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ALBERTA OIL SANDS ENVIRONMENTAL RESEARCH PROGRAM

LONGITUDINAL STUDY OF PERSONAL

ADJUSTMENT AND SOCIAL CONDITIONS

IN THE FORT McMURRAY AREA

HS 30.1

PHASE 1: DRAFT FINAL REPORT

VOLUME 2

BACKGROUND PAPERS

AUGUST, 1978

LIST OF BACKGROUND PAPERS

Institutional Information System

Local Business Economy in Resource Communities

Base Demographic Data

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Social Deviance

Children and Education

Indians and Metis: Approaches to Research

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BACKGROUND PAPER:

INSTITUTIONAL INFORMATION SYSTEM

AUGUST, 1978

INSTITUTIONAL INFORMATION SYSTEM

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INSTITUTIONAL INFORMATION SYSTEM

1. INTRODUCTION

1.1 OBJECTIVES

Our Terms of Reference require us to make recommendations with respect to the establishment of a socio-economic "baseline information system", for the Fort McMurray study area and the Cold Lake Region study area, respectively.

A baseline information system is defined as a coherent and internally consistent ordering of data, on a temporal basis, to identify and monitor changes and conditions in a given study area or population grouping or activity.

The need for a baseline information system derives from the diversity and inconsistencies in the existing data sources in the province, in the data itself, in the collecting procedures and regarding accessibility.

In addition, we were required to investigate the feasibility of establishing a set of "social indicators" for the Fort McMurray study area.

In this Background Paper we set out the results of our examination, and our conclusions. We propose a framework within which to collect and order base data. And we suggest the socio-economic data which might comprise the data system.

1.1.1 Sources

To meet the requirements set out in our Terms of Reference, we carried out an extensive and detailed review of all sources available to us.

These included:

- Literature: a comprehensive review of the relevant literature was carried out with respect to social indicators, quality of life indicators, base information requirements. The literature encompassed provincial, national and international sources; and included work being carried out in the United States, progress reports of the

Organization for Economic Cooperation and Development (OECD), and recent work here in Alberta. Much of this literature is discussed in detail in the accompanying Report.

- . Alberta Government: Discussions were held with interested Government Departments with respect to data availability and data requirements. Some of the departments consulted were Business Development and Tourism; Recreation, Parks and Wildlife; Social Services and Community Health; Municipal Affairs; Environment; and Advanced Education and Manpower.

Close liaison was maintained with Alberta Bureau of Statistics which provided both valuable guidance and information throughout our work.

- . Other Governments: Discussions were held in various federal departments and agencies with experience in this field. These included National Health and Welfare; Regional Economic Expansion; the Economic Council of Canada; and the Bureau of Management Consulting Services, Supply and Services Canada. In Ontario we consulted with Central Statistics Services, Ministry of Treasury, Economics and Intergovernmental Affairs, which had just published a set of social indicators.

In the course of consulting these sources, we addressed ourselves to three central issues:

1. The feasibility of establishing social indicators and a baseline information system.
2. The most appropriate methodological framework.
3. The specific data to be collected.

1.1.2 Institutional Information System

One of the first difficulties we came across related to terminology. We found some uncertainty as to what was meant by a baseline information system.

In conventional usage, the term is applied both to information gathered from government and other data collecting bodies; and to information which is gathered through this plus other means, such as special one-of-a-kind surveys, to generate "baseline data".

To circumvent this uncertainty, we use the following terminology:

- . "Institutional Information", refers to that data which are collected from the usual data-collecting institutions such as federal, provincial and municipal government departments, boards and agencies; and from such other institutions which may collect and make available pertinent data on a regular basis.
- . "Institutional Information System", to refer to the policies, procedures and operations involved in collecting the data from the various institutions and preparing it in forms suitable for examination.

Other problems in terminology are dealt with in the appropriate sections of this Background Paper.

2. SOCIAL INDICATORS

One of the requirements set for us by AOSERP was to examine the feasibility of establishing a set of social indicators for the Fort McMurray area. AOSERP had already carried out a feasibility study at the theoretical level of models of social indicators (Snider, 1976). Our task was to examine the operational feasibility of such models within the context of the study area.

Our examination concentrated not only on the theoretical aspect, but also upon the practical experience of those who had worked in the field. We have discussed our findings at

length with the Clients and will only summarize them here.

The report by Snider (1976) admirably sets out the theoretical literature, and also the theoretical and conceptual problems which have to be resolved before a social indicator system could be defined and then operationalized. For example, he notes at least 11 definitions of social indicators, four dimensions, five properties and four typologies.

Interviews with those who had had practical experience pointed up the importance of the considerable gap between theory and practice. For example, the work of OECD in social indicators reflects a substantial contraction from its original intentions (OECD, 1977). Experts in National Health and Welfare, the Economic Council of Canada, and the Bureau of Management Consulting Services, stressed that it would likely be very difficult to establish a set of social indicators starting from theoretical principles. It would be more useful, they suggested, to give first priority to establishing an ordered and consistent data base for major dimensions of concern; and to work from that base to the development and testing of theoretical and conceptual approaches.

The relevance of these comments to the Alberta situation is demonstrated by the high priority given in our Terms of Reference to establishing a baseline information system.

Accordingly, we recommended to our Client in our Interim Report of April 10, 1978, that further work on social indicators end. It was agreed at that time that first priority be given to the immediate problems associated with baseline information, now referred to as institutional information.

We expect that as the Institutional Information System, described below, is put in place, it will be feasible to undertake work on social indicators on a firmer basis than is currently possible.

3. INSTITUTIONAL INFORMATION SYSTEM

3.1 CRITERIA REGARDING INSTITUTIONAL INFORMATION SYSTEM

In the course of examining possible approaches to establishing an Institutional Information System, we identified several criteria against which the various approaches could be evaluated.

These criteria are:

3.1.1 Universality

The design of the system should be such that the system can be used for any community in the province. This would encompass:

- . policies with respect to the provision of data
- . procedures in the various Departments and agencies with respect to arranging the data in forms suitable for the intended purposes of identifying and measuring key dimensions
- . operations with respect to preparing and organizing the data in forms suitable for their intended purposes of identifying and measuring conditions and changes in those conditions; this would require that some data, now used solely for administrative purposes, be reworked to render them suitable for the purposes of policy and planning review and analysis
- . procedures regarding access to the data and their publication

We expect that firm arrangements with respect to the above may take some time to work out. In all likelihood, the first data base will be developed with specific reference to the study areas, for reasons of operational practicality. It is also likely that, with experience

policies, operations and procedures will be revised and improved. Similarly specific modifications may be necessary to meet the particular conditions in a given community.

3.1.2 Comprehensiveness

The system should extend to all potential sources of data potentially relevant to the main dimensions of personal, family, work, social and community life. As we noted in the accompanying Report, the system, or data themselves cannot be tied to a fixed perspective as to what is and is not relevant.

In theory, this would involve duplicating all the data now available in the various levels of government, departments and agencies. In practice, however, those sources will be tapped which already have data available or are willing to prepare such data. The system will then be extended steadily to include other sources as their relevance becomes apparent.

The most immediate difficulty will be with those bodies which deal with key dimensions of community life but do not collect data or do not collect them in forms which are suitable for the purposes of an institutional information system. The cooperation of these bodies will have to be solicited and agreement reached respecting data policies, operations and procedures.

3.1.3 Current Practices

It is important to begin with what exists. We are very much aware of the gaps and inconsistencies among the various data collectors with respect to data definition, collection and collation. In our view, it would be impractical to propose a system which required, at the outset, that data collectors change their practices in any major way. The needs of the users are such that it is preferable to begin with what is available, despite its inadequacies.

Experience suggests that major alterations in data systems can take a long time to be implemented. Also, from a practical point of view, it would be preferable, and likely more efficient and economic, to begin with what is available and make revisions on the basis of experience, rather than to start by attempting a major reorganization of data practices in the various levels of government involved.

At the same time, however, it will be necessary to request that certain departments and agencies make some modest revisions to their data handling procedures. This would include:

- . data collectors which keep data for administrative purposes: i.e., names and addresses. Often this data must be kept confidential.

It would be appropriate if this data were transformed to statistics, for example, numbers of users by types of use, by locations of use or location of user.

- . data collectors which keep data on such a broad geographic basis that the information cannot be applied to a particular area.

It would be appropriate if this data were broken out into more useful categories.

We are aware that even these modest revisions may take some time to implement. We would expect that as the value of the Institutional Information System becomes apparent, cooperation will increase.

3.2 TYPOLOGY OF DATA HIERARCHY

Earlier, in our brief discussion of social indicators, we noted the existence of various problems in

terminology. There are considerable variations given to the meanings of such terms as, data, statistics, accounts and indicators.

To provide some clarity to our discussion, we propose to use the following typology, based on a hierarchy of information.

The typology includes:

- . raw data
- . socio-economic statistics
- . socio-economic indicators

3.2.1 Raw Data

Raw data are the basic stuff of an information system. They often consist in the main of names, addresses, records of events and activities. These are usually kept for administrative purposes. An example is a police record of an accident and includes: the names and addresses of those involved, the types of vehicles, the nature of the accident, the conditions pertaining to the accident, the damage done, the actions taken, charges to be laid, and so forth. Similar data is kept by municipalities with respect to the business license issued, owner, type of business involved, the type and size of premises, and tax assessment.

3.2.2 Socio-economic Statistics

To be useful for planning and review purposes, raw data have to be converted into statistics; into numbers which act as surrogates of the particular events and conditions. The statistics have to be developed and maintained in a consistent form on an on-going basis. They also have to represent in a reasonable accurate and discriminate way the key events or conditions they are intended to describe.

We do not attempt to define what is meant by socio-economic statistics. As can be seen from the following pages, the term is used by us to cover a wide range of dimensions, from the local business economy and municipal finances to health and social welfare. For operational purposes, the needs of the users determine what is to be included within the socio-economic category.

In a subsequent section of this Background Paper we set out those socio-economic statistics which we suggest be collected. The reader will note that the statistics suggested do not represent a particular theoretical or conceptual perspective. This matter is discussed in the accompanying Report.

To summarize, it would be self-defeating to impose on the design of the data collection a particular theoretical perspective or model. The state of the art with respect to the determination of key dimensions and variables is, at best, uncertain. The intent should be to maintain as wide an array of data as is feasible and seems pertinent to the needs of the users.

The statistics will be arranged in a consistent and coherent form in time-series tables by which it will be possible:

- . to measure changes and trends over time within the given study community
- . to measure changes and trends over time for a given dimension of the study community
- . to compare changes and trends among the study communities and other communities

3.2.3 Socio-economic Accounts

The distinction between a statistic and an account is a fine one, but useful. A statistic is a number which represents a specific activity or event or presence.

An account represents a combination of activities/events/presences which provides a more rounded and useful representation of the conditions under examination. For example, a statistic would represent the number of marriages in a community in a given year. An account would represent the number of marriages as a proportion of the population or age cohort. In this instance, the social account would be an important component in estimating household formation, housing needs, birth rates and so forth. Because we cannot predict with confidence what kinds of social accounts will be required by the data users, we have relied upon experience and convention, and developed our format accordingly.

3.2.4 Socio-economic Indicators

We have discussed these above, under Social Indicators. As we noted then, it is possible that the establishment of an effective Institutional Information System will do a great deal to speed up the definition and development of social indicators. The speculative work in this field could be translated into operational terms and tested using the information base provided by the system.

3.3 BASIC TYPES OF DATA SYSTEMS

In 1976, one of the members of our study team carried out a study of the structure of a traditional baseline data system (McVey, 1976). We have drawn upon his report for this section of the Background Paper.

McVey defines four different types of data systems:

- 1) Person data system
- 2) Household or family data system.
- 3) Real property data system
- 4) Geographic data system

We discuss each in turn and set out our conclusions.

Table 1. Possible Baseline Data Systems

	REAL PROPERTY	GEOGRAPHIC	PERSONAL	HOUSEHOLD/FAMILY
UNIT OF COLLECTION	Lot (land parcel)	Areal		
DATA INPUTS	Lot size Land Use Zoning Value	Selected Characteristics - Demographic data - Socio-economic data - Vital Statistics	Selected Characteristics Behavioural Sets	Selected Characteristics Behavioural Sets
DATA TABULATION	Address Lot Number Block Number	Administrative Unit Census Division Census Tract Enumeration Area	Social Insurance # File or Tax #	Address
COLLECTION AGENCIES	School Administration Transportation Department Election Office	Municipal Affairs Bureau of Statistics Statistics Canada	Health Care Commission Motor Vehicles Branch Welfare Department Income Tax Bureau	Income Tax Bureau Welfare Department Health Care Commission

3.3.1 Person Data System

In this system, the basic unit is the individual. The content of the record consists of selected characteristics or behaviour of the individual, as these are known to the participating agencies. Such agencies might be the Hospital Commission, Motor Vehicles, Attorney General.

The data system consists of all persons for whom a record can be established. For each person, the various agencies are canvassed for relevant information - coded perhaps by social insurance number - and a personal dossier is prepared, maintained and accessible by computer. Examples of such systems are, those maintained by credit rating companies on all individuals who have or who have sought credit, and that maintained by the Receiver General of Canada on all tax filers.

To be useful for conventional planning purposes such a system would have to be address-linked so that the individual could be located within a given geographic area.

The practicality of such a system for normal policy and planning purposes is limited. For example:

- . name or address-linked records are considered classified information in many agencies; and the records themselves are converted into statistics unrelated to geographic location before being published.
- . the system will incorporate only those persons who come to the attention of the particular agencies.

What can usefully be derived from the Person Data System are the statistics from the various agencies based upon the records of those who have come to their attention. The statistics are, therefore, inevitably incomplete. They also tend to be badly skewed, given the reality that certain agencies tend to be used more by certain types or classes

of persons than by others.

Nonetheless, the statistics thus derived are useful so long as the limited degree of their representativeness is acknowledged. If nothing else, such statistics provide a reliable representation of the types or classes of persons coming to the attention of the particular agency.

3.3.2 Household of Family Data System

The basic unit in this system is the household or the family. This data system is similar to the Person Data System except that it is extended to the family or household. It faces the same limitations, and the same difficulties in operationalizing it; plus the added limitation that the family or household is not normally used by most agencies as the basic unit in their information systems. These limitations render it unfeasible for our purposes.

3.3.3 Real Property Data System

In this system, the basic unit is the lot or land parcel. Data records consist of such matters as address, lot size, land use, dwelling type, number of dwelling units on the lot, zoning, assessment, tax status and the like. Identifying codes for the lot or land parcel would be the address, lot number, block number; perhaps the census tract code, police beat, traffic zone, school zone, planning district.

Additional data records can be provided through the municipal census to include information with respect to number of households, household composition, school support, tenancy status; perhaps occupation and employer. (see Fort McMurray Municipal Census, 1977)

In this way individual and family/household data can be linked to lot number or address without

encountering the problems of confidentiality associated with the two previous data systems.

Through the identifying code, agencies such as the local school administration, planning department, transportation department, can access data relevant to their purposes. The uses to which the system is put will determine the types of data collected regarding each lot. With this system, the user can aggregate the lot data to higher order areas such as the planning zone or census tract.

Another advantage of this system is that it can be kept up to date readily. Property assessment is a function common to all municipalities. The tax assessor's office maintains as a matter of course continuous records with respect to each lot or parcel of land within the municipality. All changes with respect to the lot and building on the lot are recorded in the assessor's files as they occur.

Given the requirements of local administrative regulations and procedures, such information is seldom more than a month or so out of date; and family/household data are collected annually, and therefore are never more than twelve months out of date.

McVey reports that Real Property Data Systems are in place in Detroit, Washington, New Haven and Philadelphia, among other cities. A similar system is in place in Calgary. In the Calgary system the identifying code is the roll number assigned to each parcel of land. Other data content which can be referenced by roll number can, therefore, be incorporated into the system.

The Real Property Data System thus possesses a number of important advantages. It is based upon a fixed unit. Data with respect to that unit are collected by the municipality as a matter of course on a continuing basis. The nature of the unit, the log, makes it relevant

to many of the local data collecting agencies. The data from each unit can be aggregated to higher order areas.

The disadvantage of this system is the limited amount of information it contains. It is primarily demographic. It does not, for example, contain any information with respect to behaviour, social status and conditions, disease, family stability, crime, and other important dimensions of local life.

3.3.4 Geographic Data System

In this system, as in the Real Property System, the basic unit is areal. In this case, however, the unit is larger than the lot; for example, a census tract or planning zone.

The records in this system, therefore, do not pertain to conditions on the lot, but to the events which occur within the geographic area. The records, therefore, consist of data pertaining to activities, occurrences, events which can be referenced accordingly. Such records might pertain to traffic accidents, crimes at place of enactment, incidence of disease, truancy, building code violations by address.

The advantage of this system is that data records can be established to cover a range of events for the given geographic area. It is possible to feed into this system aggregated data from the municipal census and the tax assessor's office. In the same way, agencies collecting confidential address-linked data can feed into the system their statistics without breaching confidentiality. Statistics Canada collects data regularly on a geographically coded basis and thus can provide a powerful set of data records for such a system.

The University of Alberta Population Research Laboratory has established a Geographic Data System. Called the Standard User Data Sets (SUDS), it uses the Statistics

Canada census enumeration area as the basic areal unit. The objective of SUDS is to generate data profiles for any user-designated area in Canada. In addition, the laboratory has an "Alberta Only" tape file. The SUDS program has identified all census data by enumeration area. Using this as the building block, the data system can retrieve and manipulate data to higher order aggregations, such as census tract, metropolitan area, census division.

The potential result of a Geographic Data System, describes as ecological data for research, planning, program evaluation, and monitoring of changes within the area covered by the system. In this way the system can meet a wide range of user needs with respect to data collection, according to McVey.

The major disadvantage, as McVey notes, is the difficulty of operationalizing the system.

The reason is the relatively undeveloped state of record keeping, and mechanization of records, within the various agencies. While the records of the tax assessor are kept up to date on a continuing basis, and frequently are on computer tape and therefore accessible at short notice, many agencies only collate and organize their data once a year, and then often in gross rather than fine grain statistical description.

There is also the difficulty of relating address-coded records to the specific areal unit, particularly in the larger municipalities. The Juvenile Court, for example, would not only have to table the number of cases it dealt with in various categories, but also relate the address of the juvenile to the specific area. This can be time-consuming, and the advantages of the cost involved might not be apparent to the Court Officials.

Perhaps the major obstacle to operationalizing the Geographic Data System is areal discontinuity. In order for such a system to work to maximum efficiency, there

must exist a common small area system which is used by the major data sources. In other words, everyone should use the same building block. The individual common area would also have to be small enough to permit the level of fine grain data collection and analysis which most users would find relevant to their needs.

McVey found, however, that areal continuity is the exception rather than the rule. Each department or agency creates its own statistical area system to meet what it considers to be its needs. Not only do these statistical areas not conform with each other, but often departments or agencies change the area boundaries from time to time to meet altered circumstances. A recent attempt by the consultants to institute a national data system based on the postal code system could not be implemented because the system itself contains serious anomalies, and the postal codes for specific areas are altered frequently. Statistics Canada also changes the boundaries of its enumeration areas, sometimes from census to census for some locations.

A further problem is that departments and agencies frequently establish statistical areas which are so large and contain such diverse conditions that the usefulness of the data generated is questionable.

To illustrate the problems of spatial extent and areal discontinuity, we quote McVey's findings with respect to the AOSERP region. The statistical area most compatible with this region is Census Division 12 (CD 12). At the time of McVey's study in 1976 the statistical areas of other provincial departments could not be matched to the boundaries of CD 12. Some examples are cited here:

Department of Agriculture - Agricultural Regions, 1974: in 1974, the Northeast Agricultural Region included Census Division 12 and parts of Census Divisions 10 and 7.

Department of Agriculture - Agricultural Reporting Areas, 1975: In 1975, ARA 6 included not only Census Division 12, but also Census Divisions 13 and 14.

Department of Municipal Affairs - Minor Civil Sub-Divisions, 1975: In 1975, Census Division 12 was compatible with Improvement Districts 18 and 24, Counties 13 and 19, and Municipal District 87.

Department of Social Services and Community Health - Health Units, 1976: In 1976, Census Division 12 contained the Fort McMurray and District Health Unit, the Northeastern Alberta Health Unit, and part of Athabasca Health Unit.

Electoral Districts, 1971: In 1971, Census Division 12 comprised parts of Electoral Districts 801, 818 and 815.

Industry and Commerce Regions, 1976: In 1976, Industry and Commerce Region 6 includes that portion of Census Division 12 south of the 19th base line and part of Census Division 13.

Judicial Districts, 1962: In 1962, the Edmonton Judicial District included all of Census Divisions 12, 13, 14 and parts of Census Divisions 10, 11, and 15.

Travel Alberta - Travel Industry Zones, 1973: In 1973, 'The Lakeland Travel Zone' included all of Census Division 12 and parts of Census Divisions 10 and 13.

McVey concluded this section of his report by recommending that Statistics Canada be requested to standardize the enumeration areas in CD 12 according to the 1976 delineations. This would ensure areal discontinuity in that particular area for future censuses.

He also recommended that the Province encourage the various departments and agencies in the government to use these standardized enumeration areas as the basic building blocks for their own statistical areas.

3.3.5 Conclusions

In the above sections we have described the basic types of data systems and have summarized the major advantages and disadvantages of each. The basic types are:

1. Person Data System
2. Household or Family Data System
3. Real Property Data System
4. Geographic Data System

In this description we drew heavily upon the work of one of our study team members (McVey, 1976). In the preceding paragraphs we summarized his recommendations that a common small area statistical system be established for all departments and agencies charged with data collection; and that all demographic, social, economic and biophysical data collected by local departments and agencies, as well as by Statistics Canada, be referenced to the common small area system.

Our objectives are different from those of McVey in 1976, in that we are charged with designing an Institutional Information System to be put in place at the commencement of Phase 2 of both the Fort McMurray Longitudinal Study and the Cold Lake Region Baseline Study. Consequently, we must propose a system which takes the best advantage of what is possible within the existing conditions of data availability and area discontinuity.

Our major conclusion is that the most practical approach to take is a geographically coded data system with Person Data Systems and Real Property Data Systems keyed to it, to the extent feasible.

Despite its disadvantages, a data system approach keyed to geographic areas seems the best able to accommodate the diversity and range of data arrangements currently in place.

It will be possible to proceed with this approach

without waiting for a final decision regarding McVey's recommendations for the establishment of a common small area system. In those cases, such as those cited above, where different departments use different statistical areas, it will be necessary to do a more fine grain analysis to establish data records for geographical areas more appropriate to the purposes of the study. In some cases, the data will have to be examined and ordered by hand.

Types of Real Property Data Systems are already in place, to varying extents, in the study communities. This data will have to be aggregated to higher order areas in order to conform to area boundaries from geographically coded systems.

Statistics derived from Person Data Systems can be examined and ordered to conform to geographic areas.

Accordingly, we conclude that the Institutional Information System at its inception should consist of the following components:

1. Person Data System. Statistics can be collected from the various agencies based upon their name and address-related records. Confidentiality can be preserved by aggregating the data and relating them to the most appropriate geographic area feasible with the time and resources available. We expect that, in some cases, the data will have to be treated by hand to convert them to useable statistics and to relate these to a spatial area small enough to be useful for the purposes of the studies.
2. Real Property Data System. Two major sources can be utilized here, in addition to others

which may be available. The first is the property and assessment data for the study communities available through the municipalities themselves and through the computer tapes of the Department of Municipal Affairs. The Department also possesses computer tapes with respect to the housing and demographic data obtained through the various municipal censuses in some of the study communities. Not all municipalities in the Cold Lake Region have undertaken a municipal census. In these communities, surrogate data can be provided from the results of the Base Demographic Questionnaire to be administered in the survey of households.

3. Geographic Data System. Use should be made of all data sources available. The major difficulty will be treating the data to conform to appropriate areal boundaries. It will be important to establish priorities so that the time and budget resources available to the studies can be focussed on the most important topics.

We expect there will be difficulties in establishing data comparability within consistent areal boundaries small enough to identify and monitor effectively the particular conditions to be studied. It will be important to acknowledge in the resulting statistics and accounts, whatever areal and other anomalies cannot be resolved.

4. DATA EVALUATION

4.1 CRITERIA

The major criterion for devising a data system is data availability. Six sub-criteria are considered:

- 1) Type of data - demographic, social, economic;
- 2) Data source - collection agency;
- 3) Data detail - level of aggregation;
- 4) Unit of data collection - area reference;
- 5) Data accessibility - availability and confidentiality;
- 6) Data time frame - regularity or period of collection;

These sub-criteria facilitate the evaluation of data compatibility, in that they provide guidelines to ascertain whether data inputs are amenable to a geographically coded continuous monitoring system.

In addition to the above, the data must be accessible and should not violate confidentiality; must be available at the necessary level of aggregation; and must be collected at regular intervals to ensure temporal continuity.

A second major criterion is that the geographically coded data system can be used in most areas throughout the province and at different scales. This approach is intended to maintain conceptual consistency by providing a comparative framework within which to measure existing conditions and monitor changes in these conditions. It is possible that the experience gained in the study areas may help facilitate the achievement of this criterion on a wider basis.

The final major criterion concerns the selection of data that comprise the Institutional Information System.

The data inputs must be flexible enough to facilitate their manipulation for a wide range of user needs and analytical purposes; for example, presenting these data by number and percentage or proportion, by breakdown or category, in crosstabulated form, and for various statistical tests. Thus, the data inputs will be presented in a simple form, that is, one that will enable them to be modified for their intended usage.

5. SOCIO-ECONOMIC STATISTICS.

5.1 INTRODUCTION

The second objective of this Background Paper is to review a broad cross-section of the literature relating to objective social statistics for the purpose of identifying important or key subject areas for which measures were specified. It was found that approaches to socio-economic statistics and accounting were many and varied. They were contingent upon a number of factors, such as purpose and objectives, data availability, size of study area or population, level of analysis or synthesis, time, and so forth. In addition the scope of a particular study also dictated the approach that was undertaken: some studies dealt with social statistics in general with the intent of devising individual, household or community profiles of living quality, standard or well-being; other studies focused in considerable detail on particular social statistics such as education, health, or income.

The search of the literature, regarding socio-economic statistics was carried out in two stages. First, articles and publications dealing with quality of life or well-being in general were reviewed. This review provided the framework within which various subject areas were identified. Second, additional materials relating to specific subject areas were then examined in greater detail to evaluate the possible inclusion of specific social data. During these stages, potential users of the systems were consulted regarding their needs.

The literature search identified a variety of social statistics that have been used by various researchers. We have grouped these social statistics into subject areas according to the criteria outlined above. Social statistics for each subject area that comprise the baseline data system include the following:

- . population, income and consumption
- . education,
- . housing
- . health
- . local business economy
- . work and employment
- . recreation and leisure
- . justice
- . government

In each case, statistical categories will be standardized to facilitate compatibility with major data sources such as Alberta Bureau of Statistics and Statistics Canada. The resources of the University of Alberta Population Research Laboratory will be consulted.

5.2 PROPOSED SUBJECT AREAS

5.2.1 Population

Population statistics provide a useful starting point for examining characteristics of the population as a whole for two reasons. First, population and population changes are perhaps the single most important indicators of other attributes of the population such as housing, household formation, health, growth and so forth. Second, population data are readily available in standardized categories on a regular basis. Generally, these data include the number and distribution - percentage of the population by age and sex. Other breakdowns include marital status, household and family composition, ethnic background, migrational characteristics and urban-rural distinctions. Population data are presented at either an individual level of aggregation or on a family or household basis. Areal units of accounting vary; different levels of spatial accounting are used by different agencies. These will need to be accommodated.

Alberta Bureau of Statistics, 1977; Alberta Municipal Affairs, 1977; Butler, 1973; Larson, 1977; Maslove, 1975; Michalos, 1978; Ontario Ministry of Treasury, 1977; Ontario Ministry of Treasury, 1978; Resources Management Consultants, 1978; Statistics Canada, 1977; University of Alberta, 1977a; Urban Affairs, 1973; Urban Affairs, 1976b; Van Dyke, 1977; Wood, 1974.

5.2.2 Income

Income is generally measured on an annual basis. Two distinctions can be made: household income, that is, the combined income of all earners who make up a household unit; and individual income. Income statistics can be reported in either or both ways. The usual variables cross-tabulated with income include the following: age, sex, educational level, occupational category, urban-rural, ethnicity, family characteristics. Also, statistics relating to income distribution and consumption should be examined.

Alberta Bureau of Statistics, 1977; Harland, 1973B; Johnson, (undated); Maslove, 1975; Ontario Ministry of Treasury, 1977; OECD, 1974; OECD, 1977; Palys, 1973; Paproski, 1973; Snider, 1976; Statistics Canada, 1977; Urban Affairs, 1973; Urban Affairs, 1976b; Van Dyke, 1977; Wood, 1974.

5.2.3 Local Business Economy

In the present context, the local business economy refers to retail, service and industrial activities. These activities provide a good indication of the economic health or viability of a community for three reasons. First, these activities not only employ a significant proportion of the labour force but, also, generate a large volume of sales; that is, these activities are a key component of the local economic base. Second, commercial services reflect the buying power of the population, the latter being directly related to disposable income. Third, the range of goods and services provided reflects the opportunities available to the consumer.

Distinctions between local and non-local commercial services would also be useful in order to determine the

extent to which the local economy is dependent on decisions made outside the community, for example, by head offices of regional/national "chains" or multinational corporations. Some statistics with respect to this matter may be available from Alberta Bureau of Statistics. If it is not available, surrogate information can be obtained through the proposed survey of local businesses.

Data collected should therefore be categorized sectorally: 1) retail
2) services
3) industrial

and by ownership if possible. Statistics should include numbers of services by category, ownership, gross sales.

Since data require aggregation to ensure confidentiality, socio-economic statistics can be presented by using the categories outlined above. Activity types can be specified according to the "Standard Industrial Classification" (SIC), as revised by ABS.

Harland, 1973B; OECD, 1974; Resources Management Consultants, 1978; Swedish Council for Building Research, 1975; Urban Affairs, 1973; Urban Affairs, 1976a; Van Dyke, 1977.

5.2.4 Education

Statistics relating to educational status of persons attending school are accessible through the local school administration. Comparable statistics for other jurisdictions may be available through the Department of Education. Educational statistics for the school age population not in school can be determined from the Census. This will create some difficulties in establishing comparable figures on an annual basis. Education continues to be a major expenditure. The \$11.3 billion spent on education in 1975-1975 constitutes 8.6% of the Canadian GNP and 17.8% of the total federal government budget, an average of \$1,764 per full-time student. Almost two-thirds of these expenditures were for elementary and secondary schools, almost

one-quarter for university, and the remainder was evenly divided between post-secondary, non-university and vocational schools.

When dealing with educational statistics, four levels of education can be distinguished.

- 1) elementary
- 2) secondary
- 3) post-secondary, non-university and vocational
- 4) university

A distinction should be made among public, separate and private schools, and between the school and non-school population. Other categories might include fulltime, part-time and seasonal students, and teacher ratios and turnover rates. Statistics should also be collected on the availability and quality of education, and educational expenditures.

Alberta Bureau of Statistics, 1977; Berry, 1973; Harland, 1973C; Henderson, 1973; Henderson, 1974; Ontario Ministry of Treasury, 1977; OECD, 1974; OECD, 1977; Paproski, 1973; Project North Task Force, 1976; Resources Management Consultants, 1978; Snider, 1976; Statistics Canada, 1977; Swedish Council for Building Research, 1975; Taylor, 1975; Urban Affairs, 1973; Urban Affairs, 1976a; Urban Affairs, 1976b; Van Dyke, 1977; Wahlstrom, 1976; Wood, 1974.

5.2.5 Housing

Housing is an important measure of the quality of life, socio-economic status and the state of the economy. Social statistics relating to housing should include housing stock, type, use, density, availability, price and quality.

Many of the housing statistics can be cross-tabulated to provide useful social reports. Vacancy rates, for example, can be cross-tabulated with dwelling type, period of construction, dwelling value, and so forth. Owner-occupied and rented dwellings can be cross-tabulated with other housing statistics such as tenure, persons per room, bedroom or bathroom, percentage of units with basic

utilities. In addition, other variables can be cross-tabulated with many of the housing statistics - occupation, ethnicity, age and sex of household head.

Alberta Bureau of Statistics, 1977; Alberta Municipal Affairs, 1977; Berry, 1973; Harland, 1973G; Henderson, 1974; Larson, 1977; Maslove, 1975; Maslove, 1977; Ontario Ministry of Treasury, 1977; OECD, 1974; OECD, 1977; Paproski, 1973; Resources Management Consultants, 1978; Snider, 1976; Snider, 1977; Statistics Canada, 1977; Swedish Council for Building Research, 1975; Surendra and Kuhn, 1977; Taylor, 1975; University of Alberta, 1977a; Urban Affairs, 1973; Urban Affairs, 1976b; Van Dyke, 1977; Wood, 1974.

5.2.6 Health Services

The importance of the health service field is illustrated by health expenditures. Per capita health expenditures in Canada rose from about \$120 in 1960 to over \$500 by 1975 (measured in constant dollars). The 11.5 billion dollars spent on health in 1975, expressed as a percentage of the Gross National Product, was 7.1%, compared to 5.5% in 1960. Corresponding trends were evidenced in the United States.

The collection and documentation of statistics in health are probably more extensive than in any other field of social statistics. This stems in part from the procedures involved in using the health services field (e.g., medical insurance, hospital records, Workman's Compensation, etcetera), and partly from the diverse nature of the health field including vital statistics, diseases and disabilities, alcohol and drugs and health care services, facilities and expenditures.

Given the wealth and diversity of information collected in the health field, we propose the following categories or "areas" in which to group the data:

- 1) Life and death (vital statistics)
- 2) Disease and disability
- 3) Alcohol and drugs
- 4) Health care services

5) Health care expenditures.

6) Other

Alberta Bureau of Statistics, 1977; Alberta Health Care Insurance Commission, 1976; Canada Council, 1977; Flanagan, 1978; Harland, 1973F; Henderson, 1973; Henderson, 1974; Johnson, (undated); Larson, 1977; Michalos, 1978; Ontario Ministry of Treasury, 1977; OECD, 1974; OECD, 1977; Palys, 1973; Paproski, 1973; Resources Management Consultants, 1978; Snider, 1976; Swedish Council for Building Research, 1975; Taylor, 1975; U.S. Department of Health, 1977; Statistics Canada, 1977; Urban Affairs, 1973; Urban Affairs, 1976a; Urban Affairs, 1976b; Van Dyke, 1977; Wood, 1974.

5.2.7 Work and Manpower

The variety of social statistics that fall under the general heading of work include those that relate to labour, labour force and employment. Standardized categories for occupation and occupational field will be used. Information about job satisfaction is subjective and cannot be provided in the Institutional Information System. There are, nonetheless, some measures that may reflect job satisfaction indirectly; for example, labour turnover, absenteeism, strike days; these, however, should be used cautiously.

Distinctions between characteristics of the Native/Metis and non-native population are relevant because they provide an indication of the extent to which the former are integrated into or participate in the economic mainstream.

Education, income and health are all related to work. In addition, leisure/recreation activities can also be compared to various aspects of work.

Alberta Bureau of Statistics, 1977; Alberta Health Care Insurance Commission, 1976; Canada Council, 1977; Flanagan, 1978; Harland, 1973F; Henderson, 1973; Henderson, 1974; Johnson, (undated); Larson, 1977; Michalos, 1978; Ontario Ministry of Treasury, 1977; OECD, 1974; OECD, 1977; Palys, 1973; Paproski, 1973; Resources Management Consultants, 1978; Snider, 1976; Swedish Council for Building Research, 1975; Taylor, 1975; U.S. Department of Health, 1977; Statistics Canada, 1977; Urban Affairs, 1973; Urban Affairs, 1976a; Urban Affairs, 1976b; Van Dyke, 1977; Wood, 1974.

5.2.8 Leisure and Recreational Activities

Activities carried out during leisure time are indicators of quality of life, physical fitness, and work satisfaction. Almost all leisure and recreational activity studies provide background information on, or profiles of, participants and non-participants. Common cross-tabulated variables include marital status, education, income, employment status, and occupation. Related data include participation in and attendance at recreational activities and recreational facilities and expenditures. Much of this information is collected through various surveys.

Alberta Bureau of Statistics, 1977; Harland, 1973A; Kirsh, Dixon and Bond, 1972; Ontario Ministry of Treasury, 1977; OECD, 1974; OECD, 1977; Resources Management Consultants, 1978; Snider, 1976; Statistics Canada, 1977; Tourism and Outdoor Recreational Planning Study Committee, 1977; University of Alberta, 1977a; Urban Affairs, 1973; Urban Affairs, 1976a; Urban Affairs, 1976b; Van Dyke, 1977.

5.2.9 Justice

In this context, justice relates primarily to unlawful or illegal criminal acts and public safety and protection, as distinct from equality and individual freedoms or rights. Statistics therefore, pertain to the number and type of crimes and offences, the workings of the criminal court legal system, and public safety or protection. It might also be possible to prepare a profile of offenders, also be provided by cross-tabulating other background variables such as age, sex, occupation, unemployment, educational level, income, place of residence, marital status, and so on.

Alberta Bureau of Statistics, 1977; Canada Council, 1977; Harland, 1973H; Johnson, (undated); Maslove, 1975; Ontario Ministry of Treasury, 1977; OECD, 1974; OECD, 1977; Palys, 1973; Resources Management Consultants, 1978; Snider, 1976; Statistics Canada, 1977; University of Alberta, 1977a; University of Alberta, 1977b; University of Alberta, 1977c; Urban Affairs, 1973; Urban Affairs, 1976b; Van Dyke, 1977; Wood, 1974.

5.2.10 Local Government

Monitoring of local government spending is critical for sound municipal planning, programming, priority definition and evaluation. Budgetary allotments define local financial priorities and requirements. Capital expenditures provide the necessary infrastructure for local development. In addition, government employs a significant proportion of the local population and is a major land user. Relevant data should include municipal tax base (revenues), budget expenditures for both capital and operating costs, and indebtedness.

Alberta Bureau of Statistics, 1977; Larson, 1977; Maslove, 1975; Ontario Ministry of Treasury, 1977; Resources Management Consultants, 1978; Snider, 1976; Urban Affairs, 1973; Urban Affairs, 1976a; Van Dyke, 1977, Wood, 1974.

6. INSTITUTIONAL INFORMATION SYSTEM: STATISTICS
AND SOURCES

6.1 INTRODUCTION

A preliminary investigation of the availability of social statistics from current data sources was undertaken during the study period. Relevant information for the study areas was identified on the basis of:

1. A previous study commissioned by AOSERP, dealing with the "Structure of a Traditional Baseline Data System" (McVey, 1976), and
2. Discussions with the Alberta Bureau of Statistics on the availability and relevance of information for the study areas.
3. Discussions with selected Government departments and agencies.

Based on these investigations, sources that comprise the Institutional Information System were identified. These sources are presented below. The listing is tentative. Only when work begins on putting the system in place will it be possible to identify in detail, the ability of the many sources to provide the data or statistics, the specific statistics available and their status.

Two points should be emphasized. First, the collection of some of the data requires cooperation of various Government departments and agencies. Second, although social statistics will be collected for the entire population, statistics relating to the native population should also be collected on a similar basis, whenever possible. In many cases, however, these statistics are difficult to obtain from conventional sources because most collection agencies do not distinguish between natives and non-native. Agencies collecting data relating to the native population should, therefore, be asked to cooperate.

6.2 POPULATION

<u>Statistics</u>	<u>Possible Data Sources</u>
1. Total Population	Fort McMurray Census (A)* Census of Canada (A) Municipal Affairs (A) Census of Canada (B)**
2. Age/sex	Fort McMurray Census (A) Census of Canada (A)
3. Natural increase (births)	Vital Statistics***
4. Net migration	Available statistics
5. Ethnicity	Census of Canada
6. Birthplace	Fort McMurray Housing Survey (A) Census of Canada (B)
7. Marriage/Divorce Rate	Vital Statistics Statistics Canada
8. Household composition	Fort McMurray Housing Survey (A) Fort McMurray Census (A) Census of Canada (B)

* (A)-Indicates the data source is relevant for Fort McMurray only

** (B)-Indicates that the data source is relevant for Cold Lake only

***No letter-Indicates that the data source is relevant for both Fort McMurray and Cold Lake

6.3 INCOME

<u>Statistics</u>	<u>Possible Data Sources</u>
1. Per capita personal income (and distribution, by level)	Fort McMurray Housing Survey (A) Revenue Canada (B) Census of Canada (B)
2. Personal expenditures	Alberta Bureau of Statistics
3. Consumer Price Index	Alberta Bureau of Statistics
4. Welfare Recipients (per 100,000)	Alberta Social Services and Community Health

6.4 LOCAL BUSINESS ECONOMY

Social Statistics

1. Establishments, by type
2. Size - annual sales
- number employed
3. Establishments by type
per capita
4. Sales by type per capita
5. Post office revenues and
per capita

Possible Data Sources

Alberta Bureau of Statistics
 Alberta Bureau of Statistics
 Alberta Bureau of Statistics
 Available statistics
 Office of the Postmaster
 General

6.5 EDUCATION

Social Statistics

1. Enrollment by level,
age, sex
2. Graduation by level,
age, sex
3. Retention/Dropout rate
by level, age, sex
4. Teacher to student
ratio by level
5. Teacher turnover rate
6. Highest level completed
(non-school) by age, sex
7. Expenditures on education
by level

Possible Data Sources

Public, Separate and Private
 School Boards
 College and Universities
 Public, Separate and Private
 School Boards
 Colleges and Universities
 Public, Separate and Private
 School Boards
 College and Universities
 Public, Separate and Private
 School Boards
 College and Universities
 Public, Separate and Private
 School Boards
 Colleges and Universities
 Census of Canada,
 Alberta Bureau of Statistics
 School Boards
 Department of Education
 Alberta Public Accounts

6.6 HOUSING

Social Statistics

1. Tenure
2. Age of Dwelling .
3. Persons per room
4. Vacancy rate
5. Rent/Mortgages
6. Government Housing
7. Amenities
8. Dwelling Value
9. Basic Utilities
10. New Housing Starts/Com-
pletions
11. Handicapped/Elderly
Housing Units
12. Housing prices/rents

Possible Data Sources

- Housing Survey (A)
Census of Canada (B)
- Housing Survey (A)
Census of Canada (B)
- Housing Survey (A)
Census of Canada (B)
- Fort McMurray Census (A)
Local Real Estate Boards (B)
- Housing Survey (A)
Census of Canada
- CMHC
Alberta Housing
- Census of Canada
Housing Survey (A)
- Housing Survey (A)
Local Real Estate Boards (B)
- Local Utilities Boards
- Statistics Canada
Alberta Housing
- Alberta Housing
CMHC
Alberta Social Services
and Community Health
- Real Estate Boards

6.7 HEALTH

1. Birth Rate
Vital Statistics
Local Health Services
2. Life expectancy at birth,
age 1
Vital Statistics
Social Services
3. Infant mortality rate
Vital Statistics
4. Proportional mortality rate
Vital Statistics
5. Age, sex, specific death,
by cause
Office of Chief Medical Officer
Coroners Office (Attorney General)
6. Crude death rate
Office of Chief Medical Officer
Coroners Office (Attorney General)
7. Suicide rate
Office of Chief Medical Officer
Coroners office (Attorney General)

6.7 HEALTH (continued)

<u>Social Statistics</u>	<u>Possible Data Sources</u>
8. Conditions (chronic, acute, injury) by type, age, sex	Local Health Services Health Commission
9. Alcohol (per capita consumption, expenditure)	ALCB
10. Prescribed drugs (per capita expenditure, consumption)	Alberta Health Care Commission Drug Stores
11. Cigarettes (per capita consumption expenditures, and user age, sex)	Alberta Tobacco Tax Alberta Treasury
12. Hospital beds, by type (per capita)	Alberta Health Care Commission Local Health Services
13. Physicians, dentists, nurses (per capita)	Alberta Health Care Commission
14. Patient days by cause, age, sex	Alberta Health Care Commission Local Health Services
15. Hospital admission rate	Alberta Health Care Commission Local Health Services
16. Institutions, by type (per 100,000)	Alberta Health Care Commission Local Health Services
17. Expenditures on Health care/services	Alberta Health Care Commission
18. Physically handicapped, by type, cause, %	Alberta Social Services and Community Health
19. Incidence of VD	Local Health Services
20. Mental Health Patients (per 100,000)	Alberta Social Services and Community Health
21. Abortion rate	Alberta Health Care Commission Local Health Services

6.8 WORK AND MANPOWER

<u>Social Statistics</u>	<u>Possible Data Sources</u>
1. Labour Force Participation Rate	Census of Canada
2. Occupation	Housing Survey (A) Fort McMurray Census (A) Census of Canada (B)
3. Unemployment Rate	Fort McMurray Census (A) Advanced Manpower and Education (B)

6.8 WORK AND MANPOWER (continued)

<u>Social Statistics</u>	<u>Possible Data Sources</u>
4. Unemployment, by duration	Advanced Manpower and Education Unemployment Insurance Commission
5. Full-time job vacancies, by type	Statistics Canada Job Vacancy Survey
6. Union membership, by in- dustry	Unions
7. Average weekly work hours	Census of Canada Statistics Canada
8. Child care arrangements for working mothers	Social Services and Community Health in Day Care Registry

6.9 LEISURE AND RECREATION ACTIVITIES

<u>Social Statistics</u>	<u>Possible Data Sources</u>
1. Proportion of time for leisure, by age, sex, in- come, marital status	Household Survey Alberta Parks, Recreation and Wildlife
2. Participation in activity type, by age, sex, income, marital status	Household Survey Alberta Parks, Recreation and Wildlife Alberta Business Development and Tourism
3. Facilities by type per capita	Alberta Parks, Recreation and Wildlife Alberta Business Development and Tourism
4. Household ownership of selected recreational equipment	Household Survey
5. Leisure time expenditures	Alberta Bureau of Statistics Alberta Business Development and Tourism
6. Park area (square miles) per capita	Alberta Parks, Recreation and Wildlife
7. Provincial park daily traffic counts, by season	Alberta Transportation
8. Cultural and entertainment facilities, by type and and size per capita	Local Government Alberta Culture

6.10 JUSTICE

Social Statistics

1. Criminal offence rate,
by type, age, sex
2. Vehicular accident rate,
by type
3. Alcohol, drug related
offences
4. Convictions (ratio per
offence)
5. Use of Public Defenders
6. Police per capita
7. Police turnover rate
8. Police Fatalities

Possible Data Sources

Statistics Canada
 Alberta Bureau of Statistics
 Motor Vehicles Branch
 Solicitor General
 RCMP
 AADAC
 Alberta Courts
 Legal Aid
 Alberta Courts
 Attorney General
 RCMP
 RCMP
 RCMP

6.11 LOCAL GOVERNMENT

Social Statistics

1. Mill rate
2. Total debt, per capita
3. Capital and operating
expenditures by type, per
capita
4. Assessment rate, by type
and per capita
5. Labour force employed
in local government

Possible Data Sources

Municipal Affairs
 Municipal Affairs
 Municipal Affairs
 Municipal Affairs
 Local Government
 Local Offices of Provincial
 and Federal Government

ALBERTA OIL SANDS ENVIRONMENTAL RESEARCH PROGRAM

LONGITUDINAL STUDY OF PERSONAL ADJUSTMENT

AND SOCIAL CONDITIONS IN

THE FORT McMURRAY AREA HS 30.1

PHASE 1: FINAL REPORT

BACKGROUND PAPER:

THE LOCAL BUSINESS ECONOMY IN

RESOURCE COMMUNITIES

AUGUST, 1978

THE LOCAL BUSINESS ECONOMY
IN RESOURCE COMMUNITIES

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1. INTRODUCTION

Although there is a diverse literature on resource communities ranging over such topics as work, education, individual and family well-being, and quality of life, little empirical research has been done on the local business economy in resource communities.

We find, for example, little information available with respect to such central topics as: structure and characteristics of the local business economy, patterns of ownership and shifts in patterns, availability and variety of retail goods, costs associated with delivery to point of sale and handling at point of sale, local wage economy, prices comparative to other communities, availability of services, involvement of local business in and share of resource industry sector, and dislocation of consumer services caused by diversion of the local business economy to the resource industry sector.

Until comparatively recently, in fact, not much attention was given in the literature to the local business economy itself as an object deserving special study. Wood (1974), for example, writes that it is important not to, "lose sight of the value of economic indicators as social indicators".

The economic indicators he selects, however, are those pertaining only to employment, income and consumption. While these are undoubtedly important, he deals with them mainly within the context of the resource development sector itself: employment, and the benefits therefrom, mostly in the government and resource sectors of the economy. His major concerns are with the adequacy of employment opportunities, quality of working life, consumer command over goods and services, and consumer satisfaction.

The only two specific references Wood makes to the local business economy are purely as a function of consumer command over goods and services: the number of

retail stores per 100 population as a function of supply; and retail sales per capita. Beyond this, there is no discussion of the local business economy per se.

In this Background Paper we will examine first the major issues involved in the local economy in resource communities. Then we examine some of the specifics with respect to the communities within our studies' area. Finally, we will propose a set of procedures for collecting the relevant information.

We also intend to deal with the native economy separately from the non-native. The distinction is, in fact, not clear cut. The native economy does, however, present some special considerations which should be addressed separately. This we do in the latter sections of this Background Paper.

2. ISSUES ASSOCIATED WITH THE LOCAL BUSINESS ECONOMY IN NORTHERN RESOURCE COMMUNITIES

2.1 SOME BASIC DISTINCTIONS

There is not, as we noted earlier, much in the way of literature and research which attempts to deal comprehensively with the local economy of a resource town in the context of resource development. The most recent effort is that by Imperial Oil (Resources Management Consultants, 1977a, 1977b) in its assessments of the socio-economic impacts of its proposed Cold Lake plant upon the local communities (Resources Management Consultants, 1978a, 1978b).

While Imperial's assessments contain the most up-to-date data and information available on the Cold Lake Region, they do not specifically identify the issues surrounding the local business economy and set them within an overall context. Rather, the emphasis is more upon examination each sector of the local economy within its own context. This examination is useful, but it is not adequate in itself for the purposes of this paper.

The most sustained efforts to place local economies in the context of resource developments were carried out in connection with the hearings, studies and submissions associated with the various pipeline hearings in the Yukon and Northwest Territories: specifically, the National Energy Board with respect to its decisions on northern pipelines (NEB, 1977); the Alaska Highway Pipeline Inquiry (Lysyk, 1977); the MacKenzie Valley Pipeline Inquiry (Berger, 1977). The report of the Environmental Assessment Panel with respect to the Alaska Highway Pipeline (EAP, 1977) was reviewed but it contains little or no reference to local social and economic concerns and is therefore not useful for discussion.

There are significant differences between the Yukon and Northwest Territories on the one hand, and Fort McMurray and the Cold Lake Region on the other. The material

from the pipeline hearings regarding the local economy is, however, of general applicability for the most part, and we do not deal with those aspects which seem irrelevant for our study areas.

In these hearings, and associated reports and studies, much of the discussion regarding the local economy dealt with that economy in terms of economic and social benefits and costs, particularly with respect to natives. In this section of this Background Paper, we are concerned only with the local economy itself. The social benefits and costs (public and private) of resource development are discussed elsewhere in our Background Papers and accompanying Report.

Also, we do not examine the provincial, or national, economic benefits which accrue because of businessmen in general who benefit from local resource development; or of local businessmen who benefit and then sell at a profit to invest their money elsewhere within the provincial jurisdiction, and in this way benefit provincial development generally. Our concern is with the long term state of the business economy within the resource area.

In his discussion of the costs and benefits of resource development, Paproski (#96, 1977) sets out some distinctions which are useful for our purposes.

Paproski distinguishes between primary and secondary economic objectives. If proponents of large-scale economic development are not residents of the areas for which development is proposed, their primary economic interests will generally be to generate economic benefits to "outsiders": private corporations are concerned with their shareholders (i.e. their "electorate"); and state-owned enterprises and governments are concerned to create benefits for areas in which the bulk of the people live.

Governments usually have secondary economic objectives.

These secondary economic objectives frequently include enhancing the economic well-being of the local residents in the region or area in which the resource development is planned.

This distinction between primary and secondary objectives is arbitrary. It does not take account of resource development sponsored or aided by government primarily for the regional economic and social benefits which may accrue from it. For the purposes of our discussion, however, we can maintain the distinction because the scale of the proposed resource developments with which we are concerned involves costs so high to both the private and public sectors that the developments would not be feasible on the grounds of solely regional economic development criteria.

Berger (1977) states the distinction explicitly with respect to the MacKenzie Valley Pipelines. He notes that the purpose of the pipeline is to serve national and international demands for energy, not to meet regional objectives. He states that it is an illusion to believe the pipeline will solve the economic problems of the north.

Without arguing the merits of the recommendations Berger draws from these and similar conclusions, one can agree to the distinction between primary and secondary objectives; and also agree that too frequently in the past the long term benefits to the local business economy of resource development have been overestimated. (see also NEB, 1977; Lysyk, 1977). Looking at secondary (i.e. regional/local) economic objectives Paproski sets out a key proposition:

There will be conflicting perceptions and evidence concerning the extent of economic benefit to the residents of the areas in which development is proposed. The distribution of benefits among residents and between residents and non-residents must be specified. (emphasis added) (Paproski, #96, 1977, p.24)

Within the local business economy, one can distinguish among three categories of benefit related to resource development:

1. local businesses which benefit directly.
2. local businesses which benefit indirectly.
3. local businesses which do not benefit.

2.1.1 Direct Benefit Sector

This category includes those businesses which become directly involved in the development of the resource, usually by selling goods or services directly to the resource company or by sub-contracting to provide goods and services through the prime contractor or other sub-contractors. This category might also include local businessmen who provide goods or services to government agencies directly involved in the construction of the plant; for example, with respect to clearing rights of way, building roads and other physical infrastructure.

In general, the most potentially advantageous time for the involvement of local business in resource development is during the construction phase when there is a heavy demand for a wide range of goods and services. The facilities, services and goods required for the physical plant are, however, often so technologically advanced and complex, or require such a heavy commitment in terms of financing, equipment and manpower, that local businesses find it difficult to compete effectively for a share of the market.

For example, in its submission to the National Energy Board hearings, the Northwest Territories Chamber of Commerce asked for provision of preferences to northern business in all phases of the project, including the tendering of construction contracts of a size manageable by northern businesses (NEB, 1977).

In turn, the various Applicants at the hearings

took pains to propose organizational and procedural methods to facilitate the involvement of local businesses during the construction phases.

These proposals are interesting because they represent a serious attempt to come to grips with the local economy in relation to resource development; to define and establish links and interactions for more direct integration of the local business economy into a scale of development which normally lies outside the capabilities of small town businesses. As such, the proposals provide a valuable insight into the local business economy in resource communities during stages of construction.

In its presentation to the National Energy Board (NEB, 1977), Foothills (Yukon) anticipated that the proposed project would generate active but not unusual trends in business opportunities, and that the use of local supplies would create some mutual advantages for both the company and established local enterprises.

The company argued that the participation of northern business in the construction and operations of the pipeline would depend to a large degree on the policy positions adopted by the company. It observed, for example, that northern businesses could be at a competitive disadvantage vis-a-vis southern-based firms. This disadvantage stemmed in part from the difficulty the northern firms had in competing for the kinds of qualified personnel more readily available to southern firms; and from the need to maintain large inventories which entailed relatively large (for the northern companies) working capital commitments.

Foothills (Yukon) proposed the following to the NEB:

- . to locate construction headquarters in Whitehorse, which would facilitate contact with local businesses.

- . to encourage local business participation in construction, but to guard against such participation producing negative impacts on the communities.

(Thus, if it appeared that the level of participation in a given community was resulting in shortages or contributing to local inflation, the company would reduce its reliance on local business.)

- . to be guided by the wishes of the communities as to the amount of local participation in the project.
- . to limit bidder's lists for certain items to northern companies only, and to restrict bidding in certain areas of the project to northern firms considered competent to handle the work.
- . to allow, wherever possible, longer than normal lead-times for local businesses to tender on contracts.
- . to provide advice and assistance to local business; and to consider advancing prepayments for work to be done and entering into contracts guaranteeing work to these businesses, as ways of assisting them to obtain the necessary financial backing to carry out the work.
- . to require project contractors and subcontractors to follow the company's policies regarding the local procurement of goods and services.
- . to avoid the potential danger of "boom or bust" which might accompany intensive local participation during construction, by encouraging local businesses to concentrate on the more stable and durable

business opportunities related to the operations phase of the pipeline.

- to maximize local participation during the operations phase.

In addition, Foothills (Yukon) recognized that the more the local businesses became involved in the construction phase, the greater the risk of generating an excessive demand and with it, local inflation. The company suggested that giving local bidders longer lead-times would enable them to incorporate pipeline-related orders into their scheduling and thereby reduce disruptions of services and goods to the local community and minimize the risk of inflation.

The company also dealt with a number of related matters in its submission. It stated, for example, that the diversion of local workers to pipeline-oriented jobs might create an inflationary trend. Local employers would find themselves forced to increase wages (and thereby prices) in order to remain competitive with wage levels in the construction sector. Foothills (Yukon), like other Applicants before the National Energy Board, did not consider this would prove to be a major problem.

In its submission to the Alaska Highway Pipeline Inquiry (Lysyk, 1977), the company made essentially the same proposals, although with some greater degree of specificity. At both sets of hearings, local business organizations expressed strong support for the construction of the pipeline and for their involvement.

One might judge that these businessmen took a more optimistic stance than the company about the kinds of trends in business opportunities the pipeline construction might generate.

The Lysyk report, for example, noted that in 1975, when there were 24,000 persons directly employed on the construction of the Alaska pipeline, approximately 35,000 new jobs were created elsewhere in the Alaskan

economy: a ratio of about 1:1.5. Lysyk quoted estimates that 1,800 indirect and secondary jobs would be created as a result of the 2,300 persons employed by Foothills (Yukon) at peak construction: a ratio of about 1:.75.

From the submissions of Foothills (Yukon) and others, and the findings of the NEB and Lysyk inquiries, one can draw several preliminary conclusions about the direct role and impacts on the local business economy during the construction phase:

- . Local businesses would find it difficult to capture a share of the direct market in the absence of special policies and procedures which would give them a privileged bidding and financial position vis-a-vis outsiders.
- . The direct involvement of existing local businesses may well have inflationary effects in the community because of the limited capacities of these businesses to meet the demands of both construction and existing consumers.
- . Quite apart from the inflationary factor, local businesses might find it difficult to become involved in resource plant construction without disrupting existing services to the local community.
- . The entrance into the community of new local businesses either to service the resource industry, or to take up the slack in consumer demand created when existing local businesses diverted their goods and services to the resource industry, might serve to alleviate inflationary pressures and disruptions in the flow of goods and services to the consumer market.

It is impossible to forecast with any precision the scope and scale of the direct involvement of local businesses during the construction phase of a resource development, without a detailed understanding of:

- the construction and operational requirements of the company,
- the existing and potential capabilities of the local business sector with respect to these requirements, and to the finding necessary financial backing,
- company policies and procedures,
- the ability of local businesses to retain and hold the skills and manpower necessary to capture a share of the direct resource development market,
- the comparative costs and benefits to local businesses of serving resource development directly, or indirectly through the expanding consumer market.

Similar questions need to be addressed with respect to the ability of the local business sector to provide goods and services to the resource development during the operations phase.

2.1.2 Indirect Sector

Insofar as one can determine from the existing data, to the extent the local business economy benefits from resource development, in the main it benefits indirectly; that is by selling goods and services to people working

on the resource development itself or in related activities. We would include the home construction sector in this category, even though, in many cases, it contracts directly with the resource company to build company housing.

The benefits which accrue to local business indirectly involved in resource development seem to be considerable, judging from the figures in Table 1. We assume that most of the increases noted in Fort McMurray are due to indirect benefits; although we do not yet have any data on the number of those businesses which directly served Great Canadian Oil Sands or Syncrude.

Despite the benefits which accrue to it through indirect involvement, this sector of the local economy is also not immune to the negative economic impacts of the resource development upon the community.

We have noted several times already the difficulties which these businesses face in terms of wage competition. Lysyk cites evidence that Fairbanks banks were suffering 100 percent staff turnover in one year. Yet, unlike companies involved directly with the resource company, the indirect sector must still price its goods and services in terms of what the local consumer market will bear.

In the accompanying Report we discuss the relationship between income and cost of living, and note that a substantial proportion of the resource community does not derive proportional benefits from the resource development in terms of increased income. These people continue to make up a significant proportion of the businessman's market and he must price his goods and services accordingly. The experience in Alaska suggests that lower income residents might constitute about 40 percent of the population (Fison, 1977; Lysyk, 1977).

While incomes of these people tended to increase, the increases were at a lower rate than the local inflationary rate, which itself was significantly higher than

the national rate. Persons in this group would include those working in retail outlets dealing with food, clothing, general merchandise, or banks; service industries such as hotels and restaurants; also unorganized workers, government employees (especially those without housing allowances and isolation bonuses), and, of course, persons on fixed incomes such as pensioners and persons on welfare and unable to work.

Whatever difficulties the indirect sector might experience, in terms of maintaining staff and acceptable price levels, the evidence strongly suggests that on the whole these businesses do well during the construction phase.

The data with respect to the subsequent operations phase is less certain. There are suggestions (NEB, 1977; Lysyk, 1977) that as construction ends and operations begin, the work force drops and some businesses experience considerable difficulty. Some had expanded in order to accommodate the heavy demand; and during conditions of reduced demand found themselves with high fixed overheads which they could not sustain and remain in operation.

In this respect, these businesses are not different from those which serve the resource development directly during construction, and have little to do once construction ends. While the resource company can, as Foothills (Yukon) suggested, confine much of direct local business involvement to those activities which are related to operations, there is little that can be done by the company to assist companies involved in the 'indirect sector'.

It is not simply a matter of shopkeepers closing up and leaving town, or going bankrupt. The chain extends through the impacts on the real estate market to the financing capability of the remaining businesses and the cost of home mortgages.

There are several questions which need to be addressed:

- . What is the actual pattern of growth in the indirect sector during and after the construction phase?
- . What are the effects on the indirect sector of the post-construction phase?
- . Are these effects distributed or influenced by special characteristics of the indirect sector? For example, do businesses in operation prior to construction fare better than more recently established businesses? Is ownership an important factor? Is ownership of the premises an important factor?
- . Are the effects of the post-construction phase upon the indirect sector minimized in some proportion to the increase in the size of the base population in the community? Is it true to assume that as the base population grows, and the proportion of people directly employed on construction decreases, the effects of the post-construction phase on the indirect sector are lessened accordingly?
- . To what extent can the local business economy adjust itself to the post-construction phase without suffering a high attrition rate?
- . To what extent and in what areas is Government intervention likely to be useful and appropriate?

2.1.3

Non-Benefit Sector

One can suggest there are two groups in this

category, and that they blend into each other.

The first group consists of those businesses which may benefit indirectly; however, their costs in terms of wage competition, staff turnover, high rents, and perhaps other factors, may increase to the extent that they are not much better off than they were before. The problems such businesses may face may also have to do with management and operational practices, or with selling the wrong product or service in the wrong place.

Time may also be a consideration. A business opening up in the latter stages of construction may find itself saddled with high fixed overheads, and insufficient time in which to build a reserve to carry it over between one construction phase and another - assuming there is another. Such businesses might be highly vulnerable during this interim period, particularly if the period extends for a year or so longer than expected. (The effects of the 1969 false boom in Fairbanks are instructive in this regard. Fison, 1977).

The second, and likely, larger group consists of those businesses which derive no benefit, direct or indirect, from the resource development but must bear the effects of manpower shortages, rising wages and local inflation generated by the construction phase. Such businesses might include other but unrelated resource activities such as mining and forestry, local manufacturers, farming and related activities.

Businesses in this category might find themselves seriously affected by resource development. This would be especially true if the businesses were already facing serious price competition from other companies not affected by major resource development, or facing a weakening market which was sensitive to rising prices, or if the companies or markets were already marginal.

Although these businesses may not constitute an important segment of their provincial sector, and although they may be marginal or vulnerable in other ways,

they also constitute an important potential for local economic diversification in the post-construction phase. The sad experiences of single resource towns once that resource runs out or becomes uneconomic to extract, are too numerous and well-known to need reciting.

These experiences are not restricted to single resource towns. One can think of the radical attrition among furniture manufacturers in Ontario's Georgian Bay areas. The companies traditionally low wage, could not compete with the local industrial sector for skilled manpower; and because of national and international competition could not compete in the consumer market at the higher prices which higher wages would have necessitated.

The result was that many towns lost their major source of employment. Workers had either to commute long distances to work or to move to a different community. This is a deeply rooted pattern in the rural-urban migration patterns across the country over the past thirty years.

It can be argued, therefore, that it is in the interests of the local community, and local business economy, to have the 'non-benefit sector' remain in operation. It is also consistent with the Alberta Government's policy of encouraging economic diversification and balanced growth in northern communities (Alberta Business Development and Tourism, Nov. 1975).

At both the National Energy Board and Lysyk hearings there was some concern as to effects of pipeline construction on the non-benefit sectors of the local business economy.

Foothills (Yukon) in its submission suggested that the impacts on the non-benefit sector would not be important (Lysyk, 1977). A mining company representative, however, drew attention to, "labour scarcities, particularly in the skilled trades, and the disproportionate wages that might severely affect both the industry itself and the

companies which provide goods and services to the (mining) industry". (Lysyk, 1977, p.64).

The purpose of the discussion is not to hold Foothills (Yukon) up to examination, but to use the Foothills (Yukon) submission as a basis from which to extrapolate issues and concerns and approaches which are relevant to the studies within our terms of reference. It should be noted that the submissions of the other proponents before the National Energy Board did not differ in major ways from that of Foothills (Yukon) with respect to the assessment of the impact on the local economy of the proposed pipeline development (NEB, 1977).

What emerges from the sources we have examined regarding the non-benefit sector of the local business economy, are the following:

- . It is possible the more vulnerable components of the non-benefit sector could be seriously if not critically, affected by the inflationary wage impacts of a major resource development.
- . The non-benefit sector of the local business economy may provide a cushion to the local economy during slack periods of construction, and during the post-construction period when the other sectors of the local economy may have to cut back on their operations.
- . The pressures of resource development on the non-benefit sector may encourage the rationalization of marginal operations in this sector.
- . No general assumptions can be drawn on an

overall basis but must be addressed to the specifics of the structure and characteristics of the non-benefit sector in the particular community of concern.

2.2 CONCLUSIONS

In the previous pages we have discussed the non-native local business economy in relation to resource development in terms of three major sectors:

- . Direct benefit
- . Indirect benefit
- . Non-benefit

With respect to the direct benefit sector, it remains to be demonstrated how much of a share of the resource development market local businesses in the resource community can expect to capture. Undoubtedly a great deal will depend upon the initiative and competitiveness of the local businessmen. In the final analysis, as the submissions of the pipeline companies make plain, the key factor is the resource company itself, and kinds of policies and procedures it sets up and implements.

Long term benefits for the direct sector, and for the community generally, will depend largely on the share it can capture of the operating phase of the resource development. It will be important to monitor the progress and problems of the direct sector to identify what, if any, policies and programs might be appropriate for the Government to consider. It also remains to be determined what effects the involvement of the direct sector will have upon the flow of goods and services to the community.

The indirect sector has traditionally gained the most from resource development, especially during the construction phases. These gains are greater by several

orders of magnitude than what would be considered satisfactory in a conventional local economy. Although the indirect sector seems to suffer in substantial but varying degrees, from the effects of demand-pull inflation, the gross data suggests that the benefits far outweigh the costs.

There are two dimensions of the indirect sector which need examination. The first is the impacts of the transitional phases in between construction, and post-construction - have upon the indirect sector and to identify those variables affecting transition, and to identify potential areas for government policies and programs.

The second dimension involves the impacts of demand-pull inflation on the indirect sector and then to the consumer. Part of this examination should also include a better definition of the "captive market" syndrome, which is discussed in the subsequent section. It is not immediately clear what types of intervention would be useful or appropriate for the Government to consider with respect to inflation, in the private sector, and speculation, and their effects upon different classes of consumers. It is, however, as we shall see, a matter of some concern among residents in resource communities, and therefore should be addressed in sufficient detail to obtain a good understanding of the processes, interactions, and linkages.

The third sector, the non-benefit sector - is the most vulnerable to resource development for several reasons. Frequently, it is involved in resource development itself and must compete with the high wage new resource company for manpower who possess skills which are frequently in short supply. The non-benefit sector may also have difficulty competing effectively for special types of materials and goods. Often, the non-benefit sector cannot pass these cost increases to its customers because of national or international market conditions.

It is not, however, either in the interest of

the local community, or of the province, that the non-benefit sector withdraw or seriously restrict its activities. The non-benefit sector plays a key role in provincial policies regarding economic diversification and balanced regional growth. Further, in the long term, the non-benefit sector may represent an important source of employment and stability in the local economy once the rush of construction is over.

The non-benefit sector has to be addressed in terms of the specific conditions, characteristics and trends of the local situation and that sector's particular market conditions. It is necessary, therefore, to establish a sound data base from which to draw an understanding of these conditions, characteristics and trends.

In summary, although the local business economy seems to benefit substantially from the onset of resource development, those benefits are unevenly distributed. There is also some evidence that some sectors of the local economy do suffer. It is important to collect sufficient data and information to compensate for the existing gap in the literature and research; and to provide better baseline data and information as a context within which to consider appropriate government policies and programs.

3. THE STUDY COMMUNITIES

3.1 NON-NATIVE ECONOMY

3.1.1 Introduction

In this section we review the literature and information available with respect to the study communities. There is not a great deal of either available. For the Cold Lake Region we have drawn heavily upon the socio-economic overview prepared for Imperial Oil (Resources Management Consultants, 1978a, 1977b).

It is not the objective of our Phase 1 work to analyze the local business economies of the study communities. The purpose of this discussion is to identify those dimensions and issues of the local economy in the various communities which are central to an understanding of that economy; and to set out the major research parameters and their relevance to policy program and review.

As we noted above, in the context of resource development the local business economy falls within the category of secondary objectives. The primary objective is to meet the resource needs of the province, country or international markets. The state of the local economy, however important it may be, is secondary to that primary objective.

The following discussion is based on that premise. We assume that resource development will take place according to policies and imperatives which will be regarded as transcending local interests. The interest of the Provincial Government, and its role or roles, in the local business economy will be to maximize local benefits without endangering or diminishing what is considered to be the larger public interest.

Within that context, the key to secondary or local economic growth lies in the ability of the local economy to retain earnings, and returns on capital investment,

within the community itself as a basis for generating additional growth. We are not, therefore, concerned with economic activities which are imported into the resource community for short periods only (e.g. companies specializing in certain types of metal fabrication) and leave when the work is done. To the extent these companies affect the local economy it is usually through the employment of local people for comparatively short periods of time.

Our interest lies in the local and long term structure and character of the local business economy. Our discussion concentrates on the opportunities and problems the local economy faces in deriving and maintaining benefits from resource development and the construction and operation of resource facilities.

As an aid to the discussion we maintain the three-part typology of the local economy vis-a-vis resource development: direct benefit sector, indirect benefit sector and non-benefit sector. While the typology is useful for discussion purposes, we do not mean to imply by its use that it is rigid, or that each local economic activity belongs in only one sector or another. As we shall see, a number of activities can, depending upon circumstances, fall into one or another sector, or into more than one.

3.1.2 Direct Benefit Sector

We noted under the comparable heading in the previous section that the potential scope and scale of the local business economy in the direct benefit sector had yet to be demonstrated. We also noted, following the lead of the pipeline companies, that the extent to which there might be a direct benefit sector would depend in large measure upon the policies and activities of the specific resource company, and the manner and form in which these were implemented.

One might postulate that the structural characteristics, scale, technology and complexity of resource development would establish some practical limitations on

what the local business economy might hope to achieve.

For example, Resources Management Consultants note that in the Cold Lake Region there are substantial supplies of lumber and related forest products which could be used for the construction needs of the Imperial Oil project itself. If one wished to make an assessment of the lumber industry to determine its ability and potential to capture a share of the Imperial Oil demand for lumber, several questions would have to be answered:

- . What is Imperial's demand for the types of lumber which can be produced locally?
- . What revisions would Imperial have to make in its purchasing and tendering procedures to enable the local industry to bid competitively?
- . Is the local lumber industry sufficiently well-integrated and of a scale to adopt a competitive bidding stance?
- . Assuming that the local lumber industry could capture a share of the direct benefit sector, what distortions would this create in the overall supply picture with regard to local demand for lumber and related products?
- . Could the lumber industry pay high enough wages to compete effectively with the resource company and its contractors for manpower to produce the lumber for the resource company, and still bid at competitive prices?

The answers to these questions may be apparent. We raise them simply to note the complexity of the specific interactions which have to be negotiated before a company can participate in the direct benefit sector. We note, for example, the comment of Resources Management Consultants in

their 1978 report that, to date, the major lumber companies have had trouble serving the local market because local lumber dealers are not capable of handling truck-load quantities of a given size and/or they are tied to head office buying and central inventory control. Consequently, if the major lumber companies could break into the direct benefit sector this would likely create little distortion in the local demand-supply ratio.

The last question - that of wage competition - is especially relevant. Traditionally, the forestry industry has had trouble maintaining a competitive wage rate vis-a-vis other industries quite apart from differences in working conditions. This has been true in Census District 12 where, in the past, a number of skilled operators have been drawn to the Syncrude construction operation.

The paradox is that the wage inflation generated by the resource development may prevent the lumber company from competing effectively for direct benefits from that development.

Another, and critical point, is that if the lumber company cannot provide competitive wage rates it may end up in the non-benefit sector. Clearly, the labour market is not an isotropic plain, the labour force is not homogeneous, and there are limits to mobility. Within these limits, and with respect to participation in the direct benefit sector, there is likely to be considerable variation and perhaps heavy penalties for those excluded.

In fact, with respect to the lumber industry, we would expect it to participate substantially in the indirect benefit sector, particularly in local construction. The current difficulties the lumber industry is facing with respect to obtaining a share of the local market will likely diminish in importance as the total construction market expands and if traditional suppliers are unable to keep up with demand at a satisfactory rate.

It seems reasonable to suppose that those local firms most easily able to find entry into the direct benefit sector will be in the service field: food, maintenance and repairs, cleaning; at last report one of the Indian bands was intending to set up a laundry to meet Syncrude's needs.

It also seems reasonable to assume that local firms will be able to compete most effectively to sell goods and services which are not capital-intensive and which do not require high technology or high technology capability. This does not include new companies with these capabilities coming into the area in order to be closer to their market. It would be useful to determine whether or not such migrants do appear and what spin-off effects, if any, they have on the structure and growth of the local economy.

More detailed information will be available from the study commissioned by Alberta Business Development and Tourism on camp construction procurement.

3.1.3 Indirect Benefit Sector

To the extent there is any discussion of the local business economy in the studies of specific resource communities, it is usually on the subject of the indirect benefit sector: that is, primarily the retail and service sectors, construction, transportation, and other activities which benefit from population growth. We noted in the discussion of general issues that the distribution of benefits of resource development within this sector may vary widely.

One of the characteristics of life in a resource community is the higher cost of living comparable to conditions in the major centres.

Riffel (1975) is of the opinion that the major reasons for higher prices in northern communities are:

- . the costs of transportation of goods to the point of sale.
- . the lower turnover of merchandise than in major centres.

Riffel notes that transportation costs affect all dimensions of the local economy, not just the price of goods and services. In his opinion, the local businessman must maintain high prices in order to stay in business.

Riffel's assumption regarding the effects of transportation costs seems reasonable. His reference to low rates of merchandise turnover seems more applicable to smaller resource communities in a stable state. It does not seem applicable to communities in the stages of rapid growth. Certainly, the experience in Fort McMurray during the construction phases suggests that many businessmen, particularly retailers, banks and similar services, were operating close to maximum capacity per square foot at peak periods.

The information available from businessmen is that wages are a major problem. As one businessman reported:

My greatest problem as a small businessman is that I cannot compete on the labour market. When just down the road a person can get a job with one of the plants at a much larger salary and probably with housing or cost of living subsidies thrown in also, how am I going to compete for his services? If I raise my prices to do so, I would price myself right out of business.
(Van Dyke, 1977, pp.52-53)

Nichol (1976) finds this position has substance. He also notes that the very size of the resource projects may disrupt the local economy in other ways; by attracting into their employ skilled tradesmen - plumbers, electricians, appliance repairmen - who can do better as employees of the oil companies than they can by serving the consumer market. Also, local businessmen, such as

small contractors, may find it more profitable to sub-contract to the oil companies during construction than to meet the demands of the local economy. In these ways the local service economy infrastructure is disrupted.

Matthiasson (1970) found that retail services were in the lower order of priorities among his respondents, despite demonstrably higher prices. He suggested the reason might be that respondents felt they had sufficient opportunity to shop in Edmonton for goods. Some studies suggest that this "leakage" might encompass somewhere between 50 percent and 80 percent of Fort McMurray residents; people who, more or less frequently, make a point of going to Edmonton to shop, particularly for major purchases such as durable goods. (Matthiasson, 1970; Fort McMurray General Plan, 1974).

Several years later, when Van Dyke (1977) carried out his study, respondents were complaining about the price of goods and services, the absence of certain goods on the shelves, the lack of variety, long delays in delivery, and the absence of bargains and sales. One can assume from this difference in the attitudes of Matthiasson's respondent's and those of Van Dyke that the latter were feeling the distortions in the local economy noted by Nichol and caused by peak construction activity at Syncrude.

Some of Van Dyke's respondents also expressed the view that merchants were deliberately keeping prices high. The implication was that with the demand so great, merchants and others had no need to compete with each other on a price basis, despite the leakage to Edmonton.

To provide some sense of the order of magnitude of these benefits, we have set out data collected from various sources. These data refer to Fairbanks, Alaska before and during pipeline construction; to Fort McMurray during construction, and the three major communities in the Cold Lake Region prior to construction.

The categories of data are not directly comparable in all cases, but they will serve for purposes of illustration.

Table 1. Growth of the Local Business Economy in Three Resource Areas (\$ Million)

	<u>1971</u>	<u>1973</u>	<u>1975</u>	<u>1976</u>
<u>Fairbanks</u> ¹				
Gross business receipts		\$ 311.4	\$ 2.400 (670%)	
No. of businesses		1173		2,255 (92%)
Bank deposits		\$ 92	\$ 218 (137%)	
<u>Fort McMurray</u> ²				
Retail and commercial sales	\$ 9.2		\$ 46.8	\$ 79.6 (764%)
No. of retail and commercial outlets	48		89	127 (164%)
<u>Bonnyville, Cold Lake and Grande Centre</u>				
Retail and commercial sales	\$ 18.8		\$ 38.5 (104%)	
No. of retail and commercial outlets	145		168 (16%)	

Sources

¹Fison, 1977

²Alberta Treasury

If one calculates into the sales increases in towns of the Cold Lake Region an annual inflation factor of perhaps nine percent, then those increases take on more modest proportions.

With respect to Fairbanks, one should also note that in 1973 construction had not begun; but by 1975 the number of persons directly employed on pipeline construction was rapidly approaching the peak figure of 30,000 people (1976), according to Fison. In Fort McMurray the process took longer, but the increases are within the same order of magnitude.

Another point to keep in mind is that Fairbanks at the time construction began had a metropolitan population of about 45,000 persons. This suggests that the impact of construction on the local business economy can reach extremely high levels, even when the local economic infrastructure is well established. This bears some relevance to the Cold Lake communities.

Other aspects with respect to Fort McMurray and the Cold Lake communities also bear consideration. We have already noted in the accompanying Report the importance of relating income to the cost of living in assessing the comparative advantages of living and working in a resource community. We have also noted above in this paper the assumption that the cost of living in northern communities is necessarily higher because of transportation costs; and perhaps other variables are involved, such as the lack of local building supplies and agricultural produce.

The evidence, however, is that these quantifiable factors do not bear a necessary relation to the actual price of goods and services. The Cold Lake Region is instructive in this regard. The three towns have ample land available within their boundaries to handle perhaps another 15,000 persons - although there are some servicing inadequacies; and there is ample land on the towns' boundaries which can

be serviced and brought into production at conventional costs--
-unlike Fort McMurray where soil conditions presented significant development constraints (Resources Management Consultants, 1978a).

Nonetheless, the available evidence suggests that land (and housing) prices have soared beyond what might reasonably be expected. Within six months a 50' x 150' commercial lot increased in price by more than a factor of three, and land zoned for housing has shown a comparable increase (Resources Management Consultants, 1978a). The phenomenon of land speculation is well known in Alberta; however, the implications it carries for the stability of the local business economy in resource towns has not been examined.

Presumably, the commercial lot mentioned above is only worth the selling price if someone believes it will provide a reasonable return on investment. That return can be achieved in two ways:

- 1) resale of the land at an acceptable profit, in which case, the local economic implications of 2) have yet to be realized; or,
- 2) development of the land and rental of the building for a reasonable return on investment.

Inevitably, there comes a point when 1) has to end and 2) begins. A central question is whether 1), the continuing turnover of the land for significant profits, continues to the point where 2), the productive use of the land, becomes economically unfeasible because no one can afford the rents which would provide the reasonable return on investment.

One can assume that 1) continues on the basis of two assumptions; there will be substantial and continuing

increases in the population, an assumption justified by the available population projections (and by the likely construction of other oil plants; and that the public and private sector will not be able to bring sufficient land, housing and commercial/industrial structure, into production at a rate sufficient to meet demand. The speculative price of our commercial building lot is therefore based on an assumption of unmet demand for commercial land.

From a technical and financing perspective, it is certainly possible to bring land and buildings into production at a rate of reasonably close to demand; certainly at a rate close enough to demand to dampen speculation.

In the meantime, land is bought and sold, buildings are being built, sold and eventually rented at rates which reflect speculative prices. It is not clear to what extent this will affect the costs of goods and services (which must also reflect the price the tradesman pays for his home).

One can possibly distinguish here between the local businessman, living in the community, owning his home and the building in which he has his shop or rents on a long term lease), and the incoming businessman who must compete for living and business space in a speculative market.

One might also consider what would happen to such a businessman if the supply ever did catch up to demand. It is possible land and building prices might stabilize; rentals in new buildings might be competitive with those in the older buildings. Or, shopkeepers would desert the older high cost buildings downtown for the new ones in the suburbs with ample parking and new facilities.

The pattern is a common one over the long term in many communities across this country. What makes the pattern important in the Cold Lake communities is the highly inflated prices of land and buildings and the corresponding vulnerability of their owners to competitive prices for

comparable or better buildings elsewhere.

It is not uncommon to find in Edmonton housing and commercial space for rents which do not meet the owners' expenses, or provide at best a few percentage points in return on investment. Presumably the high prices the owners paid for their buildings are considered justified in the light of Edmonton's expected growth over the next thirty years or more, fueled by an increasingly diverse local economy.

It is not certain that this diversification will occur necessarily in the Cold Lake Region, or Fort McMurray for that matter. A slackening of oil plant construction in these communities could lay bare a significant weakness in the local economy; that it is fueled by expectations which exceed actuality.

All of this is assumption. It does serve however, to highlight two important dimensions of the local economy which deserve continuing and close examination. One is the extent to which the local economy is affected by speculative inflation. The second is the extent to which the local business economy is rendered vulnerable by that speculation.

It should also be noted that the data we have quoted above, and much of the other data readily available, are essentially gross supply and output data. They outline and sketch in some of the major topics. They provide us with little descriptive information regarding such key matters as the linkages and flows in the local business economy, changing patterns of ownership, employment and labour characteristics, price competition, wage competition, cost of living data.

These and similar data and information will be necessary to provide a more adequate description of the local business economy so that changes in that economy can be tracked and potential opportunity and problem areas identified for possible policy and program review.

3.1.4 Non-Benefit Sector

In the preceding discussion we suggested the paradox that some local businesses may find themselves unable to compete effectively for manpower in demand-push inflationary conditions, and might as a consequence find themselves in the non-benefit sector. We also noted that the weakening of these businesses ran contrary to the long term economic interests of the resource community and to provincial policies regarding economic diversification.

3.1.4.1 Fort McMurray

In Fort McMurray the only activities which could be deemed to fall into the non-benefit category are the other oil companies, and perhaps water and transportation. The demand-pull effects of wage inflation generated by new resource development may be detrimental to the existing resource operation. It can, however, be argued, that an increase in the number of operating resource companies, whatever the effects of wage inflation, also works to the advantage of the companies because it creates a larger pool of skilled and highly specialized labour from which to hire.

Also, it may be that, with two resource companies already in operation, a third proposed and more on the horizon, the town will begin to attract a secondary industry associated with tar sands development. This would be to the benefit of the resource companies and of the community generally, although it would not necessarily decrease the town's dependence upon the single resource, and its vulnerability to the supply of and market for that resource.

The Provincial Government is encouraging local diversification by maintaining Fort McMurray as the regional centre. Consequently, the town is becoming a major centre of government employment, and employment related to government activities, such as hospitals. Purely from the

perspective of wage competition, the Government sector belongs in the non-benefit sector of resource development. From another perspective - the creation of jobs as the result of population growth - the Government belongs in the indirect benefit sector, and represents an important dynamic in local economic diversification. An analysis of the costs and benefits to the Government of its direct involvement in the Fort McMurray resource development is beyond our Terms of Reference. We understand that some work has already been done in this field. It would be useful to identify the parameters used in this work and implications for the local economy.

One aspect which needs to be examined is the effect of resource development has encouraging or discouraging the growth of unrelated resource, manufacturing or other economic activity in a relatively isolated community such as Fort McMurray. One can speculate that the demand-pull inflationary effects upon wages, and shortages in labour supply, would discourage the entrance of new economic activities which did not derive benefits from the resource development either directly or indirectly. In such an examination one would also have to take into account such local variables as distance from markets, transportation costs and related matters. The data collection proposed in our study should provide useful background material for such an examination.

3.1.4.2 The Cold Lake Region

In terms of the local business economy, the Cold Lake Region presents a significantly different picture from Fort McMurray. The communities in the Cold Lake Region are of longstanding, and well-established. Agriculture and forestry are important rural components of the local economy; commercial fishing and trapping are less important but still significant; and the cottage/recreation sector of the

economy is growing in importance. Although St. Paul is the regional centre, government offices have been moving into Bonnyville. The Canadian Armed Forces Base at Medley, which has been expanding steadily, provides an important stabilizing effect upon the local economy. In important respects, therefore, the Cold Lake Region resembles more the typical urbanizing rural region than it does a northern, isolated resource area.

In 1971 the Region's population was about 26,500. In 1978 it is about 31,000. Imperial Oil's projections call for the population to increase to about 60,000 by 1991 (Resources Management Consultants, 1978b). This represents an annual growth rate of about seven percent which is high, but not startling. In fact, an annual breakdown demonstrates that almost half that growth (35,000 to 59,000) will occur between 1980 and 1984. Between 1984 and 1986, the projections call for the population to drop to about 53,000, and then to begin to climb again slowly.

These projections are based on the assumption Imperial Oil will have the only new plant under construction or in operation during those years. To be realistic, one should assume that within the next ten years pre-construction work will begin on one more plant, and that this will generate additional population increases, as well as a new that the commencement of construction and related activities will create significant distortions in the existing economy.

For the short-term, however, one can establish two, conflicting, postulates. The first is that the existing economic infrastructure in the region is sufficiently well established that the commencement of construction will not create important distortions. That is to say, the non-benefit sector will not be damaged to an important degree by demand-push inflation, wage competition, or competition

for skills. This is the same position taken by Resources Management Consultants (RMC) in their report, with some qualification

The conflicting postulate is that the important industries in the non-benefit sector are vulnerable to the pressures generated by resource development, and will be severely damaged by those pressures.

It is not the purpose of this Background Paper to come to a conclusion on this matter. The two conflicting postulates do, however, provide a context within which to identify the kinds of questions which need to be addressed in a study of the non-benefit sector of the region.

We noted, in a previous section of this paper, the judgement of Resources Management Consultants that the forestry industry was vulnerable to competition from high wage resource development. Another potential weak spot is, in our view, agriculture.

The following tables, extracted from Resources Management Consultants data, set out some of the important historical information.

These data suggest that agriculture in Census District 12 lags significantly behind that in the rest of the province; but that within its own area, agriculture is showing a healthy growth in production with increased levels of efficiency.

In Resources Management Consultant's judgement, construction of the plant will lead to several developments in the agricultural sector. First, the growth of the local population will create an increased demand for food, which can be supplied locally. This will stimulate the existing growth in the agricultural sector; support existing facilities; encourage the expansion of processing and marketing facilities; and encourage the stabilization of the agricultural labour force. In this sense, the agricultural sector is part of the indirect benefit sector in the local

Table 2. ¹Census District 12 and Alberta Comparative Farm Income 1974

	Census District <u>12</u>	<u>Alberta</u>
Average on-Farm Income & per tax files	\$ 614	\$ 4,300
Average off-farm Income per tax files	\$ 4,586	\$ 6,117
Total Income per tax files (1974)	\$ 5,200	\$10,416

Table 3. ¹Percentage of Labour Force in Agriculture

	Census District <u>12</u>	<u>Alberta</u>
1971	14.1%	\$ 24.2

¹Source: Resources Management Consultants (1978b)

Table 4. Census District 12 Status of Agriculture
1961 - 1976 (\$ Million)

	<u>1961</u>	<u>1971</u>	<u>1976</u>
Crops	\$ 12.2	\$ 21.3	\$ 56.6
Livestock		11.2	18.2
Labour Force (No.)	7,243	4,450	\$4,561
Improve Land (Acres)	945,900	1,035,000	1,120,000

Resources Management Consultants
978b)

economy.

Resources Management Consultants also forecasts that employment in construction and related activities will be attractive mainly to marginal farmers who will take full-time jobs and/or sell their land. Since the total farm production in the Cold Lake study area is less than one (1) percent of the provincial total, this loss will be scarcely noticeable in provincial terms. In local terms, the sale of this land, or its availability on a rental basis, will enable the remaining farmers - who now have improved incomes - to expand their operations.

The main question, in Resources Management Consultant's judgement, is what proportion of the good farmers will be drawn off the land to work in construction and related activities?

In other words, the agricultural industry will benefit indirectly from the growth, although it may also suffer somewhat because of the loss of farmers and farm workers to high wage employment.

One could, however, take the conflicting postulate and note the vulnerability of the agricultural sector to a competitive high wage resource industry. One could predict the loss not only of marginal farmers to high wage employment, but also the loss of the younger segment of the farm labour force. Included in this segment might be a substantial proportion of the farm family children who normally carry an important share of the farm work.

One might also assume that middle-aged farmers may prefer to cut back on their farming activities to a part-time basis and take full-time employment in the towns or at the plant for several reasons: it is too difficult to carry on farming operations without farm labour and other farmers to help, borrow equipment from, etcetera; town and plant wages are so high that he is much better off financially (particularly if he can still generate sufficient

farm income to retain his tax benefits).

One can also reason that recent increases in rural land values in the Region have put the price of land beyond what a farmer could hope to pay and still realize a return on his investment through farming. If he wishes to expand his operation he must rent the land. Assuming it can be rented at a reasonable rate, the farmer still lacks any assurance the land will be available to him on a long-term basis, and without that assurance he might be ill-advised to enter into any long-term program for land improvements.

Other factors to be considered are the increasing interest city dwellers are taking in rural property for vacation purposes, for speculation, or with long-term development in mind. One might expect that this trend will be accelerated by the number of town residents in the Region who will have money to invest in farm land.

In its report (p.38), Resources Management Consultants notes that about 60 percent of the farms in Census District 12 contain 400 acres or more. Assuming that proportion holds true in the study area, one can begin to see the financial advantages to the farmer of selling either all or part of his farm if he can fetch an average of \$1,000 an acre or more. In such circumstances, the individual farmer may stand to benefit considerably from resource development, but the effects on the agricultural sector could be critical.

In the past 30 years agriculture has gone through substantial increases in production accompanied by comparable decreases in farm labour employment. These trends have been possible because of better land management and improvement techniques, improved seeding and breeding, better machinery, increased government assistance, and more efficient marketing procedures.

A more detailed analysis of the agriculture

industry would likely show, however, that farm operations are highly vulnerable to the pressures and opportunities of urbanization around the towns and surrounding urban field. Fewer and fewer farmers produce more and more until at some point, usually when the farmer approaches retirement and the sons have town jobs, the land is sold to non-farm people and lost to agriculture.

Following this scenario, one would have to judge agriculture's part of the non-benefit sector, highly vulnerable to local growth pressures, and likely to suffer as a result.

It will be important in the baseline study to identify more precisely the trends within the agricultural sector, as well as in commercial fishing, trapping, and forestry, to determine to what extent these activities are complementary to resource-oriented growth and to identify the points of stress.

With this data in hand, trends can be determined and a basis established for determining what, if anything, should be done in the way of government policies and programs.

The manufacturing sector in the Cold Lake Region is slim, consisting of such activities as bakeries, printers, food processors, metal fabrication, concrete products. Except for the dairies (and the Canadian Salt Company), most of the manufacturers serve local markets.

One can assume that those serving local markets would benefit substantially as part of the indirect benefit sector. Although they may suffer from wage competition, they may be able, in part, to pass on their increased costs to the consumer. It is not clear that those activities which export their goods outside the Region will be able to do so. Consequently, they may find themselves in a serious cost/price squeeze.

It will also be important to identify the success

of the Region in diversifying and strengthening its economic base in sectors not related to oil sands development. Here again, there may be opportunities for appropriate government policies and programs.

3.1.5 Conclusions

In the preceding pages we discussed selected dimensions of the non-native business economies in Fort McMurray and the Cold Lake Region. We noted the comparative lack of data which would enable one to come to firm conclusions about the effects of resource-oriented development in these local economies. For the purposes of discussion we used a three-part typology of the local business economy: direct benefit sector, indirect benefit sector, and non-benefit sector.

We concluded, in each case, that the benefits of resource-oriented development to businesses in each of these sectors can be highly variable. We noted, in particular, the potential vulnerability of the existing non-benefit sector to pressures generated by resource-oriented development.

We have also questioned the extent to which economic diversification can occur in resource-oriented communities. We have suggested the possibility that economic activities might be reluctant to enter such communities because of the costs of competing for land, buildings, and labour unless they were able to pass these costs on to their markets. In such circumstances it is possible that resource development may serve to hinder rather than enhance economic diversification, except where that diversification is derived from the resource development itself.

We concluded that the various sectors of a local economy have to be examined in detail, on a community-by-community basis. It is important to take into account the

policies and programs of the resource company itself. One must also consider such matters as the characteristics and structure of the local economy, its manpower requirements, wage scales, markets and market penetration, and those pressures generated by cost-push and demand-pull inflation.

An improved definition and understanding is required of the various linkages, interactions and dynamics within a resource community economy; between that economy and the resource development; and between that economy and outside markets in order to come to firm conclusions about the several and differing impacts of resource development upon the local business economy.

We now turn to a discussion of the native economy in the study areas.

3.2 THE NATIVE ECONOMY

3.2.1 ISSUES

3.2.1.1 The Colonial Model

Any discussion of the native economy in a resource community has to begin with the massive disruption of the native way of life occasioned by the migration into native lands of the white man and the white man's techniques, technologies, treaties and diseases.

From the perspective of this study, the pertinent consequences were the destruction of a viable indigenous native economy, and the near destruction of the tribal and social institutions which would provide the communal adhesive for social and economic regeneration. Memmi (1967, p.119) comments that, "The body and face of the colonized are not a pretty sight. It is not without damage that one carries the weight of such historical misfortune...Being a creature of oppression, he is bound to be a creature of want."

There are two dynamics of the 'colonial model'

worth noting in the Canadian native/non-native context with respect to the native economy.

The first is that usually the colonizer uses the colonized for his own economic objectives, and these objectives are different from those indigenous people are accustomed to. The result is the erosion of the accustomed economy and the growth of new economic relations not only between colonizer and colonized, but among the colonized themselves.

The second dynamic follows from the first. The imposition of 'foreign' economic objectives and relationships leads irretrievably to the erosion and alteration of accustomed personal, social and communal relationships among the colonized themselves.

One can trace the same trends in Canada among the native peoples. Where the Canadian situation differs, however, is that the white man never regarded the natives as subjects to be put to work to help the white man achieve his economic goals. Instead, the natives were set aside, put out of the way, gathered inside reserves, given pieces of land on which they were to go about their lives while the non-natives went about theirs.

Whatever the motivations for such a policy, and they were not all bad, the economic implications for the Canadian native were considerable. In the typical colony, the colonized is an integral and key component in the economic life of the colony, and eventually his strength grows to the point where he ejects the non-native. Over the years the colonized participates not only in the economic life, but in the politics (or at least administrative) life of the colony; he owns businesses, runs factories, engages in trade, goes to school, in the army; in many respects lives a conventional, normal life, except for the conditions of subjugation.

The Canadian native did not follow in this path. The non-natives had little interest in him as an economic subject - except for some fur trapping and fishing. Thus, while the Canadian native was never isolated entirely from the thrust of the Canadian economy, he was never an important part of it. He was never involved in any important dynamic of that economy. His fate was, in a profound sense, irrelevant to the direction and tasks of the Canadian economy. His participation in the wage economy may have been useful at the local level but was seldom critical.

Another difference important to note is that in the typical colony, the power of the colonized grows in some relation to his economic strength and his ability to organize that strength to serve political purposes.

In Canada, the political power of the natives is based not on growing economic strength, but on increasingly effective political organization subsidized by the non-native government and assisted by the determinations of the government's courts. We discuss this dynamic in the accompanying Report.

We have, therefore, an anomalous situation in which the political influence of the natives far outstrips their economic strength. This political influence is based largely upon a change in consensual values among the white population, and a willingness to see these changed values take tangible form.

As part of this change in non-native values, noted in the accompanying Report, is a growing feeling that restitution has to be made to the natives in some way.

Hawthorn and Tremblay (1967) write that Indians should be regarded as "Citizens Plus": they state that in addition to the normal rights and duties of citizenship, Indians possess certain additional rights as charter members of the Canadian community. That sentiment is reflected in the great sensitivity displayed towards proposed non-native economic development, a sensitivity so great that

it is often expressed in negative terms.

Berger (1977), for example, writes that, "consideration of economic impact leads inexorably to the conclusion that the interests of native people are in conflict with those of large-scale industrial developers." (p.116). This statement is similar to that of the National Energy Board which found that, "that the traditional sector would gain little, if anything, from the (pipeline) project". (NEB, 1977, P. 5-216).

3.2.1.2 A Typology of the Native Economy

The losses to the natives from resource development are seen as twofold:

1. flight from the land of furbearing animals and consequently the final destruction of the remainder of the socio-economic infrastructure left to natives.
2. the high social costs of construction.

We find what seems to be a profound ambivalence about the role of non-native economic development in the midst of native peoples. On the one hand, great stress is placed upon preserving for the Indians their traditional land based economy, (Berger, 1977; Lysk, 1977; NEB, 1977).

On the other hand, we find considerable attention being given to ways by which natives can be incorporated into the non-native economic developments. Berger, for example, notes that ever since the first days of the fur trade, natives have willingly adopted new techniques and equipment, and some of the social practices, that the white man brought with him. Berger rejects the notion of a dual economy: traditional (native) and modern (white). He argues there are four sectors in the northern (i.e. white/native) economy:

1. subsistence: subsistence harvesting of animals, fish, grains.
2. trading of renewable resources: trading of

furs, fish, food among natives and between natives and non-natives.

3. local wage employment: the employment of individuals in local economic activities.
4. industrial wage employment: the employment of individuals in economic activities of a trans-local, trans-regional kind in which the work is characterised by conventional industrial conditions.

Berger argues that the history of the native economy can be traced along the full spectrum from subsistence activities at one end to industrial wage employment at the other. He concludes, "overlapping or mixed economic forms are now integral to the native economy". (Berger, 1977, p.121).

Later on, however, Berger (p.122) argues that the natives' increasing dependence upon the local wage economy has prepared them for absorption into the industrial wage economy. Absorption into the industrial wage economy will, he fears, undermine the viability of the mixed economy the natives have developed over the century of contact with non-natives. Absorption into the industrial wage economy, he writes, can only mean displacement of the native economy: migrant workers cannot also be hunters and trappers.

Burger concludes this section of his report by stating, "The native economy should not be preserved merely as a curiosity. The northern peoples have demonstrated before this Inquiry that their economy is not only a link with their past, but it is also the basis of their plans for the future. The continued viability of the native economy should be an objective of northern development, not its price." (Ibid, 1. 122).

Something of this same ambivalence is reflected in the varying positions northern natives take with respect

to resource development: insisting on the preservation of the traditional land based economy and the way of life it reflects and which is embodied in the social fabric of their communities; and, at the same time, pressing for land claims and rights to resource development, encouraging employment training programs for their peoples, establishing their own businesses.

3.2.1.3 The Dilemma

Berger seems correct in his typology of the native economy: subsistence, trading of renewable resources, local wage activities, and industrial wage economy. We would add the nascent entrepreneurial sector. Any mixed economy is a fragile arrangement; the result of a constellation of widely diverse international, national, regional, local pressures converging at a given point in time and space upon particular peoples. Like any economic arrangement, it cannot remain constant because the dynamics which brought it into being are themselves constantly changing.

Berger, and others, argue that the changes be held back or deflected from the natives until the natives have time in which to prepare themselves, with the assistance of the non-natives. This is not different in kind from the British colonial model is that, however well or badly they did it, the British handed over political power to the Africans who already constituted a potent force in the economy of the particular country.

In the Canadian situation, the natives do not constitute an economic power in the places in which they live. They are strung along the continuum from a subsistence economy to the industrial wage economy and entrepreneurial development. At the far right side of this economic continuum they have, so far, made only minimal inroads into the dominant economy.

The dilemma for the native is that the more

successful he is in increasing these inroads, the more he endangers by the very nature of the economic activities he undertakes the viability of the lefthand side of the continuum: traditional subsistence economy and trading of renewable resources.

3.2.1.4 Models for Research

In the preceding pages we discussed the economic situation of the Canadian native within the broader context of colonialism, to which that situation bears some important resemblances. We noted Berger's typology of the native economy as useful as a basis for examining that economy within the broader economic context of the dominant, non-native society.

We also noted that, for historical reasons, the natives have not for many decades constituted a significant force in the Canadian economy. We argued that, for reasons having to do with changing values in the white society, the political influence of the natives has increased immeasurably over the past year; but, this increase in political influence is not grounded in any commensurate growth in economic strength. Both the political and economic life of the native is heavily subsidized, financially and in other ways, by the dominant society.

We also suggested the native's dilemma, that success in the more 'modern' sectors of the economy would endanger the viability of the native's more traditional economy.

In this section we discuss several models as means of organizing an examination into developments and processes within the changing native economy. They are:

1. complementary/collaborative, and
2. competitive.

Complementary/collaborative. In economic theory, complementary goods and/or services are those which must be used in combination with each other to satisfy a want. This

model seems appropriate to the trading of renewable resources among natives, and between natives and non-natives.

What is characteristic of this model, at the trading level, is the absence of competition between one sector and another to produce goods for the market. Insofar as there is competition it is among the native trappers themselves. But even this is reduced because of the practices involved in the distribution of trapping licences.

There is, however, another form of competition which must be taken into account; the competition between the trapper and other land uses, specifically resource development. The two types of activities - harvesting renewable resources, and breaking the land - do not sit easily side by side.

The complementary/collaborative model, therefore, is applicable only in limited circumstances, and is constantly affected by competitive land uses.

Competitive. In economic theory, competition refers to the ways individuals or firms vie with each other for custom. People compete with each other, in economic terms, by making their products more attractive, striving to secure lower costs than their rivals, and attempting to get more resources to work with.

The competition model is applicable to the native economy at two levels: search for employment, and entrepreneurial activities. This latter category was not included in Berger's typology. But the evidence available strongly suggests that natives are keen to expand their activities in this sector.

When the native seeks employment he is competition with others seeking the same employment. Because of the rapid generation of employment associated with resource development, the conditions of competition may be eased. There may be more openings available for certain jobs than the labour market can fill.

It is important, however, to identify the ability of the native to compete effectively for jobs further up the skills ladder, and into the management sector. And, to continue to compete effectively once the major thrust of resource development is finished and more stable conditions ensue.

Competition also applies in the entrepreneurial sector. Entrepreneurship is closely associated with personal and group autonomy, self-esteem, and effective functioning in the larger society. From an economic perspective, entrepreneurship is a central prerequisite for economic growth and diversification in any community.

As Burns and Saul (Argyle, et al, 1967) note, entrepreneurship cannot succeed unless it can persuade a labour force, hitherto accustomed to the freedom and flexibility of non-industrial life, to fall easily and unprotestingly into the discipline and rigidity of industrial organization. They were referring to the Industrial Revolution; but their remarks are equally appropriate in the context of native entrepreneurship.

Implicit in entrepreneurial activity is a relationship between employer and employee. It has been argued that native values are not commensurable with this relationship (Larson, 1977). We have some examples among the Kehewin in the Cold Lake Region of communally owned and operated enterprises based on traditional modes of native economic cooperation. It remains to be seen how effectively these businesses can compete within the local economy during and after the major thrust of construction. It also remains to determine the effect which such entrepreneurial activities have upon native peoples in terms of personal and social adjustment.

There is one other dimension of the competitive model worth noting. It is a given in economic theory that

individuals, or groups of individuals acting in concert, seek to maximize the economic benefits to themselves as individuals: the individual leaves a lower paying job for a higher paying job. Within the native economy, this would imply upward mobility; away from trading resources, for example, into better paying jobs.

Even though, in reality, people are not motivated solely by economic motives, it is, nonetheless, true that economic motivations exert a powerful influence in terms of occupational and social mobility. Berger, as we noted above, postulates the importance of maintaining the customary native mixed economy. Two questions remain unanswered within the particular context of our study:

1. To what extent is that mixed economy viable and attractive to natives on a long term basis in the context of improving economic opportunities?
2. To what extent will natives leave their own economic organizations they have built for more economically attractive opportunities outside the native economy?

We now turn to a discussion of the study communities themselves.

3.3 THE NATIVE COMMUNITIES

In the discussion of the native communities in our study areas, we will use the three-sector typology: direct benefit, and non-benefit. We will also apply to that, as appropriate, the two models: complementary/collaborative, and competitive.

3.3.1 Fort McMurray

One of the central characteristics of a native economy is that it is geographically delineated. Its members live within fixed geographical boundaries, and

frequently its economic activities take place within those boundaries or operate out of those boundaries on an export model.

There is no "native community" as such in Fort McMurray. There are a substantial number of natives; perhaps ten percent of the population of the town is native. There is, however, little information available on these people: their numbers, population composition, family characteristics, employment characteristics, and so on.

It is intended to gather this information during the household survey. At that time it will be possible to establish baseline data with respect to the native population and its economic activities.

Without this baseline information, one can make only the most general assumptions about the economic position of the natives in Fort McMurray vis-a-vis resource development.

We assume that:

1. most of the natives in town are operating as individuals in the economy; i.e. working in wage employment, looking for work, or on some form of social assistance;
2. there is little native entrepreneurship in the town; i.e. native-owned economic activities;
3. natives in town act within the competitive model: looking for work or entrepreneurial opportunities in competition with each other and with non-natives.

The first objective in the collection of data respect natives will to establish a baseline data set regarding their characteristics and activities in the local economy.

The next task will be to test the validity of the assumptions noted above and define precisely what dimensions

of the natives' roles, activities and relationships in the local economy need to be monitored and tracked. In this definition we would be guided by the three-sector typology: direct benefit, indirect benefit, and non-benefit.

3.3.2 The Cold Lake Region

3.3.2.1 Introduction

The Cold Lake Region, as defined in our Terms of Reference, contains four major native communities:

- . Indian: The Cold Lake Band and the Kehewin Band
- . Metis: Elizabeth Settlement, and Fishing Lake Settlement

The most up-to-date information on these communities is contained in the Environmental Impact Assessment, Volume II: Socio-Economic Impact Assessment, prepared for Imperial Oil (Resources Management Consultants, 1978b). We have drawn upon this for the base information contained in this discussion.

One of the major differences between Indians and Metis communities, from an economic perspective, is that the Indian communities are on reserve lands under the guardianship of the Federal Government. Treaty Indians not only have certain rights with respect to federally funded education, medical care, etcetera, but are also eligible for federal grants, loans and other subventions. This has enabled them to establish an impressive organizational/administrative infrastructure for the management of their affairs, and to hire consultants to assist them in various activities.

The Metis communities do not have status, rights or resources in any way comparable to Treaty Indians. The result, within the Cold Lake Region at least, is a much lower level of Metis organization and, apparently, lower standards of living.

3.3.2.2 Economic History

The following is a synopsis of the economic history of the native groups in the study area. It is drawn mainly from the report by Resources Management Consultants.

Indians. The economy of the local Indians suffered disastrously in the late 1880's from the destruction of the buffalo herds, and the effects of disease, the disappearance of game, as the white men moved into the area. The Indian population in the general area dropped drastically.

The Indians then entered the agricultural economy with some modest success. This, however, was cut short by the agricultural depression in the 1920's. Many Indians sold their teams and equipment in order to survive. When the agricultural economy picked up again in the 1930's, the Indians had no money or credit to finance their re-entry into the agricultural sector.

The cycle repeated itself again during the late 1930's and early 1940's. This time the improvement was sparked by the energy and ability of an Indian Affairs Branch official. When he left in 1947, the Indians' agricultural performance fell off, incomes dropped and once more they sold their teams and equipment for cash. By the 1950's many previously self-sufficient Indians were on social assistance. The Indians' commitment to agriculture, which was never very strong, has continued to be tenuous.

Along with the loss of an economic base on the reserves, the Indians have been unable to find employment in any significant numbers outside the reserves. There are no reliable figures available. But, if one extrapolates the results of the Northeast Alberta Work Force Survey (which produced suggestive rather than reliable data), it would appear that perhaps 21 percent of the Indians in the Region were employed for wages in the Spring of 1975 (Resources Management Consultants, 1978b, p.241).

Metis. Following the defeat of Riel, many Metis came to what is now Alberta to follow their traditional way of life which centred on the communal buffalo hunt. The destruction of the buffalo herds left them impoverished. In response to their condition, the Federal Government issued "script" to the Metis, entitling each family to one square mile.

The Metis, however, were not drawn to agriculture, and many of them sold their scripts to white speculators at a dollar or less an acre. When the money ran out the Metis were left with no economic basis. By the time of the Great Depression, the condition of the Metis had worsened to the point where provincial action became necessary.

The Alberta Government, itself badly short of funds, passed the Metis Betterment Act which provided for the establishment of Metis Settlement Areas. Two of these settlements - Elizabeth and Fishing Lake - were established within our study area.

The economic life in these two settlements has always been meagre. Some efforts have been made to enter the agricultural sector. But these have not met with significant success.

To survive, the Metis have had to seek employment off the settlements. Again, no reliable figures are available, but one can assume that perhaps 21 percent of them were employed in the spring of 1975.

We now turn to a more detailed examination of the economies of the individual native communities in the study area.

3.3.2.3 Indians: Cold Lake Band

The Cold Lake Band occupies three reserves with a total of about 46,200 acres. One reserve is on the west shore of Cold Lake, another next to the town of Cold Lake and the third near Beaver Crossing, lies about nine kilometres south of Grand Centre. The total band population

is about 1,000 persons; about 600 live on the reserves, and most of these live in the Beaver Crossing reserve.

The Band is undergoing a rapid rate of population growth: about seven percent a year. Significantly, about half the population is under 16 years of age.

Employment is scarce. Resources Management Consultants notes an unemployment rate of 95 percent in March 1977. The Band has organized itself to carry out prefabricated housing work, but so far the demand has been light. Only a few men have gone to Fort McMurray for work.

Given the rapid rate of population growth and the population structure, the labour force component of the population is likely to increase dramatically over the next few years.

The Band owns some extremely good agricultural land in the Beaver Crossing area; however, the costs of land improvements are in the neighbourhood of \$3 million. We do not have any data on the number of Band members who trap or of their earnings. But we assume that at least some are involved in this activity. In addition, the Band has three gas wells which have been drilled and capped, but are not yet producing. The Band is also preparing a case to the Canadian Government for reparations.

One of the most significant occurrences, from an economic perspective, has been the Band's participation in the Seven Band council study of the reserves. This study is providing demographic and other data which will serve as a baseline for monitoring economic progress on the Reserves and among the Band members.

Conclusions. The economic base of the Band is thin: some agriculture, a house fabricating facility, three gas wells not yet producing, perhaps some trapping and perhaps reparations from the Canadian government.

On the other side of the coin is a rapidly increasing population and a rapidly increasing labour force.

Opportunities for improvements in the Band economy are slim without the proposed Imperial Oil resource development; unless, the reparations claim is successful.

It does not appear that the Band possesses the capability at this time to participate in the direct benefit sector of the resource development; unless its gas can be marketed to Imperial Oil.

One would expect the Band would place its energies in the indirect benefit sector. This might include participating in the construction of additional housing. Here, however, the Band would be in competition with other home builders. Consequently, its ability to capture a share of the housing market will depend upon its ability to market prefabricated housing. We have also heard some discussion regarding opening a mobile home park on reserve land. This, too, would place it in the competitive mode.

If the Band does derive any income from trapping, it may find this activity in the non-benefit sector. We understand there are already some difficulties caused by the effects of rights of way construction, seismic lines, etcetera upon game. This might also effect the food supply of the Band.

It is also possible that an expanded local market for agricultural produce might provide a basis for the improvement and bringing into production of additional agricultural land.

At the individual level, Band members will find increased opportunities for employment in plant construction and in the indirect benefit sector. This, too, will be a competitive situation. It will be important to track the ability of Band members to participate in the increased employment opportunities, and to monitor on a frequent and continuing basis, the various opportunities and problems as these occur.

3.3.2.4 Indians: Kehewin Band

The Kehewin Band occupies one reserve with 20,700 acres on the shore of Muriel Lake south of Bonnyville.

In 1976, the Band had a population of about 575 persons, most of whom lived on the reserve. Almost half the Band population is under 16 years of age, and the population is growing at the extraordinary rate of about 14 percent per year.

As of March 1977, the labour force in the Band totalled about 140 persons. Unemployment at that time ran about 55 percent. While this is very high, in comparison with the other native communities in the study area it is quite good. It suggests the presence in the Band's labour force of a number of energetic and relatively skilled workers.

There are other signs of the Band's energy. It owns and operates Creations Ltd., producing woven goods, Kehewin Welding, Kehewin Steel Industries and the Kehewin Band Construction Labour Pool. In addition, among the Band members there are individually-owned businesses, including general contracting, a hauling and garage business, a company engaged in earthwork and pipeline construction, and a family-owned school bus operation. All of these appear to be operating satisfactorily, although we do not have specific data in this regard.

In addition, there is speculation that gas fields lie under the Reserve lands' one well has been drilled and capped. The Reserve also contains potentially good farm land; but development funds will have to be found for land improvements. The Band also participated in the Seven Band study, the results of which are not yet available.

Conclusions. What is striking about the Kehewin Band is their ability to organize a series of economic activities. Although employment seems to be running about 50%, and population increasing at an extraordinary rate, the Band appears to have a number of advantages on its side.

First, it has already created at the Band level, and among its members, a number of enterprises which appear to be comparatively successful. The rate of employment is the highest among the four native communities in the study area, and this suggests the existence of a comparatively energetic and ambitious labour force.

While conditions on the Reserve are most unsatisfactory by non-native standards, the Band has, nonetheless, placed itself on a reasonably good footing to take advantage of the proposed resource development in the area.

Of all the native communities, the Kehewin Band appears to have the best opportunity to participate in the direct benefit sector - providing goods and services directly to the resource development.

We would also expect the existing operations in the Reserve to be able to capture some share of the indirect benefit sector. In both the direct and indirect sector, the Band would be in competition with non-native operations, but this seems to be a situation with which the Band has had some successful experience.

Expanding local markets for agricultural produce may also stimulate the improvement of the agricultural sector in the Reserve. There may also be some benefit from the gas well.

We have no information with respect to trapping and hunting.

3.3.2.5 Metis: Elizabeth Settlement

Elizabeth Settlement contains about 64,000 acres and is located about 30 kilometres south of Grande Centre. The population seems to be about 250 persons. The proportion of the population under 16 years of age is about 55 percent.

The Settlements were established primarily for the purposes of agriculture or ranching. Elizabeth's land

is of low quality, and suitable only for hay and pasturing. Consequently, the Metis have not been much involved in either farming or ranching.

The number of acres broken declined by 50 percent between 1975 and 1977 to about 425 acres. The number of cattle on the Settlement has doubled to about 325 head; however, only three families have 20 or more head of cattle. It is reported that, at the current level of development, the land could provide forage for about 1,500 head. Grazing rights at \$12 an acre are available to off-Settlement ranchers, but we have no data on income from this source.

It is also reported that land improvements would provide hay fields and pasture for an additional 1,500 head. The Settlement, however, lacks the heavy equipment necessary, or the funds or credit to finance the land improvement. Also, the Settlement would have to find the funds to purchase the calves on the open markets.

Given the poor state of the Settlement economy, and the need to make mortgage payments on new homes, the Metis are increasingly dependent upon off-Settlement sources of income.

Conclusions. The Settlement has virtually no local economy, apart from some minor agricultural activity. It is possible that an expanding local market for agricultural produce would improve the prospects of this sector of the local economy.

Apart from this, the immediate prospects are that such benefits as the Settlement draws from resource development will be through the employment of its members in the direct and non-direct sectors of the regional economy.

We should note that a Metis Economic Development Council has been established which, along with the Federation of Metis Settlements, has entered into a task force with Imperial Oil and Alberta Business Development and Tourism to discuss the prospects of the Metis. In order for the

Settlement to take advantage of the potential opportunities provided by the task force, they will have to organize themselves effectively.

3.3.2.6 Metis: Fishing Lake Settlement

The Fishing Lake Metis Settlement lies directly south of the Elizabeth Settlement. Although it is only about 45 kilometres south of Grand Centre, the distance is 78 kilometres by gravel road. The Settlement encompasses 93,000 acres.

The population is about 325 persons and growing slightly. About half the population is under 16 years of age.

Agricultural conditions are similar to those in the Elizabeth Settlement; although the amount of acreage broken has been increasing steadily and has doubled since 1975 to about 1,071 acres in 1977. The number of cattle has increased only slightly to about 383 in 1977. As in the Elizabeth Settlement, only about a third of the families own cattle, and in Fishing Lake only seven families have 20 head or more.

The land could provide forage for about 1,500 head of cattle, and Settlement rents grazing rights other rangers. It is reported that, with improvements, the land could handle an additional 1,500 head of cattle. But the Settlement lacks the machinery, funds or credit to carry out the land improvement or to buy the calves. Unemployment figures are unknown, but it appears to run at about 80 percent.

Conclusions. Fishing Lake, like Elizabeth, has virtually no local economy except for some minor agricultural activity. It is possible that an expanding local market for agricultural produce would improve the prospects of this sector of the local economy.

Apart from this, the Settlement desperately

requires employment opportunities. Any benefits it is likely to draw from resource development will be through the employment of its members in the direct and indirect benefit sectors of the regional economy.

We have already noted the formation of the task force of the Metis, Imperial Oil and Alberta Business Development and Tourism. It remains to be seen to what extent Fishing Lake inhabitants will be able to organize themselves to enter into these discussions effectively and to avail themselves of those opportunities which become available.

3.3.3 Conclusions

In the preceding pages we have examined the local economy of the natives in the study areas. We noted that in Fort McMurray there is no native "community" comparable to that in the Cold Lake Region, and that little information is available on natives in Fort McMurray. The first step, therefore, is to collect baseline data on the natives in Fort McMurray as a prelude to determining what, if any, additional research should be carried out with respect to this group.

In the Cold Lake Region, economic conditions among Indians and Metis are poor, with unemployment reported to be running between 50 and 95 percent, and with a disproportionate amount of the population under 16 years of age. Population growth is also unusually high in the Indian communities.

The picture presented is one in which unusually large numbers of natives will be entering the labour market shortly, with few prospects for work - except for that generated by resource development.

The Indian Bands in the study area have each organized themselves on an individual basis to set out economic development plans and programs. They have already carried out a baseline study with the assistance of

consultants.

The Metis communities lack the financial and organizational resources of the Indian communities, and are still in the preliminary stages of establishing an organizational framework to prepare themselves for the changes likely to be generated by resource development.

Several questions present themselves.

1. To what extent will the native communities, as communities, be able to organize themselves effectively to compete for some share of the direct and indirect benefits likely to flow from the proposed resource development?
2. To what extent will individual natives be able to participate in the employment opportunities likely to be created by the proposed resource development?

The answers to these questions will help provide the answer to a third question. If the natives cannot compete effectively for a share of the expanding local economy, will they find themselves in the non-benefit sector? Will demand-pull inflation, and related effects, outweigh whatever benefits the natives obtain from the resource development?

4. STUDY METHODOLOGY (Non-Native)

4.1 INTRODUCTION

In the preceding sections we have discussed the local business economy from several perspectives. We have examined the conceptual issues associated with local business economies in resource communities generally, and in the specific communities in our study areas. We have examined both the non-native and native economies.

We have identified a typology of the local business economy vis-a-vis resource development:

1. direct benefit sector
2. indirect benefit sector
3. non-benefit sector.

We have noted the kinds of pressures which resource development generates in a community, and examined the likely effects of these pressures upon the local business economy of natives and non-natives.

With respect to the native economy we have applied a five-part typology of the mixed economy:

1. subsistence
2. trading of renewable resources
3. local wage employment
4. industrial wage employment
5. entrepreneurship.

We have noted the kinds of pressures which resource development generates in a community, and examined the likely effects of these pressures upon the local business economy of natives and non-natives.

Throughout this Background Paper we have noted on numerous occasions the absence of reliable and adequate data with respect to the local business economy. There are not adequate baseline data, and even less with respect to the dynamics of the local business economy during the conditions generated by resource development.

In this section we set out our proposed study methodology. It is composed of three components:

1. Inventory of Local Businesses
2. Consumer Price and Housing Surveys.
3. Survey of Key Cost Sectors

Each is discussed below.

4.2 INVENTORY AND SURVEY OF LOCAL BUSINESSES

4.2.1 Inventory of Local Business

We plan to make an inventory of business establishments which will include all businesses in the region. The inventory will include the following:

- . Name of establishment
- . Type of establishment
- . Neighborhood location and specific address
- . Size in square feet.
- . Number of employees

This information will be obtained by means of observation (a windshield survey) and by personal interviews by hired interviewers.

In addition to providing baseline conditions, the information obtained could also be presented on plasticized urban and regional maps. Subsequent updated inventories could be superimposed to illustrate changes from baseline conditions.

4.2.2 Survey of Local Business

A selected number from the entire population of businesses representing every sector will be surveyed in more depth to provide a considerable amount of supplementary information, including:

- a) market data (geographic markets, types of customers and composition of sales)
- b) level of expenditures/leakages outside of the local area; recipient trading centres

- c) space tenure and cost of space
- d) ownership
- e) operating history
- f) employment data:
 - employees by sex, permanent/part-time, occupations
 - changes in employment year by year
 - levels of remuneration
 - turnover
 - labour pool
 - qualifications and criteria for employment
 - difficulties in hiring, holding
- g) business performance:
 - future plans
 - level of business volume compared to previous year
 - changes in supply of goods and services
 - perceptions regarding business prospects
 - sales volume and trends
 - areas of financial concern
 - operating concerns and difficulties

It is proposed that approximately 200 businesses be surveyed in detail. That number will permit a sufficiently large cross-sectional examination of the region by local area and type of business to provide an adequate data and information base. The survey results will be tabulated and analyzed, and a summary report of the local business sector will then be prepared. Updated inventories and surveys of business establishments will be carried out in Phase 3 to monitor changes in baseline conditions. Changes could include:

- a) re-classification (new or additional line of sales/production)
- b) relocation of the business
- c) on-site expansion

- d) increase/decrease in employment;
changes in structure and conditions of employment;
changes in availability and qualifications of labour.
- e) changes in ownership
- f) changes in business volume, competition and cost structure
- g) changes in operating conditions
- h) changes in growth perceptions

These surveys will serve to monitor the evolution of the local business sector in the region. The survey will provide businessmen-respondents with the opportunity to elaborate upon issues raised in the interview and to touch upon any other related topics. We have already indicated from Matthiasson's (1970) and Van Dyke's (1977) reports the areas which residents have described as problems -- now we give our businessmen themselves a similar opportunity to express their views.

4.3 CONSUMER PRICE AND HOUSING SURVEYS

The second instrument intended to obtain detailed data about the local business community is a consumer price index survey, and the third a survey of housing prices.

The consumer price survey will sample a "basket" of goods similar to the items used by Statistics Canada for major metropolitan centers. Neither the Cold Lake Region nor Fort McMurray are covered by Statistics Canada, which includes only Edmonton and Calgary as Alberta communities regularly surveyed for a national index of prices on 400 items. Our abbreviated consumer price survey, represented in Appendix 3, will facilitate a comparative analysis of cost differences for major categories of goods between the resource towns and southern cities. Such an objective measurement of consumer prices will also provide a form of "reality check" upon the expressed concerns of northerners.

The survey of housing prices will develop data on the prices of housing on the open market and the closed market. Data will be collected on the various forms of assistance available to home buyers. We will also collect comparable data on the open and closed markets in the rental sector.

As is stated in Appendix 4, detailed categories for dwelling type will be established with the assistance of an appraiser, to assure comparability of accommodation units.

The data will be drawn from the information available from real estate boards, the companies and government agencies in the study areas, and in Edmonton and Peace River. Although a private agency surveys housing prices across Canada every six months, it is our understanding that this data applies only to new homes, and to fewer than 100 cities.

The consumer price survey and the survey of housing prices are not intended to be definitive or detailed. The objective is to provide sufficiently comprehensive and detailed data that the dimensions of the situation can be better clarified and better understood.

At that point, the concerned Departments may wish to review the situation and determine if more detailed studies are necessary before a decision can be made regarding the appropriateness of existing or proposed Government policies and programs. We propose to carry out a comparable survey in Phase 3. It may be determined that the situation warrants more frequent monitoring.

4.4 SURVEY OF KEY COST SECTORS

The objective of this survey is to provide more precise information with respect to the cost factors associated with the local economy in resource communities.

Data will be collected with respect to such local cost factors associated with the local economy in resource communities.

Data will be collected with respect to such local cost variables as local business taxes, mill and assessment rates, and utility rates.

As part of this data collection, interviews will be carried out with:

1. the utility companies
2. major wholesalers with respect to wholesale prices for various goods at point of sale and point of delivery
3. major carriers with respect to the costs of transporting selected goods
4. municipalities (business and property taxes, utility charges)

4.5 SUMMARY

It is proposed that the collection of these various types of data with respect to the local business economies in the study communities will provide the essential baseline information necessary to obtain a more effective understanding of the specific conditions in the local business economy in each community; the dynamics of the economic linkages and interactions; and the processes which appear to encourage or discourage a viable local economy during the various periods of transition and change.

In particular, the collected data will encourage a more comprehensive and detailed understanding of the local business economy vis-a-vis the direct benefit sector, the indirect benefit sector, and the non-benefit sector. Further, it will provide a basis for identifying more precisely the opportunities and constraints in each sector.

From this information an improved basis can be provided for Government review of existing and possible policies and programs targeted to specific sectors of the local business economy, or to specific economic activities.

5. STUDY METHODOLOGY (Native)

5.1 INTRODUCTION

We believe that the differences between the non-native local economies are so great that it would be inappropriate to apply to the native economies the same approach as we propose for non-natives. The methodologies and instruments we propose for the non-native local economies presume a degree of economic organization, and scale of activity which does not exist in the native economies.

Consequently, we propose to treat the native economies differently from the non-native with respect to the examination of the local economy.

5.2 FORT McMURRAY

We have noted the absence in Fort McMurray of a "native community" in the traditional sense of a land-based grouping. Consequently, we make no special proposals with respect to the economic activity of natives in Fort McMurray.

We expect that the data provided from the household interviews in Fort McMurray will be sufficient to identify the existence and scale of native participation in the town economy and in resource development and related activities. If conditions are identified which seem to merit more detailed examination, we will bring these forward for consideration. At that time a decision can be taken with respect to more detailed studies.

5.3 THE COLD LAKE REGION

In the Cold Lake Region the native economies are thin and beset by many limitations. In the absence of resource development one could assume that native economic conditions would likely not improve - and might deteriorate further as the populations continue to expand.

There are also important differences between the

the Indian and Metis communities which have to be taken into account in carrying out studies of the native economies.

5.3.1 Indians

We have noted the problems faced by the Cold Lake and Kehewin Bands in terms of economic development - and the potential opportunities. We have also noted the organizational developments which have occurred in the past few months.

Both Bands have had surveys carried out of their peoples. We expect some of the key economic and demographic data collected in the surveys will be comparable with the data collected from the general population in the Region. Consequently we do not feel justified in proposing that another survey be carried out in the Reserves.

Both Bands have consultants to assist them, and are already engaged in preparing economic development plans and programs. This implies that mechanisms will be established by the two Bands to monitor their progress with respect to their respective economic objectives and the participation of their peoples in the labour market.

In order to avoid duplicating the work of the Bands, we propose that the Cold Lake Region Baseline Study establish an effective working relationship with the two Bands. The objectives of this liaison would be to:

- . trade information and data on a regular basis.
- . exchange views on the significance of the information.
- . provide to the Bands data and information with respect to the economic activities, participation in the non-native economy, and status of Indians living in the study area off the reserves.

We would also propose that the Bands be requested

to ensure that their monitoring mechanisms have the capacity to track changes and progress on a regular and frequent basis. Experience recommends that such fine grain monitoring is necessary if opportunities are to be identified and exploited in good time; and if problems are to be identified and tackled before their consequences are set into long-term patterns which can be altered only with great difficulty.

5.3.2 Metis

The Metis lack many of the resources available to Indian communities and appear to be still in the preliminary stages of discussion and organization. The Metis Settlements do not have the funds to finance the studies necessary to collect the baseline data, or to establish the mechanisms to monitor progress with respect to capturing a fair share of the benefits from the expanding regional economy.

Consequently, we propose that the resources be made available to the Metis Settlements for the following purposes:

1. To collect baseline data and other relevant information with respect to the current status of the Settlements and their populations (Part of phase 1).
2. To assist the Settlements in developing mechanisms by which to monitor changes in the local economies and the participation of the working force in the expanding regional economy (Phase 1 and interim phase 1-2).

We propose that the Cold Lake Baseline Study consult with the Metis Settlements as to the appropriate baseline data to be collected and the most appropriate means by which to collect it. In the design of the data collection consideration should be given to the collection of data comparable to that being collected for the general population,

as well as to that already collected in the Indian communities.

To ensure adequate sampling and quality control, we also suggest that the responsibility for the collection of baseline data lies with the Cold Lake Region Baseline Study. If the Metis Settlements prefer, the actual collection of data can be carried out by Metis persons. Experienced interviewers are available in the Metis community.

With respect to monitoring mechanisms, those responsible for the Cold Lake Baseline Study should be empowered to liaise with the Metis Settlements as to the most appropriate mechanisms given the resources available.

In the determination of such monitoring objectives, consideration should be given to procedures which have the capacity to track changes and progress on a regular and frequent basis.

We suggest that the monitoring might cover three major dimensions of economic activity:

1. changes in existing economic activities in the Settlements.
2. the introduction of and changes in new economic activities in the Settlements.
3. the participation of Metis individuals in the various sectors of the regional economy.

The Metis Settlements may wish to revise these or add other dimensions. It will be important to work out in detail how the monitoring is to be done, and to establish adequate quality control.

We have noted several times that the Metis Settlements are still in the early stages of discussing organizational structures and programs with respect to the impacts of the proposed resource development. The establishment of the task force including the Federation of Metis Settlements, the newly-formed Metis Economic Development Council, Imperial Oil and the Northern Development Branch, represents an important step for the Metis.

We find, however, that the Metis are hampered in their participation in the task force by the lack of resources they can bring to bear on, their own organizational development, establishment of goals and objectives; and suitable internal procedures and mechanisms.

We therefore suggest that the Metis have made available to them a person or persons experienced in economic development and organization to assist them. The specific tasks of such a person or persons might include the following:

- . assist Metis in establishing concrete economic objectives and programs.
- . act as a resource to them in their participation of Metis and native groups such as the Metis Economic Development Council, and during Phases 2 and 3 of the Cold Lake Region Baseline Study.
- . assist them in developing and maintaining adequate monitoring procedures with respect to economic development.

In our view, without such assistance, the Metis Settlements will be severely hampered with respect to developing programs and activities to improve their local economy; to enhance the ability of their labour force to compete effectively in the expanding labour market; or to capture their fair share of the expanding regional economy.

ALBERTA OIL SANDS ENVIRONMENTAL RESEARCH PROGRAM

LONGITUDINAL STUDY OF PERSONAL ADJUSTMENT

AND SOCIAL CONDITIONS IN

THE FORT McMURRAY AREA HS 30.1

PHASE 1: FINAL REPORT

BACKGROUND PAPER:

LOCAL BUSINESS ECONOMY IN RESOURCE COMMUNITIES

APPENDIX 1:

LOCAL BUSINESS INVENTORY

AUGUST, 1978

APPENDIX 1

LOCAL BUSINESS INVENTORY

1. Name of establishment _____
2. Type of establishment _____
3. Address _____
4. Location _____
5. Size (square feet) _____
6. Number of employees
male _____
female _____

ALBERTA OIL SANDS ENVIRONMENTAL RESEARCH PROGRAM

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PHASE 1: FINAL REPORT

BACKGROUND PAPER:

LOCAL BUSINESS ECONOMY IN RESOURCE COMMUNITIES

APPENDIX 2:

LOCAL BUSINESS SURVEY

AUGUST, 1978

LOCAL BUSINESS SURVEY

(Structured Interview)

Date _____

Name of establishment _____

Municipal Address _____

Location (C.B.D., neighbourhood centre, etc.) _____

General Comments of Interviewer (appearance, age, parking, etc.) _____

Question 1. Name and position of respondent. _____

Question 2. Line of business; range of goods or services offered.

Question 3. Customer profile.
Types of customers (individuals, business, airbase, etc.) _____

Approximate composition of sales by customer type. _____

Is the composition of customers changing over time? _____

Comments _____

Geographic markets (where do your customers come from - Town A, Town B, rural?) _____

Approximate composition of sales by geographic market _____

Is the geographic market composition changing? _____

Question 4. Commercial Leakages

Estimated proportion of local expenditures for your line of goods-services made outside of Town. _____

Where are these expenditures made? _____

Question 5. What is the total floor space occupied by this establishment?

_____ sq. ft. (or dimensions _____)

Question 5. Is the building in which this business establishment is located

- _____ owned
- _____ rented/leased
- _____ other, please specify _____
- _____ do not know

(If rented) What is the monthly rental payment for this establishment? _____

What is the basis for the rental charge (fixed monthly, fixed plus % of sales, etc.) _____

Question 7. Does the principal owner of this business establishment live

_____ in Town?

_____ out of Town? Where? _____

Question 8. Below, on the left, are four items a through d about the length of operation of this business establishment. To the right are six possible responses, numbered 1 to 6. Write the correct number for each response in the blank space beside each item.

How many years has this business establishment been operating?

_____ in this town

1) less than one year

_____ at this location

2) one to two years

_____ under the
present owner

3) two to five years

_____ under the
previous owner

4) five to ten years

5) more than ten years

6) do not know

EMPLOYMENT

Question 9. On the table below, please indicate how many employees work here.

	full-time	part-time
Males		
Females		

Question 10. Categorization of employees by occupation, duties, etc.

Respective wages/salaries of above.

Are wage and salary costs staying in line with other costs and revenues? _____ Comments. _____

Question 11. How many employees would this establishment have had one year ago at this time? _____

Probe reasons for change in number of employees.

Question 12. Elicit comments regarding employee turnover (extent of problem, trends; by occupation or sex; reasons for) _____

Question 13. Have you found it necessary to look for new staff?

What are the difficulties, if any, in finding full or part time employees? _____

What qualifications or criteria do you look for in hiring staff? _____

How do you advertise for new employees? _____

Where do new employees come from geographically (explore labour pool)? _____

BUSINESS PERFORMANCE

Question 14. What, if any, future plans are there for this business during the coming year (check as many as apply).

- relocation, where? _____
- on-site expansion
- renovation
- change in line of business (e.g., new products)
- closure, why? _____
- sell, why? _____
- none

Comment: _____

Question 15. How would you rate business this year as compared to last year? (Probe % change) _____

Question 16. Has there been any change in competition in your line of business over the past year? _____ Comments. _____

Are there any new local developments or expansion/renovation plans being proposed or rumoured in your line of business? _____
_____ Comments. _____

What effect do you think this will have on your business? _____

Question 17. What are your feelings regarding the business prospects in this community? (Probe individual prospects, e.g., resource development) _____

Do you foresee any problems or difficulties which may affect your business? _____

Question 18. What is the approximate sales volume of this business? (dollar or physical volume) _____

What has been the trend in business volume? _____

Question 19. Are there any specific areas of financial concern? (Certain operating costs increasing out of line? wages? taxes? rent?) _____

Question 20. What are your major operating concerns; major difficulties in running this business? _____

Question 21. Miscellaneous comments. _____

ALBERTA OIL SANDS ENVIRONMENTAL RESEARCH PROGRAM

LONGITUDINAL STUDY OF PERSONAL ADJUSTMENT

AND SOCIAL CONDITIONS IN

THE FORT McMURRAY AREA HS 30.1

PHASE 1: FINAL REPORT

BACKGROUND PAPER:

LOCAL BUSINESS ECONOMY IN RESOURCE COMMUNITIES

APPENDIX 3:

CONSUMER PRICE SURVEY

AUGUST, 1978

CONSUMER PRICE SURVEY

Selected items within major categories, including

1. Food

- dairy
- meat
- vegetables
- fruit
- canned goods

2. Housing

- apartments
- sale
- rent
- furniture
- appliances

3a. Clothing

- women's wear
- outer garments
- men's wear
- outer garments
- children's wear
- i) girls' garments
- ii) outer wear
- iii) boys' garments
- iv) outer wear

3b. Footwear

- men's
- women's
- girls'
- boys'

4. Transportation

- automobile purchase
- gasoline
- tires
- automobile insurance
- taxi fare

5. Health and Personal Care

- dental care
- pharmaceuticals
- toilet soap
- tooth paste
- men's haircuts
- women's hairdressing

6. Recreation, Education and Reading

- movie admission
- television sets
- stereo sets
- television repairs
- recordings
- bicycles

7. Tobacco and Alcohol

- cigarettes

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LOCAL BUSINESS ECONOMY IN RESOURCE COMMUNITIES

APPENDIX 4:

SURVEY OF HOUSING PRICES

AUGUST, 1978

SURVEY OF HOUSING PRICES

Basic format: Detailed categories to be established with assessor/appraiser and local real estate boards in Fort McMurray and Peace River.

1. Open Market

Homes: New

___ type
___ construction
___ size (sq. ft.)
___ lot size
___ purchase
___ rent

Homes: Old

___ type
___ construction
___ size (sq. ft.)
___ lot size
___ purchase
___ rent

Apartments

___ type
___ construction
___ size (sq. ft.)
___ purchase
___ rent

2. Closed Market (In cooperation with owning companies and Alberta Housing Corporation.)

Homes: New

___ type
___ construction
___ size (sq. ft.)
___ lot size
___ purchase - financial assistance
___ rent - subsidy

Homes: Old

___ type
___ construction
___ size (sq. ft.)
___ lot size
___ purchase - financial assistance
___ rent - subsidy

Apartments

___ type
___ construction
___ size (sq. ft.)
___ purchase
___ rent

ALBERTA OIL SANDS ENVIRONMENTAL RESEARCH PROGRAM

LONGITUDINAL STUDY OF PERSONAL ADJUSTMENT

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PHASE 1: FINAL REPORT

BACKGROUND PAPER:

BASE DEMOGRAPHIC DATA

AUGUST, 1978

BASE DEMOGRAPHIC DATA

The purpose of the Base Demographic Questionnaire is to collect information relating to the characteristics of the study sample with those of the entire population, and (2) generate relevant objective data in such key areas as demography, mobility, housing, education, work and material well-being. In addition, information will also be obtained for all members of the household for the purpose of providing a profile of household composition. The data obtained in the Base Demographic Questionnaire will also be useful in establishing and monitoring changes in baseline conditions.

Most of the questions we have included on the Base Demographic Questionnaire are standard demographic questions that are used by Statistics Canada. It will therefore be possible to compare these data to the census. These include such demographic questions as age, sex, marital status, language, ethnicity, and nationality; such housing questions as age, type, tenure, household composition, and monthly rent/mortgage; such work questions as class of worker, occupation, industry, shift work, and hours worked; other key areas include educational levels, total individual and household income and vehicle ownership.

There are, in addition to the standard demographic questions, a number of questions that address key issues or concerns identified in the resource community literature. Physical mobility, for example, is investigated, since the literature suggests that related attributes such as transiency and permanency are related directly to marital and community stability (Riffel, 1975; Van Dyke, 1975; Larson, 1977). The set of questions focussing on physical mobility are, therefore, intended to provide an indication as to the level of transiency of the respondent and the degree of permanence he or she attaches to the community.

Questions related to marital stability are also included, since literature suggested that it is effected to

varying degrees, by life in resource towns and by the amount of physical mobility (Riffel, 1975; Matthiason, 1970; Larson, 1977).

Since life in resource towns generally revolves around the large resource-based employers, questions relating specifically to the large oil-based companies are also included in the Base Demographic Questionnaire. As is too often the case, these large companies control, or at the very least, significantly effect, both the housing and labour markets (Van Dyke, 1975; Riffel, 1975). Questions on housing are therefore included to ascertain the extent to which the major oil companies subsidize and/or control the housing market, while questions about the labour force are intended to determine the extent to which labour force participation is directly or indirectly dependent on these companies.

Finally, there is a question which asks if there are any household members who are handicapped or disabled either emotionally or physically. This question is intended to generate information on the proportion of the population that is disabled as well as the nature of their disability since these data are neither presently known or addressed in the literature.

It would be appropriate to note here that the collection of demographic information is not exclusive to the Base Demographic Questionnaire. Considerably more detail in housing, mobility, and the world of work has been left for the Extended Interview, where respondents are expected to answer at greater length.

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BACKGROUND PAPER:

BASE DEMOGRAPHIC DATA

APPENDIX 1:

BASE DEMOGRAPHIC QUESTIONNAIRE

AUGUST, 1978

BASE DEMOGRAPHIC QUESTIONNAIRE

Instructions

This questionnaire is to be answered by the head of the household. The HEAD of the household is either the husband or wife; the parent where there is one parent only, with unmarried children, or any member of a group sharing a dwelling equally.

For those questions that have various choices, please check only one answer.

Q1. What is your sex?

- Male
 Female

Q2. What is your year of birth? _____

Q3. What is your present marital status?

- single (never married)
 now married (civil or religious ceremony)
 now married (common law)
 separated (legal or informal)
 divorced
 widowed
 other (specify) _____

Q4. How many times have you been married?

- none
 one
 two
 three or more

If now married, go to Question 5. If not, go to Question 7.

Q5. If presently married, how long have you been married?

- less than 2 years
 2 up to 5 years
 5 up to 10 years
 10 up to 15 years
 15 or more years

Q6. If married, is your spouse living with you here?

- yes No

If Yes, go to Question 8.

Q7. If No, do you have any plans for you spouse to move here?

- Yes No not sure

Q8. Does your household presently consist of

- one person only
 couple only
 nuclear family (both parents, child or children)
 one-parent family (one parent, child or children)
 extended family (one or both parents, children and other relatives)
 unrelated individuals (two or more)

Q9. Are any members of your household chronically ill, or physically or emotionally handicapped?

- No Yes, with _____

Q10. In what country were you born?

- Canada other, namely _____

(If born in Canada, go to Question 12)

Q11. If not born in Canada, how long have you lived in Canada?

- less than 2 years
 2 to 5 years
 5 to 10 years
 10 years or more

Q12. What language do you use most often in your home?

- English
 French
 other (specify) _____

Q13. To which ethnic group do you consider that you belong?

(If status Indian) To what band? _____

Q14. How many children have you ever had (exclude adopted children, stillbirths and abortions)? _____

Q15. How long have you lived in this town?

- less than six months
 six months up to a year
 1 year up to 2 years
 2 years up to 5 years
 5 years up to 10 years
 more than 10 years

Q 16. How many times have you moved since coming here? _____

Q17. How long have you lived at your present address?

- less than six months
- six months up to 1 year
- 1 year up to 2 years
- 2 years up to 5 years
- 5 years up to 10 years
- more than 10 years

Q18. Where did you last live before moving to this address?

- another part of town
- another part of Alberta
- another province in Canada
- another country

Q19. Do you consider yourself to be a permanent resident here?

- Yes No not sure

If Yes, go to Question 21.

Q20. If No, how long do you plan to remain here?

- less than a year
- one or two years
- three or four years
- for the foreseeable future
- not sure

Q21. When, approximately, was the building you are now living in constructed?

- prior to 1961
- 1961 to 1970
- 1971 to 1975
- 1976 to present
- don't know

Q22. Do you own or rent your present dwelling?

- owned
 rented
 other (specify) _____

If you own, go to Question 23.

If you rent, go to Question 24.

Q23. If you own your home, did your employer assist you in the purchase of your home?

- Yes No

Q24. If you rent your home, is your rent subsidized by your employer?

- Yes No

Q25. What total cash rent or total mortgage payment (excluding utilities) do you pay for this dwelling? (Do not include employer's subsidies).

- less than \$100 per month
 \$100 to \$199 per month
 \$200 to \$299 per month
 \$300 to \$399 per month
 \$400 to \$499 per month
 \$500 to \$599 per month
 \$600 to \$699 per month
 \$700 and over
 not applicable

Q26. Are you presently employed? (outside of your household)

- Yes No

If No, go to Question 34.

Q27. Are you

- self-employed, where? _____
- working for Government
- working for a private firm or company, where?

- other (specify) _____

If working for Government, go to Question 30.

If not, go to Question 28.

Q28. Do you work for an oil-based company?

- Yes No

If No, go to Question 30.

Q29. If Yes, for which of the following oil-based companies do you work?

- Syncrude, or one of its subsidiaries
- G.C.O.S., or one of its subsidiaries
- another oil-based company

Q30. In what business, service or industry are you now working?

- agriculture
- forestry, fishing, trapping
- mining and quarrying
- petrochemical
- manufacturing
- construction, transportation, communication
and other utilities
- retail trade, wholesale trade
- financial, insurance, real estate
- domestic services (homemaker, nanny, maid,
cleaning lady/man)
- armed forces
- civil service (e.g., Government service, not
specified above)
- community service - nongovernment
- others (specify) _____

Q31. What is your present occupation?

- clerical and general office work (typing, receptionist, filing, bookkeeping)
 sales (selling insurance, cars, clothes, etc.)
 manual labour
 skilled and semi-skilled (assembly-line, electrician, operative, mechanic)
 transportation (truck driver, pilot, bus driver)
 first line supervisor (foreman, etc.)
 teaching (school teacher, safety teacher, driving instructor)
 scientific and technical (doctor, nurse, engineer, etc.)
 social and artistic (social worker, lawyer, economist, etc.)
 executive, managerial and related (accountant, bank manager, personnel manager, etc.)
 homemaker
 student
 services not mentioned above (e.g. police, bartending, floor cleaning, etc.)
 other (specify) _____

Q32. Including overtime, how many hours a week do you normally work?

- less than 30
 30 - 39
 40 - 49
 50 - 59
 60 - 69
 over 70
 not applicable

Q33. In your present job, do you normally work

- only days or only nights
 3 shifts (day, afternoon and night)
 2 shifts (day and night)
 other (specify) _____

Q34. How many of the following vehicles do you or your family own? (If you or your family do not own a specific vehicle, please write in a zero.)

Number:

auto(s)
 truck(s)
 trailer(s), motorhome(s)
 snowmobile(s)
 boat(s)
 all terrain vehicle(s)
 other, specify

Q35. What is the highest level of education that you have completed?

elementary and secondary:

() 0 () 1-4 () 5-8 () 9-11 () 12-13

university:

() 1-2 () 3-4 () 5+

other post-secondary (technical, trade, etc.)

() 1-2 () 3-4 () 5+

Q36. What was your total income last month, before tax and other deductions?

less than \$500
 \$500 to \$999
 \$100 to \$1499
 \$1500 to \$1999
 \$2000 to \$2499
 \$2500 to \$2999
 \$3000 or more
 not applicable

Q37. What was the total household income before tax and other deductions last month?

- less than \$500
- \$500 to \$999
- \$1000 TO \$1499
- \$1500 to \$1999
- \$2000 to \$2499
- \$2500 to \$2999
- \$3000 or more
- not applicable

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PHASE 1: FINAL REPORT

BACKGROUND PAPER:

BASE DEMOGRAPHIC DATA

APPENDIX 2:

INSTRUCTIONS FOR INTERVIEWERS

AUGUST, 1978

INTERVIEW CHECK-LIST: INSTRUCTIONS FOR INTERVIEWERS

- (1) Type of Building: Structural classification of dwelling unit.

Below is a list of possible building types.

Upon approaching or entering the building in which the respondent lives, rate the type of building (see list).

Place the corresponding number in the blank space at the top left of the interviewer checklist.

Example: If respondent lives in a duplex, write in a "5" in the blank space beside type of building.

If uncertain as to the type of building, ask respondent "Is your dwelling in a building that is?"

1. SINGLE HOUSE (not attached to any other building and containing one dwelling only.)
2. SINGLE HOUSE ATTACHED to another building at ground level (such as a store, etc.) but separated from it by a common wall running from ground to roof.
3. SEMI-DETACHED or DOUBLE HOUSE (one of two dwellings joined side by side, not attached to any other building).
4. ROW HOUSE (one of three or more houses joined side by side; such as a town house, garden home, terrace house, etc.)
5. DUPLEX (one of two dwellings, one above the other, not attached to any other building and each having a separate entrance).
6. APARTMENT (in an apartment building, in a house that has been converted into apartments, or in a non-residential building).
7. MOBILE (such as a trailer or van).
8. Other
9. No response/Don't know.

- (2) Type of Dwelling: A structurally separate set of living quarters with a private entrance from outside or from a common hallway or stairway inside the building.

Note: There is a minimum of one dwelling in every building, but there may be more than one dwelling per building. For example, a suite in an apartment, a basement suite, or a room in a boarding house.

If there is only one dwelling in the building, then the dwelling type will be the same as the building type. (eg. single houses or mobile homes are often occupied by only one family or group of people). If dwelling type and building type are the same, do not fill in the blank space beside type of dwelling.

If there is more than dwelling per building, specify from the list below, and place the corresponding number in the blank space at the top-centre of the interview checklist. If uncertain as to the type of dwelling, ask respondent "What do your living quarters consist of?"

1. A suite (more than one room)
2. A room
3. Other (specify) _____
4. No response/don't know

- (3) Number of Households per Dwelling: The people (related or unrelated) who live in a structurally separate set of living quarters - dwelling, constitute a household. The people who share common living quarters constitute a household.

Simply note the number of households per dwelling and write in appropriate number in the blank space at the top left of the interviewer checklist.

If uncertain as to the number of households in the dwelling, ask respondent "In addition to your household, how many other households are there in this dwelling?"

Example: House (a) Nuclear family (both parents and children on main floor)

(b) Unrelated individuals (two secretaries) in basement suite

(c) One person only (student) upstairs

There are three households in the one dwelling.

(4) Household Members:

"We would like to find out a bit about the people who usually live in this household."

Name:

"We would like to start out by having you tell us the first name of each person who lives here with you."

(Write first name in Column 2)

"Now we would like to ask you some simple questions about each of these people."

(Ask the following set of questions for each household member, substituting each members' name where specified.)

Relationship to Head:

"What is (name) relationship to the head of the household?"

(If respondent is uncertain, specify possible responses, 1 through 5)

(Place number corresponding to response in column 3)

Sex:

(If sex can be determined on the basis of the members' name, place appropriate number 1 or 2 in Column 4).

(If sex cannot be determined in this manner,

"What is (name) sex?"

Year of Birth:

"What is his/her year of birth?"

(Write in year in Column 5, eg 52)

Occupational status:

"Is (Name) presently employed outside of the household?"

(If Yes) "Is he/she working full-time or part-time?"

(Place number corresponding to response in Column 6)

(If no)

Student Status:

"Is he/she a full-time student?"

(If yes) "What grade is (name) in, and what is the name of the school he/she is attending?"

(If not a student, write in number 00 in Column 7)

(If a student, write in grade number in Column 7, and name of school in Column 8, eg. 09, Fort McMurray Composite)

(Ask the same set of questions for all members of the household).

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LONGITUDINAL STUDY OF PERSONAL ADJUSTMENT

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PHASE 1: FINAL REPORT

BACKGROUND PAPER:

THE NEEDS-PRESS MODEL

AUGUST, 1978

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1. INTRODUCTION

1.1 STUDY OBJECTIVES

It is the requirement of the Alberta Oil Sands Environmental Research Program - Human System that the longitudinal study fulfill the following objectives:

- 1) Identify, analyze and explain changes in social conditions in the oil sands region since 1961, in such indicator areas as e.g., population income, housing, education, health (physical and mental), social welfare/social deviance, work/leisure characteristics, quality of environment and quality of community, in relation to various phases of oil sands development.
- 2) Identify, analyze and explain the specific social and personal problems faced by people, including all social groups, i.e., indigenous native and non-native, migrant native and non-native and immigrant native and non-native, in their efforts to adjust to life in the region.
- 3) Identify and explain the relationships that exist between social conditions in the region and the adjustment processes of people at different stages of the oil sands development.
- 4) Identify areas of concern which may arise out of the research and suggest practical means of meeting those concerns.

The requirements of the Cold Lake Region Baseline Study: Phase 1 are similar:

- 1) To establish a socio-economic baseline of the Cold Lake Region which can be repeated over time.
- 2) To compare scientifically socio-economic

characteristics of the population before, during and (possibly) after, major resource development.

- 3) To establish a retrieval system for the data generated from the baseline stage and from other subsequent field measurements.

Implicit in these two sets of instructions are five requirements:

- 1) Identify and collect baseline data on current and changing conditions in the study communities across all relevant community dimensions possible.
- 2) Identify and collect data on the current state of personal adjustment of residents in the study communities, and track changes in adjustment over time across all relevant personal dimensions possible.
- 3) Identify the key interactions between personal adjustment and community change, and collect relevant data with respect to these interactions.
- 4) Develop data which has explanatory as well as descriptive capability; it will be largely out of this explanatory capability that a predictive capability can be generated.
- 5) The proposed methodologies and instruments should be applicable not simply to the particular communities, but must also be applicable to other resource and frontier communities, and to conventional communities as well, as means of effective comparative study.

1.2

COMMUNITY

The methodological issues associated with collecting base information on the characteristics of and conditions in

the study communities, and changes in these over time, are fairly straightforward. There are two main sources of information: primary data and personal interviews.

1.2.1 Primary Data

The methodological issues associated with the collection of primary data are discussed earlier in our Background Paper: Institutional Information System. With the exception of information pertaining to municipal finance, only in the past year or so have reliable time series tables been prepared for various characteristics of the study communities (McVey, 1976; Larson, 1977; Fort McMurray, 1977 and 1978; Resources Management, 1978).

These tables, however, constitute only the beginning. Much more data across various dimensions of community life need to be collected before an adequately comprehensive picture of community life emerges. It will then be useful to carry out cross-tabulations of data across various dimensions to obtain more specific and precise information about target issues.

1.2.2 Personal Interviews

Personal interviews, carried out in a format providing an acceptable level of statistical reliability, constitute an essential source of primary data on the characteristics of and conditions in the various communities.

Through the mode of the personal interview it is possible to collect highly specific and detailed information with respect to the characteristics of the population itself (see above, Background Paper: Base Demographic Questionnaire) which is not available from the gross statistics available through institutional sources. In addition, the personal interview can generate reliable information on population needs and behaviour with respect to community services and facilities; i.e. demand for medical services, day care facilities, recreational facilities and so on (see below:

Background Paper: Extended Interview. Given a sensitive appreciation of the methodological problems involved, it should be possible to use the data from the personal interviews to supplement and complement that from institutional sources; and also to enrich the data from these sources.

1.3 INDIVIDUAL

The objective here is to identify and collect data on the current state of personal adjustment of residents in the study communities, and to track changes in this adjustment over time. This objective raises a number of important methodological issues. We discuss them under four headings (see also, Berger: 1969):

- 1) Analysis of institutional data.
- 2) Participant observation.
- 3) Survey questionnaires and interviews.
- 4) Psychological tests and scales.

2. THE INDIVIDUAL

2.1 MAJOR METHODOLOGICAL APPROACHES

2.1.1 Analysis of Institutional Data

Institutional data, as we discuss in our Background Paper noted above, is collected in various forms by various departments, agencies and organizations. Often the information is collected for administrative rather than planning purposes, and needs treatment before it can be used for the latter purpose. Different institutions often use differing geographic bases, different forms of user identification, and collect differing types of data on users.

To take two extreme examples, Alberta Hospitals collects highly detailed information on users at the point of use; and from this data it is possible to determine types of users and their places of residence and occupations (although this information is not published in report form, it is available on computer tape). Alberta Liquor Control Board, however, has data only on the amount of beer and wine sold at point of sale, and little continuing and up-to-date data on purchasers and users on a community-by-community basis.

Another major methodological weakness of institutional data is that it does not enable the researcher to keep track of individuals in a consistent way over time.

Although there has been a considerable amount of research carried out on the basis of primary data - catchment area and epidemiological studies are two examples of this approach (Shevky and Williams, 1949; Chein, 1963) - this is not an adequate methodology for identifying and tracking individuals over time.

2.1.2 Participant Observation

Participant observation as a technique of social

anthropology has provided a rich mine of information on people, their attitudes and values, and their behaviour. One thinks immediately of such classics as LaVida (Lewis, 1966) and Tally's Corners (Liebow, 1967). Participant observation has great value in developing primary information from which to derive theoretical perspectives, concepts and hypotheses, and as an enrichment of these.

Its major drawback, of course, is the complete impracticality of attempting to carry out participant observation techniques with statistically reliable samples of the size required for most study areas. We did, however, consider using participant observation with a small number of respondents as a source of supplementary information. Such information would be very valuable because of its richness and its focus on activities and processes both at the individual and community/societal level. It would, however, require a very heavy commitment in terms of time and resources.

Although we have not discarded the idea, we do not regard it as a high priority at this point in the longitudinal study. It may well be that the findings from Phase 2 or 3 will enable us to single out specific sub-groups requiring detailed attention and for which participant observation would be a practical venue. In the meantime, we expect the data from the Time-Use Diaries will more than adequately meet the needs of the longitudinal study with respect to behaviour.

2.1.3 Questionnaire and Interview Survey Methods

2.1.3.1 Criteria

The majority of studies of a sociological nature involve questionnaires and interview formats based on a variety of theoretical perspectives and constructs, depending upon the objectives of the researcher. The literature is vast. A major portion of our time in the literature review was spent identifying these perspectives and constructs and

examining the various measures used with regard to their applicability to the longitudinal studies.

We had carried out a similar search some years ago with the assistance of a research design grant from the Welfare Grants Division, Department of National Health and Welfare (Berger, 1969). We carried out another, more selective, search in the autumn of 1977 as part of our proposals with respect to the two longitudinal studies. And again, upon commencing the research design for the two studies, we carried out an extensive search using the computer-based literature search facilities of Alberta Environment. In each case, the results of our search brought us to similar conclusions.

We take as our starting point Kurt Lewin's dictum that personal behaviour is a function of personality and environment: $B=f(P.E.)$ (Lewin, 1936, 1951). Accordingly, we are looking for theoretical and operational construct which provides information on all three dimensions. At a minimum, the construct must generate sufficient information on two dimensions to develop a predictive capability regarding the third.

- 1) During our search we kept four criteria in mind:
 - The individual. The methodology must develop a reliable and detailed portrait of the individual respondent with respect to,
 - demographic characteristics,
 - attitudes and values across all relevant dimensions,
 - personality.

Each of these personal dimensions is necessary in order to describe the individual and to provide a basis for explaining his or her behaviour. The methodology must also provide for individuals to be aggregated into groupings such as family, work cohorts, neighbourhoods, etcetera.

2) Environment. The environment is composed of a number of different dimensions which themselves are multi-dimensional: for example,

- built and natural environment
- work
- school
- shopping
- entertainment
- housing

Each of these in various combinations can, in-turn, generate such dimensions as:

- affiliating/isolating,
- achievement/failure,
- expression/restraint.

3) Interactions between person and environment. The methodology contains the capability of identifying and tracing the interactions between the individual. By tracing changes in these interactions, one can begin to build a picture of personal adjustment in changing social conditions, and provide a basis for tracking sources of satisfaction/dissatisfaction.

4) Theoretical comprehensiveness and coherence. It is essential that the methodology be comprehensive; that it encompass all relevant dimensions of person and environment; and that it be conceptually sound and coherent. Implicit in the concept of comprehensiveness is the requirement that the methodology allow for "add ons": expanding and extending the examination of any particular dimension or interaction by adding on additional measures which would be compatible with the core methodology.

2.1.3.2 Subjective Data

In our examination of the literature with respect to the current state of knowledge regarding quality of life and community satisfaction, we looked closely at the potential value of both objective and subjective data (see our, Longitudinal Study of Social Conditions and Personal Adjustment in Fort McMurray, 1978; Cold Lake Region Baseline Study: Phase 1, 1978). Some of the conclusions we drew from the literature are pertinent here. Very briefly, they are:

- . data must be collected across a broad range of community, social and personal dimensions.
- . the measurements must incorporate explanatory as well as descriptive capability.
- . the measurements must include subjective as well as objective data with respect to the specified dimensions.

The importance of subjective data are based upon the explanatory power they provide. As Walters (1972, p.13-14) says,

For many purposes it is important to assess how people see their condition and how they feel about it. Part of our current dilemma arises out of the apparent paradox that measured improvements in objective conditions have not been associated with similar improvements in satisfaction.

Turnstall (1970) speaks of the importance of incorporating, "the subjective, which includes aspects of personal experience such as frustration, satisfaction, aspirations and perceptions".

An extensive national sample of almost 3,000 persons across the United States was carried out several years ago to define in an empirical manner the critical requirements of a person's quality of life, (Flanagan, 1978). In the course of the interviews, more than 6,500 "critical incidents" were collected and analysed.

Respondents were asked questions such as, "Think of the last time you did something very important to you or

had an experience that was especially satisfying to you. What did you do or what happened that was so satisfying to you? Why did this experience seem so important or satisfying?" Other questions asked for, "the biggest change in the quality of your life...in the past 5 years," "a continuing source of pleasure to you", "a continuing source of trouble to you."

Through an inductive process of gradual refinement of the answers, a set of 15 categories was formulated which constitute 15 quality of life components. They are:

- A. Material comforts - things like a desirable home, good food, possessions, conveniences, an increasing income, and security for the future.
- B. Health and personal safety - to be physically fit and vigorous, to be free from anxiety and distress, and to avoid bodily harm.

Relations with other people

- C. Relationships with your parents, brothers, sisters, and other relatives - things like communicating, visiting, understanding, doing things, and helping and being helped by them.
- D. Having and raising children - this involves being a parent and helping, teaching, and caring for your children.
- E. Close relationship with a husband/wife/a person of the opposite sex.
- F. Close friends - sharing activities, interests, and views; being accepted, visiting, giving and receiving help, love, trust, support, guidance.

Social, community, and civic activities

- G. Helping and encouraging others - this includes adults or children other than relatives or close friends. These can be your own efforts or efforts as a member of some church, club, or volunteer group
- H. Participation in activities relating to local and national government and public affairs.

Personal development and fulfillment

- I. Learning - attending school, improving your understanding, or getting additional knowledge.
- J. Understanding yourself - and knowing your assets and limitations, knowing what life is all about and making decisions on major life activities. For some people, this includes religious or spiritual experiences. For others, it is an attitude toward life or a philosophy.
- K. Work - in a job or at home that is interesting, rewarding, worthwhile.
- L. Expressing yourself - in a creative manner in music, art, writing, photography, practical activities, or in leisure-time activities.

Recreation

- M. Socializing - meeting other people, doing things with them, and giving or attending parties.
- N. Reading, listening to music, or observing sporting events or entertainment.
- O. Participation in active recreation - such as sports, traveling and sightseeing, playing games or cards, singing, dancing, playing an instrument, acting, and other such activities.

These categories are based upon the most broadly based and extensive testing we are aware of. These categories have several important characteristics which are worth noting. First, they are not strikingly dissimilar from those generated in much smaller samplings, for example those developed by Blake, Weigl and Perloff (1975), and those set out in the conceptual literature (Perloff, 1969; Maslove, 1977b).

The categories or dimensions are also similar to those used in previous Canadian efforts at defining quality of life (Harland, 1973); and bear a strong resemblance to dimensions used in examining quality of life in the Canadian north (Wood, 1974; Riffel, 1975). It seems that both the conceptual and empirical literature are in agreement as to

what are the major dimensions which make up quality of life, and that these are not much different in the north than they are in the south.

The second important characteristic of these dimensions is that there is no explicit theoretical framework linking them together. We expect the researchers were well aware of the close relationships among the various dimensions in terms of quality of life. Marked by its absence in the literature, however, is an explicit theoretical framework and explication of these relationships.

Flanagan, for example, writes that, based on an analysis of his data, "it is believed that experienced social scientists can make objective and reliable estimates regarding an individual's present needs and the effects on an individual's overall quality of life of specific social programs". This approach hardly constitutes a theoretical framework or perspective.

The third characteristic is that this approach is based on differing combinations of objective and subjective data categories. Looking at the various types of data produced it is not always clear which is intended to be what. As we noted above, objective data can be collected from primary sources (e.g. how much beer is sold) and from individuals (how many children do you have?).

Subjective data, however, can be obtained only from individuals. Subjective data consists of two critical questions:

1. What do you think is happening (e.g. are people drinking a lot of beer?)
2. What do you think about what is happening (e.g. are people drinking too much beer?)

What is missing from the conceptualizations of life dimensions noted above, such as Flanagan's, is a theoretical perspective from which to examine how people perceive what is happening with respect to each of these dimensions. As Walters wrote:

"...it is important to assess how people see their condition and how they feel about it". (1972)

The first step is to identify how people see their condition. Only then is it useful to determine how they feel about that condition.

This brings us to cognition theory.

2.1.3.3 Cognition Theory

Cognition is a collective term for the psychological processes involved in the acquisition, organization and use of knowledge, including the organization of subjective experience.

In cognitive psychology, the main presupposition is that any interaction between an organism and its environment changes not only the behaviour of the organism, but also its knowledge or information about the environment: and that this change in knowledge or information may alter not only the organism's present response to the environment but also its future behaviour (Neisser, 1967).

The great advantage which cognitive theory affords, is a theoretical perspective from which to define and examine the individual's cognition of his or her environment across all dimensions of that environment in an organized and consistent fashion.

In the field of cognition theory, and related fields, one can find a host of richly diverse questionnaires and interview approaches to various dimensions of life. For example:

- . Work, including quality of working life, job satisfaction, objective work conditions, job attributes, personal aspiration, life satisfaction (Portugal, 1974; O'Toole, 1974; Seashore, 1974 and 1976; Newton and Leckie, 1977).

- . Housing, including house-specific satisfaction, location-satisfaction, personal aspirations, neighbourhood satisfaction (Mom's, et al, 1976; Angrist, 1974; Maslove, 1977a; Duncan, 1971; Headley, 1972).
- . Recreation, including recreation-specific activities and facilities, needs and aspirations, personal and family well-being, community involvement and affiliation (Staley and Miller, 1972; Butler, 1973).
- . Urban living, including education, neighbourhood life, social and related services, safety and security, financial well-being, housing satisfaction, isolation/affiliation and other dimensions of metropolitan life (Perloff, 1969; Flax, 1972; Urban Affairs, 1975; Maslove, 1977b).
- . Social living, including dimensions of urban life mentioned above with additional dimensions including neighbourliness, helping relationships, alienation and anomie, work and work relations, family well-being (Barker and Schoggan, 1973; Dalkey, 1972).
- . Rural living, a subset of other dimensions with specific reference to the postulated urban/rural dichotomy in lifestyles and life quality and effects of the natural environmental (Gilligan and Wilderman, 1977).
- . Neighbourhood/community satisfaction, including housing, aspirations, isolation/affiliation, alienation and anomie, safety and security, aspirations for oneself, family and children, quality of education, socio-economic status (Smith, 1975; Bach and Smith, 1977; Kain and Quigley, 1969).

Extensive as this list is, it barely touches the vastness of the literature. From this representative list, one can draw two conclusions:

1. no one approach seems to deal adequately with all dimensions of quality of life;
2. no single approach to examining dimensions of quality of life provides a comparable method of describing the individual himself, so that we can relate in a theoretically consistent and organized manner the individual with the way he or she sees specific dimensions of the environment.

Consequently, we can look to these various approaches as additions, supplements or more detailed measures in the context of a coherent and comprehensive methodology, although they do not comprise such comprehensiveness or coherence separately or in combination with each other.

2.1.4 Psychological Scales and Tests

One can make the same comment about psychological scales and tests. Here, too, there is a wide and richly diverse range of scales and tests. One thinks of such widely used instruments as the California Psychological Inventory (Gough, 1958), the Strong Vocational Interest Bank (Strong, 1943), the Kuder Preference Record (Kuder, 1946), the Edwards Personal Preference Schedule (Edwards, 1953), the Omnibus Personality Inventory (Heist and Williams, 1957). These instruments are characterized by an attempt to cover the major dimensions of human personality, and to establish scales by which personalities can be categorized.

These instruments and others like them have several characteristics in common:

- . they possess general agreement as to what constitutes the major dimensions of human personality.

- . they attempt to cover these dimensions in a theoretically comprehensive, coherent and internally consistent way.
- . they provide data from which personality scales can be derived, and personality differences among individuals and classes of individuals can be established and defined.

In addition, of course, there are innumerable personality tests and scales devoted to specific aspects such as achievement, alienation, isolation, learning abilities and aptitudes.

What all these personality tests lack, however, is a perspective from which the dimensions of individual personality can be related to dimensions of the environment in an organized and consistent manner. This brings us to the needs-press model.

2.2 THE NEEDS-PRESS MODEL

2.2.1 Introduction

When Kurt Lewin formulated his postulate that behaviour (B) was an outcome of the relationship between the person (P) and the environment (E): $B = f(P,E)$, there were no expressions in psychology which included both the person and the environment (Stern, 1970).

H.A. Murray's needs-press model established the relationship between person and environment. (Murray, 1938, 1951, 1959) Conceptually, the model is simple and straightforward.

2.2.1.1 Needs

An individual's personality can be characterized in terms of needs. Murray defined needs as, "a force which organizes perception, apperception, intellection, conation

and action in such a way as to transform in a certain direction an existing, unsatisfying situation". (Murray, 1938, p.124). In later years Murray defined a need more simply as, "a state, in short, that is characterized by the tendency to actions of a certain kind." (Murray, 1951, p.435)

The influence of the needs concept has taken strong hold in psychological testing. Salancik and Pfeffer (1977) report, for example, that the needs-satisfaction model has been the theoretical framework "almost universally" applied to understand job satisfaction. And one can find similar examples in other dimensions of the environment.

A characteristic of the needs concept particularly appropriate to this study is that personality is described in terms of behaviour, of activities or actions which people like or dislike. In some of the psychological tests, the researchers become highly detailed in their listing of activities and actions; the activities listed in the California Psychological Inventory run to almost 500 items, for example.

2.2.1.2 Press

The concept of environmental press provides an externalized situational counterpart to the internalized personality needs (Stern, 1970). In the ultimate sense of the term, press refers to the phenomenological work of the individual, the special view which he or she has of the conditions in which he or she lives and the events in which he or she takes part.

A detached observer, such as Flanagan, can describe the situational climate, the roles and relationships, the sanctions, the purposes of various environmental conditions, events and activities - as he does in his paper from a detached position.

The participant, however, the people actually

involved in the life being studied, may consider these conditions, events and activities to have a different significance; they may even fail to recognize the existence of some of these conditions, events and activities, of the various roles and relationships, and the stated purposes.

One must recognize the distinction (Stern, Stein and Bloom, 1956) between the explicit objectives for which people may see being served by the institutional event regardless of the official interpretation (e.g. council represents only certain groups in town). It is this perspective that Walters, Henderson (1974), Land (1975) and others referred to which they spoke of the critical importance of subjective data in assessing quality of life.

There are two different kinds of environmental press. The first is made up of those conditions which represent impediments to a need; conditions which prevent, or inhibit, an individual from meeting a need; i.e. control press. The second kind is the development press; conditions which facilitate the achievement of a need.

2.2.2 Interactions of Needs and Press

Needs and press are complementary concepts; an individual with a need for affiliation - the need to establish close, friendly, reciprocal associations with others - will perceive various dimensions of the environmental press as enhancing or impeding the achievement of that need.

It does not, however, follow that a person with a high need for affiliation will necessarily behave accordingly in all situations. Similarly, it does not follow that a high affiliative press will elicit affiliative behaviour from all people. The inter-relationships are not one-to-one, or trait-by-trait, but complex-by-complex.

In any given interaction, the individual will react to or adapt to the environment in any one of a variety of ways. This adaptation will be a function of the total person and the total environment at the given moment in time.

This does not mean that the adaptation will be unique for any given individual. Testing has shown that there are sufficient similarities in needs configurations among subgroups of individuals that we can postulate the existence of personality strains or types. (Naugle et al, 1956; Scanlon, 1958; Mitchell, 1968). Experience has also shown that persons of the same type or strain may be expected to respond in similar ways to similar environmental press configurations. Similarly, groups of such individuals are likely to be found in any sufficiently congruent environmental niche. (Astin, 1963; Astin, 1965; Hassenger and Weiss, 1966; Hamaty, 1966).

2.2.2.1 Congruence and Dissonance

Consonance can be defined empirically in terms of the actual combinations of needs and press found characterizing such groups of individuals; i.e. they seek out an environmental situation which maximizes congruence with their needs to the extent possible.

Dissonance, therefore, characterizes those combinations of needs and press in which there is an unstable or incongruent needs-press combination. Where dissonance occurs, one might expect actions to lead to a modification of the press, or withdrawal physically or emotionally.

A congruent relationship would be one producing a sense of satisfaction or fulfillment for the participants; a dissonant relationship would produce discomfort or stress (Thistlethwaite, 1960; Thistlethwaite, 1965; Walz and Miller, 1967; deColigny, 1968).

2.3 THE ACTIVITIES INDEX AND COMMUNITY INDEX

To measure needs we propose to use the Activities Index (Stern, 1970); and to measure press we have developed a complementary Community Index.

2.3.1 Activities Index (AI)

The prototype of the Activities Index was constructed in 1950-51 in the Examiner's Office, University of Chicago. It was called the Interest Index after an inventory of Sheviakov and Friedberg (1939). The Interest Index was developed from a pool of over a thousand items describing commonplace daily activities and feelings which appeared to represent unambiguous manifestations of need processes, according to Stern (1970) who was one of those involved at the time. Eight psychologists independently coded these items, and the Index was assembled from items unanimously considered to be diagnostic of specific elements in the need taxonomy.

In the Interest Index, subjects were required to respond to these items by indicating their personal preference or rejection or indecision.

Two assumptions underlie this procedure:

1. characteristic classes of interactions, as conceptualized by need constructs, are reflected in specific activities.
2. the manifestation of interest in these activities in an index to actual participation in such interactions.

After several revisions, the Interest Index was employed in a number of student personality assessment studies at the University of Chicago (Stern, Stein and Bloom, 1956). These studies suggested the existence of unique configurations of needs as measured by the Index for groups of students in various programs. The studies also suggested correspondence between these Index configurations and

independent analyses of Rorschach, TAT and Sentence Completion protocols. And finally, the studies suggested meaningfulness in the needs patterns associated with each group.

In 1953 the Interest Index was renamed the Activities Index (AI) and shortened to 300 items. Also, the "undecided" response choice was removed; the two-choice format yielding essentially similar results. The subject is required to indicate only if the item describes an activity or event he or she would like, enjoy or find more pleasant than unpleasant as opposed to something he or she would dislike, reject, or find more unpleasant than pleasant.

The AI in its various forms has been tested extensively in a wide range of situations: children and aptitudes (Glass, 1957; Briggs, 1958; Chilman, 1959); medical professions (Moore, 1961; Wolarsky et al, 1961; Stern, Scanlon and Hunter, 1962; Leander, 1968); black subgroups and ethnic groups (Pace, 1961; Willie and Wagenfeld, 1962; Brewer, 1963, Kernakian, 1966); the military (Grady, 1964; Fishburne, 1967); the Peace Corps (Stern, Cohen and Redleaf, 1966); juvenile delinquency (Stern et al, 1966). In addition, there are dozens of studies using the AI and related instruments for students and teachers in highschools, colleges and universities (Stern, 1970; Mothers and Children, (Stern et al, 1969. The AI was also used with Papagos Indians (Williams and Stern, 1957). Of particular interest is the study carried out in remote industrial sites (Richman and Stern, 1969).

The evidence from these tests demonstrates a strong degree of reliability for the AI for a variety of different population subgroups, and within these subgroups strong cross-cultural reliability. We had considered that the use of the instrument with Papago youth might justify its use with natives in our study areas; however, a pilot of the AI with natives here demonstrated that the AI would not be adequate.

Parallel forms of the AI have been developed in French, German, Polish and Papago.

The standard or long form of the AI is based on 30 scales. These are set out and described in Appendix 1. These 30 scales have a structure represented by 12 first-order factors arranged in a circumplex: self assertion, audacity-timidity, intellectual interests, motivation, applied interests, orderliness, submissiveness, closeness, sensuousness, friendliness, expressiveness-constraint, egoism-diffidence.

There are also four second-order factors called "areas": achievement orientation, dependency needs, emotional expression, educability. The AI short form which we propose to use has 91 items, and the 12 factors and four areas noted above.

The AI scores and scores from the environmental press instruments (see below) can be combined to generate five composite culture factor scores.

Figure 1 (Berger, 1970) demonstrates how the AI data can be illustrated. First, it should be emphasized that the AI was designed as a measurement instrument for testing individuals. An analysis of the total sample illustrated in Figure 1 (in this case female undergraduates) reveals that respondents tend to fall into one of four "profiles". The differences in frequency distribution among the four profiles is noticeable. Out of the 124 female respondents, about two-thirds fall into one of two categories, and less than 10 percent fall into group 2. This provides strong evidence of the frequency distribution of the various needs groups in the general college population - and gives some indication of where priorities might lie.

Also very noticeable, is the extent of the differences in needs among the various groups. One group, for example, scores very high in self-assertion, and another

scores so low it is off the scale. What is particularly significant in this particular analysis is that three of the four groups of female undergraduates score below the norm in Intellectual Interests.

2.3.2 Environment Press Indexes

The first environmental press instruments developed were restricted to the description of different types of academic settings. These included the Classroom Environment Index; the College Characteristics Index, long form (which we had used in a study of a Canadian university) and short form; Elementary and Secondary School Environment Index; Evening College Characteristics Index; Highschool Characteristics Index; and the Organizational Climate Index.

The College Characteristics Index (CCI) was the first of these to appear (Pace and Stern, 1958). By 1970, the CCI had been completed by well over 100,000 American college students at hundreds of American colleges (Stern, 1970). At the time of his death Stern was working on the development of a neighbourhood climate index; some preliminary formulations of this Index were distributed to the Clients at the outset of these studies.

Each of these Indexes contains items which provide the complementary environmental press to the needs items represented in the AI. The Order variable will serve to illustrate the complementary structure of the AI with the corresponding environmental press index.

Order may be defined briefly as, "a prevailing tendency towards the compulsive organization of the immediate physical environment, manifested in a preoccupation with neatness, orderliness, arrangement, and meticulous attention to detail". (Stern, 1970, p.15).

The magnitude of this variable as a personality need can be inferred from the number of preferences the

FEMALE UNDERGRADUATES : FOUR PERSONALITY PROFILES

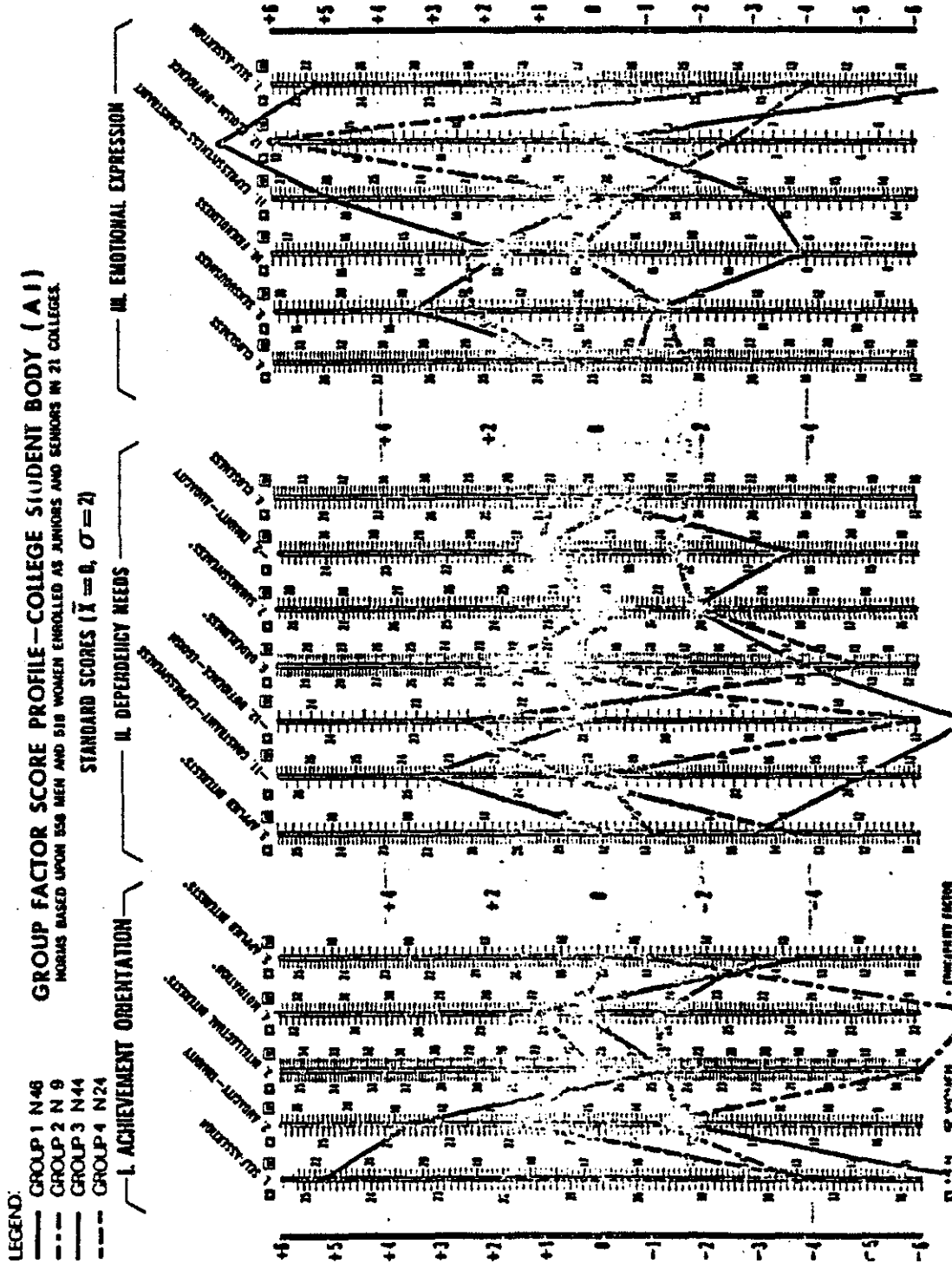


FIGURE 1

Activities Index: Group Factor Score Profile: Female Undergraduates

the respondent expresses among such AI items as, "washing and polishing things", "keeping an accurate record of money I spend", and "arranging my clothes neatly before going to bed".

The individual's perceived Order press can be inferred from the respondent's agree/disagree choices among such items (CCI) as, "student papers and reports must be neat", and "attendance is usually taken in each class".

The magnitude of the perceived Order press can be inferred from the number of respondents (in this case, students) who respond in similar ways to these items.

Figure 2 (Berger, 1970) demonstrates how the results of the environmental press instrument (in this case the College Characteristics Index) can be illustrated. Generally, the small sample of graduate respondents at this institution did not perceive the environmental press to be strongly supportive of academic achievement, self-expression, aspirations or group life.

2.3.3 Needs-Press Interaction

Using a principal components-equamax analysis (Saunders, 1960, 1962, 1969), twelve personality factors and eleven environmental factors were extracted. The matrix of correlation was then refactored to obtain a clearer picture of the basic structure. This analysis yielded four second-order personality factors (Figure 1), and three environmental dimensions (Figure 2).

Figure 3 demonstrates how the interaction between needs and press can be illustrated. In this case, the interaction of needs-press pertains to only one needs profile: the so-called vocational group of male and female undergraduates: the dotted line represents perceived press.

The actual meanings of the various terms are less important than the discriminatory capability which this illustration generates between the various needs dimensions

MALE AND FEMALE GRADUATES ENVIRONMENTAL PRESS PROFILES

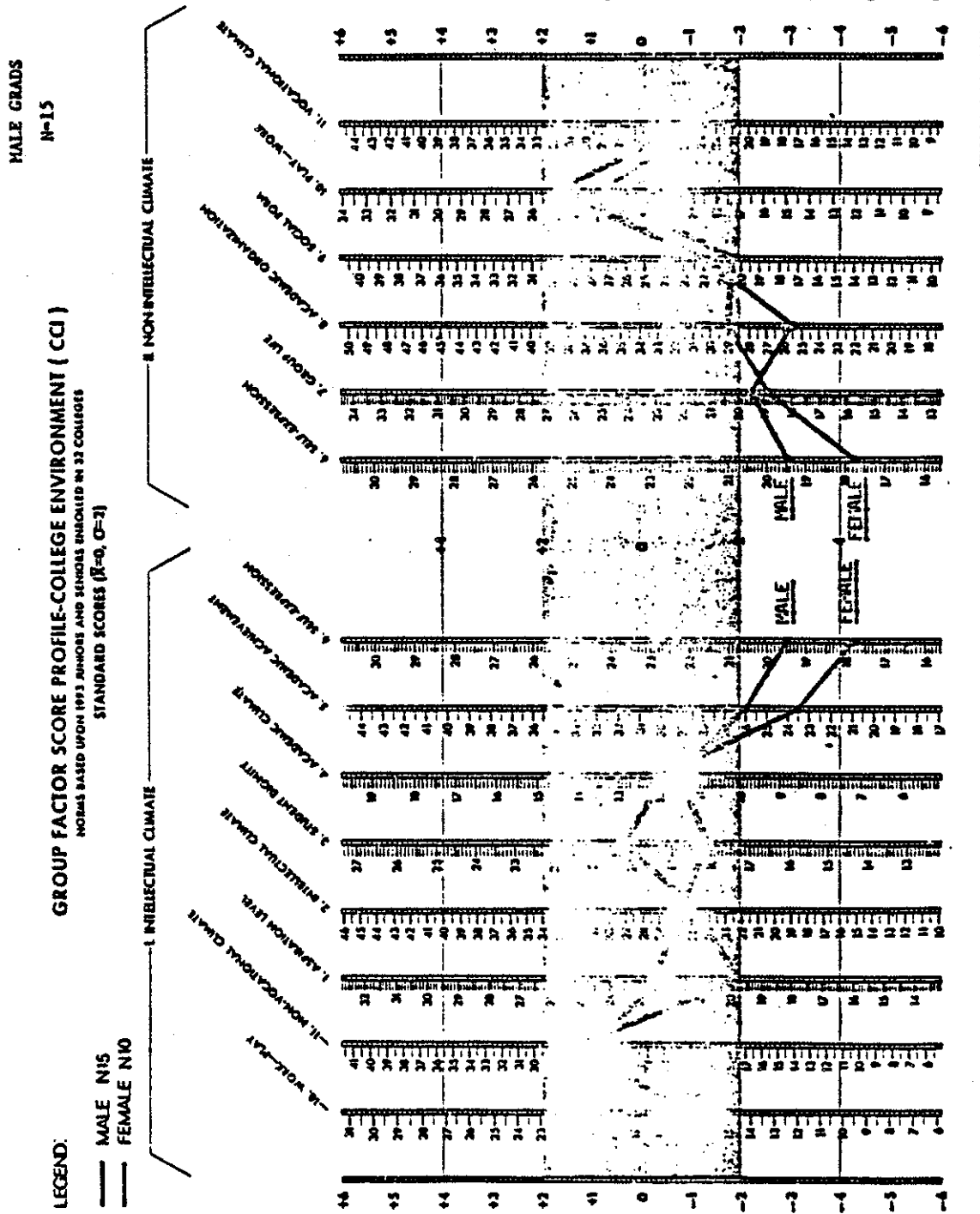


FIGURE 2 College Characteristics Index: Group Factor Score: Male and Female Undergraduates

GROUP FACTOR SCORE PROFILE--COLLEGE CULTURE (AI x CC)

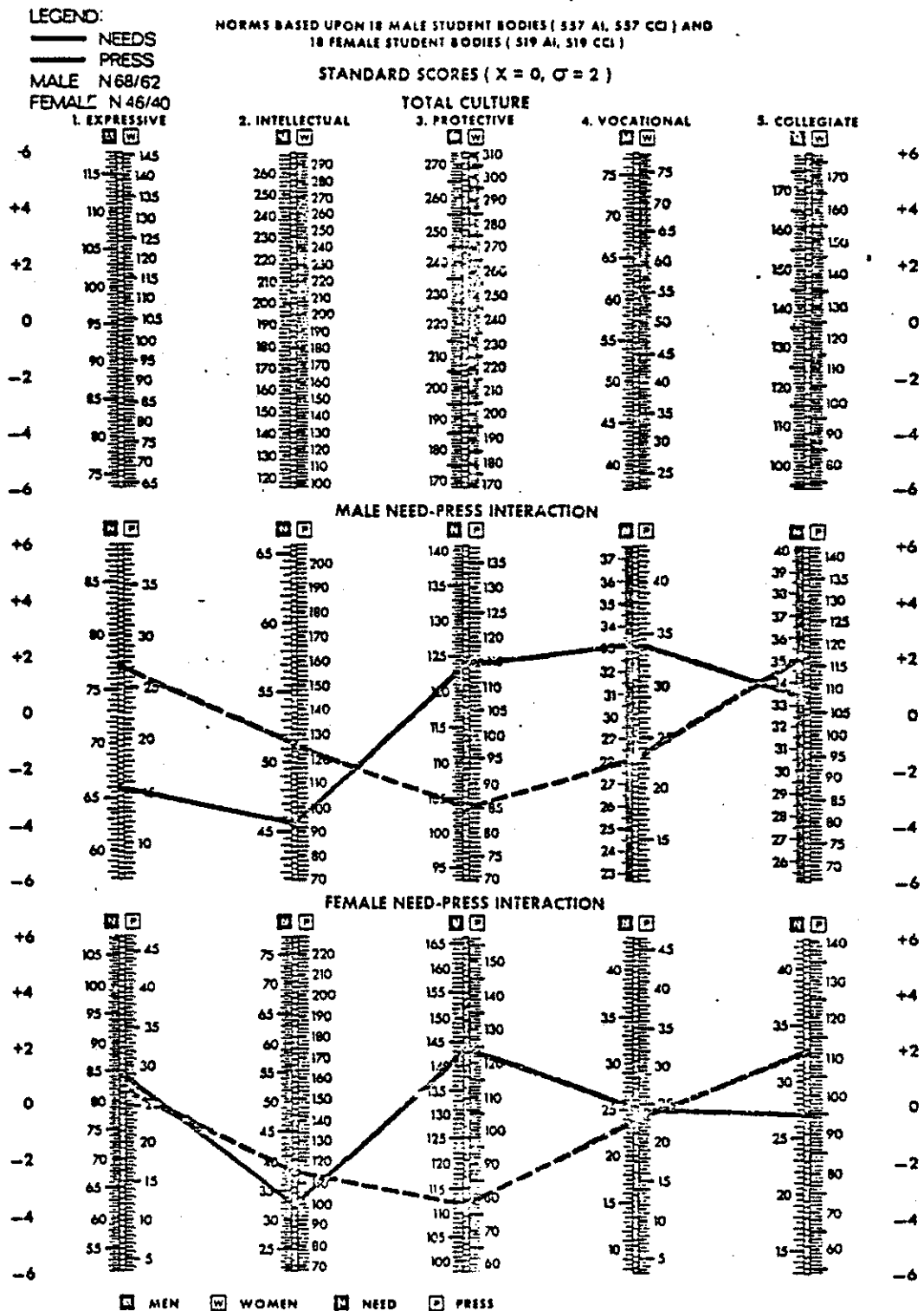


FIGURE 3 Needs-Press Interaction

of this particular group of respondents, and the respondents' perceptions of the extent to which the various dimensions of the environment meet each of these needs. In this particular case, we can see that the women consider the vocational press to be congruent with their vocational needs; the men, on the other hand, perceive the vocational press to be much less than they need. Both men and women evidence a strong need for a protective dimension and find the environmental press much less than required.

At a glance, therefore, one can identify those dimensions of needs-press interaction which may be worthy of detailed examination - either on an item by item examination of the press instrument, or by the use of complementary measures and studies.

2.3.4 Conclusions

At the outset of our discussion of questionnaire and interview survey methods, we set out the criteria by which we would evaluate the various methods available. These were:

1. The individual. The methodology must develop a reliable and detailed portrait of the individual respondent with respect to:
 - demographic characteristics
 - attitudes and values
 - personality

The methodology must provide explanatory as well as descriptive data.

The methodology must also provide for individual respondents to be aggregated into groups, such as family, work cohorts, neighbourhoods, etcetera.
2. Environment. The methodology must encompass a variety of different dimensions of the environment, such as:
 - natural and built

- work
- school
- entertainment
- recreation

The methodology must provide for the combination of these environmental dimensions into broader dimensions dealing with such factors as:

- affiliating/isolating
- achievement/failure
- expression/restraint

3. Interactions between person and environment.

The methodology must contain the capability of identifying the "fit" between the individual and specified dimensions of the environment. By tracing changes in this fit, one can build a picture of personal adjustment in changing social conditions, and provide a basis for tracking sources of satisfaction/dissatisfaction.

4. Theoretical comprehensiveness and coherence.

The methodology must be comprehensive as possible, encompassing all relevant dimensions of person and environment. The methodology should also allow for "add ons"; adding on additional measures where more detailed examination is required.

Our conclusions from a review of the state of the art is that the needs-press model is the most appropriate theoretical perspective to take; and that the methodology of the Stern Indexes should be used.

Our reasons are:

1. The needs-press model meets the criteria set out above more completely and effectively than any of the other options we examined.

2. The Stern Indexes are well established, tested and found reliable, and provide much of the desired information across relevant dimensions of the person and environment.
3. The operations of the Stern Indexes are established. Computer programs are in place, and would require only modest revisions in order to encompass a community press index. This provides us with very high savings in time and cost.
4. The Indexes are compatible with a wide variety of potential add ons; for example, we propose an extensive questionnaire on base demographic information (see Background Paper: Base Demographic Questionnaire); an extended questionnaire and interview (see Background Paper: Extended Questionnaire and Interview); an examination of work (see Background Paper: Quality of Working Life and Job Satisfaction), as well as other instruments. We would also expect to relate the findings from the time-use diaries with the needs-press indexes.

Findings from these add on measures can be correlated with the AI, the environmental press instrument, and with the needs-press profiles to provide a wealth of highly detailed and issue-oriented information with respect to policy and programs.

3. THE COMMUNITY INDEX (CI)

The next step was to develop an environmental press instrument - the Community Index (CI).

3.1 ASSOCIATES .

This work was carried out under the coordination of Dr. Earl Berger, study director. Detailed design was the responsibility of Dr. David Kleinke, a colleague of the late Dr. Stern, and currently head of Test Scoring and Evaluation Services, Syracuse University which is responsible for the use of the Stern Indexes. On-going evaluation of the CI instrument was carried out by members of the study team; Dr. Tim Burton, Dr. Wayne McVey, Dr. A.G. Scott and Dr. Zonia Thompson.

In addition, a special monitoring committee was established, of Clients and interested departments:

- . Alberta Oil Sands Environmental Research Program - Human System
- . Northern Development Branch, Alberta Business Development and Tourism
- . Alberta Bureau of Statistics
- . Alberta Environment
- . Alberta Recreation, Parks and Wildlife
- . Alberta Social Services and Community Health

An external evaluation was carried out by Dr. Ben Barkow of Behavioural Team.

3.2 PROCEDURES

The CI was developed through essentially the same procedures used in the development of the other environmental press indexes (Stern, 1970).

Several processes went on concurrently. In 1969, Stern (Berger, 1969) had prepared a memo outlining major components of a community environmental press index. These included:

1. People, including friends and neighbours, work associates, people providing goods and services, public officials including elected and staff, police, teachers, social workers.
2. Places, including neighbourhood, streets, stores, public buildings.
3. Rules and regulations, including dimensions such as work, leisure, police and courts, public services, political, media.

This typology was subsequently revised, but it served at the outset of the study to establish a framework within which to start.

Another framework was provided by the categorization of base information set out in the Institutional Information System (see Background Paper). The major categories included:

1. Population
2. Income /Consumption
3. Commercial Services and Business
4. Education
5. Health
6. Work and Employment
7. Recreation and Leisure
8. Public order, Crime and Justice
9. Local Government

The intention here was to generate, to the extent feasible, subjective data which would complement and enrich the objective data gathered from institutional sources.

The third framework was provided by the Activities Index itself. It contains 30 scales of personality need composed of 91 items. It was necessary, therefore, to develop comparable scales in the CI made up of items which would match those in the AI.

We began an extensive search of widely diverse information sources to obtain information from which relevant

CI items could be generated. In this search we were looking for items which would be applicable to any form of human settlement; which would apply to conventional communities as well as to northern, isolated resource communities; which would apply to urban as well as rural and agricultural areas; and which would tap the significant environmental press dimensions in each.

Major sources of information included:

- . Media. An on-going review was made of the newspapers in the study areas.
- . Interviews. Interviews were carried out with about 40 informed persons in the study areas with respect to major issues and concerns which might be tapped.
- . Resource community literature. An extensive review of the literature was carried out to identify major dimensions which should be tapped. Key sources were Riffel (1975), Larson (1977) and Van Dyke (1975, 1977).
- . General literature. The review of the general literature was both broad and selective. It ranged from Wirth (1929) to Flanagan (1978), and included such sources as Nisbett (1953), Morris and Rein (1968), (Harland, 1971a, 1971b, 1972), Campbell and Converse (1972), Dalkey (1972), Portigal (1973a, 1973b, 1974, 1976), Campbell, Converse and Rodgers (1975), Andrews and Withey (1976), Davis and Taylor (1972).
- . Questionnaires. Apart from those included in the studies noted above, a number of specific questionnaires were reviewed. Among the most useful were the study of the Quality of Life in Alberta, (ABS, 1977); Family Health Interview (Health and Welfare Canada, 1977); Edmonton Area Study Questionnaire (University of Alberta, 1977b); and the Migration Study carried out by the University of Alberta for Alberta Advanced Manpower and Education (University of Alberta, 1977a).

As a result of this search, it was possible to clarify more precisely some of the sub-dimensions which might be tapped. This was a long task accompanied by many revisions. The following are some of the revisions made during the latter

stages of the CI design development. They are not complete or in any order of priority and could be reorganized under different headings:

- . Employment
 - employment opportunities
 - career opportunities for youth
 - opportunities for women
 - success orientation

- . Work
 - management attitudes
 - organization/disorganization
 - safety
 - work ethic

- . Community
 - pride
 - organization
 - uniqueness/ordinariness
 - status influence of community vis-a-vis other communities, and the province
 - public participation and involvement in community affairs
 - progress vs traditionalism
 - stability vs change

- . Local government
 - leadership
 - priorities
 - competence
 - objectives and orientation
 - provision of services
 - maintenance of public facilities
 - attitude towards the public

- . Education
 - attitudes to education
 - attitudes to teachers
 - adequacy of educational services
 - educational orientation of schools

- . Media
 - fairness
 - independence
 - outspokenness
 - skew in reporting priorities

- . Recreation and leisure
 - outdoor
 - indoor
 - social/private
 - active/passive
- . Religiosity
 - existence of
 - types (communal/private)
 - public attitudes towards
- . Tolerance/discrimination
 - ethnic
 - religious
 - political
- . Culture
 - community orientation
 - diversity
- . Family and children
 - good place for family
 - good place for children
 - entertainment opportunities
 - parental aspirations for children
 - social life
 - role of children in home
 - family cohesiveness
- . Social responsibility (public officials, private citizens)
 - helping others
 - caring
- . Social
 - stratification
 - equalitarianism
 - stability
 - friendliness
 - neighbouring
 - isolation
 - aggression (including personal safety)
- . Health
 - facilities and services
 - personal maintenance and health
 - alcohol abuse and smoking

One can reorganize these and related dimensions in different ways to establish other dimensions.

A pool of 360 environmental press items was drawn up: twelve environmental press items were drawn for each of the 30 AI scales. During April and May these items were piloted with the study team, with the Clients' monitoring committee and at large. Some items were dropped, others revised, and the piloting procedure repeated. By June, a list of 180 potential items had been established for pre-testing: six environmental press items for each of the 30 AI scales.

These environmental press items were drawn up to meet specific criteria:

1. Each item had to refer to some explicit dimension of community life.
2. Each item had also to refer to one and only one AI needs scale: thus, for example, needs for winning success through personal achievement (n-ACH) are matched with complementary press items such as, "People who want to work can have a good career here".
3. Each item had to be easily readable and understandable.
4. Each item had to be applicable to any community, urban or rural, of any size in any location, with any form of government; accordingly, it had to avoid specific regional or provincial references, or references to "this town", "this city", or to "city council", "town council", or to "city officials", "town officials".
5. Each item had to be socially acceptable and not give offence because of its wording.

The 180 items were distributed in random order in the questionnaire in preparation for pre-testing. The 180 items, matched to the specific needs scales, can be found in Appendix 2.

3.2.1 Response Artifacts

One of the tasks involved in designing a questionnaire is to avoid building in expectations, patterns or word sets which will influence the respondent to give certain replies or in other ways distort his or her answers.

The following is a brief review of some of the major response artifacts and how they have been minimized in the CI.

3.2.1.1 Acquiescence response set

There is a tendency for respondents to wish to agree with the interviewer or with what is perceived as the implied expectation in the question. An affirmative response may be perceived as socially more desirable than a negative response (Salancik and Pfeffer, 1977).

As we noted above the 180 items in the CI are grouped in sets of six; six items for each of the 30 AI needs scales. Each of these sets of six items is divided into three questions with an affirmative connotation, and three questions with a negative connotation.

If we take the Achievement (n-ACH) items as an example (Appendix 2, No. 2), we can see that, if the respondent feels it to be socially desirable to stress the achievement press in the community (assuming he or she would determine that the items in fact dealt with Achievement), he or she would have to respond affirmatively (agree) to three questions and negatively (disagree) to three questions. This balance compensates for any tendency there may be among respondents for acquiescence.

3.2.1.2 Projection

Experience suggests that conscious faking of responses is of minimum importance in an environmental press instrument (Stern, 1970). It is possible, however, that the responses a subject gives to items about his or her environment may be a more accurate reflection of the subject's own needs

than they are of the surrounding environment. In other words, the subject is projecting.

McFee (1959) carried out a detailed examination of AI and College Characteristics Index (CCI) responses by a group of subjects. She found minimal correlation between the personality profile established in the AI and the subject's responses to the CCI. In the few cases where there was a relationship, these occurred where the respondent had had no personal experience with that dimension of the environment. In these cases, the CCI responses were more varied and there was some correlation with personality need; however, the total variation was minor and we expect the same situation to obtain with the CI.

3.2.1.3 Consistency effects

Consistency effects come from an individual's awareness of his responses to previous questions. Aware of the way he or she has answered one question, the respondent organizes the subsequent answers to ensure consistency (Salancik and Pfeffer, 1977). The information the respondent has provided to one question, constitutes salient information for the next questions, and provides a logical, or psychological, context for answers to subsequent questions. This is sometimes called the Socratic effect. The problem will not occur in the CI because there is no logical progression from one question to another; and because of the wide range of topics covered randomly, and the distribution among positive/negative response choices.

3.2.1.4 Self-esteem

This is one of the most troublesome response artifacts to deal with. People are often reluctant to provide responses which threaten their self-esteem or make them look wrong or foolish. That seems to be one of the reasons why people tend to score at the mid-point or higher on global life satisfaction scales (ABS, 1977); few people like to admit they are doing less than satisfactorily. This will not occur in

the CI because there are not items involving measures of self-esteem or satisfaction.

3.2.1.5 Demand Characteristics

This occurs when the respondent feels that the researcher has certain explicit or implicit expectations with which the respondent is influenced to conform. The classic example is the interviewer who wants to talk about "problems" in the community; the respondent then feels impelled to talk about "problems". The extent to which these problems are real or of importance to the respondent becomes secondary.

The CI refers only to characteristics, activities and conditions out of which it would be difficult to infer expectations, because none have been built in. The one possible exception is that the respondent may conclude that the CI items constitute the sum of what he or she will be allowed to say about the community. Given the number of instruments to be used, we doubt this will be of any significance in response distortion.

3.2.1.6 Priming

In priming, the respondent's attention is focussed on one piece of salient information in organizing his answer, at the expense of the other information in the question (Langer and Abelson, 1973). The effect is similar to the consistency effect. It typically occurs in attempts to measure some realm of satisfaction in a direct way. A typical example might be, "What is most challenging about living here?" The respondent is thus primed to think about living in the community in terms of challenge, and his answers to subsequent questions dealing with satisfaction will tend to focus on the challenge aspect, because that is how the dimension of satisfaction has been presented.

The CI contains no such questions. The respondent, even if he or she thought there was priming, would be hard put to find items in the CI to which the appropriate primed response could be made.

3.2.2 Pre-Test

3.2.2.1 Factor Analysis

The principal purpose of factor analysis is to simplify the description of data by reducing the number of necessary variables, or dimensions. A factor is a mathematically determined combination of variables. For example, in the case of the Activities Index, the factors are made up of various sets of the 30 scales in combination with each other. The first factor, Self-Assertion, is made up of four of these scales. Instead of having to deal with each of these four scales, we can deal only with one factor, Self-Assertion, without sacrificing any of the essential information contained in the four individual scales.

Factors typically are identified by taking all the answers to a set of items and setting them out in a correlation matrix. Those items which are highly correlated with each other are taken as representing the same factor.

A second-stage factor analysis can then be carried out on the factors themselves to establish a smaller number of "areas".

With respect to the development of the Community Index, once the 180 items had been identified and piloted, the next step was to reduce the number of items to about 90 by means of factor analysis.

3.2.2.2 Pre-Test Procedures

In order to carry out the factor analysis with a high degree of reliability, it was mathematically necessary to obtain 1,080 responses to each of the 180 items on the

Community Index. Consequently, arrangements were made to carry out 1,080 interviews in Edmonton to administer the draft Community Index.

A letter was sent to the Hon. Cecil Purves, Mayor of Edmonton, informing him of the pre-test and offering the test results to the City when they become available.

For the purposes of the factor analysis, it was not necessary to use statistically reliable proportional sampling techniques. It was necessary only that the sample include a reasonable cross-section of the population.

Interviewers were hired, many of them on referral from the Population Research Laboratory, University of Alberta. Staff received a full day's training program. This included a review of the purposes of the study, review of the information package to be used as part of the interview, instructions on completion of the items, coding of the answer sheets, and role playing. In addition, staff debriefing sessions were held regularly during the 20 days of interviewing. The interviews were carried out in the last half of June and into the first week of July, 1978.

The city was divided into 12 sections and one interviewer was assigned to each section. The interviewer was free to administer the draft Community Index to any households in the designated section, keeping in mind the need to maintain a broadly representative sample.

Along with the draft Community Index, Appendix 3, the interviewers also administered a Base Demographic Sheet, Appendix 4. The demographic items dealt with:

- . sex of respondent
- . age of respondent
- . length of residence in Edmonton
- . occupation
- . total personal income in the previous tax year
- . section of the city in which instrument was administered
- . name and phone number of respondent

In addition, respondents were asked for comments on the interview procedures, the instrument, and possible improvements.

Quality control of the interviewing procedures was maintained through the debriefing sessions, and through information gained by the interview administrator from a random telephone sample of persons who had completed the instruments.

Control of the sample was maintained by daily monitoring of the demographic information contained in the completed instruments. Estimates of the age and sex distribution of the Edmonton population for 1976 had been obtained from the Research and Long Range Planning Branch, City of Edmonton Planning Department. The age and sex distribution of the respondents was compared to the city-wide distribution. A separate check was maintained on income; although we had no recent income distribution information, it was important to ensure capturing sufficient numbers of both low income and high income respondents. In the event, interviewers experienced low response rates in high income areas.

Because much of the work was done during the day when men were absent from the home, it was necessary to seek out groups of men; city firehalls were a useful place. Also, we found few elderly persons in the households, and so visits were made to senior citizens' homes and nursing homes. In all, 1,111 questionnaires were completed satisfactorily.

The major demographic characteristics of the respondents follow: (see table on next page).

Table 1. Sex, Age and Income Distribution of Pre-test Respondents

<u>City of Edmonton*</u>		<u>Community Index Pre-Test*</u>	
Sex		Sex	
Male	50%	Male	49%
Female	50%	Female	51%
Age		Age	
16-24	26%	16-24	25%
25-40	31%	25-40	36%
41-50	15%	41-50	31.5%
51-65	17%	51-65	11%
66+	10%	66+	13%
		Not Designated	2%
<u>Income</u>			
Less than \$6,000	N/A	Less than \$6,000	29%
\$6,000 - \$11,999	N/A	\$6,000 - \$11,999	19%
\$12,000 - \$17,999	N/A	\$12,000 - \$17,999	14%
\$18,000 - \$23,999	N/A	\$18,000 - \$23,999	12%
\$24,000 - \$29,999	N/A	\$24,000 - \$29,999	4%
\$30,000 - \$35,999	N/A	\$30,000 - \$35,999	1%
\$36,000 plus	N/A	\$36,000 plus	1%
No income	N/A	No income	15%
No response	N/A	No response	6%

* Percentages may not total 100% because of rounding.

Source: Kennedy et al, 1978, Edmonton Area Series Report No. 7 Initial Findings from the 1978 Edmonton Area Study.

3.2.2.3 Scoring

The 1,111 answer sheets, with the demographic information coded onto them, were sent to the Centre for Instructional Development, Test Scoring and Evaluation Services, Syracuse University for item analysis and factor analysis. The answer sheets are designed for machine reading by optical scanner. The Centre owns the computer programs necessary for the factor analysis along Stern's 30 scales.

At the time of writing this Background Paper, the Centre has carried out preliminary steps to trim the 180 items to about 90 items. The bases for these steps are both statistical and experiential.

To provide the statistical information, a number of analysis are being performed. The first step is a conventional item analysis, yielding proportions of subjects agreeing or disagreeing with each statement, and the correlation between each statement and its scale.

Next follow a series of factor analysis to confirm the initial factors and to identify those items which correlate highly with one and only one of the initial factors identified in this analysis. In this process, a number of items will be dropped because they do not correlate strongly enough to any of the factors.

The remaining items will be trimmed to yield a total of about 90. This trimming will be based upon the experience gained during the Pre-Test, taking into account the comments of respondents, interviewers and study team members. There will also be an attempt to balance the "agree" and "disagree" proportions. In this process of trimming, account will also be taken of those dimensions of the community which it is considered important to retain in the Community Index.

These 90 items, plus or minus several, will then be subjected to a further factor analysis using the Pre-Test results in order to confirm the factor structure and to derive norm-like information. Area scores will then be computed.

4. LONGITUDINAL STUDY INSTRUMENTS

In this section we set out the instruments we propose to use and their inter-relationships. Because of the detailed discussion which has preceded this section, and because much of the detailed information is available in subsequent Background Papers, in this section we will only summarize our approach with respect to the instruments. An explanation of the operations associated with these instruments can be found in the appropriate Background Papers and in the foregoing Report.

4.1 COMPLEMENTARY INSTRUMENTS (Main Sample)

We noted at the outset of this Background Paper that one of our criterion in the selection of a core methodology was its ability to accommodate complementary measures: (a) to extend the scope of the examination beyond the range of the core instruments; and (b) to provide more detail than is provided in the core instruments.

Because of their comprehensive nature, the Activities Index and the Community Index are not able, at the same time, to provide the depth of detail which might be required for each dimension of personal, family, social and community life, and of the interactions among these various dimensions. Consequently, it is necessary to provide additional instruments for the main sample. For a detailed description of each, consult the appropriate Background Papers.

4.1.1 Needs-Press: Activities Index and Community Index

The rationale for and construction of these instruments is described in the preceding sections of this Background Paper. It is clear that it will be necessary to draw out additional information with respect to specific dimensions which are covered in the AI and the CI, but which require more detail for the purposes of policy and program review and evaluation.

We have reviewed the literature extensively, consulted with interested Government departments and offices, and met with key people in the study communities, as part of the process of identifying which dimensions and interactions require special attention. What follows is a description of the instruments selected and the major dimensions they are intended to cover.

4.1.2 Base Demographic Questionnaire

Both the AI and CI answer sheets contain space for the machine reading of about 15 different places of demographic or other information about the respondent. Given the range and complexity of topics which must be covered as part of the identification of the respondent, this was considered to be inadequate. Consequently, a separate instrument was established - the Base Demographic Questionnaire.

The Base Demographic Questionnaire is drawn largely from standard items and measures such as those used by Statistics Canada and Alberta Bureau of Statistics in order to provide a basis for comparison with other communities in the province and elsewhere. It includes the customary items with respect to demographic characteristics and socio-economic status; including origin, marital status, housing characteristics and tenure, education, occupation by sector and task, income, and others.

The Base Demographic Questionnaire also contains a number of items more directly pertinent to resource communities; although they would also be relevant in most Alberta communities given the growth characteristics of these communities. The items deal with:

- . place of residence of spouse
- . presence of physically and emotionally handicapped persons in household (to assist in preparing an inventory for Alberta Social Services and Community Health as a basis for forecasting demands for services)

- . migration history, including province and country of previous residence
- . residency plans
- . occupation in resource-oriented sector
- . normal hours of work and of overtime
- . shift work.

Each member in the household over sixteen years of age will be given a Base Demographic Questionnaire to fill out so as to ensure as complete a picture as possible of the dwelling units and their occupants (see Background Paper: Base Demographic Questionnaire).

4.1.3 Quality of Working Life: Job Satisfaction

The importance of the work dimension is great in any community; in a resource community it looms particularly large. The study team undertook an extensive review of the job satisfaction/quality of working life literature and experience. The objective was to find a measure, or measures, which would be applicable to workers in both large and small work environments, managerial, skilled, semi-skilled and unskilled.

Highly detailed and finely structured instruments would have been useful in the larger organizations, but potentially inappropriate in the small work situations. Conversely, the more general instruments would have been applicable in the smaller work situations but too broad to be useful in the larger organizations.

Eventually, it was decided to use the Job Description Index (JDI). It has been widely used in a range of work situations, at all levels in the hierarchy. It produces reliable and useful results; there is an extensive literature associated with it; and, it is easy to administer and takes only a few minutes to complete.

The JDI uses an adjectival checklist to cover the following dimensions or areas of work:

- . work
- . opportunities for promotion

- . pay
- . people on the job
- . supervision

The JDI will be given to each member of the household who is employed outside the home. A number of supplementary items related to work are included in the Extended Questionnaire.

The JDI is based on the cognitive approach and consequently is readily congruent with the AI and CI (see Background Paper: Quality of Working Life: Job Satisfaction).

4.1.4 Extended Questionnaire

Apart from the work dimension, there are a number of other dimensions which need to be tapped to some degree of detail beyond that provided by the AI and CI.

The various topics in summary form, are:

- . mobility and migration
- . housing and housing satisfaction
- . recreation and leisure
- . physical environment; landscape and climate
- . work
- . education
- . crime, safety and public order
- . health and personal services
- . facilities for children and the elderly
- . cost of living and expenses
- . general health and well-being
- . local government

A number of these topics were requested by various departments to assist them in their own planning. For example, Alberta Recreation, Parks and Wildlife requested detailed information on recreation activities and patterns to assist it in its long-term planning for the study areas; AOSERP is planning a separate study of the effects of the physical environment upon resource community residents and

our study was considered a useful place to gather preliminary information; Alberta Business Development and Tourism was concerned about all aspects of the local economy, and a number of these topics, including cost of living and expenses, were considered appropriate for inclusion in this Questionnaire.

Alberta Social Services and Community Health expressed interest in a number of topics. They asked for detailed information on the demand for and use of social and related services and facilities. More generally they, like AOSERP, were interested in dimensions of personal, family, social and community life which might manifest themselves in stress, disorder, deviance, breakdown to the extent that intervention would be required on a preventive, maintenance or therapeutic basis.

In addition, we were interested in tapping not only perceptions of the community, but also aspirations, expectations and disappointments associated with mobility, migration, life in a resource community, and exit. The literature and experience demonstrate conclusively that these can have an influential bearing on perceptions of quality of life and community satisfaction.

We also wished to give respondents the opportunity to tell us what is important to them about life in a resource community.

The Questionnaire also has a "confidential" section which can be sealed by the respondent. This deals specifically with various aspects of deviant and criminal behaviour.

We wish to emphasize that the Extended Questionnaire is long because it covers such a broad range of topics. Despite its scope and detail, however, it would not be adequate on its own. The reason is that it is directed towards specific topics from differing perspectives, and does not have the unified theoretical perspective and coherence which is required:

see above our discussion of Criteria (2.1.3.1). This perspective and coherence is provided by and through the needs-press Indexes and their interactions. The items in the Extended Questionnaire are compatible with the AI and CI.

The Questionnaire will be administered to up to three persons in the dwelling unit over the age of 16; a modified version will be available for teenagers living with their families (see Background Papers: Extended Questionnaire; also Social Deviance and Children and Education).

4.1.5 Time-Use Diaries

Both the Activities Index and the Extended Questionnaire deal with behaviour. In the AI, however, specified behaviour are listed to which the respondent signifies a positive or negative preference. In the Extended Questionnaire, only certain types of behavioural descriptions are requested, mainly those associated with recreation and leisure.

It is considered important to develop a more comprehensive and detailed description of the actual activities carried out by respondents, the location of those activities, and persons associated in the activities. To be useful, this description must be provided for each season and for each day within a week for the given season. Respondents should also be given the opportunity to express their views regarding these activities.

This information can be related to the needs-press Indexes, and also to the Extended Questionnaire, to develop a more fully rounded picture of what people do in resource communities. This information is not currently available.

Respondents will be distributed in seven sets for the seven days of the given week in the season. Each set of respondents will be asked to complete the Diary for that day. The base time unit is the hour, but respondents will be asked to detail activities encompassing five to ten minutes.

Where patterns emerge, we expect to correlate these with indicators of job and community satisfaction/dissatisfaction, and with personal adjustment (see Background Paper: Time Use Diaries).

4.2 SUPPLEMENTARY INSTRUMENTS (Special Samples)

The instruments described above are intended to be administered to the main sample. Two important groups, however, require special attention:

- . local businessmen
- . school children

We discuss each in turn.

4.2.1 Local Business Economy in Resource Communities

Both Alberta Business Development and Tourism and AOSERP have expressed a special interest in a more detailed understanding of the dynamics of the local economy in a resource community. Alberta Business Development has requested detailed information with respect to the extent to which local businesses share in the growth of a resource community, and the opportunities and problems which such growth presents to them.

The demographic and occupational structures of the study communities suggests that a random sample of the general population will not produce sufficient numbers of local businessmen to accommodate reliable analysis of this sub-group. In addition, it will be necessary to collect very specific and detailed information from this sub-group along a number of selected dimensions.

Accordingly, we propose to carry out a special study of local business in the communities. This study will encompass the following dimensions.

1. Survey of local businesses, including structure and characteristics, sales, costs, financing, employment and labour conditions, opportunities and concerns.

2. Consumer price and housing survey, including comparison of cost of living "basket of goods" in study communities with other communities; a comparison of housing prices will also be included.
3. Key sector interviews, including interviews with representatives from Alberta Power, transportation companies and wholesalers to determine more precisely the costs associated with providing goods and services, and operating businesses in the study communities, compared to other communities.

The survey of local businesses (1) will be carried out by personal interviews with owners or, where the owner is not local, managers/operators. To provide compatibility and comparability with the data from the main sample, respondents in the local business survey will be asked to complete the Base Demographic Questionnaire as well as the AI and CI. In this way it will be possible to examine the characteristics of the local business population in the context of the general population in the specific community; to establish profiles of local businessmen; to determine if and in what ways these profiles are similar or dissimilar to the profiles of other groups in the population; and to determine what conclusions may be drawn with respect to changes in the local business community over time.

The link between the survey of local businessmen and the main study, through the three instruments, is an important component in maintaining the coherence and validity of the longitudinal study (see Background Paper: Local Business Economy in Resource Communities).

4.2.2 Children and Education

Typically, children 15 years of age and under constitute about a third of a community's total population. They also represent a heavy public expense because of the costs associated with educating them, providing recreational activities, etc.

Children are also among the most vulnerable members of a community, prone to reflecting the stresses and strains of mobility, transition, family life, and life in the community generally. It has been argued in the literature that these stresses and strains are more severe in resource communities than elsewhere (Larson, 1977). If so, it would seem reasonable to assume that children would reflect this accordingly.

It is also argued that these stresses and strains are enhanced by conditions in the schools which, themselves, are under pressure in rapidly growing and changing communities (In some schools the proportion of children from out of province approaches 80 per cent).

We propose, therefore, to carry out a special study of school children.

The objectives of the study are several:

- . to identify and measure the educational progress of the children through their school years and compare these findings with those from other communities
- . to identify and track changes in the childrens' processes of transition and adjustment to determine the severity and duration of such processes and their manifestations, and to identify possible areas appropriate for intervention
- . to look to the child's well-being as an indication of the family's well-being, and to identify possible areas appropriate for intervention

Two types of data will be collected. School records will be examined to establish a baseline regarding absenteeism, truancy, use of counselling facilities, pass/fail rates and dropout rates.

Subjective data will be collected from a sample of school children in both the public and separate school systems during Phase 2. In Phase 3, these same children will be located in the school system, and those still resident in the study communities will be tested again.

Two different tests are proposed:

. Wide Range Achievement Test (WRAT).

This is a widely acknowledged and used instrument in the United States and Canada. It is a convenient tool for the measurement of students' abilities in basic school subjects, and Level 2 of the test is valid to adulthood.

It is also recommended as one of the tests to identify learning disabilities and/or minimal braindysfunction. Significantly, the instrument has a proven capability to identify children suffering learning disabilities because of family and related stress.

. Walker Problem Behaviour Identification Checklist.

This, too, is a widely recognized instrument. It utilizes a checklist approach through which the teacher identifies students with behaviour problems in class. The instrument and associated methodology have a proven record for the identification of problem behaviour in children and children at risk. Here, as with the WRAT, there is an established connection between the child's behaviour and family and family-related stress.

In addition, students will be interviewed in a semi-structured format.

We expect that, in addition to meeting the above-stated objectives, the tests and interviews will provide a clearer picture of conditions leading to deviant behaviour among children in resource communities, for example vandalism (see Background Paper: Social Deviance).

We propose also to interview a sample of the children's parents. This sample will include a proportion of those whose children have problems in school. The interviews will include administration of the Base Demographic Questionnaire, the Activities Index and the Community Index to provide data consistency between this special sample and the main sample. Where appropriate we will also administer the Job Description Index as a measure of work-related stress.

We intend through this procedure, to identify characteristics of families where children are having problems in school, and to be able to examine these family characteristics to define the problem areas. We expect some areas will be appropriate for policy and program intervention at the school level by higher levels of government.

4.2.3 Indians and Metis

We have developed a basic format for the development of instruments for generating data from both the Indian and Metis communities.

With respect to Indians and Metis living within the main - non-native - communities, we do not propose to use special instruments. We will use the same instruments as those for the non-native population, with the possible exception of the Activities Index. Our reasons are spelt out in Background Paper: Indians and Metis.

Very briefly, however, except where different cultural characteristics make the use of an instrument clearly inappropriate, we suggest that it would be misleading to use special instruments for one sector of a population and other instruments for another sector.

One of the objectives of this study is to establish a community-wide data base upon which to construct detailed analyses and comparisons of various groups within the community. Such groups might be identified on the basis of length of residence in the community, socio-economic status, personality profile and other potentially key discriminates.

It will be important, therefore, to obtain comparable data with respect to the perceptions by Indians and Metis of the non-native communities in which they live. We acknowledge there will be cross-cultural differences, and reply that these can be accommodated and understood through a fine grain and sensitive analysis of the data.

ALBERTA OIL SANDS ENVIRONMENTAL RESEARCH PROGRAM

LONGITUDINAL STUDY OF PERSONAL ADJUSTMENT

AND SOCIAL CONDITIONS IN

THE FORT McMURRAY AREA HS 30.1

PHASE 1: FINAL REPORT

BACKGROUND PAPER:

NEEDS-PRESS MODEL

APPENDIX 1:

ACTIVITIES INDEX

AUGUST, 1978

STERN ACTIVITIES INDEX

FORM 1158 - SHORT FORM

George G. Stern, Syracuse University

This booklet contains a number of brief statements describing many different kinds of activities. You will like some of these things. They will seem more pleasant than unpleasant to you, perhaps even highly enjoyable. There will be others that you will dislike, finding them more unpleasant than pleasant. The activities listed in this booklet have been obtained from a great many different persons. People differ in the kinds of things they enjoy, like to do, or find pleasant to experience. You are to decide which of these you like and which you dislike.

DIRECTIONS

On the special answer sheet print your name, and the other information requested. Then, as you read each statement in the booklet, blacken space

- L — if the item describes an activity or event that you would like, enjoy, or find more pleasant than unpleasant.
- D — if the item describes an activity or event that you would dislike, reject, or find more unpleasant than pleasant.

Be sure to fill in the whole answer space with a heavy black mark, using any #2-1/2 or softer pencil. Do not use ball point or ink.

YOU MUST ANSWER EVERY ITEM.

Work rapidly, going through the entire list of statements as quickly as you can. Occasionally compare item numbers from the booklet with the answer sheet space to see that they correspond. Please do not make any stray marks on the answer sheet or in this booklet. Erase all errors and stray marks completely.

Legend: L – if the item describes an activity or event that you would like, enjoy, or find more pleasant than unpleasant.

D – if the item describes an activity or event that you would dislike, reject, or find more unpleasant than pleasant.

1. Setting difficult goals for myself.
2. Imagining what I would do if I could live my life over again.
3. Talking about how it feels to be in love.
4. Belonging to a close family group that expects me to bring my problems to them.
5. Going to a park or beach with a crowd.
6. Returning to a task which I have previously failed.
7. Being an important political figure in a time of crisis.
8. Wearing clothes that will attract a lot of attention.
9. Keeping my bureau drawers, desks, etc., in perfect order.
10. Learning how to repair such things as a radio, sewing machine, or car.
11. Studying wind conditions and changes in atmospheric pressure in order to better understand and predict the weather.
12. Setting higher standards for myself than anyone else would, and working hard to achieve them.
13. Admitting when I'm in the wrong.
14. Leading an active social life.
15. Pausing to look at myself in a mirror each time I pass one.
16. Helping to collect money for poor people.
17. Talking about who is in love with whom.
18. Spending my time thinking about and discussing complex problems.
19. Organizing groups to vote in a certain way in elections.
20. Thinking about what I could do that would make me famous.
21. Daydreaming about what I would do if I could live my life any way I wanted.
22. Comforting someone who is feeling low.
23. Arranging my clothes neatly before going to bed.
24. Learning how to make such things as furniture or clothing myself.
25. Doing experiments in physics, chemistry or biology in order to test a theory.
26. Seeing love stories in the movies.
27. Being corrected when I'm doing something the wrong way.
28. Belonging to a social club.
29. Doing something that will create a stir.
30. Thinking about winning recognition and acclaim as a brilliant military figure.
31. Standing on the roof of a tall building.
32. Having lots of time to take care of my hair, hands, face, clothing, etc.
33. Finishing some work even though it means missing a party or dance.
34. Working with mechanical appliances, household equipment, tools, electrical apparatus, etc.
35. Studying the stars and planets and learning to identify them.
36. Being a philosopher, scientist, or professor.
37. Working on tasks so difficult I can hardly do them.
38. Going to parties where I'm expected to mix with the whole crowd.
39. Leading a well-ordered life with regular hours and an established routine.
40. Planning ahead so that I know every step of a project before I get to it.
41. Avoiding something at which I have once failed.
42. Being an official or leader.
43. Being the only couple on the dance floor when everyone is watching.
44. Imagining situations in which I am a great hero.
45. Catching a reflection of myself in a mirror or window.
46. Making my bed and putting things away every day before I leave the house.
47. Going to a party or dance with a lively crowd.
48. Going to scientific exhibits.

Legend: L – if the item describes an activity or event that you would like, enjoy, or find more pleasant than unpleasant.

D – if the item describes an activity or event that you would dislike, reject, or find more unpleasant than pleasant.

49. Reading novels and magazine stories about love.
50. Accepting criticism without talking back.
51. Keeping to a regular schedule, even if this sometimes means working when I don't really feel like it.
52. Organizing a protest meeting.
53. Speaking before a large group.
54. Imagining how it would feel to be rich and famous.
55. Playing rough games in which someone might get hurt.
56. Finding out how different languages have developed, changed, and influenced one another.
57. Taking care of youngsters.
58. Fixing light sockets, making curtains, painting things, etc., around the house.
59. Collecting data and attempting to arrive at general laws about the physical universe.
60. Choosing difficult tasks in preference to easy ones.
61. Apologizing when I've done something wrong.
62. Going to the park or beach only at times when no one else is likely to be there.
63. Eating my meals at the same hour each day.
64. Doing things according to my mood, without following any plan.
65. Being the center of attention at a party.
66. Skiing on steep slopes, climbing high mountains, or exploring narrow underground caves.
67. Imagining the kind of life I would have if I were born at a different time in a different place.
68. Keeping my room in perfect order.
69. Being with people who are always joking, laughing, and out for a good time.
70. Reading scientific theories about the origin of the earth and other planets.
71. Listening to my friends talk about their love-life.
72. Receiving advice from the family.
73. Having my mistakes pointed out to me.
74. Going on a vacation to a place where there are lots of people.
75. Seeing sad or melodramatic movies.
76. Pretending I am a famous movie star.
77. Making my handwriting decorative or unusual.
78. Taking care of someone who is ill.
79. Having a special place for everything and seeing that each thing is in its place.
80. Learning how to raise attractive and healthy plants, flowers, vegetables, etc.
81. Reading about how mathematics is used in developing scientific theories, such as explanations of how the planets move around the sun.
82. Having people talk to me about some personal problem of mine.
83. Following through in the development of a theory, even though it has no practical applications.
84. Picking out some hard task for myself and doing it.
85. Inviting a lot of people home for a snack or party.
86. Influencing or controlling the actions of others.
87. Converting or changing the views of others.
88. Trying out different ways of writing my name, to make it look unusual.
89. Providing companionship and personal care for a very old, helpless person.
90. Reading about the love affairs of movie stars and other famous people.
91. Working out solutions to complicated problems, even though the answers may have no apparent, immediate usefulness.

ALBERTA OIL SANDS ENVIRONMENTAL RESEARCH PROGRAM

LONGITUDINAL STUDY OF PERSONAL ADJUSTMENT

AND SOCIAL CONDITIONS IN

THE FORT McMURRAY AREA HS 30.1

PHASE 1: FINAL REPORT

BACKGROUND PAPER:

NEEDS-PRESS MODEL

APPENDIX 2A:

COMMUNITY INDEX SCALES

AUGUST, 1978

NEEDS (Activity Index)

1. ABA (50) Accepting criticism without talking back.

2. ACH (1) Setting difficult goals for myself
(12) Setting higher standards for myself than anyone else would, and working hard to achieve them.
(37) Working on tasks so difficult I can hardly do them.
(60) Choosing difficult tasks in preference to easy ones.
(84) Picking out some hard task for myself and doing it.

3. ADA (27) Being corrected when I'm doing something the wrong way.
(61) Apologizing when I've done something wrong.
(73) Having my mistakes pointed out to me.

COMMUNITY PRESS (Community Index)
Provisional pending pre-test

1. ABA (1) You really feel good about this community once you get to know it.
(60) Business people here treat everyone with respect.
(61) I am embarrassed to tell people that I live in this community.
(105) Outsiders think you have to be slightly crazy to live here.
(121) Old people in this community are respected.
(160) If young people have any self-respect, they get out of this community.

2. ACH (2) People who want to work can have a good career here.
(59) Employers here will hire women for jobs that used to go to men.
(76) It is difficult to find repair people here who take pride in their work.
(120) Workers here often call in sick because they do not want to go to work.
(131) People here would rather do without something than have to work hard for it.
(170) Most parents here expect their children to help with the chores.

3. ADA (3) People I know here are willing to listen to advice
(62) Around here, if people make a mistake they are willing to admit it.
(104) People in this town do what they please, regardless of what anyone thinks.
(141) People here are not willing to accept constructive criticism.
(180) Public officials in this community are not willing to admit their mistakes.
(58) If someone needs advice here, he is not afraid to go to a neighbour or friend.

NEEDS (Activity Index)

4. AFF (4) Going to a park or beach with a crowd.
(14) Leading an active social life.
(28) Belonging to a social club.
(38) Going to parties where I'm expected to mix with the whole crowd.
(62) Going to the park or beach only at times when no one else is likely to be there.
(74) Going on a vacation to a place where there are lots of people.
(85) Inviting a lot of people home for a snack or party.

5. AGG

6. CHA

COMMUNITY PRESS (Community Index)
Provisional pending pre-test

4. AFF (4) People here really like their privacy.
(57) This is a very friendly community.
(77) You can live here for months before anyone will say "Hello" to you.
(119) The different social groups in this community do not mix with one another.
(159) It is not easy to make good friends in this community.
(122) In order to have friends in this community, you have to be a member of a group of some kind.
5. AGG (5) It is safe to walk most places around here at night.
(63) Even when their neighbours have gone to sleep, people here play radios, stereos and television sets loudly
(103) People here are usually polite to each other.
(132) People here litter the roads.
(169) Car drivers here honk their horns when they think you are a little slow getting out of the way
(56) You can walk on the street here without having people shove or bump into you.
6. CHA (6) Nothing new ever happens around here.
(55) If you left here and came back a year later the place would have changed a lot.
(78) Very few people here lead routine lives.
(118) People here move so often it is hard to keep friends.
(142) Job conditions in this community make it hard to maintain a good family life.
(179) My friends here are the same people I have been friends with for years.

NEEDS (Activity Index)

7. CNJ (40) Planning ahead so that I know every step of a project before I get to it.
(51) Keeping to a regular schedule even if this sometimes means working when I don't really feel like it.
(64) Doing things according to my mood, without following any plan.
8. CTR (6) Returning to a task which I have previously failed.
(41) Avoiding something at which I have once failed.
9. DFR

COMMUNITY PRESS (Community Index)
Provisional pending pre-test

7. CNJ (7) Around here, most things happen on the spur of the moment.
(54) Each neighbourhood or rural area here seems to have its own community organization.
(64) People here seldom plan what they are going to do on their days off.
(102) Local government seems to be reasonably well-organized.
(123) There is a lot of confusion on the job here.
(158) Most sporting activities here are organized into teams and leagues.
8. CTR (8) Most people here will stick to a tough job until they get it right.
(53) If someone here gets into trouble they will work their way out of it.
(79) People around here are afraid of looking foolish.
(117) Most people here will say what they think, even if they look foolish.
(133) People here would rather avoid trying something new than risk looking foolish.
(168) The leaders of this community are willing to work hard to improve it.
9. DFR (9) Nobody here respects the police.
(52) Sales clerks here act as though they are doing you a favour when they wait on you.
(65) Management knows how to keep workers in line here.
(101) Children here do not spend enough time with their families.
(143) Most teachers in our schools are respected.
(178) Too many of the school children here are disrespectful to their teachers.

NEEDS (Activities Index)

10. DOM (19) Organizing groups to vote in a certain way in elections.
(42) Being an official or leader.
(52) Organizing a protest meeting.
(86) Influencing or controlling the actions of others.
11. E/A (7) Being an important political figure in a time of crisis.
(87) Converting or changing the views of others.
12. EMO (75) Seeing sad or melodramatic movies.

COMMUNITY PRESS (Community Index)
Provisional pending pre-test

10. DOM (10) Everybody around here treats everybody else as equals.
(51) The police here are usually pretty easy-going about unimportant offences.
(80) People with some authority in this community try to push other people around.
(116) You are accepted in this community regardless of your race or religion.
(124) There is a lot of racial discrimination on the job here.
(157) At work here, supervisors like you to call them by their first names or nicknames.
11. E/A (11) Our local officials see to it that anyone who really needs help gets it.
(50) Most local politicians would rather have their name on a new bridge than do something charitable without publicity.
(66) Our local officials claim anyone can call them anytime of the day or night for help.
(100) As far as social improvements go, this community is years behind the times.
(134) Most of the people here who help charities do so only to get their names in the paper.
(167) Nobody here appreciates you when you help other people.
12. EMO (12) People around here are not afraid to express their feelings in public.
(49) I have often seen people here arguing in public.
(81) People here do not kiss their families in public.
(115) At work, people often get so angry they end up shouting at each other.
(144) People here seldom show their real feelings.
(177) It is very hard to find out how people in this community really feel about things that are important to them.

NEEDS (Activities Index)

13. ENY

14. EXH (8) Wearing clothes that will attract a lot of attention.
(29) Doing something that will create a stir.
(43) Being the only couple on the floor when everyone is watching.
(53) Speaking before a large group.
(65) Being the centre of attention at a party.

15. F/A (20) Thinking about what I could do that would make me famous.
(30) Thinking about winning recognition and acclaim as a brilliant military figure.
(44) Imagining situations in which I am a great hero.
(54) Imagining how it would be to be rich and famous.
(76) Pretending I am a famous movie star.

COMMUNITY PRESS (Community Index)
Provisional pending pre-test

13. ENY (13) People around here like to keep busy.
(48) Most people here would rather do without something than walk five minutes to get it.
(67) This community is full of active people.
(99) Most people here like to spend a lot of time outdoors.
(125) Things move slowly in this community.
(156) People spend a lot of time sitting in front of the television set, watching anything that is on.

14. EXH (14) People here like to show they're familiar with the latest fashions and fads.
(47) People here like to dress the same as everybody else.
(82) Most people here like to go along with the crowd rather than do something different.
(114) Our local radio and newspaper people generally avoid taking unpopular stands on local issues.
(135) Many people in this community like to customize their cars to make them different from other cars.
(166) Anyone who belongs to a club or organization likes to brag about it.

15. F/A (15) Even though we have many newsworthy people in the community they never get into the news.
(46) Our local politicians seem to have more influence with the Provincial Government than do politicians from other communities our size.
(68) This community is more important to the country than are most others its size.
(98) Our local schools provide no better than an average education.
(145) This community is more influential than most other communities of its size.
(176) Newspaper and radio serving this community are no better than average for a place this size.

NEEDS (Activities Index)

16. HAR (31) Standing on the roof of a very tall building.
(55) Playing rough games in which someone might get hurt.
(66) Skiing on steep slopes, climbing high mountains, or exploring narrow underground caves.

17. HUM (56) Finding out how different languages have developed, changed and influenced one another.

18. IMP

COMMUNITY PRESS (Community Index)
Provisional pending pre-test

16. HAR (16) Workers here often ignore job safety rules.
(45) Few drivers here bother using their seat belts on short trips.
(83) Many people here go to the doctor even when they are not really sick.
(113) Many people I know in this community will not see a doctor even when they are sick or hurt.
(126) I know many people in this community who are afraid to take chances.
(155) Most people here will not drive during a big storm.

17. HUM (17) Most people in this community know its history.
(44) Most of the families I know here regularly attend religious services.
(69) Not many people here regularly attend church or other houses of worship.
(97) Many people here play musical instruments.
(136) Not many people here are interested in discussing social and cultural matters.
(165) People here seem to read the local newspapers more for the entertainment features than for the news.

18. IMP (18) Local officials are more concerned with filling out forms than with doing something useful.
(43) The local radio and newspaper react too quickly to problems without looking at all sides.
(84) Local officials here have a sensible long range plan for the community.
(112) Neighbours and friends here often visit without telephoning first.
(146) Most people here make plans for their vacation months ahead of time.
(175) People here plan their careers and know what they want to do next.

NEEDS (Activities Index)

19. NAR (2) Imagining what I would do if I could live my life over again.
 (15) Pausing to look at myself in a mirror each time I pass one.
 (21) Daydreaming about what I would do if I could live my life any way I wanted.
 (32) Having lots of time to take care of my hair, hands, face, clothing, etc.
 (45) Catching a reflection of myself in a mirror or window.
 (67) Imagining the kind of life I would have if I were born at a different time in a different place.
 (77) Making my handwriting decorative or unusual.
 (88) Trying out different ways of writing my name to make it look unusual.
20. NUR (16) Helping to collect money for poor people.
 (20) Comforting someone who is feeling low.
 (57) Taking care of youngsters.
 (78) Taking care of someone who is ill.
 (89) Providing companionship and personal care for a very old, helpless person.

21. OBJ

COMMUNITY PRESS (Community Index)
 Provisional pending pre-test

19. NAR (19) This community does not have any special qualities about it.
 (42) Even if we criticize this community among ourselves, deep down most of us here are proud of it.
 (70) This community is just like others of its size.
 (127) If you can be a success in this community you can be a success anywhere.
 (154) This community has a special character that makes you feel you belong.
 (96) Local radio and newspapers do not talk about the good characteristics of this community.
20. NUR (20) If you were being robbed here, no one would help you.
 (41) When there is an illness or death in your family your neighbours will offer their help.
 (85) Most employers here are willing to help an employee who has a drinking, financial, family or other personal problem.
 (111) No one at work here cares if you are having troubles at home.
 (137) There are not enough health care facilities here for everyone who needs them.
 (164) There are good day care facilities for children of working parents.
21. OBJ (21) Few people I know in this community pay any attention to astrology.
 (40) Many people in this community believe in fate.
 (95) Not many people here worry about other people taking advantage of them.
 (147) Most people here are willing to listen to your religious views, no matter what those views are.
 (174) In dealing with controversial issues the local radio and television distort the facts and give prejudiced opinions.
 (71) Many people here believe that certain objects can bring

NEEDS (Activities Index)

22. ORD (9) Keeping my bureau drawers, desks, etc, in perfect order.
(23) Arranging my clothes neatly before going to bed.
(46) Making my bed and putting things away every day before I leave the house.
(68) Keeping my room in perfect order.
(79) Having a special place for everything and seeing that each thing is in its place.
23. PLY (33) Finishing some work even though it means missing a party or dance.
(47) Going to a party or dance with a lively crowd.
(69) Being with people who are always joking, laughing, and out for a good time.
24. PRA (10) Learning how to repair such things as a radio, sewing machine, or car.
(24) Learning how to make such things as furniture or clothing myself.
(34) Working with mechanical appliances, household equipment, tools, electrical apparatus, etc.
(58) Fixing light sockets, making curtains, painting things, etc., around the house.
(80) Learning how to raise attractive and healthy plants, flowers, vegetables, etc.

COMMUNITY PRESS (Community Index)
Provisional pending pre-test

22. ORD (22) Few people in this community keep a budget.
(39) I have seldom seen public officials here sponsor a clean-up campaign to beautify this community.
(86) Our local officials make sure our roads are kept in good repair.
(110) Most people here keep their houses neat and clean.
(128) Parks and public areas here are messy.
(153) Offices and factories here are well kept and properly maintained.
23. PLY (23) Most local officials here seem to spend more time organizing sports and recreation programs than in helping businesses.
(38) Most people here put more effort into amusing themselves than they do into earning a living.
(72) This is a hard working community in which few people care how they spend their time off.
(94) People here are more interested in business news than in sports news.
(138) A lot of people miss work on the opening days of the hunting and fishing seasons.
(163) I know very few people here who use their spare time for adult education or correspondence courses.
24. PRA (24) Most people here are interested in practical results rather than abstract ideas.
(37) Public officials here will support cultural events, even those which lose money.
(87) The schools here emphasize practical skills.
(109) Most people here believe that school should teach children how to earn a living.
(148) I know many people here who take pride in not being able to balance their checkbooks.
(173) Many workers here brag about their ability to avoid hard work.

NEEDS (Activities Index)

25. REF
26. SCI (11) Studying wind conditions and changes in atmospheric pressure in order to better understand and predict the weather.
 (25) Doing experiments in physics, chemistry or biology in order to test a theory.
 (35) Studying the stars and planets and learning to identify them.
 (48) Going to scientific exhibits.
 (59) Collecting data and attempting to arrive at general laws about the physical universe.
 (70) Reading scientific theories about the origin of the earth and other planets.
 (81) Reading about how mathematics is used in developing scientific theories, such as explanations of how the planets move around the sun.

27. SEN

COMMUNITY PRESS (Community Index)
 Provisional pending pre-test

25. REF (25) People here would rather hunt a deer through the woods than just sit and enjoy the sunset.
 (36) People here hate to be alone doing nothing.
 (73) The really religious people here pray by themselves, rather than go to church.
 (93) If somebody here has a problem he will think it out himself.
 (129) People here would rather work on a project than sit around and plan it.
 (152) People here hunt and fish for the fun of it rather than for the food.
26. SCI (26) Most people here probably would go to a lecture by a famous scientist.
 (35) No one here seems to take a strong interest in scientific developments.
 (88) People in this community would not watch a science program on television if you paid them.
 (108) People here would rather see their children become scientists than lawyers.
 (139) If a new planet were discovered tomorrow, no one here would care.
 (162) People here with scientific interests can easily find others like themselves.
27. SEN (27) Only a few people in this community drink too much.
 (34) I see many people here who exercise regularly to keep fit.
 (74) It is hard to have a good time here because people are so reserved.
 (92) Most people who live here are overweight.
 (149) People here like to go out to parties or the local pub for a good time.
 (172) Each month you see fewer people around here smoking.

NEEDS (Activities Index)

28. SEX (3) Talking about how it feels to be in love.
(17) Talking about who is in love with whom.
(26) Seeing love stories in the movies.
(49) Reading novels and magazine stories about love.
(71) Listening to my friends talk about their love life.
(90) Reading about the love affairs of movie stars and other famous people.
29. SUP (4) Belonging to a close family group that expects me to bring my problems to them.
(72) Receiving advice from the family.
(82) Having people talk to me about some personal problem of mine.
30. UND (18) Spending my time thinking about and discussing complex problems.
(36) Being a philosopher, scientist or professor.
(83) Following through in the development of a theory, even though it has no practical applications.
(91) Working out solutions to complicated problems, even though the answers may have no apparent, immediate usefulness.

COMMUNITY PRESS (Community Index)
Provisional pending pre-test

28. SEX (28) A lot of people here seem to think that single men and women should go without sex
(33) Many people around here take a pretty easy attitude towards sex.
(89) Most people here are tolerant of the sexual needs of single adults.
(107) Not many people here are bothered by the emphasis on sex in magazines and movies.
(130) Too many movies shown in this community are unsuitable for young children.
(151) Male bosses rarely proposition their female employees here.
29. SUP (29) The public officials in this community allow businesses to make the important decisions.
(32) Local officials here could do a better job if the province would not intervene.
(75) A lot of people here like to be independent enough to do such things as growing their own food or sewing their own clothes.
(91) Most people here are proud of their ability to do things for themselves.
(140) Most people here feel the community can get along nicely without the help of anyone from the outside
(161) Most people would rather call a mechanic than try to fix their car themselves.
30. UND (30) The planning for this community relies too much on numbers and not enough on thoughtful discussion
(31) I know a lot of people in this community who would rather sit at home doing something like a crossword puzzle than be out socializing.
(90) A lot of the planning in this community is too abstract and does not attack the real problems
(150) People interested in analyzing theoretical problems can find lots of others here with the same interests.
(171) I do not know many people here who like to do mathematical games and puzzles.
(106) You seldom hear people in this community talk about philosophy or religion.

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APPENDIX 2B:

PERSONALITY NEEDS SCALES

AUGUST, 1978

COMMUNITY PRESS SCALES congruent with personality needs scales

1. ABA Abasement-ASS Assurance: Self-depreciation and self-devaluation as reflected in the ready acknowledgment of inadequacy, ineptitude, or inferiority, the acceptance of humiliation and other forms of self-degradation versus certainty, self-confidence, or self-glorification.
2. ACH Achievement: Surmounting obstacles and attaining a successful conclusion in order to prove one's worth, striving for success through personal effort.
3. ADA Adaptability-DFS Defensiveness: Accepting criticism, advice or humiliation publicly versus resistance to suggestion, guidance, direction, or advice, concealment or justification of failure.
4. AFF Affiliation: Gregariousness, group-centered, friendly, participatory associations with others versus social detachment, social independence, self-isolation or unsociableness.
5. AGG Agression - BLA Blame Avoidance: Indifference or disregard for the feelings of others as manifested in hostility either overt or covert, direct or indirect, versus the denial or inhibition of such impulses.
6. CHA Change - SAM Sameness: Variable or flexible behavior versus repetition and routine.
7. CNJ Conjunctivity - DSJ Disjunctivity: Organized, purposeful, or planned activity patterns versus uncoordinated, disorganized, diffuse, or self-indulgent behavior.
8. CTR Counteraction: Persistent striving to overcome difficult, frustrating, humiliating, or embarrassing experiences and failures versus avoidance or hasty withdrawal from tasks or situations that might result in such outcomes.
9. DFR Deference - RST Restiveness: Respect for authority, submission to the opinions and preferences of others perceived as superior versus noncompliance, insubordination, rebelliousness, resistance, or defiance.
10. DOM Dominance - TOL Tolerance: Ascendancy over others by means of assertive or manipulative control versus nonintervention, forbearance, acceptance, equalitarianism, permissiveness, humility, or meekness.
11. E/A Ego achievement (derived from Exocathexis-Intracathexis): Self-dramatizing, idealistic social action, active or fantasized realization of dominance, power, or influence achieved through socio-political activities in the name of social improvement or reform.

12. EMO Emotionality - PLC Placidity: Intense, open emotional expression, restraint, control, or constriction.
13. ENY Energy - PAS Passivity (derived from Energy-Endurance-psyche-anasthenia): High activity level, intense, sustained, vigorous effort versus sluggishness or inertia.
14. EXH Exhibitionism - INF Inferiority Avoidance: Self-display and attention-seeking versus shyness, embarrassment, self-consciousness, or withdrawal from situation in which the attention of others might be attracted.
15. F/A Fantasied Achievement (derived from Ego Ideal): Daydreams of success in achieving extraordinary public recognition, narcissistic aspirations for fame, personal distinction, or power.
16. HAR Harm Avoidance - RSK Risktaking: Fearfulness, avoidance, withdrawal, or excessive caution in situations that might result in physical pain, injury, illness, or death versus careless indifference to danger, challenging or provocative disregard for personal safety, thrill-seeking, boldness, venturesomeness, or temerity.
17. HUM Humanities, Social Science (derived from Endocathection-Extracception: Social Sciences and Humanities): The symbolic manipulation of social objects or artifacts through empirical analysis, reflection, discussion, and criticism.
18. IMP Impulsiveness - DEL Deliberateness: Rash, impulsive, spontaneous, or impetuous behavior versus care, caution, or reflectiveness.
19. NAR Narcissism: Self-centered, vain, egotistical, preoccupation with self, erotic feelings associated with one's own body or personality.
20. NUR Nurturance: Supporting others by providing love, assistance, or protection versus disassociation from others, indifference withholding support, friendship, or affection.
21. OBJ Objectivity - PRO Projectivity: Detached, nonmagical, unprejudiced, impersonal thinking versus autistic, irrational paranoid or otherwise egocentric perceptions and beliefs - superstition (Activities Index), suspicion (Environment Indexes).
22. ORD Order - DSO Disorder: Compulsive organization of the immediate physical environment, manifested in a preoccupation with neatness, orderliness, arrangement, and meticulous attention to detail versus habitual disorder, confusion, dissaray, or carelessness.

23. PLY Play - WRK Work: Pleasure-seeking, sustained pursuit of amusement and entertainment versus persistently purposeful serious, task-oriented behavior.
24. PRA Practicalness - IMP Impracticalness (derived from Exocathection-Extracception and Pragmatism): Useful, tangibly productive, business-like applications of skill or experience in manual arts, social affairs, or commercial activities versus a speculative, theoretical, whimsical, or indifferent attitude toward practical affairs.
25. REF Reflectiveness (derived from Endocathection - Intracception): Contemplation, intracception, introspection, preoccupation with private psychological, spiritual, esthetic or meta-physical experience.
26. SCI Science (derived from Endocathection - Extracception: Natural Sciences): The symbolic manipulation of physical objects through empirical analysis, reflection, discussion, and criticism.
27. SEN Sensuality - PUR Puritanism (derived from Sentience): Sensory stimulation and gratification, voluptuousness, hedonism, preoccupation with esthetic experience versus austerity, self-denial, temperance or abstinence, frugality, self-abnegation.
28. SEX Sexuality - PRU Prudishness (derived from Sex-Superego Conflict): Erotic heterosexual interest or activity versus the restraint, denial, or inhibition of such impulses, prudishness, priggishness, asceticism.
29. SUP Supplication - AUT Autonomy: Dependence on others for love, assistance, and protection versus detachment, independence, or self-reliance.
30. UND Understanding: Detached intellectualization, problem-solving, analysis, theorizing, or abstraction as ends in themselves.

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AND SOCIAL CONDITIONS IN

THE FORT McMURRAY AREA HS 30.1

PHASE 1: FINAL REPORT

BACKGROUND PAPER:

NEEDS-PRESS MODEL

APPENDIX 3:

EDMONTON PRE-TEST: COMMUNITY INDEX

AUGUST, 1978

COMMUNITY INDEX QUESTIONNAIRE

June 1978

There are a number of statements in this booklet. They are statements which describe the environment in which people live. The statements may or may not be true of your community because communities differ from one another in many ways. You are to decide which statements are characteristic of your community and which are not. Your answers should tell us what you believe the community is like rather than what you might personally prefer. You won't know the answer to many of these statements, because there may not be any really definite information on which to base your answer. Your responses will simply mean that in your opinion the statement is probably true or probably false about your community.

DO NOT OMIT ANY ITEM!

DIRECTIONS

As you read each statement in the booklet, blacken space

T - when you think the statement is generally TRUE or characteristic of the community, is something which occurs or might occur, is the way people tend to feel or act.

F - when you think the statement is generally FALSE or not characteristic of the community, is something which is not likely to occur, is not the way people typically feel or act.

Be sure to fill in the whole answer space with a heavy black mark, using the pencil supplied. Do NOT use ball point or ink.

YOU MUST ANSWER EVERY ITEM

Work rapidly, going through the entire list of statements as quickly as you can. Occasionally compare item numbers from the booklet with the answer sheet space to see that they correspond. Please do not make any stray marks on the answer sheet or in this booklet. Erase all errors and stray marks completely.

COMMUNITY INDEX

Revised May 30, 1978

1. You really feel good about this community once you get to know it.
2. People who want to work can have a good career here.
3. People I know here are willing to listen to advice.
4. People here really like their privacy.
5. It is safe to walk most places around here at night.
6. Nothing new ever happens around here.
7. Around here, most things happen on the spur of the moment.
8. Most people here will stick to a tough job until they get it right.
9. Not many people here respect the police.
10. Everybody around here treats everybody else as equals.
11. Our local officials see to it that anyone who really needs help gets it.
12. People around here are not afraid to express their feelings in public.
13. People around here like to keep busy.
14. People here like to show they're familiar with the latest fashions and fads.
15. Even though we have many people in the community doing worthwhile important things they never get into the news.
16. Workers here often ignore job safety rules.
17. Most people in this community know its history.
18. Local officials are more concerned with filling out forms than with doing something useful.
19. This community does not have any special qualities about it.

20. If you were being robbed here, no one would help you.
21. Few people I know in this community pay any attention to astrology.
22. Few people here keep a budget.
23. Most local officials here seem to spend more time organizing sports and recreation programs than in helping businesses.
24. Most people here are interested in practical results rather than abstract ideas.
25. People here would rather hunt a deer through the woods than just sit and enjoy the sunset.
26. Many people here probably would go to a lecture by a famous scientist.
27. Only a few people in this community drink too much.
28. A lot of people here seem to think that single men and women should go without sex.
29. The public officials in this community allow businesses to make the important decisions.
30. The planning for this community relies too much on statistics and not enough on thoughtful discussion.
31. I know a lot of people in this community who would rather sit at home doing something like a crossword puzzle than be out socializing.
32. Local officials here could do a better job if the provincial government would not intervene.
33. Many people around here take a pretty easy attitude towards sex.
34. I see many people here who exercise regularly to keep fit.
35. No one here seems to take a strong interest in scientific developments.
36. People here hate to be alone doing nothing.
37. Public officials here will support cultural events, even those which lose money.

38. Most people here put more effort into amusing themselves than they do into earning a living.
39. I have seldom seen public officials here sponsor a clean-up campaign to beautify this community.
40. Many people in this community believe in fate.
41. When there is an illness or death in your family your neighbours will offer their help.
42. Even if we criticize this community among ourselves, deep down most of us here are proud of it.
43. The local radio and newspaper react too quickly to problems without looking at all sides.
44. Most of the families I know here regularly attend religious services.
45. Few drivers here bother using their seat belts on short trips.
46. Our local politicians seem to have more influence with the Provincial Government than do politicians from other communities our size.
47. People here like to dress the same as everybody else.
48. Most people here would rather do without something than walk five minutes to get it.
49. I have often seen people here arguing in public.
50. Most local politicians would rather have their name on a new bridge than do something charitable without publicity.
51. The police here are usually pretty easy-going about unimportant offences.
52. Sales clerks here act as though they are doing you a favor when they wait on you.
53. If someone here gets into trouble they will work their way out of it.
54. Each neighbourhood or rural area here seems to have its own community organization.
55. If you left here and came back a year later the place would have changed a lot.

56. You can walk on the street here without having people shove or bump into you.
57. This is a very friendly community.
58. If someone needs advice here, he is not afraid to go to a neighbour or friend.
59. Employers here will hire women for jobs that used to go to men.
60. Business people here treat everyone with respect.
61. I am embarrassed to tell people that I live in this community.
62. Around here, if people make a mistake they are willing to admit it.
63. Even when their neighbours have gone to sleep, people here play radios, stereos and television sets loudly.
64. People here seldom plan what they are going to do on their days off.
65. Management knows how to keep workers in line here.
66. Our local officials claim anyone can call them anytime of the day or night for help.
67. This community is full of active people.
68. This community is more important to the country than are most others its size.
69. Not many people here regularly attend church or other houses of worship.
70. This community is just like others of its size.
71. Many people here believe that certain objects can bring good luck or bad luck.
72. This is a hard working community in which few people care how they spend their time off.
73. The really religious people here pray by themselves, rather than go to church.
74. It is hard to have a good time here because people are so reserved.

75. A lot of people here like to be independent enough to do such things as growing their own food or sewing their own clothes.
76. It is difficult to find repair people here who take pride in their work.
77. You can live here for months before anyone will say "Hello" to you.
78. Very few people here lead routine lives.
79. People around here are afraid of looking foolish.
80. People with some authority in this community try to push other people around.
81. People here do not kiss their families in public.
82. Most people here like to go along with the crowd rather than do something different.
83. Many people here go to the doctor even when they are not really sick.
84. Local officials here have a sensible long range plan for the community.
85. Most employers here are willing to help an employee who has a drinking, financial, family or other personal problem.
86. Our local officials make sure our roads are kept in good repair.
87. The schools here emphasize practical skills.
88. People in this community would not watch a science program on television if you paid them.
89. Most people here are tolerant of the sexual needs of single adults.
90. A lot of the planning in this community is too abstract and does not attack the real problems.
91. Most people here are proud of their ability to do things for themselves.
92. Most people who live here are overweight.
93. If somebody here has a problem he will think it out himself.

94. People here are more interested in business news than in sports news.
95. Not many people here worry about other people taking advantage of them.
96. Local radio and newspapers do not talk about the good characteristics of this community.
97. Many people here play musical instruments.
98. Our local schools provide no better than an average education.
99. Most people here like to spend a lot of time outdoors.
100. As far as social improvements go, this community is years behind the times.
101. Children here do not spend enough time with their families.
102. Local government seems to be reasonably well-organized.
103. People here are usually polite to each other.
104. People in this town do what they please, regardless of what anyone thinks.
105. Outsiders think you have to be slightly crazy to live here.
106. You seldom hear people in this community talk about philosophy or religion.
107. Not many people here are bothered by the emphasis on sex in magazines and movies.
108. People here would prefer to see their children become scientists rather than lawyers.
109. Most people here believe that school should teach children how to earn a living.
110. Most people here keep their houses neat and clean.
111. No one at work here cares if you are having troubles at home.
112. Neighbours and friends here often visit without telephoning first.

113. Many people I know in this community will not see a doctor even when they are sick or hurt.
114. Our local radio and newspaper people generally avoid taking unpopular stands on local issues.
115. At work, people often get so angry they end up shouting at each other.
116. You are accepted in this community regardless of your race or religion.
117. Most people here will say what they think, even if they look foolish.
118. People here move so often it is hard to keep friends.
119. The different social groups in this community do not mix with one another.
120. Workers here often call in sick because they do not want to go to work.
121. Old people in this community are respected.
122. In order to have friends in this community, you have to be a member of a group of some kind.
123. There is a lot of confusion on the job here.
124. There is a lot of racial discrimination on the job here.
125. Things move slowly in this community.
126. I know many people in this community who are afraid to take chances.
127. If you can be a success in this community you can be a success anywhere.
128. Parks and public areas here are messy.
129. People here would rather work on a project than sit around and plan it.
130. Too many movies shown in this community are unsuitable for young children.
131. People here would rather do without something than have to work hard for it.

132. People here litter the roads.
133. People here would rather avoid trying something new than risk looking foolish.
134. Most of the people here who help charities do so only to get their names in the paper.
135. Many people in this community like to customize their cars to make them different from other cars.
136. Not many people here are interested in discussing social and cultural matters.
137. There are not enough health care facilities here for everyone who needs them.
138. A lot of people miss work on the opening days of the hunting and fishing seasons.
139. If a new planet were discovered tomorrow, no one here would care.
140. Most people here feel the community can get along nicely without the help of anyone from the outside.
141. People here are not willing to accept constructive criticism.
142. Job conditions in this community make it hard to maintain a good family life.
143. Most teachers in our schools are respected.
144. People here seldom show their real feelings.
145. This community is more influential than most other communities of its size.
146. Most people here make plans for their vacation months ahead of time.
147. Most people here are willing to listen to your religious views, no matter what those views are.
148. I know many people here who take pride in not being able to balance their checkbooks.
149. People here like to go out to parties or the local pub for a good time.

150. People interested in analyzing theoretical problems can find lots of others here with the same interests.
151. Male bosses rarely make sexual advances to their female employees here.
152. People here hunt and fish for the fun of it rather than for the food.
153. Offices and factories here are well kept and properly maintained.
154. This community has a special character that makes you feel you belong.
155. Most people here will not drive their car during a big storm.
156. People spend a lot of time sitting in front of the television set, watching anything that happens to be on.
157. At work here, supervisors like you to call them by their first names or nicknames.
158. Most sporting activities here are organized into teams and leagues.
159. It is not easy to make good friends in this community.
160. If young people have any self-respect, they get out of this community.
161. Most people here would rather call a mechanic than try to fix their car themselves.
162. People here with scientific interests can easily find others like themselves.
163. I know very few people here who use their spare time for adult education or correspondence courses.
164. There are good day care facilities for children of working parents.
165. People here seem to read the local newspapers more for the entertainment features than for the news.
166. Anyone here who belongs to a club or organization likes to brag about it.
167. Nobody here appreciates you when you help other people.

168. The leaders of this community are willing to work hard to improve it.
169. Car drivers here honk their horns when they think you are a little slow getting out of the way.
170. Most parents here expect their children to help with the chores.
171. I do not know many people here who like to do mathematical games and puzzles.
172. Each month you see fewer people around here smoking.
173. Many workers here brag about their ability to avoid hard work.
174. In dealing with controversial issues the local newspeople distort the facts and give prejudiced opinions.
175. People here plan their careers and know what they want to do next year.
176. Newspapers, radio and television serving this community are no better than average for a place this size.
177. It is very hard to find out how people in this community really feel about things that are important to them.
178. Too many of the school children here are disrespectful to their teachers.
179. My friends here are the same people I have been friends with for years.
180. Public officials in this community are not willing to admit their mistakes.

ALBERTA OIL SANDS ENVIRONMENTAL RESEARCH PROGRAM

LONGITUDINAL STUDY OF PERSONAL ADJUSTMENT

AND SOCIAL CONDITIONS IN

THE FORT McMURRAY AREA HS 30.1

PHASE 1: FINAL REPORT

BACKGROUND PAPER:

NEEDS-PRESS MODEL

APPENDIX 4:

EDMONTON PRE-TEST: BASE DEMOGRAPHIC SHEET

AUGUST, 1978

BASE DEMOGRAPHIC SHEET

Introduction

In order to ensure that we are getting a good representation of the Edmonton population, we'd like to ask you a few questions.

Q1. Sex? (BOTTOM RIGHT-HAND CORNER)

- Male
- Female

CODING Q2. How old are you? (LOWER RIGHT-HAND SIDE)

(00) _____ no response

Q3. How long have you lived in Edmonton? (OTHER CODED DATA, COLUMN 1)

Column 1

- (0) _____ no response
- (1) _____ Less than 6 months
- (2) _____ 6 months up to 1 year
- (3) _____ 1 year up to 2 years
- (4) _____ 2 years up to 5 years
- (5) _____ 5 years up to 10 years
- (6) _____ more than 10 years

Q4. What is your present occupation? (OTHER CODED DATA, COLUMN 2 and 3)

Columns 2 and 3

- (00) _____ not employed
- (10) _____ Clerical and general office work (typing, receptionist, filing, book-keeping)
- (20) _____ Sales (selling insurance, cars, clothes, etc.)
- (30) _____ Manual labour
- (40) _____ Skilled and semi-skilled (assembly-line, electrician, operative, mechanic)
- (50) _____ Transportation (truck driver, pilot, bus driver)
- (60) _____ First line supervisor (foreman, etc.)
- (70) _____ Teaching (school teacher, safety teacher, driving instructor)
- (80) _____ Scientific and technical (doctor, nurse, engineer, etc.)
- (90) _____ Social and artistic (social worker, lawyer, economist, etc.)

- (01) _____ no response
- (02) _____ Executive, managerial and related (accountant, bank manager, personnel manager, etc.)
- (03) _____ Homemaker
- (04) _____ Student
- (05) _____ Services not mentioned above (eg police, bartending, floor cleaning, etc.)
- (06) _____ Other (please specify) _____
- (07) _____ Retired

Q5. Approximately what was your total personal income last year before
 Column 4 tax and other deductions? (OTHER CODED DATA, COLUMN 4)

- (0) no response
- (1) Less than \$6,000
- (2) \$6,000 to \$11,999
- (3) \$12,000 to \$17,999
- (4) \$18,000 to \$23,999
- (5) \$24,000 to \$29,999
- (6) \$30,000 to \$35,999
- (7) \$36,000 or more
- (8) no income

Q6. Note section of City where interview took place, that is, the number
 assigned to the section of the city in which you are interviewing.
 (OTHER CODED DATA, COLUMN 5 and 6)

In order to evaluate and also to improve our own social research, we would like to call back some of the 1,000 people we intend to interview in Edmonton. The purpose of this call back will be to ensure that in fact you were interviewed, and secondly to get your impressions of the interview and any suggestions you might have as to how it might be improved. The information you give us over the phone will be strictly confidential and will be used to improve our research techniques. If you would give me your name and your phone number, you may be called back by our office.

Thank you very kindly.

- 7. Date of Interview: Upper left hand corner.
- 8. Last Name: Upper right hand corner.
- 9. Phone number: Below name in blank space.
- 10. Name of Test: Fill in Other.

ALBERTA OIL SANDS ENVIRONMENTAL RESEARCH PROGRAM

LONGITUDINAL STUDY OF PERSONAL ADJUSTMENT

AND SOCIAL CONDITIONS IN

THE FORT McMURRAY AREA HS 30.1

PHASE 1: FINAL REPORT

BACKGROUND PAPER:

EXTENDED INTERVIEW

AUGUST, 1978

ALBERTA OIL SANDS ENVIRONMENTAL RESEARCH PROGRAM

LONGITUDINAL STUDY OF PERSONAL ADJUSTMENT

AND SOCIAL CONDITIONS IN

THE FORT McMURRAY AREA HS 30.1

PHASE 1: FINAL REPORT

BACKGROUND PAPER:

EXTENDED INTERVIEW

APPENDIX 2:

EXTENDED INTERVIEW: II OPEN-ENDED QUESTIONNAIRE

AUGUST, 1978

BACKGROUND PAPER: EXTENDED INTERVIEW

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BACKGROUND PAPER: EXTENDED INTERVIEW

1. INTRODUCTION

The Extended Interview consists of a series of questions dealing with a wide range of topics. The instruments are designed to allow the respondent an opportunity to discuss in more detail various dimensions of personal, social and community life included in the other instruments. More important, perhaps, the Interview is designed to allow the respondent an opportunity to deal with those matters which are of most concern to him or her. Personal topics are also of high interest to several departments.

The Interview is divided into two basic components. One is a self-administered Questionnaire, and the other consists of an Interview in which the interviewer probes across a wide range of dimensions. In both components, questions are both structured and semi-structured; self-administered structured questions provide room for the respondent to explain, amplify and clarify his or her answers.

The dimensions which the two components cover are the following:

- . Mobility
- . Housing
- . Community activities, including recreation and leisure
- . Natural environment
- . Education
- . Work
- . Health and personal services
- . Day care needs
- . Facilities for the elderly
- . Personal health and well-being
- . Family well-being
- . Cost of living and financial matters
- . Crime, safety and the police
- . Social deviance (although greater detail is gone into in the Confidential Questionnaire discussed in Background Paper, Social Deviance)

- . General services
- . Local government

Within, and ranging across these dimensions are a number of others dealing with such factors as community involvement and affiliation, stress, isolation, effects of moving, attachment to the community, aspirations for oneself and for children and other dimensions which the literature and research demonstrated is important in resource towns.

The following is a brief discussion of each of the major headings noted above.

2. MOBILITY

Items pertaining to geographic and job mobility are located in both the Base Demographic Sheet and Extended Interview. Larson (1977) cites several studies with respect to people moving north which suggest both relatively high geographic mobility and job mobility. There is also considerable evidence linking mobility with psychological stress (see below, Background Paper, Children and Education). There, we cite one researcher who states that for the child moving is akin in impact to losing a parent. Larson also discusses at some length the processes and difficulties associated with adaptation of individuals to new surroundings, particularly surroundings which are likely strikingly different in important respects from those to which the individuals were accustomed. Previous history of geographic and job mobility will, therefore, be an important piece of base data with respect to characteristics of the current population and changes in those characteristics over time. With respect to mobility we also identify the urban/rural background of the respondent, since this too has an important bearing on expectations and adjustment.

3. HOUSING

Housing has long been regarded as one of the major

factors in community satisfaction (Flanagan, 1978). With respect to isolated resource towns, Moss (1969) argues strongly for the importance of housing in encouraging employees to remain in the north. He suggests that the key factor in northern employee turnover is that people are unwilling to accept second class rental housing located in "drab, unplanned and poorly landscaped areas". He also argues that tenants have little financial stake in the community and typically contribute little to its improvement. Riffel (1975) also argues for the importance of housing as a factor in community satisfaction and population turnover. Van Dyke's (1977) informants frequently mention housing as a source of dissatisfaction, particularly during the early stages of development.

The Base Demographic Sheet will provide information on the type and age of housing, size and adequacy with respect to the number of inhabitants, ownership, subsidies, etcetera. In the Extended Interview we deal more directly with aspects of perceived adequacy (construction, insulation, etcetera), relations with landlords, location with respect to access to other services such as shopping; and with respondents' satisfaction and dissatisfaction. We will enquire whether the respondents had problems finding housing in the resource town, their perceptions of crowding and of the relative cost of the housing obtained compared with their former community. The actual cost of housing will be dealt with in our discussion of Cost of Living, and in that section of the Extended Interview.

4. COMMUNITY ACTIVITIES

Items in this category are designed to cover a number of different dimensions. At a specific level the data will assist, along with the data from the Time Use Diaries, in providing information for projecting demands for indoor and outdoor community and recreation facilities,

including parks and campgrounds. This information was requested by several departments.

More generally, the various questions will provide information with respect to the degree various types of respondents involve themselves in the community, the most popular and desired types of involvement, and matters of expectation, satisfaction and dissatisfaction. At a more conceptual level, we are looking to information regarding social isolation, affiliation, social organization and related dimensions. The Community Index also has items relating to these matters.

To a considerable extent community satisfaction varies with integration and involvement with the community; having a "stake" in its organizations and people. (Ross, 1969). The Extended Interview will allow us to find out which respondents are "joiners", are active volunteers and executive members of clubs and associations, and which respondents disdain participation in the town's organizations. We hope to discover the social network of influence as well as affiliation. We intend to use the data with respect to community participation as an indirect measure of social organization and continuity in the community. Ross and others active in the field of community organization/development make plain the importance of continuity as a factor in social organization. Every group or club or organization has its several high energy members who keep things going. When these people leave the organization often falters and not infrequently takes some time to recover, particularly if significant numbers of the other members also leave. For example, we have been told that the relocation of Bechtel staff had a significant effect upon the fabric of the community: club women, volunteers, social workers, secretaries, administrators, service club members left; and those left behind who were more active in the community felt a serious sense of dislocation. The study findings will enable us to examine this question more precisely.

The data from Phase 2 will enable us to identify those active in the community in various respects; as professionals, paraprofessionals, active in organizations, etcetera. In Phase 3, we will identify those who have left. One can thus begin to build up a picture of one dimension of community organization. Responses of subjects to community organization-oriented items in Phase 3 will enable us to identify how important, if at all, the loss of such persons is to the community's sense of social organization and continuity. We can also relate the movement of these people to various dimensions of community satisfaction.

5. NATURAL ENVIRONMENT

There is a considerable amount of evidence which points to perceptions of the climate and landscape as powerful influences with respect to population turnover in resource communities. Riffel notes climate as a major factor in turnover. The study by Nickels, Sexton and Bayer (1976) noted that weather factors represented only a small part of the explained variation in satisfaction and staying. We expect that feelings of social isolation, and satisfaction with various life dimensions (e.g. social facilities, housing, schools) are closely related to attitudes towards the climate and landscape. We expect a comparative analysis of the responses from Fort McMurray, Cold Lake and Peace River respondents will prove instructive in eliciting a better understanding of the various relationships.

The items in this section deal with the effects on the climate and surrounding countryside on the respondent's activities, feelings of personal well-being, and relations with others.

6. EDUCATION

Information on the education level of the respondent and members of the responding household are

included in the Base Demographic Sheet. In addition, the Community Index contains several items relating to education and aspirations, adequacy of the schools and perceptions of the teachers.

The purpose of questions in the Extended Interview is to deal with a number of broad dimensions of self and aspirations, and indirectly with community satisfaction. (See below, Children and Education).

Respondents are asked whether they are able to fulfill their desire for educational and occupational upgrading with the facilities available in the community. Also, an adult's acceptance of self and community is related to the degree of success he and his offspring enjoy in educational pursuits. Since the adult, and child, is also judged on this basis of his apparent success, education and educational aspiration are also related to feelings of self-worth. A parent's assessment of the education system coupled with his aspirations for his or her children are significant factors in community satisfaction and potential stress. In this regard, one of the first problems cited to us by Fort McMurray informants concerned the adequacy of the schools. We expect the matter to be of particular concern to persons of high educational level who aspire to at least comparable levels for their children.

7. WORK

The Base Demographic Sheet contains several items pertaining to job mobility, place of work, occupation, and standard industrial classification. The Community Index also contains items pertaining to the community as a satisfactory place in which to work and make one's career. A special instrument, the Job Description Index (JDI) is being used to deal with the major dimensions of the work place, the job itself and fellow workers and supervisors.

The items in the Extended Interview deal more

with the dimensions of job aspirations for oneself and one's children. They also enable the respondent to deal directly with the job as satisfying or dissatisfying in any respect the respondent thinks important. Responses to these items are related to community satisfaction and potential future mobility. A more detailed description of these and other dimensions is included below in the Background Paper, Quality of Working Life/Job Satisfaction.

8. HEALTH AND PERSONAL SERVICES

The reports and studies by Riffel, Larson, Van Dyke etcetera, are replete with references to the inadequacies of services in resource communities. Flanagan, in his study, and Blake, Weigl and Perloff (1975) stress the importance of the "maintenance system", as factors in community satisfaction. In addition, we have been asked by several departments to provide for them data on the need for perceived adequacy and satisfaction with a range of services.

The items we have used have, for the most part, been drawn from or modelled on the National Health Survey being carried out by the Health and Welfare Canada. This will provide a basis for fruitful comparability of our data with that from other communities in Alberta and across the country. The services referred to in the Extended Interview include medical/dental, pharmaceutical psychiatric/psychological and related ones. Respondents are invited to talk about their use of these services within the community and elsewhere, so that we will find out how far afield some residents go.

9. FACILITIES FOR THE ELDERLY

These represent an important subset of the services noted in the previous section. Day care for children is obviously an important consideration in any community in which, according to the 1977 Municipal Census, 12% of

the population is in the age cohort 0 - 4 years. That is the situation in Fort McMurray. Conversely, the percentage of elderly persons in Fort McMurray is perhaps .5%.

The Cold Lake communities, however, are likely to face a different kind of population composition, older and costly, because of their already substantial population base.

Respondents are asked to state their need for these facilities, the perceived availability of the facilities, satisfaction with the facilities and comparisons with similar facilities which the respondent may have used in other communities.

10. PERSONAL HEALTH AND WELL-BEING

Specific information on handicapped, disabled and chronically ill persons in the household is obtained through the Base Demographic Sheet. In addition, indirect reporting on emotional well-being will be available through an analysis of the Activities Index/Community Index.

The items in the Extended Interview are directed towards several dimensions as a set of important base data. The first is the health and perceived health of the respondent. It is not practical for us to propose actual testing of blood pressure, urine and vital capacity - which are standard and reliable tests with respect to general health. Instead, we have used the verbal items from the National Health Survey and similar sources. It will be noted that these items deal not only with physical well-being but mental well-being also. In addition, respondents are being asked to describe their drinking and smoking habits and changes in these habits over time. Other items refer to the perceived pace of life.

These items are, of course, strongly related to other key dimensions, particularly stress.

We attempted to design a more stress-specific instrument. To this end we discussed the matter with

Dr. Hans Selye and his staff at the International Stress Institute in Montreal. They, however, found they were unable, within the limitations of time and budget, to develop a written stress instrument applicable to the general population, the main thrust of their work being with executives' and managers' stress conditions.

Any adequate discussion of stress with regard to well-being and satisfaction is beyond the scope of this brief review. The subject has been dealt with extensively elsewhere (see, Lennart, 1975). Even in the absence of physical testing and a population general instrument, we believe the various instruments we propose contain adequate items, taken in combinations with each other, to develop reliable findings with respect to perceived stress. We have referred to some of these items in general terms in the preceding paragraphs. If we look specifically at work and work-related stress, for example, drawing on the model suggested by Gardell (in Lennart) we find that the basic components are:

Individual aspirations (needs Activities Index)	Objective conditions (secondary data)	Perceptions of objective conditions (press; Community Index; Job Description Index)	Satisfaction Extended Interview
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It is possible, therefore, through careful linking of these components, to prepare a composite which will provide direct and indirect measures of stress for particular population groups with sufficient reliability and precision to major areas of concern.

11. FAMILY WELL-BEING

Larsen notes that there has been little substantive research of any kind on the adjustment of the family unit to life in resource communities. Our approach to this

is both direct and indirect. We are collecting base information on family structure composition, socio-economic status and related information through the Base Demographic Sheet.

The Time Use Diaries will provide direct and detailed information on the amount of time families spend together, including which members are interacting, and what their joint activities are.

The Community Index contains a number of items pertaining to the perception of the community as a place in which to raise a family, and have one's children live.

The Extended Interview contains a number of items allowing the respondent to describe family leisure activities, his or her satisfaction with the facilities in the community vis-a-vis family life, and an opportunity to compare family recreation choices in this and the previous community of residence.

The Extended Interview also contains items pertaining directly to the respondent's perception of satisfaction with his or her spouse in relation to the respondent and to the children. The key variable here is perceived availability of time and space, drawing from Larson's review of the literature. The respondent will be asked to report on whether he or she has enough time with the children, whether the spouse does, and whether spouses have enough time together and space in which to be alone. Married respondents will also be asked to list their individual adjustment problems, and those of their spouse.

The data from these items will enable us to prepare family profiles which will be instructive across key dimensions of family life.

It should be noted that where there is a child in the house over the age of 16, that young person will also be asked to complete the core instruments.

Consequently, we expect to have a multi-perspective description of family life.

Indirect measures of family life and adjustment will be drawn mainly through consonance/dissonance measures on the needs-press instruments and through the testing of children at school with respect to achievement, behaviour and family well-being (see below, Children and Education). In addition, a number of items in the various instruments can be regarded, separately or in clusters, as indirect measures of various dimensions of family life and adjustment.

12. COST OF LIVING AND FINANCIAL MATTERS

Van Dyke and others report on the importance of financial motivation in bringing people to northern resource communities. It is commonly held that the desire to make money is what brings the great majority of migrants to these communities. What is not clear, is the extent to which these expectations are realized. Informants in Fort McMurray have spoken to us of the frequency of heavy indebtedness. Retailers point to heavy sales in recreation equipment and vehicles. Conversely, Van Dyke's informants also speak of the high cost of living, and not simply with respect to housing, but also of the cost of food and clothing.

The intent of the items in the Extended Interview is to provide detailed and reliable information with respect to perceptions of the cost of living vis-a-vis expectations, the frequency of borrowing, the more common purposes of loans, and respondents' perceptions of problems incurred as a result of the cost of living.

We expect that financial stress, indebtedness and preoccupation, will be negatively associated with community satisfaction. Among those in Fort McMurray to make the "fast buck", who openly want to save a great deal of money, we will be interested in their level of community and job satisfaction.

13. CRIME, SAFETY, THE POLICE AND SOCIAL DEVIANCE

Safety for oneself and one's family ranks high in determining satisfaction with the community. Social deviance and its effects are discussed in detail in the Background Paper, Social Deviance.

The Extended questionnaires attempt to tackle this question from several perspectives. Respondents are asked to express their views with regard to crime, safety and the police. These items were drawn in part from the recent survey (1976) carried out by the Alberta Bureau of Statistics and the Edmonton Police Commission: "Residents' Attitudes Towards the Police". Respondents are asked to report on specific types of deviant behaviour suffered by persons they know personally or of whom they have direct knowledge. Respondents are also asked to report on specific types of deviance committed by persons they know or of whom have some direct knowledge. Item checks will be established during analysis to reduce problems of double counting among respondents.

It is well documented (Nettler, 1974) that official statistics on crime err on the side of under-reporting. Other measures of the incidence and varieties of crime are victim reports and self-reports, and though memory is admittedly faulty and self-esteem heavy, the Extended Interview does provide the opportunity for improving the data. This information from respondents will enable us to provide a more complete picture of the incidence of various types of deviant behaviour together with some information with regard to the socio-demographic characteristics of the victims and perpetrators.

At least as important, however, respondents' reports will provide an additional dimension to reported perceptions of the levels of crime and the degree of safety in the community.

Respondents are also asked to report on deviant behaviour within the household. Clearly, this is a

highly sensitive matter, and a sealed, self-administered questionnaire will be used. The procedure is not uncommon but it does pose problems with respect to confidentiality of data, developing sufficient trust in the respondent to encourage reliable responses, and possible legal difficulties with respect to withholding information. We are particularly concerned with acts of violence within the family; i.e. child abuse and wife beating. It is a concern of departmental officials that, because of the stresses in resource communities, these practices may be more widespread and common than has been thought up until now.

The matter is obviously highly sensitive and has to be handled with some delicacy. The loading on self-esteem is extreme. With respect to child and spouse battering, the items are indirect, and some judgment will have to be used in the analysis with respect to the likelihood of battering occurring and its seriousness. Responses will, of course, be examined in the context of other stress-related measures. Items with respect to more "acceptable" forms of deviant behaviour - e.g. robbery - will be asked directly. We expect some under-reporting on all items and are proposing a separate and more intensive interview process over time to elicit this more sensitive information.

14. GENERAL SERVICES

There is substantial anecdotal and other evidence that one cause of dissatisfaction in resource communities is the absence of simple maintenance and amenity services such as an appliance repairman, beauticians, and plumbers. Respondents are asked to cite their experiences and note their satisfaction or dissatisfaction with this aspect of community life.

15. LOCAL GOVERNMENT

Even a cursory reading of the local Fort McMurray newspaper makes plain the burdens which local governments

face in a resource community of this type. Senior levels of government are heavily involved, there are only one or two employers of any size, major decisions lie beyond the reach of the local council and officials, the conditions and circumstances of growth are more difficult and complicated than they are accustomed to or trained for, they have to finance the services and amenities up front and hope for repayment out of increased assessment in later years. There has not been, to the best of our knowledge, any substantial research into residents' perceptions of and attitudes towards local government as a factor in community satisfaction in northern communities. The Community Index contains some items in this respect. The Extended Interview provides an opportunity for respondents to describe their contacts, if any, with local government, and to express their views.

16. CAVEAT

The items which follow are intended to accommodate the following:

1. The requirements of the Terms of Reference
2. Information requests from other departments.
3. Central topics identified through the literature search.

Each of the resulting subjects is dealt with comprehensively. For example, there are 67 items dealing with all aspects of Health and Personal Services.

With the subject of social deviance, it is necessary to ask a number of indirect questions on such subjects as child abuse and spouse abuse, in order to pave the way to the more direct, and highly sensitive questions.

In all cases, items have been developed to ensure that each subject is covered thoroughly. Respondents are offered ample opportunity in each subject to express their views.

At this point it is essential to set priorities with respect to the information required for the Longitudinal Study. Because of the number of items required to cover each subject comprehensively, the length of the questionnaire makes it unsuitable for administration.

During the pilot testing in Edmonton and Fort McMurray, the willingness of respondents to complete questions diminished as they became aware of how many more were left to complete. Even though many questions would not apply to all respondents (e.g. marrieds vs. singles), nonetheless the sense of respondent burden was apparent to the interviewer. In part, it arose simply from the respondent's recognition of the number of pages which needed to be turned and read. Most of the open-ended questions were avoided, as were questions dealing with difficult and sensitive matters. Unfortunately, these are the items in which a number of departments are most interested.

Several approaches need to be considered.

The first is to cut out entire topics, or subjects within topics. This would require consultation with the departments concerned.

The second approach is to cut questions from each subject. Instead of dealing with a subject comprehensively, selected questions of a broad representational nature would be retained, and the remainder cut. For example, one might cut all the questions dealing with family well-being and marital satisfaction (subjects of concern to a number of agencies, and about which not a great deal is known), and retain only the "family life ladder" items.

Because of their broad nature, however, such questions do not generate the detail necessary to focus in on the specifics from which one can derive conclusions pertinent to policies and programs.

In our view, it is not possible to meet all the departmental requests for information, and cover in detail all the major topics which studies point to as important. We suggest the following:

Phase 2

1. In their review of the Extended Questionnaire, its topics, subjects and items, the Client and the interested departments identify their priorities with respect to information required during the next 12 months, keeping in mind data to be generated through the other instruments.
2. The Client and departments review priorities with the study team and a determination will be made regarding which topics will be dealt with in detail and which by representational items.
3. The study team will make the necessary revisions, pre-test the revised version and incorporate it into the household survey.

Phase 3

1. In Phase 3 priorities will be reconsidered by the Client and interested departments.
2. The study team will revise the Extended Questionnaire accordingly, maintaining sufficient continuity of items in each topic from phase to phase to provide an adequate basis for comparability.

In addition, we propose to organize the questionnaire differently. In order to reduce the sense of respondent burden, we will break the Extended Questionnaire into two separate questionnaires. One questionnaire will be used only for single persons, including separated, divorced, widowed and never married. The second questionnaire will be administered only to married persons. This will serve to reduce appreciably the physical size of the questionnaire a respondent has to handle. Both questionnaires will contain a number of the same items as these apply regardless of marital status or age.

EXTENDED INTERVIEW

Part II: Open-ended questions

- Q1 Even though some people have lived in many different cities or towns and others have lived in only a few, many people think of one place as home, even if they haven't lived there in years.

Is there a place that you call home?

Yes (please specify) _____
 No
 not sure

If Yes, go to Question 2.

If No or not sure or if home is where respondent is now living, go to Question 3.

- Q2 Why do you consider (name place) to be your home? What things about (name place) make you feel like it is your home?

PROBE: grew up there
 spent a lot of time there
 family, friends, relatives there
 people friendly, helpful, etc.
 easy to make friends, meet people
 go back to visit, phone/write a lot
 had a good job there
 other: _____

- Q3 Did you leave behind any family or relatives in (name place)?

Yes No

- Q4 How did you feel about this?

PROBE: miss/don't miss them, why?

- Q5 Did you leave behind many friends?

Yes No

Q6 How did you feel about this?

PROBE: miss/don't miss them, why?

Q7 Do you have any relatives here/still here?

_____ Yes _____ No

Q8 (If Yes) How much time do you spend with them?

PROBE: a lot, some, a little, none

What they do together (e.g., visit, go out, etc.)

Q9 Do you have many friends here that you spend time with?

_____ Yes _____ No

PROBE .

Q10 (If Yes) Was it easy to make friends?

_____ Yes _____ No

PROBE: were/are people friendly

were/are there chances to meet people

Q11 (If No) Why not?

PROBE: people were/are not friendly

no chance to meet people

Q12 What have been the best ways for you to meet people here?

PROBE: through friends and relatives

neighbours

organizations/clubs

which ones? _____

church

meeting at restaurants, discos, bars, etc.

other: _____

Q13 Have any of your relatives/friends left since you arrived?

_____ Yes _____ No

Q14 (If Yes) How did you feel about this?

Q15 Before you came here, what did you expect this town to be like?

Q16 What was it like?

Q17 In what ways is it different from what you expected?

Q18 What are the things about this town that have impressed you?

Q19 What are the things about this town that have disappointed you?

(If respondent is single, go to Q23.)

Q20 What things about this town do you think your spouse finds disappointing?

Q21 What things about this town do you think you spouse is impressed with?

Q22 What advantages do you feel this town offers your children?

Q23 What problems or difficulties do you experience as a result of living here?

Q24 Do you feel you and your spouse have enough time together?

_____ Yes _____ No

Q25 (If No) What seems to be getting in the way?

Q26 On the whole, did you find getting adjusted to this community involved

- a few more difficulties than expected?
 about what you expected?
 fewer difficulties than expected?

PROBE: Could you explain why you found it less/more difficult, or about the same?

Q27 Would you like (your family) to live/or grow up here?

- Yes No

PROBE: Why/why not?

Q28 How long do you plan to stay here?

- less than six months
 six months to one year
 one to two years
 two to five years
 more than five years
 not sure

Q29 (If planning to leave) Can you talk a little about why you think you'll be leaving?

Q30 Do you feel that you can get what you want here?

___ Yes . ___ No

PROBE: Find out what respondent wants. How/why they are/are not getting what they want.

Q31 Have you ever found that you needed help and did not know where to go for it here?

___ Yes ___ No

PROBE

Q32 All things considered, what are the things you like most about this town? _____

Q33 All things considered, what are the things you dislike the most about this town? _____

Q34 If you could change two things about this community, what would they be? (PROBE) _____

MANY THANKS!

ALBERTA OIL SANDS ENVIRONMENTAL RESEARCH PROGRAM

LONGITUDINAL STUDY OF PERSONAL ADJUSTMENT

AND SOCIAL CONDITIONS IN

THE FORT McMURRAY AREA HS 30.1

PHASE 1: FINAL REPORT

BACKGROUND PAPER:

EXTENDED INTERVIEW

APPENDIX 3:

CONFIDENTIAL QUESTIONNAIRE

AUGUST, 1978

AOSERP LETTERHEAD

TO THE RESPONDENT

DRAFT/AUGUST

CONFIDENTIAL QUESTIONNAIRE

The following questions may seem personal. They are very important in discovering what actually occurs in a community. This information will be used to plan services and facilities. We guarantee that your comments will be treated confidentially. Only numbers (such as percentages and grouped statistics) will be used in the research reports. There will be no possible way of identifying individuals involved.

To ensure that no one but the senior researchers will see your responses, you should place the completed questionnaire in the envelope provided, and SEAL IT before handing it back to our interviewer.

Thank you very much for your co-operation.

Sincerely,
EARL BERGER LIMITED

Earl Berger, Ph.D. (Econ.)
Project Director

A.G. Scott, Ph.D.
Consulting Psychologist

CONFIDENTIAL QUESTIONNAIRE

- Q1. In your immediate family is there a history of: (Check all that apply)
- diabetes
 cancer
 heart disease
 tuberculosis
 rheumatic fever
 arthritis
 mental disorder:
 treated in office
 treated in hospital
 mental retardation:
 remain at home
 placed in institution
 social diseases (V.D.)
 other: _____
- Q2. Do you have children living here with you?
 Yes No
- Q3. When you must leave your children at home, is it easy to obtain good babysitting?
 Yes No no children
- Q4. What is the current rate for babysitting in this community?
 Rate \$____.____ per hour do not know
- Q5. Do you know of situations where young children (under 8 years) have been left alone for long periods of time (more than one hour)?
 Yes No
- Q6. Have you had to leave your children alone for long periods of time?
 Yes No no children
 When _____

Q7. Do you sometimes think that your children are left alone too much?

Yes No no children

Q8. Do you know families in this community where children have been left alone, without enough to eat?

Yes No

Q9. Do you know families who seem to let their children run loose on the streets day and night?

Yes No

Q10. Have you had to look after other people's children unexpectedly (not babysitting at parents' request), in such ways as:

- feeding them meals
- letting them sleep overnight
- making sure they're properly clothed
- making sure they go to school
- making sure they're clean
- other: _____
- No

Q11. Do you think this is much of a problem?

- a big problem
- something of a problem
- not much of a problem
- do not know

Explain. _____

(FOR PARENTS WITH CHILDREN LIVING AT HOME)

Q12. Raising children today is difficult and challenging. Do you find children to be demanding and unable to understand parents' problems?

_____ Yes _____ No

Explain. _____

Q13. School discipline today, in this community is (check one):

_____ too soft
_____ about right
_____ too strict
_____ other: _____

Q14. As far as you know, discipline by elementary school teachers in this community is (check one):

_____ too soft
_____ about right
_____ too strict
_____ other: _____

Q15. As far as you know, discipline by junior high school teachers in this community is (check one):

_____ too soft
_____ about right
_____ too strict
_____ other: _____

Q16. As far as you know, discipline by high school teachers in this community is (check one):

_____ too soft
_____ about right
_____ too strict
_____ other: _____

Q17. Families in this community generally discipline their children:

- not enough
- about right
- too much

Q18. Some people have to take very firm disciplinary action to control their children. Have you found this to be true for your family?

- Yes
- No

Q19. Do you sometimes get so angry that you think you will lose your temper?

- Yes
- No

Q20. Have you ever been afraid that you might lose control when disciplining a child?

- Yes
- No

Q21. Have you ever been so close to losing control when disciplining a child that somebody had to stop you?

- Yes
- No

Q22. If you have children, these days how do you usually discipline them?

- does not apply
- send to their rooms
- sit on chair in middle of room
- spank with my hand
- spank with a spoon
- spank with a belt
- spank with other object: _____
- scolding
- yelling
- reasoning
- stand in the corner
- loss of privilege, like T.V.
- loss of freedom, "grounding" them
- other: _____

Q23. In this community have you ever had reason to suspect some parents are abusing their children?

_____ Yes _____ No

Explain. _____

Q24. Did you report it?

_____ Yes _____ No

Explain. _____

Q25. Do you believe that there are more young girls getting pregnant in this community than others you may have lived in?

_____ Yes _____ No

Q26. Do you think there is a lot of V.D. in this community?

_____ Yes _____ No _____ no opinion

Q27. Are sex education courses needed in the schools here?

_____ Yes _____ No _____ no opinion

(If Yes) In what grades? _____

Q28. If you felt really upset and desperate, who would you call for help?

_____ wouldn't call any one

_____ my doctor

_____ my clergyman

_____ my parents

_____ a good friend

_____ my social worker

_____ my in-laws

_____ other: _____

Are they in town, or someplace else?

_____ in town _____ someplace else

Q29. If you had to borrow money for an emergency, to whom would you go for help?

- bank, credit union, loan company
 one of my parents
 another member of my family
 one of my in-laws
 a good friend
 other: _____

Are they in town, or someplace else?

- in town someplace else

Q30. If you had a major crisis in your marriage/serious relationship, to whom would you go for help?

- one of my parents
 a marriage counsellor
 a good friend
 another member of my family
 my clergyman
 wouldn't call anyone
 other: _____

Are they in town, or someplace else?

- in town someplace else

Q31. Are household fights between husband and wife common among the people you know in this community?

- Yes No do not know

Q32. Are there times when they hit each other?

- Yes No do not know

Q33. How many families do you know where this happens?

- none
 1 - 3
 4 - 6

Q34. Does it ever happen in your household?

_____ once or twice a week

_____ occasionally

_____ once or twice a year

_____ never

Q35. Have you ever observed anyone being struck or attacked or robbed in this community?

_____ Yes _____ No

Describe where, when, what happened. _____

Q36. Have you ever been struck, attacked or robbed in this community?

_____ Yes _____ No

Describe where, when, what happened. _____

Q37. Is there any area around here where you would be afraid to walk alone at night?

_____ Yes _____ No

(If Yes) Explain: _____

Q38. Do you think the streets and playgrounds here are safe for children?

_____ Yes _____ No

(If Yes) Explain: _____

Q39. Do you think the streets are safe for the elderly?

_____ Yes _____ No

(If No) Explain: _____

Q40. Do you think the streets are safe for women?

_____ Yes _____ No

(If No) Explain: _____

Q41. Do you believe that any of the following are problems in this community?

	Yes	No	No Opinion	Comments:
Loneliness				
Gambling				
Juvenile Delinquency				
Excessive Alcohol				
Drug Abuse				
Prostitution				
Crime (in general)				
Other				

Q42. Have any of the following happened to someone in your household while living here (check all that apply and comment):

- robbery _____
- assault (beaten up) _____
- sexual assault _____
- rape _____
- motor vehicle _____
- vandalism _____
- motor vehicle stolen _____
- being wounded _____
- being shot at _____
- attempted suicide _____
- being cheated _____
- financially _____
- other _____
- none _____

Q43. While living here has your residence been

- vandalized
- broken into
- robbed
- other (Explain) _____
- no _____

Q42. Have any of the following happened to someone in your household while living here (check all that apply and comment):

- | | | |
|--------------------------|------------------------------|-------|
| <input type="checkbox"/> | robbery | _____ |
| <input type="checkbox"/> | assault (beaten up) | _____ |
| <input type="checkbox"/> | sexual assault | _____ |
| <input type="checkbox"/> | rape | _____ |
| <input type="checkbox"/> | motor vehicle
vandalism | _____ |
| <input type="checkbox"/> | motor vehicle stolen | _____ |
| <input type="checkbox"/> | being wounded | _____ |
| <input type="checkbox"/> | being shot at | _____ |
| <input type="checkbox"/> | attempted suicide | _____ |
| <input type="checkbox"/> | being cheated
financially | _____ |
| <input type="checkbox"/> | other | _____ |
| <input type="checkbox"/> | none | _____ |

Q43. While living here has your residence been

- | | | |
|--------------------------|-----------------|-------|
| <input type="checkbox"/> | vandalized | |
| <input type="checkbox"/> | broken into | |
| <input type="checkbox"/> | robbed | |
| <input type="checkbox"/> | other (Explain) | _____ |
| <input type="checkbox"/> | no | _____ |

Q45. While living here has anyone in your household committed any of the following (check those that apply):

	Yes	No	Age of Person
vandalism	___	___	_____
breaking and entering	___	___	_____
theft under \$200	___	___	_____
theft over \$200	___	___	_____
assault and battery	___	___	_____
attempted murder	___	___	_____
murder	___	___	_____
rape	___	___	_____
attempted rape	___	___	_____
prostitution	___	___	_____
possession of drugs	___	___	_____
theft of motor vehicle	___	___	_____
indecent assault	___	___	_____
shoplifting	___	___	_____

FOR MARRIED PEOPLE LIVING TOGETHER (Singles go to Question 56.)

Q46. These days, how do you and your spouse get along?

- ___ we are on the brink of breaking up
- ___ there are differences but we manage
- ___ we leave each other alone
- ___ we are comfortable with each other
- ___ we are happy together

Comment: _____

Q47. Has living in this community changed your relationship?

Q48. At the moment, are things between you

- ___ better than usual
- ___ about the same as always
- ___ not as good as usual

Q49. If you were to describe the best things in your married life since coming here, what would they be? _____

Q50. If you were to describe the worst (most difficult) things in your married life since coming here, what would they be?

Q51. What are the subjects that you and your spouse disagree about?

Q52. Does living in this community contribute to your disagreements?

_____ Yes _____ No _____ too early to
say

Comment. _____

Q53. Do you and your spouse have enough time together by yourselves?

_____ not enough time
_____ sometimes enough time
_____ usually enough time

How do you think your spouse would answer that? _____

Q54. Do you and your spouse have enough privacy for adult conversation alone?

_____ rarely enough privacy
_____ sometimes enough privacy
_____ usually enough privacy

Q55. Do you and your spouse have enough privacy for sex?

- rarely enough privacy
 sometimes enough privacy
 usually enough privacy

Statistics show that a number of married people have sexual relations with persons to whom they are not married.

Q56. Do you think that this has happened here?

- I do not know
 I have been told that it has happened,
 but I have no personal knowledge
 it has happened among some people I am
 acquainted with
 it has happened among my friends

Q57. While you have been living in this community, has it happened:

-- in your immediate family?

- Yes not sure No - no family

-- with you (or your spouse, if married)?

- Yes not sure No

(Marrieds, please go to Question 67)

FOR SINGLES (also separated, divorced, widowed)

Statistics show that some single people have sexual relations without marriage.

Q58. Does this happen very much in this community, in your opinion?

- don't know
 yes, a lot
 yes, to some extent
 not very much
 no

People tell us that having a satisfying sex life is important.

Q59. How important is it to you?

- very important
 somewhat important
 not very important

Q60. On the whole, do you feel that your sex life here is satisfying?

- generally satisfying
 generally not satisfying
 not satisfying at all
 not interested

Q61. Do you go out with members of the opposite sex as often as you would like?

- not as often as I would like
 as often as I would like
 not interested

Q62. Do you have a current serious relationship with someone outside this community?

- Yes No

Q63. Do you have a current serious relationship with someone who lives here?

- Yes No

Q64. (If No) Do you think there are people here with whom you could have a serious relationship?

- Yes No

Q65. Is it difficult for you to meet the kinds of people here with whom you could have a serious relationship?

- Yes, it is difficult
 No, it is not difficult

(If it is difficult) Please explain why. _____

Q66. Have you personally experienced the break-up of a marriage or a serious long-term relationship?

- Yes, once. When? _____
 Within the past 3 years? Yes No
- Yes, several times. When? _____
 Any of them within the past 3 years?
 Yes No
- No, not so far

THANK YOU for your assistance. Remember, to be sure your answers are treated confidentially, place the finished Questionnaire in the envelope provided, seal it, and hand it to the Interviewer.

ALBERTA OIL SANDS ENVIRONMENTAL RESEARCH PROGRAM

LONGITUDINAL STUDY OF PERSONAL ADJUSTMENT

AND SOCIAL CONDITIONS IN

THE FORT McMURRAY AREA HS 30.1

PHASE 1: FINAL REPORT

BACKGROUND PAPER:

EXTENDED INTERVIEW

APPENDIX 1:

EXTENDED INTERVIEW: I SELF-ADMINISTERED

QUESTIONNAIRE

AUGUST, 1978

EXTENDED INTERVIEW: I SELF-ADMINISTERED

PREAMBLE

The attached is the third revision of the extended questionnaire investigating many aspects of lifestyle. The first draft was piloted in Edmonton in May, 1978; a second draft was piloted in Edmonton in June and in Fort McMurray in July, 1978; and it is proposed that this revision will be checked with the Client with regard to length and piloting.

SEQUENCE OF QUESTIONS

For the interested reader, following is the sequence of questions asked in this instrument:

- Mobility
- Housing
- Recreation and Leisure
- Physical Environment
- Work
- Education
- Crime, Safety and the Law
- Health and Personal Services
- Facilities for Children and the Elderly
- Cost of Living and Expenses
- General Health and Well-Being
- Local Government
- Social Deviance

EXTENDED QUESTIONNAIRE

(INTRODUCTORY QUESTIONS)

Q1. Where did you spend the majority of your time when you were growing up?

_____ Metropolitan city with more than 500,000 people

_____ City with 100,000 to 500,000 people

_____ Small city with 10,000 to 99,999 people

_____ Town with 1,000 to 9,999 people

_____ Rural town with less than 1,000 people

_____ Acreage subdivision

_____ Farm

_____ Other (specify) _____

Q2. In how many communities did you live before the age of 18?

_____ one

_____ two

_____ three

_____ four or five

_____ six or seven

_____ eight or more

Q3. Have you always lived in this community?

_____ Yes

_____ No, moved here

Q4. Who made the final decision to move here?

- I did
 My spouse did
 We decided together
 Transferred
 I can't remember
 Always lived here
 Others decided (specify) _____

Q5. How did you feel about the idea of moving to this community?

- Very willing
 Somewhat willing
 Indifferent, didn't care
 Somewhat reluctant
 Very reluctant
 Always lived here

Q6. Did you (or your spouse) visit this town before you moved here?

- We both did
 He/she did
 I did
 No, neither of us did
 Always lived here

Q7. No matter how long you've lived here, from the list below, check as many as fit your reasons for moving here or staying.

- I like to move from place to place
- This is a good place to make money
- This is a good place to make a career
- I was transferred here
- There are good opportunities for my skills
- Spouse wanted to work here
- Company offered me/spouse a job here
- This is the only place to find a good job
- This is a good place to raise a family
- This is a good place for children
- Family members are here
- This is "home"
- This is a good place to make a start
- This is a good place to settle
- Friends are here
- On the recommendation of others
- This is a faster place of life
- There are better recreational facilities and/or opportunities
- This is a good place to live

IF YOU HAVE ALWAYS LIVED HERE, GO TO QUESTION 14

FOR THOSE WHO MOVED HERE

Q8. Did you have a job when you arrived?

Yes No

Q9. (If no) Were you looking for a job?

Yes No

Q10. (If no) How long did it take you to get a job?

Under a month
 One to two months
 More than two months

Q11. Did your spouse have a job when you arrived?

Yes No No spouse

Q12. Was he/she looking for a job?

Yes No No spouse

Q13. (If no) How long did it take your spouse to get a job?

Under a month No spouse
 One to two months
 More than two months

(HOUSING)

Q14. In what kind of residence do you currently live?

- A 2-3-storey walk-up apartment
- A 4-6-storey apartment
- A high-rise apartment
- A mobile home
- A townhouse
- A suite in someone's residence
- A bungalow
- A 2-storey house

Q15. Is there a yard where children can play?

- Yes No

Q16. Is there a garden where you can grow flowers and vegetables?

- Yes No

Q17. Did you choose your residence

- From what was available on the open market
- Through your employer
- Other (specify) _____
- _____

Q18. Who is responsible for taking care of the services in your dwelling? (e.g., plumbing, furnace, etc.)

- Landlord (Go to Question 19)
- I am, as owner (Go to Question 23)
- I am, as tenant (Go to Question 20)
- Other (specify) _____

FOR TENANTS ONLY

Q19. (If landlord is responsible) Have you noticed or experienced any problems in the maintenance service provided by your landlord?

_____ Yes _____ No

(If Yes) Please specify problems _____

Q20. (If tenant is responsible) In the course of taking care of your residence, have you contacted any trades personnel (such as carpenters, electricians, painters, plumbers, interior decorators or appliance repair personnel)?

_____ Yes _____ No

Q21. (If Yes) Considering such things as waiting time, cost, and quality of work, were you satisfied with the service? (Please specify the service and whether you were satisfied.)

<u>Service (Specify)</u>	<u>Satisfied</u>	<u>Dissatisfied</u>
_____	_____	_____
_____	_____	_____

Q22. If you were not satisfied with the service, please specify service and explain why you weren't satisfied.

Q23. Do you feel that the following features of your residence are adequate (good enough) or inadequate (not good enough):

a. Construction: _____ Adequate _____ Inadequate
(If inadequate) Why? _____

b. Insulation: _____ Adequate _____ Inadequate
(If inadequate) Why? _____

c. Size: _____ Adequate _____ Inadequate
(If inadequate) Why? _____

Q24. Is it easy to get to the following places from your house?

a. Shopping: _____ Yes, easy _____ No, not easy
(If no) Why? _____

Do you need a car to do this? _____ Yes _____ No

b. Recreational facilities:
_____ Yes, easy _____ No, not easy
(If no) Why? _____

Do you need a car to do this? _____ Yes _____ No

c. Work: _____ Yes, easy _____ No, not easy
(If no) Why? _____

Do you need a car to do this? _____ Yes _____ No

Q25. What do you like most about your home? _____

Q26. What do you dislike most about your home? _____

Q27. Are you dissatisfied enough to look for another more suitable residence?

_____ Yes _____ No

(If Yes) When? _____ Where? _____

(If No) Why not? _____

Q28. How long do you plan to stay in this home?

- _____ A few months
- _____ A year
- _____ Two years
- _____ More than two years

Q29. What do you like most about this neighborhood (immediate 3 to 4 blocks)? _____

Q30. What do you dislike most about this neighborhood?

Q31. What sort of people would you expect could get something done in this neighbourhood to improve it?

(Check as many as apply)

- | | |
|--|-----------------------------------|
| <input type="checkbox"/> Action by residents | <input type="checkbox"/> Police |
| <input type="checkbox"/> Block parents | <input type="checkbox"/> Syncrude |
| <input type="checkbox"/> Social workers | <input type="checkbox"/> G.C.O.S. |
| <input type="checkbox"/> Civic officials | |
| <input type="checkbox"/> Other (specify) _____ | |

Q32. Do you expect that improvements will be made to this neighbourhood? (Mark where you feel on scale)

of course not	maybe	of course
/-----/		
pessimistic		optimistic

Q33. What kind of residence do you want to move into?

- 2 or 3-storey walk-up apartment
- 4 to 6-storey apartment
- High rise apartment
- Suite in a house
- Mobile home
- Townhouse
- Bungalow
- 2-storey home
- Do not want to move

Q34. What are the main reasons you want to move? (Check 4 or less)

- Leaving town
- Want a smaller home
- Want a larger home
- Current home too expensive
- Want a different neighborhood
- Want a different school for children
- Want to be closer to school
- Want to be closer to work
- Want to be closer to shopping, services
- Want to be closer to friends
- Want to be closer to family
- Want a back yard
- Want to get away from busy traffic area
- Our current home is not good enough for us
- Have more money to spend on a home
- Buying a home is better than renting
- Buy and sell at a profit
- Other (specify) _____
- _____
- Do not want to move

Q35. Do you think it will be difficult to find a home you want at a price you can afford?

- Very difficult
- Difficult but it's possible
- Not very difficult
- Do not want to move

Q36. Quite apart from financial considerations, if you had the choice, in what section of town would you prefer to live? (Name neighborhood) _____

Why? _____

(RECREATION/LEISURE)

Q37. Do you belong to any of your town's clubs or community organizations?

	<u>Yes</u>	<u>No</u>	<u>Name of Club</u>
a. sports groups (i.e., base- ball, curling)	—	—	_____
b. service clubs (i.e., Kins- men, Kinettes)	—	—	_____
c. church groups	—	—	_____
d. outdoors (i.e., Fish & Game)	—	—	_____
e. hobby clubs (i.e., cam- era, ham radio)	—	—	_____
f. YM or YWCA	—	—	_____
g. Other (specify)	—	—	_____

Q38. Have you served in any executive or board positions with clubs or organizations since coming to this town?

_____ Yes _____ No

(If Yes) What positions with what groups? _____

Instruction:

The box below on the right contains five possible responses, numbered 1 to 5. Look at item a to the left of the box, and decide which of five responses you agree with most. Write the number of that response in the blank space beside item a. Then proceed to items b, c and d.

Q39. How often do you participate in the following activities?

- a. _____ outdoor recreation
 b. _____ recreation at home
 c. _____ community activities
 d. _____ movies or spectator sports

- | |
|--------------------------|
| 1. less than once a year |
| 2. few times a year |
| 3. monthly |
| 4. weekly |
| 5. daily |

Q40. On a normal weekend when you are not working, do you spend most of your time

_____ in town?

_____ out of town? Where? _____

_____ mostly doing _____

Q41. On a long weekend when you are not working, do you spend most of your time

_____ in town?

_____ out of town? Where? _____

_____ mostly doing _____

Q42. When and for how long was your last vacation? _____

Q43. Where did you spend it?

_____ in town

_____ in the area/region

_____ elsewhere in Alberta

_____ outside the province

Q44. Generally, do you spend vacations around the Fort McMurray area?
 Yes No

Why? _____

Q45. What are your hobbies? _____

Q46. Since you've been here, have you and/or your children:
 (Please write Yes on the line for as many as apply)

Adults only	Children only	&Adults	
			attended a school concert
			attended a church concert
			attended a concert by a known entertainer
			attended a school play/drama
			attended a church play/drama
			attended a play/drama by a theatre company
			visited an art exhibit
			visited a photo exhibit
			visited a historic exhibit
			visited a science exhibit

Q47. Would you say that Fort McMurray has adequate facilities for
 such social activities as dances, bingos and parties?

- adequate
- inadequate
- don't know/care

Q48. Did you attend more social events such as dances in the previous
 community you lived in, than in Fort McMurray?

- Yes
- No
- does not apply,
always lived here

Q49. Were you disappointed in the social activities held in Fort McMurray compared to the number in your previous community?
 Yes No Does not apply, always lived here

Explain _____

Q50. To meet the "right people" and get ahead in this community, what groups or clubs should someone join? _____

Q51. How often do you read the local newspaper, Fort McMurray Today?
 regularly
 some of the time
 not very often
 never

Q52. Are you, or any of your children, members of the local library?
 Yes, the children belong
 Yes, I belong
 No
 Other: _____

Q53. What magazines do you read regularly through subscription or purchase? _____

Q54. How many books have you read in the past Year for:
 study _____ reading enjoyment _____

Some people say that this community does not have facilities for cultural activities. Others say that it has most of the facilities people need.

Q55. Would you say that this community has adequate cultural facilities?
 adequate
 inadequate
 don't know/care

Comments: _____

Q56. Did you attend more cultural events in the previous community you lived in, compared with Fort McMurray?

Yes No does not apply,
always lived here

Q57. Were you disappointed in the cultural events held in Fort McMurray compared to your previous community?

Yes No does not apply,
always lived here

Q58. Thinking about the people you work with, how much do you have in common with them?

a lot in common
 some things in common
 not very much in common
 I am not working

Explain: _____

Q59. Thinking about the people you spend your leisure time with, how much do you have in common with them?

a lot in common
 some things in common
 not very much in common

Explain: _____

Q60. Apart from food and rent, what do you spend the rest of your income on?

car
 sports and recreation
 savings
 clothes
 trips and vacations
 household furnishings, e.g. stereo
 outside entertainment, e.g. movies, discos, pubs
 personal entertaining at home, e.g. liquor, snacks
 other

Q61. Do you go to local, provincial or national parks?

Yes No

List those parks you visit, and how many times a year:

PARK

NUMBER OF TIMES A YEAR

_____	_____
_____	_____
_____	_____

Q62. In your opinion, are there any particular groups here who seem to run things?

Yes No Don't Know

Explain: _____

Q63. On the whole, what do you think of the people moving into the community these days?

they seem to be a benefit to the community.

they seem to bring problems with them

don't know much about them

Q64. Do you have parents or other members of your own family living near here?

Yes No

Q65. How often do you telephone them.

several times a week

several times a month

on special family occasions

several times a year

almost never

no family

Q66. How often do you go to visit your family?

several times a week

almost never

several times a month

no family

on special family occasions

several times a year

Q67. How often do your parents come to visit you?

- several times a week
 several times a month
 on special family occasions
 several times a year
 seldom
 never
 does not apply (no living family)
 no family in the area

Q68. How long do your parents usually stay when they visit you?

- do not visit
 a few hours
 a weekend (or couple of days)
 a week
 several weeks
 several months
 does not apply
 no family

Q69. Who do you spend most of your leisure time with?

- people I know from work
 people who live near me
 people I've met socially through friends
 people I've met in organizations, through clubs
 people I've met at the pub
 others _____

Q70. Are there things you'd like to do here that you haven't been able to?

Yes No

(If yes) What are they?

Q71. Do you have any of these problems? Check those that apply.

- can't find maintenance repairmen
- can't find babysitters
- can't cash a cheque when I need to
- can't find recreational activities I'm used to
- can't find my kind of people for socializing
- can't get away from people I see at work

- can't find quiet, private places to think
- can't find the clothes, personal items I want
- can't get special medical, dental treatment
- can't meet members of the opposite sex
- can't be private, everyone knows everyone else's business
- other: _____

MARRIED COUPLES LIVING IN FORT McMURRAY, PLEASE GO TO QUESTION 76

FOR SINGLE PERSONS (including separated, divorced, widowed)

Q72. How do you usually spend your leisure time?
Rank top 3.

- mostly outdoors (fishing, hunting, skiing)
 mostly at a pub or lounge
 mostly at house parties
 mostly at movies
 mostly at home
 mostly at the gym (working out, playing basketball)
 mostly doing my hobby: _____
 mostly with club activities: _____
 other: _____

Q73. How easy is it to make friends in this community?

- not as easy as I would like
 fairly easy
 very easy

Q74. How often do you meet people of the opposite sex here that you'd like to date?

- rarely
 sometimes
 often

Q75. When you go out on a date, where do you usually go?
Rank top 3.

- I do not go on dates
 to a pub or lounge
 to a dance/disco
 to a house party
 to a movie
 to a sports event
 to my place or my date's
 to a live concert
 other: _____

Go to Question 89

FOR MARRIED COUPLES LIVING IN FORT McMURRAY

Q76. What things do you and your spouse usually do together?

Q77. What things do you and your spouse usually do with your children -- as a family?

Q78. (For married men) To what extent do you help with household tasks?

- I help all the time
 I help when necessary
 I help occasionally

Q79. To what extent do you help with the children?

- I help all the time
 I help when necessary
 I help occasionally
 does not apply (no children)

Q80. (For married women) To what extent does your husband help with household tasks?

- He helps all the time
 He helps when necessary
 He does not help very often

Comment: _____

Q81. To what extent does your husband help with the children?

- He helps all the time
 He helps when necessary
 He does not help very often
 does not apply (no children)

Comment: _____

(PHYSICAL ENVIRONMENT)

Q82. People look at the countryside in different ways. What are your feelings about the countryside/landscape near here?

(Circle the number closest to the word that expresses your feelings on each pair of words.)

unfriendly	1	2	3	4	5	friendly
drab	1	2	3	4	5	vivid
disorderly	1	2	3	4	5	orderly
unwelcoming	1	2	3	4	5	welcoming
upsetting	1	2	3	4	5	relaxing
boring	1	2	3	4	5	exciting
unsafe	1	2	3	4	5	safe
unattractive	1	2	3	4	5	attractive
depressing	1	2	3	4	5	invigorating
confining	1	2	3	4	5	spacious
dark	1	2	3	4	5	bright
no pleasure	1	2	3	4	5	extreme pleasure
ordinary	1	2	3	4	5	unusual
ugly	1	2	3	4	5	beautiful
uncomfortable	1	2	3	4	5	comfortable

Q83. Have you lived here throughout the four seasons of the year?

Yes

Not yet been here for _____

Q84. Do you find that the winter cuts down on your visiting and going out?

Yes

No

Q85. Do you find that you get a little depressed in the winter?

Yes

No

Q86. Are there any things you like to do in the winter months that you haven't been able to do here?

Yes

No

Explain _____

Q87. Are there any things that you like to do in the summer months that you haven't been able to do here?

Yes

No

Explain _____

Q88. People have different attitudes towards the seasons of the year. What are your feelings about the winter? Not here in winter

(Circle the number closest to the word that expresses your feelings on each pair of words.)

unfriendly	1	2	3	4	5	friendly
drab	1	2	3	4	5	vivid
disorderly	1	2	3	4	5	orderly
unwelcoming	1	2	3	4	5	welcoming
upsetting	1	2	3	4	5	relaxing
boring	1	2	3	4	5	exciting
unsafe	1	2	3	4	5	safe
unattractive	1	2	3	4	5	attractive
depressing	1	2	3	4	5	invigorating
confining	1	2	3	4	5	spacious
dark	1	2	3	4	5	bright
no pleasure	1	2	3	4	5	extreme pleasure
ordinary	1	2	3	4	5	unusual
ugly	1	2	3	4	5	beautiful
uncomfortable	1	2	3	4	5	comfortable

People have different attitudes towards the seasons of the year.

Q89. What are your feelings about the spring? ___ Not here in spring

(Circle the number closest to the word that expresses your feelings on each pair of words.)

unfriendly	1	2	3	4	5	friendly
drab	1	2	3	4	5	vivid
disorderly	1	2	3	4	5	orderly
unwelcoming	1	2	3	4	5	welcoming
upsetting	1	2	3	4	5	relaxing
boring	1	2	3	4	5	exciting
unsafe	1	2	3	4	5	safe
unattractive	1	2	3	4	5	attractive
depressing	1	2	3	4	5	invigorating
confining	1	2	3	4	5	spacious
dark	1	2	3	4	5	bright
no pleasure	1	2	3	4	5	extreme pleasure
ordinary	1	2	3	4	5	unusual
ugly	1	2	3	4	5	beautiful
uncomfortable	1	2	3	4	5	comfortable

People have different attitudes towards the seasons of the year.

Q90. What are your feelings about the summer? ___ Not here in summer

(Circle the number closest to the word that expresses your feelings on each pair of words.)

unfriendly	1	2	3	4	5	friendly
drab	1	2	3	4	5	vivid
disorderly	1	2	3	4	5	orderly
unwelcoming	1	2	3	4	5	welcoming
upsetting	1	2	3	4	5	relaxing
boring	1	2	3	4	5	exciting
unsafe	1	2	3	4	5	safe
unattractive	1	2	3	4	5	attractive
depressing	1	2	3	4	5	invigorating
confining	1	2	3	4	5	spacious
dark	1	2	3	4	5	bright
no pleasure	1	2	3	4	5	extreme pleasure
ordinary	1	2	3	4	5	unusual
ugly	1	2	3	4	5	beautiful
uncomfortable	1	2	3	4	5	comfortable

People have different attitudes towards the seasons of the year.

Q91. What are your feelings about the autumn? ___ Not here in autumn

(Circle the number closest to the word that expresses your feelings on each pair of words.)

unfriendly	1	2	3	4	5	friendly
drab	1	2	3	4	5	vivid
disorderly	1	2	3	4	5	orderly
unwelcoming	1	2	3	4	5	welcoming
upsetting	1	2	3	4	5	relaxing
boring	1	2	3	4	5	exciting
unsafe	1	2	3	4	5	safe
unattractive	1	2	3	4	5	attractive
depressing	1	2	3	4	5	invigorating
confining	1	2	3	4	5	spacious
dark	1	2	3	4	5	bright
no pleasure	1	2	3	4	5	extreme pleasure
ordinary	1	2	3	4	5	unusual
ugly	1	2	3	4	5	beautiful
uncomfortable	1	2	3	4	5	comfortable

Although we realize that the role of Homemaker includes a lot of hard work and really amounts to a full-time job, when we talk about work in this section, we mean being paid for labour in your occupational field.

Q92. Would you like a child of yours to have the same kind of occupation as you do?

Yes No depends on child

(If No) What would you like to see him or her do? _____

Q93. Would you encourage a daughter of yours to be a homemaker full-time and not have another occupation?

Yes No

Q94. What do you think about your current job, if you're working?

(Check all that apply)

- I'm not working, does not apply
- like it better than previous jobs
- don't like it as much as previous jobs
- like the money but not the work I do
- like the money and like the work
- think I'm underpaid but like the work
- think I'm overpaid but like the work
- it's a job like other jobs
- working is better than being on welfare
- like the company employing me
- dislike the company employing me
- like the people I work with
- dislike the people I work with
- like the working conditions
- don't like the working conditions
- like the hours
- don't like the hours
- other: _____

SINGLES PLEASE GO TO QUESTION 116.

Q95. FOR MARRIED MEN(not including separated):
Do you live with your wife?

Yes No

(If No) Where does she live? _____

How often do you visit? _____

Q96. Is she currently working?

Yes No

Q97. (If working) Why is she working?

mostly to meet family financial needs

mostly for her personal satisfaction

I don't know

Q98. Did she work before you came to Fort McMurray?

Yes

No

not married before we came to Fort McMurray

working in Fort McMurray when I met her

Q99. How important is it to you that your wife works?

very important

somewhat important

neither important nor unimportant

not very important

not important at all

does not apply, she's not working

Q100. How do you feel about your wife's working?

I like it a lot

I like it but there are problems

I don't care--it's up to her

there are a lot of problems

it's more trouble than it's worth

FOR MARRIED MEN (continued)

Q101. If your wife is working, for what is her income mainly used?

- for her own personal use
 for daily living
 for special things for the household
 for special things outside the home
 for family savings

Q102. How important is your wife's income for the family?

- necessary
 helps, but not necessary
 not necessary at all

FOR MARRIED WOMEN(not including separated):

Q103. Do you live with your husband?

- Yes No

(If No) Where does he live? _____

Q104. Did you work before coming here?

- Yes, recently
 Yes, some years ago
 No
 Always lived here

(If Yes) What were the reasons you worked before?

- mostly to meet family's financial needs
 mostly for personal satisfaction

Q105. Are you working now?

- Yes No

(If Yes) What is the main reason you are working?

- mostly to meet family's financial needs
 mostly for personal satisfaction

Q106. Does your husband think it is important for you to work?

- Yes No

Explain _____

FOR MARRIED WOMEN (continued)

Q107. What is your husband's attitude toward your working or not?

- he's all in favour of my working
 he's in favour, but has some reservations
 he's doesn't care
 he's somewhat reluctant
 he's not at all in favour of my working

Explain _____

Q108. How is your income used, mainly? (no matter what source)

- for my own use
 for family's daily living (rent, food, clothes)
 for special things for the household
 (dishwasher, recreation room)
 for special things outside the home
 (holidays, cottage, boat)
 for family's savings (children's education)

FOR MARRIED MEN AND WOMEN:

Q109. What does your spouse think about your current job, if you're working? (Check all that apply)

- I am not working, does not apply
 likes it better than my previous jobs
 doesn't like it as much as my previous jobs
 likes the money but not the work I do
 likes the money and likes the work
 thinks I'm underpaid but likes the work
 thinks I'm overpaid but likes the work
 says it's a job like other jobs
 says working is better than being on welfare
 likes the company employing me
 dislikes the company employing me
 likes the people I work with
 dislikes the people I work with
 likes the working conditions
 dislikes the working conditions
 likes the hours
 dislikes the hours
 others: _____

Comments: _____

FOR MARRIED MEN AND WOMEN (continued)

Q110. What do you think about your spouse's current job?
 (Check all that apply)

- he/she is not working, does not apply
- like it better than his/her previous jobs
- like it less than his/her previous jobs
- like the money but not the work he/she does
- like the money and like the work he/she does
- think he/she is underpaid but like the work
- think he/she is overpaid but like the work
- it's a job like other jobs
- his/her working is better than being on welfare
- like the company employing him/her
- dislike the company employing him/her
- like the people he/she works with
- dislike the people he/she works with
- like the working conditions
- dislike the working conditions
- like the hours
- dislike the hours
- other: _____

Q111. As a working person, do you volunteer for overtime?

- does not apply, not working
- Yes, because: _____
- _____
- No, because: _____
- _____

Q112. How many hours of overtime per month is average for

YOU	YOUR SPOUSE
<input type="checkbox"/> 1 to 10 hours	<input type="checkbox"/> 1 to 10 hours
<input type="checkbox"/> 11 to 20 hours	<input type="checkbox"/> 11 to 20 hours
<input type="checkbox"/> 21 to 30 hours	<input type="checkbox"/> 21 to 30 hours
<input type="checkbox"/> 31 to 40 hours	<input type="checkbox"/> 31 to 40 hours
<input type="checkbox"/> 41 to 59 hours	<input type="checkbox"/> 41 to 59 hours
<input type="checkbox"/> 60 or more hours	<input type="checkbox"/> 60 or more hours
<input type="checkbox"/> 0, never work over	<input type="checkbox"/> 0, never works over
<input type="checkbox"/> does not apply	<input type="checkbox"/> does not apply
<input type="checkbox"/> not working	<input type="checkbox"/> not working

FOR MARRIED MEN AND WOMEN (continued)

Q113. What does your spouse think about your working overtime?

Q114. Does your spouse volunteer for overtime work?

_____ does not apply, not working

_____ Yes, because: _____

_____ No, because: _____

Q115. What do you think about his/her working overtime? _____

_____ does not work overtime

_____ does not work

Q116. What are the problems you face as a parent who is also employed?

_____ does not apply

My main problems are: _____

Q117. Do you find it difficult to find time for the children?

_____ does not apply

_____ Yes

_____ No

Explain: _____

Q118. Would you like to change jobs while you're living here?

_____ Yes, very much (Explain): _____

_____ Perhaps (Explain): _____

_____ No (Explain): _____

_____ Does not apply, not working

Q119. Do you have children who are not going to school here?

- no children
 no, children aren't school age
 no, they go to school here
 yes, they go to school somewhere else

(If yes) Where? _____

(If yes) What is the main reason?

- living with a parent
 need special education
 schools here are unsatisfactory
 other: _____

FOR ALL PARENTS

Q120. Has your eldest child received regular out-of-school instruction in activities such as music, art, crafts, a language, etc.?

- yes
 no
 does not apply (no children)
 children are too young

Q121. If your eldest child is school age, what grade would you like that child to complete?

- does not apply
 grade 6
 grade 9
 grade 10
 grade 12
 technical college
 community college
 university
 other: _____

Q122. Do you think your eldest child will actually reach or go beyond this level?

- yes
 no
 does not apply

(If no) Why not?

- we move too much
 he/she is not getting the grades
 he/she is not interested
 he/she has learning disabilities
 he/she prefers to work
 other: _____

Q123. If you have children still in grade school here, in which school system is the eldest of them registered?

- no children
 public
 private
 not in school
 going to school elsewhere

IF YOU DO NOT HAVE CHILDREN WHO ATTEND GRADE SCHOOL HERE

GO TO QUESTION 130

FOR PARENTS WITH CHILDREN IN GRADE SCHOOL HERE

Q124. Please keep in mind the eldest of your children who is still in grade school here.

- a) Do you know the name of his/her home-room teacher?
 yes
 no
- b) Have you met that child's home-room teacher this year about school matters?
 yes
 no
- c) Have you talked to that child's home-room teacher by telephone about school matters?
 yes
 no

Q125. Have you ever tried to get information about that child's progress from school authorities in this community?

- yes
 no
 does not apply

(If yes) Whom did you contact? (Check as many as apply)

- principal
 vice-principal
 teacher
 counsellor
 other: _____

(If yes) How helpful were they?

- very helpful
 somewhat helpful
 not very helpful

Explain: _____

Q126. Do you think that the school is doing a good job of keeping you informed about how that child is doing?

- a very good job
 a satisfactory job
 not a very good job
 do not know

Explain: _____

Q127. What does that child like about school? (Check up to 3)

- certain subjects
 teachers
 other children, classmates
 extra-curricular activities
 other: _____
 nothing
 I do not know

Explain: _____

Q128. Does that child seem to have any problems at school?

- no
 yes, with certain subjects
 yes, with other children
 yes, with extra-curricular activities
 other: _____

Explain: _____

Q129. Have you attended a Parent's Night or Open House at any of your children's schools so far this year?

- yes
 no
 there has not been one yet
 (If yes) What did you do there? _____

Now, we's like to ask about your personal experience with education.

Q130. Since first leaving school, have you taken any further education?

- no (Go to question 134)
 correspondence
 night school
 part-time days
 full-time days

Q131. (If you have) When did you do these courses?

- before moving here
 since moving here
 other: _____

Q132. (If you have) Where did you take them?

- in town
 out-of-town
 some in town and some out-of-town
 correspondence

Q133. What was your purpose in taking these courses?

- upgrade my qualifications for work
 upgrade my qualifications in education
 complete my job training program
 complete my educational program
 self-development
 for fun
 other: _____

Describe: _____

Q134. What programs or courses would you like to take in the future, and for what purposes? _____

Q135. Can you take these courses while you are living here?

- do not know
 yes
 no, they're not available
 no, they're too expensive
 no, I've no time
 other: _____

(CRIME/SAFETY and the POLICE)

Below, in the box on the right, are five/six possible responses, numbered 1 to 5/6. Look at each item a through d to the left and decide which of the five responses you agree with most. Then write the number of the response in the blank space beside each item.

Q136. In your view, how serious is the crime situation in

- a. ___ your neighbourhood
- b. ___ your place of work
- c. ___ downtown
- d. ___ the town as a whole

- | |
|-----------------------|
| 1. not at all serious |
| 2. slightly serious |
| 3. moderately serious |
| 4. very serious |
| 5. extremely serious |

Q137. How safe do you (would you) feel

- a. ___ in your home
- b. ___ walking alone in your neighbourhood at night
- c. ___ walking alone downtown at night
- d. ___ in the town as a whole

- | |
|----------------------|
| 1. very safe |
| 2. moderately safe |
| 3. slightly safe |
| 4. slightly unsafe |
| 5. moderately unsafe |
| 6. very unsafe |

Q138. Overall, what kind of job do you feel the police do here?

- ___ very good
- ___ good
- ___ slightly good
- ___ slightly bad
- ___ bad
- ___ very bad
- ___ don't know

Q139. Overall, how would you rate the relations between the police and the public?

- ___ very good
- ___ good
- ___ slightly good
- ___ slightly bad
- ___ bad
- ___ very bad
- ___ don't know

(HEALTH and PERSONAL SERVICES)

Q140. In the past 6 months or since coming here, have you needed a doctor?

_____ Yes _____ No

If No, go to Question 150.

Q141. (If Yes) Have you seen one?

_____ Yes _____ No

If Yes, go to Question 149.

If no, why not? _____

Go to Question 150.

Q142. (If Yes) How often did you see one in the last six months?

_____ once
 _____ 2 - 4 times
 _____ 5 or more times

Q143. If you have children, have you taken any of them to the doctor in the last 6 months?

_____ Yes _____ No _____ no children

Q144. (If you visited the doctor yourself or with your children in the last 6 months) Did you see one

_____ in town?
 _____ out of town? Where? _____
 _____ both in and out of town?

Q145. (If you visited a doctor out of town) Why did you see one out of town? _____

Q146. (If you visited a doctor in town) Where did you usually see this person (please check one or more)?

- did not see doctor in town
 health professional's office
 community health centre
 hospital emergency
 hospital outpatient department and clinic
 as a patient in the hospital
 at work or industrial clinic
 at school
 at home
 other (please specify) _____

Q155(a) On average, how long did you have to wait for an appointment?

- less than 1 week
 1 to 2 weeks
 2 to 4 weeks
 more than 4 weeks

Q155(b) If you had a choice, would you visit this person again?

- yes no
 (If no) Why not? _____

Q156. In the past six months, or since coming here, have you needed a dentist?

- yes no
 If no, go to Question 163.

Q157. (If yes) Have you seen one?

- yes no
 If yes, go to Question 158.
 (If no) Why not? _____

Go to Question 163.

- Q158. (If Yes) Did you see one
 ___ in town?
 ___ out of town? Where? _____
 ___ both in and out of town?
- Q159. (If you visited a dentist out of town) Why did you see one out
 of town? _____

- Q160. (If you visited a dentist in town) Where did you see this
 person? (Please check one or more)
 ___ health professional's office
 ___ community health centre
 ___ hospital emergency room
 ___ hospital outpatient department or clinic
 ___ while patient in hospital
 ___ at work or industrial clinic
 ___ at school
 ___ at home
 ___ other (please specify) _____
- Q161. On average, did you have to wait a long time for an appointment?
 ___ Yes ___ No
- Q162. If you had a choice would you visit this person again?
 ___ Yes ___ No

(If No) Why not: _____

Q163. In the last six months, or since coming here, have you contacted a public health nurse?

___ Yes ___ No

If No, go to Question 171.

Q164. (If Yes) Did you see one

___ in town?

___ out of town? Where? _____

___ both in and out of town?

Q165. (If you visited a nurse out of town) Why did you see one out of town? _____

Q166. (If you visited a nurse in town) Where did you see this person? (Please check one or more)

___ health professional's office

___ community health centre

___ hospital emergency room

___ hospital outpatient department or hospital clinic

___ while patient in hospital

___ at work or industrial clinic

___ at school

___ at home

___ other (please specify) _____

Q167. On average, did you have to wait a long time for an appointment?

___ Yes ___ No

Q168. If you had a choice, would you visit this person again?

___ Yes ___ No

(If No) Why not? _____

Q169. In the past six months, or since coming here, have you seen a pharmacist or druggist for advice (excluding prescriptions)?

_____ Yes _____ No

If no, go to Question 174.

Q170. (If Yes) Did you see one

_____ in town?

_____ out of town? Where? _____

_____ both in and out of town?

Q171. (If you visited a pharmacist or druggist out of town) Why did you see one out of town? _____

Q172. (If you visited a pharmacist or druggist in town) Where did you see this person? (please check one or more)

_____ health professional's office

_____ community health centre

_____ drugstore

_____ at work or industrial clinic

_____ other (please specify) _____

Q173. If you had a choice, would you visit this person again?

_____ Yes _____ No

If Yes, go to Question 174.

(If No) Why not? _____

Q174. In the past six months, or since coming here have you needed an optometrist or optician?

_____ yes _____ no

If no, go to Question 180.

Q175. (If Yes) Did you see one

in town?

out of town? Where? _____

both in and out of town?

Q176. (If you visited an optometrist or optician out of town)
Why did you see one out of town? _____

Q177. (If you visited an optometrist or optician in town) Where
did you see this person? (please check one or more)

health professional's office

community health centre

hospital emergency room

hospital outpatient department or hospital clinic

while patient in hospital

at work or industrial clinic

at school

at home

other (please specify) _____

Q178. Did you have to wait a long time for an appointment?

Yes No

Q179. If you had a choice, would you visit this person again?

Yes No

(If No) Why not? _____

Q180. In the past six months or since coming here, have you needed
a chiropractor or physiothrapist?

Yes No

If No, go to Question 185.

Q181. (If Yes) Did you see one

in town?

out of town? Where? _____

both in and out of town?

Q182. (If you visited a chiropractor or physiotherapist in town)
Where did you see this person? (please check one or more)

health professional's office

community health centre

at work or industrial clinic

at school

at home

other (please specify) _____

Q183. Did you have to wait a long time for an appointment?

Yes No

Q184. If you had a choice, would you visit this person again?

Yes No

(If No) Why not? _____

Q185. In the past six months, or since coming here, have you
needed a social worker or counsellor? (i.e. marriage counsellor)

Yes No

If No, go to Question 192.

Q186. (If yes) Have you seen one?

Yes No (Why not? _____)

Q187. (If Yes) Did you see one

in town?

out of town? Where? _____

both in and out of town?

Q188. (If you visited a social worker or marriage counsellor out of town) Why did you see one elsewhere? _____

Q189. (If you visited a social worker or counsellor in town) Where did you see (have your appointment with) this person?

- health professional's office
 community health centre
 while patient in hospital
 at work or industrial clinic
 at school
 at my home
 other: _____

Q190. Did you have to wait a long time for an appointment?

Yes No

Q191. If you had a choice, would you visit this person again?

Yes No

(If No) Why not? _____

Q192. In the past six months, or since coming here, have you needed a psychiatrist or psychologist?

Yes No

If No, go to Question 198.

Q193. (If Yes) Have you seen one?

Yes No (Why not? _____)

Q194. (If Yes) Did you see one

- in town?
 out of town? Where? _____
 both in and out of town?

Q195. (If you visited a psychiatrist or psychologist out of town)
Why did you see one elsewhere? _____

Q196. (If you visited a psychiatrist or psychologist in town)
Where did you see this person?

- health professional's office
 community health centre
 while patient in hospital
 at work or industrial clinic
 at school
 at my home
 other: _____

Q197. Did you have to wait a long time for an appointment?

Yes No

Q198. If you had a choice, would you visit this person again?

Yes No

(If No) Why not? _____

Q199. In the past six months, or since coming here, have you
wanted to go to a clergyman/priest for advice?

Yes No

If No, go to Question 206.

Q200. (If Yes) Have you seen one?

Yes No Why not? _____

Q201. (If Yes) Did you see one

- in town?
 out of town? Where? _____
 both in and out of town?

Q202. (If you visited a clergyman out of town) Why did you see one elsewhere? _____

Q203. (If you visited a clergyman in town) Where did you see this person?

- in his office
 in the church
 while patient in hospital
 community health centre
 at school
 at clergyman's residence
 at my home
 other: _____

Q204. Did you have to wait a long time for an appointment?

Yes No

Q205. Would you visit this person again?

Yes No

(If No) Why not? _____

(FACILITIES FOR CHILDREN AND THE ELDERLY)

Q206. Do you have need of Day Care facilities for children?

- yes, for all day
 yes, for part of the day
 no
 does not apply

If no, go to Question 208.

Q207. (If yes) Are you making use of day care facilities now?

yes, full-time

yes, part-time

no

other: _____

(If no) Why not?

can't find any

didn't know any is available

poor service, quality

too expensive

no room

other: _____

Q208. Have you ever used day care facilities in another community?

yes

no

Q209. (If yes) How do the day care facilities here compare to what you were used to there?

better

about the same

worse

do not know

Comment: _____

Q210. Do you or anyone in your household, need facilities here to take care of the elderly?

yes, need home care (Visiting homemaker or nurse)

yes, need nursing home

yes, need senior citizen's residence/lodge

yes, others: _____

no

If no, go to Question 212.

Q211. (If yes) Is someone in your family, or yourself, making use of such facilities here?

yes no

(If no) Why not?

can't find any
 didn't know any available
 poor service/quality
 too expensive
 no room
 other: _____

Q212. Has a member of your family used these facilities in another town?

yes no

Q213. (If yes) How do the facilities for senior citizens here compare to what you were used to in the other community?

better
 about the same
 worse

Comment: _____

(COST OF LIVING AND EXPENSES)

Q214. Is it more expensive to live here than you expected?

yes no

Q215. Which of the following do you find to be particularly expensive here?

- housing
- furniture and appliances
- repair work, maintenance (includes auto, small appliance repairs)
- transportation in town
- transportation to other places
- automobile
- clothes
- sports
- entertainment
- food (for home)
- eating out (restaurants)
- utilities (power, gas, water, sanitation)
- building materials
- medicines and prescriptions
- other: _____

Q216. Since you have been here, have you borrowed money for your own personal use or purchased something on installments (not including mortgage, credit card debts)?

- Yes No

Q217. What was this money for?

- general ongoing expenses (food, rent)
- recreational vehicle(s)
- furniture, appliances, etc.
- home improvement
- holidays or travel
- pay old debts
- other (please specify) _____

Q218. Have you been able to save as much money here as you expected?

- more
- about what I expected
- less
- none at all

Explain: _____

(GENERAL HEALTH)

Q219. Below, on the left, is a list that describes some of the ways people feel at different times. On the right are three possible responses. Beside each item on the list, write the number of the response that best describes how often you feel:

- ___ on top of the world
- ___ very lonely or remote from other people
- ___ particularly excited or interested in something
- ___ depressed or very unhappy
- ___ pleased about having accomplished something
- ___ bored
- ___ proud because someone complimented you on something you had done
- ___ so restless you could not sit long in a chair
- ___ that things were going your way
- ___ upset because someone criticized you

- | |
|-----------------|
| 1. often |
| 2. sometimes |
| 3. almost never |

Q220. In the past six months or since coming here, have you become aware of or noticed an increase in any of the following (check as many as apply)?

- ___ frequent headaches
- ___ stomach ulcers
- ___ high blood pressure
- ___ insomnia
- ___ constant worry and anxiety
- ___ chronic or recurring diarrhea
- ___ tiring easily
- ___ trouble concentrating
- ___ crying spells
- ___ often feeling lonely
- ___ being considerably overweight
- ___ steady dieting
- ___ chronic constipation
- ___ (females only) irregular menstrual periods

Q221. In your opinion, how much control do you have over the good or pleasant things that happen to you?

- almost total control
- mostly under my control
- about half the time I can control the good things
- mostly not under my control
- almost none
- not sure

Q222. In your opinion, how much control do you have over the bad or unpleasant things that happen to you?

- almost total control
- mostly under my control
- about half the time I can control the bad things
- mostly not under my control
- almost none
- not sure

Q223. Do you feel somewhat of an Outsider here?

- Yes, always
- most of the time
- sometimes
- not very often
- No, rarely

Q224. How many cigarettes do you smoke on an average day?

- none
- a few
- about half a pack
- a pack
- two packs
- more than two packs

Q225. Over the last six months or since coming here, do you find that you are smoking

- more
- less
- about the same

Q226. How many glasses/bottles of beer do you drink on an average working day?

- none
- 1 - 2
- 3 - 6
- 7 - 12
- over 12

Q227. How many glasses/bottles of beer do you drink on an average non-working day?

- none
- 1 - 2
- 3 - 6
- 7 - 12
- over 12

Q228. How many glasses/bottles of wine do you drink on an average working day?

- none
- 1 - 3 glasses
- 4 - 8 glasses
- half a 26 oz. bottle
- about a 26 oz. bottle
- more than a 26 oz. bottle

Q229. How many glasses/bottles of wine do you drink on an average non-working day?

- none
- 1 - 3 glasses
- 4 - 8 glasses
- half a 26 oz. bottle
- about a 26 oz. bottle
- more than a 26 oz. bottle

Q230. How much liquor do you drink on an average working day?

- none
- 1 - 3 oz.
- 4 - 6 oz.
- 7 - 13 oz.
- over a mickey (13 oz.)
- over a 26 oz. bottle

Q231. How much liquor do you drink on a typical non-working day?

- none
- 1 - 3 oz.
- 4 - 6 oz.
- 7 - 13 oz.
- over a mickey (13 oz.)
- over a 26 oz. bottle

Q232. In the past six months, or since coming here, what changes (if any) have you noticed in the following?

(a) the amount of prescription drugs you use for medical purposes

- no change
- use less
- use more
- does not apply, use none

(b) the amount of physical exercise you get (fun and work)

- no change
- get less
- get more
- does not apply, get none

(c) sleeping habits (hours of sleep, insomnia)

- no change
- get less sleep
- get more sleep

In the past six months, or since coming here, what changes (if any) have you noticed in the following?

(d) appetite (desire for food)

- no change
 less hungry
 more hungry

Q233. In the past six months, or since coming here, do you think your pace of life has changed, and if so, how?

Q234. Have you noticed any overall specific changes in your physical health over the last six months?

Yes No

(If Yes) Explain: _____

Q235. Taking all things together, how would you rate your physical health these days?

- excellent
 good
 fair
 poor
 very poor

Explain: _____

Q236. Taking all things together, how would you rate your mental health these days?

- excellent
 good
 fair
 poor
 very poor

Explain: _____

(LOCAL GOVERNMENT)

Q237. Have you had any contact with this community's officials or elected representatives?

____ yes _____ no

If no, go to Question 238.

a) (If Yes) What about? _____

b) Did you have any difficulty contacting the right person?

____ yes _____ no

Comment: _____

c) Did they listen to you, pay attention?

____ Yes _____ No

Describe what happened: _____

d) Were the officials courteous?

____ Yes _____ No

Describe: _____

e) Did they do something positive?

____ Yes _____ No

Describe: _____

Q238. What do you think the local government is doing well here?

Q239. What do you think the local government is doing poorly here?

Q240. How would you rank the job community officials are doing now?

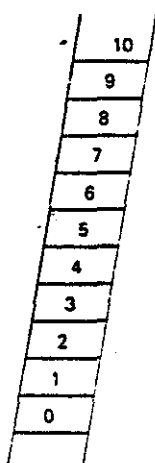
very poor					excellent
job					job
1	2	3	4	5	

Q241. What do you think the provincial government is doing well here?

Q242. What do you think the provincial government is doing poorly here?

Q243.

WORK LIFE



To the left is the picture of a ladder which we call the "ladder of life". Let the ladder represent your work life. Let the top rung (10) represent the best possible work life for you -- where your fondest hopes and wishes for your work life have come true. Let the bottom rung (0) represent the worst possible work life for you -- where your worst fears and worries about your work life have come true.

(a) Now, consider your work life at present. Where on the ladder do you stand at the present time? Please circle the appropriate number on the ladder.

10
9
8
7
6
5
4
3
2
1
0

(b) Now think of your work life as it was five years ago. Indicate on the ladder to the left where you stood five years ago. Please circle the appropriate number.

10
9
8
7
6
5
4
3
2
1
0

(c) Now think of your work life as you imagine it will be five years from now. Indicate on the ladder to the left where you think you will stand five years in the future. Please circle the appropriate number.

Q244.

FAMILY LIFE

This time let the ladder to the left represent your family life. Let the top rung (10) represent the best possible family life for you -- where your fondest hopes and wishes for your family life have come true. Let the bottom rung (0) represent the worst possible family life for you -- where your worst fears and worries about your family life have come true.

10
9
8
7
6
5
4
3
2
1
0

(a) Now, consider your family life at present. Where on the ladder do you stand at the present time? Please circle the appropriate number on the ladder.

10
9
8
7
6
5
4
3
2
1
0

(b) Now, think of your family life as it was five years ago. Indicate on the ladder to the left where you stood five years ago. Please circle the appropriate number.

10
9
8
7
6
5
4
3
2
1
0

(c) Now, think of your family life as it will be five years from now. Indicate on the ladder to the left where you think you will stand five years in the future. Please circle the appropriate number.

THANK YOU FOR YOUR HELP !

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