.19	0.12	0.08	0.21	0.12	0.06
Decomp. Ratio	-0.61	-0.63	-0.66	-0.66	-0.59	-0.41	-0.58	-0.65	-0.75

	North			**South**			**On-Reserve**		
	1980	1981	1982	1980	1981	1982	1980	1981	1982
Standard Crude	11.23	10.97	10.74	10.37	10.12	9.90	7.76	7.59	7.43
Given Crude	11.46	11.12	10.84	10.56	10.25	10.00	7.85	7.64	7.53
ASMR:	11.79	11.39	11.04	10.97	10.44	10.11	8.11	7.77	7.50
Binomial Variance	1.701E-06	1.582E-06	1.485E-06	1.45E-06	1.319E-06	1.247E-06	8.185E-07	7.492E-07	7.03E-07
Standard Error	0.00130	0.00126	0.00122	0.00120	0.00115	0.00112	0.00090	0.00087	0.00084
95% C.L. (+/-)	2.56	2.47	2.39	2.36	2.25	2.19	1.77	1.70	1.64
Comp. Component	-0.26	-0.23	-0.18	-0.34	-0.13	-0.03	-0.22	-0.10	0.06
Rates Component	0.49	0.38	0.28	0.52	0.25	0.14	0.31	0.16	0.03
Overall	0.23	0.15	0.10	0.18	0.12	0.11	0.09	0.05	0.09
Decomp. Ratio	-0.54	-0.60	-0.65	-0.65	-0.51	-0.23	-0.70	-0.66	1.95

	Off-Reserve			North Male			North Female		
	1980	1981	1982	1980	1981	1982	1980	1981	1982
Standard Crude	17.41	17.03	16.70	22.10	21.64	21.16	22.81	22.24	21.77
Given Crude	18.32	17.68	16.82	22.62	21.96	21.39	23.22	22.50	21.94
ASMR:	19.18	18.30	17.63	23.50	22.34	21.61	23.86	22.98	22.40
Binomial Variance	4.196E-06	3.755E-06	3.459E-06	6.055E-06	5.619E-06	5.237E-06	6.416E-06	5.993E-06	5.728E-06
Standard Error	0.00205	0.00194	0.00186	0.00246	0.00237	0.00229	0.00253	0.00245	0.00239
95% C.L. (+/-)	4.01	3.80	3.65	4.82	4.65	4.49	4.96	4.80	4.69
Comp. Component	-0.57	-0.44	-0.65	-0.67	-0.26	-0.15	-0.54	-0.41	-0.41
Rates Component	1.48	1.09	0.77	1.19	0.58	0.38	0.95	0.68	0.58
Overall	0.91	0.65	0.12	0.52	0.31	0.23	0.41	0.27	0.17
Decomp. Ratio	-0.39	-0.40	-0.84	-0.56	-0.46	-0.39	-0.57	-0.61	-0.71

	South Male			South Female			On-Reserve Male		
	1980	1981	1982	1980	1981	1982	1980	1981	1982
Standard Crude	19.87	19.42	19.06	21.68	21.13	20.56	14.88	14.59	14.33
Given Crude	20.16	19.63	19.23	22.14	21.41	20.82	15.05	14.68	14.45
ASMR:	21.06	20.55	19.84	23.07	21.53	21.18	15.54	14.97	14.42
Binomial Variance	4.641E-06	4.18E-06	3.999E-06	5.894E-06	5.247E-06	5.047E-06	2.795E-06	2.611E-06	2.433E-06
Standard Error	0.00215	0.00204	0.00200	0.00243	0.00229	0.00225	0.00167	0.00162	0.00156
95% C.L. (+/-)	4.22	4.01	3.92	4.76	4.49	4.40	3.28	3.17	3.06
Comp. Component	-0.76	-0.80	-0.50	-0.70	0.05	-0.20	-0.41	-0.23	0.08
Rates Component	1.06	1.01	0.66	1.15	0.23	0.46	0.57	0.32	0.04
Overall	0.30	0.22	0.17	0.46	0.28	0.27	0.16	0.09	0.12
Decomp. Ratio	-0.72	-0.78	-0.75	-0.61	0.22	-0.43	-0.71	-0.71	1.89

	On-Reserve Female			Off-Reserve Male			Off-Reserve Female		
	1980	1981	1982	1980	1981	1982	1980	1981	1982
Standard Crude	16.19	15.81	15.44	34.64	33.85	33.22	34.95	34.19	33.49
Given Crude	16.40	15.91	15.71	36.53	35.29	33.82	36.67	35.37	33.41
ASMR:	16.96	16.14	15.66	38.89	36.18	34.31	37.40	36.04	35.75
Binomial Variance	3.387E-06	3.087E-06	2.951E-06	1.125E-05	1.161E-05	1.07E-05	1.383E-05	1.249E-05	1.17E-05
Standard Error	0.00184	0.00176	0.00172	0.00335	0.00341	0.00327	0.00372	0.00353	0.00342
95% C.L. (+/-)	3.61	3.44	3.37	6.57	6.68	6.41	7.29	6.93	6.70
Comp. Component	-0.47	-0.18	0.15	-1.65	-0.12	0.10	-0.17	-0.29	-1.88
Rates Component	0.67	0.28	0.12	3.54	1.57	0.50	1.88	1.47	1.79
Overall	0.21	0.10	0.27	1.89	1.44	0.60	1.71	1.18	-0.09
Decomp. Ratio	-0.69	-0.65	1.23	-0.47	-0.08	0.19	-0.09	-0.20	-1.05

Appendix IIID: Mortality Rates and Associated Calculations for Adjusted and Unadjusted Populations Counts, Ages >1 to 9, 1980-1982 (Adjusted as Standard Population)

	Total			Male			Female		
	1980	1981	1982	1980	1981	1982	1980	1981	1982
Standard Crude	2.70	2.72	2.75	5.26	5.26	5.29	5.54	5.63	5.73
Given Crude	2.88	2.85	2.85	5.60	5.50	5.49	5.91	5.89	5.95
ASMR:	3.59	3.37	3.32	7.03	6.60	6.39	7.29	6.89	6.91
Binomial Variance	1.175E-06	1.031E-06	9.975E-07	4.423E-06	3.885E-06	3.632E-06	4.74E-06	4.214E-06	4.238E-06
Standard Error	0.00108	0.00102	0.00100	0.00210	0.00197	0.00191	0.00218	0.00205	0.00206
95% C.L. (+/-)	2.12	1.99	1.96	4.12	3.86	3.74	4.27	4.02	4.04
Comp. Component	-0.59	-0.45	-0.41	-1.19	-0.94	-0.79	-1.15	-0.87	-0.85
Rates Component	0.77	0.58	0.51	1.53	1.18	0.99	1.53	1.13	1.06
Overall	0.18	0.13	0.11	0.35	0.24	0.20	0.37	0.26	0.22
Decomp. Ratio	-0.77	-0.78	-0.79	-0.77	-0.79	-0.79	-0.76	-0.77	-0.80

	North			South			On-Reserve		
	1980	1981	1982	1980	1981	1982	1980	1981	1982
Standard Crude	5.35	5.40	5.46	5.43	5.48	5.53	3.91	3.94	3.96
Given Crude	5.71	5.64	5.64	5.80	5.74	5.78	4.10	4.06	4.12
ASMR:	7.01	6.59	6.33	7.29	6.88	6.95	4.98	4.68	4.62
Binomial Variance	4.371E-06	3.862E-06	3.549E-06	4.768E-06	4.22E-06	4.308E-06	2.241E-06	1.964E-06	1.912E-06
Standard Error	0.00209	0.00197	0.00188	0.00218	0.00205	0.00208	0.00150	0.00140	0.00138
95% C.L. (+/-)	4.10	3.85	3.69	4.28	4.03	4.07	2.93	2.75	2.71
Comp. Component	-1.10	-0.84	-0.62	-1.23	-0.97	-1.00	-0.75	-0.55	-0.45
Rates Component	1.45	1.07	0.80	1.60	1.24	1.25	0.93	0.67	0.61
Overall	0.35	0.24	0.17	0.37	0.27	0.25	0.18	0.12	0.16
Decomp. Ratio	-0.76	-0.78	-0.78	-0.77	-0.78	-0.80	-0.80	-0.82	-0.74

	Off-Reserve			North Male			North Female		
	1980	1981	1982	1980	1981	1982	1980	1981	1982
Standard Crude	8.22	8.35	8.55	10.46	10.51	10.56	10.96	11.10	11.32
Given Crude	9.67	9.53	9.31	11.24	11.01	10.93	11.59	11.54	11.63
ASMR:	13.15	11.79	11.46	14.60	13.24	12.23	13.58	13.17	13.21
Binomial Variance	1.486E-05	1.196E-05	1.137E-05	1.807E-05	1.495E-05	1.283E-05	1.573E-05	1.482E-05	1.483E-05
Standard Error	0.00385	0.00346	0.00337	0.00425	0.00387	0.00358	0.00397	0.00385	0.00385
95% C.L. (+/-)	7.55	6.78	6.61	8.33	7.58	7.02	7.77	7.55	7.55
Comp. Component	-2.70	-1.86	-1.79	-2.74	-1.90	-1.17	-1.73	-1.44	-1.41
Rates Component	4.15	3.03	2.55	3.52	2.41	1.55	2.36	1.89	1.72
Overall	1.45	1.18	0.76	0.78	0.50	0.38	0.63	0.44	0.31
Decomp. Ratio	-0.65	-0.61	-0.70	-0.78	-0.79	-0.76	-0.73	-0.77	-0.82

North	South Male 1980	South Male 1981	South Male 1982	South Female 1980	South Female 1981	South Female 1982	On-Reserve Male 1980	On-Reserve Male 1981	On-Reserve Male 1982
Standard Crude	10.55	10.52	10.56	11.19	11.42	11.60	7.63	7.64	7.67
Given Crude	11.17	10.99	11.01	12.07	12.02	12.15	7.97	7.87	7.97
ASMR:	13.62	13.15	13.40	15.75	14.43	14.42	9.64	9.19	8.97
Binomial Variance	1.603E-05	1.491E-05	1.547E-05	2.116E-05	1.775E-05	1.783E-05	8.175E-06	7.405E-06	7.025E-06
Standard Error	0.00400	0.00386	0.00393	0.00460	0.00421	0.00422	0.00286	0.00272	0.00265
95% C.L. (+/-)	7.85	7.57	7.71	9.01	8.26	8.28	5.60	5.33	5.19
Comp. Component	-2.07	-1.85	-2.03	-2.96	-2.06	-1.96	-1.42	-1.15	-0.89
Rates Component	2.69	2.32	2.48	3.85	2.66	2.51	1.76	1.38	1.19
Overall	0.62	0.47	0.45	0.88	0.60	0.55	0.34	0.24	0.30
Decomp. Ratio	-0.77	-0.80	-0.82	-0.77	-0.77	-0.78	-0.81	-0.83	-0.75

South	On-Reserve Female 1980	On-Reserve Female 1981	On-Reserve Female 1982	Off-Reserve Male 1980	Off-Reserve Male 1981	Off-Reserve Male 1982	Off-Reserve Female 1980	Off-Reserve Female 1981	Off-Reserve Female 1982
Standard Crude	8.04	8.12	8.18	16.01	16.06	16.15	16.87	17.41	18.12
Given Crude	8.42	8.35	8.51	18.87	18.24	17.60	19.86	19.93	19.71
ASMR:	10.21	9.47	9.53	26.57	22.83	21.28	26.33	24.35	24.68
Binomial Variance	9.153E-06	7.839E-06	7.937E-06	5.481E-05	4.176E-05	3.699E-05	5.423E-05	4.643E-05	4.755E-05
Standard Error	0.00303	0.00280	0.00282	0.00740	0.00646	0.00608	0.00736	0.00681	0.00690
95% C.L. (+/-)	5.93	5.49	5.52	14.51	12.67	11.92	14.43	13.36	13.52
Comp. Component	-1.52	-1.00	-0.92	-5.89	-3.75	-3.09	-5.08	-3.65	-4.09
Rates Component	1.90	1.23	1.25	8.74	5.94	4.54	8.06	6.17	5.68
Overall	0.38	0.23	0.33	2.86	2.18	1.45	2.98	2.52	1.59
Decomp. Ratio	-0.80	-0.81	-0.74	-0.67	-0.63	-0.68	-0.63	-0.59	-0.72

Appendix IV:

Abridged Life Tables for Adjusted and Unadjusted Populations, 1979 - 1983.

Life Table: **Total 1980 Adjusted**

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	399	7	0.017544	0.07	0.017262	100000	1726	0.07	98395	6893697	68.937
1-4	1614	3	0.001859	0.5	0.007407	98274	728	0.5	391639	6795302	69.147
5-9	2064	1	0.000484	0.5	0.002420	97546	236	0.5	487139	6403663	65.648
10-14	2114	2	0.000946	0.5	0.004719	97310	459	0.5	485401	5916524	60.801
15-19	1910	4	0.002094	0.5	0.010417	96851	1009	0.5	481731	5431123	56.077
20-24	1381	5	0.003621	0.5	0.017940	95842	1719	0.5	474910	4949392	51.641
25-29	1046	4	0.003824	0.5	0.018939	94122	1783	0.5	466155	4474482	47.539
30-34	819	2	0.002442	0.5	0.012136	92340	1121	0.5	458897	4008327	43.409
35-39	646	3	0.004644	0.5	0.022953	91219	2094	0.5	450861	3549430	38.911
40-44	514	3	0.005837	0.5	0.028763	89125	2564	0.5	439217	3098570	34.766
45-49	422	3	0.007109	0.5	0.034924	86562	3023	0.5	425251	2659352	30.722
50-54	312	4	0.012821	0.5	0.062112	83539	5189	0.5	404721	2234101	26.743
55-59	280	2	0.007143	0.5	0.035088	78350	2749	0.5	384877	1829380	23.349
60-64	210	4	0.019048	0.5	0.090909	75601	6873	0.5	360822	1444504	19.107
65-69	171	6	0.035088	0.5	0.161290	68728	11085	0.5	315927	1083682	15.768
70-74	164	4	0.024390	0.5	0.114943	57643	6626	0.5	271650	767755	13.319
75-79	87	6	0.068966	0.5	0.294118	51017	15005	0.5	217573	496105	9.724
80-84	65	6	0.092308	0.5	0.375000	36012	13505	0.5	146299	278531	7.734
85+	47	8	0.170213	1	1.311341	22508	22508	1	132232	132232	5.875

Life Table: **Total 1980 Unadjusted**

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	268	7	0.026119	0.07	0.025500	100000	2550	0.07	97629	6824604	68.246
1-4	1514	3	0.001982	0.5	0.007895	97450	769	0.5	388261	6726975	69.030
5-9	2040	1	0.000490	0.5	0.002448	96681	237	0.5	482812	6338714	65.563
10-14	2115	2	0.000946	0.5	0.004717	96444	455	0.5	481083	5855902	60.718
15-19	1911	4	0.002093	0.5	0.010411	95989	999	0.5	477447	5374820	55.994
20-24	1380	5	0.003623	0.5	0.017953	94990	1705	0.5	470685	4897373	51.557
25-29	1049	4	0.003813	0.5	0.018886	93284	1762	0.5	462017	4426688	47.454
30-34	818	2	0.002445	0.5	0.012151	91523	1112	0.5	454833	3964670	43.319
35-39	645	3	0.004651	0.5	0.022989	90411	2078	0.5	446857	3509838	38.821
40-44	514	3	0.005837	0.5	0.028763	88332	2541	0.5	435309	3062981	34.676
45-49	422	3	0.007109	0.5	0.034924	85791	2996	0.5	421466	2627672	30.629
50-54	312	4	0.012821	0.5	0.062112	82795	5143	0.5	401120	2206206	26.647
55-59	280	2	0.007143	0.5	0.035088	77653	2725	0.5	381452	1805086	23.246
60-64	211	4	0.018957	0.5	0.090498	74928	6781	0.5	357688	1423635	19.000
65-69	168	6	0.035714	0.5	0.163934	68147	11172	0.5	312807	1065947	15.642
70-74	164	4	0.024390	0.5	0.114943	56975	6549	0.5	268505	753140	13.219
75-79	89	6	0.067416	0.5	0.288462	50427	14546	0.5	215768	484635	9.611
80-84	61	6	0.098361	0.5	0.394737	35880	14163	0.5	143994	268867	7.493
85+	46	8	0.173913	1	1.336409	21717	21717	1	124873	124873	5.750

Life Table: **Total** 1981 Adjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	397	7	0.017632	0.07	0.017348	100000	1735	0.07	98387	6936045	69.360
1-4	1610	3	0.001863	0.5	0.007426	98265	730	0.5	391602	6837659	69.584
5-9	2037	1	0.000491	0.5	0.002452	97536	239	0.5	487080	6446057	66.089
10-14	2113	2	0.000947	0.5	0.004721	97296	459	0.5	485334	5958977	61.246
15-19	1972	4	0.002028	0.5	0.010091	96837	977	0.5	481742	5473644	56.524
20-24	1493	5	0.003349	0.5	0.016606	95860	1592	0.5	475320	4991901	52.075
25-29	1090	4	0.003670	0.5	0.018182	94268	1714	0.5	467055	4516581	47.912
30-34	856	2	0.002336	0.5	0.011614	92554	1075	0.5	460083	4049526	43.753
35-39	673	3	0.004458	0.5	0.022043	91479	2016	0.5	452354	3589443	39.238
40-44	547	3	0.005484	0.5	0.027051	89463	2420	0.5	441263	3137089	35.066
45-49	431	3	0.006961	0.5	0.034208	87043	2978	0.5	427769	2695826	30.971
50-54	324	4	0.012346	0.5	0.059880	84065	5034	0.5	407741	2268056	26.980
55-59	286	2	0.006993	0.5	0.034364	79031	2716	0.5	388367	1860316	23.539
60-64	220	4	0.018182	0.5	0.086957	76315	6636	0.5	364987	1471949	19.288
65-69	172	6	0.034884	0.5	0.160428	69679	11178	0.5	320450	1106962	15.887
70-74	168	4	0.023810	0.5	0.112360	58501	6573	0.5	276071	786512	13.444
75-79	91	6	0.065934	0.5	0.283019	51928	14697	0.5	222897	510441	9.830
80-84	69	6	0.086957	0.5	0.357143	37231	13297	0.5	152914	287544	7.723
85+	45	8	0.177778	1	1.265891	23934	23934	1	134630	134630	5.625

Life Table: **Total** 1981 Unadjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	292	7	0.023973	0.07	0.023450	100000	2345	0.07	97819	6888801	68.888
1-4	1555	3	0.001929	0.5	0.007687	97655	751	0.5	389119	6790982	69.541
5-9	2019	1	0.000495	0.5	0.002473	96904	240	0.5	483922	6401863	66.064
10-14	2118	2	0.000944	0.5	0.004710	96665	455	0.5	482185	5917941	61.221
15-19	1979	4	0.002021	0.5	0.010055	96209	967	0.5	478628	5435756	56.499
20-24	1492	5	0.003351	0.5	0.016617	95242	1583	0.5	472253	4957128	52.048
25-29	1102	4	0.003630	0.5	0.017986	93659	1685	0.5	464085	4484875	47.885
30-34	857	2	0.002334	0.5	0.011601	91975	1067	0.5	457206	4020790	43.716
35-39	674	3	0.004451	0.5	0.022010	90908	2001	0.5	449537	3563584	39.200
40-44	547	3	0.005484	0.5	0.027051	88907	2405	0.5	438522	3114047	35.026
45-49	430	3	0.006977	0.5	0.034286	86502	2966	0.5	425095	2675525	30.930
50-54	324	4	0.012346	0.5	0.059880	83536	5002	0.5	405175	2250431	26.940
55-59	284	2	0.007042	0.5	0.034602	78534	2717	0.5	385876	1845256	23.496
60-64	220	4	0.018182	0.5	0.086957	75816	6593	0.5	362600	1459380	19.249
65-69	168	6	0.035714	0.5	0.163934	69224	11348	0.5	317748	1096780	15.844
70-74	166	4	0.024096	0.5	0.113636	57876	6577	0.5	272936	779032	13.460
75-79	91	6	0.065934	0.5	0.283019	51299	14519	0.5	220198	506096	9.866
80-84	66	6	0.090909	0.5	0.370370	36780	13622	0.5	149846	285898	7.773
85+	47	8	0.170213	1	1.290326	23158	23158	1	136053	136053	5.875

Life Table: **Total 1982 Adjusted**

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	393	7	0.017812	0.07	0.017521	100000	1752	0.07	98371	6979540	69.795
1-4	1595	3	0.001881	0.5	0.007495	98248	736	0.5	391519	6881170	70.039
5-9	2013	1	0.000497	0.5	0.002481	97511	242	0.5	486953	6489651	66.553
10-14	2103	2	0.000951	0.5	0.004744	97270	461	0.5	485194	6002699	61.712
15-19	2044	4	0.001957	0.5	0.009737	96808	943	0.5	481684	5517505	56.994
20-24	1586	5	0.003153	0.5	0.015640	95865	1499	0.5	475579	5035821	52.530
25-29	1156	4	0.003460	0.5	0.017153	94366	1619	0.5	467784	4560241	48.325
30-34	887	2	0.002255	0.5	0.011211	92748	1040	0.5	461138	4092457	44.125
35-39	704	3	0.004261	0.5	0.021082	91708	1933	0.5	453705	3631319	39.597
40-44	569	3	0.005272	0.5	0.026019	89774	2336	0.5	443032	3177613	35.396
45-49	432	3	0.006944	0.5	0.034130	87439	2984	0.5	429732	2734581	31.274
50-54	354	4	0.011299	0.5	0.054945	84454	4640	0.5	410671	2304849	27.291
55-59	291	2	0.006873	0.5	0.033784	79814	2696	0.5	392329	1894178	23.732
60-64	230	4	0.017391	0.5	0.083333	77118	6426	0.5	369521	1501850	19.475
65-69	175	6	0.034286	0.5	0.157895	70691	11162	0.5	325551	1132328	16.018
70-74	161	4	0.024845	0.5	0.116959	59529	6962	0.5	280240	806777	13.553
75-79	102	6	0.058824	0.5	0.256410	52567	13479	0.5	229137	526537	10.017
80-84	68	6	0.088235	0.5	0.361446	39088	14128	0.5	160120	297400	7.608
85+	44	8	0.181818	1	1.231985	24960	24960	1	137279	137279	5.500

Life Table: **Total 1982 Unadjusted**

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	299	7	0.023411	0.07	0.022913	100000	2291	0.07	97869	6944482	69.445
1-4	1557	3	0.001927	0.5	0.007678	97709	750	0.5	389335	6846613	70.072
5-9	1997	1	0.000501	0.5	0.002501	96959	242	0.5	484187	6457278	66.598
10-14	2110	2	0.000948	0.5	0.004728	96716	457	0.5	482437	5973091	61.759
15-19	2057	4	0.001945	0.5	0.009676	96259	931	0.5	478966	5490654	57.041
20-24	1589	5	0.003147	0.5	0.015610	95327	1488	0.5	472917	5011688	52.573
25-29	1170	4	0.003419	0.5	0.016949	93839	1590	0.5	465221	4538771	48.367
30-34	894	2	0.002237	0.5	0.011123	92249	1026	0.5	458679	4073550	44.158
35-39	707	3	0.004243	0.5	0.020994	91223	1915	0.5	451326	3614871	39.627
40-44	570	3	0.005263	0.5	0.025974	89308	2320	0.5	440739	3163545	35.423
45-49	433	3	0.006928	0.5	0.034052	86988	2962	0.5	427534	2722806	31.301
50-54	352	4	0.011364	0.5	0.055249	84026	4642	0.5	408523	2295272	27.316
55-59	291	2	0.006873	0.5	0.033784	79384	2682	0.5	390213	1886749	23.768
60-64	226	4	0.017699	0.5	0.084746	76702	6500	0.5	367258	1496536	19.511
65-69	175	6	0.034286	0.5	0.157895	70201	11084	0.5	323296	1129278	16.086
70-74	157	4	0.025478	0.5	0.119760	59117	7080	0.5	277886	805982	13.634
75-79	100	6	0.060000	0.5	0.260870	52037	13575	0.5	226249	528096	10.148
80-84	68	6	0.088235	0.5	0.361446	38462	13902	0.5	157556	301848	7.848
85+	47	8	0.170213	1	1.245946	24560	24560	1	144291	144291	5.875

Life Table: **Females** 1980 Adjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	195	7	0.035897	0.07	0.034738	100000	3474	0.07	96769	5653390	56.534
1-4	769	3	0.003901	0.5	0.015484	96526	1495	0.5	383116	5556620	57.566
5-9	1021	1	0.000979	0.5	0.004885	95032	464	0.5	473998	5173504	54.440
10-14	1050	2	0.001905	0.5	0.009479	94567	896	0.5	470596	4699507	49.695
15-19	924	4	0.004329	0.5	0.021413	93671	2006	0.5	463341	4228911	45.146
20-24	664	5	0.007530	0.5	0.036955	91665	3387	0.5	449857	3765570	41.080
25-29	519	4	0.007707	0.5	0.037807	88278	3338	0.5	433045	3315713	37.560
30-34	398	2	0.005025	0.5	0.024814	84940	2108	0.5	419432	2882668	33.938
35-39	312	3	0.009615	0.5	0.046948	82832	3889	0.5	404440	2463237	29.738
40-44	236	3	0.012712	0.5	0.061602	78944	4863	0.5	382561	2058796	26.079
45-49	195	3	0.015385	0.5	0.074074	74081	5487	0.5	356684	1676236	22.627
50-54	153	4	0.026144	0.5	0.122699	68593	8416	0.5	321925	1319551	19.237
55-59	132	2	0.015152	0.5	0.072993	60177	4392	0.5	289903	997627	16.578
60-64	101	4	0.039604	0.5	0.180180	55784	10051	0.5	253794	707724	12.687
65-69	75	6	0.080000	0.5	0.333333	45733	15244	0.5	190555	453930	9.926
70-74	74	4	0.054054	0.5	0.238095	30489	7259	0.5	134296	263376	8.638
75-79	36	6	0.166667	0.5	0.588235	23230	13664	0.5	81987	129080	5.557
80-84	34	6	0.176471	0.5	0.612245	9565	5856	0.5	33185	47093	4.923
85+	30	8	0.266667	1	2.515980	3709	3709	1	13908	13908	3.750

Life Table: **Females** 1980 Unadjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	133	7	0.052632	0.07	0.050176	100000	5018	0.07	95334	5555553	55.556
1-4	722	3	0.004155	0.5	0.016484	94982	1566	0.5	376798	5460219	57.487
5-9	1005	1	0.000995	0.5	0.004963	93417	464	0.5	465925	5083421	54.417
10-14	1051	2	0.001903	0.5	0.009470	92953	880	0.5	462565	4617496	49.675
15-19	923	4	0.004334	0.5	0.021436	92073	1974	0.5	455431	4154930	45.127
20-24	664	5	0.007530	0.5	0.036955	90099	3330	0.5	442172	3699500	41.060
25-29	521	4	0.007678	0.5	0.037665	86770	3268	0.5	425678	3257328	37.540
30-34	397	2	0.005038	0.5	0.024876	83501	2077	0.5	412315	2831650	33.911
35-39	311	3	0.009646	0.5	0.047096	81424	3835	0.5	397535	2419335	29.713
40-44	236	3	0.012712	0.5	0.061602	77590	4780	0.5	375999	2021800	26.058
45-49	195	3	0.015385	0.5	0.074074	72810	5393	0.5	350566	1645802	22.604
50-54	152	4	0.026316	0.5	0.123457	67417	8323	0.5	316275	1295235	19.212
55-59	133	2	0.015038	0.5	0.072464	59094	4282	0.5	284763	978960	16.566
60-64	101	4	0.039604	0.5	0.180180	54811	9876	0.5	249367	694197	12.665
65-69	75	6	0.080000	0.5	0.333333	44935	14978	0.5	187231	444830	9.899
70-74	73	4	0.054795	0.5	0.240964	29957	7219	0.5	131739	257599	8.599
75-79	37	6	0.162162	0.5	0.576923	22738	13118	0.5	80896	125860	5.535
80-84	31	6	0.193548	0.5	0.652174	9620	6274	0.5	32416	44964	4.674
85+	30	8	0.266667	1	2.564290	3346	3346	1	12548	12548	3.750

Life Table: **Females 1981 Adjusted**

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	192	7	0.036458	0.07	0.035263	100000	3526	0.07	96721	5714547	57.145
1-4	778	3	0.003856	0.5	0.015306	96474	1477	0.5	382942	5617826	58.232
5-9	983	1	0.001017	0.5	0.005074	94997	482	0.5	473781	5234884	55.106
10-14	1072	2	0.001866	0.5	0.009285	94515	878	0.5	470382	4761104	50.374
15-19	946	4	0.004228	0.5	0.020921	93638	1959	0.5	463290	4290722	45.823
20-24	727	5	0.006878	0.5	0.033807	91679	3099	0.5	450645	3827432	41.748
25-29	540	4	0.007407	0.5	0.036364	88579	3221	0.5	434844	3376787	38.122
30-34	415	2	0.004819	0.5	0.023810	85358	2032	0.5	421710	2941944	34.466
35-39	326	3	0.009202	0.5	0.044978	83326	3748	0.5	407260	2520234	30.246
40-44	252	3	0.011905	0.5	0.057803	79578	4600	0.5	386391	2112974	26.552
45-49	199	3	0.015075	0.5	0.072639	74978	5446	0.5	361275	1726583	23.028
50-54	156	4	0.025641	0.5	0.120482	69532	8377	0.5	326716	1365308	19.636
55-59	134	2	0.014925	0.5	0.071942	61154	4400	0.5	294773	1038593	16.983
60-64	107	4	0.037383	0.5	0.170940	56755	9702	0.5	259520	743819	13.106
65-69	83	6	0.072289	0.5	0.306122	47053	14404	0.5	199256	484299	10.293
70-74	76	4	0.052632	0.5	0.232558	32649	7593	0.5	144264	285043	8.730
75-79	36	6	0.166667	0.5	0.588235	25056	14739	0.5	88434	140779	5.619
80-84	36	6	0.166667	0.5	0.588235	10317	6069	0.5	36414	52345	5.074
85+	30	8	0.266667	1	2.433764	4248	4248	1	15931	15931	3.750

Life Table: **Females 1981 Unadjusted**

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	144	7	0.048611	0.07	0.046509	100000	4651	0.07	95675	5646257	56.463
1-4	750	3	0.004000	0.5	0.015873	95349	1513	0.5	378370	5550583	58.213
5-9	974	1	0.001027	0.5	0.005120	93836	480	0.5	467977	5172213	55.120
10-14	1073	2	0.001864	0.5	0.009276	93355	866	0.5	464611	4704236	50.391
15-19	948	4	0.004219	0.5	0.020877	92489	1931	0.5	457619	4239625	45.839
20-24	726	5	0.006887	0.5	0.033852	90558	3066	0.5	445128	3782006	41.763
25-29	551	4	0.007260	0.5	0.035651	87493	3119	0.5	429666	3336879	38.139
30-34	416	2	0.004808	0.5	0.023753	84374	2004	0.5	416857	2907213	34.456
35-39	326	3	0.009202	0.5	0.044978	82369	3705	0.5	402585	2490356	30.234
40-44	251	3	0.011952	0.5	0.058027	78665	4565	0.5	381911	2087771	26.540
45-49	199	3	0.015075	0.5	0.072639	74100	5383	0.5	357043	1705859	23.021
50-54	156	4	0.025641	0.5	0.120482	68717	8279	0.5	322889	1348816	19.628
55-59	133	2	0.015038	0.5	0.072464	60438	4380	0.5	291242	1025927	16.975
60-64	106	4	0.037736	0.5	0.172414	56059	9665	0.5	256130	734685	13.106
65-69	85	6	0.070588	0.5	0.300000	46393	13918	0.5	197172	478555	10.315
70-74	74	4	0.054054	0.5	0.238095	32475	7732	0.5	143046	281383	8.665
75-79	37	6	0.162162	0.5	0.576923	24743	14275	0.5	88028	138337	5.591
80-84	32	6	0.187500	0.5	0.638298	10468	6682	0.5	35637	50309	4.806
85+	31	8	0.258065	1	2.485231	3786	3786	1	14672	14672	3.875

Life Table: **Females** 1982 Adjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	189	7	0.037037	0.07	0.035804	100000	3580	0.07	96670	5776028	57.760
1-4	777	3	0.003861	0.5	0.015326	96420	1478	0.5	382723	5679358	58.903
5-9	954	1	0.001048	0.5	0.005227	94942	496	0.5	473469	5296635	55.788
10-14	1079	2	0.001854	0.5	0.009225	94446	871	0.5	470050	4823166	51.068
15-19	976	4	0.004098	0.5	0.020284	93574	1898	0.5	463127	4353116	46.520
20-24	779	5	0.006418	0.5	0.031586	91676	2896	0.5	451142	3889989	42.432
25-29	572	4	0.006993	0.5	0.034364	88781	3051	0.5	436276	3438847	38.734
30-34	429	2	0.004662	0.5	0.023041	85730	1975	0.5	423710	3002571	35.024
35-39	339	3	0.008850	0.5	0.043290	83754	3626	0.5	409708	2578861	30.791
40-44	269	3	0.011152	0.5	0.054250	80129	4347	0.5	389776	2169153	27.071
45-49	200	3	0.015000	0.5	0.072289	75782	5478	0.5	365213	1779377	23.480
50-54	171	4	0.023392	0.5	0.110497	70304	7768	0.5	332097	1414163	20.115
55-59	132	2	0.015152	0.5	0.072993	62535	4565	0.5	301264	1082067	17.303
60-64	112	4	0.035714	0.5	0.163934	57971	9503	0.5	266094	780802	13.469
65-69	88	6	0.068182	0.5	0.291262	48467	14117	0.5	207044	514708	10.620
70-74	72	4	0.055556	0.5	0.243902	34351	8378	0.5	150807	307663	8.957
75-79	42	6	0.142857	0.5	0.526316	25972	13670	0.5	95688	156856	6.039
80-84	34	6	0.176471	0.5	0.612245	12303	7532	0.5	42683	61168	4.972
85+	31	8	0.258065	1	2.365836	4770	4770	1	18485	18485	3.875

Life Table: **Females** 1982 Unadjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	144	7	0.048611	0.07	0.046509	100000	4651	0.07	95675	5714053	57.141
1-4	758	3	0.003958	0.5	0.015707	95349	1498	0.5	378401	5618379	58.924
5-9	948	1	0.001055	0.5	0.005260	93852	494	0.5	468023	5239977	55.833
10-14	1079	2	0.001854	0.5	0.009225	93358	861	0.5	464636	4771954	51.115
15-19	982	4	0.004073	0.5	0.020161	92497	1865	0.5	457821	4307318	46.567
20-24	782	5	0.006394	0.5	0.031466	90632	2852	0.5	446029	3849497	42.474
25-29	586	4	0.006826	0.5	0.033557	87780	2946	0.5	431535	3403468	38.773
30-34	435	2	0.004598	0.5	0.022727	84834	1928	0.5	419351	2971933	35.032
35-39	340	3	0.008824	0.5	0.043165	82906	3579	0.5	405584	2552582	30.789
40-44	268	3	0.011194	0.5	0.054446	79328	4319	0.5	385840	2146997	27.065
45-49	201	3	0.014925	0.5	0.071942	75008	5396	0.5	361551	1761158	23.479
50-54	171	4	0.023392	0.5	0.110497	69612	7692	0.5	328831	1399606	20.106
55-59	131	2	0.015267	0.5	0.073529	61920	4553	0.5	298219	1070775	17.293
60-64	110	4	0.036364	0.5	0.166667	57367	9561	0.5	262933	772557	13.467
65-69	93	6	0.064516	0.5	0.277778	47806	13279	0.5	205831	509624	10.660
70-74	69	4	0.057971	0.5	0.253165	34527	8741	0.5	150781	303792	8.799
75-79	41	6	0.146341	0.5	0.535714	25786	13814	0.5	94394	153012	5.934
80-84	32	6	0.187500	0.5	0.638298	11972	7642	0.5	40755	58618	4.896
85+	33	8	0.242424	1	2.409815	4330	4330	1	17862	17862	4.125

Life Table: **Males** 1980 Adjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	204	7	0.034314	0.07	0.033253	100000	3325	0.07	96908	5821865	58.219
1-4	845	3	0.003550	0.5	0.014101	96675	1363	0.5	383973	5724958	59.219
5-9	1043	1	0.000959	0.5	0.004782	95312	456	0.5	475418	5340985	56.037
10-14	1064	2	0.001880	0.5	0.009355	94856	887	0.5	472060	4865567	51.294
15-19	986	4	0.004057	0.5	0.020080	93968	1887	0.5	465125	4393507	46.755
20-24	717	5	0.006974	0.5	0.034270	92081	3156	0.5	452518	3928383	42.662
25-29	528	4	0.007576	0.5	0.037175	88926	3306	0.5	436365	3475864	39.087
30-34	421	2	0.004751	0.5	0.023474	85620	2010	0.5	423076	3039500	35.500
35-39	334	3	0.008982	0.5	0.043924	83610	3672	0.5	408870	2616424	31.293
40-44	278	3	0.010791	0.5	0.052539	79938	4200	0.5	389189	2207555	27.616
45-49	228	3	0.013158	0.5	0.063694	75738	4824	0.5	366629	1818366	24.009
50-54	160	4	0.025000	0.5	0.117647	70914	8343	0.5	333712	1451737	20.472
55-59	148	2	0.013514	0.5	0.065359	62571	4090	0.5	302631	1118025	17.868
60-64	110	4	0.036364	0.5	0.166667	58481	9747	0.5	268040	815394	13.943
65-69	96	6	0.062500	0.5	0.270270	48734	13171	0.5	210744	547355	11.231
70-74	91	4	0.043956	0.5	0.198020	35563	7042	0.5	160209	336611	9.465
75-79	52	6	0.115385	0.5	0.447761	28521	12771	0.5	110678	176402	6.185
80-84	32	6	0.187500	0.5	0.638298	15750	10053	0.5	53618	65724	4.173
85+	17	8	0.470588	1	2.240670	5697	5697	1	12106	12106	2.125

Life Table: **Males** 1980 Unadjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	136	7	0.051471	0.07	0.049119	100000	4912	0.07	95432	5713779	57.138
1-4	792	3	0.003788	0.5	0.015038	95088	1430	0.5	377492	5618347	59.086
5-9	1035	1	0.000966	0.5	0.004819	93658	451	0.5	467162	5240855	55.957
10-14	1064	2	0.001880	0.5	0.009355	93207	872	0.5	463854	4773692	51.216
15-19	988	4	0.004049	0.5	0.020040	92335	1850	0.5	457048	4309838	46.676
20-24	717	5	0.006974	0.5	0.034270	90484	3101	0.5	444670	3852790	42.580
25-29	528	4	0.007576	0.5	0.037175	87384	3248	0.5	428797	3408119	39.002
30-34	421	2	0.004751	0.5	0.023474	84135	1975	0.5	415738	2979323	35.411
35-39	334	3	0.008982	0.5	0.043924	82160	3609	0.5	401779	2563584	31.202
40-44	279	3	0.010753	0.5	0.052356	78551	4113	0.5	382475	2161806	27.521
45-49	227	3	0.013216	0.5	0.063966	74439	4762	0.5	360290	1779331	23.903
50-54	160	4	0.025000	0.5	0.117647	69677	8197	0.5	327893	1419041	20.366
55-59	147	2	0.013605	0.5	0.065789	61480	4045	0.5	297287	1091148	17.748
60-64	110	4	0.036364	0.5	0.166667	57435	9573	0.5	263244	793861	13.822
65-69	93	6	0.064516	0.5	0.277778	47863	13295	0.5	206075	530617	11.086
70-74	91	4	0.043956	0.5	0.198020	34567	6845	0.5	155725	324542	9.389
75-79	52	6	0.115385	0.5	0.447761	27722	12413	0.5	107579	168817	6.090
80-84	30	6	0.200000	0.5	0.666667	15309	10206	0.5	51031	61238	4.000
85+	16	8	0.500000	1	2.293864	5103	5103	1	10206	10206	2.000

Life Table: **Males** 1981 Adjusted

Age	n_i	d_i	r_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	205	7	0.034146	0.07	0.033095	100000	3310	0.07	96922	5861788	58.618
1-4	833	3	0.003601	0.5	0.014303	96690	1383	0.5	383996	5764865	59.622
5-9	1054	1	0.000949	0.5	0.004733	95308	451	0.5	475410	5380869	56.458
10-14	1042	2	0.001919	0.5	0.009551	94856	906	0.5	472017	4905459	51.715
15-19	1026	4	0.003899	0.5	0.019305	93950	1814	0.5	465218	4433442	47.189
20-24	767	5	0.006519	0.5	0.032072	92137	2955	0.5	453296	3968224	43.069
25-29	550	4	0.007273	0.5	0.035714	89182	3185	0.5	437946	3514928	39.413
30-34	441	2	0.004535	0.5	0.022422	85997	1928	0.5	425163	3076981	35.780
35-39	347	3	0.008646	0.5	0.042313	84069	3557	0.5	411450	2651818	31.544
40-44	295	3	0.010169	0.5	0.049587	80511	3992	0.5	392576	2240369	27.827
45-49	232	3	0.012931	0.5	0.062630	76519	4792	0.5	370614	1847793	24.148
50-54	168	4	0.023810	0.5	0.112360	71727	8059	0.5	338485	1477178	20.595
55-59	153	2	0.013072	0.5	0.063291	63667	4030	0.5	308263	1138693	17.885
60-64	114	4	0.035088	0.5	0.161290	59638	9619	0.5	274142	830430	13.925
65-69	90	6	0.066667	0.5	0.285714	50019	14291	0.5	214366	556288	11.122
70-74	92	4	0.043478	0.5	0.196078	35728	7005	0.5	161125	341922	9.570
75-79	55	6	0.109091	0.5	0.428571	28722	12310	0.5	112838	180797	6.295
80-84	33	6	0.181818	0.5	0.625000	16413	10258	0.5	56419	67959	4.141
85+	15	8	0.533333	1	2.198030	6155	6155	1	11540	11540	1.875

Life Table: **Males** 1981 Unadjusted

Age	n_i	d_i	r_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	148	7	0.047297	0.07	0.045305	100000	4530	0.07	95787	5775631	57.756
1-4	806	3	0.003722	0.5	0.014778	95470	1411	0.5	379056	5679844	59.494
5-9	1045	1	0.000957	0.5	0.004773	94059	449	0.5	469171	5300788	56.356
10-14	1046	2	0.001912	0.5	0.009515	93610	891	0.5	465822	4831617	51.614
15-19	1031	4	0.003880	0.5	0.019212	92719	1781	0.5	459142	4365795	47.086
20-24	766	5	0.006527	0.5	0.032113	90938	2920	0.5	447388	3906653	42.960
25-29	551	4	0.007260	0.5	0.035651	88017	3138	0.5	432242	3459266	39.302
30-34	442	2	0.004525	0.5	0.022371	84880	1899	0.5	419650	3027023	35.663
35-39	348	3	0.008621	0.5	0.042194	82981	3501	0.5	406150	2607373	31.421
40-44	297	3	0.010101	0.5	0.049261	79479	3915	0.5	387609	2201223	27.696
45-49	231	3	0.012987	0.5	0.062893	75564	4752	0.5	365939	1813614	24.001
50-54	168	4	0.023810	0.5	0.112360	70812	7956	0.5	334167	1447675	20.444
55-59	151	2	0.013245	0.5	0.064103	62855	4029	0.5	304204	1113507	17.715
60-64	114	4	0.035088	0.5	0.161290	58826	9488	0.5	270410	809304	13.758
65-69	84	6	0.071429	0.5	0.303030	49338	14951	0.5	209313	538894	10.922
70-74	92	4	0.043478	0.5	0.196078	34387	6743	0.5	155079	329581	9.584
75-79	54	6	0.111111	0.5	0.434783	27645	12019	0.5	108174	174502	6.312
80-84	34	6	0.176471	0.5	0.612245	15625	9566	0.5	54210	66327	4.245
85+	16	8	0.500000	1	2.221955	6059	6059	1	12117	12117	2.000

Life Table: **Males** 1982 Adjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	204	7	0.034314	0.07	0.033253	100000	3325	0.07	96908	5902874	59.029
1-4	818	3	0.003667	0.5	0.014563	96675	1408	0.5	383883	5805967	60.057
5-9	1059	1	0.000944	0.5	0.004710	95267	449	0.5	475212	5422083	56.915
10-14	1024	2	0.001953	0.5	0.009718	94818	921	0.5	471787	4946871	52.172
15-19	1068	4	0.003745	0.5	0.018553	93897	1742	0.5	465128	4475084	47.660
20-24	807	5	0.006196	0.5	0.030506	92155	2811	0.5	453745	4009956	43.513
25-29	584	4	0.006849	0.5	0.033670	89343	3008	0.5	439196	3556211	39.804
30-34	458	2	0.004367	0.5	0.021598	86335	1865	0.5	427014	3117015	36.104
35-39	365	3	0.008219	0.5	0.040268	84470	3401	0.5	413848	2690001	31.845
40-44	301	3	0.009967	0.5	0.048622	81069	3942	0.5	395490	2276153	28.077
45-49	232	3	0.012931	0.5	0.062630	77127	4831	0.5	373560	1880663	24.384
50-54	183	4	0.021858	0.5	0.103627	72297	7492	0.5	342754	1507103	20.846
55-59	159	2	0.012579	0.5	0.060976	64805	3952	0.5	314145	1164349	17.967
60-64	119	4	0.033613	0.5	0.155039	60853	9435	0.5	280680	850204	13.971
65-69	87	6	0.068966	0.5	0.294118	51419	15123	0.5	219285	569525	11.076
70-74	89	4	0.044944	0.5	0.202020	36296	7332	0.5	163147	350239	9.650
75-79	60	6	0.100000	0.5	0.400000	28963	11585	0.5	115852	187093	6.460
80-84	34	6	0.176471	0.5	0.612245	17378	10640	0.5	60291	71240	4.099
85+	13	8	0.615385	1	2.146117	6738	6738	1	10950	10950	1.625

Life Table: **Males** 1982 Unadjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	155	7	0.045161	0.07	0.043341	100000	4334	0.07	95969	5829811	58.298
1-4	799	3	0.003755	0.5	0.014907	95666	1426	0.5	379811	5733842	59.936
5-9	1050	1	0.000952	0.5	0.004751	94240	448	0.5	470080	5354030	56.813
10-14	1031	2	0.001940	0.5	0.009653	93792	905	0.5	466697	4883950	52.072
15-19	1075	4	0.003721	0.5	0.018433	92887	1712	0.5	460154	4417253	47.555
20-24	807	5	0.006196	0.5	0.030506	91175	2781	0.5	448919	3957099	43.401
25-29	585	4	0.006838	0.5	0.033613	88393	2971	0.5	434538	3508180	39.688
30-34	460	2	0.004348	0.5	0.021505	85422	1837	0.5	422517	3073642	35.982
35-39	368	3	0.008152	0.5	0.039947	83585	3339	0.5	409577	2651125	31.718
40-44	302	3	0.009934	0.5	0.048465	80246	3889	0.5	391507	2241547	27.933
45-49	232	3	0.012931	0.5	0.062630	76357	4782	0.5	369829	1850040	24.229
50-54	181	4	0.022099	0.5	0.104712	71575	7495	0.5	339136	1480211	20.681
55-59	160	2	0.012500	0.5	0.060606	64080	3884	0.5	310690	1141075	17.807
60-64	116	4	0.034483	0.5	0.158730	60196	9555	0.5	277094	830385	13.795
65-69	82	6	0.073171	0.5	0.309278	50641	15662	0.5	214051	553291	10.926
70-74	88	4	0.045455	0.5	0.204082	34979	7139	0.5	157049	339240	9.698
75-79	59	6	0.101695	0.5	0.405405	27840	11287	0.5	110986	182191	6.544
80-84	36	6	0.166667	0.5	0.588235	16554	9738	0.5	58425	71206	4.301
85+	15	8	0.533333	1	2.158801	6816	6816	1	12780	12780	1.875

Life Table: **North** 1980 Adjusted

Age	ni	di	ti	ai	qi	li	di	ai	Li	Ti	ei
<1	189	7	0.037037	0.07	0.035804	100000	3580	0.07	96670	5684467	56.845
1-4	816	3	0.003676	0.5	0.014599	96420	1408	0.5	382863	5587796	57.953
5-9	1050	1	0.000952	0.5	0.004751	95012	451	0.5	473932	5204933	54.782
10-14	1008	2	0.001984	0.5	0.009872	94561	933	0.5	470470	4731001	50.031
15-19	860	4	0.004651	0.5	0.022989	93627	2152	0.5	462755	4260532	45.505
20-24	646	5	0.007740	0.5	0.037965	91475	3473	0.5	448692	3797777	41.517
25-29	481	4	0.008316	0.5	0.040733	88002	3585	0.5	431048	3349084	38.057
30-34	387	2	0.005168	0.5	0.025510	84417	2154	0.5	416703	2918036	34.567
35-39	292	3	0.010274	0.5	0.050083	82264	4120	0.5	401019	2501333	30.406
40-44	247	3	0.012146	0.5	0.058939	78144	4606	0.5	379205	2100313	26.878
45-49	193	3	0.015544	0.5	0.074813	73538	5502	0.5	353937	1721109	23.404
50-54	133	4	0.030075	0.5	0.139860	68037	9516	0.5	316394	1367172	20.095
55-59	143	2	0.013986	0.5	0.067568	58521	3954	0.5	282719	1050779	17.956
60-64	111	4	0.036036	0.5	0.165289	54567	9019	0.5	250286	768059	14.076
65-69	99	6	0.060606	0.5	0.263158	45547	11986	0.5	197772	517774	11.368
70-74	90	4	0.044444	0.5	0.200000	33561	6712	0.5	151026	320002	9.535
75-79	47	6	0.127660	0.5	0.483871	26849	12991	0.5	101767	168976	6.294
80-84	35	6	0.171429	0.5	0.600000	13858	8315	0.5	48502	67209	4.850
85+	27	8	0.296296	1	2.295803	5543	5543	1	18708	18708	3.375

Life Table: **North** 1980 Unadjusted

Age	ni	di	ti	ai	qi	li	di	ai	Li	Ti	ei
<1	130	7	0.053846	0.07	0.051278	100000	5128	0.07	95231	5584436	55.844
1-4	761	3	0.003942	0.5	0.015645	94872	1484	0.5	376520	5489205	57.859
5-9	1037	1	0.000964	0.5	0.004810	93388	449	0.5	465816	5112685	54.747
10-14	1007	2	0.001986	0.5	0.009881	92939	918	0.5	462397	4646869	49.999
15-19	860	4	0.004651	0.5	0.022989	92020	2115	0.5	454813	4184471	45.473
20-24	643	5	0.007776	0.5	0.038139	89905	3429	0.5	440952	3729658	41.484
25-29	481	4	0.008316	0.5	0.040733	86476	3522	0.5	423574	3288706	38.030
30-34	387	2	0.005168	0.5	0.025510	82954	2116	0.5	409477	2865132	34.539
35-39	292	3	0.010274	0.5	0.050083	80837	4049	0.5	394066	2455654	30.378
40-44	247	3	0.012146	0.5	0.058939	76789	4526	0.5	372629	2061589	26.848
45-49	192	3	0.015625	0.5	0.075188	72263	5433	0.5	347731	1688960	23.372
50-54	134	4	0.029851	0.5	0.138889	66830	9282	0.5	310943	1341228	20.069
55-59	142	2	0.014085	0.5	0.068027	57548	3915	0.5	277952	1030285	17.903
60-64	111	4	0.036036	0.5	0.165289	53633	8865	0.5	246002	752333	14.027
65-69	99	6	0.060606	0.5	0.263158	44768	11781	0.5	194387	506331	11.310
70-74	89	4	0.044944	0.5	0.202020	32987	6664	0.5	148275	311944	9.457
75-79	47	6	0.127660	0.5	0.483871	26323	12737	0.5	99772	163669	6.218
80-84	33	6	0.181818	0.5	0.625000	13586	8491	0.5	46702	63897	4.703
85+	27	8	0.296296	1	2.339451	5095	5095	1	17195	17195	3.375

Life Table: **North** 1981 Adjusted

Age	n_i	d_i	r_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	192	7	0.036458	0.07	0.035263	100000	3526	0.07	96721	5747857	57.479
1-4	799	3	0.003755	0.5	0.014907	96474	1438	0.5	383019	5651137	58.577
5-9	1047	1	0.000955	0.5	0.004764	95036	453	0.5	474046	5268118	55.433
10-14	1022	2	0.001957	0.5	0.009737	94583	921	0.5	470612	4794072	50.686
15-19	887	4	0.004510	0.5	0.022297	93662	2088	0.5	463089	4323460	46.160
20-24	688	5	0.007267	0.5	0.035689	91574	3268	0.5	449697	3860372	42.156
25-29	505	4	0.007921	0.5	0.038835	88305	3429	0.5	432954	3410674	38.624
30-34	409	2	0.004890	0.5	0.024155	84876	2050	0.5	419255	2977721	35.083
35-39	300	3	0.010000	0.5	0.048780	82826	4040	0.5	404029	2558466	30.890
40-44	267	3	0.011236	0.5	0.054645	78786	4305	0.5	383165	2154437	27.346
45-49	195	3	0.015385	0.5	0.074074	74480	5517	0.5	358609	1771272	23.782
50-54	143	4	0.027972	0.5	0.130719	68963	9015	0.5	322280	1412662	20.484
55-59	137	2	0.014599	0.5	0.070423	59949	4222	0.5	289188	1090383	18.189
60-64	116	4	0.034483	0.5	0.158730	55727	8846	0.5	256520	801195	14.377
65-69	102	6	0.058824	0.5	0.256410	46881	12021	0.5	204354	544674	11.618
70-74	95	4	0.042105	0.5	0.190476	34860	6640	0.5	157702	340320	9.762
75-79	50	6	0.120000	0.5	0.461538	28220	13025	0.5	108540	182618	6.471
80-84	34	6	0.176471	0.5	0.612245	15196	9303	0.5	52719	74078	4.875
85+	29	8	0.275862	1	2.243687	5892	5892	1	21359	21359	3.625

Life Table: **North** 1981 Unadjusted

Age	n_i	d_i	r_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	144	7	0.048611	0.07	0.046509	100000	4651	0.07	95675	5672689	56.727
1-4	775	3	0.003871	0.5	0.015365	95349	1465	0.5	378467	5577015	58.490
5-9	1033	1	0.000968	0.5	0.004829	93884	453	0.5	468287	5198548	55.372
10-14	1021	2	0.001959	0.5	0.009747	93431	911	0.5	464877	4730261	50.629
15-19	886	4	0.004515	0.5	0.022321	92520	2065	0.5	457438	4265384	46.102
20-24	683	5	0.007321	0.5	0.035945	90455	3251	0.5	444146	3807946	42.098
25-29	507	4	0.007890	0.5	0.038685	87204	3373	0.5	427584	3363799	38.574
30-34	411	2	0.004866	0.5	0.024038	83830	2015	0.5	414113	2936215	35.026
35-39	301	3	0.009967	0.5	0.048622	81815	3978	0.5	399130	2522103	30.827
40-44	267	3	0.011236	0.5	0.054645	77837	4253	0.5	378551	2122973	27.275
45-49	194	3	0.015464	0.5	0.074442	73584	5478	0.5	354223	1744422	23.707
50-54	144	4	0.027778	0.5	0.129870	68106	8845	0.5	318417	1390199	20.412
55-59	136	2	0.014706	0.5	0.070922	59261	4203	0.5	285797	1071782	18.086
60-64	116	4	0.034483	0.5	0.158730	55058	8739	0.5	253442	785984	14.276
65-69	101	6	0.059406	0.5	0.258621	46319	11979	0.5	201646	532543	11.497
70-74	92	4	0.043478	0.5	0.196078	34340	6733	0.5	154865	330897	9.636
75-79	49	6	0.122449	0.5	0.468750	27606	12941	0.5	105681	176031	6.376
80-84	33	6	0.181818	0.5	0.625000	14666	9166	0.5	50414	70351	4.797
85+	29	8	0.275862	1	2.283119	5500	5500	1	19936	19936	3.625

Life Table: **North** 1982 Adjusted

Age	n_i	d_i	r_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	186	7	0.037634	0.07	0.036362	100000	3636	0.07	96618	5800130	58.001
1-4	786	3	0.003817	0.5	0.015152	96364	1460	0.5	382535	5703511	59.187
5-9	1041	1	0.000961	0.5	0.004792	94904	455	0.5	473382	5320976	56.067
10-14	1016	2	0.001969	0.5	0.009794	94449	925	0.5	469932	4847594	51.325
15-19	934	4	0.004283	0.5	0.021186	93524	1981	0.5	462666	4377662	46.808
20-24	724	5	0.006906	0.5	0.033944	91543	3107	0.5	449944	3914995	42.767
25-29	546	4	0.007326	0.5	0.035971	88435	3181	0.5	434223	3465051	39.182
30-34	420	2	0.004762	0.5	0.023529	85254	2006	0.5	421255	3030828	35.551
35-39	316	3	0.009494	0.5	0.046368	83248	3860	0.5	406590	2609573	31.347
40-44	273	3	0.010989	0.5	0.053476	79388	4245	0.5	386327	2202983	27.750
45-49	201	3	0.014925	0.5	0.071942	75143	5406	0.5	362199	1816656	24.176
50-54	157	4	0.025478	0.5	0.119760	69737	8352	0.5	327804	1454457	20.856
55-59	138	2	0.014493	0.5	0.069930	61385	4293	0.5	296194	1126653	18.354
60-64	116	4	0.034483	0.5	0.158730	57092	9062	0.5	262806	830459	14.546
65-69	105	6	0.057143	0.5	0.250000	48030	12008	0.5	210132	567653	11.819
70-74	94	4	0.042553	0.5	0.192308	36023	6927	0.5	162794	357521	9.925
75-79	56	6	0.107143	0.5	0.422535	29095	12294	0.5	114741	194727	6.693
80-84	32	6	0.187500	0.5	0.638298	16801	10724	0.5	57196	79986	4.761
85+	30	8	0.266667	1	2.204078	6077	6077	1	22789	22789	3.750

Life Table: **North** 1982 Unadjusted

Age	n_i	d_i	r_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	150	7	0.046667	0.07	0.044726	100000	4473	0.07	95841	5740986	57.410
1-4	772	3	0.003886	0.5	0.015424	95527	1473	0.5	379163	5645145	59.094
5-9	1029	1	0.000972	0.5	0.004847	94054	456	0.5	469130	5265982	55.989
10-14	1016	2	0.001969	0.5	0.009794	93598	917	0.5	465699	4796852	51.249
15-19	934	4	0.004283	0.5	0.021186	92681	1964	0.5	458498	4331153	46.732
20-24	720	5	0.006944	0.5	0.034130	90718	3096	0.5	445848	3872656	42.689
25-29	547	4	0.007313	0.5	0.035907	87622	3146	0.5	430243	3426807	39.109
30-34	424	2	0.004717	0.5	0.023310	84475	1969	0.5	417454	2996564	35.473
35-39	318	3	0.009434	0.5	0.046083	82506	3802	0.5	403026	2579110	31.260
40-44	274	3	0.010949	0.5	0.053286	78704	4194	0.5	383036	2176084	27.649
45-49	200	3	0.015000	0.5	0.072289	74510	5386	0.5	359086	1793048	24.064
50-54	157	4	0.025478	0.5	0.119760	69124	8278	0.5	324924	1433962	20.745
55-59	138	2	0.014493	0.5	0.069930	60846	4255	0.5	293591	1109038	18.227
60-64	116	4	0.034483	0.5	0.158730	56591	8983	0.5	260497	815446	14.410
65-69	102	6	0.058824	0.5	0.256410	47608	12207	0.5	207523	554949	11.657
70-74	94	4	0.042553	0.5	0.192308	35401	6808	0.5	159985	347427	9.814
75-79	52	6	0.115385	0.5	0.447761	28593	12803	0.5	110958	187442	6.556
80-84	33	6	0.181818	0.5	0.625000	15790	9869	0.5	54279	76484	4.844
85+	30	8	0.266667	1	2.230882	5921	5921	1	22205	22205	3.750

Life Table: **North Male** 1980 Adjusted

Age	n_i	d_i	r_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	92	7	0.076087	0.07	0.071059	100000	7106	0.07	93392	4430638	44.306
1-4	425	3	0.007059	0.5	0.027842	92894	2586	0.5	366404	4337247	46.690
5-9	535	1	0.001869	0.5	0.009302	90308	840	0.5	449439	3970843	43.970
10-14	493	2	0.004057	0.5	0.020080	89468	1797	0.5	442847	3521405	39.360
15-19	433	4	0.009238	0.5	0.045147	87671	3958	0.5	428460	3078558	35.115
20-24	324	5	0.015432	0.5	0.074294	83713	6219	0.5	403017	2650097	31.657
25-29	247	4	0.016194	0.5	0.077821	77494	6031	0.5	372392	2247080	28.997
30-34	201	2	0.009950	0.5	0.048544	71463	3469	0.5	348642	1874688	26.233
35-39	156	3	0.019231	0.5	0.091743	67994	6238	0.5	324375	1526046	22.444
40-44	127	3	0.023622	0.5	0.111524	61756	6887	0.5	291562	1201671	19.458
45-49	98	3	0.030612	0.5	0.142180	54869	7801	0.5	254840	910110	16.587
50-54	66	4	0.060606	0.5	0.263158	47067	12386	0.5	204372	655269	13.922
55-59	76	2	0.026316	0.5	0.123457	34681	4282	0.5	162702	450897	13.001
60-64	51	4	0.078431	0.5	0.327869	30400	9967	0.5	127080	288195	9.480
65-69	55	6	0.109091	0.5	0.428571	20433	8757	0.5	80271	161114	7.885
70-74	50	4	0.080000	0.5	0.333333	11676	3892	0.5	48649	80844	6.924
75-79	28	6	0.214286	0.5	0.697674	7784	5431	0.5	25343	32195	4.136
80-84	19	6	0.315789	0.5	0.882353	2353	2076	0.5	6575	6852	2.912
85+	8	8	1.000000	1	3.775952	277	277	1	277	277	1.000

Life Table: **North Male** 1980 Unadjusted

Age	n_i	d_i	r_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	58	7	0.120690	0.07	0.108510	100000	10851	0.07	89909	4238745	42.387
1-4	393	3	0.007634	0.5	0.030075	89149	2681	0.5	351234	4148836	46.538
5-9	528	1	0.001894	0.5	0.009425	86468	815	0.5	430302	3797603	43.919
10-14	492	2	0.004065	0.5	0.020121	85653	1723	0.5	423956	3367301	39.313
15-19	433	4	0.009238	0.5	0.045147	83929	3789	0.5	410174	2943346	35.069
20-24	323	5	0.015480	0.5	0.074516	80140	5972	0.5	385772	2533171	31.609
25-29	245	4	0.016327	0.5	0.078431	74169	5817	0.5	356300	2147399	28.953
30-34	201	2	0.009950	0.5	0.048544	68351	3318	0.5	333462	1791099	26.204
35-39	156	3	0.019231	0.5	0.091743	65033	5966	0.5	310251	1457637	22.414
40-44	127	3	0.023622	0.5	0.111524	59067	6587	0.5	278867	1147386	19.425
45-49	98	3	0.030612	0.5	0.142180	52480	7462	0.5	243744	868519	16.550
50-54	66	4	0.060606	0.5	0.263158	45018	11847	0.5	195473	624775	13.878
55-59	75	2	0.026667	0.5	0.125000	33171	4146	0.5	155490	429301	12.942
60-64	51	4	0.078431	0.5	0.327869	29025	9516	0.5	121333	273811	9.434
65-69	54	6	0.111111	0.5	0.434783	19508	8482	0.5	76338	152478	7.816
70-74	50	4	0.080000	0.5	0.333333	11027	3676	0.5	45944	76141	6.905
75-79	28	6	0.214286	0.5	0.697674	7351	5129	0.5	23934	30197	4.108
80-84	18	6	0.333333	0.5	0.909091	2222	2020	0.5	6061	6263	2.818
85+	8	8	1.000000	1	3.851124	202	202	1	202	202	1.000

Life Table: **North Male** 1981 Adjusted

Age	n_i	d_i	r_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	96	7	0.072917	0.07	0.068286	100000	6829	0.07	93649	4490283	44.903
1-4	405	3	0.007407	0.5	0.029197	93171	2720	0.5	367245	4396633	47.189
5-9	546	1	0.001832	0.5	0.009116	90451	825	0.5	450194	4029388	44.548
10-14	489	2	0.004090	0.5	0.020243	89627	1814	0.5	443597	3579194	39.935
15-19	455	4	0.008791	0.5	0.043011	87812	3777	0.5	429619	3135598	35.708
20-24	336	5	0.014881	0.5	0.071736	84035	6028	0.5	405106	2705979	32.200
25-29	259	4	0.015444	0.5	0.074349	78007	5800	0.5	375536	2300873	29.496
30-34	216	2	0.009259	0.5	0.045249	72207	3267	0.5	352868	1925337	26.664
35-39	158	3	0.018987	0.5	0.090634	68940	6248	0.5	329079	1572469	22.809
40-44	141	3	0.021277	0.5	0.101010	62692	6332	0.5	297627	1243390	19.833
45-49	99	3	0.030303	0.5	0.140845	56359	7938	0.5	261951	945764	16.781
50-54	70	4	0.057143	0.5	0.250000	48421	12105	0.5	211843	683813	14.122
55-59	76	2	0.026316	0.5	0.123457	36316	4483	0.5	170371	471970	12.996
60-64	54	4	0.074074	0.5	0.312500	31832	9948	0.5	134293	301599	9.475
65-69	50	6	0.120000	0.5	0.461538	21885	10101	0.5	84172	167306	7.645
70-74	51	4	0.078431	0.5	0.327869	11784	3864	0.5	49262	83134	7.055
75-79	30	6	0.200000	0.5	0.666667	7920	5280	0.5	26402	33872	4.277
80-84	18	6	0.333333	0.5	0.909091	2640	2400	0.5	7200	7470	2.830
85+	9	8	0.888889	1	3.744798	240	240	1	270	270	1.125

Life Table: **North Male** 1981 Unadjusted

Age	n_i	d_i	r_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	69	7	0.101449	0.07	0.092703	100000	9270	0.07	91379	4364711	43.647
1-4	391	3	0.007673	0.5	0.030227	90730	2742	0.5	357434	4273332	47.100
5-9	539	1	0.001855	0.5	0.009234	87987	812	0.5	437905	3915898	44.505
10-14	490	2	0.004082	0.5	0.020202	87175	1761	0.5	431471	3477993	39.897
15-19	455	4	0.008791	0.5	0.043011	85414	3674	0.5	417884	3046522	35.668
20-24	334	5	0.014970	0.5	0.072150	81740	5898	0.5	393956	2628637	32.159
25-29	257	4	0.015564	0.5	0.074906	75842	5681	0.5	365010	2234681	29.465
30-34	216	2	0.009259	0.5	0.045249	70161	3175	0.5	342870	1869672	26.648
35-39	159	3	0.018868	0.5	0.090090	66987	6035	0.5	319846	1526802	22.793
40-44	142	3	0.021127	0.5	0.100334	60952	6116	0.5	289470	1206956	19.802
45-49	99	3	0.030303	0.5	0.140845	54836	7723	0.5	254873	917486	16.731
50-54	70	4	0.057143	0.5	0.250000	47113	11778	0.5	206119	662613	14.064
55-59	75	2	0.026667	0.5	0.125000	35335	4417	0.5	165631	456494	12.919
60-64	55	4	0.072727	0.5	0.307692	30918	9513	0.5	130806	290863	9.408
65-69	48	6	0.125000	0.5	0.476190	21405	10193	0.5	81541	160057	7.478
70-74	51	4	0.078431	0.5	0.327869	11212	3676	0.5	46870	78516	7.003
75-79	29	6	0.206897	0.5	0.681818	7536	5138	0.5	24834	31646	4.199
80-84	18	6	0.333333	0.5	0.909091	2398	2180	0.5	6539	6812	2.841
85+	10	8	0.800000	1	3.796612	218	218	1	272	272	1.250

Life Table: **North Male** 1982 Adjusted

Age	n_i	d_i	r_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	99	7	0.070707	0.07	0.066344	100000	6634	0.07	93830	4552150	45.522
1-4	390	3	0.007692	0.5	0.030303	93366	2829	0.5	367804	4458320	47.751
5-9	553	1	0.001808	0.5	0.009001	90536	815	0.5	450644	4090517	45.181
10-14	483	2	0.004141	0.5	0.020492	89721	1839	0.5	444011	3639872	40.569
15-19	481	4	0.008316	0.5	0.040733	87883	3580	0.5	430465	3195862	36.365
20-24	356	5	0.014045	0.5	0.067843	84303	5719	0.5	407217	2765397	32.803
25-29	279	4	0.014337	0.5	0.069204	78584	5438	0.5	379323	2358180	30.008
30-34	221	2	0.009050	0.5	0.044248	73145	3237	0.5	357636	1978857	27.054
35-39	162	3	0.018519	0.5	0.088496	69909	6187	0.5	334078	1621221	23.190
40-44	146	3	0.020548	0.5	0.097720	63722	6227	0.5	303044	1287143	20.199
45-49	102	3	0.029412	0.5	0.136986	57495	7876	0.5	267787	984099	17.116
50-54	75	4	0.053333	0.5	0.235294	49619	11675	0.5	218909	716313	14.436
55-59	75	2	0.026667	0.5	0.125000	37944	4743	0.5	177863	497404	13.109
60-64	58	4	0.068966	0.5	0.294118	33201	9765	0.5	141593	319541	9.624
65-69	48	6	0.125000	0.5	0.476190	23436	11160	0.5	89280	177948	7.593
70-74	51	4	0.078431	0.5	0.327869	12276	4025	0.5	51318	88668	7.223
75-79	34	6	0.176471	0.5	0.612245	8251	5052	0.5	28626	37350	4.527
80-84	17	6	0.352941	0.5	0.937500	3199	2999	0.5	8498	8723	2.727
85+	9	8	0.888889	1	3.679586	200	200	1	225	225	1.125

Life Table: **North Male** 1982 Unadjusted

Age	n_i	d_i	r_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	80	7	0.087500	0.07	0.080916	100000	8092	0.07	92475	4468096	44.681
1-4	381	3	0.007874	0.5	0.031008	91908	2850	0.5	361934	4375621	47.608
5-9	545	1	0.001835	0.5	0.009132	89059	813	0.5	443260	4013687	45.068
10-14	484	2	0.004132	0.5	0.020450	88245	1805	0.5	436715	3570427	40.460
15-19	483	4	0.008282	0.5	0.040568	86441	3507	0.5	423436	3133712	36.253
20-24	354	5	0.014124	0.5	0.068213	82934	5657	0.5	400527	2710276	32.680
25-29	276	4	0.014493	0.5	0.069930	77277	5404	0.5	372874	2309749	29.889
30-34	221	2	0.009050	0.5	0.044248	71873	3180	0.5	351413	1936875	26.949
35-39	163	3	0.018405	0.5	0.087977	68693	6043	0.5	328355	1585462	23.081
40-44	147	3	0.020408	0.5	0.097087	62649	6082	0.5	298040	1257107	20.066
45-49	102	3	0.029412	0.5	0.136986	56567	7749	0.5	263462	959067	16.955
50-54	74	4	0.054054	0.5	0.238095	48818	11623	0.5	215031	695605	14.249
55-59	76	2	0.026316	0.5	0.123457	37195	4592	0.5	174493	480574	12.921
60-64	58	4	0.068966	0.5	0.294118	32603	9589	0.5	139041	306081	9.388
65-69	44	6	0.136364	0.5	0.508475	23014	11702	0.5	85814	167040	7.258
70-74	53	4	0.075472	0.5	0.317460	11312	3591	0.5	47581	81226	7.181
75-79	31	6	0.193548	0.5	0.652174	7721	5035	0.5	26016	33645	4.358
80-84	18	6	0.333333	0.5	0.909091	2685	2441	0.5	7324	7629	2.841
85+	10	8	0.800000	1	3.729384	244	244	1	305	305	1.250

Life Table: **North Female** 1980 Adjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	97	7	0.072165	0.07	0.067626	100000	6763	0.07	93711	4374306	43.743
1-4	391	3	0.007673	0.5	0.030227	93237	2818	0.5	367313	4280595	45.911
5-9	516	1	0.001938	0.5	0.009643	90419	872	0.5	449916	3913282	43.279
10-14	516	2	0.003876	0.5	0.019194	89547	1719	0.5	443439	3463366	38.676
15-19	427	4	0.009368	0.5	0.045767	87828	4020	0.5	429093	3019927	34.384
20-24	323	5	0.015480	0.5	0.074516	83809	6245	0.5	403431	2590834	30.914
25-29	234	4	0.017094	0.5	0.081967	77564	6358	0.5	371925	2187403	28.201
30-34	186	2	0.010753	0.5	0.052356	71206	3728	0.5	346710	1815478	25.496
35-39	136	3	0.022059	0.5	0.104530	67478	7053	0.5	319756	1468768	21.767
40-44	120	3	0.025000	0.5	0.117647	60425	7109	0.5	284351	1149012	19.016
45-49	95	3	0.031579	0.5	0.146341	53316	7802	0.5	247073	864661	16.218
50-54	67	4	0.059701	0.5	0.259740	45513	11822	0.5	198013	617588	13.569
55-59	67	2	0.029851	0.5	0.138889	33692	4679	0.5	156760	419574	12.453
60-64	60	4	0.066667	0.5	0.285714	29012	8289	0.5	124339	262814	9.059
65-69	45	6	0.133333	0.5	0.500000	20723	10362	0.5	77712	138475	6.682
70-74	40	4	0.100000	0.5	0.400000	10362	4145	0.5	41446	60764	5.864
75-79	19	6	0.315789	0.5	0.882353	6217	5486	0.5	17371	19317	3.107
80-84	16	6	0.375000	0.5	0.967742	731	708	0.5	1887	1946	2.661
85+	20	8	0.400000	1	4.184252	24	24	1	59	59	2.500

Life Table: **North Female** 1980 Unadjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	72	7	0.097222	0.07	0.089161	100000	8916	0.07	91708	4266527	42.665
1-4	368	3	0.008152	0.5	0.032086	91084	2922	0.5	358491	4174819	45.835
5-9	509	1	0.001965	0.5	0.009775	88161	862	0.5	438653	3816328	43.288
10-14	515	2	0.003883	0.5	0.019231	87300	1679	0.5	432301	3377676	38.691
15-19	427	4	0.009368	0.5	0.045767	85621	3919	0.5	418308	2945374	34.400
20-24	320	5	0.015625	0.5	0.075188	81702	6143	0.5	393154	2527067	30.930
25-29	236	4	0.016949	0.5	0.081301	75559	6143	0.5	362439	2133913	28.242
30-34	186	2	0.010753	0.5	0.052356	69416	3634	0.5	337995	1771474	25.520
35-39	136	3	0.022059	0.5	0.104530	65782	6876	0.5	311719	1433479	21.791
40-44	120	3	0.025000	0.5	0.117647	58906	6930	0.5	277203	1121760	19.043
45-49	95	3	0.031579	0.5	0.146341	51976	7606	0.5	240863	844557	16.249
50-54	68	4	0.058824	0.5	0.256410	44369	11377	0.5	193405	603695	13.606
55-59	67	2	0.029851	0.5	0.138889	32993	4582	0.5	153507	410289	12.436
60-64	60	4	0.066667	0.5	0.285714	28410	8117	0.5	121759	256782	9.038
65-69	45	6	0.133333	0.5	0.500000	20293	10147	0.5	76099	135023	6.654
70-74	39	4	0.102564	0.5	0.408163	10147	4141	0.5	40379	58924	5.807
75-79	19	6	0.315789	0.5	0.882353	6005	5299	0.5	16779	18545	3.088
80-84	15	6	0.400000	0.5	1.000000	706	706	0.5	1766	1766	2.500
85+	19	8	0.421053	1	4.244911	0	0	1	0	0	0.000

Life Table: **North Female** 1981 Adjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	96	7	0.072917	0.07	0.068286	100000	6829	0.07	93649	4441367	44.414
1-4	394	3	0.007614	0.5	0.030000	93171	2795	0.5	367095	4347718	46.664
5-9	501	1	0.001996	0.5	0.009930	90376	897	0.5	449638	3980622	44.045
10-14	533	2	0.003752	0.5	0.018587	89479	1663	0.5	443236	3530985	39.462
15-19	433	4	0.009238	0.5	0.045147	87816	3965	0.5	429167	3087749	35.162
20-24	352	5	0.014205	0.5	0.068587	83851	5751	0.5	404877	2658582	31.706
25-29	246	4	0.016260	0.5	0.078125	78100	6102	0.5	375246	2253705	28.857
30-34	194	2	0.010309	0.5	0.050251	71998	3618	0.5	350947	1878459	26.090
35-39	142	3	0.021127	0.5	0.100334	68380	6861	0.5	324749	1527512	22.338
40-44	126	3	0.023810	0.5	0.112360	61519	6912	0.5	290316	1202763	19.551
45-49	96	3	0.031250	0.5	0.144928	54607	7914	0.5	253251	912446	16.709
50-54	74	4	0.054054	0.5	0.238095	46693	11117	0.5	205672	659196	14.118
55-59	62	2	0.032258	0.5	0.149254	35576	5310	0.5	164604	453524	12.748
60-64	62	4	0.064516	0.5	0.277778	30266	8407	0.5	130311	288920	9.546
65-69	52	6	0.115385	0.5	0.447761	21859	9787	0.5	84825	158609	7.256
70-74	44	4	0.090909	0.5	0.370370	12071	4471	0.5	49179	73784	6.112
75-79	20	6	0.300000	0.5	0.857143	7600	6515	0.5	21715	24605	3.237
80-84	16	6	0.375000	0.5	0.967742	1086	1051	0.5	2802	2890	2.661
85+	20	8	0.400000	1	4.034679	35	35	1	88	88	2.500

Life Table: **North Female** 1981 Unadjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	75	7	0.093333	0.07	0.085879	100000	8588	0.07	92013	4356281	43.563
1-4	384	3	0.007813	0.5	0.030769	91412	2813	0.5	360023	4264268	46.649
5-9	494	1	0.002024	0.5	0.010070	88599	892	0.5	440766	3904245	44.066
10-14	531	2	0.003766	0.5	0.018657	87707	1636	0.5	434445	3463478	39.489
15-19	431	4	0.009281	0.5	0.045351	86071	3903	0.5	420596	3029033	35.192
20-24	349	5	0.014327	0.5	0.069156	82167	5682	0.5	396631	2608438	31.745
25-29	251	4	0.015936	0.5	0.076628	76485	5861	0.5	367773	2211806	28.918
30-34	196	2	0.010204	0.5	0.049751	70624	3514	0.5	344336	1844034	26.111
35-39	142	3	0.021127	0.5	0.100334	67110	6733	0.5	318719	1499697	22.347
40-44	126	3	0.023810	0.5	0.112360	60377	6784	0.5	284925	1180979	19.560
45-49	96	3	0.031250	0.5	0.144928	53593	7767	0.5	248547	896054	16.720
50-54	75	4	0.053333	0.5	0.235294	45826	10783	0.5	202173	647506	14.130
55-59	61	2	0.032787	0.5	0.151515	35043	5310	0.5	161943	445333	12.708
60-64	62	4	0.064516	0.5	0.277778	29734	8259	0.5	128020	283390	9.531
65-69	53	6	0.113208	0.5	0.441176	21474	9474	0.5	83687	155370	7.235
70-74	41	4	0.097561	0.5	0.392157	12000	4706	0.5	48237	71683	5.973
75-79	20	6	0.300000	0.5	0.857143	7294	6252	0.5	20841	23446	3.214
80-84	15	6	0.400000	0.5	1.000000	1042	1042	0.5	2605	2605	2.500
85+	20	8	0.400000	1	4.098948	0	0	1	0	0	0.000

Life Table: **North Female** 1982 Adjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	88	7	0.079545	0.07	0.074066	100000	7407	0.07	93112	4478727	44.787
1-4	396	3	0.007576	0.5	0.029851	92593	2764	0.5	364846	4385615	47.364
5-9	488	1	0.002049	0.5	0.010194	89829	916	0.5	446858	4020770	44.760
10-14	534	2	0.003745	0.5	0.018553	88914	1650	0.5	440445	3573912	40.195
15-19	453	4	0.008830	0.5	0.043197	87264	3770	0.5	426897	3133467	35.908
20-24	369	5	0.013550	0.5	0.065531	83495	5471	0.5	403794	2706571	32.416
25-29	267	4	0.014981	0.5	0.072202	78023	5633	0.5	376032	2302776	29.514
30-34	199	2	0.010050	0.5	0.049020	72390	3549	0.5	353077	1926744	26.616
35-39	154	3	0.019481	0.5	0.092879	68841	6394	0.5	328221	1573667	22.859
40-44	127	3	0.023622	0.5	0.111524	62447	6964	0.5	294825	1245446	19.944
45-49	99	3	0.030303	0.5	0.140845	55483	7814	0.5	257878	950621	17.134
50-54	82	4	0.048780	0.5	0.217391	47668	10363	0.5	212435	692743	14.533
55-59	63	2	0.031746	0.5	0.147059	37306	5486	0.5	172813	480307	12.875
60-64	59	4	0.067797	0.5	0.289855	31820	9223	0.5	136040	307494	9.664
65-69	57	6	0.105263	0.5	0.416667	22597	9415	0.5	89444	171454	7.588
70-74	43	4	0.093023	0.5	0.377358	13181	4974	0.5	53471	82010	6.222
75-79	22	6	0.272727	0.5	0.810811	8207	6655	0.5	24400	28538	3.477
80-84	16	6	0.375000	0.5	0.967742	1553	1503	0.5	4007	4138	2.665
85+	21	8	0.380952	1	3.934744	50	50	1	131	131	2.625

Life Table: **North Female** 1982 Unadjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	70	7	0.100000	0.07	0.091491	100000	9149	0.07	91491	4393688	43.937
1-4	392	3	0.007653	0.5	0.030151	90851	2739	0.5	357925	4302197	47.354
5-9	484	1	0.002066	0.5	0.010277	88112	906	0.5	438294	3944272	44.764
10-14	532	2	0.003759	0.5	0.018622	87206	1624	0.5	431971	3505977	40.203
15-19	451	4	0.008869	0.5	0.043384	85582	3713	0.5	418628	3074007	35.919
20-24	366	5	0.013661	0.5	0.066050	81869	5407	0.5	395828	2655378	32.434
25-29	271	4	0.014760	0.5	0.071174	76462	5442	0.5	368704	2259551	29.551
30-34	203	2	0.009852	0.5	0.048077	71020	3414	0.5	346562	1890847	26.624
35-39	156	3	0.019231	0.5	0.091743	67605	6202	0.5	322520	1544285	22.843
40-44	127	3	0.023622	0.5	0.111524	61403	6848	0.5	289895	1221765	19.898
45-49	98	3	0.030612	0.5	0.142180	54555	7757	0.5	253383	931870	17.081
50-54	83	4	0.048193	0.5	0.215054	46798	10064	0.5	208831	678486	14.498
55-59	62	2	0.032258	0.5	0.149254	36734	5483	0.5	169964	469655	12.785
60-64	58	4	0.068966	0.5	0.294118	31251	9192	0.5	133278	299691	9.590
65-69	58	6	0.103448	0.5	0.410959	22060	9066	0.5	87635	166412	7.544
70-74	41	4	0.097561	0.5	0.392157	12994	5096	0.5	52231	78777	6.063
75-79	21	6	0.285714	0.5	0.833333	7898	6582	0.5	23037	26546	3.361
80-84	16	6	0.375000	0.5	0.967742	1316	1274	0.5	3397	3509	2.665
85+	21	8	0.380952	1	3.987291	42	42	1	111	111	2.625

Life Table: **South** 1980 Adjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	210	7	0.033333	0.07	0.032331	100000	3233	0.07	96993	5777401	57.774
1-4	798	3	0.003759	0.5	0.014925	96767	1444	0.5	384179	5680408	58.702
5-9	1017	1	0.000983	0.5	0.004904	95323	467	0.5	475444	5296229	55.561
10-14	1106	2	0.001808	0.5	0.009001	94855	854	0.5	472141	4820785	50.823
15-19	1050	4	0.003810	0.5	0.018868	94001	1774	0.5	465573	4348643	46.262
20-24	735	5	0.006803	0.5	0.033445	92228	3085	0.5	453427	3883071	42.103
25-29	566	4	0.007067	0.5	0.034722	89143	3095	0.5	437978	3429644	38.473
30-34	433	2	0.004619	0.5	0.022831	86048	1965	0.5	425328	2991666	34.767
35-39	354	3	0.008475	0.5	0.041494	84083	3489	0.5	411695	2566337	30.521
40-44	268	3	0.011194	0.5	0.054446	80594	4388	0.5	392002	2154643	26.734
45-49	230	3	0.013043	0.5	0.063158	76206	4813	0.5	368999	1762641	23.130
50-54	180	4	0.022222	0.5	0.105263	71393	7515	0.5	338179	1393642	19.521
55-59	138	2	0.014493	0.5	0.069930	63878	4467	0.5	308224	1055463	16.523
60-64	100	4	0.040000	0.5	0.181818	59411	10802	0.5	270051	747239	12.577
65-69	72	6	0.083333	0.5	0.344828	48609	16762	0.5	201141	477188	9.817
70-74	74	4	0.054054	0.5	0.238095	31847	7583	0.5	140280	276047	8.668
75-79	41	6	0.146341	0.5	0.535714	24265	12999	0.5	88826	135767	5.595
80-84	30	6	0.200000	0.5	0.666667	11266	7510	0.5	37552	46941	4.167
85+	20	8	0.400000	1	2.472441	3755	3755	1	9388	9388	2.500

Life Table: **South** 1980 Unadjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	139	7	0.050360	0.07	0.048107	100000	4811	0.07	95526	5672347	56.723
1-4	753	3	0.003984	0.5	0.015810	95189	1505	0.5	377747	5576821	58.587
5-9	1004	1	0.000996	0.5	0.004968	93684	465	0.5	467258	5199073	55.496
10-14	1108	2	0.001805	0.5	0.008985	93219	838	0.5	464001	4731815	50.760
15-19	1051	4	0.003806	0.5	0.018850	92381	1741	0.5	457554	4267814	46.198
20-24	738	5	0.006775	0.5	0.033311	90640	3019	0.5	445652	3810260	42.037
25-29	568	4	0.007042	0.5	0.034602	87621	3032	0.5	430524	3364608	38.400
30-34	432	2	0.004630	0.5	0.022883	84589	1936	0.5	418105	2934085	34.686
35-39	353	3	0.008499	0.5	0.041609	82653	3439	0.5	404668	2515980	30.440
40-44	268	3	0.011194	0.5	0.054446	79214	4313	0.5	385288	2111312	26.653
45-49	230	3	0.013043	0.5	0.063158	74901	4731	0.5	362679	1726024	23.044
50-54	179	4	0.022346	0.5	0.105820	70171	7425	0.5	332289	1363344	19.429
55-59	138	2	0.014493	0.5	0.069930	62745	4388	0.5	302756	1031055	16.432
60-64	100	4	0.040000	0.5	0.181818	58357	10610	0.5	265261	728299	12.480
65-69	69	6	0.086957	0.5	0.357143	47747	17052	0.5	196103	463039	9.698
70-74	75	4	0.053333	0.5	0.235294	30694	7222	0.5	135417	266935	8.697
75-79	42	6	0.142857	0.5	0.526316	23472	12354	0.5	86477	131519	5.603
80-84	29	6	0.206897	0.5	0.681818	11118	7581	0.5	36640	45042	4.051
85+	19	8	0.421053	1	2.504869	3538	3538	1	8402	8402	2.375

Life Table: **South** 1981 Adjusted

Age	n_i	d_i	r_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	205	7	0.034146	0.07	0.033095	100000	3310	0.07	96922	5820268	58.203
1-4	811	3	0.003699	0.5	0.014688	96690	1420	0.5	383921	5723346	59.192
5-9	993	1	0.001007	0.5	0.005023	95270	479	0.5	475155	5339425	56.045
10-14	1092	2	0.001832	0.5	0.009116	94792	864	0.5	471799	4864270	51.315
15-19	1085	4	0.003687	0.5	0.018265	93928	1716	0.5	465349	4392471	46.764
20-24	805	5	0.006211	0.5	0.030581	92212	2820	0.5	454011	3927121	42.588
25-29	585	4	0.006838	0.5	0.033613	89392	3005	0.5	439449	3473111	38.853
30-34	462	2	0.004329	0.5	0.021413	86387	1850	0.5	427312	3033662	35.117
35-39	375	3	0.008000	0.5	0.039216	84538	3315	0.5	414400	2606350	30.831
40-44	281	3	0.010676	0.5	0.051993	81222	4223	0.5	395554	2191950	26.987
45-49	237	3	0.012658	0.5	0.061350	76999	4724	0.5	373187	1796396	23.330
50-54	181	4	0.022099	0.5	0.104712	72275	7568	0.5	342457	1423209	19.691
55-59	150	2	0.013333	0.5	0.064516	64707	4175	0.5	313100	1080752	16.702
60-64	106	4	0.037736	0.5	0.172414	60533	10437	0.5	276572	767651	12.682
65-69	71	6	0.084507	0.5	0.348837	50096	17475	0.5	206792	491080	9.803
70-74	74	4	0.054054	0.5	0.238095	32621	7767	0.5	143686	284288	8.715
75-79	41	6	0.146341	0.5	0.535714	24854	13315	0.5	90983	140602	5.657
80-84	35	6	0.171429	0.5	0.600000	11539	6924	0.5	40387	49619	4.300
85+	16	8	0.500000	1	2.382641	4616	4616	1	9231	9231	2.000

Life Table: **South** 1981 Unadjusted

Age	n_i	d_i	r_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	148	7	0.047297	0.07	0.045305	100000	4530	0.07	95787	5735349	57.353
1-4	781	3	0.003841	0.5	0.015248	95470	1456	0.5	378967	5639563	59.072
5-9	986	1	0.001014	0.5	0.005058	94014	476	0.5	468880	5260596	55.956
10-14	1098	2	0.001821	0.5	0.009066	93538	848	0.5	465571	4791716	51.227
15-19	1093	4	0.003660	0.5	0.018132	92690	1681	0.5	459250	4326144	46.673
20-24	809	5	0.006180	0.5	0.030432	91010	2770	0.5	448124	3866894	42.489
25-29	595	4	0.006723	0.5	0.033058	88240	2917	0.5	433907	3418771	38.744
30-34	446	2	0.004484	0.5	0.022173	85323	1892	0.5	421885	2984863	34.983
35-39	373	3	0.008043	0.5	0.039422	83431	3289	0.5	408933	2562978	30.720
40-44	280	3	0.010714	0.5	0.052174	80142	4181	0.5	390257	2154045	26.878
45-49	236	3	0.012712	0.5	0.061602	75961	4679	0.5	368105	1763788	23.220
50-54	180	4	0.022222	0.5	0.105263	71281	7503	0.5	337649	1395683	19.580
55-59	148	2	0.013514	0.5	0.065359	63778	4169	0.5	308469	1058034	16.589
60-64	104	4	0.038462	0.5	0.175439	59610	10458	0.5	271904	749564	12.575
65-69	68	6	0.088235	0.5	0.361446	49152	17766	0.5	201345	477661	9.718
70-74	74	4	0.054054	0.5	0.238095	31386	7473	0.5	138248	276316	8.804
75-79	43	6	0.139535	0.5	0.517241	23913	12369	0.5	88644	138068	5.774
80-84	33	6	0.181818	0.5	0.625000	11544	7215	0.5	39684	49424	4.281
85+	18	8	0.444444	1	2.419513	4329	4329	1	9741	9741	2.250

Life Table: **South** 1982 Adjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	207	7	0.033816	0.07	0.032785	100000	3279	0.07	96951	5874518	58.745
1-4	809	3	0.003708	0.5	0.014724	96721	1424	0.5	384038	5777567	59.734
5-9	974	1	0.001027	0.5	0.005120	95297	488	0.5	475267	5393530	56.597
10-14	1088	2	0.001838	0.5	0.009149	94809	867	0.5	471878	4918263	51.875
15-19	1110	4	0.003604	0.5	0.017857	93942	1678	0.5	465516	4446384	47.331
20-24	862	5	0.005800	0.5	0.028588	92264	2638	0.5	454728	3980868	43.146
25-29	611	4	0.006547	0.5	0.032206	89627	2887	0.5	440918	3526140	39.342
30-34	482	2	0.004149	0.5	0.020534	86740	1781	0.5	429249	3085223	35.569
35-39	405	3	0.007407	0.5	0.036364	84959	3089	0.5	417072	2655974	31.262
40-44	298	3	0.010067	0.5	0.049100	81870	4020	0.5	399299	2238902	27.347
45-49	232	3	0.012931	0.5	0.062630	77850	4876	0.5	377060	1839603	23.630
50-54	197	4	0.020305	0.5	0.096618	72974	7051	0.5	347244	1462543	20.042
55-59	154	2	0.012987	0.5	0.062893	65924	4146	0.5	319252	1115298	16.918
60-64	116	4	0.034483	0.5	0.158730	61777	9806	0.5	284372	796046	12.886
65-69	71	6	0.084507	0.5	0.348837	51971	18130	0.5	214533	511674	9.845
70-74	67	4	0.059701	0.5	0.259740	33842	8790	0.5	147234	297141	8.780
75-79	47	6	0.127660	0.5	0.483871	25052	12122	0.5	94954	149907	5.984
80-84	36	6	0.166667	0.5	0.588235	12930	7606	0.5	45635	54952	4.250
85+	14	8	0.571429	1	2.307983	5324	5324	1	9317	9317	1.750

Life Table: **South** 1982 Unadjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	149	7	0.046980	0.07	0.045013	100000	4501	0.07	95814	5794145	57.941
1-4	785	3	0.003822	0.5	0.015171	95499	1449	0.5	379097	5698331	59.669
5-9	969	1	0.001032	0.5	0.005147	94050	484	0.5	469039	5319234	56.558
10-14	1094	2	0.001828	0.5	0.009099	93566	851	0.5	465701	4850194	51.837
15-19	1123	4	0.003562	0.5	0.017652	92714	1637	0.5	459481	4384494	47.290
20-24	869	5	0.005754	0.5	0.028361	91078	2583	0.5	448932	3925013	43.095
25-29	624	4	0.006410	0.5	0.031546	88495	2792	0.5	435495	3476081	39.280
30-34	470	2	0.004255	0.5	0.021053	85703	1804	0.5	424005	3040586	35.478
35-39	389	3	0.007712	0.5	0.037831	83899	3174	0.5	411560	2616581	31.187
40-44	296	3	0.010135	0.5	0.049423	80725	3990	0.5	393650	2205021	27.315
45-49	233	3	0.012876	0.5	0.062370	76735	4786	0.5	371711	1811370	23.605
50-54	195	4	0.020513	0.5	0.097561	71949	7019	0.5	342198	1439659	20.009
55-59	153	2	0.013072	0.5	0.063291	64930	4109	0.5	314375	1097462	16.902
60-64	110	4	0.036364	0.5	0.166667	60820	10137	0.5	278760	783086	12.875
65-69	73	6	0.082192	0.5	0.340909	50684	17279	0.5	210222	504326	9.950
70-74	64	4	0.062500	0.5	0.270270	33405	9028	0.5	144455	294105	8.804
75-79	49	6	0.122449	0.5	0.468750	24377	11427	0.5	93317	149650	6.139
80-84	35	6	0.171429	0.5	0.600000	12950	7770	0.5	45325	56333	4.350
85+	17	8	0.470588	1	2.330114	5180	5180	1	11008	11008	2.125

Life Table: **South Male** 1980 Adjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	112	7	0.0625	0.07	0.059066745	100000	5907	0.07	94507	4693838	46.938
1-4	419	3	0.007159905	0.5	0.028235	94093	2657	0.5	371060	4599332	48.881
5-9	512	1	0.001953125	0.5	0.009718	91437	889	0.5	454961	4228272	46.243
10-14	572	2	0.003496503	0.5	0.017331	90548	1569	0.5	448817	3773311	41.672
15-19	553	4	0.007233273	0.5	0.035524	88979	3161	0.5	436991	3324494	37.363
20-24	393	5	0.012722646	0.5	0.061652	85818	5291	0.5	415862	2887503	33.647
25-29	281	4	0.014234875	0.5	0.068729	80527	5534	0.5	388798	2471641	30.693
30-34	220	2	0.009090909	0.5	0.044444	74992	3333	0.5	366630	2082842	27.774
35-39	178	3	0.016853933	0.5	0.080863	71659	5795	0.5	343811	1716212	23.950
40-44	151	3	0.01986755	0.5	0.094637	65865	6233	0.5	313741	1372402	20.837
45-49	130	3	0.023076923	0.5	0.109091	59632	6505	0.5	281895	1058660	17.753
50-54	94	4	0.042553191	0.5	0.192308	53126	10217	0.5	240090	776765	14.621
55-59	73	2	0.02739726	0.5	0.128205	42910	5501	0.5	200796	536675	12.507
60-64	59	4	0.06779661	0.5	0.289855	37408	10843	0.5	159935	335880	8.979
65-69	42	6	0.142857143	0.5	0.526316	26565	13982	0.5	97873	175945	6.623
70-74	41	4	0.097560976	0.5	0.392157	12584	4935	0.5	50581	78072	6.204
75-79	24	6	0.25	0.5	0.769231	7649	5884	0.5	23535	27491	3.594
80-84	13	6	0.461538462	0.5	1.071429	1765	1891	0.5	4098	3956	2.241
85+	9	8	0.888888889	1	3.978791014	-126	-126	1	-142	-142	1.125

Life Table: **South Male** 1980 Unadjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	78	7	0.08974359	0.07	0.082830	100000	8283	0.07	92297	4564338	45.643
1-4	399	3	0.007518797	0.5	0.029630	91717	2718	0.5	361433	4472041	48.759
5-9	508	1	0.001968504	0.5	0.009794	88999	872	0.5	442818	4110608	46.187
10-14	572	2	0.003496503	0.5	0.017331	88128	1527	0.5	436820	3667790	41.619
15-19	555	4	0.007207207	0.5	0.035398	86600	3066	0.5	425338	3230970	37.309
20-24	394	5	0.012690355	0.5	0.061501	83535	5137	0.5	404831	2805632	33.586
25-29	283	4	0.014134276	0.5	0.068259	78397	5351	0.5	378609	2400801	30.623
30-34	220	2	0.009090909	0.5	0.044444	73046	3246	0.5	357114	2022192	27.684
35-39	178	3	0.016853933	0.5	0.080863	69800	5644	0.5	334887	1665078	23.855
40-44	152	3	0.019736842	0.5	0.094044	64155	6033	0.5	305694	1330191	20.734
45-49	130	3	0.023076923	0.5	0.109091	58122	6341	0.5	274758	1024497	17.627
50-54	94	4	0.042553191	0.5	0.192308	51781	9958	0.5	234012	749739	14.479
55-59	72	2	0.027777778	0.5	0.129870	41823	5432	0.5	195538	515726	12.331
60-64	59	4	0.06779661	0.5	0.289855	36392	10548	0.5	155588	320188	8.798
65-69	39	6	0.153846154	0.5	0.555556	25843	14357	0.5	93324	164600	6.369
70-74	41	4	0.097560976	0.5	0.392157	11486	4504	0.5	46169	71276	6.206
75-79	24	6	0.25	0.5	0.769231	6982	5371	0.5	21482	25107	3.596
80-84	13	6	0.461538462	0.5	1.071429	1611	1726	0.5	3740	3625	2.250
85+	8	8	1	1	4.033590064	-115	-115	1	-115	-115	1.000

Life Table: **South Female** 1980 Adjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	98	7	0.071429	0.07	0.066979	100000	6698	0.07	93771	4458099	44.581
1-4	379	3	0.007916	0.5	0.031169	93302	2908	0.5	367392	4364328	46.776
5-9	506	1	0.001976	0.5	0.009833	90394	889	0.5	449748	3996936	44.217
10-14	535	2	0.003738	0.5	0.018519	89505	1658	0.5	443382	3547188	39.631
15-19	497	4	0.008048	0.5	0.039448	87848	3465	0.5	430575	3103806	35.332
20-24	342	5	0.014620	0.5	0.070522	84382	5951	0.5	407034	2673231	31.680
25-29	285	4	0.014035	0.5	0.067797	78431	5317	0.5	378864	2266197	28.894
30-34	213	2	0.009390	0.5	0.045872	73114	3354	0.5	357186	1887333	25.814
35-39	176	3	0.017045	0.5	0.081744	69760	5702	0.5	334545	1530148	21.934
40-44	117	3	0.025641	0.5	0.120482	64058	7718	0.5	300994	1195603	18.664
45-49	100	3	0.030000	0.5	0.139535	56340	7861	0.5	262046	894609	15.879
50-54	86	4	0.046512	0.5	0.208333	48479	10100	0.5	217144	632562	13.048
55-59	65	2	0.030769	0.5	0.142857	38379	5483	0.5	178188	415419	10.824
60-64	41	4	0.097561	0.5	0.392157	32896	12900	0.5	132230	237231	7.212
65-69	31	6	0.193548	0.5	0.652174	19996	13041	0.5	67377	105002	5.251
70-74	34	4	0.117647	0.5	0.454545	6955	3161	0.5	26872	37625	5.410
75-79	17	6	0.352941	0.5	0.937500	3794	3557	0.5	10077	10753	2.835
80-84	18	6	0.333333	0.5	0.909091	237	216	0.5	647	676	2.852
85+	11	8	0.727273	1	4.388555	22	22	1	30	30	1.375

Life Table: **South Female** 1980 Unadjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	61	7	0.114754	0.07	0.103688	100000	10369	0.07	90357	4272405	42.724
1-4	354	3	0.008475	0.5	0.033333	89631	2988	0.5	352549	4182048	46.658
5-9	496	1	0.002016	0.5	0.010030	86643	869	0.5	431045	3829499	44.198
10-14	536	2	0.003731	0.5	0.018484	85774	1585	0.5	424908	3398454	39.621
15-19	496	4	0.008065	0.5	0.039526	84189	3328	0.5	412626	2973546	35.320
20-24	344	5	0.014535	0.5	0.070126	80861	5670	0.5	390130	2560920	31.671
25-29	286	4	0.013986	0.5	0.067568	75191	5080	0.5	363253	2170790	28.870
30-34	212	2	0.009434	0.5	0.046083	70110	3231	0.5	342475	1807537	25.781
35-39	175	3	0.017143	0.5	0.082192	66879	5497	0.5	320655	1465063	21.906
40-44	116	3	0.025862	0.5	0.121457	61383	7455	0.5	288274	1144408	18.644
45-49	100	3	0.030000	0.5	0.139535	53927	7525	0.5	250824	856133	15.876
50-54	85	4	0.047059	0.5	0.210526	46402	9769	0.5	207590	605309	13.045
55-59	66	2	0.030303	0.5	0.140845	36634	5160	0.5	170268	397720	10.857
60-64	41	4	0.097561	0.5	0.392157	31474	12343	0.5	126513	227451	7.227
65-69	31	6	0.193548	0.5	0.652174	19131	12477	0.5	64464	100939	5.276
70-74	34	4	0.117647	0.5	0.454545	6654	3025	0.5	25710	36475	5.481
75-79	18	6	0.333333	0.5	0.909091	3630	3300	0.5	9899	10765	2.966
80-84	16	6	0.375000	0.5	0.967742	330	319	0.5	852	866	2.625
85+	11	8	0.727273	1	4.459103	11	11	1	15	15	1.375

Life Table: **South Female** 1981 Adjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	96	7	0.072917	0.07	0.068286	100000	6829	0.07	93649	4508715	45.087
1-4	384	3	0.007813	0.5	0.030769	93171	2867	0.5	366952	4415066	47.386
5-9	483	1	0.002070	0.5	0.010299	90305	930	0.5	449198	4048114	44.827
10-14	539	2	0.003711	0.5	0.018382	89375	1643	0.5	442766	3598916	40.268
15-19	513	4	0.007797	0.5	0.038241	87732	3355	0.5	430271	3156150	35.975
20-24	375	5	0.013333	0.5	0.064516	84377	5444	0.5	408274	2725879	32.306
25-29	294	4	0.013605	0.5	0.065789	78933	5193	0.5	381683	2317605	29.362
30-34	237	2	0.008439	0.5	0.041322	73740	3047	0.5	361083	1935922	26.253
35-39	185	3	0.016216	0.5	0.077922	70693	5509	0.5	339694	1574839	22.277
40-44	126	3	0.023810	0.5	0.112360	65184	7324	0.5	307612	1235146	18.948
45-49	103	3	0.029126	0.5	0.135747	57860	7854	0.5	269666	927534	16.031
50-54	82	4	0.048780	0.5	0.217391	50006	10871	0.5	222853	657868	13.156
55-59	72	2	0.027778	0.5	0.129870	39135	5082	0.5	182969	435015	11.116
60-64	45	4	0.088889	0.5	0.363636	34053	12383	0.5	139306	252046	7.402
65-69	31	6	0.193548	0.5	0.652174	21670	14133	0.5	73018	112739	5.203
70-74	33	4	0.121212	0.5	0.465116	7537	3506	0.5	28922	39721	5.270
75-79	16	6	0.375000	0.5	0.967742	4032	3902	0.5	10404	10799	2.679
80-84	20	6	0.300000	0.5	0.857143	130	111	0.5	372	395	3.036
85+	10	8	0.800000	1	4.316706	19	19	1	23	23	1.250

Life Table: **South Female** 1981 Unadjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	69	7	0.101449	0.07	0.092703	100000	9270	0.07	91379	4384505	43.845
1-4	366	3	0.008197	0.5	0.032258	90730	2927	0.5	357065	4293126	47.318
5-9	480	1	0.002083	0.5	0.010363	87803	910	0.5	436740	3936061	44.828
10-14	542	2	0.003690	0.5	0.018282	86893	1589	0.5	430494	3499321	40.272
15-19	518	4	0.007722	0.5	0.037879	85305	3231	0.5	418445	3068827	35.975
20-24	377	5	0.013263	0.5	0.064185	82073	5268	0.5	397197	2650383	32.293
25-29	301	4	0.013289	0.5	0.064309	76805	4939	0.5	371679	2253186	29.336
30-34	220	2	0.009091	0.5	0.044444	71866	3194	0.5	351346	1881507	26.181
35-39	184	3	0.016304	0.5	0.078329	68672	5379	0.5	329913	1530161	22.282
40-44	125	3	0.024000	0.5	0.113208	63293	7165	0.5	298552	1200248	18.963
45-49	103	3	0.029126	0.5	0.135747	56128	7619	0.5	261591	901695	16.065
50-54	81	4	0.049383	0.5	0.219780	48509	10661	0.5	215890	640104	13.196
55-59	72	2	0.027778	0.5	0.129870	37847	4915	0.5	176949	424214	11.209
60-64	45	4	0.088889	0.5	0.363636	32932	11975	0.5	134723	247265	7.508
65-69	32	6	0.187500	0.5	0.638298	20957	13377	0.5	71342	112542	5.370
70-74	33	4	0.121212	0.5	0.465116	7580	3526	0.5	29087	41200	5.435
75-79	18	6	0.333333	0.5	0.909091	4054	3686	0.5	11058	12113	2.988
80-84	18	6	0.333333	0.5	0.909091	369	335	0.5	1005	1056	2.864
85+	12	8	0.666667	1	4.326588	34	34	1	50	50	1.500

Life Table: **South Female 1982 Adjusted**

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	101	7	0.069307	0.07	0.065110	100000	6511	0.07	93945	4595614	45.956
1-4	381	3	0.007874	0.5	0.031008	93489	2899	0.5	368158	4501669	48.152
5-9	466	1	0.002146	0.5	0.010672	90590	967	0.5	450533	4133511	45.629
10-14	546	2	0.003663	0.5	0.018149	89623	1627	0.5	444050	3682978	41.094
15-19	523	4	0.007648	0.5	0.037523	87997	3302	0.5	431729	3238928	36.807
20-24	411	5	0.012165	0.5	0.059032	84695	5000	0.5	410975	2807199	33.145
25-29	306	4	0.013072	0.5	0.063291	79695	5044	0.5	385865	2396224	30.067
30-34	245	2	0.008163	0.5	0.040000	74651	2986	0.5	365790	2010359	26.930
35-39	200	3	0.015000	0.5	0.072289	71665	5181	0.5	345374	1644568	22.948
40-44	142	3	0.021127	0.5	0.100334	66484	6671	0.5	315746	1299195	19.541
45-49	102	3	0.029412	0.5	0.136986	59814	8194	0.5	278585	983449	16.442
50-54	89	4	0.044944	0.5	0.202020	51620	10428	0.5	232030	704864	13.655
55-59	70	2	0.028571	0.5	0.133333	41192	5492	0.5	192228	472835	11.479
60-64	53	4	0.075472	0.5	0.317460	35700	11333	0.5	150165	280606	7.860
65-69	32	6	0.187500	0.5	0.638298	24366	15553	0.5	82949	130442	5.353
70-74	30	4	0.133333	0.5	0.500000	8813	4407	0.5	33050	47492	5.389
75-79	20	6	0.300000	0.5	0.857143	4407	3777	0.5	12591	14442	3.277
80-84	19	6	0.315789	0.5	0.882353	630	555	0.5	1759	1852	2.941
85+	10	8	0.800000	1	4.165003	74	74	1	93	93	1.250

Life Table: **South Female 1982 Unadjusted**

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	74	7	0.094595	0.07	0.086946	100000	8695	0.07	91914	4481101	44.811
1-4	367	3	0.008174	0.5	0.032172	91305	2937	0.5	359347	4389187	48.071
5-9	464	1	0.002155	0.5	0.010718	88368	947	0.5	439472	4029840	45.603
10-14	548	2	0.003650	0.5	0.018083	87421	1581	0.5	433152	3590368	41.070
15-19	532	4	0.007519	0.5	0.036900	85840	3168	0.5	421281	3157216	36.780
20-24	417	5	0.011990	0.5	0.058207	82672	4812	0.5	401332	2735934	33.094
25-29	315	4	0.012698	0.5	0.061538	77860	4791	0.5	377323	2334602	29.984
30-34	232	2	0.008621	0.5	0.042194	73069	3083	0.5	357637	1957279	26.787
35-39	184	3	0.016304	0.5	0.078329	69986	5482	0.5	336224	1599642	22.857
40-44	141	3	0.021277	0.5	0.101010	64504	6516	0.5	306231	1263418	19.587
45-49	103	3	0.029126	0.5	0.135747	57988	7872	0.5	270263	957187	16.507
50-54	88	4	0.045455	0.5	0.204082	50117	10228	0.5	225014	686924	13.707
55-59	69	2	0.028986	0.5	0.135135	39889	5390	0.5	185968	461911	11.580
60-64	52	4	0.076923	0.5	0.322581	34498	11129	0.5	144671	275943	7.999
65-69	35	6	0.171429	0.5	0.600000	23370	14022	0.5	81795	131272	5.617
70-74	29	4	0.137931	0.5	0.512821	9348	4794	0.5	34755	49477	5.293
75-79	20	6	0.300000	0.5	0.857143	4554	3904	0.5	13012	14722	3.233
80-84	16	6	0.375000	0.5	0.967742	651	630	0.5	1679	1710	2.629
85+	12	8	0.666667	1	4.261347	21	21	1	31	31	1.500

Life Table: **On-Reserve** 1980 Adjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	286	7	0.024476	0.07	0.023931	100000	2393	0.07	97774	6374368	63.744
1-4	1126	3	0.002664	0.5	0.010601	97607	1035	0.5	388358	6276593	64.305
5-9	1398	1	0.000715	0.5	0.003570	96572	345	0.5	481999	5888235	60.972
10-14	1408	2	0.001420	0.5	0.007077	96227	681	0.5	479435	5406236	56.182
15-19	1375	4	0.002909	0.5	0.014440	95546	1380	0.5	474283	4926801	51.564
20-24	1047	5	0.004776	0.5	0.023596	94167	2222	0.5	465279	4452518	47.283
25-29	707	4	0.005658	0.5	0.027894	91945	2565	0.5	453312	3987240	43.366
30-34	503	2	0.003976	0.5	0.019685	89380	1759	0.5	442502	3533928	39.538
35-39	407	3	0.007371	0.5	0.036188	87621	3171	0.5	430176	3091426	35.282
40-44	332	3	0.009036	0.5	0.044183	84450	3731	0.5	412921	2661250	31.513
45-49	294	3	0.010204	0.5	0.049751	80719	4016	0.5	393553	2248330	27.854
50-54	229	4	0.017467	0.5	0.083682	76703	6419	0.5	367467	1854777	24.181
55-59	214	2	0.009346	0.5	0.045662	70284	3209	0.5	343397	1487310	21.161
60-64	165	4	0.024242	0.5	0.114286	67075	7666	0.5	316209	1143913	17.054
65-69	140	6	0.042857	0.5	0.193548	59409	11499	0.5	268299	827703	13.932
70-74	137	4	0.029197	0.5	0.136054	47911	6518	0.5	223257	559404	11.676
75-79	71	6	0.084507	0.5	0.348837	41392	14439	0.5	170863	336148	8.121
80-84	53	6	0.113208	0.5	0.441176	26953	11891	0.5	105037	165285	6.132
85+	32	8	0.250000	1	1.624163	15062	15062	1	60248	60248	4.000

Life Table: **On-Reserve** 1980 Unadjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	202	7	0.034653	0.07	0.033572	100000	3357	0.07	96878	6306392	63.064
1-4	1102	3	0.002722	0.5	0.010830	96643	1047	0.5	384478	6209514	64.252
5-9	1381	1	0.000724	0.5	0.003614	95596	345	0.5	477117	5825036	60.934
10-14	1411	2	0.001417	0.5	0.007062	95251	673	0.5	474572	5347919	56.146
15-19	1382	4	0.002894	0.5	0.014368	94578	1359	0.5	469493	4873347	51.527
20-24	1037	5	0.004822	0.5	0.023821	93219	2221	0.5	460544	4403854	47.242
25-29	708	4	0.005650	0.5	0.027855	90999	2535	0.5	448656	3943310	43.334
30-34	507	2	0.003945	0.5	0.019531	88464	1728	0.5	437999	3494654	39.504
35-39	413	3	0.007264	0.5	0.035672	86736	3094	0.5	425945	3056655	35.241
40-44	334	3	0.008982	0.5	0.043924	83642	3674	0.5	409025	2630710	31.452
45-49	296	3	0.010135	0.5	0.049423	79968	3952	0.5	389960	2221685	27.782
50-54	228	4	0.017544	0.5	0.084034	76016	6388	0.5	364109	1831725	24.097
55-59	213	2	0.009390	0.5	0.045872	69628	3194	0.5	340155	1467616	21.078
60-64	166	4	0.024096	0.5	0.113636	66434	7549	0.5	313297	1127461	16.971
65-69	137	6	0.043796	0.5	0.197368	58885	11622	0.5	265368	814165	13.826
70-74	136	4	0.029412	0.5	0.136986	47263	6474	0.5	220128	548796	11.612
75-79	73	6	0.082192	0.5	0.340909	40788	13905	0.5	169179	328669	8.058
80-84	50	6	0.120000	0.5	0.461538	26883	12408	0.5	103397	159490	5.933
85+	31	8	0.258065	1	1.650016	14476	14476	1	56093	56093	3.875

Life Table: **On-Reserve 1981 Adjusted**

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	280	7	0.025000	0.07	0.024432	100000	2443	0.07	97728	6416018	64.160
1-4	1141	3	0.002629	0.5	0.010462	97557	1021	0.5	388186	6318291	64.765
5-9	1374	1	0.000728	0.5	0.003632	96536	351	0.5	481804	5930105	61.429
10-14	1413	2	0.001415	0.5	0.007052	96185	678	0.5	479232	5448301	56.644
15-19	1393	4	0.002872	0.5	0.014255	95507	1361	0.5	474132	4969069	52.028
20-24	1128	5	0.004433	0.5	0.021920	94146	2064	0.5	465569	4494937	47.744
25-29	754	4	0.005305	0.5	0.026178	92082	2411	0.5	454384	4029367	43.758
30-34	537	2	0.003724	0.5	0.018450	89671	1654	0.5	444221	3574983	39.868
35-39	422	3	0.007109	0.5	0.034924	88017	3074	0.5	432400	3130762	35.570
40-44	347	3	0.008646	0.5	0.042313	84943	3594	0.5	415730	2698362	31.767
45-49	295	3	0.010169	0.5	0.049587	81349	4034	0.5	396660	2282632	28.060
50-54	240	4	0.016667	0.5	0.080000	77315	6185	0.5	371112	1885972	24.393
55-59	212	2	0.009434	0.5	0.046083	71130	3278	0.5	347455	1514860	21.297
60-64	175	4	0.022857	0.5	0.108108	67852	7335	0.5	320922	1167405	17.205
65-69	138	6	0.043478	0.5	0.196078	60517	11866	0.5	272918	846483	13.988
70-74	142	4	0.028169	0.5	0.131579	48651	6401	0.5	227250	573565	11.789
75-79	75	6	0.080000	0.5	0.333333	42249	14083	0.5	176038	346316	8.197
80-84	51	6	0.117647	0.5	0.454545	28166	12803	0.5	108824	170277	6.045
85+	32	8	0.250000	1	1.602934	15363	15363	1	61453	61453	4.000

Life Table: **On-Reserve 1981 Unadjusted**

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	217	7	0.032258	0.07	0.031319	100000	3132	0.07	97087	6373791	63.738
1-4	1129	3	0.002657	0.5	0.010573	96868	1024	0.5	385424	6276703	64.796
5-9	1366	1	0.000732	0.5	0.003654	95844	350	0.5	478345	5891279	61.467
10-14	1419	2	0.001409	0.5	0.007022	95494	671	0.5	475793	5412934	56.684
15-19	1407	4	0.002843	0.5	0.014114	94823	1338	0.5	470770	4937142	52.067
20-24	1102	5	0.004537	0.5	0.022432	93485	2097	0.5	462182	4466372	47.776
25-29	751	4	0.005326	0.5	0.026281	91388	2402	0.5	450935	4004190	43.815
30-34	543	2	0.003683	0.5	0.018248	88986	1624	0.5	440871	3553255	39.930
35-39	436	3	0.006881	0.5	0.033822	87362	2955	0.5	429424	3112385	35.626
40-44	352	3	0.008523	0.5	0.041725	84407	3522	0.5	413233	2682960	31.786
45-49	297	3	0.010101	0.5	0.049261	80886	3985	0.5	394467	2269728	28.061
50-54	239	4	0.016736	0.5	0.080321	76901	6177	0.5	369063	1875261	24.385
55-59	210	2	0.009524	0.5	0.046512	70724	3290	0.5	345398	1506198	21.297
60-64	177	4	0.022599	0.5	0.106952	67435	7212	0.5	319143	1160800	17.214
65-69	135	6	0.044444	0.5	0.200000	60223	12045	0.5	271001	841657	13.976
70-74	138	4	0.028986	0.5	0.135135	48178	6511	0.5	224614	570655	11.845
75-79	77	6	0.077922	0.5	0.326087	41667	13587	0.5	174369	346042	8.305
80-84	51	6	0.117647	0.5	0.454545	28080	12764	0.5	108492	171672	6.114
85+	33	8	0.242424	1	1.608003	15316	15316	1	63181	63181	4.125

Life Table: **On-Reserve** 1982 Adjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	275	7	0.025455	0.07	0.024866	100000	2487	0.07	97687	6450942	64.509
1-4	1134	3	0.002646	0.5	0.010526	97513	1026	0.5	388001	6353254	65.153
5-9	1370	1	0.000730	0.5	0.003643	96487	352	0.5	481556	5965254	61.824
10-14	1409	2	0.001419	0.5	0.007072	96135	680	0.5	478978	5483698	57.041
15-19	1409	4	0.002839	0.5	0.014094	95456	1345	0.5	473914	5004720	52.430
20-24	1192	5	0.004195	0.5	0.020756	94110	1953	0.5	465668	4530806	48.144
25-29	822	4	0.004866	0.5	0.024038	92157	2215	0.5	455246	4065138	44.111
30-34	572	2	0.003497	0.5	0.017331	89942	1559	0.5	445811	3609892	40.136
35-39	437	3	0.006865	0.5	0.033746	88383	2983	0.5	434458	3164081	35.800
40-44	356	3	0.008427	0.5	0.041265	85400	3524	0.5	418191	2729624	31.963
45-49	290	3	0.010345	0.5	0.050420	81876	4128	0.5	399060	2311433	28.231
50-54	262	4	0.015267	0.5	0.073529	77748	5717	0.5	374448	1912372	24.597
55-59	210	2	0.009524	0.5	0.046512	72031	3350	0.5	351780	1537925	21.351
60-64	182	4	0.021978	0.5	0.104167	68681	7154	0.5	325519	1186144	17.270
65-69	138	6	0.043478	0.5	0.196078	61527	12064	0.5	277473	860626	13.988
70-74	137	4	0.029197	0.5	0.136054	49463	6730	0.5	230489	583152	11.790
75-79	84	6	0.071429	0.5	0.303030	42733	12949	0.5	181291	352663	8.253
80-84	49	6	0.122449	0.5	0.468750	29784	13961	0.5	114015	171372	5.754
85+	29	8	0.275862	1	1.575879	15823	15823	1	57357	57357	3.625

Life Table: **On-Reserve** 1982 Unadjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	220	7	0.031818	0.07	0.030904	100000	3090	0.07	97126	6421978	64.220
1-4	1106	3	0.002712	0.5	0.010791	96910	1046	0.5	385547	6324852	65.265
5-9	1347	1	0.000742	0.5	0.003705	95864	355	0.5	478431	5939305	61.956
10-14	1406	2	0.001422	0.5	0.007087	95509	677	0.5	475851	5460874	57.177
15-19	1428	4	0.002801	0.5	0.013908	94832	1319	0.5	470862	4985023	52.567
20-24	1150	5	0.004348	0.5	0.021505	93513	2011	0.5	462537	4514161	48.273
25-29	793	4	0.005044	0.5	0.024907	91502	2279	0.5	451812	4051625	44.279
30-34	573	2	0.003490	0.5	0.017301	89223	1544	0.5	442255	3599813	40.346
35-39	452	3	0.006637	0.5	0.032644	87679	2862	0.5	431240	3157558	36.013
40-44	366	3	0.008197	0.5	0.040161	84817	3406	0.5	415569	2726318	32.144
45-49	294	3	0.010204	0.5	0.049751	81411	4050	0.5	396928	2310749	28.384
50-54	259	4	0.015444	0.5	0.074349	77360	5752	0.5	372423	1913821	24.739
55-59	211	2	0.009479	0.5	0.046296	71609	3315	0.5	349755	1541399	21.525
60-64	181	4	0.022099	0.5	0.104712	68293	7151	0.5	323589	1191644	17.449
65-69	142	6	0.042254	0.5	0.191083	61142	11683	0.5	276503	868054	14.197
70-74	131	4	0.030534	0.5	0.141844	49459	7015	0.5	229757	591551	11.960
75-79	83	6	0.072289	0.5	0.306122	42444	12993	0.5	179736	361794	8.524
80-84	51	6	0.117647	0.5	0.454545	29451	13387	0.5	113787	182059	6.182
85+	34	8	0.235294	1	1.571617	16064	16064	1	68272	68272	4.250

Life Table: **On-Reserve Male** 1980 Adjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	146	7	0.047945	0.07	0.045899	100000	4590	0.07	95731	5251549	52.515
1-4	590	3	0.005085	0.5	0.020134	95410	1921	0.5	377799	5155818	54.038
5-9	706	1	0.001416	0.5	0.007057	93489	660	0.5	465796	4778019	51.108
10-14	692	2	0.002890	0.5	0.014347	92829	1332	0.5	460817	4312223	46.453
15-19	704	4	0.005682	0.5	0.028011	91498	2563	0.5	451080	3851406	42.093
20-24	554	5	0.009025	0.5	0.044131	88935	3925	0.5	434861	3400326	38.234
25-29	391	4	0.010230	0.5	0.049875	85010	4240	0.5	414449	2965465	34.884
30-34	277	2	0.007220	0.5	0.035461	80770	2864	0.5	396689	2551016	31.584
35-39	226	3	0.013274	0.5	0.064240	77906	5005	0.5	377017	2154326	27.653
40-44	180	3	0.016667	0.5	0.080000	72901	5832	0.5	349925	1777309	24.380
45-49	166	3	0.018072	0.5	0.086455	67069	5798	0.5	320849	1427384	21.282
50-54	120	4	0.033333	0.5	0.153846	61271	9426	0.5	282787	1106535	18.060
55-59	105	2	0.019048	0.5	0.090909	51844	4713	0.5	247439	823748	15.889
60-64	82	4	0.048780	0.5	0.217391	47131	10246	0.5	210041	576309	12.228
65-69	77	6	0.077922	0.5	0.326087	36885	12028	0.5	154357	366268	9.930
70-74	76	4	0.052632	0.5	0.232558	24857	5781	0.5	109835	211911	8.525
75-79	41	6	0.146341	0.5	0.535714	19077	10220	0.5	69834	102076	5.351
80-84	26	6	0.230769	0.5	0.731707	8857	6481	0.5	28083	32242	3.640
85+	14	8	0.571429	1	2.763824	2376	2376	1	4158	4158	1.750

Life Table: **On-Reserve Male** 1980 Unadjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	104	7	0.067308	0.07	0.063343	100000	6334	0.07	94109	5154675	51.547
1-4	578	3	0.005190	0.5	0.020548	93666	1925	0.5	370814	5060566	54.028
5-9	698	1	0.001433	0.5	0.007138	91741	655	0.5	457068	4689752	51.119
10-14	695	2	0.002878	0.5	0.014286	91086	1301	0.5	452178	4232683	46.469
15-19	706	4	0.005666	0.5	0.027933	89785	2508	0.5	442655	3780505	42.106
20-24	548	5	0.009124	0.5	0.044603	87277	3893	0.5	426653	3337850	38.244
25-29	391	4	0.010230	0.5	0.049875	83384	4159	0.5	406524	2911197	34.913
30-34	281	2	0.007117	0.5	0.034965	79225	2770	0.5	389202	2504672	31.614
35-39	228	3	0.013158	0.5	0.063694	76455	4870	0.5	370102	2115471	27.669
40-44	181	3	0.016575	0.5	0.079576	71586	5696	0.5	343687	1745368	24.382
45-49	167	3	0.017964	0.5	0.085960	65889	5664	0.5	315286	1401682	21.273
50-54	120	4	0.033333	0.5	0.153846	60225	9265	0.5	277963	1086396	18.039
55-59	105	2	0.019048	0.5	0.090909	50960	4633	0.5	243217	808433	15.864
60-64	83	4	0.048193	0.5	0.215054	46327	9963	0.5	206729	565216	12.201
65-69	74	6	0.081081	0.5	0.337079	36364	12258	0.5	151177	358487	9.858
70-74	76	4	0.052632	0.5	0.232558	24107	5606	0.5	106518	207310	8.600
75-79	43	6	0.139535	0.5	0.517241	18500	9569	0.5	68579	100792	5.448
80-84	26	6	0.230769	0.5	0.731707	8931	6535	0.5	28319	32212	3.607
85+	13	8	0.615385	1	2.770315	2396	2396	1	3894	3894	1.625

Life Table: **On-Reserve Male** 1981 Adjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	142	7	0.049296	0.07	0.047135	100000	4713	0.07	95616	5288757	52.888
1-4	595	3	0.005042	0.5	0.019967	95287	1903	0.5	377341	5193141	54.500
5-9	703	1	0.001422	0.5	0.007087	93384	662	0.5	465265	4815800	51.570
10-14	683	2	0.002928	0.5	0.014535	92722	1348	0.5	460241	4350535	46.920
15-19	721	4	0.005548	0.5	0.027360	91374	2500	0.5	450622	3890293	42.575
20-24	583	5	0.008576	0.5	0.041982	88874	3731	0.5	435044	3439671	38.703
25-29	411	4	0.009732	0.5	0.047506	85143	4045	0.5	415605	3004627	35.289
30-34	296	2	0.006757	0.5	0.033223	81099	2694	0.5	398757	2589022	31.924
35-39	239	3	0.012552	0.5	0.060852	78404	4771	0.5	380094	2190265	27.936
40-44	191	3	0.015707	0.5	0.075567	73633	5564	0.5	354255	1810172	24.584
45-49	164	3	0.018293	0.5	0.087464	68069	5954	0.5	325461	1455916	21.389
50-54	129	4	0.031008	0.5	0.143885	62115	8937	0.5	288233	1130455	18.199
55-59	107	2	0.018692	0.5	0.089286	53178	4748	0.5	254020	842222	15.838
60-64	85	4	0.047059	0.5	0.210526	48430	10196	0.5	216660	588202	12.145
65-69	70	6	0.085714	0.5	0.352941	38234	13494	0.5	157435	371542	9.718
70-74	78	4	0.051282	0.5	0.227273	24740	5623	0.5	109642	214107	8.654
75-79	44	6	0.136364	0.5	0.508475	19117	9721	0.5	71284	104465	5.465
80-84	25	6	0.240000	0.5	0.750000	9397	7047	0.5	29364	33181	3.531
85+	13	8	0.615385	1	2.745061	2349	2349	1	3817	3817	1.625

Life Table: **On-Reserve Male** 1981 Unadjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	108	7	0.064815	0.07	0.061130	100000	6113	0.07	94315	5207479	52.075
1-4	591	3	0.005076	0.5	0.020101	93887	1887	0.5	371774	5113164	54.461
5-9	698	1	0.001433	0.5	0.007138	92000	657	0.5	458357	4741391	51.537
10-14	690	2	0.002899	0.5	0.014388	91343	1314	0.5	453430	4283033	46.889
15-19	726	4	0.005510	0.5	0.027174	90029	2446	0.5	444028	3829603	42.538
20-24	570	5	0.008772	0.5	0.042918	87582	3759	0.5	428515	3385575	38.656
25-29	405	4	0.009877	0.5	0.048193	83824	4040	0.5	409018	2957060	35.277
30-34	303	2	0.006601	0.5	0.032468	79784	2590	0.5	392443	2548042	31.937
35-39	244	3	0.012295	0.5	0.059642	77193	4604	0.5	374457	2155599	27.925
40-44	195	3	0.015385	0.5	0.074074	72589	5377	0.5	349505	1781141	24.537
45-49	166	3	0.018072	0.5	0.086455	67212	5811	0.5	321535	1431637	21.300
50-54	129	4	0.031008	0.5	0.143885	61402	8835	0.5	284921	1110101	18.079
55-59	107	2	0.018692	0.5	0.089286	52567	4693	0.5	251100	825180	15.698
60-64	86	4	0.046512	0.5	0.208333	47873	9974	0.5	214433	574080	11.992
65-69	64	6	0.093750	0.5	0.379747	37900	14392	0.5	153518	359647	9.489
70-74	77	4	0.051948	0.5	0.229885	23507	5404	0.5	104027	206129	8.769
75-79	46	6	0.130435	0.5	0.491803	18103	8903	0.5	68259	102102	5.640
80-84	27	6	0.222222	0.5	0.714286	9200	6572	0.5	29572	33843	3.679
85+	13	8	0.615385	1	2.730906	2629	2629	1	4271	4271	1.625

Life Table: **On-Reserve Male** 1982 Adjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	138	7	0.050725	0.07	0.048440	100000	4844	0.07	95495	5317325	53.173
1-4	584	3	0.005137	0.5	0.020339	95156	1935	0.5	376753	5221830	54.876
5-9	713	1	0.001403	0.5	0.006988	93221	651	0.5	464475	4845076	51.974
10-14	674	2	0.002967	0.5	0.014728	92569	1363	0.5	459438	4380602	47.322
15-19	731	4	0.005472	0.5	0.026991	91206	2462	0.5	449875	3921164	42.992
20-24	605	5	0.008264	0.5	0.040486	88744	3593	0.5	434739	3471289	39.116
25-29	442	4	0.009050	0.5	0.044248	85151	3768	0.5	416337	3036550	35.661
30-34	321	2	0.006231	0.5	0.030675	81384	2496	0.5	400677	2620212	32.196
35-39	248	3	0.012097	0.5	0.058708	78887	4631	0.5	382857	2219536	28.136
40-44	196	3	0.015306	0.5	0.073710	74256	5473	0.5	357596	1836678	24.734
45-49	157	3	0.019108	0.5	0.091185	68782	6272	0.5	328232	1479083	21.504
50-54	144	4	0.027778	0.5	0.129870	62510	8118	0.5	292257	1150851	18.411
55-59	108	2	0.018519	0.5	0.088496	54392	4813	0.5	259927	858594	15.785
60-64	88	4	0.045455	0.5	0.204082	49579	10118	0.5	222598	598666	12.075
65-69	65	6	0.092308	0.5	0.375000	39461	14798	0.5	160309	376068	9.530
70-74	75	4	0.053333	0.5	0.235294	24663	5803	0.5	108807	215759	8.748
75-79	49	6	0.122449	0.5	0.468750	18860	8841	0.5	72198	106952	5.671
80-84	25	6	0.240000	0.5	0.750000	10019	7514	0.5	31310	34754	3.469
85+	11	8	0.727273	1	2.707989	2505	2505	1	3444	3444	1.375

Life Table: **On-Reserve Male** 1982 Unadjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	110	7	0.063636	0.07	0.060081	100000	6008	0.07	94412	5255616	52.556
1-4	572	3	0.005245	0.5	0.020761	93992	1951	0.5	372065	5161204	54.911
5-9	699	1	0.001431	0.5	0.007128	92041	656	0.5	458563	4789139	52.033
10-14	675	2	0.002963	0.5	0.014706	91385	1344	0.5	453563	4330576	47.389
15-19	744	4	0.005376	0.5	0.026525	90041	2388	0.5	444232	3877013	43.058
20-24	589	5	0.008489	0.5	0.041563	87652	3643	0.5	429154	3432781	39.164
25-29	426	4	0.009390	0.5	0.045872	84009	3854	0.5	410412	3003627	35.754
30-34	323	2	0.006192	0.5	0.030488	80156	2444	0.5	394668	2593215	32.352
35-39	258	3	0.011628	0.5	0.056497	77712	4390	0.5	377583	2198547	28.291
40-44	203	3	0.014778	0.5	0.071259	73321	5225	0.5	353545	1820964	24.835
45-49	161	3	0.018634	0.5	0.089021	68097	6062	0.5	325328	1467419	21.549
50-54	143	4	0.027972	0.5	0.130719	62035	8109	0.5	289900	1142092	18.411
55-59	112	2	0.017857	0.5	0.085470	53925	4609	0.5	258105	852192	15.803
60-64	86	4	0.046512	0.5	0.208333	49316	10274	0.5	220896	594087	12.046
65-69	64	6	0.093750	0.5	0.379747	39042	14826	0.5	158145	373191	9.559
70-74	75	4	0.053333	0.5	0.235294	24216	5698	0.5	106835	215046	8.880
75-79	50	6	0.120000	0.5	0.461538	18518	8547	0.5	71224	108210	5.843
80-84	28	6	0.214286	0.5	0.697674	9971	6957	0.5	32465	36987	3.709
85+	12	8	0.666667	1	2.662676	3015	3015	1	4522	4522	1.500

Life Table: **On-Reserve Female** 1980 Adjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	140	7	0.050000	0.07	0.047778	100000	4778	0.07	95557	5023231	50.232
1-4	537	3	0.005587	0.5	0.022099	95222	2104	0.5	376680	4927675	51.749
5-9	692	1	0.001445	0.5	0.007199	93118	670	0.5	463913	4550995	48.874
10-14	716	2	0.002793	0.5	0.013870	92447	1282	0.5	459032	4087082	44.210
15-19	672	4	0.005952	0.5	0.029326	91165	2673	0.5	449142	3628050	39.796
20-24	493	5	0.010142	0.5	0.049456	88492	4376	0.5	431518	3178908	35.923
25-29	316	4	0.012658	0.5	0.061350	84115	5160	0.5	407675	2747390	32.662
30-34	226	2	0.008850	0.5	0.043290	78955	3418	0.5	386229	2339715	29.634
35-39	182	3	0.016484	0.5	0.079156	75537	5979	0.5	362737	1953485	25.861
40-44	153	3	0.019608	0.5	0.093458	69558	6501	0.5	331537	1590749	22.869
45-49	128	3	0.023438	0.5	0.110701	63057	6980	0.5	297834	1259212	19.969
50-54	109	4	0.036697	0.5	0.168067	56077	9425	0.5	256821	961378	17.144
55-59	109	2	0.018349	0.5	0.087719	46652	4092	0.5	223029	704557	15.102
60-64	83	4	0.048193	0.5	0.215054	42560	9153	0.5	189917	481529	11.314
65-69	63	6	0.095238	0.5	0.384615	33407	12849	0.5	134913	291612	8.729
70-74	61	4	0.065574	0.5	0.281690	20558	5791	0.5	88313	156699	7.622
75-79	30	6	0.200000	0.5	0.666667	14767	9845	0.5	49224	68386	4.631
80-84	27	6	0.222222	0.5	0.714286	4922	3516	0.5	15822	19162	3.893
85+	19	8	0.421053	1	3.075781	1406	1406	1	3340	3340	2.375

Life Table: **On-Reserve Female** 1980 Unadjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	99	7	0.070707	0.07	0.066344	100000	6634	0.07	93830	4924945	49.249
1-4	525	3	0.005714	0.5	0.022599	93366	2110	0.5	369242	4831115	51.744
5-9	683	1	0.001464	0.5	0.007294	91256	666	0.5	454614	4461873	48.894
10-14	716	2	0.002793	0.5	0.013870	90590	1256	0.5	449809	4007259	44.235
15-19	676	4	0.005917	0.5	0.029155	89334	2604	0.5	440157	3557450	39.822
20-24	489	5	0.010225	0.5	0.049850	86729	4323	0.5	422837	3117293	35.943
25-29	317	4	0.012618	0.5	0.061162	82406	5040	0.5	399428	2694457	32.698
30-34	226	2	0.008850	0.5	0.043290	77365	3349	0.5	378455	2295029	29.665
35-39	186	3	0.016129	0.5	0.077519	74016	5738	0.5	355737	1916575	25.894
40-44	153	3	0.019608	0.5	0.093458	68279	6381	0.5	325440	1560837	22.860
45-49	129	3	0.023256	0.5	0.109890	61897	6802	0.5	292482	1235397	19.959
50-54	108	4	0.037037	0.5	0.169492	55096	9338	0.5	252132	942914	17.114
55-59	109	2	0.018349	0.5	0.087719	45757	4014	0.5	218752	690782	15.097
60-64	83	4	0.048193	0.5	0.215054	41744	8977	0.5	186275	472030	11.308
65-69	64	6	0.093750	0.5	0.379747	32766	12443	0.5	132725	285756	8.721
70-74	60	4	0.066667	0.5	0.285714	20323	5807	0.5	87101	153031	7.530
75-79	30	6	0.200000	0.5	0.666667	14517	9678	0.5	48389	65930	4.542
80-84	24	6	0.250000	0.5	0.769231	4839	3722	0.5	14889	17541	3.625
85+	19	8	0.421053	1	3.148055	1117	1117	1	2652	2652	2.375

Life Table: **On-Reserve Female 1981** Adjusted

Age	n_i	d_i	f_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	138	7	0.050725	0.07	0.048440	100000	4844	0.07	95495	5080572	50.806
1-4	546	3	0.005495	0.5	0.021739	95156	2069	0.5	376487	4985076	52.388
5-9	671	1	0.001490	0.5	0.007424	93087	691	0.5	463709	4608589	49.508
10-14	730	2	0.002740	0.5	0.013605	92396	1257	0.5	458839	4144880	44.860
15-19	672	4	0.005952	0.5	0.029326	91139	2673	0.5	449015	3686041	40.444
20-24	545	5	0.009174	0.5	0.044843	88467	3967	0.5	432415	3237026	36.590
25-29	343	4	0.011662	0.5	0.056657	84499	4788	0.5	410529	2804611	33.191
30-34	241	2	0.008299	0.5	0.040650	79712	3240	0.5	390459	2394083	30.034
35-39	183	3	0.016393	0.5	0.078740	76472	6021	0.5	367305	2003624	26.201
40-44	156	3	0.019231	0.5	0.091743	70450	6463	0.5	336093	1636319	23.227
45-49	131	3	0.022901	0.5	0.108303	63987	6930	0.5	302610	1300226	20.320
50-54	111	4	0.036036	0.5	0.165289	57057	9431	0.5	261707	997617	17.485
55-59	105	2	0.019048	0.5	0.090909	47626	4330	0.5	227306	735909	15.452
60-64	90	4	0.044444	0.5	0.200000	43296	8659	0.5	194834	508603	11.747
65-69	68	6	0.088235	0.5	0.361446	34637	12519	0.5	141887	313770	9.059
70-74	64	4	0.062500	0.5	0.270270	22118	5978	0.5	95644	171883	7.771
75-79	31	6	0.193548	0.5	0.652174	16140	10526	0.5	54385	76239	4.724
80-84	27	6	0.222222	0.5	0.714286	5614	4010	0.5	18045	21854	3.893
85+	19	8	0.421053	1	2.995845	1604	1604	1	3809	3809	2.375

Life Table: **On-Reserve Female 1981** Unadjusted

Age	n_i	d_i	f_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	110	7	0.063636	0.07	0.060081	100000	6008	0.07	94412	5024543	50.245
1-4	538	3	0.005576	0.5	0.022059	93992	2073	0.5	371821	4930130	52.453
5-9	669	1	0.001495	0.5	0.007446	91919	684	0.5	457882	4558309	49.591
10-14	730	2	0.002740	0.5	0.013605	91234	1241	0.5	453068	4100427	44.944
15-19	682	4	0.005865	0.5	0.028902	89993	2601	0.5	443462	3647360	40.529
20-24	532	5	0.009398	0.5	0.045914	87392	4012	0.5	426928	3203898	36.661
25-29	346	4	0.011561	0.5	0.056180	83379	4684	0.5	405187	2776970	33.305
30-34	241	2	0.008299	0.5	0.040650	78695	3199	0.5	385479	2371783	30.139
35-39	192	3	0.015625	0.5	0.075188	75496	5676	0.5	363290	1986304	26.310
40-44	157	3	0.019108	0.5	0.091185	69820	6367	0.5	333183	1623014	23.246
45-49	131	3	0.022901	0.5	0.108303	63453	6872	0.5	300086	1289832	20.327
50-54	110	4	0.036364	0.5	0.166667	56581	9430	0.5	259330	989746	17.493
55-59	104	2	0.019231	0.5	0.091743	47151	4326	0.5	224940	730416	15.491
60-64	91	4	0.043956	0.5	0.198020	42825	8480	0.5	192925	505476	11.803
65-69	71	6	0.084507	0.5	0.348837	34345	11981	0.5	141773	312551	9.100
70-74	61	4	0.065574	0.5	0.281690	22364	6300	0.5	96071	170779	7.636
75-79	31	6	0.193548	0.5	0.652174	16064	10477	0.5	54130	74707	4.651
80-84	24	6	0.250000	0.5	0.769231	5588	4298	0.5	17193	20577	3.683
85+	21	8	0.380952	1	3.057875	1289	1289	1	3385	3385	2.625

Life Table: **On-Reserve Female 1982 Adjusted**

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	137	7	0.051095	0.07	0.048777	100000	4878	0.07	95464	5142596	51.426
1-4	551	3	0.005445	0.5	0.021544	95122	2049	0.5	376391	5047132	53.059
5-9	657	1	0.001522	0.5	0.007582	93073	706	0.5	463601	4670741	50.184
10-14	735	2	0.002721	0.5	0.013514	92367	1248	0.5	458716	4207141	45.548
15-19	678	4	0.005900	0.5	0.029070	91119	2649	0.5	448974	3748424	41.138
20-24	587	5	0.008518	0.5	0.041701	88470	3689	0.5	433128	3299451	37.294
25-29	380	4	0.010526	0.5	0.051282	84781	4348	0.5	413036	2866322	33.809
30-34	252	2	0.007937	0.5	0.038911	80433	3130	0.5	394342	2453287	30.501
35-39	189	3	0.015873	0.5	0.076336	77304	5901	0.5	371765	2058945	26.635
40-44	160	3	0.018750	0.5	0.089552	71403	6394	0.5	341027	1687180	23.629
45-49	134	3	0.022388	0.5	0.106007	65008	6891	0.5	307813	1346153	20.707
50-54	118	4	0.033898	0.5	0.156250	58117	9081	0.5	267883	1038340	17.866
55-59	102	2	0.019608	0.5	0.093458	49036	4583	0.5	233724	770457	15.712
60-64	94	4	0.042553	0.5	0.192308	44453	8549	0.5	200895	536733	12.074
65-69	73	6	0.082192	0.5	0.340909	35905	12240	0.5	148923	335839	9.354
70-74	62	4	0.064516	0.5	0.277778	23664	6573	0.5	101888	186916	7.899
75-79	35	6	0.171429	0.5	0.600000	17091	10255	0.5	59818	85028	4.975
80-84	25	6	0.240000	0.5	0.750000	6836	5127	0.5	21364	25209	3.688
85+	18	8	0.444444	1	2.934978	1709	1709	1	3845	3845	2.250

Life Table: **On-Reserve Female 1982 Unadjusted**

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	110	7	0.063636	0.07	0.060081	100000	6008	0.07	94412	5068936	50.689
1-4	535	3	0.005607	0.5	0.022181	93992	2085	0.5	371798	4974524	52.925
5-9	648	1	0.001543	0.5	0.007686	91907	706	0.5	457769	4602726	50.080
10-14	731	2	0.002736	0.5	0.013587	91201	1239	0.5	452905	4144957	45.449
15-19	685	4	0.005839	0.5	0.028777	89962	2589	0.5	443335	3692051	41.040
20-24	561	5	0.008913	0.5	0.043592	87373	3809	0.5	427342	3248716	37.182
25-29	367	4	0.010899	0.5	0.053050	83564	4433	0.5	406737	2821374	33.763
30-34	250	2	0.008000	0.5	0.039216	79131	3103	0.5	387896	2414637	30.514
35-39	194	3	0.015464	0.5	0.074442	76028	5660	0.5	365989	2026741	26.658
40-44	163	3	0.018405	0.5	0.087977	70368	6191	0.5	336363	1660752	23.601
45-49	133	3	0.022556	0.5	0.106762	64177	6852	0.5	303757	1324388	20.636
50-54	116	4	0.034483	0.5	0.158730	57326	9099	0.5	263880	1020631	17.804
55-59	99	2	0.020202	0.5	0.096154	48226	4637	0.5	229539	756751	15.692
60-64	95	4	0.042105	0.5	0.190476	43589	8303	0.5	197189	527212	12.095
65-69	78	6	0.076923	0.5	0.322581	35286	11383	0.5	147976	330023	9.353
70-74	56	4	0.071429	0.5	0.303030	23904	7244	0.5	101410	182048	7.616
75-79	33	6	0.181818	0.5	0.625000	16660	10413	0.5	57269	80638	4.840
80-84	24	6	0.250000	0.5	0.769231	6248	4806	0.5	19223	23368	3.740
85+	23	8	0.347826	1	3.002552	1442	1442	1	4145	4145	2.875

Life Table: **Off-Reserve** 1980 Adjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	120	7	0.058333	0.07	0.055332	100000	5533	0.07	94854	4753575	47.536
1-4	523	3	0.005736	0.5	0.022684	94467	2143	0.5	373582	4658721	49.316
5-9	695	1	0.001439	0.5	0.007168	92324	662	0.5	459965	4285140	46.414
10-14	708	2	0.002825	0.5	0.014025	91662	1286	0.5	455097	3825175	41.731
15-19	535	4	0.007477	0.5	0.036697	90377	3317	0.5	443591	3370078	37.289
20-24	334	5	0.014970	0.5	0.072150	87060	6281	0.5	419596	2926487	33.615
25-29	340	4	0.011765	0.5	0.057143	80779	4616	0.5	392353	2506891	31.034
30-34	317	2	0.006309	0.5	0.031056	76163	2365	0.5	374900	2114537	27.763
35-39	239	3	0.012552	0.5	0.060852	73797	4491	0.5	357760	1739637	23.573
40-44	182	3	0.016484	0.5	0.079156	69307	5486	0.5	332818	1381877	19.939
45-49	128	3	0.023438	0.5	0.110701	63821	7065	0.5	301441	1049059	16.438
50-54	84	4	0.047619	0.5	0.212766	56756	12076	0.5	253589	747619	13.173
55-59	66	2	0.030303	0.5	0.140845	44680	6293	0.5	207667	494030	11.057
60-64	46	4	0.086957	0.5	0.357143	38387	13710	0.5	157661	286362	7.460
65-69	32	6	0.187500	0.5	0.638298	24677	15752	0.5	84008	128702	5.215
70-74	28	4	0.142857	0.5	0.526316	8926	4698	0.5	32885	44693	5.007
75-79	17	6	0.352941	0.5	0.937500	4228	3964	0.5	11231	11809	2.793
80-84	13	6	0.461538	0.5	1.071429	264	283	0.5	613	578	2.188
85+	15	8	0.533333	1	4.431261	-19	-19	1	-35	-35	1.875

Life Table: **Off-Reserve** 1980 Unadjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	66	7	0.106061	0.07	0.096538	100000	9654	0.07	91022	4512763	45.128
1-4	412	3	0.007282	0.5	0.028708	90346	2594	0.5	356197	4421741	48.942
5-9	659	1	0.001517	0.5	0.007559	87752	663	0.5	437104	4065543	46.330
10-14	704	2	0.002841	0.5	0.014104	87089	1228	0.5	432375	3628439	41.663
15-19	529	4	0.007561	0.5	0.037106	85861	3186	0.5	421340	3196064	37.224
20-24	343	5	0.014577	0.5	0.070323	82675	5814	0.5	398840	2774724	33.562
25-29	341	4	0.011730	0.5	0.056980	76861	4380	0.5	373356	2375885	30.911
30-34	312	2	0.006410	0.5	0.031546	72481	2286	0.5	356691	2002529	27.628
35-39	232	3	0.012931	0.5	0.062630	70195	4396	0.5	339984	1645838	23.447
40-44	181	3	0.016575	0.5	0.079576	65799	5236	0.5	315903	1305854	19.846
45-49	126	3	0.023810	0.5	0.112360	60563	6805	0.5	285801	989951	16.346
50-54	84	4	0.047619	0.5	0.212766	53758	11438	0.5	240195	704150	13.099
55-59	67	2	0.029851	0.5	0.138889	42320	5878	0.5	196906	463956	10.963
60-64	45	4	0.088889	0.5	0.363636	36442	13252	0.5	149082	267050	7.328
65-69	31	6	0.193548	0.5	0.652174	23191	15124	0.5	78142	117968	5.087
70-74	28	4	0.142857	0.5	0.526316	8066	4245	0.5	29718	39826	4.937
75-79	16	6	0.375000	0.5	0.967742	3821	3698	0.5	9860	10109	2.646
80-84	12	6	0.500000	0.5	1.111111	123	137	0.5	274	248	2.014
85+	15	8	0.533333	1	4.570064	-14	-14	1	-26	-26	1.875

Life Table: **Off-Reserve** 1981 Adjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	117	7	0.059829	0.07	0.056676	100000	5668	0.07	94729	4799843	47.998
1-4	503	3	0.005964	0.5	0.023576	94332	2224	0.5	372882	4705114	49.878
5-9	697	1	0.001435	0.5	0.007148	92108	658	0.5	458897	4332232	47.034
10-14	703	2	0.002845	0.5	0.014124	91450	1292	0.5	454021	3873336	42.355
15-19	579	4	0.006908	0.5	0.033956	90158	3061	0.5	443139	3419314	37.926
20-24	366	5	0.013661	0.5	0.066050	87097	5753	0.5	421103	2976176	34.171
25-29	336	4	0.011905	0.5	0.057803	81344	4702	0.5	394966	2555073	31.411
30-34	320	2	0.006250	0.5	0.030769	76642	2358	0.5	377316	2160106	28.184
35-39	252	3	0.011905	0.5	0.057803	74284	4294	0.5	360686	1782790	24.000
40-44	200	3	0.015000	0.5	0.072289	69990	5060	0.5	337302	1422105	20.319
45-49	136	3	0.022059	0.5	0.104530	64931	6787	0.5	307685	1084803	16.707
50-54	84	4	0.047619	0.5	0.212766	58143	12371	0.5	259790	777117	13.366
55-59	75	2	0.026667	0.5	0.125000	45773	5722	0.5	214559	517327	11.302
60-64	45	4	0.088889	0.5	0.363636	40051	14564	0.5	163845	302769	7.560
65-69	35	6	0.171429	0.5	0.600000	25487	15292	0.5	89204	138924	5.451
70-74	27	4	0.148148	0.5	0.540541	10195	5511	0.5	37197	49720	4.877
75-79	16	6	0.375000	0.5	0.967742	4684	4533	0.5	12088	12522	2.673
80-84	18	6	0.333333	0.5	0.909091	151	137	0.5	412	434	2.875
85+	13	8	0.615385	1	4.243500	14	14	1	22	22	1.625

Life Table: **Off-Reserve** 1981 Unadjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	75	7	0.093333	0.07	0.085879	100000	8588	0.07	92013	4629922	46.299
1-4	426	3	0.007042	0.5	0.027778	91412	2539	0.5	360570	4537909	49.642
5-9	653	1	0.001531	0.5	0.007628	88873	678	0.5	442670	4177339	47.004
10-14	699	2	0.002861	0.5	0.014205	88195	1253	0.5	437843	3734669	42.346
15-19	572	4	0.006993	0.5	0.034364	86942	2988	0.5	427242	3296827	37.920
20-24	390	5	0.012821	0.5	0.062112	83954	5215	0.5	406736	2869585	34.180
25-29	351	4	0.011396	0.5	0.055402	78740	4362	0.5	382794	2462849	31.278
30-34	314	2	0.006369	0.5	0.031348	74378	2332	0.5	366059	2080055	27.966
35-39	238	3	0.012605	0.5	0.061100	72046	4402	0.5	349225	1713996	23.790
40-44	196	3	0.015306	0.5	0.073710	67644	4986	0.5	325755	1364771	20.176
45-49	133	3	0.022556	0.5	0.106762	62658	6689	0.5	296566	1039016	16.582
50-54	85	4	0.047059	0.5	0.210526	55969	11783	0.5	250385	742449	13.265
55-59	74	2	0.027027	0.5	0.126582	44186	5593	0.5	206946	492064	11.136
60-64	44	4	0.090909	0.5	0.370370	38593	14294	0.5	157229	285118	7.388
65-69	33	6	0.181818	0.5	0.625000	24299	15187	0.5	83528	127890	5.263
70-74	28	4	0.142857	0.5	0.526316	9112	4796	0.5	33571	44362	4.868
75-79	15	6	0.400000	0.5	1.000000	4316	4316	0.5	10791	10791	2.500
80-84	15	6	0.400000	0.5	1.000000	0	0	0.5	0	0	-
85+	14	8	0.571429	1	4.419081	0	0	1	0	0	-

Life Table: **Off-Reserve** 1982 Adjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	118	7	0.059322	0.07	0.056220	100000	5622	0.07	94772	4850358	48.504
1-4	487	3	0.006160	0.5	0.024341	94378	2297	0.5	372917	4755586	50.389
5-9	681	1	0.001468	0.5	0.007315	92081	674	0.5	458720	4382669	47.596
10-14	702	2	0.002849	0.5	0.014144	91407	1293	0.5	453803	3923949	42.928
15-19	635	4	0.006299	0.5	0.031008	90114	2794	0.5	443586	3470146	38.508
20-24	395	5	0.012658	0.5	0.061350	87320	5357	0.5	423207	3026560	34.661
25-29	335	4	0.011940	0.5	0.057971	81963	4751	0.5	397936	2603353	31.763
30-34	317	2	0.006309	0.5	0.031056	77211	2398	0.5	380063	2205417	28.563
35-39	264	3	0.011364	0.5	0.055249	74814	4133	0.5	363735	1825354	24.399
40-44	210	3	0.014286	0.5	0.068966	70680	4875	0.5	341215	1461619	20.679
45-49	139	3	0.021583	0.5	0.102389	65806	6738	0.5	312184	1120404	17.026
50-54	91	4	0.043956	0.5	0.198020	59068	11697	0.5	266098	808220	13.683
55-59	80	2	0.025000	0.5	0.117647	47371	5573	0.5	222924	542122	11.444
60-64	48	4	0.083333	0.5	0.344828	41798	14413	0.5	172958	319198	7.637
65-69	34	6	0.176471	0.5	0.612245	27385	16766	0.5	95009	146240	5.340
70-74	24	4	0.166667	0.5	0.588235	10619	6246	0.5	37478	51230	4.825
75-79	19	6	0.315789	0.5	0.882353	4372	3858	0.5	12217	13753	3.145
80-84	19	6	0.315789	0.5	0.882353	514	454	0.5	1437	1536	2.985
85+	13	8	0.615385	1	4.135689	61	61	1	98	98	1.625

Life Table: **Off-Reserve** 1982 Unadjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	79	7	0.088608	0.07	0.081862	100000	8186	0.07	92387	4732463	47.325
1-4	451	3	0.006652	0.5	0.026258	91814	2411	0.5	362434	4640076	50.538
5-9	651	1	0.001536	0.5	0.007651	89403	684	0.5	445305	4277643	47.847
10-14	704	2	0.002841	0.5	0.014104	88719	1251	0.5	440466	3832338	43.196
15-19	629	4	0.006359	0.5	0.031299	87468	2738	0.5	430494	3391872	38.779
20-24	439	5	0.011390	0.5	0.055371	84730	4692	0.5	411921	2961378	34.951
25-29	378	4	0.010582	0.5	0.051546	80038	4126	0.5	389878	2549457	31.853
30-34	322	2	0.006211	0.5	0.030581	75913	2321	0.5	373760	2159579	28.448
35-39	256	3	0.011719	0.5	0.056926	73591	4189	0.5	357483	1785820	24.267
40-44	204	3	0.014706	0.5	0.070922	69402	4922	0.5	334704	1428337	20.581
45-49	139	3	0.021583	0.5	0.102389	64480	6602	0.5	305894	1093632	16.961
50-54	93	4	0.043011	0.5	0.194175	57878	11238	0.5	261293	787738	13.610
55-59	80	2	0.025000	0.5	0.117647	46639	5487	0.5	219479	526445	11.288
60-64	45	4	0.088889	0.5	0.363636	41152	14965	0.5	168351	306966	7.459
65-69	33	6	0.181818	0.5	0.625000	26188	16367	0.5	90021	138615	5.293
70-74	27	4	0.148148	0.5	0.540541	9820	5308	0.5	35831	48594	4.948
75-79	17	6	0.352941	0.5	0.937500	4512	4230	0.5	11985	12763	2.829
80-84	17	6	0.352941	0.5	0.937500	282	264	0.5	749	778	2.758
85+	13	8	0.615385	1	4.244909	18	18	1	29	29	1.625

Life Table: **Off-Reserve Female** 1980 Adjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	60	7	0.116667	0.07	0.105247	100000	10525	0.07	90212	3565459	35.655
1-4	247	3	0.012146	0.5	0.047431	89475	4244	0.5	349413	3475247	38.840
5-9	345	1	0.002899	0.5	0.014388	85231	1226	0.5	423091	3125834	36.675
10-14	334	2	0.005988	0.5	0.029499	84005	2478	0.5	413830	2702743	32.174
15-19	252	4	0.015873	0.5	0.076336	81527	6223	0.5	392076	2288913	28.076
20-24	172	5	0.029070	0.5	0.135501	75304	10204	0.5	351009	1896836	25.189
25-29	203	4	0.019704	0.5	0.093897	65100	6113	0.5	310218	1545828	23.745
30-34	173	2	0.011561	0.5	0.056180	58987	3314	0.5	286651	1235610	20.947
35-39	131	3	0.022901	0.5	0.108303	55673	6030	0.5	263292	948959	17.045
40-44	84	3	0.035714	0.5	0.163934	49644	8138	0.5	227873	685667	13.812
45-49	67	3	0.044776	0.5	0.201342	41505	8357	0.5	186635	457794	11.030
50-54	44	4	0.090909	0.5	0.370370	33149	12277	0.5	135050	271159	8.180
55-59	23	2	0.086957	0.5	0.357143	20871	7454	0.5	85722	136109	6.521
60-64	18	4	0.222222	0.5	0.714286	13417	9584	0.5	43127	50388	3.755
65-69	12	6	0.500000	0.5	1.111111	3834	4259	0.5	8519	7261	1.894
70-74	13	4	0.307692	0.5	0.869565	-426	-370	0.5	-1204	-1258	2.954
75-79	6	6	1.000000	0.5	1.428571	-56	-79	0.5	-79	-54	0.981
80-84	7	6	0.857143	0.5	1.363636	24	32	0.5	38	25	1.045
85+	12	8	0.666667	1	7.246742	-9	-9	1	-13	-13	1.500

Life Table: **Off-Reserve Female** 1980 Unadjusted

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	34	7	0.205882	0.07	0.172797	100000	17280	0.07	83930	3255410	32.554
1-4	198	3	0.015152	0.5	0.058824	82720	4866	0.5	321149	3171480	38.340
5-9	322	1	0.003106	0.5	0.015408	77854	1200	0.5	386273	2850331	36.611
10-14	335	2	0.005970	0.5	0.029412	76655	2255	0.5	377638	2464058	32.145
15-19	247	4	0.016194	0.5	0.077821	74400	5790	0.5	357527	2086420	28.043
20-24	175	5	0.028571	0.5	0.133333	68610	9148	0.5	320182	1728894	25.199
25-29	205	4	0.019512	0.5	0.093023	59462	5531	0.5	283483	1408712	23.691
30-34	172	2	0.011628	0.5	0.056497	53931	3047	0.5	262037	1125229	20.864
35-39	126	3	0.023810	0.5	0.112360	50884	5717	0.5	240127	863192	16.964
40-44	83	3	0.036145	0.5	0.165746	45167	7486	0.5	207118	623065	13.795
45-49	66	3	0.045455	0.5	0.204082	37680	7690	0.5	169178	415947	11.039
50-54	44	4	0.090909	0.5	0.370370	29991	11108	0.5	122184	246769	8.228
55-59	24	2	0.083333	0.5	0.344828	18883	6511	0.5	78136	124585	6.598
60-64	18	4	0.222222	0.5	0.714286	12372	8837	0.5	39766	46449	3.754
65-69	12	6	0.500000	0.5	1.111111	3535	3927	0.5	7855	6683	1.891
70-74	13	4	0.307692	0.5	0.869565	-393	-342	0.5	-1110	-1172	2.984
75-79	7	6	0.857143	0.5	1.363636	-51	-70	0.5	-81	-62	1.211
80-84	7	6	0.857143	0.5	1.363636	19	25	0.5	30	19	1.045
85+	12	8	0.666667	1	7.256735	-7	-7	1	-10	-10	1.500

Life Table: **Off-Reserve Female 1982 Adjusted**

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	52	7	0.134615	0.07	0.119638	100000	11964	0.07	88874	3616809	36.168
1-4	241	3	0.012448	0.5	0.048583	88036	4277	0.5	343591	3527935	40.074
5-9	314	1	0.003185	0.5	0.015798	83759	1323	0.5	415488	3184344	38.018
10-14	348	2	0.005747	0.5	0.028329	82436	2335	0.5	406342	2768856	33.588
15-19	298	4	0.013423	0.5	0.064935	80101	5201	0.5	387500	2362515	29.494
20-24	192	5	0.026042	0.5	0.122249	74899	9156	0.5	351606	1975015	26.369
25-29	192	4	0.020833	0.5	0.099010	65743	6509	0.5	312442	1623409	24.693
30-34	178	2	0.011236	0.5	0.054645	59234	3237	0.5	288077	1310967	22.132
35-39	151	3	0.019868	0.5	0.094637	55997	5299	0.5	266736	1022891	18.267
40-44	109	3	0.027523	0.5	0.128755	50698	6528	0.5	237169	756155	14.915
45-49	67	3	0.044776	0.5	0.201342	44170	8893	0.5	198617	518986	11.750
50-54	53	4	0.075472	0.5	0.317460	35277	11199	0.5	148386	320370	9.082
55-59	31	2	0.064516	0.5	0.277778	24078	6688	0.5	103668	171984	7.143
60-64	18	4	0.222222	0.5	0.714286	17389	12421	0.5	55895	68316	3.929
65-69	15	6	0.400000	0.5	1.000000	4968	4968	0.5	12421	12421	2.500
70-74	11	4	0.363636	0.5	0.952381	0	0	0.5	0	0	0.000
75-79	8	6	0.750000	0.5	1.304348	0	0	0.5	0	0	0.000
80-84	10	6	0.600000	0.5	1.200000	0	0	0.5	0	0	0.000
85+	11	8	0.727273	1	6.744174	0	0	1	0	0	0.000

Life Table: **Off-Reserve Female 1982 Unadjusted**

Age	n_i	d_i	t_i	a_i	q_i	l_i	d_i	a_i	L_i	T_i	e_i
<1	34	7	0.205882	0.07	0.172797	100000	17280	0.07	83930	3427264	34.273
1-4	224	3	0.013393	0.5	0.052174	82720	4316	0.5	322250	3343334	40.417
5-9	300	1	0.003333	0.5	0.016529	78404	1296	0.5	388783	3021084	38.532
10-14	348	2	0.005747	0.5	0.028329	77109	2184	0.5	380082	2632302	34.138
15-19	298	4	0.013423	0.5	0.064935	74924	4865	0.5	362458	2252220	30.060
20-24	222	5	0.022523	0.5	0.106610	70059	7469	0.5	331622	1889762	26.974
25-29	219	4	0.018265	0.5	0.087336	62590	5466	0.5	299284	1558140	24.894
30-34	185	2	0.010811	0.5	0.052632	57124	3007	0.5	278102	1258856	22.037
35-39	146	3	0.020548	0.5	0.097720	54117	5288	0.5	257365	980754	18.123
40-44	105	3	0.028571	0.5	0.133333	48829	6511	0.5	227868	723389	14.815
45-49	68	3	0.044118	0.5	0.198675	42318	8408	0.5	190572	495522	11.709
50-54	55	4	0.072727	0.5	0.307692	33911	10434	0.5	143468	304949	8.993
55-59	32	2	0.062500	0.5	0.270270	23477	6345	0.5	101521	161481	6.878
60-64	15	4	0.266667	0.5	0.800000	17132	13705	0.5	51395	59961	3.500
65-69	15	6	0.400000	0.5	1.000000	3426	3426	0.5	8566	8566	2.500
70-74	13	4	0.307692	0.5	0.869565	0	0	0.5	0	0	0.000
75-79	8	6	0.750000	0.5	1.304348	0	0	0.5	0	0	0.000
80-84	8	6	0.750000	0.5	1.304348	0	0	0.5	0	0	0.000
85+	10	8	0.800000	1	6.867293	0	0	1	0	0	0.000

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