This handbook is intended for communities that wish to undertake their own community impact assessment (CIA). The goal is to enable communities to plan for changes before they occur, so they can cope with changes when they do occur. CIA involves forecasting and evaluating the full range of unintended consequences for the community of development undertaken by outside interests. The first task is to see if there is general interest. Scoping consists of three steps: brainstorming, discussion, and formulation of objectives and workplans; its biggest advantage is that it uses local knowledge in a positive way. Brainstorming brings out ideas, and discussion subjects them to close scrutiny, resulting in the formulation of a set of written objectives that lays a foundation for choosing realistic and measurable courses of action. A flow chart of major steps is given, as are checklists addressing who will be affected, possible types of impacts, and the refinement of objectives. The pros and cons of hiring consultants, and three ways to use them effectively are discussed, but the importance of community control is emphasized. Consultants should only be used when communities lack the manpower or expertise to do it themselves. Once a final report is compiled, it requires implementation. The key to successful CIA is achieving consensus. Appendix outlines instructions for brainstorming. (TD)
Community Impact Assessment Handbook
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are pleased to present this Handbook for the use of northern residents.

September, 1982
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BEST COPY AVAILABLE
To the reader

If you are about to undertake Community Impact Assessment, or if you are just interested in understanding how Community Impact Assessment might be useful to your community in the future, this handbook will give you a broad background on the subject. The handbook is intended to acquaint you with the jargon of Community Impact Assessment, understand its scope and applications, and gain an appreciation of the amount of effort and kinds of skills that are required to carry out a Community Impact Assessment.

On its own, this handbook will not be enough to ensure that you will be able to successfully complete a Community Impact Assessment. It is not a complete handbook, with step-by-step instructions from A to Z. For one thing, it would take several volumes to comprehensively cover the subject. And, furthermore, there is no single "correct" way to do Community Impact Assessment. There are dozens of options every step of the way. We have never seen two impact assessments undertaken in precisely the same fashion. The field is very young, still in its developmental stages, and so there has not been enough experience to single out one best approach. If you choose to do a Community Impact Assessment in the early 1980's, you are a pioneer, and you will have to choose your own route.
Furthermore, if an impact assessment is truly community-based — that is conceived, developed, and carried out by community members — its directions must be uniquely defined. No one else but the community itself can dictate what issues are to be addressed, how they are to be addressed, and at what level of detail they are to be addressed. Each community is unique, faces unique situations, and thus must come to grips with potential community impact in its own unique way. So it is best to consider the handbook to be a resource to use when it suits your purposes. Some ideas you may accept, some you may reject, and others you may adapt to your own situation. Use only the ideas that seem appropriate to your unique community needs.

Most literature that we consulted while preparing this handbook views impact assessment as a study about a community rather than by a community. Increasingly, various impact assessment specialists are calling for community involvement and consultation in impact assessment. Yet, most literature assumes that the impact assessment is conducted by a proponent of a senior government. We have prepared this book for communities who wish to undertake their own impact assessment, either because they have to (because no one else will) or because they realize that controlling the impact assessment will help to ensure that it accurately reflects community viewpoints and community priorities. Therefore it is community directed and intended as an orientation for community groups.
What is Community Impact Assessment?

"Community Impact Assessment is a planning tool used by a community to help it cope with change — especially rapid and/or drastic change. Ideally, Community Impact Assessment involves forecasting and evaluating the full range of unintended consequences for the community of a development (or set of developments) undertaken primarily for interests outside that community or for specialized interests within it. Community Impact Assessment is controlled by the community itself, although the community may involve outside interests in the process." (Defined by the Canadian Council of Resource and Environment Ministers. Environmental Impact Assessment Task Force 1980. Principles for Community Impact Assessment. A Background Discussion Paper)

This is a complex definition. In the following subsections we discuss it, piece by piece, to clarify exactly what it means.
Community Impact Assessment is a planning tool used by a community to help it cope with change — especially rapid and/or drastic change.

The effects of rapid, drastic change may be viewed as good or bad, depending on who is doing the viewing. However, there is no doubt that negative consequences are increased when a community is unprepared physically and psychologically for the changes, and the amount of disruption to individuals, families, special groups, and local government is greater when they have not planned ways to manage change. Slow changes and small changes are easy enough for a small community to respond to, even if they are unexpected. But fast, radical change may leave a community with a host of pressing problems which it is ill-equipped to solve.

Although Community Impact Assessment seeks to forecast and evaluate the amount and nature of change that a community will face, it is a means to a larger end. The ultimate goal of Community Impact Assessment is impact management: the ability to plan for changes before they occur, so that the community is able to cope with changes when they occur.

Impact assessment falls into one of three categories: projective assessment, evaluative assessment, and directive assessment. In this handbook we are concerned with Community Impact Assessment as directive assessment. Directive assessment looks toward the future, investigating the ways in which change can be controlled and managed in order to encourage the positive aspects of change and minimize the negative ones. This assessment also includes projective and evaluative assessment.
What is actually causing change is another part of our definition that needs some elaboration. In northern Alberta there may be a feeling that Community Impact Assessment is always in response to a major energy or natural resource development. But Community Impact Assessment is not restricted to these kinds of actions. At the time of this writing, the community of Athabasca is planning to undertake an assessment of the impact Athabasca University will have. Assessments have been done on the impact of new highways and highway by-passes, the closing of a manufacturing plant, the introduction of a technological innovation, the damming of a river, the development of a park, and a host of other actions. The action that causes impact does not even need to be tangible and concrete. Change in a law or in a social or economic policy can have significant impact on a community, and is fair game for Community Impact Assessment.

Some communities are undergoing negative growth or only moderate change. Many of the ideas in the handbook will be useful in evaluating the future directions of these communities as well.

In this handbook we focus on natural resource developments, for two reasons. First they are the most common reason for rapid and drastic change in northern Alberta communities. Second, the most experience with impact assessment has been in the realm of energy and natural resource development. Nonetheless, the basic principles are transferable to other situations.

Sometimes small scale changes, each one having relatively minor impact, may have major cumulative impacts on a community. For instance, over the past few years in Grande Prairie there have been several new developments which have not, individually, been of major import; but, taken together, they have led to rapid population growth and change within the community. The point is: you should not feel that there must be one major development in order to justify an impact assessment. Whenever your community expects rapid and/or drastic change, an impact assessment can help to make plans for coping with the change.
The proponent of an energy development is usually a private corporation but the proponent of developments, that can cause change in your community, is not always private industry. It can also be local government, a voluntary organization, or senior government. Regardless of who or what is causing the change, the basic principles of Community Impact Assessment are the same.

1. __________
2. __________
3. __________
4. __________
5. __________
6. __________

"Unintended consequences"

For the purposes of this handbook, an "impact" is defined as "an unintended consequence caused by a development or a set of developments." You must be very careful here not to limit your notion of impacts to only "changes for the worse." Just because the proponent(s) of a development do not intend to cause certain changes does not mean the changes will always be bad. For example, a corporation does not open a mill in order to provide jobs in a community. Public relations aside, a company starts a new operation based on profitability, not altruism. In other words, the creation of new jobs is an unintended effect. In most people's eyes the change in the number of jobs in the community will be seen as a positive change, i.e., a positive impact.
When you undertake a Community Impact Assessment, you are attempting to predict the future of your community. Forecasting in the realm of human activity is inexact, and often downright incorrect. Anyone embarking on a Community Impact Assessment should be aware that forecasting is a matter of anticipating possibilities and probabilities about the future. At best times, forecasting is systematic, well reasoned, well documented guesswork, and nothing more. Rest assured that if time proves your forecasts wrong, you are in distinguished company. This is not to say that there is no value in attempting to accurately forecast changes. It simply means that the healthiest approach to prediction includes a realistically skeptical mind.

A useful and directive Community Impact Assessment involves more than just forecasting. It also includes evaluation. Is the forecast change a change for the better or for the worse? Is it an important change or will it pass unnoticed by most?
Consider, for example the situation of the small community facing the prospect of rapid population growth over the next five years. To some community members, the population growth may be a welcome change. In the prospect of growth, these people may see increasing local business vitality; more recreation opportunities, a more diverse and interesting citizenry, and more city-like amenities (such as more shops, libraries, movies, and so forth). On the other hand, other community members may dread the anticipated growth. These people may fear the loss of small-town friendliness, strains on existing facilities (for instance, line-ups at the bank), and increased taxes. An essential component of Community Impact Assessment is the careful consideration of the positive and negative aspects of changes from the viewpoint(s) of the community. Without this evaluative component, a Community Impact Assessment is little more than an academic exercise.

In this handbook we will describe general principles and specific techniques for forecasting and evaluating impacts. However, we will only be scratching the surface. There are many specific techniques for forecasting and evaluating changes, some of them complex and difficult. We cannot cover them all. However, we will attempt to familiarize you with some of the more common techniques.

"Ideally, Community Impact Assessment (addresses) the full range of unintended consequences for the community."

When we developed our definition, we inserted the word "ideally," in recognition of the tight limitations that small communities have with respect to money, time, and expertise. In most cases, a lack of resources will prevent a community from meeting the ideal of identifying the full range of impacts.
Community control is essential to Community Impact Assessment as we have defined it here. This aspect of our definition distinguishes it from the way in which the term "Community Impact Assessment" usually may be used.
Community Impact Assessment in your community

Community Impact Assessment begins when members of the community perceive that a change or set of changes will be affecting the usual processes that occur in the community. Most commonly, but not always, the changes that are expected are due to something causing out-of-the-ordinary population growth. Increased population growth implies potential changes in the general character of a community, and almost certainly implies increases and changes in the demands for locally supplied services. Thus, in the most common situation, Community Impact Assessment begins because of a community's concern with how it will cope with growth.

If you are one of the first residents to think about doing Community Impact Assessment, you are probably concerned about the mechanics of getting the process accomplished: Who should be involved? Who should do the work? How should conflicting views be handled? How do we get started?
If you have identified a concern that you believe will need a Community Impact Assessment, the thing you need to do is spread the word widely, to see if there is general interest, or if you are a lone voice in the wilderness. If no one else is concerned, there is no sense in attempting Community Impact Assessment because Community Impact Assessment is, by definition, something which requires broadly based local involvement. If you find that others in the community share your concern, then a temporary steering committee may help to set the process in motion.

The steering committee's first task is to publicize the concern widely to draw as many people as possible for a public meeting. If the steering committee has worked hard to publicize the issue but you get a poor turn-out at a public meeting, it is again time to question whether or not there is enough interest to begin working in earnest.

Public meetings, although suggested, are not the only method that has been used in originating a Community Impact Assessment project. Often a specific community group or municipal body may perceive a need and decide to establish a steering committee.
At the public meeting, the temporary steering committee should formally present its case for a Community Impact Assessment and generally state what the objectives of the Community Impact Assessment would be. If there is interest, the culmination of the meeting should be the formation of a permanent steering committee.

One pitfall that may reduce the effectiveness of the Community Impact Assessment process is control by a few elites. There is always a tendency for the same people to repeatedly direct community activities. This is almost impossible to avoid entirely, but you should actively, consciously try to build a steering committee that is broadly based, that draws membership from all segments of the community. Otherwise, the project will be viewed as the property of an elite group, not of the whole community.

People in the community who do not identify with the elite group will pull away from the project. You will miss their input, and so, ultimately, the Community Impact Assessment will not be comprehensive and will not be accepted by significant subgroups in the community. Don't be afraid of disagreement. Actively seek the involvement of people with minority opinions at the outset. Minority opinion will not go away. Make sure it has the chance to be incorporated into your Community Impact Assessment process.

We recommend a two-tiered organization structure. However, each community must choose its own structure, and yours may prefer another one. The top tier is the steering committee, composed of five to ten people committed to devoting time and energy to overseeing and coordinating the Community Impact Assessment. The second tier is a larger organization composed of as many people in the community as you can draw to regular meetings. For major decisions, the whole organization should be involved. If the steering committee makes major decisions independently, without the advice of the larger organization, it runs the great risk of becoming elitist and out of touch with community concerns. The steering committee's first job is to bring the whole group together to develop its objectives.
COMMUNITY IMPACT ASSESSMENT

Major Steps

Community Perceives Plan

Community Awareness Heightened

Establish Community Impact Assessment Organization & Steering Committee

Consultant
No
Yes

Scoping
Brainstorming
Discussion
Formulation of Research objectives & Workplan
Terms of Reference

Implement Workplan

Steering Committee Review Interim Report

Final Report to Organization Consultant & Steering Committee

Organization Reviews Report Objectives of Group

Terms of Reference
Call for statement of credentials
Short List Call for proposals
Selected Contract

Implementation of Plan
Setting a clear course

Two Alberta communities that have recently undertaken Community Impact Assessment in response to rapid growth have taken similar approaches by preparing terms of reference and then requesting the assistance of a consultant. Representatives of the first community speak of their Community Impact Assessment in glowing terms. They believe the process has brought increased self-understanding and awareness of ways to cope with rapid growth. Additionally, they feel the process has improved community cohesiveness, fostering communication among various segments of the community. On the other hand, representatives of the second community found their Community Impact Assessment process to be frustrating and disappointing. After going through an intensive Community Impact Assessment research program, they do not feel they have a strong sense of how they will plan to cope with the growth that they know they will be facing.

Both situations illustrate the need to clearly define your Community Impact Assessment objectives. The first community, the one that is pleased with its Community Impact Assessment, might be described as being pleasantly surprised. Community representatives say they did not have a good idea at the outset of where they were going with their Community Impact Assessment. It just happened to turn out well, as much due to good luck as anything else. The second community had thought that they had known what they wanted from their Community Impact Assessment. A combination of circumstances led to the not-so-happy ending, but a basic cause was the absence of a clear set of detailed written objectives for the group that would have helped them to carefully map their Community Impact Assessment plans. Developing objectives is nothing more than knowing what you hope to accomplish. But it is not as easy as it sounds.

Developing written objectives that are democratically generated, realistic and that actually provide a sturdy foundation for choosing courses of action, takes more time and energy than you may want to expend. However, developing objectives is one of the most crucial steps in planning impact assessment. If you do not devote the time and energy required, your entire Community Impact Assessment process is jeopardized. If the process works out well for you without carefully determining your objectives, it will be due to good fortune rather than good planning.
Developing objectives does more than just lay a firm foundation for Community Impact Assessment planning. It also fosters individual commitment to the Community Impact Assessment. One of the most frustrating problems a leader faces is apathy. People do not show up for meetings or volunteer to do necessary tasks. The way in which you develop objectives can go a long way in preventing apathy. Simply stated, if community members do not have a strong belief in the group’s objectives, they will be apathetic toward the group.

This basic principle is deceptively simple. Achieving consensus is the key. If a person is "just going along" with the majority in endorsing a goal, but does not personally feel strongly about it, he or she will not work hard to see that the goal is accomplished. Along the same lines, if a group determines its objectives by majority, you will have a significant minority who will be apathetic toward the objective.

Strong group agreement on objectives is a powerful force. When the group really agrees on an objective, the group feels like a cohesive unit. Group cohesiveness, in turn, is a magnet that draws other people in. Most people enjoy working with a closely knit organization. Thus individuals have not one, but two reasons to work toward the objective. The first is that they want to see the goal accomplished. The second is that they want to retain membership in the group. But do not be surprised if in the process there is significant discussion and disagreement within the group. This is all part of the process.
What do we study in a Community Impact Assessment?

Before you begin a Community Impact Assessment study, you must identify potential areas of impact, because you have to know what to research. You cannot study everything, and, of the things you do study, you cannot study all in equal depth. Unless you have unlimited time and money, you must set priorities.

There is a chicken-and-egg problem here: How do you know what are going to be significant areas of impact before you do your research? That, after all, is the point of the research. The chicken-and-egg problem is one you cannot entirely get around. However, you can do some preliminary work on identifying possible impacts, using the community’s own knowledge of itself coupled with supplementary information about the experiences of other communities. In this section, we will discuss possible focuses for your Community Impact Assessment and how to choose your priorities for the study.

Some studies about impact assessment recommend beginning with a "COMMUNITY PROFILE". A community profile is a document that breaks down information, usually statistical, about the community’s population, facilities, services, businesses, local government, financial status, and other variables that describe what exists in a community.

A community profile can be undertaken at various levels of detail. We do not recommend beginning your Community Impact Assessment research with a detailed community profile. To complete a detailed community profile can be an expensive and time-consuming procedure. You may eventually find that you have collected information that is quickly out-dated and that you never use. Instead, we recommend beginning your impact assessment with a "SCOPING" procedure.
"Scoping" is a name applied to the process of setting the boundaries of Community Impact Assessment. Simply put, the technique involves bringing together interested parties to:

1. determine the particular issues that the Community Impact Assessment will cover;
2. determine the depth of coverage for each issue;
3. plan the timing of the Community Impact Assessment; and
4. allocate work responsibilities for the Community Impact Assessment.

The major advantages of "scoping" your Community Impact Assessment are that it gets you started right away thinking about the broad range of impacts that might occur, getting you to plan carefully at the outset; and it can bring out important considerations at the beginning of the Community Impact Assessment process, when you still have time to incorporate these considerations into your workplan.

But probably the biggest advantage of scoping is that it makes use of local knowledge and opinions in a positive, productive way. If you (or any member of your community) hear that a major development is planned, you immediately have all sorts of predictions about what you think will happen; and you also have a pretty good idea about how you feel about the changes that you predict. Many approaches to impact assessment ignore these preconceived ideas (really, "guesses") about impact. Scoping admits to them and makes use of them.

When you scope your Community Impact Assessment, you should involve as many different interests and viewpoints as possible, and you should make sure that all potentially affected groups are represented. In addition, you might consider inviting the proponent to participate.
The scoping technique we are proposing consists of three steps:

1. Brainstorming, brainwriting, and/or Delphi (any one or combination of these techniques can be used — See Appendix),

2. Discussion, and

3. Formulation of research objectives and workplan.
BRAINSTORMING (See Appendix)

- a technique for generating information.
- economical and adaptable to numerous situations.
- used to generate objectives, identify potential areas of impact and identify cause-and-effect relationships for projecting impacts.
- works best with small groups (3-7).
- one identifies every possible impact that can be thought of.
- the key to brainstorming is to generate as many ideas as possible — never criticize; the idea is simply recorded.
- the results are just raw material and should be used later to develop objectives.

BRAINWRITING (See Appendix)

- modification of brainstorming.
- tries to eliminate the biasing caused by vocal, dominant individuals, pressure for group conformance, and the risk of specific issues and comments overwhelming creativity.
- communication between group members is written instead of spoken.

DELPHI (See Appendix)

- named after Greek oracle at which the future was foretold.
- a method that can be used to gather information, refine it, make or evaluate forecasts.
- could be used to refine brainstorming data.
- uses a panel of experts (community people) who are anonymous to one another.
- experts answer a series of written questionnaires.
ISSUES TO CONSIDER WHEN YOU SCOPE YOUR COMMUNITY IMPACT ASSESSMENT

When you scope your Community Impact Assessment you run the risk of leaving out something very important. To assist you in your brainstorming about possible impacts, we have developed checklists of persons and areas which may experience impact, and the types of impacts that might occur. These checklists are by no means complete, nor should you expect that your community will need to focus on every issue raised in the checklists. However, the checklists should help you by triggering other ideas, generally stimulating the brainstorming participants to think broadly about possible community impacts.

The steering committee should use the checklists to consider the relationships between the possible impacts that can be identified and their effects on individuals, families, households, etc. within the community. For example, what will be the effect on young females and males in the community if the proposed development brings to the area an increase in population of young job seeking males? The checklists should be used to cross reference and formulate questions.

Start broadly and then gradually narrow your focus. Ideally, you will identify all possible areas of impact before developing any terms of reference for Community Impact Assessment studies. Of course the ideal is never achieved. But your community will be well served if you keep that ideal of total comprehensiveness in front of you at all times.
Checklist: who will be affected

I. PEOPLE
   A. Individuals
      1. Adults
         a) Females
         b) Males
         c) Young adults
         d) Middle-aged adults
         e) Elderly adults
      2. Teenagers
         a) Boys
         b) Girls
      3. Children
         a) School-aged children
         b) Pre-school-aged children

   B. Families
      1. Single-person families
         a) Young; never married
         b) Young; separated, divorced, or widowed
         c) Middle-aged; never married
         d) Middle-aged; separated, divorced, or widowed
         e) Elderly; never married
         f) Elderly; separated, divorced, or widowed
      2. Two-person families
         a) Married or common-law
         b) Siblings
         c) Parent-Offspring
            i) both adults
            ii) one adult and one child
      3. Conventional nuclear families
      4. Extended families

   C. Households
      1. Households that are also families (See "B. Families" above).
      2. Households of unrelated individuals.
II. SPECIAL INTEREST GROUPS

A. Ethnic groups

B. People on fixed incomes (e.g., elderly, disabled)

C. Unemployed
   1. Homemakers, not looking for work
   2. People actively looking for work
   3. People who have given up looking for work

D. Formal organizations
   1. Charitable organizations
   2. Hobby, interest clubs
   3. "Issue" organizations (e.g., environmental groups, taxpayers associations, parent organizations, Alcoholics Anonymous)

III. COMMUNITY ORGANIZATIONS AND SYSTEMS

A. Local Government
   1. Elected Officials
   2. Civil Servants
   3. Volunteers (e.g., recreation board members)

B. Physical Infrastructure
   1. Transportation systems
   2. Water and sewer systems
   3. Public buildings and facilities (e.g., parks)

C. Social Infrastructure
   1. Social programs
   2. Education system
   3. Health care system
   4. Cultural system (e.g., libraries)
   5. Criminal justice system
   6. Public safety system (police and fire protection)

IV. NATURAL ENVIRONMENT

A. Atmosphere
B. Water
C. Land
D. Plant and animal life

V. INTANGIBLES

A. Sense of community
B. Sense of place
C. Special qualities that it's hard to put your finger on, but that you know are important.
The process of brainstorming is an information generating technique. It has many other uses besides the scoping process. (See Appendix for Brainstorming Instructions.)

The focus of brainstorming should be the following questions:

1. What do you think the effects of the proposed project might be on the community? Why do you think so?

2. Which of the predicted effects are positive? Which are negative? Why?

3. Who is likely to benefit most? Least?

4. Are any of the negative effects preventable? How?

5. Are all the positive effects inevitable? If not, how can they be assured?

To answer all these questions may take several brainstorming sessions, or a weekend workshop. All participants should be assured that this is all speculation at the early stage, and that the point of the brainstorming is to draw out as many ideas as possible. In later stages of the scoping and, later, in the Community Impact Assessment research process, the ideas will be examined critically, but in this first stage, brainstorming, the idea is to generate heaps of information which will be whittled down later.

The biggest danger in the scoping process is possibly overlooking a major impact. If you bring together a diverse group of people and get them to feel comfortable speculating aloud — even if some of the speculation seems rather wild — you will prevent overlooking something important. Participants should be encouraged to think in terms of "impact chains". That is, the proposed project may bring on a direct impact, such as population growth, and that impact may, in turn, cause other, indirect impacts. For example, a proposed project may anticipate importing 100 new employees into your community. These employees will need housing, and, if housing is not immediately available, property values could shoot upward. If housing prices rise, property taxes may rise. This scenario is an example of an impact chain.
Discussion

If the brainstorming has been as freewheeling as it should be, plenty of conflicting ideas will have emerged. Discussion is the time when these disagreements are debated, and when every idea raised in the brainstorming sessions is subject to close scrutiny.

Take each idea from the brainstorming session and treat it by answering these questions.

1. What are the assumptions behind it?
2. Are the facts correct?
3. What are the causes-and-effect relationships that lead to the suggested impact?
4. How probable is the suggested impact?
5. How serious is the suggested impact?
6. What are the reasons for differing evaluations of a predicted impact?

The results of your discussion should be the raw materials for a "first approximation" impact assessment. You may not wish to take the time to write up the discussion results as a polished report, but it would be very useful to summarize on paper, and perhaps design an outline of your "first approximation" of community impact.
You will find that there are "holes" in your first approximation impact assessment. Some of the holes are gaps in knowledge of basic information. Some are logical holes — you question the validity of some of the underlying assumptions of predicted impact or you question the logic of the cause-and-effect links. Others may be holes due to lack of expertise: for instance, you know that population will grow, but you don't know how to forecast the rate or amount of growth. Other holes may be areas of disagreement, both on forecasts of impact and evaluations of predicted impacts.

A sub-title for a first approximation impact assessment might be, "What We (Think) We Already Know About Community Impacts, and What We're Not Sure About." Instead of a community profile, the results of your first approximation impact assessment become the foundation for developing your Community Impact Assessment workplan.
CHECKLIST — POSSIBLE TYPES OF IMPACT

1. Demographic (population) Change

   — Increase in population from in-migration of workers (and job seekers) and their families; "multiplier effect" can make population increase greater than might initially be obvious.

   — Increase in population from influx of young families (in childbearing years), leading to an increase in local birth rate.

   — Change in sex ratio (ratio between men and women): occurs most often when construction or resource project draws large number of male workers who are either single or have left their families "back home."

   — Change in age structure (proportion of people in each age group): rapidly growing communities often experience increasing proportions of people in younger age groups.

   — Rapid fluctuation in population size (boom-bust).

   — High population turnover (can result from large influx of unsuccessful job seekers; or during construction phase of major projects, when each kind of job is for a short term; or when in-migrants are highly dissatisfied with new community).

   — Change in average family size and/or household size.
2. Economic

- New job opportunities (not always available to long-term local residents, unless they have appropriate skills).
- Increased entrepreneurial opportunities
- Increased wage rates
- Increased cost of living
- Increased variety in available goods and services
- Possible local shortages in goods and services (especially during periods of rapid growth); long-term shortages can occur due to difficulty in attracting high-status professionals to northern communities.
- Increase in proportion of two-breadwinner families
- Increase in local taxes
- Economic difficulties for people on fixed incomes

3. Housing

- Housing shortages (during periods of rapid growth)
- Increased property values and housing costs
- Increased rental costs

4. Political

- Decreased individual political power
- Change in community's power structure

5. Socio-Psychological

- Changing acquaintance and friendship networks
- Increased variety of social, recreational and cultural opportunities
- Newcomer-oldtimer animosity
- Faster paced community atmosphere
- Increased diversity among people in the community
- Change in community cohesiveness
- Increased isolation among households (can occur with large influx of new families)
- Higher levels of stress and stress-related problems (e.g., alcohol abuse, child and spouse abuse, mental and physical health problems, suicide).
6. Business Sector
- Increased high and lows in business cycles
- Increased entrepreneurial opportunities
- Increased markets (size and type)
- Increased competition among businesses for workers (retail and commercial sectors may be placed at competitive disadvantage): can result in higher pay scales and labour turnover
- Increased capital requirements
- Increased costs of goods, services, commercial space
- Shortages of space
- Increased taxes
- Increased competition for markets (may lead to higher rates of bankruptcies)
- Increased specialization

7. Administration of Local Government
- Increase in magnitude of decision and management responsibilities
- Increase in complexity of decision and management responsibilities
- Increase in formalized, bureaucratic structures and procedures
- Faster paced administration
- Larger tax base
- Increased capital requirements
8. Community Facility and Service Needs

Increase in need/demand for:

- Developable land
- Water supply and distribution system
- Sewage collection and treatment system
- Housing
- Medical facilities and services
- Dental facilities and services
- Protection facilities and services (fire and police)
- Criminal justice facilities and services
- Social and mental health services
- Retail goods and services
- Commercial services
- Professional services
- Recreation and park facilities
- Entertainment and cultural facilities
- Clubs and community organizations

Needs for special services:

- Transient housing and counselling services
- Newcomer welcoming, orientation and counselling services
- Preventive/treatment services for stress-related problems
The culmination of the scoping process is a tight set of research objectives that lead to a detailed workplan for conducting your Community Impact Assessment.

In a comprehensive Community Impact Assessment, the ideal, your objectives would address:

1. Research that confirms (or disapproves) what you already know about community impacts;

2. Research that fills in the gaps in your current beliefs about what impacts are likely to occur; and

3. Evaluations of the importance of forecast impacts.

Unless your community is well supplied with money, time, and expertise (which could happen if a proponent supplies funds and consultants for your use), you will have to be less ambitious.
The art of objective writing

Writing objectives that work — i.e., that build a foundation for planning an effective Community Impact Assessment strategy and that build group commitment — is an art. This section is intended to address a major part of that art: The ability to refine statements of objective so that they mean the same thing to everyone; and so that, further down the line, you are able to assess the degree to which they have been accomplished.

The acid test of a well-written objective is its measurability. In other words, will you be able to tell when it has been accomplished? A common fault of a group's objectives is that they are written in such lofty language, expressing such grandiose sentiments, that the group never has a way to measure the extent to which the objective has been achieved.

The following examples will illustrate measurability.

"The Lonetree Alberta Community Impact Assessment Organization seeks to promote positive development that fosters the well-being of the citizens of Lonetree."
The sentiments sound good. But what does it really mean? How will the Community Impact Assessment Organization know if it has accomplished its goal? The Organization will need to develop a sophisticated research methodology that is able to distinguish "positive development" from "negative development;" that is able to measure "citizen well-being;" and that is able to trace a relationship between "positive development" and "citizen well-being." To do so, would be to surpass the frontiers of social science, a task we doubt that Lonetree is equipped for.

If the Community Impact Assessment Organization accepts this objective, its members will probably file it in a notebook and forget it. Maybe that would be best for the Organization. If the Organization keeps its sights set on this goal, it is in for frustration and conflict. A local business person may get up at the Objectives Review Meeting, a year after the objectives were written, and pronounce the goal accomplished: "Since we wrote that objective, my business has prospered. The new lumber companies need the widgets I manufacture, and the housing construction industry has ordered 10,000 of my gadgets. I've bought a big new house, I can afford to send my kids to a private school, and I've provided ten new jobs for Lonetreeites. Now that's what I call 'positive development' and 'citizen well-being.'" Next, another business person might rise to give his view: "Before the mill came in, I had a successful, family-run general store. With all the new population in town, the chainstores are coming in. There's a big new supermarket and a discount department store is planned. I just can't compete any longer. As far as I'm concerned, this development has been negative."

Following these comments, other members of the Organization will rise to tell their own tales. Some will have stories of success and pleasure; others will relate tragedies. Has the goal been accomplished? Who can tell? Each person has his or her own interpretation. If it has not already, the Organization will die a quick death, a suicide at the hands of the internal conflict the group created for itself. On the other hand, the group might have started with a measurable objective such as this:
"The Lonetree Community Impact Assessment Organization will complete a review of existing housing stock in Lonetree and determine its capacity to accommodate projected population increases."

This objective is closer to one that works. The housing stock in Lonetree can be measured, present shortages in types can be established, and possible future shortages and needs identified. A measurable objective, in this case, provides the answer to the question, "Can Lonetree accommodate population increases with its present housing stock?"

An important consideration in creating measurable objectives is the actual choice of words. The two aspects of word choice that you must pay careful attention to are concreteness and uniform definitions, and these two aspects are inter-related. For example, believing that cooperation is more effective than confrontation, Lonetree wishes to express formally its hopes that the community will be able to work together with, rather than against, the forestry industry. A member of the group proposes the following objective:
"The Lonetree Community Impact Assessment Organization seeks to work cooperatively with Acme Forest Products, in the hopes that development of the proposed industry can be planned in such a way that it is compatible with both the economic needs of Acme and the quality-of-life needs of the citizens of Lonetree."

The basic problem with the objective is not its sentiment, but its imprecise wording. What, exactly, does the Lonetree Community Impact Assessment Organization mean by "work cooperatively"? The phrase is not concrete enough to have a clear definition shared by all community members. A more concrete way to start out the objective might be:

"The Lonetree Community Impact Assessment Organization seeks to establish a project planning committee, including three representatives of Acme Forest Products and three representatives of the Lonetree Community Impact Assessment Organization, who will meet weekly to review housing needs, and establish time schedules for labour force increases ... ."

In this way, "work cooperatively" is changed to a more concrete phrase, which essentially describes a planning committee with equal representation from both interests. Everyone is likely to have the same definition of the words used, such as "three representatives" and "meet weekly." Other words and phrases the Lonetree group needs to work on are "compatible" and "quality of life." Both share the same problems — they are not concrete and they do not mean the same thing to all people.

An alternative way to refine the original objective is to explicitly define the unclear terms. For example, the Lonetree Community Impact Assessment Organization would append a page defining the measurable characteristics that define "quality of life."
Designing objectives that are measurable tends to prevent a second common problem: objectives that are unrealistically ambitious.

When goals are unrealistic, they are not achieved, people become frustrated and apathetic, and members drop out of the organization. In constructing a realistic objective, consider time, money, and human resources to ensure you are equipped to achieve it.
Objectives should be accompanied by deadlines and assignment of responsibility. Ideally, you should be able to set out a completion date for the achievement of each objective. Also, one person should ultimately be named the one who will see to it that the goal is achieved. This person may be assigned the assistance of a committee, a task force, or another individual, but he or she is the place "where the buck stops." By assigning responsibility, you introduce accountability into your objectives. There is one person who expects to see to it that the job gets done, and who feels responsible to the group.

The final and most critical aspect of developing objectives is the degree to which individual members of your organization support each objective. Gaining full, enthusiastic support from each person represents the ideal situation. Of course, it is an ideal that is rarely achieved. Nonetheless, in developing objectives, every person should be aware that the organization's ultimate effectiveness will depend heavily on the degree to which all members support the objectives. Your community group may be well advised to accept a particular objective based on something more than a simple majority vote. Rather, a larger proportion, such as two-thirds or three-quarters or even 90 percent may be the basis on which you decide to accept or reject a particular objective.
The proportion of people who vote in favour of an objective is different than the proportion who really support it enthusiastically. If 75 percent of the group votes in favour of an objective, but each of those people only supports it 51 percent, you have nothing close to full enthusiastic support. This important consideration leads us to suggest that members be asked to vote in favour of an objective only if they feel unreserved support for it. A secret ballot is more likely to reflect true feelings of support than is a public show of hands.
CHECKLIST FOR REFINING OBJECTIVES

1. Are the meanings of the words clear to everyone?
2. Is the language concrete rather than lofty?
3. Is it clear how you will measure the extent to which each objective has been achieved?
4. Is each objective realistic?
5. Is it clear who is responsible for accomplishing each objective?
6. Does each objective have a time limit?
7. Does each objective have the full support of the group?

Once the community group has reached the point of completing the initial brainstorming session and identified objectives, a decision regarding the use of consultants is often made. The following discusses the pro's and con's of consultants and the selection of a consulting firm.
Hiring a consultant

Never request proposals from consultants until you have developed clear, realistic, comprehensive unambiguous terms of reference.

You can contact prospective consultants informally to get information that can help you develop your terms of reference. And, even if you want to hire a consultant to help you develop terms of reference for subsequent impact studies, you must be able to make it very clear exactly what sorts of assistance you will need. No consultant can read your mind. Clients waste their own and the consulting industry’s money by assuming (hoping?) that a consultant will be able to take vague, ambiguous terms of reference and miraculously design a focused, efficient workplan that suddenly makes clear all previously uncertain objectives. When this occurs it is pure luck. If your group has undergone the scoping process you will have identified thorough objectives and/or questions you wish answered by a consultant. Areas of information shortage will also be relevant in producing the terms of reference.

It takes work on your part to design effective terms of reference for impact studies.

CHECKLIST:

1. Develop clear objectives for the consultant.
2. Know your priorities.
3. Translate the objectives into clear research questions.
4. Decide what it will take to answer questions, calculate the number of days it will require and the expenses involved in carrying it out.

In accomplishing all the work of developing clear terms of reference, you will readily find areas where the community can save money by doing some of the work. For example, a consultant, who is likely to live in a major city, will need some basic orientation to the community.
Consultants — magicians or shysters?

There are two opposing, common myths about consultants that we hope to dispel. The first is that consultants are akin to magicians, people who can come into your community organization, answer all your questions, even read your mind when you have trouble putting your questions into words, and take the responsibility of impact assessment off your hands. The opposite myth is that consultants are shysters, people who borrow your watch to tell you the time and then charge you a fortune for that service.

Like all myths, there is sometimes a grain of truth in both of these depictions. But, for the most part, both are distortions of the whole truth. Although consultants cannot work magic, they have training and experience that can enhance the quality of your impact assessment. But there are some aspects of impact assessment that you can do as well as a consultant, and you can do them less expensively.

Several northern Alberta communities which have undertaken impact assessment have turned to consultants to accomplish the bulk of the research, analysis, interpretation, and reporting. These communities have probably paid consultants for some work that they could have done less expensively themselves and, on the other hand, missed out on taking full advantage of the services that consultants can provide. This section, we hope, will help communities use consultants more selectively and more effectively.
HOW CONSULTANTS CHARGE FOR THEIR SERVICES

The rule of thumb that consultants generally use is to bill the clients at 2.5 to 3.5 times the direct cost of the employee. Thus the researcher in our example would cost you somewhere between $270 and $380 per day.

In addition, consultants pass along the costs of direct expenses (sometimes called "disbursements") to the client. The costs of travel, living expenses while an employee is travelling, couriers, long-distance telephone charges, printing, typing, computer services, purchase of special supplies, etc., are all charged to the client. Some consultants add a small percentage as a carrying charge for expenses.

It is easy to see how the cost of employing a consultant can add up. Essentially, consultants exist for special projects, those projects for which clients normally do not have the manpower or expertise to undertake themselves.

Hiring a consultant is only economical when you either do not have the time or the expert resources to do a job yourself, at the level of quality that you require, or when the issues are sensitive and require an independent perspective.
If you understand how consultants charge for their services, you will be in a better position to decide if and how you want to employ them.

When you purchase consulting services, you are paying for more than the actual, direct cost of the work that you commission. You are paying for two other things: the consulting firm’s profit and its overhead. Of course this is no different than any other purchase of goods and services from the private sector. Let’s look briefly at the cost that consultants bear. Suppose the consulting firm employs a researcher who is paid $25,000 a year in salary with a three-week paid holiday. Assume the researcher takes an average of five days of paid sick leave per year. For simplicity’s sake, assume the only other benefit the employee gets is 10 paid statutory holidays a year. So, out of 260 week days in a year, the researcher actually works 230 days. Dividing the annual cost of the researcher ($25,000) by the number of days worked (230), we see that the employee directly costs the consulting firm $108.70 per day or, if a work day is 7 ½ hours, $14.50 per hour. If the consulting firm charged its clients $108.70 for a day of this researcher's work, the firm would go belly-up. First of all, there would be no profit. Secondly, the company would not be able to pay for the researcher's office, desk, reference books, telephone, paper, pens, stationery, routine clerical assistance such as typing correspondence, filing and answering the telephone, and the bookkeeper who keeps track of accounts. Obviously, the firm must incorporate these costs into the per diem charges to a client. Further — and this is probably a factor that is overlooked by people who employ consultants — that researcher is not “billable” for 100% of his/her time.

Consulting firms must cover all of the “overhead” costs — not only the costs of offices and equipment and supplies, but also non-billable employees’ time. The only “product” that a consulting firm has to offer is the work of its employees. So the only way that the firm can stay in business is to pass along all of these costs to the client via consulting per diems.
Using consultants effectively

There are three ways to use consultants effectively in Community Impact Assessment.

PROCESS

The first is to employ a process consultant to help get over an impasse or confusion. For example, suppose your community is helplessly deadlocked in conflict over priorities for research or over evaluating the meaning of impact. Or, suppose your community organization is losing momentum — everyone seems burned-out. A consultant with expertise in a facilitating process can be employed on a short-term, one-time basis to conduct workshops to help you break the impasse or find ways of regaining your momentum. There are times when you have organizational “people problems” that an outsider with experience in this sort of thing can seemingly work miracles. An impartial outsider with skills in facilitating group processes can bring you fresh viewpoints and techniques that revitalize your efforts.

ADVISOR

The second way to use a consultant is as an advisor: a “consultant,” in the true sense of the word. Suppose you wish to forecast population growth, but no one in your community has expertise in the best way to go about it. You may hire a consultant to come in, discuss your alternatives with you and help you choose an approach.

In this case, you are using a consultant for his or her knowledge and experience to plan a strategy in an area that you know little or nothing about.
RESEARCHER

The third way is to employ a consultant to actually do research for you. This is the most expensive use of a consultant because it uses the most consulting days. It is also the way that northern Alberta communities have most often chosen to use consultants. It certainly can be a legitimate, effective use of consulting services if you have the money to pay for the work, if you have an agreed-upon, detailed workplan, and if the community does not have the time and energy to do the research itself. But it is more cost-effective to determine certain aspects of the research that can be done internally, and only use the consultant for the most complex and technical aspects of the research.

The Community Impact Assessment Steering Committee designs a research plan and a research team of which the consultant is only a small but important part. Not only do you save money this way, using expensive consulting services only where they are essential, but you reap the added benefit of a sense of ownership that can only come from an investment of true citizen participation in Community Impact Assessment.
By using volunteers or hiring someone knowledgeable in your community, you can give the consultant a basic, written orientation to what your community is like. If you do not provide the consulting firm with detailed background materials, it will have to orient itself, and you will pay for the time that the orientation takes. In other words, you will be paying the consultant to find out what you already know.

Another example is in administering surveys. If you know, from your own attempts at developing a workplan, that you will want a community survey with personal interviews, you can hire the consultant to help develop the survey instrument, the sampling plan, and to train interviewers. But volunteers or paid local residents can be used to do the interviews. Perhaps a local club would take on the job as a community project. If the consulting firm hires interviewers, it may charge you mark-up on their time. Likewise, if you want to interview some special segment of the population, such as business people or social service delivery staff, you can pay a consultant to help develop the interview schedule and interviewing techniques, but use local people to do the interviews.
TERMS OF REFERENCE

Your terms of reference should include:

— Statement of objectives for the studies;
— Detailed research questions;
— Relevant background information about the community;
— Methodological guidelines wherever you have suggestions, preferences, or requirements; and
— The name of one or more persons who can be contacted for further information.

Your terms of reference should clearly indicate the areas where the community will do the work, and where the consultant alone is responsible. The terms of reference should also include the following supplemental material:

— A narrative that gives background on why the studies are being done, and what has been done so far;
— An organizational chart showing where the consultant fits in, and to whom the consultant will report;
— A timeline, showing when each phase of the work needs to be completed;
— A budget, broken down into professional fees and expense upper limits;
— The number of consultants who have been asked to submit a proposal, and who they are; and
— The criteria that you will be using to adjudicate the proposals.
A third area where a community can do its own work is in obtaining and compiling baseline data from existing secondary sources. With a small amount of direction from a consultant, community members will be able to do this sort of work less expensively than will the consultant’s staff. Look for ways that your community can reduce the consultant’s expenses. For example, if you agree to use community-owned facilities for tasks such as report reproduction, you will avoid paying the commercial rates that a consultant charges, and you will save yourself money.

Use a two-stage process to hire consultants. In the first stage, find out about as many potential consultants as you can. The Northern Development Branch will be able to provide you with a list of consultants whom they know of. So will Alberta Environment’s Environmental Assessment Division. Other northern Alberta communities which have used consultants can also give you some names. Or, you can place an advertisement in newspapers in the cities of your choice, announcing that terms of reference are available to interested consultants. In the first stage, do not invite proposals! Instead, ask for a “Statement of Credentials.” Give your detailed terms of reference to all interested consultants, and ask them for a description of their corporate credentials that would enable them to do the project for you. Ask for resumes of staff who might be assigned to the project. Additionally, ask them for a brief (no more than five pages) description of the general approach and philosophy that they would bring to the project. And, finally, ask them for the names of past clients whom you could contact to get a reference on each consultant’s previous work.
Set a deadline for submissions. You should give at least two weeks between the time that the prospective consultants receive the terms of reference (take into account mailing time!) and the time that you receive the statement of credentials. Be prepared in the interim to get calls from interested consultants who want some clarification or additional background information.

Review the submissions and start eliminating the firms who seem least likely to do the job for you. Your aim is to develop a "short list" of no more than five firms whom you will ask to submit detailed proposals. Before considering your short list to be final, contact references!

In the second stage, it is a courtesy both to yourself and to the consulting industry to request proposals from no more than five firms. Three are better. For one thing, it is a time-consuming process to adjudicate proposals. For another, the fewer consultants you ask to submit, the better the proposals you will receive. If a consulting firm knows it is only one out of many, it figures that its probability of winning the contract is relatively slim. Therefore, it limits the resources it will give to proposal preparation. But, if the firm knows it is one out of three, it figures that it has a strong chance of winning the contract, and will go all-out in working to submit the best proposal. Finally, it can cost into the thousands of dollars to prepare a proposal and, as we explained earlier, the cost of proposal preparation ultimately is passed along to clients. By asking a large number of firms to submit proposals, you are indirectly contributing to escalating costs in the consulting industry.

The steering committee should adjudicate the proposals. They should develop their adjudication criteria before the terms of reference are sent out. Adjudicating proposals is simply a matter of applying those criteria to the proposals which have been received.

A few words about the ethics of hiring a consultant: First, it is unethical to invite proposals if you are not prepared to hire a consultant. In other words, if you do not have the funds or if you think a consultant "might" be nice to have, but you haven't decided definitely, do not invite proposals. Second, the proposals submitted are proprietary information. You should not show to the winning consultant the proposals submitted by others and suggest that he borrow the best ideas of each. Instead, destroy all but the winning proposal unless you have paid each consultant to prepare the proposals. In that case, you own the ideas developed in each one and you can pick and choose from all of them.
Contracting

There are hundreds of variations in consulting contracts. The one that we recommend is very simple. The bulk of the contract is composed of the original terms of reference and the winning proposal attached as Schedule A and Schedule B. If, before you have awarded the contract, you and the consultant have negotiated changes from the original terms of reference and proposal, enumerate these changes in the body of the contract.

In addition, the body of the contract should include the dates that the consultant submits particular pieces of the work for you and the dates by which payment will be made. Reporting relationships, a cancellation clause, and a clause describing how contract terms can be altered should also be in the contract. The submissions procedure and scheduling of progress reports by the consultant to the steering committee should also be clearly identified. It is most important that the consultant and the steering committee meet regularly to review the progress of the work and to ensure the terms of reference are being met to the satisfaction of all.

Contracting can be an awkward process. When a client and a consultant are beginning their relationship, both sides are trying to establish cordiality and trust. At such a time, being very "sticky" by putting details in writing may seem vaguely dirty or mistrustful. However, it is ultimately in everyone's best interests to put all terms of agreement in a legal contract, regardless of how uncomfortable it may feel at the time.
The final report
CONCLUSION

Once the Consultant and/or the Community Organization has completed its final report and presented the report’s findings to the Community Impact Assessment Organization and the residents of the community, the task is not completed, but rather just begun. The Community Impact Assessment Report now requires implementation. The Community Impact Assessment Organization should examine its organizational goals and objectives in light of the final report and decide how the findings and recommendations will be acted upon. If the Community Impact Assessment Organization felt strongly enough about the changes occurring in their community to produce a Community Impact Assessment report, then a strategy for implementation and follow-up to the report should be developed. The report is but the beginning stage.

The Community Impact Assessment Report may bring about controversy and a great deal of discussion. The Community Impact Assessment Organization should be prepared for this possibility and not take alarm. Careful review and considerations of the findings and the development of alternative solutions to problem areas is the next step for the group and the community.
Appendix
Appendix

INSTRUCTIONS FOR BRAINSTORMING

Advance Preparation

1. Arrange for a location which has enough rooms to allow each brainstorming team space and privacy. Schedule a time for the sessions.

2. Blackboards, flip-charts, and/or tape recorders are optional.

3. Choose one group member to be the “recorder” for each team. The recorders will need a short orientation session before the brainstorming sessions are held.

4. Write a brief set of instructions for the brainstorming sessions, describing the problem or task that will be the focus, and explaining how the sessions will work. This step is optional. However, it is helpful to the team members to have some notion of the process ahead of time; it also allows people to collect their thoughts on the topic.

5. Set a firm time limit. Brainstorming sessions should never be more than an hour long.

Basic Rules for Brainstorming

1. The recorder writes everything down, either taking personal notes, or writing on a blackboard or flip-chart. The alternative is to use a tape recorder, and transcribe the tape after the sessions. A tape recorder frees up the recorder to participate more actively.

2. The recorder enforces the rules and keeps the team on-track. A skilled recorder will also encourage all team members to participate.

3. Team members should be instructed to state any ideas on the topics that occur to them; the more ideas the better. Contrary to most creative sessions, in brainstorming, quantity is more important than quality (ideals can always be improved later).

4. Team members should be asked to refrain absolutely from any criticism, compliments, or questions about anyone’s ideas. Team members can even be asked to try to avoid non-verbal gestures or sounds that indicate their reaction. In short, no grunting, groaning, applause, laughing, or crying. (This instruction should definitely be tempered with some humour). The idea is not to inhibit people, but rather to make the atmosphere neutral enough to make people comfortable in suggesting any idea that pops into mind.

5. Discussion of ideas takes time away from the generation of more ideas. Therefore, no discussions are allowed.
6. Wild, far-out ideas are encouraged.

7. Ideas that are slight variations or combinations of other ideas are encouraged.

8. Stick to the time limit.

Optional Elements of a Brainstorming Session

1. An Introductory Exercise

Brainstorming's rules seem just the reverse of what we usually think produces useful ideas. People aren't being encouraged to be realistic. Rather, they are told that strange ideas are desirable. Members cannot ask questions or discuss ideas. And, worst of all, quantity is more important than quality.

These features of brainstorming are what makes it work. Peer pressure is reduced, people become less inhibited, their minds start working more creatively, and just hearing a series of ideas in rapid-fire fashion tends to stimulate even more ideas.

Nonetheless, people may be skeptical or confused about brainstorming, because it is so different from more common work-session techniques. It may help to begin with an introductory exercise. This one was suggested by two management experts (Gorman and Baker, 1978):

Imagine that you have been cast ashore on an uninhabited South Pacific island. You are nude except for a leather belt. How can the belt be used to aid in your survival?

In five minutes the group should tackle this problem using the basic rules for brainstorming. Gorman and Baker comment:

Given the nature and absurdity of the assignment most groups are surprised to find the quantity of ideas they develop far exceeds any expectation they had...Quality is not always consistent, but even though a number of poor ideas may be generated during the...session, they may still serve a useful purpose.

1. They break tension...
2. They encourage others...
3. They spark other ideas...
2. A Five-Minute Thinking Period

Brainstorming can fail if a group gets hooked on one particular train of thought. As a way to reduce the risk of this situation, the session can begin with a five-minute "think" period, where group members write down all the ideas they can think of. Then, when brainstorming begins, there are a variety of ideas which can be used as a springboard for other ideas.

**BRAINWRITING INSTRUCTIONS**

Members of a small group (7 - 10 a good size) offer ideas about an assigned question by writing the ideas on a piece of paper. After each individual has, without discussion, written down all of his or her responses, the piece of paper is put into a central pile. Then each individual draws from the pile the submission of one of the other participants and adds his or her own comments as they are stimulated by those of others. The procedure is repeated until all members of the group have seen all pieces of paper. This process encourages the development of ideas and provides substantiation for those that arise repeatedly.

The next step involves the return of each member’s original piece of paper at which time the participants take a few minutes to review and contemplate the comments that may have been added by the others. A brief discussion period follows when members have the opportunity to clarify and expand on points. An effort is made to identify the most important points and reach consensus on them.

As a final step, each participant summarizes at the end of his or her sheet of paper those points which he or she has selected as important. A group recorder collects and retains these for the time when greater refinement of this information is necessary.

The primary purpose of brainwriting, like brainstorming, is one of generating information from a group of individuals. It clearly involves one additional refinement over brainstorming, but does not eliminate the need for further work on putting the information into usable form.

**DELPHI**

The Delphi uses a panel of experts who are anonymous to one another. Because in Community Impact Assessment community members are experts — experts on their community — anyone from your community might be included on your Delphi panel.

The Delphi uses a series of written questionnaires. After the first round of questionnaires is returned, you compile all the information and send your compilation back to the panelists with another questionnaire. In this way, the panel of experts receives the benefit of learning of other experts’ responses without any of the peer-pressure or status-pressure that occurs when people discuss an issue face-to-face. Successive rounds of feedback-questionnaire lead to increasing expert consensus as the experts weigh each other’s ideas and adjust their own opinions in light of others’ arguments.