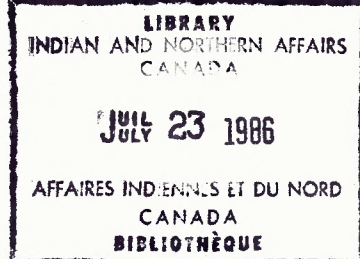INAC STATISTICAL REQUIREMENTS
ON INDIAN AND INUIT CONDITIONS

INAC STATISTICAL REQUIREMENTS ON INDIAN AND INUIT CONDITIONS

Corporate Policy Sector
INDIAN AND NORTHERN AFFAIRS CANADA

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CONTENTS

I   PURPOSE AND USE OF REPORT

This report describes the requirements of Indian and Northern Affairs Canada (INAC) for social statistics respecting Indian and Inuit conditions in Canada. This report will enable Statistics Canada to assess the extent to which it can assist in further defining and meeting these requirements; and INAC to further develop its own complementary data and information sources and resources.

More specifically, the report:

- reviews background INAC initiatives in the development of a system of statistical measures and indicators related to Indian and Inuit conditions in Canada

- summarizes the nature and use of such a system of social statistics in the field of social and economic analysis

- provides an analytical framework for a system of social statistics with respect to user statistical information requirements respecting Indian and Inuit conditions in Canada

- provides an overview assessment of the current situation with respect to statistical information requirements, within the context of the general availability and suitability of existing statistical measures and indicators

The report focuses on statistical measures and indicators concerning Indian and Inuit conditions. The emphasis, therefore, is on statistical descriptions of the lives, livelihood, environment and well-being of Indians and Inuit.

Data requirements on expenditures by federal departments and provincial governments are not included in this report.

This report identifies a relatively comprehensive list of statistical measures and indicators of Indian and Inuit conditions required by INAC. Some of these statistical data requirements will need further research and development involving the census and survey programs and projects of Statistics Canada.

Statistics Canada can meet only some of the statistical data requirements identified in this report. The report will therefore also serve as a reference document for INAC in its own ongoing and special research and data-gathering and analysis activities as they relate to Indian and Inuit conditions. The report thus provides a 'menu' of statistical measures and indicators which should be developed by or on behalf of INAC to help it meet its policy development, program planning, operations and evaluation responsibilities.

The list of statistical data requirements are grouped into eight subject matter domains and set out in summary form on the accompanying tables. Each indicator is assessed in terms of the following:

- <u>user requirements</u>, including applications and uses of the data and required characteristics of the data

- <u>current situation</u>, regarding the characteristics of existing data and indicators

- <u>sources</u>, which are currently providing data or which, with proper modification, could provide required data

- <u>comments</u> on improvements and modifications needed to provide required data

- <u>need for action</u>, providing an assessment of the relative need for action to provide required data taking into account <u>both</u> the relative importance of the data for user applications and the degree to which current data and indicators satisfy user requirements

This report provides a broad overview of the present situation regarding the availability and suitability of statistical measures and indicators on Indian and Inuit conditions; it does not provide a definitive assessment. Follow-up research and analysis will be required to assess each subject area of the overall system of social statistics from the point of view of the following characteristics:

- relevance to specific policy, planning, operations and evaluation requirements

- availability

- timeliness

- cost

- administrative responsibility for collection, manipulation and
  dissemination

Further follow-up work will also be required to assess how existing and
potential new data sources, systems and procedures can be organized so as to
obtain the data inputs and produce the desired statistics in an efficient and
timely fashion, taking into account the administrative, financial and other
implications involved. Where required statistics cannot be provided as
described in this report, alternative or proxy measures may need to be found.

II USER REQUIREMENTS

Overview of Requirements

Past studies and evaluations, summarized in Appendix 1, have emphasized the need to develop a data base of statistical measures and indicators in relation to overall political, social, economic and cultural objectives and concerns. Such social statistics provide an important aid to policy developers, program planners, researchers and program evaluators in the performance of their respective duties, and to other individuals and organizations with similar interests (e.g., Indian and Inuit communities and organizations) in the measurement, analysis and forecasting of Indian and Inuit social conditions and trends. As noted in the introduction, user requirements for expenditure statistics are included only in a very limited way.

As outlined in the Management Improvement Project M-6, the principal stakeholders with requirements for statistical data on Indian and Inuit conditions in Canada include:

- INAC, with its various responsibility centres:

    - Indian and Inuit Program (including major sub-programs)

    - Northern Affairs Program

    - Office of Native Claims

. other federal departments and agencies with program interests and
  responsibilities related to or affecting Indian and Inuit conditions
  (e.g., Health & Welfare; Secretary of State; Employment and
  Immigration; Ministry of State for Small Business & Tourism; Regional
  Industrial Expansion; Justice Canada; and the Ministry of the Solicitor
  General)

. Cabinet, including the Cabinet Committees on Social Development and
  Economic Development

. central agencies, including the Ministry of State for Social
  Development, the Ministry of State for Economic and Regional
  Development, the Privy Council Office, the Treasury Board Secretariat,
  the Federal-Provincial Relations Office and the Office of Aboriginal
  Constitutional Affairs

. Indian and Inuit communities, organizations and enterprises across
  Canada

. provincial and territorial governments

. other national, provincial and local organizations and special interest
  groups concerned with the social, economic, cultural or political
  development of Native Canadians

Although the primary emphasis of this report is on the statistical data requirements of INAC and other selected federal central agencies and key departments respecting Indian and Inuit conditions, consideration has also been given to data requirements of the external users identified above.

The data requirements of key users with responsibilities for policy development and research and, to a lesser extent, program planning and evaluation are expressed in terms of:

a) the purpose and use of data

b) the content or subject matter (substantive domains)

c) required data characteristics

a) PURPOSE AND USE OF DATA

As outlined in past reports, and as reinforced through interviews with members of this project's departmental steering committee, data on Indian and Inuit conditions are required in respect of a wide range of purposes and activities:

. <u>Policy and Program Analysis & Development</u>:

. measurement, assessment and justification of the relative needs, priorities and concerns of Indians and Inuit

- establishment of a rational and/or quantitative basis for setting and adjusting program reference levels

- identification of emerging factors and issues requiring policy and program responses

. Planning and Forecasting:

- identification and measurement of client groups and sub-groups eligible for various programs and services

- measurement of the anticipated demand for, and take-up of, specific programs and services

. Operational Decision-Making:

- establishment of a rational and/or quantitative basis for the allocation of services and resources based upon empirical conditions in relation to established policies, standards and guidelines (e.g., eligibility criteria for program services)

. Policy and Program Evaluation:

- measurement and assessment of the impact and effects of policies and programs on Indian and Inuit conditions

- monitoring and analysis of the overall progress and rate of
  change of key factors affecting (and key aspects of) Indian and
  Inuit conditions

- Pure Research:

  - ongoing research and analysis of the history and evolution of
    Indian and Inuit peoples in Canada, and of the inter-linkages
    between key facts, factors, attributes and variables in their
    lives

b) SUBSTANTIVE DOMAINS

The data requirements cover the complete range of factors depicting the lives,
livelihood and well-being of Indian and Inuit people, and for convenience may
be organized under the following substantive domains and areas of concern:

- Demographic:

  - population size, rate of growth, distribution and composition,
    including vital statistics and related demographic facts, factors
    and variables

. <u>Social</u>:

    . family and community organization, stability and well-being, including factors such as family conditions, and social relations

. <u>Criminal Activity and Justice</u>:

    . delinquent and criminal behaviour, and participation in the adult and juvenile criminal justice systems

. <u>Economic</u>:

    . natural, human and institutional resources and development opportunities

    . economic organization and structure

    . economic/employment status, conditions and development

. <u>Cultural and Political</u>:

    . characteristics and trends regarding the cultural and political identity, organization and development, as well as participation in community, regional and national affairs

- Environment and Infrastructure:

    - quality and condition of the built and natural environment,
      including natural amenities, housing and public facilities

- Health:

    - individual and community physical and mental health and
      well-being, including morbidity and mortality

- Education:

    - formal (and informal) academic, vocational and life skills
      training and experience

c) REQUIRED DATA CHARACTERISTICS

On the basis of a review of past studies and evaluations of data requirements
as well as interviews of the project's steering committee members, it has been
determined that most indicators and measures of Indian and Inuit conditions
have a range of common characteristics and attributes. Some indicators and
measures, however, require additional or special characteristics and
attributes for particular purposes. The summary tables, which link indicators
and measures to user requirements, current situation, and priority, thus

identify only major variations and special requirements that differ from the common characteristics and specifications that apply to all indicators and measures. Common characteristics and attributes with major variations and special requirements are outlined below.

. Level of Geographic Aggregation:

. Wherever possible and practical, collected data should be organized and tabulated at the level of individual Indian and Inuit communities, including Indian bands and reserves as well as selected communities across Canada where there are significant concentrations of status Indians and Inuit. In addition, the data need to be subsequently aggregable at the INAC administrative district, provincial and national levels for ready comparison with the non-Indian and non-Inuit populations.

. In certain circumstances, special units of geographic aggregation are required. For example, educational information (especially for the elementary and secondary levels) may need to be aggregated at the school district level, while certain economic data would have to be aggregated at the level of the department of Regional Industrial Expansion's economic regions or that of INAC's economic districts. Wherever such special units of aggregation are required, they are indicated as special features in the summary table which follows. In general, however, the indicated level of aggregation on tables accompanying each domain

represents the minimum (lowest) possible level at which data, if
available, could be most useful. Higher levels of collection
above the minimum are implicitly assumed.

. <u>Sub-Group Classification:</u>

   . All data on the Indian and Inuit populations should be organized
     in a way which allows for ready comparison among males and
     females; different age groups; on and off-reserve groups; legal
     status (i.e., status Indian by birth; status Indian by marriage;
     Inuit).

   . In addition to the above basic classifications, certain special
     sub-groupings may be required for certain indicators and
     statistical measures. For example, certain economic data should
     be organized on the basis of economic sectors and/or Standard
     Industrial Classification categories. These special required
     characteristics are indicated on the summary table.

. <u>Comparability with Non-Status Indian and Non-Native Populations:</u>

   . To the greatest extent possible, the data should be organized in
     a format compatible with other national data sources, and should
     allow for ready comparison between status Indians, Inuit,
     non-status Indians and other groupings of the national population.

. The data should, at a minimum, allow for comparison of status
Indian and Inuit populations in each province or territory and in
Canada with the total provincial and national populations.

. Ideally, the data should also provide for a comparison among
status Indian, Inuit and non-Indian/non-Inuit populations (as
distinct from total population) in each province and in Canada as
a whole.

. The level of geographic aggregation should be specific enough to
allow for a comparison of Indian and Inuit conditions in
specified sub-provincial regions (e.g., INAC administrative
districts; on/off reserve; economic regions; etc.) with the total
and/or non-Indian/non-Inuit populations in the same or adjacent
sub-provincial geographic regions.

. The summary table rates each recommended indicator/measure on the
basis of how important it will be to ensure a reasonable degree
of comparability with the non-Indian and non-Inuit populations.
Indicators which are ranked as H (high) are those for which it is
especially important to ensure that the units of measure,
timeframes, and other attributes of the indicator are closely
comparable to similar indicators/measures for the non-Indian and
non-Inuit populations. This means that the indicators will be
used heavily for inter-group comparisons. Indicators and

measures which are ranked M (medium) or L (low) are less
important for inter-group comparisons. Hence, users will be more
tolerant of variations in the units of measure, timeframe,
relative accuracy, etc. of the Indian/Inuit and the
non-Indian/non-Inuit indicators.

. Inter-linkage/Cross-Tabulation of Data:

   . To the greatest extent possible, the various statistical measures
     and indicators should be organized and tabulated in such a
     fashion so as to allow for maximum cross-tabulation for analytic
     purposes.

   . The relative importance attached by users to ensuring that data
     for one indicator/statistical measure allow for ready comparison
     and cross-tabulation with other indicators within the same domain
     or within other domains, is shown on a scale of H (high), M
     (medium), and L (low). A high rating indicates that users would
     attach great importance to using one statistical measure to
     correlate or cross-tabulate with other indicators (i.e., to
     assess the cross-impacts and interrelationship of various
     conditions and circumstances). A detailed analysis of all the
     inter-linkages of the indicators and of required correlations has
     not been undertaken to date and is beyond the scope of this

report. It should be noted, however, that the possibility of inter-linking domains using different data source systems is highly problematic.

. **Timeframe/Periodicity:**

. In most cases, the data should be organized and tabulated on an annual basis. (i.e., the period and/or frequency of measure should be one year/once per year)

. In a few instances, such as with labour force data, data measurement would be preferred on an annual basis.

. In other cases, such as with basic household characteristics which are typically enumerated in the census, measurement every 5 years appears to be satisfactory.

. The ideal or preferred timeframe/periodicity of the data is indicated on the summary chart. For example, annual periodicity means that the data should be measured once per year.
(Note: This means that the users require the data on an annual basis, even if data are in fact collected or tabulated more frequently than once a year.)

. <u>Timeliness</u>:

     . The time span between the occurence of events and their recording, and subsequently between the recording of the events and the availability and publication of data, should be such that the resulting data are not regarded as obsolete in relation to their intended use. As a general rule, most data organized on an annual basis should be available within one to three months of year-end, while most data from the census should be available within two years.

     . The approximate time spans from end of period of measurement to desired availability of data in at least a raw tabular form is shown on the summary table.

. <u>Accuracy</u>:

     . In all cases, the greatest possible attention should be attached to the achievement of a high degree of accuracy for all indicators and statistical measures. Each must be defensible for its applications and intended uses, and should have a margin of error compatible with the level of precision required by the users.

. In some cases, however, a lower level of accuracy than the ideal
  may be tolerable - in particular if no data have previously been
  available and/or the cost of achieving a high degree of accuracy
  is prohibitive. In such cases, the relative tolerance of users
  toward a lower degree of accuracy is shown on a high, medium, low
  scale. This does not mean, for example, that a high tolerance
  for low accuracy should result in the production of low-accuracy
  data. Instead, it means that high-accuracy data should be
  sought, but that low-accuracy data would also be useful to meet
  particular needs and to fill previous data gaps.

. Sample/Selective Survey:

  . In most cases, the ideal is to have data available on the total
    universe (i.e., all Indian and Inuit individuals, communities,
    enterprises, etc.). However, for practical reasons it is not
    always cost-effective to carry out an absolute count of the total
    universe. Instead, a sample or selective survey may provide
    sufficiently accurate and reliable data for user requirements.

  . The summary chart indicates whether ideally a sample or selective
    survey is acceptable for each indicator/measure (indicated by a
    yes response) or whether a total universe count is required
    instead of a sample or selective survey (indicated by a no
    response). For the current situation section, the YES/NO

responses simply confirm the method by which data were acquired

for each indicator/measure--i.e., whether by sample/selective

survey (YES) or by a total universe count (NO).

III A SYSTEM OF STATISTICAL MEASURES AND INDICATORS

The following sections describe a proposed system of statistical measures and initiatives dealing with Indian and Inuit conditions in eight substantive domains:

    a) demographic

    b) social

    c) criminal activity and justice

    d) economic

    e) cultural and political

    f) environment and infrastructure

    g) health

    h) education

Each domain is assessed in terms of:

- SCOPE: factors, elements and components included in the domain

- USER APPLICATIONS/SUBSTANTIVE ISSUES: major substantive activities and areas of concern in the domain requiring data for decisions, action, etc.

- OVERVIEW OF CURRENT SITUATION: general summary assessment of the availability, reliability and suitability of existing statistics, statistical measures and data sources

.   RECOMMENDED INDICATORS AND STATISTICAL MEASURES: proposed measures and
    data which should be obtained by or on behalf of INAC on a regular basis

.   SUMMARY TABLE: assessment of each recommended measure/indicator in
    terms of user requirements (applications; required characteristics);
    current situation (data characteristics, sources, comments on required
    changes), and relative priority

a) DEMOGRAPHIC

Scope

The demographic domain is defined here as the social aspect which covers indicators and measures dealing with the basic population characteristics and attributes of Indians and Inuit. These include vital statistics on births and deaths, as well as basic measures of the population size, rate of growth, composition (age, sex, legal status) and distribution. They also include measures which focus on the basic demographic characteristics of Indian and Inuit communities.

User Applications/Substantive Issues

Demographic statistics and indicators form the basic building block of all of the department's statistical information systems. They are used to describe and analyze the basic characteristics of the client population, with respect to such factors as eligibility for program services (i.e., on the basis of age, sex, geographic location, legal status, and/or residence on or off reserve). They are also used for estimating and forecasting the potential and likely demand for, and take-up of, available programs and services.

Basic demographic data are used by virtually all branches of the Department, and by virtually all other departments and organizations dealing with and/or providing services to Indian, Inuit and other Native populations.

Increasing attention may be paid in future years to the impact of changes to the Indian Act, which are designed to remove discriminatory provisions related to the loss and/or gain of Indian status by marriage. The overall demographic effect of these changes, measured in terms of the number of Indians gaining or losing status as a result of marriage (including dependent children), has a major effect on the number of persons eligible for programs and services of INAC and other departments serving the Indian population.

Current Situation

At the present time, data for most required demographic variables range from fair to excellent in terms of availability, reliability and suitability with the exceptions noted below. Apart from the problems associated with late-reported births, the Indian Register is generally considered to be a reliable demographic data source, while the reliability of census data is somewhat lower due to problems of self-enumeration and undercoverage. In terms of availability, the census is an excellent source while the Indian Registered can be rated as fair. Finally for suitability, both systems can be rated as good.

Recommended Indicators and Statistical Measures

The following list outlines a set of indicators and statistical measures
designed to meet the key requirements of major users involved with demographic
analysis, as well as with the estimation and forecasting of demand for various
programs and services, as a function of demographic attributes.

- Population Size (number of Indians; number of Inuit)

- Population Growth Rate (% growth in population each year over previous
  year)

- Population Age Composition (by sex)

- Population Sex Composition (by age)

- Population Distribution (absolute numbers and % of total population by
  administrative district, province, territory, community, and CSDs,
  CMAs, CAs)

- On/Off Reserve Population Distribution (absolute numbers and % of total
  Indian population on/off reserve)

- Migration (status and period of residency; frequency of previous moves;
  origin and destination of migrants; stated reasons for migration)

- Indian and Inuit Communities (absolute number and population size of
  all Indian bands and Inuit communities, including major off-reserve
  concentrations in mixed Indian/Inuit and non-Indian/non-Inuit settings;
  distribution of Indian and Inuit population by band size and other
  appropriate classification)

- Urban/Rural Distribution (absolute numbers and % of Indians and Inuit
  living in urban, semi-urban, rural and remote bands and communities)

- Live Births (absolute number of live births)

- Birth Rate (number of live births per 1,000 women)

- Adoptions (absolute number of Indians and Inuit children adopted by Indians, Inuit and others)

- Population Projections (by age, sex, geographic distribution and total numbers)

- Total Fertility Rate (number of live births per woman of child-bearing age--15-49 years)

- Age-Specific Fertility Rate (number of live births per woman in each age category)

- Deaths (absolute number of deaths)

- Death Rate (number of deaths per 1,000 population)

- Age-Specific Death Rate (number of deaths per 1,000 population in each age category)

- Natural Increase (absolute increase in population through natural increase; i.e., births minus deaths, and % of total population growth attributed to natural increase)

- Status Loss By Application (number of Indians losing Indian status as a result of application)

- Status Loss By Marriage (number of female adult Indians and their unmarried minors losing Indian status as a result of marriage to non-Indian males)

- Status Gain By Marriage (number of non-Indian females and their unmarried minors gaining status by marrying Indian males)

b) SOCIAL

Scope

The social domain includes basic demographic information on the social
composition and characteristics of the Indian and Inuit populations. These
include data dealing with overall population age composition (i.e., as an
indicator of dependency) as well as family and household characteristics and
social assistance information.

Ideally, the domain would include indicators which provide a measure of social
harmony, cohesion and stability, as well as a measure of the degree to which
Indian and Inuit populations are socially compatible with non-status and
non-Native populations. However, these measures are not likely to be made
available, with the exception of information on welfare and social pathology.
In the future, consideration might be given to inclusion of indicators dealing
with such factors as ethnic tensions (e.g., discrimination cases brought
before the Canadian Human Rights Commission), and various community
interpersonal behavioural norms governing helping others, resolving social
problems and conflicts, showing respect for people and property and general
socialization process.

User Applications/Substantive Issues

Many of the social indicators and measures are used for broad analytic
purposes, to assess the overall stability and well-being of the Indian and
Inuit populations, in comparison with the non-status Indian population and
other Canadians.

A few of the measures are used for specific planning and forecasting purposes,
including:

- estimating and forecasting the demand for housing and related services,
  as a function of total population, household formation, family size and
  family status

- assessing and forecasting the demand for specialized social assistance
  programs, such as child care, counselling and social assistance

- as outlined above, additional social indicators might be considered in
  the future, to provide data on such important social factors as ethnic
  relations between Indians/Inuit and non-status Indian people and other
  Canadians

Current Situation

Most of the demographic-related information on the social domain is drawn from the Indian Register, which is recognized as a generally acceptable data source. The major requirement is for the data to be organized and presented in the required format on a timely basis (e.g., rate of household formation; family size distribution; etc.). The census will provide additional information with respect to such factors as marital status, household formation, etc.

Data are limited on key factors related to dependence on social assistance. Although departmental administrative data sources provide information on social assistance and related transfer payments, there is inadequate information on the household characteristics, educational levels, employment history, and income sources of past and current recipients. A major problem of INAC's social assistance data is that the Department's social development data base is still manually operated.

Recommended Indicators and Statistical Measures

Although the measurement of births outside marriage is a relatively low-priority item, current recordings are not considered to be comprehensive or accurate.

- Dependent Population/Dependency Ratio (absolute numbers and % of total population of 'dependent' age group; i.e., 0-14 yrs. and 65 yrs. and over)

- Index of Aging (population 65 yrs. and over compared to population under 15 yrs.)

- Average Family Size (average number of adults and dependents per family)

- Family Size Distribution (absolute numbers and % of families in each family size category)

- Household Formation (absolute number of family household units; net increase in family household units each year)

- Births Outside Marriage (absolute number and % of total births outside formal marriage)

- Family Composition (number and % of 2-parent and single-parent families by sex of single parent, and distribution by family size)

- Marital Status (marital status and history of previous marriages of adult population)

- Divorces and Divorce Rates (absolute number of newly-divorced persons each year; divorced persons per 1,000 population; divorced persons per ever-married population)

- Children In Care (absolute number and % of all children in care, by type, location, average period of care; and by reason for placement in care)

- Adoptions (absolute number of Indian and Inuit children adopted by Indians/Inuit and non-Indians/non-Inuit)

- Dependence on Social Assistance (number and % of families and total persons dependent on social assistance)

c) CRIMINAL ACTIVITY AND JUSTICE

Scope

The criminal justice domain includes measures of both criminal activity and criminal justice. In terms of criminal activity, the domain includes actual and reported offences under criminal statutes dealing with both young offenders and adult offenders. In general, these are categorized under property and personal or violent crimes. In terms of criminal justice, this includes various measures of the flow of accused offenders through the criminal justice system, including activities of the police, courts and correctional services.

User Applications/Substantive Issues

INAC does not have direct responsibility in the field of criminal justice which is administered through Justice Canada and the Ministry of the Solicitor General. However, in view of the close interrelationship between social and economic conditions and the level of criminal activity and the treatment of offenders, there is increasing interest in the Department in the analysis of criminal activity and justice as it relates to Indians and Inuit. This is parallelled by increasing attention in Justice Canada and the Ministry of the Solicitor General in the general fields of Native justice and justice in the

north. Similarly, there is interest on the part of the Medical Services
Branch of Health and Welfare Canada (in the National Native Alcohol and Drug
Abuse Program) on the functional interrelationships between the social,
medical and criminal aspects of alcohol and drug abuse.

To the extent that the underlying root causes of a significant portion of
criminal activity by Indians and Inuit are linked directly or indirectly to
social, cultural, environmental and economic conditions, there is an interest
on the part of INAC to assess means by which these problems can be overcome.
Similarly, there is an interest within INAC in the overall fairness of the
criminal justice system as it is administered to Indians and Inuit.

Current Situation

At present, all information on criminal justice as it relates to Indians and
Inuit is retained through the joint centre for criminal justice, administered
by Justice Canada, the Ministry of the Solicitor General and Statistics
Canada. The identification of Indians and Inuit in criminal justice data
systems has been varied and inconsistent, partly due to the different
reporting methods employed by each province. It is felt, however, that with
marginal increased effort, the recording of Indian and Inuit participation in
the criminal justice system at the federal and provincial levels could be
greatly enhanced. This is especially true of adult offenders. The

accessibility and availability of information on young offenders in general
(i.e., the total population) is not clear in light of the new Young Offenders
Act, which provides for improved protection of young offender records. Since
the national data sources and records systems in the criminal justice field
are generally recognized as being reliable and accurate, the isolation of
status Indians in data collection and tabulation would fill an important gap
in current criminal statistics on Indians and Inuit.

Recommended Indicators and Statistical Measures

The following list outlines a set of indicators and statistical measures which
are designed to meet the key requirements of major users involved with
criminal justice services, and with the interrelationships between criminal
activity and social, cultural, political, economic and environmental
conditions.

- Property Crime Rates (number of reported property crimes in Indian and
  Inuit communities by crime type; rate per 1,000 population)
- Violent Crime Rates (number of reported violent crimes in Indian and
  Inuit communities by crime type; rate per 1,000 population)
- Adult Arrests and Convictions (absolute number, rate per 1,000
  Indian/Inuit population and % of all arrests and convictions by major
  offence)
- Young Offender Arrests and Convictions (absolute number, rate per 1,000
  population and % of all arrests and convictions by major offence)

. <u>Criminal Dispositions</u> (average disposition for convicted Indians/Inuit compared to non-Indians/Inuit for selected offences)

. <u>Incarcerations</u> (absolute number, rate per 1,000 population and % of total inmate population in federal penitentiaries and provincial detention centres by reason for incarceration and length of sentence)

d) ECONOMIC

Scope

The economic domain covers a full range of indicators and measures which deal
with economic resources, economic activity and economic status. The resources
include natural as well as man-made resources, including renewable and
non-renewable resources, economic structures and institutions (e.g.,
financial, commercial, and manufacturing facilities and equipment), human
skills, and all related social and physical infrastructure. Economic activity
includes all formal and informal investment, operations and development
activities related to the creation and distribution of goods and services by
or for Indians and Inuit. Economic status includes the income, wealth and
general economic well-being of Indians and Inuit.

User Applications/Substantive Issues

Indicators and statistical measures of the preceding range of factors and
attributes are required by the Department (especially the Corporate Policy
Sector, the Resource, Economic and Employment Development Branch and the
Northern Affairs Program), as well as by key related federal departments in
the socio-economic development field (especially the newly-created Native
Economic Development Program in the Department of Regional Industrial
Expansion, but also including the job creation, affirmative action and

training branches of the Canada Employment and Immigration Commission, the various units of Energy, Mines and Resources concerned with the effects of resource development, and the resource development programs of Agriculture Canada and Fisheries and Oceans).

The uses and applications to which the required indicators and measures will be put, and the substantive issues with which they will deal, include:

- monitoring and assessment of the level of economic well-being of Indians and Inuit in different communities and regions and over time

- identification of key target groups requiring high-priority or specialized economic development assistance (e.g., certain communities, age and social groups, enterprises, etc.) to deal with particularly severe or unique economic hardships

- determination of the eligiblity of certain communities, groups and enterprises for various economic assistance programs and services, within established guidelines and criteria

- measurement and assessment of the current and longer-term development potential of Indian and Inuit communities, as a function of their natural resource endowment, geographic location, access to financial commodities and markets, etc.

- measurement and assessment of the degree to which Indians and Inuit have access to, and take advantage of, national economic services, institutions and resources

- identification and assessment of linkages (i.e., causes and contributing factors) between the economic development of Indians and Inuit, and their health, education, social, cultural, political and environmental conditions (i.e., to aid in shaping and coordinating programs)

- development of an understanding of the form, nature and process of economic development within the Indian and Inuit context, and of the interrelationship between wage and non-wage or traditional pursuits in their overall socio-economic-cultural structure

Current Situation

At the present time, the most basic needs of users are not being met by existing economic data and sources. This is the poorest-developed domain in terms of quality and availability of data, and is particularly crucial in light of the overall importance of economic development in the social, cultural, political and environmental well-being and health of Indians and Inuit.

At present there is no organized, consistent and reliable system for providing timely data on Indian economic resources, activities and conditions. The major sources of information on Indian economic conditions include individual reports and evaluation studies on selected communities, enterprises and projects (e.g., individual band projects, business ventures, sectoral programs, etc.). These vary widely in quality and reliability and typically utilize inconsistent definitions, units of measure and time periods. Moreover, they do not cover even a representative sampling of reserves and communities across the country. These reports and studies, which include selected data on employment, job creation, resource development potential (within a given reserve or sector), and business activity/output, are complemented by departmental administrative data - primarily in the Resources, Economic and Employment Development Branch. That branch has recently engaged the Bureau of Management Consulting to assist in the development of a consistent system of baseline data and program information which is designed to overcome many of the current shortcomings.

The Canada Labour Force Survey does not cover Indian reserves and has not been used to isolate Indians and Inuit in off-reserve communities. In the future, special surveys of Indian reserves and selected communities with high concentrations of Indian and Inuit could be undertaken to provide required data on employment, although the cost-effectiveness of such special surveys has not been determined.

Data on reserve resource endowments are available through Reserves and Trusts, which is responsible for carrying out surveys of mineral and petroleum resources and production. These surveys, with the exception of basic data on value of production, have not been fully exploited for research and analytic purposes.

Additional information on the land development capacity of Indian reserves for a range of economic activities (e.g., agriculture, forestry, recreation, game animals) and on patterns of land use is available through special tabulations of the Canada Land Inventory of Environment Canada. These have not been exploited or made available to key users in the Department, despite being relatively convenient to produce and relatively inexpensive.

The 1981 and future censuses of Canada hold great promise for data on economic activity and status of communities, households and individuals--provided that current problems with the reliability of the enumeration are minimized.

Recommended Indicators and Statistical Measures

The following list outlines a set of indicators and statistical measures which are designed to meet the key requirements of major users involved with the economic development and status of Indians and Inuit and/or with the linkages between economic conditions and social, cultural, political, health and environmental conditions.

- Working-Age Population (absolute numbers and % of total population of working age (i.e., 15-64 yrs.) and net annual increase in working-age population)

- Labour Force Participation (Wage Economy)(absolute number and % of working-age population working or actively seeking work in wage pursuits, each month or quarter)

- Non-Wage (Traditional Pursuit) Participation (absolute number and % of working-age population working or actively seeking work in non-wage (traditional) pursuits, each month or quarter)

- Employment Rate (absolute number and % of labour force participants gainfully employed in wage pursuits each month or quarter)

- Employment Success Rate (absolute number and % of total working-age population gainfully employed in wage pursuits each month or quarter)

- Income (average wage income per family, per working-age population, per labour force participant and per employed person in wage pursuits)

- Income Sources (absolute value and % distribution of community and average family income by source of income: wage; non-wage; transfers)

- Occupations (absolute numbers and % distribution of employed workers by occupation and major industry sector)

- Work Duration (average number of days/weeks worked per year of employed workers; % distribution of employed workers by categories of number of weeks worked per year)

- Economic Dependency Ratio (ratio of economically inactive population to economically active population; i.e., ratio of non-working population of all ages to working population of all ages)

- Labour Market Conditions (% distribution of Indian/Inuit communities and Indian/Inuit population by average unemployment level in adjacent/surrounding regions)

- Reserve Accessibility (% distribution of Indian/Inuit communities and population accessible by road, water/seaplane and/or rail)

- Indian/Inuit Enterprises (number and average value of business of Indian- and Inuit-owned or controlled enterprises, by business type)

- Reserve Lands (absolute size and average per capita share of Indian reserve lands; % distribution of communities and population by per capita reserve lands)

- Reserve Land Use (absolute size and annual increment in use of reserve lands, by use type and by land use capability classification type; % utilization of each land use capability class)

- Land-Use Capability (size and distribution of Indian reserve lands with good potential for each of agriculture, forestry, animal game, waterfowl, and commercial recreation)

- Mineral Resources (number, distribution, and value of production of oil, gas, metals and structural materials; % of reserves with good to excellent mineral resource potential)

e)   CULTURAL AND POLITICAL

Scope

The cultural and political domain includes factors relating to Indian and Inuit government and political participation, as well as cultural, linguistic and religious attributes.

User Applications/Substantive Issues

Data on the cultural and political attributes and conditions of Indians and Inuit are primarily used for broad policy and program analysis purposes. Some of the key issues which will require a better understanding of the Indian and Inuit cultural and political situation are:

.   progress towards Indian self-government, including trends in the involvement and participation of Indians and Inuit in the planning, design and delivery of their own programs

.   the development of an understanding on the part of non-Indians and non-Inuit of the evolving political structures and processes of Indian and Inuit communities and organizations, to aid in improved political and working relationships

. assessing the impact of a broad range of programs, services, and
general socio-economic trends on the cultural integrity and stability
of Indian and Inuit populations and communities

Current Situation

With the exception of information on the participation of Indian bands in the
administration of government programs (i.e., band-administered funds), most of
the statistical measures and indicators in the cultural and political domains
are poorly developed. To a large extent, this may reflect their lower
priority in relation to the social, economic, health and education domains.
Nonetheless, much of the information can be obtained with relatively marginal
cost and effort. For example, data are readily available on the level of
participation of Canadians in federal and provincial elections, by geographic
area (i.e., to a polling district level). In addition, data on membership in
Indian, Inuit and Native organizations should be readily available from the
organization offices.

The census provides information on language retention and religion. It also
provides information on the degree to which Indians and Inuit tend to
inter-marry with non-Indians and non-Inuit and, similarly, the extent to which
each group tends to be involved in adoptions from the other group.

Recommended Indicators and Statistical Measures
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The following list outlines a set of indicators and statistical measures which
are designed to meet the requirements of major users concerned with the
overall cultural and political evolution of Indians and Inuit, and with the
administration of Indian self-government.

- Band Councils (number of councils, by method of selection; i.e.,
  traditional or election)

- Participation in Band Elections (% of eligible Indian and Inuit voters
  voting in band elections)

- Band-Administered Funds (% of total DIAND budget administered by bands)

- Indian & Inuit Participation in Federal and Provincial Elections (% of
  enumerated voters voting in general elections)

- Language (absolute number and % of Indian and Inuit population by
  language(s) including official language(s) spoken, mother tongue and
  language spoken at home)

- Indian & Inuit Newspapers and Magazines (number and circulation of
  Indian/Inuit-oriented periodicals)

- Religion (absolute numbers and % of population by religious affiliation)

- Membership in Indian/Inuit and Other Native Organizations/Associations
  (number of registered members in major national, provincial,
  territorial and local organizations)

f) ENVIRONMENT AND INFRASTRUCTURE

Scope

The environment and infrastructure domain includes three broad elements:
housing, community infrastructure and facilities, and the natural
environment. Housing includes the quantity, quality, characteristics and cost
of shelter and of related services such as heating. Community services and
infrastructure include basic utilities (sewer, water and electricity) as well
as specialized infrastructure such as community recreation and service
facilities. The natural environment includes the quality of air and water,
and exposure to environmental hazards. The statistical measures and
indicators in this domain of Indian and Inuit conditions can be strongly
related to program outputs and thus program costs.

User Applications/Substantive Issues

Information on housing supply, construction, cost, etc., is required both
internally within INAC (Housing and Band Support Branch), but also in Canada
Mortgage and Housing Corporation (Rural and Native Housing Program). These
organizations are concerned with such substantive issues as:

. estimating and forecasting the demand for housing of different sizes
and characteristics across the country, on the basis of household
formation, rate of deterioration, etc.

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- estimating and forecasting the demand for major renovation and repair services and support

- assessing the eligibility for, and requirements of, housing construction and maintenance assistance (i.e., taking into account the quality and affordability of housing)

- setting priorities for capital construction and maintenance programs to meet housing program needs

Similarly, INAC and CMHC have a requirement for data on basic community infrastructure, to assess the demand for, and supply of, basic services such as water, sewerage, and electricity as well as support services such as fire protection. In addition, there is a requirement for an assessment of the demand for, and supply of, community recreation and service facilities. Certain other departments, such as Health and Welfare Canada, have an interest in the overall quality of housing and community services - especially recreational facilitities - as they relate to physical and mental health conditions and the incidence of alcohol and drug abuse, mental disorders, etc.

There is a growing interest within the Department and within Health and Welfare Canada on the past and potential future impact of industrial and resource development projects on the environmental safety of Indian and Inuit communities. There is a need to monitor and assess the exposure to, and impacts of, environmental hazards facing Indians and Inuit. This will be used

to guide future resource development and related industrial projects and activities – particularly in environmentally sensitive and unique areas, and where Indians and Inuit are dependent upon natural amenities (e.g., fresh water, fishing, trapping and hunting) for their livelihood.

Current Situation

In relation to the overall importance of housing, community services and the natural environment on the livelihood and well-being of Indians and Inuit, existing data sources are inadequate. The biennial Housing Needs Analysis Survey has not been updated since 1977, and it has not enjoyed as high a degree of confidence as should be expected of such a survey.

The census promises to fill important gaps, by providing important information on the current housing stock occupied by Indians and Inuit (both on and off reserve), including the type of structure, period of construction, number of rooms, and size of household. It is also expected to provide supplementary information on household expenditures, heating systems, etc. However, this cannot adequately replace the need for a comprehensive and regularly-updated inventory of housing as well as community infrastructure facilities. These more specific, and more frequent, inventory surveys are required to regularly guide the planning of capital and operations/maintenance investments and expenditures.

Information on environmental hazards and the overall quality of the natural

environment in Indian and Inuit communities is virtually non-existent. With

the exception of special investigative studies and evaluations in response to

immediate and specific environmental incidents, there is no systematic

overview of the natural environment in Indian and Inuit communities. It is

recognized that the establishment of a system of air or water-quality

monitoring systems would be impractical in most Indian and Inuit communities.

However, it may be practical to initiate a relatively subjective system of

chronicling major current and potential future environmental hazards, to

provide a common data base and a national overview. In future, selective

surveys and targeted studies could be undertaken to complement the information

in high-risk areas.

Recommended Indicators and Statistical Measures

The following list outlines a set of indicators and statistical measures which

are designed to meet the key requirements of major users involved with housing

and community infrastructure design, construction, operation and maintenance,

and financial assistance, as well as those who are involved with monitoring

and responding to environmental risks and hazards.

   . Housing Stock (absolute number of dwelling units and rate per 1,000

     families)

- Occupancy (absolute number of occupied and of unoccupied housing units and rate per 1,000 housing units)

- House Construction/Supply (number of new houses starting construction, under construction, completed, and occupied each year or quarter)

- Crowding (average number of rooms and average m^2 of usable floor area per person; distribution of persons and of families by different size classification of houses — expressed in terms of rooms and usable m^2)

- Housing Quality (number and % of houses deemed to be in need of major repair)

- Water Supply (number and % of houses with community water supply)

- Sewer Facilities (number and % of houses with sewer facilities by type: pipe sewer, septic tank, storage tank)

- Electricity Supply (number and % of houses with electric power supply)

- Fire Protection Services (number of communities and size of population with fire protection services and equipment, by type: professional vs. voluntary; band-owned vs. outside municipal contract)

- Fire Deaths (absolute number and rate per 1,000 population of deaths by fire, by types of causes, e.g., defective wiring, heating systems, etc.)

- Community Recreation and Service Facilities (number and size in m^2 of community facilities by type and use, e.g., health centre, recreation centre, band office, etc.)

- Age of Housing (number and % distribution of dwelling units by period of construction)

- Heating Equipment (number and % distribution of dwelling units by type of heating equipment, e.g., central heating, space heater, etc., and by type of fuel, e.g., oil, gas, kerosene, wood, electricity)

- Housing Expenditures (average rent, capital and operating payments per dwelling unit)

- Environmental Hazards (number of communities and population reported to be under risk of significant and/or sustained environmental risk, e.g., through air or water pollution, by type of environmental hazard)

g) HEALTH

(see also DEMOGRAPHIC section for selected vital statistics)

Scope

The health domain includes a wide range of indicators and measures which deal with the physical and mental health and well-being of Indians and Inuit, including measures of the quality and level of health and of the effects and impacts of poor health in terms of morbidity and mortality.

User Applications/Substantive Issues

Within INAC, there is a broad general concern for health conditions among Indians and Inuit - in particular as they relate to such factors as economic status, housing conditions, environmental hazards, and personal life skills (i.e., as a function of education). Although INAC is not directly responsible for the provision of health care services (which are administered through the Medical Services Branch of Health and Welfare Canada), it is responsible for many of the above substantive domains and for the provision of related services such as housing, water supply, education, sanitary facilities, and environmental protection. It is responsible for assistance in economic and employment development, which may be important contributing factors in the overall level of health care (e.g., as a function of nutrition and access to adequate counselling and clinical care).

Within the Medical Services Branch of Health and Welfare, there is a requirement for basic information on health conditions of Indians and Inuit for the following purposes:

- monitoring and assessing health conditions and their association with causes and contributing factors

- estimating and forecasting the demand for medical and non-medical health services

- planning, organizing and delivering health awareness and related preventive programs to targeted groups and communities who are at high risk

Current Situation

With the exception of basic information on mortality, data on Indian and Inuit health conditions (e.g., nutrition, physical illness and disability, mental illness, alcohol and drug abuse/dependence, etc.) are poor and inconsistent. The better data sources are those retained at the provincial hospital level, but data at the community level are inadequate. Improvement of the health data base will be a major task, involving health workers, health administrators and counsellors at the national, provincial and community levels.

Recommended Indicators and Statistical Measures

The following list outlines a set of indicators and statistical measures which
are designed to meet the key requirements of major users involved with the
planning and delivery of health care services (including nutrition, medical
and counselling services, environmental protection, and specialized services
for the disabled).

- Causes of Deaths (number and rate per 1,000 population by major causes)

- Age-Specific Mortality (number of deaths and rates per 1,000 population
  in each age category, by major causes)

- Age-Specific Life Expectancy (average additional years of life and
  average age at death of each age group)

- Neo-natal Mortality (number of deaths of infants under 28 days old, per
  1,000 live births)

- Post Neo-Natal Mortality (number of deaths of infants between 4 wks.
  and 1 year, per 1,000 live births)

- Causes of Infant Mortality (% distribution of neo-natal and post
  neo-natal mortality by major causes)

- Violent Deaths (number of violent deaths, rate per 100,000 population
  and % of all deaths, by major type, e.g., motor vehicle accident, fire,
  firearms, etc.)

- Homicides (number of homicides and rate per 100,000 population)

- Suicides (number of suicides and rate per 100,000 population)

- Hospital Morbidity (number and rate per 100,000 population of hospital admissions, by cause)

- Alcohol and Drug Abuse Treatment (caseload per 1,000 population in specialized alcohol and drug abuse treatment centres)

- Medical Treatment Facilities (number of beds and rate per 1,000 population, in hospital and other specialized treatment facilities, by type of facility)

- Physical Disability (number of persons with physical disabilities, and rate per 1,000 population, by type of disability, e.g., partial or complete blindness; restricted to wheelchair; confined to institutional care, etc.)

h) EDUCATION

Scope

The education domain includes measures of the participation and of the attainment of Indians and Inuit in both formal and informal education at the elementary, secondary and post-secondary levels, including academic and vocational institutions. It also includes measures of the quality and accessibility of educational services and facilities for Indians and Inuit. The related statistical measures and indicators are closely correlated to measures of program outputs.

User Requirements/Substantive Issues

The major issues in the education domain requiring data on educational participation, attainment, services and facilities, include:

- estimating and forecasting the level and distribution of demand for various educational services and facilities at the elementary, secondary and post-secondary levels

- assessing the quality and accessibility of educational services and facilities at all levels

- planning and anticipating future social, cultural and economic successes and/or difficulties, as a function of educational attainment of Indians and Inuit

- assessing the interrelationships between educational participation and attainment and other social, economic, cultural and political attributes of Indians and Inuit

Current Situation

At present, the principal data sources on Indian and Inuit education are the Nominal Roll, the Continuing Education Information System (CEIS) and the census. In general, the data systems managed by INAC are reasonably reliable for information on the elementary and secondary levels of Indians on reserves but are incomplete and inconsistent on post-secondary participation, attainment, and type of program (e.g., university enrolment, teacher training enrolment, nursing enrolment, pre-vocational enrolment, vocational training enrolment, and adult education enrolment). In addition, there is no overall measurement of the basic functional literacy of Indians and Inuit in Canada. Similarly, information on the numbers of Indian and Inuit teachers is limited to those in federal and band schools. Information on Native curricula and Native teachers in the provincial school systems is virtually non-existent. Finally, there is a need for enrolment statistics on off-reserve students of all ages and on registered Indians in provincial schools.

The census will enhance existing data bases by providing additional information on educational attainment at all levels and will provide useful correlative information on related characteristics (such as socio-economic background, employment, location, etc.).

Recommended Indicators and Statistical Measures

The following list outlines a set of indicators and statistical measures which are designed to meet the key requirements of major users involved with the provision of education and related facilities to Indians and Inuit and/or with the linkages between education and social, cultural, political and economic conditions.

- School Enrolment (number of students enrolled in school, by school level: pre-school, elementary, secondary, special)
- School Participation Rate (% of children enrolled in school at each age level)
- Education Attainment Level (% distribution of adult population by highest level of education successfully completed, by each adult age group)
- Enrolment by School Type (number and % distribution of students enrolled in federal, provincial and band schools, for each of elementary and secondary levels)
- Pupil/Teacher Rates (average ratio of pupils to teachers, in each of federal, provincial and band schools, at each of elementary and secondary levels)

- <u>Indian and Inuit Teachers</u> (number of Indian and Inuit teachers and % of total teachers in federal and band schools)

- <u>University Enrolment; Teacher Training Enrolment; Nursing Enrolment; Pre-Vocational Enrolment; Vocational Training Enrolment and Adult Education (Basic Literacy and Other)</u> (number of students enrolled full- or part-time in each type of institution or program, and % of population in young adult age groups)

- <u>Functional Literacy</u> (number of adults deemed to be functionally literate/illiterate, and rate per 1,000 adult population)

APPENDIX 1

BACKGROUND INITIATIVES RELATED TO

SOCIAL STATISTICS ON INDIAN AND INUIT CONDITIONS

While concerns about the availability and reliability of suitable statistical

measures and indicators on Indian and Inuit conditions have been prevalent for

some time, the current inadequacy of data in Canada has become particularly

apparent in recent years.

A retrospective report prepared in 1974 by K. Scott Wood of the Institute of

Public Affairs at Dalhousie University,[1] suggested that the Department's

interests in developing social indicators can be traced to the introduction of

Program Planning and Budgeting Systems (PPBS) for managing federal government

budgeting and resource allocation. Under PPBS, each program and all of its

integral sub-activities had to formulate objectives by which their progress

was to be evaluated. It therefore became necessary to specify measurements or

indicators to evaluate the social and economic objectives of the Department.

At the same time, Wood argued, with the formulation of "A STRATEGY FOR

NORTHERN DEVELOPMENT" as a step towards regional planning in Canada north of

60°, it was felt necessary to construct "...a social accounting framework"

which would organize and present economic information and social indicators

needed for regional planning in the north. Hence, in 1970-71, the Department

initiated a social indicator pilot project as part of research efforts in the Regional Planning and Manpower sections "...to provide an information system that could be used for regional planning in northern Canada". The project involved the development of social indicators which would identify and measure the impact of development projects in the Mackenzie River Delta and in Inuvik.

Since that time, issues related to Indian and Inuit affairs in Canada have become increasingly prominent and complex. Concerns with the past successes and shortcomings of departmental programs and initiatives in the fields of socio-economic development, housing, education, band government, health, cultural development, and overall program delivery, have all focused attention on the availability, accuracy, and suitability of existing statistical measures and indicators, as well as data sources and data management systems.

In 1978, an internal Research Branch study carried out by Andrew Siggner, Gary Cohen, and Chantal Locatelli[2] concluded that existing data systems did not adequately fulfill P.R.E.'s requirements and that there had been to date "...no systematic and integrated approach to data collection to support P.R.E.'s activities and, in most cases, it (was) not possible to link data from one system with data from another". The report noted major gaps in the area of economic activity. It also noted that available data systems were used only on a limited basis for research and evaluation purposes because the systems had been established primarily for financial management and control; the reliability of the data was poor; the data were not sufficiently timely;

and P.R.E. staff were sometimes unaware of the availability or extent of existing data systems throughout the Department. The report attempted to assess the suitability and availability of existing data systems in relation to major policy and evaluation activities. No attempt was made to develop a comprehensive list of desired statistical measures and indicators beyond the existing core systems (e.g., Indian Register, Census, Reserve Facts and Figures, Housing Needs Survey, Nominal Roll, etc.).

In 1979, the Department commissioned a special task force to develop a report, INDIAN CONDITIONS: A SURVEY,[3] chronicling broad trends and patterns over the previous 10 to 15 years. The task force report, which drew largely upon existing data sources throughout the Department, but which also involved specially commissioned studies (e.g., on-reserve land use capabilities), provided a relatively comprehensive collection of statistical descriptions of Indian conditions both on and off reserve at the national and provincial levels. The quality and reliability of the data sources used to produce the statistical displays, however, were recognized as being highly variable and inconsistent.

At the same time a national report and a series of provincial overview reports were also prepared by the Department.[4] In contrast with INDIAN CONDITIONS: A SURVEY, the overview reports on the provinces focused primarily on social, economic and demographic facts and conditions and did not include data on program services and expenditures. They tended to provide more detailed information on the more statistically reliable variables such as vital statistics.

On June 20, 1980, the Department of Indian Affairs and Northern Development and Statistics Canada jointly sponsored an INDIAN DEMOGRAPHIC WORKSHOP.[5] Among the commissioned papers was a report by Leeroy Murray of Statistics Canada. The report noted that although there were a number of significant gaps and weaknesses in existing data sources (INAC; Statistics Canada; Medical Services Branch, Health and Welfare Canada), many of the sources had not been fully utilized to date. The report called for a thorough evaluation of Native and Indian data systems and noted the need for improved data linkages so as to maximize the usefulness of existing data.

In 1982, in response these problems and shortcomings, a DIRECTORY OF PRIMARY SOURCES OF DEMOGRAPHIC/SOCIO-ECONOMIC DATA ON CANADA'S REGISTERED INDIANS AND INUIT[6] was prepared by the INAC Research Branch. This directory summarizes available data and existing data sources by subject matter, topics and sub-topics. It provides an indication of cross-tabulations which are available, as well as information on the geographic breakdown, years of availability, sources, frequency of data updating, reference period, location of data source, and the name of contact persons for each data source.

In recent years, concern has shifted from an evaluation and assessment of existing data and sources to the identification of desired future data and sources.

The latest departmental effort at resolving data requirements in the area of demographic statistics is the Management Improvement Project, DEMOGRAPHIC STATISTICS ON INDIANS AND INUIT, undertaken under the direction of the Research Branch. The objective of this project is to develop a single reference source/centre of demographic statistics on Indians and Inuit. A feasibility study, completed in November 1983, assessed the existing sources against user requirements and recommended as a solution the creation of a Demographic Statistics Centre. The project's focus is to provide improvements in the quality, accessibility, manipulation, retrieval and quantitative analysis of demographic statistics on Indians and Inuit.

Another factor underscoring the need to articulate the specific statistical data requirements of INAC is the attention given in the 1981 and 1986 censuses to Native peoples as part of the NATIONAL CENSUS. The Department has agreed to contribute $2.1 million (1983 dollars) to assist in the census, with the objective of improving the coverage and reliability of census data on Indians and Inuit.

The HOUSE OF COMMONS SPECIAL COMMITTEE REPORT, Indian Self-Government in Canada,[7] outlined three policy domains as being of "critical concern" for Indian self-government: education, child welfare and health. The report also made reference to such social statistics as child welfare, education, housing facilities, income, unemployment, criminal justice, causes of death, death rates, violent deaths, infant mortality, life expectancy, suicides, and hospital admissions.

In April 1983, during a meeting of the Deputy Ministers Committee on FUNDING OF NATIVE ORGANIZATIONS, it was noted that there were significant deficiencies in information on the counts and conditions of Native people and that Statistics Canada's current capacities in respect of measurement of these conditions were limited.

Following this meeting, the Chief Statistician invited deputy heads to formulate to him the statistical requirements which they perceived for data on Native conditions. In response to this invitation, the Deputy Minister of INAC directed staff to examine and report on departmental requirements in relation to the current availability of social indicator types of statistics regarding Indian and Inuit peoples. This report provides the departmental response to the Chief Statistician's invitation.

NATURE AND USE OF STATISTICS,
STATISTICAL MEASURES AND INDICATORS

Social scientists frequently place considerable importance and emphasis on a distinction between and among 'statistics', 'indicators' and 'indices'. The main controversy is over the interpretation of what constitutes a 'statistic' and what constitutes an 'indicator'. However, for the purposes of this report, there is no need to develop precise definitions since the full range of statistical measures and indicators are required to satisfy the differing needs of various programs and interest groups. As will be seen, what is merely a 'statistic' from one perspective or for one purpose, could be an 'indicator' from another perspective.

In general, 'statistics' are deemed to be measures in their rawest, least-processed form. They are a raw count of cases and are typically value-free. (Rossi and Gilmartin, 1980)[8] Similarly, an indicator may be generally defined as a representation of the measurable aspects of social concerns and sub-concerns. It is a "...relative notion to be measured, and not a measurement or statistic itself. While indicators are more measurable than social concerns, they are still abstract from a measurement perspective." (K. Scott Wood et al, 1980)[9] By comparison, an index may be generally defined as "...a weighted combination of two or more indicators that is usually intended to summarize the status in some area of concern" (e.g., the consumer price index). (Rossi and Gilmartin, 1980)[10]

As outlined in the U.S. Department of Health, Education and Welfare report[11] a social indicator is defined as "...a statistic of direct normative interest which facilitates concise, comprehensive and balanced judgements about the condition of major aspects of society". An indicator points out something of interest about an object or process (Shulman and Bond, 1978), and hence is defined in terms of the value framework of the individual or organization expressing the interest.

Thus, it may be concluded that such data requirements should be expressed in terms of indicators, rather than mere statistics, since indicators are more specifically tailored to this normative framework and analytic timeframe. Since indicators convey summary information about a field of concern, they are also efficient means of monitoring changes and trends in factors of social concern. However, there are two fundamental problems and shortcomings of social indicators which necessitate the development of a more comprehensive and integrated system of social statistics, containing both indicators and statistics:

. First, the state of the art of social indicator theory is not particularly well developed, and there is no consistent, reliable and acceptable theoretical structure that establishes the linkages between and among varying social facts, factors and trends. Hence there are serious limitations on the ability of social scientists to derive a useful set of indicators that can meet most if not all planning, operational and evaluation requirements.

. Second, the needs, interests, reference systems and normative
frameworks of different data users vary widely from one group or
organization to the next, depending on their program responsibilities,
priorities and operating context. As a consequence, it is necessary in
most cases to provide data in its rawest and most disaggregated form to
meet the widest range of anticipated uses. This is especially true
since the interpretation of statistics and indicators requires a
consideration of the specific context within which they are developed.
This context, which takes into account values, standards and
expectations, varies widely from one geographic location, time period,
institutional setting and population group to another.

Taking these concerns and limitations into account, this report has attempted
to include as broad a range of indicators and 'statistical measures' as
possible to meet most user requirements. The statistical measures which have
been proposed are in a relatively 'raw' form to allow for the maximum degree
of statistical manipulation and interpretation for indicator analysis
purposes. To meet the widest range of uses, different kinds of indicators and
measures have been included. In most cases objective measures (i.e., based on
counts of observable attributes) have been included, but a few subjective
indicators have been included where they are more available or relevant.
Similarly, the greatest emphasis has been on selection of direct indicators,
but a few indirect indicators have been included to meet special analytic
requirements and/or fill in gaps where direct indicators are not available.

Finally, most indicators chosen are relatively value-free and do not involve judgement in recording and measurement, but a few normative indicators have been selected to provide a comparison against established standards, where relevant.

APPENDIX 3

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7. Canada, House of Commons. Indian Self-Government in Canada, Report of the Special Committee on Indian Self-Government (Ottawa: Supply and Services, 1983), pp. 15, 27-35.

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9. Wood, K. Scott et al. A Blue Print For Core Social Indicators: Meeting Social Data Needs for the 1980s (Dalhousie University, Institute of Public Affairs, 1980), pp. 5-6.

10. Rossi and Gilmartin, op. cit., pp. 18-19.

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APPENDIX 4

SUMMARY TABLES OF STATISTICAL MEASURES AND INDICATORS

INDICATORS AND MEASURES OF HEALTH CONDITIONS

INDICATORS AND MEASURES	Policy & Program Development	Planning and Forecasting	Operational Decision Making	Evaluation	Pure Research	Level of Aggregation	Sub-group Classification	Inter-group Comparability	Interlinkage with other Domains	Periodicity	Timeliness	Accuracy	Sample/Selective Survey	Level of Aggregation	Sub-group Classification	Inter-group Comparability	Interlinkage with other Domains	Periodicity	Timeliness	Accuracy	Sample/Selective Survey		Comments	Need for Action
	Applications					**Characteristics (USER REQUIREMENTS)**								**Characteristics (CURRENT SITUATION)**										
. Mortality by Cause	H	H	L	H	H	Band	On/Off Reserve age sex	H	H	1 yr.	3 mos.	H	No	Region	age sex	H	L	1 yr.	2yrs.	M	No	MSB (HWC)	General: No HWC health data exist for the Inuit in Yukon. Since James Bay agreement, HWC data on Inuit are collected only for the NWT. . Coverage (completeness) varies from province to province: Method of data collection differs from region to region. Other recognized problems with HWC data include: . Inconsistency in data collection and reporting by Service Centres. . Data collected for status Indians on reserves only. . MSB annual reports use unadjusted figures (births, deaths, etc.) . Hence, in general, accuracy, quality and coverage are difficult to assess.	M
. Life-Expectancy	M	M	L	L	H	Band	On/Off Reserve age sex	H	H	5yrs.	2 yrs.	H	No	Region	age sex	H	L	1 yr.	"	M	No	.		H
. Neo-Natal and Post Neo-Natal Mortality by cause	M	M	L	L	H	Band	"	H	H	1 yr.	3 mos.	H	No	Region	age sex	H	L	1 yr.	"	M	No	"		L
. Violent Deaths; Homicides; Suicides	H	M	L	L	H	Band	"	H	H	1 yr.	3 mos.	H	No	Region	age sex	H	L	1 yr.	"	L	No	"		M
. Hospital Morbidity; Incidence of Major Diseases by Type	H	H	M	M	H	Band	"	H	H	1 yr.	3 mos.	H	Yes	Region	limited	L	L	1 yr.	"	M	No	"	Need systematic hospital/treatment centre reporting. Only TB information appears readily available at present.	H
. Alcohol and Drug Abuse Treatment	H	H	H	H	H	Band	age sex type of abuse	H	H	1 yr.	3 mos.	H	Yes	Region	limited	L	L	1 yr./ variable	N/A ad hoc	M	No	"	NNADAP program data (HWC) should eventually be relatively reliable.	H
. Medical Treatment Facilities	H	H	H	L	L	Band	Type Service	H	L	1-5 yrs.	1 yr.	H	No	Region	limited	L	L	1yr./ variable	ad hoc	M	No	"	Need regular inventory.	H
. Physical Disability	H	H	H	M	H	Band	age sex type of disability	H	H	5 yrs.	2 yrs.	H	Yes	N/A	N/A	L	L	1 yr./ variable	N/A	L	No	MSB (HWC) Census (1986)	Need basic preliminary survey. 1986 census will have a question on disability and possibly to be followed by a post-censal survey on the disabled.	H

General: A common problem with all data sources examined is that a given domain from one source cannot generally be cross classified with other domains from other sources. This appears to be a particularly acute problem with housing data.

ENVIRONMENT & INFRASTRUCTURE (cont'd) INDICATORS AND MEASURES	Applications					Characteristics (User Requirements)								Characteristics (Current Situation)								Sources	Comments	Need for Action
	Policy & Program Development	Planning and Forecasting	Operational Decision Making	Evaluation	Pure Research	Level of Aggregation	Sub-group Classification	Inter-group Comparability	Interlinkage with other Domains	Periodicity	Timeliness	Accuracy	Sample selective Survey	Level of Aggregation	Sub-group Classification	Inter-group Comparability	Interlinkage with other Domains	Periodicity	Timeliness	Accuracy	Sample/Selective Survey			
. Water Supply	H	H	H	H	H	Reserve	rent/own Type rur/rem/urban	H	H	1 yr.	3 mos.	H	No	Reserve	rent/own Type/rur/rem/urban	H	.H	5 yrs.	2 yrs.	L	Yes	Census		H
. Sewer Facilities	H	H	H	H	H	"	"	H	H	1 yr.	3 mos.	H	No	"	"	M	H	"	"	L	Yes	"		H
. Electricity Supply	H	H	H	H	H	"	"	H	H	1 yr.	3 mos.	H	No	"	"	M	H	"	"	L	Yes	"		H
. Fire Protection Services	H	H	H	H	M	"	Prof/volunt. Band own/other Equip.	H	M	1 yr.	3 mos.	M	No	"	unknown	M	L	ad hoc	ad hoc	M	Yes	Housing Needs Analysis	Information out of date.	M
. Fire Deaths	M	M	M	M	M	"	Cause Ind/Inu. Type of struct.	H	H	1 yr.	3 mos.	H	No	"	unknown	M	L	"	"	M	Yes	"	" "	H
. Community Recreation & Service Facilities	M	M	H	M	M	"	Type Expenditure Particin'n. by type	H	M	1 yr.	3 mos.	H	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Need for reliable/extensive data.	H
. Environmental Hazards	H	H	M	M	H	Reserve	Level/type of risk Geo. loc.	H	H	1 yr.	3 mos.	H	No	Unknown	Geo. Loc. Type of Risk	L	L	unknown	unknown	unknown	No	DOE HWC	A systematic recording of this type of information needs to be established. Necessity of interlinkage with other (health, demographic, etc.) domains could arise.	M

INDICATORS AND MEASURES OF KEY ASPECTS OF THE ENVIRONMENT AND INFRASTRUCTURE

DOMAIN ENVIRONMENT AND INFRASTRUCTURE — INDICATORS AND MEASURES	USER REQUIREMENTS — Applications					USER REQUIREMENTS — Characteristics								CURRENT SITUATION — Characteristics								Sources	Comments	Need for Action
	Policy & Program Development	Planning and Forecasting	Operational Decision Making	Evaluation	Pure Research	Level of Aggregation	Sub-group Classification	Inter-group Comparability	Interlinkage with other Domains	Periodicity	Timeliness	Accuracy	Sample/Selective Survey	Level of Aggregation	Sub-group Classification	Inter-group Comparability	Interlinkage with other Domains	Periodicity	Timeliness	Accuracy	Sample/Selective Survey		General: . on-reserve housing projections from the Housing Needs Analysis Survey is available by Reserve only. . supplementary data for northern regions is provided by the NWT and Yukon Housing Authorities. . in general, existing sources would appear to be satisfactory in terms of subject coverage and content, but they all lack adequate periodicity and timeliness for variables which need more frequent calculations to remain useful.	
Housing Stock	H	H	H	H	H	Reserve	Type rur/rem/urban	H	H	1 yr.	3 mos.	H	Yes	Reserve	type rur/rem/urban	H	M	5 yrs.	2 yrs.	L	Yes	Census	. In addition, the census suffers from the typical problems of undercoverage and self enumeration	H
Occupancy	M	H	H	H	M	"	type owned/rented	L	L	1 yr.	3 mos.	H	Yes	"	type owned rented	L	L	"	"	L	Yes	"		H
House Construction/Supply	H	H	H	M	L	"	Type rur/rem/urban	L	L	1 yr.	3 mos.	H	No	"	Type rur/rem/urban	M	L	1 yr.	3 mos.	H	No	"	Housing supply data are available only from administrative records at INAC and CMHC.	H
Crowding	H	H	H	H	H	"	rent/own #/type amenities household income	H	H	1 yr.	3 mos.	H	Yes	"	rent/own #/type amenities household income	H	H	5 yrs.	2 yrs.	L	Yes	"		H
Housing Quality	H	H	H	H	H	"	Type own/rent type of repair	H	H	1 yr.	3 mos.	H	Yes	"	own/rent type of repair	H	H	"	"	L	Yes	"		H
Age of Housing	H	H	L	L	L	"	Type own/rent	H	H	5 yrs.	2 yrs.	H	No	"	Type own/rent	H	H	"	"	L	Yes	"		H
Housing Expenditures By Households	M	M	M	M	M	"	On/Off reserve overall remote	M	M	5 yrs.	2 yrs	M	No	"	On/Off reserve Overall remote	H	H	"	"	L	Yes	"		M
Heating Equipment, Fuels, etc	H	H	.H	H	H	"	On/Off reserve overall remote	H	H	1 yr.	3 mos.	H	Yes	"	On/Off reserve Overall Remote	H	H	"	"	L	Yes	"		H

INDICATORS AND MEASURES OF DEMOGRAPHIC CHARACTERISTICS

DOMAIN: DEMOGRAPHIC

General comment (CURRENT SITUATION / Comments):
General: Problems associated with the census include:
. Inaccurate treatment of crown-lands and settlements re: native/settler communities.
. Self-enumeration and under-coverage cov..
. Limitations of the Indian Register (I.R.) are mainly due to the late and/or partial reporting and recording of events

INDICATORS AND MEASURES	USER REQUIREMENTS — Applications					USER REQUIREMENTS — Characteristics								CURRENT SITUATION — Characteristics								Sources	Comments	Need For Action
	Policy & Program Development	Planning and Forecasting	Operational Decision Making	Evaluation	Pure Research	Level of Aggregation	Sub-group Classification	Inter-group Comparability	Interlinkage with other Domains	Periodicity	Timeliness	Accuracy	Sample/Selective Survey	Level of Aggregation	Sub-group Classification	Inter-group Comparability	Interlinkage with other Domains/	Periodicity	Timeliness	Accuracy	Sample/Selective Survey			
. Population Size; Growth Rate; Natural Increase	H	H	H	M	H	Band/ Reserve	age sex	H	H	1 yr. 5 yrs.	3 mos. 2 yrs.	H	No	Band/ Reserve	age sex	L/H	L/H	1 yr. 5 yrs.	1B mos. 2 yrs.	M/L	No	I.R. Census	. Census not reconciled fully with Indian Register / . Need manipulation for projections / . Concern about late-reported births from I.R.	H
. Population Age/ Sex Composition	H	H	H	M	H	Band/ Reserve	N/A	H	H	1 yr. 5 yrs.	3 mos. 2 yrs.	H	No	Band/ Reserve	N/A	L/H	L/H	1 yr. 5 yrs.	1B mos. ? yrs.	M/L	No	I.R. Census	"	L
. Pop. Distribution; urban/ rural distribution; migration	H	H	H	H	H	Band/ Reserve	urban semi- urban rural remote	M	H	1 yr. 5 yrs.	3 mos 2 yrs.	H	No	Band/ Reserve	urban semi- urban rural remote	L/H	L/H	1 yr. 5 yrs.	18 mos. 2 yrs.	M/L	No	I.R. Census	. Census question on mobility status is inadequate. INAC and census definitions of rural/urban are not equivalent.	H
. On/Off Reserve Distribution; migration	H	H	H	H	H	Band/ Reserve	age/sex on/ off duration	L	H	1 yr. 5 yrs.	3 mos. 2 yrs.	H	No	Band/ Reserve	age/sex on/ off duration	L/H	L/H	1 yr. 5 yrs.	18 mos. 2 yrs.	M/L	No	I.R. Census	. Need data on frequency/duration and destination. / .Undercoverage/low accuracy in urban cen / .No description of origins and destinations of migrants.	
Inuit And Settler Communities	H	H	H	H	H	Selected Communi- ties	Age/Sex Type	H	H	5 yrs.	2 yrs.	H	Yes	Communi- ties	age/sex	L	L	5 yrs	2 yrs	L	Yes	Census	. Can be linked to Census sub-division level. No questions on settlers. / . Suppression of data for smaller communities.	
. Live Births; Birth Rates; Total Fertility; Age-Specific Fertility	M	H	M	L	H	Band	age sex	H	M	1 yr.	3 mos.	H	No	Band	age sex	L	L	1 yr.	2 yrs	M	No	I.R.	. Required for population projections. / . Late reporting and recording of births and deaths is a major problem.	
. Deaths; Death Rate; Age-spe- cific Death Rate	M	H	M	H	H	Band	age sex	H	H	1 yr.	3 mos.	H	No	Band	age sex	H	L	1 yr.	2 yrs.	M	No	I.R.	"	
. Status Loss/Gain by Application/ Marriage	H	H	H	L	H	Band	age, prev. legal status marital/ family status	L	H	1 yr.	3 mos.	H	No	Band	marital status prev. legal status	L	L	1 yr.	2 yrs.	M	No	I.R.	. Needs projections	L

ECONOMIC (cont'd) INDICATORS AND MEASURES	USER REQUIREMENTS — Applications					USER REQUIREMENTS — Characteristics								CURRENT SITUATION — Characteristics								Sources	Comments	Need for Action
	Policy & Program Development	Planning and Forecasting	Operational Decision Making	Evaluation	Pure Research	Level of Aggregation	Sub-group Classification	Inter-group Comparability	Interlinkage with other Domains	Periodicity	Timeliness	Accuracy	Sample/Selective Survey	Level of Aggregation	Sub-group Classification	Inter-group Comparability	Interlinkage with other Domains	Periodicity	Timeliness	Accuracy	Sample/Selective Survey			
· Reserve/Community Accessibility	H	H	H	M	H	Reserve	Roads Air,Water Rur/rem./urban	M	M	1 yr.	3 mos.	H	No	Reserve	Access type: Rural/Remote/Urban	H	H	5 yrs.	2 yrs.	M	No	Census	Interlinkage of this category with labour market conditions is very important.	H
· Indian/Inuit Enterprises	H	M	H	M	M	Reserve	Econ. sector Type of expertise	H	H	1 yr.	3 mos.	M	Yes	Reserve	Econ. sector Types	L	L	ad hoc	ad hoc	unknown	Yes	Special studies e.g., DRIE	NEDP currently collecting extensive info. on all types of Native enterprises. Summaries of Native annual business reports could be an important data source.	H
· Reserve Lands (Inventory)	M	H	M	L	L	Reserve	sub-Res. tract	M	L	5-10yrs.	1 yr.	H	No	Reserve	Land tracts	H	L	15-20yrs.	3-5yrs.	H	No	Canada Lands Inventory	Required data on land inventory and land use capability is available at modest cost from DOE.	H
· Land-Use Capability	H	H	H	H	H	Reserve	"	L	M	5 yrs.	1 yr.	M	No	"	"	"	"	"	"	"	"	"	" "	H
· Reserve Land Use	H	H	M	M	H	"	"	L	M	"	"	"	"	"	"	"	"	"	"	"	"	"	" "	H
· Mineral Resources & Production	H	H	H	H	H	"	Plant ops.	L	M	1 yr.	3 mos.	H	No	Reserve	Mining Ops.	L	L	1 yr.	6 mos.	M	No	Reserves & Trusts mineral surveys	Requires consistent framework to relate to individual bands; not widely published.	M

INDICATORS AND MEASURES OF ECONOMIC CONDITIONS

DOMAIN	USER REQUIREMENTS													CURRENT SITUATION								Sources	Comments	Need for Action
ECONOMIC	Applications					Characteristics								Characteristics										
INDICATORS AND MEASURES	Policy & Program Development	Planning and Forecasting	Operational Decision Makin.	Evaluation	Pure Research	Level of Aggregation	Sub-group Classification	Inter-group Comparability	Interlinkage with other Domains	Periodicity	Timeliness	Accuracy	Sample/Selective Survey	Level of Aggregation	Sub group Classification	Inter-group Comparability	Interlinkage with other Domains	Periodicity	Timeliness	Accuracy	Sample/Selective Survey		Economic data on Indians and Inuit will require more frequently undated sources than the quinquenial census can provide. . Special studies of selected native communities and past labour force surveys contain valuable information which has, however become out of date. · Many census definitions of economic categories are not comparable to INAC definitions.	
. Working-Age Population	.. H	H	H	M	H	Band/ Reserve	Sex	H	H	1 yr. 5 yrs.	3 mos. 2 yrs.	H	No	Band/ Reserve	Sex	H	H	1 yr. 5 yrs.	18 mos. 2 yrs.	M/L	No	I.R. Census	Both the Census and labour force surveys hold great hope for the future provision of improved data on working-age pop., labour force participation, employ. income and sources, etc.	nevertheless L
. Labour-Force Participation (Wage Economy)	H	H	H	H	H	Reserve	Econ. sector	H	H	1 yr.	3 mos.	H	Yes	Reserve	Age Sex	H	H	5 yrs	2 yrs.	L	No	Census		H
. Non-Wage (Traditional Pursuit) Participation	H	H	H	M	H	Reserve	Type of pursuit	L	L	1 yr.	3 mos.	H	Yes	Reserve	age/ sex Occup.	H	H	5 yrs.	2 yrs.	L	No	Census	Non-wage data are important for inter-. linkage with other domains/variables. However, only the occupations classification is available from the census and the information provided may not be very reliable on the non-wage pursuits.	H
. Employment Rate; Employment Success Rate; Dependency Ratio	H	H	H	H	H	Reserve	Econ. sector Occupat. Education	H	H	1 yr.	3 mos.	H	Yes	Reserve	age/ sex Occup.	H	H	5 yrs.	2 yrs.	L	No	Census		H
. Income; Income Sources	H	H	H	M	H	Reserve	Econ. sector Age/sex	H	H	1 yr.	3 mos.	H	No	Reserve	Econo Sector Age/ Sex	H	H	5 yrs.	2 yrs.	L	No	Census		M
. Occupations	H	H	H	M	H	Reserve	Ind. Class. Age Sex	H	H	1 yr.	3 nos.	H	No	Reserve	Age/ Sex	H	H	5 yrs.	2 yrs.	L	No	Census		M
. Work Duration	H	H	H	M	H	Reserve.	Econ. sector Industry	H	H	1 yr.	3 mos.	H	Yes	Reserve	Age/ Sex Econo Sector	H	H	5 yrs.	2 yrs.	L	No	Census		H
. Labour Market Conditions	H	H	H	M	H	Reserve	Econ. sector Groups Age Sex	H	H	1 yr.	3 mos.	H	Yes	Reserve	Age/ Sex Econo Sector	H	H	5 yrs.	2 yrs.	L	No	Census		H

INDICATORS AND MEASURES OF EDUCATIONAL CHARACTERISTICS

DOMAIN EDUCATION — INDICATORS AND MEASURES	USER REQUIREMENTS — Applications					USER REQUIREMENTS — Characteristics								CURRENT SITUATION — Characteristics								Sources	Comments	Need for Action
	Policy & Program Development	Planning and Forecasting	Operational Decision Making	Evaluation	Pure Research	Level of Aggregation	Sub-group Classification	Inter-group Comparability	Interlinkage with other Domains	Periodicity	Timeliness	Accuracy	Sample/Selective Survey	Level of Aggregation	Sub-group Classification	Inter-group Comparability	Interlinkage with other Domains/	Periodicity	Timeliness	Accuracy	Sample/Selective Survey			
General: CEIS deals only with INAC-sponsored students. Census has no educational data on under-15 students. More educational information is in provincial, territorial and municipal school systems. Hence tapping all these sources by a centralizing agency would greatly improve analyses of student post-secondary enrolment and achievement and the calculation of all the educational input, progression and output measures.																								
· Enrolment; Participation Rate	H	H	M	H	H	School	age/sex level school type	H	L	1 yr.	3 mos.	H	No	School District	age/sex level School Type	M	L	1 yr.	3-6 mos.	H	No	Nominal Roll	. Nominal roll only gathers data for on-reserve students.	H
· Educational Attainment Level	H	H	M	H	H	Band	age/sex level	H	H	5 yrs.	1 yr.	H	No	Reserve	age/sex level	H	H	5 yrs.	2 yrs.	M	No	Census		L
· Retention	H	H	M	H	H	School	age/sex level	H	H	1 yr.	3 mos.	H	No	School	age/sex level	M	L	1 yr.	3-6 mos.	H	No	Nominal Roll		M
· Pupil/ Teacher Ratios	H	M	M	M	M	School	School Type Level	H	L	1 yr.	3 mos.	H	No	School	School Type Level	H	N/A	1 yr.	3-6 mos.	H	No	Nominal Roll		M
· Native Teachers	H	M	M	M	M	School	School Type Level	L	L	1 yr.	3 mos.	H	No	School	School Type	L	L	1 yr.	3-6 mos.	M	No	Nominal Roll		M
· University Enrolment; Teacher Training; Nursing; Vocational; etc.	H	H	M	M	H	Region	age/sex program type level	H	H	1 yr.	3 mos.	H	No	Region	Level Program Type Age/sex	H	L	1 yr.	3-6 mos.	L	No	CEIS		H
· Functional Literacy	H	L	L	H	M	District	age/sex level	H	H	3 yrs.	1 yr.	H	Yes	Canada Region	N/A	L	L	1 yr.	N/A	N/A	N/A	CEIS	Functional literacy variable not properly measured. Figures available are only for adult enrolment in basic education and other adult programs.	M

INDICATORS AND MEASURES OF SOCIAL CONDITIONS

DOMAIN / SOCIAL: INDICATORS AND MEASURES	USER REQUIREMENTS — Applications					USER REQUIREMENTS — Characteristics								CURRENT SITUATION — Characteristics								Sources	Comments	Need for Action
	Policy & Program Development	Planning and Forecasting	Operational Decision Making	Evaluation	Pure Research	Level of Aggregation	Sub-group Classification	Inter-group Comparability	Interlinkage with other Domains	Periodicity	Timeliness	Accuracy	Sample/Selective Survey	Level of Aggregation	Sub-group Classification	Inter-group Comparability	Interlinkage with other Domains	Periodicity	Timeliness	Accuracy	Sample/Selective Survey		General: Although most of these indicators, rates and ratios can be easily obtained from census and I.R. in some instances complex manipulations would be required to obtain them.	
Dependent Poo., Dependency Ratio; Index of Aging	H	H	H	M	H	Band/Reserve	age/sex family Type	H	H	1 yr. 5 yrs.	3 mos. 2 yrs.	H	No	Band/Reserve	Family type age/sex	L/H	L/H	1 yr. 5 yrs.	18 mos 2 yrs.	M/M	No	I.R. Census	Requires in-house manipulation of data.	H
Family Size: Average, Size Distribution	H	M	H	L	H	Band/Reserve	age/sex family type	H	H	1 yr. 5 yrs.	3 mos. 2 yrs.	H	No	Band/Reserve	age/sex family type	L/H	L/H	1 yr. 5 yrs.	18 mos. 2 yrs.	M/M	No	I.R. Census	A combination of Census data and Housing Needs Analysis Survey appears to have produced superior measures of these domain categories. A more frequent un-date of the Housing Needs Analysis-derived information could be very valuable.	H
Family Composition; Marital Status	H	M	M	L	H	Band/Reserve	age/sex family type	H	H	1 yr. 5 yrs.	3 mos. 2 yrs.	H	No	Band/Reserve	age/sex	L/H	L/H	1 yr. 5 yrs.	18 mos. 2 yrs.	M/M	No	I.R. Census		H
Household Formation	H	H	M	L	H	Band/Reserve	family type/size number net increase	H	H	1 yr. 5 yrs.	3 mos. 2 yrs.	H	No	Band/Reserve	number of family units type/size	L/H	L/H	1 yr. 5 yrs.	18 mos. 2 yrs.	M/M	No	I.R. Census	Requires projections of net family unit increases annually.	H
Divorce; Divorce Rates	M	M	M	L	H	Band/Reserve	age/sex prev & current marital status	H	H	1 yr. 5 yrs.	3 mos. 2 yrs.	H	Yes	Band/Reserve	age/sex marital status	L/H	L/H	1 yr. 5 yrs.	18 mos. 2 yrs.	M/M	No	I.R. Census	Needs more manipulation and refinement of Indian Register data.	L
Births Outside Marriage	M	M	·M	M	H	Band/Reserve	age of mother	H	M	1 yr. 5 yrs.	3 mos. 2 yrs.	H	No	Band/Reserve	age of mother	L/H	L/H	1 yr. 5 yrs.	18 mos. 2 yrs.	M/M	No	I.R. Census	Appears to be available only from I.R. However, 1986 census will include a question on the variable.	L
Children in Care	H	H	H	H	H	Band	age/sex type of instit. Care Duration	H	H	1 yr.	3 mos.	H	No	Band	age/sex Indian/non-Indian	M	L	1 yr.	3 mos.	M	No	INAC SOC. ASST. DEV. SYSTEM	INAC social assistance development data system is not automated and its basic information is financial in nature.	H
Dependence on Social Assistance	H	H	H	H	H	Band	age/sex marital status family size/type	H	H	1 yr.	3 mos.	H	No	Band	age/sex	M	L	1 yr.	3 mos.	M	No	•		H

INDICATORS AND MEASURES	USER REQUIREMENTS														CURRENT SITUATION								Sources	Comments	Need for Action
	Applications					Characteristics									Characteristics										
	Policy & Program Development	Planning and Forecasting	Operational Decision Making	Evaluation	Pure Research	Level of Aggregation	Sub-group Classification	Inter-group Comparability	Interlinkage with other Domains	Periodicity	Timeliness	Accuracy	Sample/Selective Survey	Level of Aggregation	Sub-group Classification	Inter-group Comparability	Interlinkage with other Domains	Periodicity	Timeliness	Accuracy	Sample/Selective Survey			
Adoptions	H	H	H	H	H	Band	Family (native/ non- native age/sex)	H	M	1 yr.	3 mos.	H	No	Band	Age/ Sex Family Status	L	L	1 yr.	18 mos.	M	No	I.R.	Indian Register is the only source.	L
Adults in Care	H	H	H	H	H	Band	Age/Sex marital status Type of Care	H	M	1 yr.	3 mos.	H	No	Band	Age/ Sex Family Status	L	L	1 yr.	18 mos.	M	No	INAC Soc. Dev. Asst. Syst.		M

DOMAIN

SOCIAL (cont'd)

INDICATORS AND MEASURES OF CULTURAL AND POLITICAL CONDITIONS

DOMAIN: CULTURAL AND POLITICAL

INDICATORS AND MEASURES	Policy & Program Development	Planning and Forecasting	Operational Decision Making	Evaluation	Pure Research	Level of Aggregation	Sub-group Classification	Inter-group Comparability	Interlinkage with other Domains	Periodicity	Timeliness	Accuracy	Sample/Selective Survey	Level of Aggregation	Sub-group Classification	Inter-group Comparability	Interlinkage with other Domains	Periodicity	Timeliness	Accuracy	Sample/Selective Survey	Sources	Comments	Need for Action
	USER REQUIREMENTS — Applications					USER REQUIREMENTS — Characteristics								CURRENT SITUATION — Characteristics										
Band Councils	H	M	M	H	M	Band	Traditional/Election	H	L	2 yrs.	3 mos.	H	No	Band	selected char.	L	L	ad hoc/2 yrs.	unknown	M	No	Reserves and Trusts (INAC)		L
Participation in Band Elections	H	L	L	M	H	Band	age/sex	H	M	2 yrs.	3 mos.	H	Yes	Band	selected char.	L	L	ad hoc/2 yrs.	unknown	H	No	Reserves and Trusts (INAC)	Needs cooperation with the various Indian/Inuit organizations	L
Band-Administered Funds	H	H	M	H	L	Band	Purpose and Use	H	H	1 yr.	3 mos.	H	No	Band	By nature of support	H	L	1 yr.	9 mos.	H	No	INAC financial mgmt. and program supp. groups	Readily available from administrative/financial records at INAC	L
Participation in Federal & Provincial Elections	H	M	L	L	H	Reserve	age/sex	H	M	5 yrs	1 yr.	H	Yes	Reserve	selected char.	H	L	ad hoc	1 yr.	H	No	Federal & Provincial Electoral Offices		L
Languages	H	H	M	M	M	Reserve	Type of Native Language official lang.	H	H	5 yrs.	2 yrs.	H	No	Reserve	Type of Nat. Language use of off. lang.	H	H	5 yrs.	2 yrs.	L	No	Census		M
Indian & Inuit Newspapers & Magazines	M	M	L	L	H	Reserve	periodicity purpose/material covered	M	M	1 yr.	3 mos.	H	No	Reserve	Selected Char.	N/A	N/A	Unknown	N/A	N/A	No	Individual Indian/Inuit Papers	Systematic record of this variable may have to be developed.	M
Religion	M	M	M	M	M	Reserve	Tradtl. Others Educ. Level	M	M	5 yrs.	2 yrs.	M	No	Reserve	Tradtl. Others	H	H	5 yrs.	2 yrs.	L	No	Census		L
Membership in Indian/Inuit/Native Organizations	H	H	H	M	H	Band	age/sex	H	H	1 yr.	3 mos.	H	No	Band	N/A	L	L	ad hoc	ad hoc	unknown	Yes	Indian/Inuit Organizations	Information can easily be generated by contacting various Native organizations	M

INDICATORS AND MEASURES OF CRIMINAL ACTIVITY AND JUSTICE

DOMAIN

CRIMINAL ACTIVITY AND JUSTICE

INDICATORS AND MEASURES	Policy & Program Development	Planning and Forecasting	Operational Decision Making	Evaluation	Pure Research	Level of Aggregation	Sub-group Classification	Inter-group Comparability	Interlinkage with other Domains	Periodicity	Timeliness	Accuracy	Sample/Selective Survey	Level of Aggregation	Sub-group Classification	Inter-group Comparability	Interlinkage with other Domains	Periodicity	Timeliness	Accuracy	Sample/Selective Survey	Comments	Need for Action
Property Crime Rates	M	M	M	M	M	Band	age/sex type of offence	H	M	1 yr.	3 mos.	H	No	Region/Instit.	age/sex marital status type of offence	H	M	1 yr.	Quart.	H	No	Sol. Gen.	
Violent Crime Rates	M	L	L	M	M	Band	age/sex type of offence orev. commit.	H	M	1 yr.	3 mos.	H	No	Region/Instit.	age/sex marital status type of offence	H	M	1 yr.	Quart.	H	No	Sol. Gen.	H
Adult Arrests & Convictions	M	L	M	M	M	Band	age/sex type of offence prev. commit.	H	M	1 yr.	3 mos.	H	No	Region/Instit.	age/sex marital status type of offence	H	M	1 yr.	Quart.	H	No	Sol. Gen.	H
Young Offender Arrests & Convictions	M	M	M	M	M	Band	age/sex tyoe of offence orev. commit.	H	M	1 yr.	3 mos.	H	No	Region/Instit.	age/sex marital status tyoe of offence	H	M	1 yr.	Quart.	H	No	Sol. Gen.	H
Criminal Dispositions	M	M	L	L	M	Band	age/sex sentence	H	M	1 yr.	3 mos.	H	Yes	Region/Instit.	age/sex marital status type of offence	H	M	1 yr.	Quart.	H	No	Sol. Gen.	H
Incarcerations	H	L	M	L	M	Band	age/sex sentence	H	M	1 yr.	3 mos.	H	No	Region/Instit.	age/sex marital status tyoe of offence	H	M	1 yr.	Quart.	H	No	Sol. Gen.	H