Community (Internet) Access Groups: Case Studies from rural and small town British Columbia, CANADA

by

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Project Abstract

This monograph is part of a larger research project on the potential role of new information technologies in supporting, or creating, a Civil Society. It is increasingly clear that access to needed and relevant information forms a crucial linkage between the formation and enhancement of civil society and the success of community development and community economic development initiatives. If local community groups, the very foundation of Civil Society, are to be successful in their efforts and endeavours, then their access to information must be both efficient and effective.

Rural and small town communities are the geographic focus of the project "Pluralism in Community Development Practices: Can New Information Technology Build/Maintain A Civil Society?". Such locations have historically been disadvantaged with respect to accessing information and information sources. Large distances and small local populations (critical mass) are well known and well documented impediments for rural and small town communities across much of North America. Against this backdrop, there is now considerable interest and debate about the potential role which new information technologies, especially computer based information access and retrieval technologies, may play in changing this historic relationship.

More generally, this research project also offers the opportunity to consider the question of representation and participation in decision making. These two issues are central to the idea of Civil Society. Motivating questions for the research include whether the new information technologies can enhance the ability of local groups to engage in community (economic) development debate and whether the membership of these groups is broadly representative of their local community or whether they represent specific sub-sets or interest groups. Is there democratic participation or are new information technologies likely to reinforce existing patterns of local elites? In this case study report, issues of conflict and contention between individuals and groups within each place are connected to this question of relative local power.

The research project is based at the Community Economic Development Centre at Simon Fraser University, Vancouver, Canada and involves additional researchers at the University of Northern British Columbia, Prince George, Canada and Charles University in Prague, Czech Republic. The researchers in the Czech Republic are exploring the same types of general questions raised here, but in a much different context where rural and small town residents are now developing community groups and associations in light of the transition to a market economy.

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Other publications related to this research include:

"An Essay on Civil Society"
by Dr. Brian Massam (York University)
1995, Vancouver: Community Economic Development Centre,
Simon Fraser University.

"Information Needs and Internet Opportunities (Constraints) - Report on a Questionnaire Survey of Community (Economic) Development Groups in British Columbia, CANADA"
by Dr. Greg Halseth (University of Northern British Columbia)
1996, Vancouver: Community Economic Development Centre,
Simon Fraser University.

"Community (Internet) Access Groups: Case Studies from rural and small town British Columbia, CANADA"
by Dr. Greg Halseth and David Arnold (University of Northern British Columbia)
1997, Vancouver: Community Economic Development Centre,
Simon Fraser University.

For further information on this research, or these research publications, please visit our Internet homepage at **http://www.sfu.ca/cedc/**

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Table of Contents

Acknowledgements	2
Project Abstract	3
Executive Summary	6
Section I - Introduction	
1.1 Introduction	21
1.2 Definitions	23
1.3 Canada Case Study	26
1.4 Methodology	27
Section II - Case Study Communities	
2.1 Profiles	30
2.2 Community Startup with New Information Technology	32
Section III - Themes in New Information Technologies	
3.1 Mechanics of New Information Technology Setup	37
3.2 Community Response to New Information Technologies	39
3.3 Users of New Information Technologies in the Community	41
3.4 Non-Users of New Information Technology in the Community	43
3.5 Use of New Information Technology as a Tool for Building Civil Society	44
3.6 Traditional Methods of Building Civil Society	47
Discussion	50
Bibliography	54
Appendix 1 - Interview Schedule	55
2 - Community Access Program	60
3 - Community A: Internet Society Constitution	64
4 - Relevant Internet Sites	67

Executive Summary:

Introduction

This monograph is a summary report from the case study of two small communities in British Columbia which recently undertook to connect to the Internet. The study was conducted as part of the research project: "Pluralism in Community Development Practices: Can New Information Technology Build/Maintain A Civil Society?".

Broadly, the research project attempts to assess the potential value of new information technologies in building and maintaining Civil Society. This emphasis upon a strong Civil Society means critiquing the ways communities take up new information technology to assess whether it enhances local participation, representation, and consensus building.

Across British Columbia there is a striking difference in the ability to access information between communities. Historically, rural and small town communities have been disadvantaged. Large distances and small local populations (critical mass) are well documented impediments to both community development and local economic development. There is now considerable interest in the potential of new information technologies in changing this historic relationship.

In exploring this issue, the monograph can contribute to community development debate in at least three ways.

- For the communities which participated in the study, this report provides feedback and an opportunity to compare their own experiences.
- For the community (economic) development audience, this monograph provides a baseline from which to assess and interpret future trends.
- Finally, there has been considerable, often uncritical, dialogue on the potential of new information technologies - to which this report provides some “real world” experience.

Definitions

Civil Society:

The concept of "Civil Society" is key to the research project. The project defines it as the critical space between the individual and the state. As such, Civil Society creates a geographical landscape for social organization and action. It is also a theoretical cornerstone in local community development; a mechanism through which to re-assert local priorities through local democracy. Critical questions involve the degree to which the (broader) community participates, whether there is an equality of access, and whether the local Internet group is representative of the local population; that is, when they speak up for local interests are they speaking from democratic foundations.

New Information Technologies:

By New Information Technologies, we mean electronic and computer-based information sharing and retrieval technologies. These include fax machines, electronic networks, and computer assisted systems such as the Internet. Important issues for rural and remote communities concerns local availability of support for new information technologies; including 1) access to Internet Servers and 2) access to repair and technical assistance. Both are limited outside of larger centres. Some of the important questions asked in the case study concern the mechanics of connecting rural communities.

Community Power:

Debate and conflict between individuals or groups is a natural and normal part of community functioning. Such debate is often the result of a struggle for community power - either to gain decision-making control or to avoid losing it. As local Internet organizations are formed, and these organizations become part of the institutional landscape, debate and conflict can be expected.

Canada Case Study

The geography of British Columbia is comprised of an urbanized core involving the greater Vancouver-Victoria metropolitan region in the south-west corner of the province while the remainder can be characterized as generally small communities and rural areas isolated from one another by large distances, rough terrain, and a relatively limited transportation network.

This report has a special interest in rural and small town places. This interest is motivated by the greater isolation from information resources which such places often face, and also by the perception that new technologies may be of greater assistance to such locales.

Methodology

A case study methodology was used to examine how small communities organized themselves in order to use new information technologies to connect with the Internet. Two small communities, both well removed from the metropolitan Vancouver-Victoria urban area, were selected. This study focuses upon the kinds of problems, barriers, opportunities, and rewards which other rural communities across Canada might expect to encounter. Both case study communities were fully connected to the Internet at the time of the research.

Interviews were conducted with a wide range of community members - from those people intimately involved with the drive to connect to the Internet, to those who opposed the move, to those who were simply outside of this effort. As well, a broad range of "users" within each community were interviewed (See Appendix 1 for the interview schedule). The interviews were conducted during the Fall of 1996.

Information was specifically collected on:

1.) The background or general history of efforts to organize local Internet access,

2.) The actual mechanics of connecting the community to the Internet, including availability of service providers, etc.,

3.) The reactions/participation of the general community in the drive to connect to the Internet,

4.) The levels of use which the system has been getting and the characteristics of the "user" groups,

5) The general characteristics (economic and social) of the community within which the Internet organization is working.

Community Profiles

The two case study communities are both relatively small and are located far from the urban heartland of the province. As part of the research protocols, the communities are not identified by name. It is hoped that their experiences will resonate with readers familiar with rural and small town communities.

"Community A", has a population of approximately 1,500. It is relatively remote since the nearest large center (with a population of over 50,000) is 3 ½ hours driving time away.

Historically, the local economy has been based upon forestry with local employment primarily in logging and transportation. There are, however, no large sawmills or other processing facilities and most forest employment is via seasonal contacts with small independent firms. The community also has a retail, service, and support sector. Tourism is one economic area which has seen recent growth.

Diversification plans identified the need to take an active interest in the supply of Internet services. While opportunities for accessing information via the Internet is considered important,

advertising the growing local tourism opportunities to a “world wide” audience is considered critical.

“Community B” has a population of approximately 4,500 and serves a relatively larger rural hinterland than does Community A. Community B is approximately one hours driving time from a large center (with a population of over 50,000), putting it within the retail-shed for many of the high order services offered in that urban centre.

The economy of Community B is based upon two key components: forestry and agriculture. In terms of employment, forestry accounts for the majority of jobs. While most of these jobs are in logging and transportation, there is also has some local processing and value-added wood manufacturing. Agricultural activity is focussed mainly on dairying with some beef cattle.

Community Startup

Community A

The Internet access site was developed under guidance from the local “Internet Society”. The physical creation of the site was made possible with assistance from the federal Community Access Program (see Appendix 2). The Internet Society now provides a high speed data transfer system within the community. The CAP site came on line one month before the case study research.

The Internet Society came about when a group of residents sought to establish community awareness and education related to new information technologies. Society directors were elicited from the wider community through a series of ‘public information nights’. While meetings were made as ‘open’ as possible, most directors had been the previous FreeNet participants. The computer-based nature of the medium seemed at this early stage to attract a very specific clientele.

The Society began with 26 members and by the fall of 1996 membership had grown to 48. The objectives of the Society are to offer training and mentoring at the Learning Centre and other community locations in order to introduce youth, community groups, entrepreneurs and local businesses to the potential of the Information Highway.

Although some of the Internet Society's founding members had experience with the Internet from elsewhere, most became interested via participation in FreeNet bulletin board services (BBS). When they moved to commercial Internet servers they encountered costly charges, including long distance telephone charges to connect to servers in the urban centre 3½ hours driving time away. Only the affluent enjoyed the new information technology benefits.

To move forward with the CAP proposal, the Society had to develop a functional set of partnerships. This included Industry Canada (CAP funds), local educational institutions and businesses, the public library, and local community service groups. Bringing the community media "on-board" proved important in efforts to highlight and publicize the potential benefits of the information highway for area residents.

The critical partner in Community A proved to be the local government. The active support of several council members in community debate also played an important role in legitimizing the efforts of the Society.

The Internet Society set as an early priority the need to identify potential mentors and local "champions" of the Internet. In cooperation with its partners, the Internet Society will train local employees and residents who will then become mentors and trainers for others. This type of cumulative community learning is a common CED empowerment strategy. The "buy-in" of local institutions is evident in the range of places which have been made available for CAP training.

Community B

The CAP site in Community B was developed under the direction of the "Access Network Organization" (Access Network). The Access Network, which began in 1995, is a community-based not-for-profit association. It provides service to a huge area that includes seven farming and forestry communities over a 1,500 square kilometre area covering three BC Tel calling areas.

Interest in the Internet and new information technologies also found its beginnings with BBS. The impetus in Community B was an innovative school district staff who used electronic networking to reach a dispersed student population. With over 800 users by 1995 (375 students, 130 parents, 78 staff, and 219 community members), the school district was providing a workable virtual solution to their geographical challenges.

A successful CAP grant application allowed the Access Network to offer access to a wide public. As required by CAP guidelines, they also undertook to advertise and inform the community. As with Community A, most of these directors were people with technical computing interests and experience.

The Access Network plan focused on inexpensive text-only Internet services. By avoiding graphical information members could use less expensive computer equipment and reduce costly time on-line. The Access Network also made community training one of their primary functions. Many local institutions expressed interest in assisting with and participating in this training. Unlike Community A, however, no clear strategy such as a "training the trainers" program is in place.

One of the key challenges was how to effectively serve such a large area. Two service provision strategies were adopted:

1) A set of public access sites in Community B's public library and the Chamber of Commerce office,

2) A mobile site which would be capable of traveling to other community centres, ranches, and mills as part of training and outreach activity.

Success in Community B did not come without problems. As the Cap site came on-line, congestion on the school district lines grew. The school district finally served notice and the Access Network had to find another Internet server. Eventually, local entrepreneurs eventually formed a local Internet supplier.

Mechanics of Setup

At the time of the research, both communities encountered barriers with service provision options. This lack of commercial communications support mirrors the situation many rural and small town communities in have experienced for decades. Several rural communities in British Columbia still rely upon radio-phone service because land-lines have either not yet become commercially viable or have simply not yet been provided.

Community B used a private commercial competitor to gain timely access to the lines they needed while the more isolated Community A went with a satellite link.

Connection choices were based on three criteria:

- setup time,
- cost of both setup and on-going use,
- and, line speed capabilities for transmission of data.

These three factors were weighted differently by directors of the managing boards and there continues to be some disagreement over where to place emphasis.

A second start-up challenge involved the steep learning curve associated with new information technologies generally and the process of connecting in particular. This applied not only to the initial setup but also to on-going troubleshooting. This learning curve very much taxed time and patience, and perpetuated elite technical involvement.

The intense learning periods also led to several community relationship casualties. This outcome is not unexpected. First, there is bound to be tension and competition between local elites as they vie for control of local organizations. Second, decisions made in building the service and organization may alienate some of the founding members. As one respondent put it, debates often became “my way or the highway”.

Community involvement and support was at first high in both communities. As time passed, the pattern in both communities was that non-technical members dropped out and left decisions to ‘experts'.

While both communities are thankful for the CAP program for help with start-up costs, ongoing costs for rural operations and hardware replacement, however, highlight the reality that cost-recovery necessitates aggressive sales work, a degree of commercialization, or further government support.

Community Response

Public interest with new information technologies varied in both case study communities. Turnouts at public meetings were initially very good but dropped off.

Approximately 2½ weeks after initial start-up, Community A had around 50 user accounts. In Community B, there were approximately 275 users on the Text-only access, 125 users on the full graphic service, and 800 staff, student, and parent users through the school district. The Text-only service had been available for 9 months, full graphics for 3 months, and school district access for 4 years. Managers report that the Text-only service appears to be holding its user numbers while the full graphics is increasing.

Local advocates for Internet access proved to be important. While residents in both communities felt that the general public was relatively well informed, they were not always convinced about the benefits to them individually. Open houses and Trade Shows were used to show the advantages of electronic networking.

Community Users of New Information Technology

In each of the case study communities, client users come from a broad socio-economic spectrum. Among the service users interviewed were policemen, farmers, teachers, pastors, adventure tour guides, photographers, loggers, railway workers, and people presently out of work.

The range of Internet uses was similarly broad. Identified uses included research and information collection, taking on-line educational courses, and expanding their business opportunities. Finally, many suggested they used the medium for hockey pools and to play interactive games.

In over half of the interviews, users mentioned that they did not pursue their current interests or activities until the Internet provided easy and convenient access.

Much has been written in popular forums regarding “virtual socialization”. Many users interviewed reported joining discussion groups in topic areas which had long fascinated them. One social studies school teacher reported an increase in student political interest due to incorporation of the Internet into her classroom.

Two particular applications show how new information technologies can facilitate interactions which strengthen local civil society. Several ‘environmentalists’ reported using the Internet to successfully network with others both within, and outside, the local area. Within the service area of Community B, a First Nations' home page contains an on-line language dictionary.

Interest in using new information technologies to develop “virtual communities” or to build local civil society are well removed from those who view the Internet simply as a source of recreation. In these communities it was clear that new users were more content to access ‘light’ and visually stimulating web pages. An interesting issue as the audience matures will be whether they shift their attention to more substantive topics.

Finally, the school district’s Internet project has become a showcase in the move towards the transformation of schools into ‘virtual schools’. 450 mostly rural students are already experiencing new information technology’s indifference to space and are developing on-line communities according to interests and challenges.

Non-Users of New Information Technology

The case study research suggests that “non-users” could be categorized into three broad groupings.

1) Community members who are “technophobic” or feel themselves left behind and bewildered by all the “fancy language” and “strange formulas” (Internet site addresses). One respondent spoke about seeing all of these “dot - ‘w’, ‘w’, ‘w’ - dot - dot’s” after all the television newscasts and sports shows and asked whether she was missing something important.

2) There are also those excluded by money. Many lower income households simply do not have the means to either purchase the computer hardware or to pay the continuing costs of an Internet connection. Any potential role for new information technologies in building local civil society is negated by the failure to be democratic and inclusive.

3) The third broad category of non-users are the self-described 'old dogs' - those who simply did not want to be bothered with anything new.

A Tool for Building Civil Society ?

Bringing Internet services to these communities did provide something of a "community-building" experience. The problem, however, is that such community building could have resulted from similar exercises such as cooperative battles for a new hospital or a swimming pool and cannot be claimed as a result of the new technology itself.

Much has been made about the Internet as the focal point of the information revolution that is upon us. Many residents felt that they had placed their local area in a better position to take advantage of future development opportunities - a motivation clearly linked to local capacity building. People worried about the 'demise' of rural communities felt that their community now had a competitive advantage.

Following this same capacity building argument, many users joined the local Internet service even without a complete understanding of what they would use it for. This was especially the case for local entrepreneurs.

Development of both local physical and human capacities was an important motivating force for those involved with the drive to connect to the Internet. However, a couple of points of caution are worth raising.

1) Many small towns across Canada continue to struggle under a debt burden resulting from the construction of elaborate industrial parks. There is a danger that new information technology and the Internet may be taken-up as the latest in a long line of such panacea solutions for rural economies.

2) Many of those interviewed expected that their town would now be in a more competitive position to take advantage of new development opportunities. Most extended this logic to suggest this would ultimately change their relative economic position. For small communities, the question is perhaps not so much one of getting ahead, rather it is a question of not being left even further behind. Expectations may need to be realistic to fully enjoy the potential of new information technologies.

Traditional Methods of Building Civil Society

Most rural and small town communities across North America have historically had a strong traditional base from which to develop and support Civil Society. In agricultural communities, farmers institutes, co-ops, and the Women's Institute were important, while in forestry and mining communities it was often the various crafts and trades organizations which were important. In many rural communities, the church played a central role in community life and local Civil Society.

In many communities the traditional sources of support for Civil Society remain in place while for other communities they are no longer relevant. It has been suggested that new information technologies may be harmful to local Civil Societies by engaging residents in interests outside of the geographic community.

Looking at local service clubs, both communities had a strong history of club activity. While there has been a decline in membership for some groups, others have grown. In part, this likely reflects the changing demographic mix within these communities. In Community B for example, the local church still has a strong influence.

It seems that the more the local economy is based on seasonal, or uncertain, employment the more difficult it will be to maintain support for Civil Society institutions. While new information technology may be one way to assist community development, it seems more clear that community development can contribute towards building or maintaining local Civil Society.

At this point at least, the "waxing and waning" of traditional Civil Society building agencies was not linked to the introduction of new information technologies.

Discussion

Four key issues emerge from this study.

1) "Representativeness". This is a critical link between new information technologies and Civil Society. Community oversight of Internet access points has been left largely to 'technical' computer people. Internet organizations clearly need to become more representative in order to avoid becoming seen as 'closed' clubs catering to a very small segment of the local population. At this stage, Internet access is not yet inclusive in either case study community.

2) Public involvement and education is a second critical issue highlighted in this study. This is crucial not just at the beginning of any drive to "connect" a rural community, but it continues to hold the key to successful participation and representation. This also includes the question of "continuing education" for users and non-users alike. Besides on-going education in information management to keep users functioning efficiently, non-

users must get introductory level education to break down barriers. If new information technologies are to be effective in building a strong Civil Society then educational efforts to enhance democratic participation must be developed.

3) Local community building institutions have, at this point at least, not been displaced by the Internet's indifference to space. On the contrary, local residents and governments have shown an interest in using new information technologies as a resource for local community economic development.

4) A final issue concerns the relative position of rural and small town Canada within the national social and economic fabric. First, technical difficulties encountered in the case study communities were dismissed by commercial Internet servers on the point that the technology is changing so rapidly that in time there will be new solutions. The experience of other rural communities is, however, instructive. Rural Canada has historically lagged in communications infrastructure, and with the introduction of new information technologies rural Canada still appears to be lagging. Second, expectations are high. A more realistic vision is that getting rural and small town Canada on-line is important in order to keep them from falling further behind and becoming even more marginalized.

This new medium is of such a dynamic nature that it is difficult to assess and predict without being quickly out-dated. As more inexpensive, user-friendly, and multi-media possibilities emerge, community applications will intensify and magnify the potential for community and economic development. Both of which may assist in building and supporting local Civil Society.

Section 1.1 - Introduction

This monograph provides a summary report from the case study of two small communities in British Columbia which recently undertook to connect to the Internet. Based upon in-depth interviews with local residents, this study was conducted as part of the research project entitled "Pluralism in Community Development Practices: Can New Information Technology Build/Maintain A Civil Society?". Broadly, the research project attempts to assess the potential value of new information technologies, and the possible continuing value of traditional information exchange mechanisms, in building and maintaining Civil Society. This emphasis upon a strong Civil Society means critiquing the ways communities take up new information technology in terms of whether it enhances local participation, representation, and consensus building.

As described in previous project reports (Halseth, 1996a; Massam, 1995), the research is based upon a comparative design involving Canada and the Czech Republic. The Canadian case study concentrates upon communities within the province of British Columbia. Inclusion of the Czech Republic as a comparative to Canada is considered very important to the research project. The legacy of a central planning regime in Eastern Europe has left a suppressed space between the individual and the state - the Civil Society. The participation of citizens in their community, and equity of access to information and decision-making, are requisite for the well-being of individuals and their communities. While the traditions of a pluralistic civil society develop slowly over time, Eastern European countries need to be able to develop civil societies quickly if they are to be successful in navigating the current period of political and economic transition. In British Columbia, as in other market economy regions, the issue is one of preserving and enhancing an existing Civil Society. This is being accomplished in part with policies that seek to devolve decision-making to the community level and with support of local community development and community (economic) development institutions. In this context, it is an older problem of unevenness between rural and urban communities which presents the most striking challenge.

Across British Columbia there is a striking difference in the ability to access information and information sources between communities. Historically, rural and small town communities have been disadvantaged to the degree that large distances and small local populations (critical mass) are well known and documented impediments for community development and local economic development. There is now considerable interest and debate about the potential role which new information technologies may play in changing this historic relationship. By linking this interest in new information technology with a concern for enhancing Civil Society, questions of representation and participation in local decision-making come to the fore. Case study research in rural British Columbia, therefore, provides an opportunity to consider questions on both the potential of new information technology and on local patterns of participation and representation.

The two communities selected for the case study research are both relatively small and are located far from the urban heartland of the province. As part of the research protocols, we have chosen not to identify the communities by name. It is our hope that the experiences recorded here will resonate with those readers familiar with rural and small town communities and that the names of our particular case study locations will, therefore, be of little concern. Given the research project focus upon rural and remote communities, the case study seeks to draw out the experiences of people actually involved in connecting to the Internet. The interviews were structured so as to gather information on the way in which the community organized to take advantage of new information technologies as well as some of the mechanical and logistical issues that were faced. It is hoped that other community groups will be able to use this report towards equipping themselves better to participate in debate and discussion regarding the potential local value of new information technology and on connecting to the Internet.

In exploring this issue, and the questions related to it, this monograph can contribute to community development groups, practices, and debate in at least three direct ways. For the communities which participated in the study, this report provides feedback and an opportunity to compare their own experiences with at least one other community. Second, for the general

community (economic) development audience this monograph provides something of a baseline from which to assess and interpret their position and possibilities for future decisions. In this sense it also provides a checkpoint on the issues facing small communities as they seek to take advantage of new information technologies. Finally, as described in Halseth (1996a) there has been considerable and often uncritical dialogue on the potential of new information technologies to 'close the information gap' for rural and remote communities. This report makes a positive contribution to the debate by summarizing the real world experiences of two rural communities.

Section 1.2 - Definitions

Much is expected in small town and rural communities from new information technologies. Long experience with isolation, long distances of separation, and continuing high costs associated with accessing the kinds of information needed for community development, means that such places are actively looking to the potential benefits of these computer-based electronic information access and retrieval technologies. In Canada, public policy makers are also looking to these new technologies to provide significant local benefits. Before discussing the results, it is important to establish the framework within which this case study into the role and value of new information technology in rural and small town communities was developed.

Civil Society

The concept of "Civil Society" is key to this research project. While there is a large body of philosophical literature, and a range of views, on the issue of Civil Society, this project defines it as the critical space between the individual and the state (Halseth, 1996a). As such, Civil Society creates a geographical landscape for social organization, order, and action. In this sense, Civil Society is also a theoretical cornerstone in local community development; a mechanism through which to re-assert local priorities through local democracy (Massam, 1995). Central to the notion of Civil Society are the collective associations of individuals, residents, or other actors. At the local scale, such collective associations are often of grassroots origins. Critical questions for the case study involve the degree to which the (broader) community participates, whether there is an

equality of access, and whether the local Internet connection group is representative of the local population; that is, when they speak up for local interests are they speaking from democratic foundations.

New Information Technologies

Many commentators have likened the present activity surrounding new information technology (specifically the Internet) to the introduction of the telephone. Others see its effects as even more far reaching and compare it to the invention of the printing press. These comparisons highlight, among other things, that futurists expect new information technologies to mark a change in culture, community, and society in general. Gates (1995) reminds us that before the printing press, literacy for the masses was unnecessary and few ventured beyond their village. This resulted in a world where experience was largely personal and horizons were generally small. At its introduction, the telephone was considered by many as a nuisance with little worthwhile application. Two categories of users adventured to acquire this 'new communication technology' - the isolated and the hobbyist. Eventually, as more and more people acquired the telephone at their homes and businesses, ways were created to take advantage of the unique characteristics of this means of communication. As it flourished, its own special expressions, tricks, etiquette, and culture developed. At this time the Internet and our own new information technology is undergoing a similar evolutionary process which also includes the formation of its own rules, habits, and social practices.

By New Information Technologies, we mean electronic and computer-based information sharing and retrieval technologies. These include fax machines, electronic networks, and computer assisted systems such as the Internet. Two important and related issues for rural and remote communities concerns local availability of support for these new information technologies. First, to get "onto" the Internet, one currently needs to be a subscriber with an Internet server. These companies are, however, often only located within larger cities. For rural residents, the result is that one must first call the larger city (incurring a long-distance telephone cost) then connect to the Internet server (incurring their service and user fees). Second, access to repair service and

assistance is limited outside of larger centres where there may be numbers of computer hardware, software, and technical advice resources. Some of the important questions asked in the case study, therefore, have to do with the mechanics of connecting rural communities.

It is unclear if new electronic information technologies will automatically enhance Civil Societies. Some aspects of such technologies may in fact serve to destroy Civil Society or may 'crowd out' more traditional mechanisms for building and maintaining Civil Society. While new information technologies make a positive contribution with respect to overcoming geographical disadvantage, a number of issues and concerns also arise. First, do new information technologies tend to segregate groups by specialized interest. Second, do aspects of 'class' or socio-economic exclusivity lead to non-accessibility, non-participation, and non-representation of some community groups. Third, does the disturbance of "place-based" community focus frustrate community building at the local level. Each of these issues may be examined through the case study research presented in this report.

Community Power

A final issue which became clearly important in the course of the case study research is "community power". Debate and conflict between individuals or groups is a natural and normal part of the functioning of any community. Rural sociology has understood for a considerable period of time that community conflict is "one of the major social processes in community life" (Sanderson and Polson, 1939, 316). Typical rural community conflict situations involve perceived threats or competition. Common examples include "newcomers" versus "old-timers" (especially as newcomers enter local politics), rivalry between community-based groups for local people or funds, and rivalry between local leaders. Each of these examples involves some form of struggle for community power - either to gain decision-making control or to avoid losing it (Dahl, 1968). All of these types of conflict situations do appear in the case study communities as local organizations are formed to develop Internet connections and these organizations become part of the institutional landscape in each place.

Local debate and conflict can be made worse when underscored by concern about local economic uncertainty or community change. These two issues can increase the level of stress for local residents which can in turn raise the tension in debates. Rural and small town communities across North America, and elsewhere, have certainly experienced change and uncertainty over the past couple of decades. For communities close to urban places this change has often involved an influx of new residents who have little or no experience with small town life but are attracted by its affordability. For more remote and resource dependant communities the processes of downsizing, replacement of jobs by technology, plant closures, tightening environmental regulations, and resource exhaustion have enhanced the uncertainty always present with resource dependant economies. Again, both of the case study communities have experience with these types of change and uncertainty.

Section 1.3 - Canada Case Study

The geography of British Columbia is comprised of an urbanized core involving the greater Vancouver-Victoria metropolitan region in the south-west corner of the province while the remainder can be characterized as generally small communities and rural areas isolated from one another by large distances, rough terrain, and a relatively limited transportation network. This report has a special interest in rural and small town places. This interest is motivated in part by the greater isolation from information resources which such places often face, and also by the perception that new technologies may be of greater assistance to such locales. As a growing literature suggests, the very geography of rural and small town places in North America, dictates ranges of advantages and disadvantages (Fitchen, 1991; Halseth, 1996b; Hodge and Qadeer, 1983). In this case study report, the experiences of two communities in rural British Columbia are explored.

Connecting to the Internet, and using other computer-based electronic information access systems, presents some very unique problems and barriers for the small towns and communities within rural British Columbia. Included among these are a lack of Internet service providers, an infrastructure which cannot always meet the requirements of new information technologies, and

the burden of costs in both establishing and then maintaining an Internet connection. Rural British Columbia provides an excellent location in which to test the value and practicality of new information technologies.

Section 1.4 - Methodology

A case study methodology was used here to examine the ways in which small communities worked and organized themselves in order to use new information technologies to connect with the Internet. To begin, we chose two small communities in British Columbia, both of which were well removed from the metropolitan Vancouver-Victoria urban area. This specification fits well with the overall research project focus upon small rural and remote communities. By this design, we hoped to elaborate upon the kinds of problems, barriers, opportunities, and rewards which other rural communities across Canada might expect to encounter. Both of the communities were fully connected to the Internet at the time of the research.

After initial contact and familiarization with the community, we set up appointments for interviews and discussions with a wide range of community members. The design was to talk not just with the people intimately involved with the community's drive to connect to the Internet, but to also get the views and opinions of those opposed to or outside of this effort. As well, a broad range of "users" within each community were approached for an interview. The interview schedule which guided the discussions is attached in Appendix 1. The interviews were conducted during the Fall of 1996 and the report which follows represents a summary of issues and themes which emerged.

The purpose of these in-depth interviews was to collect information from community members on five general topic areas:

1.) The background or general history of efforts to organize local Internet access, including identification of motivations and local "key" player(s).

2.) The actual mechanics of connecting the community to the Internet, including the costs, availability of service providers, and the types of information access technology which were required.

3.) The reactions/participation of the general community in the drive to connect to the Internet. This is an especially interesting topic area as it connects well with established rural and small town research literatures on community change and conflict.

4.) The levels of use which the system has been getting and the characteristics of the "user groups". Included in this section were questions on "ease of access" in a small town communications landscape where party-line telephones, for example, are not uncommon.

5) The type of community within which the Internet connection organization is working. The people were asked to identify some of the key aspects of local economic and social organization within their communities.

Two communities in rural British Columbia were selected for this study. Within Community A, we conducted in-depth interviews with 13 people, while in Community B we interviewed 15 people. The sampled community members were drawn from a range of local positions, including elected town council representatives, school teachers and school administrators, business people, loggers and primary producers, students and unemployed individuals, computer sales people, local government agents, Internet suppliers, chamber of commerce representatives, legion members, railworkers, retirees, community Internet group presidents, technicians, and local economic development officers.

Within the general parameters which excluded all communities close to the metropolitan Vancouver-Victoria urban region, the criteria for case study choice included: size, location, and duration of Internet access. While both communities are small, Community B is relatively larger and serves a larger hinterland population and area than does Community A.

In terms of Community Location, Community A would best be described as isolated and remote. While there are other small communities nearby, most are approximately the same size as Community A and do not significantly add to the range of goods and services available within the local area. Community B on the other hand is located relatively closer to a larger centre such that it is within the retail hinterland of that adjacent 'urban' neighbour for higher order goods and services.

In terms of Internet access, at the time the interviews were conducted Community A had been connected for just less than a month. In contrast, Community B had been connected for just over one year. In connecting to the Internet, both case study communities had received assistance from the federal government's Community Access Program (CAP). CAP (see Appendix 2) aims to assist rural communities with setting up affordable public access to the Internet and to assist with the development of the skills needed to use it effectively. A national network of community access sites are being established with the explicit aim of helping to create new opportunities for local growth and employment. Through a competitive grant application process, communities are selected to establish and operate public access sites in such low cost locations as schools and public libraries. In the language of the government publications, these public access sites are to serve as "Information Highway on ramps". Without this federal government program, both communities admit they would not be as 'connected' as they are today.

2.0 Case Study Communities

2.1 Profiles

Community A

The first community included in the case study, "Community A", has a population of approximately 1,500. It is a relatively remote community as the nearest large center (with a population of over 50,000) is 3 ½ hours driving time away. As mentioned above, there are a number of other small communities within about an hours driving time, but most of these are of generally similar population size as Community A and have approximately the same type of economic and retail base. Historically, the local economy has been based upon forestry with local employment opportunities primarily in logging and transportation. There are, however, no large sawmills or related processing facilities (with their well-paid, year-round jobs) locally and most forest employment is via seasonal contacts with small independent firms. To compliment this economic base, the community also has a retail, service, and support sector. While there has been some economic diversification in recent years, a 'logging camp' mentality still prevails with the feeling of impermanence and seasonality of employment still noticeable.

Tourism is one economic area which has seen recent growth. In part, Community A's location along a provincial highway through a scenic mountain landscape provides an ideal setting for developing a local tourism economy. Tourists and travelers coming to the region are attracted to the rugged, wild, and pristine nature of the landscape. Recently, there has been a large influx of European immigrants to the region. Local residents suggest that this is related, at least in part, to this growing tourism economy and an increasing familiarity the region enjoys among both European and Asian travelers.

Recent population growth, albeit small, and a changing economic base has resulted in a shift in attitude (and membership) among local decision-makers. With the election of some new members, it is suggested by local residents that the community now has a very proactive town council. Diversification plans are being developed through a newly established Economic Development Committee of council. Among the strategies identified as important by that Committee is that the community must take an active interest in the supply of Internet services. While opportunities for accessing information via the Internet is considered important, advertising the growing local tourism opportunities to a "world wide" audience is considered critical.

Community B

The second community included in this case study has a population of approximately 4,500. As suggested above, Community B also serves a relatively larger rural hinterland population than does Community A. As for location, Community B is approximately one hours driving time from a large center (with a population of over 50,000). This puts Community B well within the retail-shed for many of the high order services offered in that nearby urban centre.

The economy of Community B is based upon two key components: forestry and agriculture. In terms of employment, forestry accounts for the majority of jobs. While most of these jobs are in logging and transportation, Community B also has some local processing and value-added wood manufacturing activity. This not only adds to local employment but it also changes some of the "seasonality" commonly associated with work "in the woods". The agricultural sector is provincially significant and there is a good deal of Agricultural Land Reserve lands within the region. Agricultural activity is focussed mainly on dairying with some additional activity in beef cattle. Like many agricultural communities across British Columbia, there are also a couple of interesting, perhaps quirky, agricultural experiments underway with 'unconventional' farm animals.

Demographic patterns show a relatively large Mennonite presence in the community. This is largely an historical product, one connected to the early agricultural potential of the region. Based on this local economy and local history, residents report that Community B has a strong sense of self-reliance and pride. Some of these residents further suggest that it is this resilient, pioneering, spirit which has spilled over into the innovative ways in which the community has looked to the potential of new information technologies to achieve local goals.

2.2 Community Startup with New Information Technology

Community A

The Internet access site in Community A was developed under guidance from the "Internet Society". Appendix 3 contains further information which describes the organization and aims of the Internet Society. The physical creation of this site in Community A was made possible with assistance from the federal Community Access Program (CAP - see Appendix 2). The Internet Society now provides callers in the area with affordable access to the Internet through a high speed data transfer system located within the community. The CAP site came on line one month before the case study research.

The Internet Society was registered under the Societies Act in 1996. The Society originally came about when a group of residents sought to establish a program of community awareness and education related to new information technologies. During its formative period, the Society began with 26 members. By the fall of 1996, as the CAP site was coming on-line, membership had grown to 48. The objectives of the Society are to offer training and mentoring at the Learning Centre, and throughout the community as well, in order to introduce youth, community groups, entrepreneurs and local businesses to the potential opportunities of the Information Highway. Building directly from the recent shift in local economic opportunities, the Society is also interested in enhancing Internet capacity so that the community can use this medium to explore potential tourism and related economic development opportunities.

Although some of the Internet Society's founding members in Community A had experience with the Internet from elsewhere, it was the 'beckoning' of the nearest FreeNet organization that provided the impetus to the organization. Several years before the formation of the Internet Society, a number of community members connected to the FreeNet via a bulletin board service (BBS) where they shared their ideas about life, issues, and the possibility of further electronic networking. Members of this electronic community described their experience as being one of "users helping users". From this point, some members moved on to individual commercial Internet servers for expanded access (with that closest server being located in the urban centre 3 ½ hours driving time away). This translated into long distance telephone charges to connect. Access was, therefore, kept to a minimum with only the affluent enjoying the new information technology benefits.

Early experience with FreeNet and then Internet services was valuable. Access to a broader set of information sources eventually led to the CAP initiative. A group of interested community members then went on to form the Internet Society and apply for a CAP grant to establish affordable public Internet access within their community.

Society directors were elicited from the wider community through a series of 'information nights' held for public discussion. Advertising was considered to be widespread and the meetings were made as 'open' to the public as possible. In the end, however, most of the directors elected had been previous FreeNet participants or had some technical computing background as either a professional or hobbyist. Even though a democratic process was followed, the electronic and computer-based nature of the medium seemed at this early stage to attract a very specific clientele. Given problems with local connections, those involved with the Internet Society voted to proceed with a full-graphics Internet service through a satellite link to a server in Ontario.

In order to move forward with the proposal to develop a local CAP site, the Society had to develop a functional set of partnerships. Included in these partnership arrangements were Industry Canada (CAP funds), local educational institutions and businesses, the public library, and local community service groups. Bringing the community media "on-board" proved important in efforts to highlight and publicize more broadly the potential benefits of the information highway for area residents. The critical partner in Community A proved to be the local government. The active support of the local council was a requirement for the CAP application process, and the active support of several council members in community debate played an important role in legitimizing the efforts of the Society.

As part of its strategy to bring this project to fruition, the Internet Society set as an early priority the need to identify potential mentors and local "champions" of the Internet and its benefits to the community. In cooperation with its partners, the Internet Society will train local employees and residents who will then become mentors and trainers for others. This type of cumulative community learning is a common empowerment strategy advocated in the community development and community economic development literatures. The "buy-in" of local institutions is evident in the range of places which have been made available for CAP training. Presently, training will take place in the Learning Centre, the public library, the Village office, and the elementary school Technology Centre. The school district, and the community television channel servicing Community A, have also offered assistance and participation in the training program.

Community B

The CAP site in Community B was developed under the direction of the "Access Network Organization" (Access Network). The Access Network, which began functioning in early 1995, is a community-based not-for-profit association. The goal of the organization is to provide a shared interactive resource through a local Internet connection. The Access Network provides service to a huge area that includes seven farming and forestry communities over a 1,500 square kilometer area. This service region also falls across three BC Tel calling areas.

Interest in the Internet and the potential of new information technologies in Community B also found its beginnings in the BBS arena. The late 1980s found several key local educators and technicians frequenting e-mail as the communication mode of choice. While the impetus in Community A came from technical professionals and hobbyists, in Community B it was an innovative school district staff who initially embraced electronic networking as a means to reach their dispersed student populations. During the early 1990s, this electronic mailing system had formed the centerpiece of their move towards administrative automation and technological integration. With over 800 users by 1995 (375 students, 130 parents, 78 staff, and 219 community members), the school district was clearly on the way to providing a workable virtual solution to their geographical and distributional challenges.

The interested non-educators in the community also saw the possibilities of electronic networking as a means of informing and encouraging both local economic opportunities and development of a broader sense of local community. Initial partnership efforts saw them piggyback on existing school district hardware and software. A successful CAP grant application gave this group some form of autonomy and allowed them to offer access to the community at large. As required by CAP guidelines, they also undertook to advertise and inform community members about the services which were becoming available. One of the first developments out of this public information campaign was the formalization of the Access Network Organization and the election of a board of directors. As was the case with Community A, most of these directors were people with technical computing interests and experience.

The Access Network plan for the CAP site involved a focus on inexpensive text-only Internet services. By avoiding graphical information, with their associated long data transfer times, members could use less expensive computer equipment and reduce costly time on-line. The Access Network also made community training one of their primary functions. As in Community A, a large number of local institutions have expressed interest in assisting with and participating in this training. Unlike Community A, however, there is as yet no clear strategic proposal such as a “training the trainers” program.

One of the key challenges which the Access Network had to resolve was how to effectively serve such a large area. Two service provision strategies were devised. The first was to develop a set of public access sites. At present, these public access sites are located in Community B's public library and in the Chamber of Commerce office. The second strategy was to establish a mobile site which would be capable of traveling to other community centres, ranches, and mills within the service area. The mobile site consists of a 486 laptop, an Ethernet LAN that connects to four PC laptops, an overhead projector, and a LCD panel. The mobile site is key to the community training program. These training sessions are provided on request and the equipment can, essentially, be brought right to the local site. In devising this system, the Access Network found BC Tel to be very supportive. Internet service for this large area is purchased from the local school board, the only provider covering the area during the setup phase.

The success of the Access Network in Community B did not come without some problems. As the volume on school district lines increased, and more community members took advantage of the CAP site services, congestion grew. The school district finally served notice and sent the Access Network Organization looking for another server for their customers. With most of their finances tied up in equipment and a mobile training lab, they looked to the private sector for a server. Local initiative and opportunity led to several community members combining their talents and resources to establish a local community-based commercial, full-graphics, Internet supplier. This local supplier also became the home of the Access Network Organization which provides a cheaper text-only alternative to community members.

3.0 Themes in New Information Technologies

Having sketched background information for each of the case study communities separately in Section 2, this section of the report now combines the experiences of these two communities and tries to draw out common issues and themes.

3.1 Mechanics of New Information Technology Setup

The two common challenges associated with the setup of new information technology sites for Internet access are those related to "service connection" and to the lack of available on-site training. With respect to service connection, a first item to bear in mind is that both the technology and the regulatory framework are experiencing rapid change. In fact, for the next several years this situation of continual flux will be the norm.

At the time the case study research was conducted, both communities encountered barriers with service provision options. The public telephone company offered appropriate line connections only after lengthy waiting periods. Based on customer experience with this telephone service, these waiting periods never seemed to shorten even as months and years went by. This lack of commercial support very closely mirrors the situation many rural and small town communities in British Columbia have experienced for decades with respect to telephone service. Several rural communities in British Columbia still rely upon radio-phone service because land-lines have either not yet become commercially viable or have simply not yet been provided (Halseth, 1996a).

Community B called upon commercial competitors in order to gain timely access to the lines they needed while the more isolated Community A went with a satellite link to provide access. Connection choices were based on three criteria: setup time, cost of both setup and use, and line speed capabilities for transmission of data. These three factors were weighted differently by directors of the managing boards and there continues to be some disagreement over where to place emphasis. In the case of Community A, the decision was made to proceed with the best

setup time as the alternative was a two year wait. Cost, line speed and user flexibility has suffered slightly by this choice but the community is connected and their satellite link is serving them well at this point.

The second start-up challenge encountered by the case study communities involved the steep learning curve associated with the new information technologies generally and the process of connecting in particular. The learning curve applied not only to issues involved with the initial setup of the connection but also with the on-going process of troubleshooting while the system is in operation. This learning curve very much taxed the time and patience of 'volunteers' and perpetuated elite technical involvement.

One of the consequences of the steep learning curve and the continued reliance upon technical experts is that interpersonal skills within the organization were often traded for back room "hacking" skills. In Community A, which worked to make the process open to area residents, public relations efforts were reduced to announcements of success and frustrations. This intense period also led to several community relationship casualties that are yet to be resolved. This outcome is not unexpected in at least two ways. First, the literature on "community power" suggests that any local change can cause tension and competition between local elites as they vie for control of local organizations. In small communities this competition acts itself out at a very personal level. So we expect that the establishment of a new community development organization (the electronic network people) will become part of this competitive local hierarchy. Second, decisions made in building any volunteer-based organization may alienate some of the founding members. This may be grounded either as part of an internal struggle for control or as a parting of philosophical viewpoints as to future directions for the organization. In either case, if the organization is not mature and resilient the result is, as one respondent put it, often "my way or the highway".

As these initial pressures subsided, community involvement and support was sought. Community meetings were called with over 100 people attending initially in both communities. As meetings progressed, it became the pattern in both communities that non-technical members

left discussions and decisions in the hands of the 'experts' and participation dropped to about 30. Word of mouth continued, however, to generate new users. This is especially the case in Community A, where the attractiveness of their full-graphic Internet access is being relied upon to keep user numbers at a viable level. Community B, which is further along with their development, is relying upon their mobile training facility to keep interest levels high.

From time-to-time both communities receive visits from commercial access providers inquiring as to whether they could viably offer Internet service to the local area. In both cases they could not be promised enough users to make it economically viable on their own. Again, critical mass becomes a limiting issue for rural and small town communities. The disadvantages which remote location and small population size have historically generated for these types of communities are being perpetuated during the move to the information age. While the private sector has been unwilling to invest in these communities with either infrastructure or services comparable to those already available to urban customers, public policy is playing a critical role. Both case study communities are thankful for the CAP program which helped them move past this viability question and initiate access through the provision of standard $30,000 grants. Ongoing costs for operations and hardware replacement, however, highlight the reality that cost-recovery necessitates aggressive sales work, a degree of commercialization, or further governmental support.

3.2 Community Response to New Information Technologies

Public interest with new information technologies varied in both case study communities from strong enthusiasm to a "glazed nod". Turnouts at public meetings were initially very good with a cross-section of community members showing an openness to innovative ideas. The Internet seems to be a well known symbol of technological advancement and connection to the rest of the world. No doubt some of this attendance was an outcome of pent-up curiosity. Although meeting attendance did wane, many in each community asked that some form of regular but informal information updates be continued.

Approximately 2 ½ weeks after initial start-up, Community A could boast that there were around 50 user accounts in place. At this same time, Community B identified a distribution of subscribers numbering approximately 275 users on the Text-only access, 125 users on the full graphic service, and 800 staff, student, and parent users through the school district. At the time, Text-only access had been available for 9 months, full graphical access for 3 months, and school district access for 4 years. Managers report that the Text-only service appears to be holding its user numbers while the full graphics service is showing a steady increase.

Both locations had their respective Community Development Officers (CDOs) involved and enthusiastic about the introduction of the Internet into the community. In each case, these CDOs shared their acknowledgment that this type of service is necessary for the growth and diversification of the community. Again, this type of support within the "public" debate helped to legitimize what the two Internet access groups were trying to do.

The strategy of having local advocates for Internet access proved to be important. While residents in both communities felt that the general public was relatively well informed about the availability of the service, they were not always convinced about the benefits to them individually. Open houses and Trade Shows were used to show the advantages of electronic networking. Community A then took a more reactive approach, offering training courses when the demand called for them. Community B was more proactive in this regard, employing the mobile lab to seek out possible users for training.

Residents in Community A reported that the local municipal council "also shared the vision" and was supportive of efforts to bring Internet access into the community. This civic support can be contrasted with Community B, where those interviewed suggested that local representatives were 'non-committal' on the issue. In light of the municipal elections forth-coming immediately after our case study research, it was interesting to note that both locations had strong Internet promoters running for mayoral positions. Their involvement in this electronic aspect of community networking seems to have given them a desire to work with community development and networking on a political level. Related motivations for involvement at the local political

level included a frustration with the civic bureaucracy and a desire to assist in directing the community's future. This transition from community activist for Internet access to involvement in local politics clearly highlights how much of the debate and posturing encountered in both communities is related to a struggle over "community power" by different local groups.

As suggested in Section 2, decisions about services and development are made by the directors of the respective management boards. Community evaluation of these management boards ranged from "they must know what they are doing" to "well-meaning, non-business people who are more technical than personal". As users increase their expectations and demands, calls for directors and staff who possess greater interpersonal skills and who recognize that this is a services provision operation, are also increasing. As federal funds diminish and the local systems must function on their own revenues and income sources, it is expected in both communities that the call will be for more business-minded managers to become involved. Clearly, replacement and transition are expected as part of the normal course for these organizations.

3.3 Users of New Information Technology in the Community

In each of the case study communities, the client users of the new Internet access services cover a broad socio-economic spectrum. Among the service users interviewed were individuals employed as policemen, farmers, teachers, pastors, adventure tour guides, photographers, loggers, and railway workers. Also interviewed were store owners, students, and retired seniors. In Community B, interviews with some of the text-only access users found some to be currently unemployed or on welfare.

The range of uses to which users put their Internet access was similarly broad. Uses ranged from research and information collection to the taking of on-line educational courses. Those with an entrepreneurial interest were using Internet access to enhance their business opportunities. This employment of the Internet for direct and immediate economic benefit is one of the motivations which brought local economic development officers, local business representatives, and some

local municipal council members “on-side” early in the process. It is also one of the clearly identified opportunities and benefits from new information technology envisioned within the federal CAP process. Finally, there were still others who used the medium for hockey pools and to play interactive games.

Before Internet access was available in these communities, residents would either access the library or leave research undone; they would sign up for correspondence courses or would simply not pursue them; they would advertise in the traditional media or rely upon word of mouth for new business; and they would read the paper or rent video games. In over half of the interviews, users mentioned that they did not pursue their current interests or activities until the Internet provided easy and convenient access. Finally, no one except the overworked ‘volunteer' troubleshooters admitted to a decreased social life due to the time they invested in using the new technology.

Much has been written in popular forums regarding the “virtual socialization" which on-line associations can facilitate. Many examples of individuals joining discussion groups or becoming active in topic areas which had long fascinated them were cited in both case study communities. One social studies school teacher reported an increase in student political activity and interest due to an incorporation of the Internet into her classroom. Many thought that they may consider gaining a political voice through the Internet and subscribe to some issue related listservers in the future.

Two particular applications where this new information technology provided one of the mechanisms for promoting local civil society involve environmental and first nations interests. In Community B, several ‘environmentalists' reported using the Internet rather successfully to network and to inform others both within and outside the local area that there was a need to combat the deterioration of their river. Within the service area of Community B's Internet service are three First Nations communities. A First Nations home page contains an on-line language dictionary in their respective languages. While this is just a start, these efforts hint at the future potential for political and sociological impact. In both of these examples, new information

technologies are facilitating interactions and it is these interactions which are working to strengthen the foundations of local civil society.

The interest in using new information technologies to become involved in "virtual communities" of participants and activists, and to use the opportunities for interaction to help build local civil society, are well removed from those who view the Internet simply as a source of recreation. In the case study communities it was clear that new users were more content to access 'light' and visually stimulating web pages that provided general information through some multimedia presentation format. Unfortunately, it is often these 'fast-food' outlets with their flash and flair which attract most attention. An interesting issue to track as this audience matures will be whether they shift their attention to searching for more substantive information and dialogue.

The school district office in Community B has taken the use of the Internet to a new level of application. They have developed a "Technology Plan Review" which outlines their goals with respect to integrating new information technology into the schools and which provides a forum for reporting on their progress. This school district is striving to develop rigorous and relevant educational opportunities for all learners. As suggested by the school district, schools should no longer be constrained by four walls, a timetable, and a gatekeeper. Their Internet project has become a showcase in the effort to move towards the transformation of schools into 'virtual schools', where users play an active role in determining what they need to learn and can elect when they choose to learn it. By reaching 450 students electronically, they have injected new information technology into many homes. The next generation is learning how to "do" school electronically as this generation learns how to "do" work, business, and recreation electronically. These mostly rural students are already experiencing new information technology's indifference to space and are developing on-line communities according to interests and challenges.

3.4 Non-Users of New Information Technology in the Community

Interview research in these two case study communities suggests that "non-users" could be categorized into three broad groupings. First, there are unquestionably community members who

are “technophobic”, that is, they are afraid of technology in general and computers in particular. In many cases this may go beyond real phobias against technology and may also include the large number of people who find themselves left behind and bewildered by all the “fancy language” and “strange formulas” (Internet site addresses). One respondent spoke about seeing all of these “dot - ‘w’, ‘w’, ‘w’ - dot - dot’s” after all the television newscasts and sports shows and asked whether she was missing something important. The pace of change and the use of a specialized vocabulary is quite clearly an issue which must be dealt with if the potential value of new information technologies for ALL community members is to be realized.

A second broad category of non-users involves those excluded by money. Many households in the lower socio-economic echelons of the community simply do not have the means to either purchase the necessary hardware to access Internet services or to pay the continuing costs of that connection. In most cases, such households are excluded from the Internet. The experience of the case study communities is that while public access nodes were available in various libraries or learning centers, they were not always convenient and were only sporadically used. Again, the potential role which new information technologies may be able to play in building local civil society is negated by the failure to be democratic and inclusive. In this case, there is an important public policy question to be dealt with regarding funding, regulation and ensuring accessibility (see also Halseth, 1996a). Along this same theme, a recent E-mail debate over CAP site funding in Canada raised the question about whether current public expenditures were in essence welfare for the elite.

The third broad category of non-users have been described to us as the ‘old dogs’, those who did not want to be bothered at all with anything new and wanted to be left to live life as they always have.

3.5 Use of New Information Technology as a Tool for Building Civil Society

The process of bringing Internet services to each of the case study communities certainly provided a rich environment for studying “community-building”. The problem is, however, that

such community building efforts could have resulted from any one of a number of similar exercises. As is the case in many similar types of organizational building efforts, there was an initial period of interaction where levels of cooperation were described as running the gamut from working together to 'fighting'. Arguments ensued over such details as who to use as the Internet service provider. Cooperative efforts were demanded for initial proposals to CAP. While there was some "fall-out" from early debates, those interviewed suggest that these casualties were far outweighed by new bonds which formed and by the sense of community pride and success felt in the achievements of securing first the CAP funds and then the Internet services. These benefits could, however, have come through a cooperative battle for a new hospital or a swimming pool and cannot be claimed as a result of the new information technology itself.

Several benefits of new information technology to the process of community building at the local scale were identified by the interviewees. Much ado has been made about the Internet as the focal point of the information revolution that is upon us. By heralding this service into the area, members felt that they had placed their local area in a better position to take advantage of future development opportunities. This motivation is clearly linked to the issue of local capacity building. People interviewed spoke of the 'demise' of rural communities and that one way to combat this threat was to create a framework for local diversification. If the Internet was to be a medium of choice for current change, then their community would have a competitive advantage because of the service and access capabilities locally available.

Following this same capacity building argument, many users joined the local Internet service even without a complete understanding of what they would use it for. They too had heard from a variety of sources that they need to work smarter instead of harder. Apart from training and set-up work, especially with the School District in Community B, no new jobs have arisen from the Internet service in either case study community.

Based on the experiences of our two case study communities, development of both the physical and human capacities to take advantage of the potential which new information technology afforded was an important motivating force. Based on a review of the CAP funding objectives

and priorities, it is also clear that this motivation is central to current public policy as well. A couple of points of caution are worth raising. First, many small towns across Canada have struggled under a debt burden resulting from the construction of elaborately serviced industrial parks. Such sites, many of which remain vacant decades later, were the result of an almost bandwagon effect where town councils rushed to put in-place the latest panacea solution for resolving local economic uncertainty. There is a concern among some that new information technology and the Internet may be only the latest version of such panacea solutions.

A second point of caution is with respect to what some expect to be achieved by connecting their community to the Internet. Many of those interviewed in both case study communities argued that their town would now be in a more competitive position to take advantage of new development opportunities. Most of these residents followed this logic to further argue that this would ultimately change their relative economic position. The question is, perhaps, not so much one of getting ahead rather it is a question of not being left even further behind. With Walmart and most other large retail and service firms going on-line, and with most large towns and urban areas already possessing sets of Internet access options, rural and small town locations may NEED to get connected in order to avoid being further marginalized. If this is the case, expectations may need to be amended in order to more realistically employ the potential of new information technologies.

In Community B, residents have been waiting longer for the fruits of their labor to spill into the general population and into their pockets. They recently formed a round table on the “Local Information Economy” that looked at research and possibilities for community development through new telecommunication possibilities. The round table attracted 42 participants representing the forestry, tourism, education, culture, professional services, mining, health, government, information, police, construction, First Nations, and community service sectors. In effect, local people have once again come together to assess future community development options.

In developing community economic development capacity using new information technologies, human capital and skills formation must be an integral part of economic policy. The round table focussed upon the idea that changes in the telecommunications environment create an opening for community-based networks that could assist them economically. However, little distinction was being made between community development and community economic development at these sessions. When local businesses are suffering, the rationale goes, then general community well-being will suffer as well. The round table discussions on the local information economy gave rise to a plan of action for building community through new information technologies. This plan included the need to upgrade rural access to private line standard, promote public education, buy a server and establish a data network, and extend public access district-wide.

One year has passed since the round table recommendations were made. The CDO reports that much of the “wind has gone from the sails” and only the enthusiastic continue with the vision that connectivity will bring automatic rewards. The new commercial Internet server has overshadowed community access aspirations, while BC Tel line access has frustrated some of the more isolated users. Most still expect this new information technology to be a large part of their future but are surprised at the delays. The Internet as a medium, and the infrastructure needed to deliver it in rural and small town locations in British Columbia, still need improvement and streamlining.

3.6 Traditional Methods of Building Civil Society

Most rural and small town communities across North America have historically had a strong traditional base from which to develop and support Civil Society. Such traditional bases usually includes those important for the founding of many of these communities. In agricultural communities, for example, the various farmers institutes, co-ops, and the Women's Institute would have played key roles in local civil society. In forestry and mining communities it was the various crafts and trades organizations which have been important. In many other communities it has been, and continues to be, the church which plays a central role in structuring community life and local Civil Society.

In many rural and small town communities the traditional sources of support for Civil Society remain in place while for other communities they are no longer relevant. Against this uneven backclothe, much has been written about the role of new information technologies for developing and supporting various kinds of communities. It has also been suggested that new information technologies may be harmful to local Civil Societies by tying the activities and interests of residents outside the geographic community. The case study research for this report examined two specific types of local Civil Society support mechanisms, local service clubs and local government, to see if the introduction of new information technologies changed the situation.

Both case study communities had a strong history of service club activity. Such formal clubs, and associated informal functions, pulled people together socially and encouraged the building of community. In Community A, this point is well understood and the local economic development committee of council has developed a list of successful functions that rally the "locals" and attract tourists. This community, however, has seen a decline in some of its clubs, with the local Kinsmen organization folding about five years ago. The Lions club is said to be just "holding its own". In contrast, however, outdoor recreation clubs (summer and winter focus) have grown in membership. In part this may reflect some of the changing demographic mix within the community as it moves away from its forest industry roots and develops more of a tourism and outdoor recreation orientation.

In Community B, both the local Kinsmen and Rotary clubs have seen a small increase in membership over the past decade, with a decline in interest being reported only for the area's Elks club. A strong sense of pride, morality, and sacrifice for the community was present in the discussion with most of the residents interviewed. No doubt some of this can be traced to the still strong influence of the church (Mennonite). Others suggest that the stable local economy, or at least the agricultural component of that economy, also contributes to this community cohesion.

The differences between Communities A and B do seem to reflect some of the differences first described in the community profiles. The more the local economy is based on seasonal, or

uncertain, employment the more difficult it will be to maintain support for Civil Society institutions. While new information technology may be one way to assist community development and human capacity building, it seems much more clear that community development can contribute towards building or maintaining local Civil Society.

Municipal governments received varying "report cards" depending upon the issues considered important by the individuals interviewed. In Community A, most of those interviewed gave generally positive impressions of municipal involvement and sensitivity. In Community B on the other hand many of those interviewed reported that the local government was too bureaucratic or "out-of-touch". In both, the role of individuals in local politics cannot be understated. The adage that small town politics is personal bears out in these cases.

Most important among the findings was that the "waxing and waning" of traditional community and Civil Society building agencies was not linked to the introduction of new information technologies. At this point in their local development, interest in virtual communities did not seem to be replacing an interest in geographic communities (while some of those working with students, however, did voice concern that this replacement may occur in the future). Rather, the local use of new information technologies was very much directed at enhancing the area's economic and community development. In fact, this case study research found some evidence that the process and excitement around the local Internet connection debate did prompt some community spirit and concern among a few usually "dormant" residents.

4.0 Discussion

This report has reviewed the results of a case study investigation into the ways two communities within rural British Columbia have recently organized to employ new information technologies to connect with the Internet. This section of the report focuses upon an elaboration of four key issues which emerged from that study. The first involves "representativeness", a critical issue which links access to new information technologies with Civil Society. The second issue concerns the central role for public education and input in the process of building Civil Society through new information technologies. The third issue involves the case study communities' experiences with traditional institutions for building and supporting local Civil Society. The final issue reviewed involves a restatement of the social and economic "position" which rural Canada occupies relative to urban areas.

Beginning with representativeness, there were a number of specific findings. Even though CAP requirements, and the well-meaning intentions of local activists, suggest that community oversight of Internet access points should be representative, the medium of the Internet and nature of resident interactions has left control in the hands of predominantly technical people. Feelings of inadequacy during the troubleshooting and learning stages have moved the business and management personnel to the background. Indeed, intra-organizational bickering has forced some people with needed administrative, business, or management skills out when technicians threatened to "walk" if things did not progress their way. While this is an important organization building issue it must be remembered, however, that even if a balance could be achieved at this level it still does not include the range of other residents in the local community. Attrition has been steady for both case study communities. Both users and potential users agree that there is a need for personnel with better interpersonal and management skills for continued success. If the Internet organizations do not attract more people-sensitive personnel they are in danger of becoming 'closed' clubs catering to a very small segment of the local population.

Both communities exhibit pluralism with varied ethnic and socio-economic groupings. At this stage in its local development Internet access is not yet all inclusive in either case study communities. While most segments of these communities were initially interested in the possibilities which new information technologies may offer, not all pursued the matter during the interim period of technical deliberations and organizational upset. Slow progress has allowed decision-making to become concentrated. This is not a positive situation with respect to the use of new information technologies for building or maintaining local Civil Society. The study suggests that this outcome is simply a natural part of the maturing and growth process. It is hoped that the commitments of many community members to make Internet access more open and available will assist in resolving this tension. Further, the very dynamic nature of the Internet does not lend itself well to top-down control. While the challenge of opening decision-making control remains, both of these factors may play an assistive role.

Public involvement and education is a second critical issue highlighted in this study. Such involvement and education is crucial not just at the beginning of any drive to "connect" a rural community, but it continues to hold the key to successful participation and representation as the process unfolds. Counter to some examples cited in this report, this is especially the case when progress is slow and frustrations mount. People need to have the vision and the possibilities of new information technologies kept before them. Examples of innovative applications need to be shared to encourage and spark others.

A further aspect of this public education issue concerns the need for a process of "continuing education" for users and non-users alike. Some local residents are likely to be so overwhelmed with the vast amounts of information available to them that they do not know where to start. Users begin with enthusiasm but often find themselves mired, wasting both time and money. Ongoing education in the area of information management is needed to keep users functioning as efficiently as possible. On-line courses as well as the growing number of desktop video conferencing courses can provide some of this training and expertise over the Internet. Users should be connected to such courses to help them make more efficient use of their time, the

available technology and the available on-line resources. Finally, non-users must be provided with introductory level educational opportunities to break down barriers to use. These barriers, everything from a lack of knowledge about how to turn a computer on and off - to how to log into the Internet, will act to limit local participation unless they are actively addressed. If new information technologies are to be effective in building and supporting local Civil Society then educational efforts to enhance democratic participation must be developed.

The delivery of government services, as projected by CAP, via the Internet and other technologies will steadily increase in the coming years. If the general public is to have fair access to this material then infrastructure and knowledge about how to use that infrastructure must be in place.

Local community building institutions have, at this point at least, not been displaced by the Internet's indifference to space. On the contrary, the interest which local residents and governments have shown to new information technologies has been motivated by a concern to harness a broader information base to be a resource for local community economic development. While the Internet organizations profiled in this report are now new players on the local institutional landscape, existing organizations have not reported any detrimental effect.

In Community B, the school district has used its remote access sites to demonstrate the positive benefits in overcoming geographical disadvantages within a rural service region. With the growth in available on-line courses, shift workers will be able to overcome time barriers by moving desired projects to their 'prime-time'. Accessibility to these and other possibilities will be limited only by the issues of affordability and infrastructure availability.

A final issue which came out of the research concerns the relative position of rural and small town Canada within the national social and economic fabric. A number of the technical difficulties encountered in the case study communities were dismissed by the commercial servers on the point that the technology is changing so rapidly that in time there will be new solutions. The experience of those rural communities in British Columbia who still rely upon radio phones

is instructive at this point. Historically rural Canada has lagged and with the introduction of new information technologies rural Canada is still lagging. Public policy such as CAP is critical in assisting rural and small town Canada. But this assistance should not be read as placing these communities far ahead in terms of competitive advantage. The more realistic vision is that getting rural and small town Canada on-line is simply one part of an effort at keeping them from falling further behind and becoming even more marginalized.

This new medium is of such a dynamic nature that it is difficult to assess and predict without being quickly out-dated. As more inexpensive, user-friendly, and multi-media possibilities emerge, community applications will intensify and magnify the potential for community and economic development. Both of which may assist in building and supporting local Civil Society.

In conclusion, we return to the critical questions posed in our project background. From this study, can we determine that the use of new information technologies will preserve or enhance civil societies? Just as with the introduction of the printing press and the telephone, futurists expect societal changes. To date, the Internet has generated some changes but not the mammoth upheavals some expect. In rural and small town communities, infrastructure challenges and lack of meaningful applications has slowed progress. Yet, possibilities remain.

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Appendix 1 -

Interview Schedule

INFORMED CONSENT FORM:

New Information Technology in Communities

Introduction to Community

This study is designed to look at your community and assess the impact of the Internet. We are wanting to learn how you brought the Internet to this community, the problems you faced and the successes you have experienced. We would like to interview you regarding these questions. This study is sponsored by the Toyota Foundation and involves researchers from Simon Fraser University (Community Economic Development Centre) as well as from the University of Northern British Columbia.

Your participation is purely voluntary and strict confidentiality will be maintained throughout this study. We will not name individuals or communities within our study. No information will be able to be traced back to you. You can consent by signing the bottom form. Please feel free to not answer any questions or parts of questions.

The results of this study can be used to determine if the Internet can help small communities such as yours to become more informed, give more input, and become more responsible for local development.

This study is under the direction of Greg Halseth, of the Faculty of Natural Resources at UNBC. Should you have any questions about this research, you may call Dr. Greg Halseth 1-800-667-8622 extension 5826.

I, _____ have read the above information and I understand the procedures to be used in this study. I also understand that my participation in this study is purely voluntary and can be terminated at any time upon my request. My signature below certifies that I consent to participation in this study and I acknowledge receipt of a copy of the consent form.

Date _____ Signature _____

Interview Schedule

Name : _____ Date : _____ Time : _____

Questions are indexed to the following groupings with wording varying
1. Founding Societal Member 2. Present Societal Member 3. Provider 4. User 5. Non-User

---

To begin, I'd like to ask you a couple of questions about how you set up/ created/ joined up with this Internet group.

A. History

So how did you come to be involved with the Internet? (1,2,3,4)

Where did you get the idea from? (1)

Who helped you in the early development stages? (1)

B. Mechanics

What barriers did you come up against? (1)

How did you overcome these obstacles? (1)

Where is the 'server' located? (1,2,3)

Who has access to the server? (1,2,3)

Who is your line supplier? (1,2,3)

Why did you choose that supplier? (1,2,3)

C. Community

How did the general community respond to the Internet? (1,2,3,4,5)

Did the general community help you? (1)

Is the general community involved now in the development of this service? (1,2,3,4,5)

Who presently makes decisions about your services and development? (1,2)

Do you think that the community is informed about Internet services? (1,2,3,4,5)

How do you train community members to use this new service? (1,2,3)

D. Users

How many users do you have? (1,2,3)

What sort of users do you have? (1,2,3)

Types of people

Where they live

How many and who did you expect to use your services (1,2,3)

What sort of things do they use the Internet for? (1,2,3,4)

What sort of things did you expect them to use the Internet for? (1,2,3,4)

How did they do these things before they got the Internet? (1,2,3,4)

Has the Internet caused people to be more social or less social? (1,2,3,4,5)

Has the Internet caused people to be more politically involved? (1,2,3,4,5)

What sort of people don't use your service? (1,2,3,4,5)

Do you know any community members that are scared of computers? (1,2,3,4,5)

Do you know any community members that don't use computers and the Internet because of poor reading or typing skills? (1,2,3,4,5)

Do you know of any community members who don't use the Internet because of connection problems eg party lines? (1,2,3,4,5)

Do you know of any community members who don't use the Internet because of the cost?(1,2,3,4,5)

Why don't you use the Internet? (5)

Other (1,2,3,4,5)

_____

_____

E. Community Profile

Tell me a little more about your community. What makes it unique? (1,2,3,4,5)

What sort of people live here and why? (1,2,3,4,5)

What are the greatest needs of your community? (1,2,3,4,5)

What sort of social functions draw the community together? Formal & Informal (1,2,3,4,5)

What clubs function in your community? Are they holding there own or shrinking? (1,2,3,4,5)

Which individuals or groups do the most for the community? (1,2,3,4,5)

Are the people in your community open to new things? (1,2,3,4,5)

What do you think the future holds for your community? (1,2,3,4,5)

Other (1,2,3,4,5)

_____

_____

_____

Appendix 2

Community Access Program

The Community Access Program (Cap)

The federally funded Community Access Program (CAP) is presently a very important source of assistance to rural and small town communities in Canada. It has also been important in the case study communities examined in this report. The following is a brief summary of some key points from the CAP as developed from their public documentation. For further details about CAP, visit their Internet homepage at **http://cnet.unb.ca/cap** or write to:

Director,
Community Access Program
8th Floor, West Tower
235 Queen Street
Ottawa, Ontario
K1A 0H5

Background:

The Community Access Program is a federal government program administered by Industry Canada. The general program goal is to "foster economic, social, and cultural growth in Canada" (http://cnet.unb.ca/cap/aboutcap/ 05/14/97, p1) According to its mandate, it also has a specific geographic orientation. The CAP is designed to "help residents and businesses in small and rural communities have the same access to the opportunities offered by the Information Highway as those in larger urban centres" (http://cnet.unb.ca/cap/aboutcap/applicationguide.html 05/14/97, p2). As a result, applications are encouraged from communities with populations of less than 50,000 people which are located away from such metropolitan centres as Montreal, Toronto, and Vancouver.

The program is looking to assist 1,500 rural communities during its initial 1995 to 1998 period of operation. As reported, during its first year CAP provided funds to 380 communities. The level of funding assistance is up to $30,000. This funding is tied to quite an elaborate application package which includes identification of material, monetary, and 'in-kind' contributions from the local community itself. Granted funds may be used to cover the costs of computer equipment, Internet hook-up/connection, staff, as well as training and technical support. A notable feature during this first year was the number of college/university students who were hired, most often in their "hometowns", to set up the CAP site.

The CAP contains a degree of flexibility in terms of who can apply for funding assistance. A range of local groups, including service clubs, non-profits, and chambers of commerce are eligible to make a submission. While the application must identify that there is a broad community partnership associated with the application (hence only one application per community will be accepted), clearly the degree to which the 'general community' as opposed to a specific 'interest group' is participating is important in trying to determine the potential contribution to the development of a local Civil Society.

Specific Objectives:

As described in their public documentation (http://cnet.unb.ca/cap/aboutcap/applicationguide.html 05/14/97, p2), the CAP has four primary objectives:

> "1.To help raise awareness within Canada's rural communities of the benefits and opportunities of using information technologies and services.
>
> 2.To accelerate access to, and use of, the Information Highway learning tools and services to help sustain jobs and growth in rural communities and to foster the exchange of ideas and information through electronic linkage.
>
> 3.To promote training opportunities for local entrepreneurs, employees of local businesses, educators, students and others interested in improving their computer, information management and networking skills.
>
> 4.To foster conversion of existing government and other services to electronic delivery as well as the development of new services, with a view to providing better and more economically efficient services to all Canadians, regardless of the size or location of their community."

Opportunities and Benefits :

In a general sense, the CAP recognizes that it will be up to the individual communities to decide upon the specific form and emphasis their Internet sites and services will take. This reflects, in part, recognition of both the geographic diversity of communities across Canada as well as the inherent flexibility of new information technology. Even a cursory review of CAP sites presently funded and operating across Canada will reflect that there is indeed a diverse range in the way places have developed and employed their Internet access sites.

The CAP, however, is a federal program under Industry Canada. So despite urging to be 'creative' and 'imaginative', the application and funding process does come with some very specific guidelines. These guidelines are instructive both for how they envision the needs of rural and small town Canada and for how they envision the opportunities of the Internet and new information technologies. According to the applications information, a CAP project should focus on the following opportunities and benefits (http://cnet.unb.ca/cap/aboutcap/applicationguide.html 05/14/97, p2):

> - "assistance in generating local content and local applications (such as home pages, electronic town halls or labour exchanges) on the Internet.

- resources to train local entrepreneurs, educators, young people and others in new information management, networking and other important employment skills.

- opportunities for creative and meaningful uses of the Internet, such as distance education, remote health care or help to local entrepreneurs for improving their competitiveness.

- public access to government information and services on virtually any topic from anywhere in Canada or around the world through the Internet.

- linkages through CNet ... to other rural communities that share local economic development and job creation objectives.

- more efficient identification of business, job, investment and promotional opportunities for individuals, businesses and communities."

Appendix 3

Community One:
Internet Society Constitution

Community One:
Internet Society Constitution and Bylaws (excerpts)

* some information is amended for confidentiality

INTERNET SOCIETY CONSTITUTION

1. The name of the society is Internet Society

2. The purposes of the society are:
   2.1 to raise telecomputing literacy within the dialing region;
   2.2 to provide users with access to Internet and/ or other electronic networks, to an extent determined by the directors of the society.

3. On the winding up or dissolution of this society, funds or assets remaining after all debts have been paid shall be transferred to a charitable institution with purposes similar to those of this society, or, if this cannot be done, to another charitable institution recognized by Revenue Canada as qualified under the provisions of the Income Tax Act of Canada.

Paragraph 3 of this constitution is unalterable in accordance with the Society Act.

INTERNET SOCIETY BYLAWS (excerpts)

PART 1 – INTERPRETATION

1.1 In these bylaws, unless the context otherwise requires,

- 1.1.1 "society" means Internet Society
- 1.1.2 "directors" means the directors of the society
- 1.1.3 "Society Act" means the Society Act of the Province of British Columbia from time to time in force and all amendments to it;
- 1.1.4 "registered address" of a members means his address is recorded in the register of members;
- 1.1.5 "dialing region" means the region surrounding, B.C., within which calls are not long distance calls;
- 1.1.6 "telecomputing", as applied to the Internet Society, describes any and/ or all activities which exploit telecommunications technology to access and provide information.

1.2 The definitions in the Society Act on the date these bylaws become effective, apply t0 these bylaws.

2 Words importing the singular include the plural and vice versa; and words importing a male person include a female person and a corporation.

PART 2 – MEMBERSHIP

3 The members of the society are the applicants for incorporation of the society, and those persons who subsequently have become members, in accordance with these bylaws and, in either case have not ceased to be members.

4 A person may apply to the directors for membership in the society and on acceptance by the directors shall be a member.

5 Every member shall uphold the constitution and comply with these bylaws.

6 The amount of the first annual membership dues shall be determined by the directors and after that the annual membership dues shall be determined at the annual general meeting of the society.

7 A person shall cease to be a member of the society.

- 7.1 by delivering his resignation in writing to the secretary of the society or by mailing or delivering it to the address of the society;
- 7.2 on his death or in the case of a corporation on dissolution;
- 7.3 on being expelled; or
- 7.4 on having been a member not in good standing.

8

- 8.1 A member may be expelled by a special resolution of the members passed at a general meeting.
- 8.2 The notice of special resolution for expulsion shall be accompanied by a brief statement of the reason or reasons for the proposed expulsion.
- 8.3 The person who is the subject of the proposed resolution for expulsion shall be given an opportunity to be heard at the general meeting before the special resolution is put to a vote.

9 All members are in good standing except a member who has failed to pay his current annual membership fee or any other subscription or debt due and owing by him to the society and he is not in good standing so long as the debt remains unpaid.

Appendix 4

Relevant Internet Sites

Appendix 4
Relevant Internet Sites

This section is added to our report for the information and assistance of readers. As electronic based information access and retrieval systems become more reliable and less costly, they may become increasingly useful for residents in small or isolated communities. The "Web", however, is always in a state of flux and transition. While we have taken care to ensure that all websites listed were in operation at time of publication, please be aware that some may have become dormant while others may have been developed. These homepage addresses have been included as possible starting points for individuals and groups interested in the topics of new information technology, the Internet, and Civil Society. Their listing here does not imply endorsement by the CED Centre nor the authors.

Civic Net BC - Canada	http://civicnet.gov.bc.ca/
Government of Canada	http://canada.gc.ca/main_e.html
British Columbia Legislative Assembly	http://www.legis.gov.bc.ca/
SchoolNet - Canada	http://www.schoolnet.ca/
Center to Support Public Access to Connectivity through Education	http://cspace.unb.ca/
Canadian Rural Restructuring Foundation	http://artsci-ccwin.concordia.ca/socanth/crrf/crrf_hm.html
Cariboo-net, British Columbia, Canada	http://www.cariboo-net.com/
Community Economic Development Centre, Simon Fraser University	http://www.sfu.ca/cedc/
Rural and Small Town Programme, Mount Allison University.	http://www.mta.ca/rstp/
Community Access Program (CAP)	http://cnet.unb.ca/cap
