Northern British Columbia Community-Based Research Needs

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> Very little research has examined the unique planning and development needs of northern British Columbia communities and rural regions. This situation is beginning to change with the opening of the University of Northern British Columbia (UNBC) in 1994. Faculty members at UNBC and other researchers are now implementing research strategies which are providing knowledge to more comprehensively understand opportunities and problems facing these northen municipalities and rural regions. This paper provides an inventory of research opportunities identified by community leaders in northern British Columbia which can direct community-based research in the future.

Introduction

The northern portion of the province of British Columbia has not received the level of community planning and development research experienced in southern British Columbia due to the small size of northern municipal governments, resulting in a corresponding lack of planning research expertise, and due to the absence of a northern university with faculty members who could undertake this type of research. With the opening of the University of Northern British Columbia in 1994, many new researchers are now examining numerous elements of the northern landscape. As an important step in the research process, this article provides readers with an overview of research needs in northern British Columbia communities and rural regions. The paper summarizes the views of northern municipal leaders about improving the livability and sustainability of northern British Columbia communities and rural regions. The purpose of the research is threefold: (1) to determine what northern leaders perceive are the critical issues impeding the development of their communities, (2) to solicit suggestions for research projects that could investigate how to improve the livability of northern communities, and (3) provide land use and community development researchers with a comprehensive list of research opportunities which should result in the greatest impact on further developing northern communities.

The idea for this research originated at a two-day workshop with Cariboo Regional District planners and municipal administrators in June, 1995. Medium- and long-term research needs and the desire to create a community-based research institute¹ were discussed. Numerous authors (Bowles 1992, Bradley 1988, Randal and Ironside 1996, Remus 1995, Troughton 1995) have identified research needs in the areas of community, land use, and ecological planning or within a northern context. In a search of literature utilizing computerized databases² at the University of Northern British Columbia Library no books, articles, or other materials were identified which examined community-based research needs in northern British Columbia.

Based on the results of this search and subsequent to this June 1995 meeting, interviews were conducted with planners and municipal administrators in the Bella Coola, Nechako, Bulkley, Stikine, and Fraser valleys. Interviewees represented the communities of 100 Mile House, Williams Lake, Quesnel, Prince George, Smithers, Kitimat, and Prince Rupert and the regional districts of the Cariboo, Bulkley-Nechako, Kitimat-Stikine, and Skeena-Queen Charlotte. In addition, representatives from Canada Mortgage and Housing Corporation; Ministry of Small Business, Tourism, and Culture; Ministry of Environment, Lands and Parks; the British Columbia Real Estate Foundation; and the University of Northern British Columbia provided input.

In-depth semi-structured interviews and focus sessions (Marshall & Rossman, 1989; Patton, 1990; Yin, 1989) were conducted with mayors, councillors, and senior municipal administrators (city managers and administrators, clerks, directors of planning, chief engineers, and economic development professionals) to determine their medium and long-term research needs. The primary research question asked was "What are the community-based opportunities which should be developed and what are the problem which need to be resolved? This question can be applied at a community, regional, and northern BC level." The research question was mailed to each participant prior to the interview or focus session to provide an opportunity to reflect on the discussions that would take place. The interviews and focus sessions were audio-tape recorded and the results of each session were transcribed. The transcriptions were reviewed and analyzed to identify knowledge or information themes. These themes were then developed into categories of problems and opportunities that are affecting the development of communities and rural areas in northern British Columbia. These categories are not always mutually exclusive due to the complexity and interrelatedness of the problems and opportunities under examination.

Although this study focuses on research needs, community leaders also identify training and skill development needs. Where appropriate these ideas are included in the main body of the study.

Preliminary Issues List

The following sections categorize problems and opportunities which were identified by the interview and focus session participants as impacting the development of communities and rural areas in the north: growth and development; lifestyle shifts; rural development, shoreland and recreational development, urban and rural housing; and the institutional environment. Following the discussion of each major issue, research project suggestions are presented which would begin addressing the major developmental issues confronting northern communities.

Growth and Development

Most communities in northern British Columbia are presently experiencing considerable population growth. Community leaders sense that this growth is the result of higher housing costs initially in the Lower Mainland area and Vancouver Island, and currently affecting affordability in the Okanagan region of British Columbia. People are now looking to northern British Columbia for an affordable lifestyle. In addition, urban sprawl and transportation congestion are reducing the livability of portions of southern British Columbia. Therefore, growing numbers of people who were initially attracted to "Super Natural BC" have an increasingly difficult time finding this natural beauty as more people, coupled with sprawling community growth patterns, consume larger portions of the natural landscape of portions of southern BC.

Research participants perceive these trends continuing in the south. The result will be increasing numbers of people moving into northern communities where homes are still affordable and communities, although also constructed in a sprawling manner, have not reached a population and spatial size which result in a significant reduction in livability. Many community leaders feel land use regulations are archaic, encouraging sprawl development in rural and exurban locations. In most cases the urban-rural split is in a ratio of 1:1 (50% of a community's population reside inside municipal boundaries and 50% within approximately 8 km of the municipality). In the south Cariboo area this ratio increases to a perceived ratio of 1:9 (10% within municipal boundaries and 90% rural).

In a number of communities, growth is currently constrained by the availability of land within municipal boundaries. In some cases properties within municipal boundaries are not being converted to urban land uses. For example, in 100 Mile House virtually all undeveloped lands are owned by one family or protected for agricultural use under the Agriculture Land Commission Act. In other communities developable land has been consumed and there is a need to bring more land into the community through the expansion of municipal boundaries. But municipal boundary expansion is a difficult process. Traditionally, lower rural tax rates have encouraged residing outside of municipal boundaries while enjoying the benefits of urban services (i.e., policing, recreation facilities, libraries, etc.). Development Cost Charges (DCCs) are levied for new construction in urban areas while no charges are applied in rural areas where the impact of development may be as great (or greater) as development in urban areas. Community leaders believe land use regulations need to be revised in both urban and rural areas to reflect a policy of fringe area residents paying for municipal services utilized and to reflect the reality of evolving sustainable planning practice.

Economic restructuring is also impacting the development of northern communities. There is a growing awareness that economic and environmental issues are tied together and community restructuring processes are needed to move away from highly resource dependent development patterns to development patterns build on concepts and principles of sustainability. From a global perspective economic restructuring is redefining human demands for resources extracted from northern rural landscapes. Community leaders recognize that economic diversification and the identification of value-added employment development is a key element of the new economy. But they also see a shift in attitudes towards a desire for more environmentally livable urban and rural landscapes. As the mayor of one municipality notes, "the most critical issue facing our community is abnormal respiratory problems and without resolving this one problem our economic growth will be stifled."

Planning processes must not only reflect growth but also the need to plan for boom/bust cycles as well as steady-state and declining local and regional economies. Communities in the north have experienced boom/bust economic activity for decades. Local level leaders feel there must be a better way to manage local and regional economies. Community leaders in the Peace River District feel they should begin planning soon for a movement away from the current heavy regional economic reliance on oil and gas extraction.

Research Needs

A number of issues identified by study participants would suggest that communities will need research assistance in the following areas:

Baseline Data Collection: A comprehensive study of social, economic, and ecological livability indicators and related information must be undertaken to provide a compendium of statistical and descriptive information which will support further research. This project is considered a priority as further studies will build from this baseline information. Inter- and intra-community/regional comparative studies will be feasible once this information is compiled.

Growth and Development Projections for Communities and Regions: Statistical growth and development projections for communities and the regions of the north are required to assist decision-makers in undertaking comprehensive proactive planning and infrastructure investment. A component of this study (or a companion study) would be the identification of unincorporated areas which should be encouraged to move to municipal status as a result of population growth and of changing land use patterns resulting from regional planning processes (Local Resource Management Plans [LRMPs], Committee on Resources and the Environment [CORE], etc.).

Spatial Analysis of Community Growth and Land Consumption: Low density urban and rural sprawl results in high levels of resource consumption which is unsustainable. Spatial analysis studies are required to determine the sustainability of community and regional land use patterns. Inter- and intra-community and regional comparative spatial and financial studies would assist community decision-makers in determining the economic sustainability of current land use patterns and assist in the identification of more appropriate urban and rural land use if current patterns are unsustainable. A review of Development Cost Charges (DCCs) for urban areas and the feasibility of establishing DCCs for rural areas should be undertaken.

Impact of Legislation on the Growth and Development of Northern Communities: The province-wide application of legislation developed, in many cases to address southern BC growth problems (discussed in more detail in the "Institutional Environment" section) must be studied and the impact of this legislation on the unique (and many times ignored or little understood) characteristics of northern communities must be examined. For example, the Agricultural Land Reserves were established using inadequate resource mapping for many of the regions of the north. A review of northern Agricultural Land Reserves should be undertaken with the goal of insuring that quality agricultural lands are protected and marginal lands are released for other purposes.

Economic Opportunities Study: Economic restructuring brought on by both internal and external forces continue to have significant impacts on northern communities. Business and community economic development opportunities brought about through this restructuring can be identified through techniques developed in other highly entrepreneurial communities in Canada, the United States and Europe.

Community Sustainability Planning: A case study of one region of the north should be undertaken to develop and test concepts of community/regional sustainability based on the unique bio-physical characteristics of the north. The plan should define a realistic process whereby communities can move from current high consumption development patterns to a form of development which is sustainable. A strong community education component should be included in this planning project.

Lifestyle Shifts and Landscape Redesign

The greatest growth and expansion in northern communities has taken place during a time when the automobile has been the most significant element in defining the community landscape. Survey participants are aware of lifestyle changes in their communities and in the larger North American society which will bring about changes in how their communities function. They perceive significant resident lifestyle shifts taking place which will require the redesign of urban and rural landscapes.

The interior of BC is still viewed by many residents and visitors as a frontier. People have traditionally moved to the region to make their fortune and then retire elsewhere. "Super, Natural BC" has also attracted individuals who covet "wide-open spaces," but increasing numbers of people desiring solitude contribute to the human congestion which they originally chose to escape. Increasing numbers of long-time residents and senior migrants retiring, and the overall expansion of population are contributing to problems of resource and land use conflict.

Traditionally, interior BC communities and rural landscapes were populated by young individuals and families. Community leaders perceive a trend towards an aging population and communities are beginning to deal with the concept of "aging in place." Independent and somewhat individualistic lifestyles are being replaced with the need for increasing community support as rural residents grow older. Adult daycare and the provision of other community facilities and programs for a seniors population are becoming increasingly important considerations in planning at a municipal level. Due to downloading of services from senior levels of government, many local and provincial agencies are being placed in an unfamiliar environment requiring the coordination of activities such of health care and community recreation services.

Trends toward an aging population and the need to develop less energy-intensive transportation systems are encouraging the examination of non-automobile dominated transportation systems. Over the past number of years public transit has been attempted in many northern communities with varying degrees of success. The poor record for public transit is due mainly to continuing low costs for energy, low density community landscapes, and the separation of community functions.

Land use regulations need to be updated to reflect the current and rapidly evolving trends towards sustainable community planning. In addition, the entrepreneurial spirit in the north continues to be strong and the trend towards home-based businesses is placing increasing pressure on regulatory agencies responsible for separating land use functions through bylaw enforcement. Thus, in a number of areas local and regional land use regulations need to be revised to incorporate changing social, economic, and ecological values.

Improvements to the design of community landscapes, particularly the downtown cores and the entrances (gateways) to communities was repeatedly commented on by community leaders. Many buildings have been constructed for function with little consideration to form or the significant role which structures can play in defining a sense of community and architectural heritage. The result, in many communities, are aesthetically uninspiring community landscapes. Communities such as Quensel and Smithers have developed and continue to maintain strong, vibrant downtowns. Prince Rupert has controlled road gateway development accomplishing interesting and inviting road access points which give travellers positive first impressions to the community. Improvements are required in other communities. Rail, air, and water access require particular attention in all communities.

Another, often ignored, problem noted by research participants is the aging ranch/farm populations and a perceived decline in the agricultural industry. Young families are being discouraged from pursuing a ranching/farming career due to the high level of uncertainty surrounding the renewal of long-term crown land tenure leases and other problems which make an agricultural career undesirable. Without younger families to continue utilizing the agricultural land base, the capacity of British Columbia to feed itself will be diminished.

Research Needed

Value/Attitude Surveys: Value/attitude surveys (environmental autobiographies) should be undertaken to identify elements of northern living and the urban and rural landscape which residents cherish most and elements which are resulting in the aesthetic degradation of northern landscapes. Planning techniques should be formulated which would result in new land use activities which strengthen these positive elements.

Managing Change Processes: Case studies of other regions which have undergone significant small community and rural growth should be undertaken to learn how to enhance the positive aspects of this growth while minimizing the negative impacts.

Changing Population Composition Impact Studies: An analysis of the changing socio-economic composition of the population would assist in the identification of new government and private sector initiatives which could adapt the built environment to the needs of the present and future anticipated population. Particular attention should be focussed on the impact of an aging population on the structure and function of community and rural landscapes.

Public Transit/Land Use Studies: A strong relationship exists between the economic viability of public transit and adjacent land use patterns in large urban regions. This relationship should be tested in smaller communities and the feasibility of developing viable energy conserving transportation systems should be examined.

Community Structuring to Support Entrepreneurship: A small number of communities in North America have developed strong local entrepreneurial cultures. The unique characteristics which support entrepreneurial activity in these communities should be researched for applicability to northern BC communities. A examination of government and private sector impediments interfering with entrepreneurial activity should be undertaken. Methods to support the maintenance and development of small business and entrepreneurial activities should be tested.

Northern Community Architectural Design Analysis: A examination of the unique architecture history of northern BC should be undertaken to identify a northern vernacular. The compilation of a northern architecture should be used as a basis for future build-out mapping (three-dimensional designs delineating future built landscapes), community and rural landscape planning, and redevelopment projects.

Community Form and Townscape Analysis: An analysis of the characteristics and elements of community planning and design which contribute towards sustainability should be completed. Many of the elements of neo-traditional urban design encompass consideration of community sustainability principles; building materials, architectural styles, front yard setbacks, street crosssections, landscaping elements (including fences, hedges and walls), and formal and informal open spaces. Methods to integrate design elements and sustainability principles into the land development process while maintaining regional landscape character should be explored.

Community Landscape Design Charrettes: Evolving out of the two previous research activities should be community design charrettes which undertake design projects focusing on community downtowns, rural landscapes, and highway commercial strips.

Institutionalization of Urban Sprawl: In many communities and rural areas current official community plans and zoning and subdivision bylaws institutionalize sprawl land use development separating home from work and encouraging the use of the automobile to move around the community. Illustrative case studies of land development processes should identify how planning principles and regulations perpetuate sprawl and how new principles and regulations could be introduced which would improve the livability of communities. Growth management legislation should also be reviewed to determine how these laws hinder or support the movement towards sustainability.

Analysis of Traditional and Contemporary Planning Methods: New methods of transposing community visions into action programs should be examined. Simulation modelling, three-dimensional computer aided design (CAD), and build-out maps which illustrate real streets, building positions and uses should be tested to determine whether planning and implementation processes can better replicate community visions.

Food Security Study: An examination of changes in the agricultural industry in northern British Columbia is needed to determine whether the north will have secure supplies of food in the future. One interview participant noted that a study he recently read stated that due to increasing consumption levels, United States will become a net importer of food within ten years. Canada and British Columbia currently depend on the United Sates for a significant portion of fruit and vegetable consumption. Current research on concepts of food security should be applied to the food needs of northern British Columbia communities.

Rural Development

A strong rural ideology exists in northern British Columbia. The image of wide open spaces and an abundant natural landscape attract people to the region. The desire to own a portion of the northern rural landscape has reached a point where community leaders feel helter-skelter, large lot development is fragmenting the countryside. This fragmentation is resulting in the removal of large acreages of agricultural and forestry land from productive use and contributing to agriculture, forestry, recreation, and residential land use conflicts. Another component of land fragmentation is rural land severances for sons/daughters of ranch/farming families. This continues as an unresolved problem in land development decision-making.

Farms and ranches are being purchased for recreational or aesthetic purposes resulting in a change in emphasis from working landscapes to passive landscapes. Land use conflicts result, partially, from a perception of ownership beyond property boundaries, particularly within the context of a working forest landscape. For example, clear cut logging on private lands, particularly near lakes and rivers, is creating animosity among neighbouring property owners. In many cases, the process of land purchase includes tangible considerations of local and regional aesthetics, but control of local and regional land uses is not one of the legal rights of individual property purchase.

Increasing demands are being placed on urban infrastructure by rural residents. Municipal decision-makers have mixed feelings toward exurban development. On the one hand, municipalities act as regional service centres. Commercial enterprise is enhanced due to purchases by rural residents. On the other hand, there is the perception that rural development is increasing servicing costs (roads, snowplowing, school busing, etc.). Differential taxation rates between urban and rural areas results in development outside of municipal boundaries which would, under an equitable taxation structure, take place within municipal boundaries. Community leaders voiced a strong desire for a review of provincial taxation policy and the movement towards a user pay policy which results in taxation equality between rural and urban areas.

Community leaders feel that, in many cases, larger urban and southern planning principles are being applied to northern smaller community and rural area problems with mixed results. They suggest planning principles need to be developed to address the unique characteristics of smaller communites and rural regions and the unique conditions of northern climates. A number of participants feel that a provincial-wide building code is required to support efficient planning efforts. In many areas the lack of application of a building code results in sub-standard housing.

Research Needed

Land Use Change and Property Fragmentation Study: An analysis of the impact of land fragmentation on working landscapes should be studied. Properties moving from active to passive land uses can impact surrounding working landscapes. Large lot development regulations, originally put in place to discourage rural residential development, may be accelerating the conversion of rural lands to urban uses. This study could be integrated into a major study which examines urban sprawl within and outside municipal boundaries.

Psychological Factors contributing to Rural Land Ownership: An analysis of why people desire large lot or acreage rural residential lifestyles should be undertaken. Do they desire large quantities of

rural land or do they desire rural landscapes? If they desire the latter, more appropriate methods exist to create natural and working landscapes which address their psychological needed for a rural lifestyle without encouraging excessive rural land fragmentation and land use conflicts.

Systems to Protect Privately Owned Working Landscapes: The Ministry of Forestry is actively pursuing the development of Local Resource Management Plans (LRMPs) on crown lands across the province. A corresponding system of land use plans needs to be developed to protect privately owned working landscapes. Ideally, both planning processes should be integrated, resulting in a system of bioregional plans which define the limits, activities, and interrelationships between natural, working, and urban landscapes. Part of this study could address one significant and recurring cultural element of landscape design, methods which support family members living in close proximity to each other (the question of land severance for family members) in rural areas.

Analysis of Community Services Costs in Relationship to Urban/ Rural Land Use Patterns: A comprehensive study of the social, economic, and environmental impact on communities resulting from urban and rural sprawl is needed. A financial analysis of the costs of urban and rural sprawl would help decision-makers reorient government expenditures towards investments which support community and regional sustainability. A study entitled "Access to the Industrial Tax Base in the Northeast" undertaken in the Peace River Region (Peace River Regional District, 1993) should be examined for its applicability in other regions of northern British Columbia. This study documents that most industrial land uses in resource-based regions takes place outside of municipal boundaries while northern communities supply services without the benefits of industrial taxation revenue. The authors of the report advocate a regional/bioregional approach to settlement management and regional capital planning which would insure taxation equity for all land use activities within and outside municipal boundaries.

Planning and Development Principles for Northern British Columbia: The unique conditions in which planning takes place in the north and the unique characteristics of smaller communities and rural areas should be studied. Planning principles to address the development needs of northern British Columbia communities should be undertaken. Traditional socio-economic and biophysical inventory methodology; Official Community Plan (OCP) processes; and zoning, subdivision, and other land use bylaw development processes should reviewed and revised to reflect the reality of northern community and rural planning.

Shoreland and Recreational Development

A desire for first, second, and retirement home ownership continues to place pressures on the shorelands and recreational lands of the north. Increasing numbers of passive and active landscape users are resulting in land use conflicts. There is a perceived decline in public open space as use of the more accessible public owned lands increase and additional restrictions on access to private land are put in place. Overcrowding of lakeshore areas, ineffective use of land surrounding certain lakes, and the conversion of cottages to year-round use (for example, 108 Resort) are contributing to an increase in incidents of lifestyle conflict. Pressure is being put on government calling for land and water use controls. For example, the Ministry of Environment, Lands and Parks is examining the need for noise abatement by-laws on lakes in the province.

The current moratorium on the sell of shoreline lots by BC Lands is resulting in a pent-up rural lot/acreage demand. When the moratorium is terminated, this pent-up demand may result in the rapid development of pristine landscapes. Coupled with this pent-up demand, participants discussed the presence of a growing time bomb, the degradation of surface and groundwater as a result of poor construction and maintenance of self-contained sewage systems, and nutrient loading from cattle manure and commercial fertilizers.

Research Needed

Recreation/Shoreline Access Node Study: The numerous Land and Resource Management Planning (LRMP) and Committee on Resources and the Environment (CORE) processes are developing macro land use designations for the provincial land base. Lands are being designated as protected areas, natural resource lands, and lands for human settlement. As these plans are completed the settlement patterns of British Columbia are being redrawn. A macro study should be undertaken identifying recreation/shoreland access nodes. Land development regulations should be developed and municipal incorporation could be considered for these nodes to insure efficient and orderly development in the future.

Shoreland Site Planning Guidelines: New shoreland site planning guidelines should be developed based on sustainability principles, most notable the carrying capacity of adjacent lands and waters to support human activity. Planned Shoreland Lot Inventory: Using information obtained from the above recreational/shoreland access node study and the site planning guidelines, concepts for new or expanded townsites at these nodes should be undertaken. The marketability of tourism/cottage villages and other forms of recreation settlements should be tested. Recreational opportunities should be made available for a variety of lifestyles.

Sewage Disposal Construction and Maintenance Study: Significant advances have been made in the development of highly efficient self-contained small scale sewage disposal systems. The applicability of these new systems to the unique development characteristics of northern British Columbia should be examined. The cost effectiveness of proper methods of construction and maintenance of septic tank and weeping tile systems has been documented in other jurisdictions. Improved inspection procedures during construction and introduction of maintenance procedures should be examined to determine whether these systems are economically viable within the northern BC context.

Urban and Rural Housing

Canada has had a strong tradition of supporting goals of quality and affordable housing through institutions such as Canada Mortgage and Housing Corporation and, in BC, through the Ministry of Housing, Recreation and Consumer Services. Community leaders observe a changing role in the provision of housing. Participants felt senior levels of government were downloading housing responsibilities to a municipal level during a period when they cannot afford to continue providing programs which contribute to community building and the maintenance of a quality standard of living. Most municipal representatives feel their organizations do not have the financial capability to appropriately address social housing needs.

To the casual observer, the difficulty of developing land for housing purposes may not be evident within the vastness of northern British Columbia. But, in many communities, limited land for development lowers vacancy rates, increases rents, and increases lot prices undermining the provision of additional affordable housing. Many community leaders note that there is a continuing low supply of rental housing, particularly affordable rental housing. In addition, changes in lifestyles and an aging population are creating a demand for different types of housing options (for example, condominiums, granny flats, etc.). There is an increasing demand for rural retirement lots.

As changes come about in the relationship between aboriginal people and the remaining provincial population there may be a significant migration back to rural areas and ancestral homelands. A consequence of this migration may be an increased demand for rural and village level housing and an expanded role for communities which act as regional service centres.

In both urban and rural areas, participants felt that new directions in the planning of housing, neighbourhoods, villages, and communities are required to insure accessibility for seniors. Community facilities and programs need to be put in place to address the needs of seniors. For example, an automobile-oriented transportation system may not provide mobility to seniors as they age and lose the ability to operate a motor vehicle. Also, a characteristic of aging populations is the new demands they place on health infrastructure and other community services. Participants suggested that innovative planning efforts could focus on seniors housing as a means to change traditional community development patterns.

Research Needed

Study of Municipal Affordable Housing Programs: The experiences of northern BC communities and communities in other jurisdictions should be studied to determine innovative local and regional government programs and private/public partnerships which are successfully providing affordable housing to their residents.

Analysis of Land Development Constraints: The question of why many northern communities are experiencing limited land and building lot inventories, particularly for the provision of affordable housing should be studied. A component of this study should be the examination of the structures and procedures of government institutions which may be impediments, restricting the delivery of land for expansion of community housing stock.

Lifestyle Trend Impacts on Northern Housing Study: How current and anticipated lifestyle changes are redefining the housing market can be undertaken by examining how these changes have impacted other housing markets. In addition, a study of senior's impacts on institutional service delivery should be undertaken to determine the costs and benefits of actively attracting seniors to northern communities.

Land Claims Impact Study: A housing needs assessment and the impact on adjacent community service centres of aboriginal people

migrating back to rural areas and ancestral homelands should be undertaken. An interesting component of this area of research would be the redevelopment of home design and community landscape design to reflect the unique elements of aboriginal culture.

Lifestyle Trend Impacts on Community Planning and Design: Concurrent with the above study should be an examination of how the urban and rural environment should be redesigned to accommodate the needs of an aging population. This study could become a component part of the Community Design Analysis and the Community Landscape Design Charrettes discussed above.

Housing Stock Analysis: A comprehensive analysis of housing stock should be undertaken to identify opportunities for the introduction of new forms of housing in communities throughout the north.

Institutional Environment

A number of institutional barriers are perceived to be impeding the development of urban and rural landscapes in a healthy and sustainable manner. Community leaders observed that a great deal of confusion surrounds the crown land management and land disposal process. The provincial government presently controls approximately ninety-two percent of the land base and thus controls and can, therefore, influence how large acreages of land, which will be needed for future urban and rural land expansion, will be developed. Participants identified a need for streamlining the land development process. This situation is particularly acute at the present time due to uncertainty over native land claim negotiations.

In many municipalities, community leaders themselves feel that political leadership is lacking when calls are made for a reexamination of how communities are planned. Frustration was expressed by research participants when attempting to introduce current research and cutting-edge community planning concepts. In addition, there is concern over the lack of municipal involvement in the Local Resource Management Plan (LRMP) processes and concern over the separation of LRMP processes (regional crown land planning only) and non-crown rural land and settlement planning processes. LRMP processes are redefining the rural landscape within a narrowly specified context focussed on forestry issues. Municipal leaders feel that resource planning and settlement planning should take place within one regional planning process. Increasing demands are being placed on local and regional level governments. The downloading to regional districts and municipalities of responsibilities traditionally managed at a provincial and federal level is of great concern. Concern surrounding the continued provision of affordable housing, traditionally a senior government responsibility, was discussed in the previous section.

Community leaders discussed policies and regulations which favoured southern British Columbian communities and which were developed for southern British Columbian communities with the assumption that they would be applicable to northern municipalities as well. One example often referred to was solid waste management legislation. Research participants feel solid waste can be handled differently in the north over the short- to medium-term due to a large inventory of available solid waste disposal sites.

The one issue most frequently discussed was the perception that massive revenues flow out of the north to support southern development with only a trickle returning to support mainly resource extraction infrastructure. Research participants described a growing frustration whereby the north is not getting the services enjoyed by the lower part of the province. One example often cited was the lack of health care services and the erosion of current services in northern communities.

Community leaders are constantly involved in urban and regional land use issues. They conclude, from their experience in managing and developing communities, that land use decisions are the most hostile or oppositional in nature. They suggest higher principles are needed to move away from confrontational decisionmaking. For example, the NIMBY syndrome (Not In My Back Yard)³ is increasingly impacting land development processes in communities and rural areas.

The confrontational nature of many land use issues creates a need for good negotiation skills and quality information to assist in the decision-making process. One participant stated, "We don't have the resources to be professional; we need resources to undertake comprehensive planning." Community representatives stressed the need for education in the following areas: rural and small community planning, site planning, geographical information systems (GIS), and computer aided design (CAD) systems. In the area of interpersonal relations, courses in conflict resolution and consensus decision-making were mentioned on numerous occasions. Skills upgrading is also needed for building inspection, economic development, and recreation staff.

Research Needs

Land Development Process Study: A comprehensive study should examine the administrative process surrounding how land is developed and redeveloped. The goal of the study would be to identify existing inefficiencies which are impeding the timely development of land, and barriers which are restricting the introduction of contemporary land planning principles. Extensive research has been undertaken in the private sector on the diffusion or commercialization of innovation. The study should also examine how the diffusion of innovation can be incorporated into the planning and development of communities and rural areas. Another component of this study should examine how the new *Growth Management Strategy Act* can be used to benefit northern communities.

Downloading Study: The impact of discontinued federal and provincial community development programs on regional governments and municipalities should be explored. The long-term impact of lower levels of support for social housing and infrastructure development could define the magnitude of the impending problem and seek solutions which could be implemented at a local level. A comparative study of how local level governments in other provinces are coping with the devolution of services from senior levels of government could be undertaken.

Regional Output/Input Analysis of Government Revenues and Expenditures: This study would examine the outflow of resources to senior levels of government from northern British Columbia and the investments (input benefits) returned to the region. Investments make to support the extraction of resources should be noted.

NIMBY Study: The reluctance of individuals and community groups to accept change has both positive and negative connotations. This attitude, commonly referred to as the NIMBY syndrome, needs to be studied to enlighten community development advocates concerning ways to understand resistance to change in land use activity.

Community Level Planning and Development Education Needs Assessment: A survey is required to determine training needs for local and regional government, volunteers, elected officials, and employees in the areas of community planning and development.

Conclusions

Over the long term, the challenge for northern community leaders is to find methods to maintain the natural beauty and quality of life, which have attracted people to the north, when resource extraction, population growth, and community expansion will significantly impact on these livability factors during the coming years. The conclusions from the workshop, interviews, and focus sessions are that northern communities are beginning to experience significant growth (brought on, in part, by expanding provincial population and rapidly escalating real estate prices in southern BC). Community leaders feel that proactive planning and implementation strategies must be put in place at a community and regional level to insure community expansion and regeneration takes place in a healthy and sustainable⁴ manner. They feel positive change and improving community livability can be achieved through good municipal decision making which is based on quality information. In many cases, previous decisions guiding the growth and development of northern communities have been made without sufficient research and appropriate information. These decisions have adversely effected community livability.

More comprehensive community-based research is needed in northern British Columbia. This study provides information which should stimulate discussion on research priorities. A portion of this research can be undertaken by faculty at the University of Northern British Columbia, but other researchers interested in planning and community development issues in a northern context are also needed.

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Appendix A Organizations Participating in the Research

Municipalities

Cities

Dawson Creek Fort St. John Prince George Prince Rupert Quesnel Terrace Williams Lake Districts Chetwynd Hudson's Hope Kitimat 100 Mile House Smithers

Villages

Masset McBride Valemount Regional Districts Bulkley-Nechako Cariboo Central Coast Kitimat-Stikine Skeena-Queen Charlotte Organizations and Federal/Provincial Government Agencies

British Columbia Real Estate Foundation Canada Mortgage and Housing Corporation Ministry of Environment, Lands and Parks Ministry of Municipal Affairs Ministry of Small Business, Tourism, and Culture University of Northern British Columbia

Appendix B Original Goals of the University of Northern British Columbia Northern Land Use Institute

A contribution by the Real Estate Foundation of British Columbia has been provided for the purpose of generating annual income to financially support the University's initiative known as The Northern Land Use Institute. The Institute and the Foundation have mutual interests in advancing land use practices that enhance the social, economic, and environmental well-being of northern communities.

The Institute's mission is to be entrepreneurial and achieve its stated goals in partnership with private enterprise, public agencies, and non-profit organizations. The Institute will both seek out and respond to opportunities to work with community partners in the region. The Institute will offer research, educational programs and products, technical assistance and expertise in policy analysis, community/regional planning, community resource management, land use conflict resolution, and sustainable development initiatives.

The Institute's strategy to achieve these goals will incorporate an entrepreneurial emphasis and address objectives such as the following:

1. Improve land use, resource and environmental management decision-making and problem solving at the local and regional levels;

2. Promote collaborative, inter-disciplinary research in partnership with public agencies, the private sector, local communities, and First Nations to address the opportunities and challenges in northern communities;

3. Assist communities to undertake long-term planning and land development to achieve economic and ecological efficiencies;

4. Assist northern communities to access information and expertise related to land planning and development, environment and resource management;

5. Work with regional networks of private sector, local government, and nongovernmental organizations to identity emerging issues, concerns, and educational needs that can be addressed by the resources of the University;

6. Assist northern communities to respond positively and efficiently adapt to rapid social, economic and environmental change and growth;

7. Provide short courses, workshops, credit and non-credit courses to students, the community, and others;

8. Embark on cooperative programs involving student placement and internships; and

9. Launch the Real Estate Foundation "Distinguished Lecture Series" to bring the region renowned speakers from around the world relating to land use and real estate issues.

Appendix C An Action Research Plan

Three elements of an action research plan are:

1. Compiling economic, social, and biophysical information including:

The development of a database of regional and municipal information;

Conducting comparative cost/benefit analyses of land development/maintenance costs following traditional versus new planning principles; and

Studying and identifying rural versus urban living/servicing costs.

2. Identifying principles of community planning, including:

Theoretical level—General change in planning principles in North America;

Practical level—Incorporating the reality of planning in Northern British Columbia;

Regional, community, and site level principles; and Urban and rural (village) principles.

3. *Communicating the information and the principles via:* Seminars/continuing education;

Videos/Multimedia;

Publications—Design guidelines, workbooks, articles;

Recoverable Urban Demonstration Projects—BC Lands site plans developed for 100 Mile (Horse Lake Road), Williams Lake (200 acres in West Ridge), and Quesnel subject to BC Lands being brought into the municipality through boundary extension; and

Recoverable Rural Demonstration Projects—Replication of 108 Resort.

Redevelopment of principles based on input received in the communication stage. Further communication of knowledge.

Notes

1. The original concept for a research institute, focusing on community and regional affairs, was conceived by a group of land development professionals who, in September 1992, submitted a proposal to the university planning committee during the early stages of developing the University of Northern British Columbia. This proposal called for courses, degree programs (including a continuing education component), and research which would assist in upgrading the skills and knowledge of professionals involved in planning and development activities at a community and regional level (Cariboo Real Estate Association and the British Columbia Real Estate Foundation, 1992).

In the fall of 1994, representatives from the Cariboo Real Estate Association, the British Columbia Real Estate Foundation, and the University of Northern British Columbia (UNBC) initiated negotiations on developing a university-based institute. These negotiations culminated in the spring of 1996 when the British Columbia Real Estate Foundation provided \$750,000 in endowment funds to establish the Northern Land Use Institute at UNBC.

2. The following databases, Arctic and Antarctic Regions, CPIQ, Canadian Business and Current Afairs, Humanities and Social Sciences, Art Index, PAIS, ProQuest, Academic Search, Article First, and Current Contents, were searched using the keywords "research needs" alone or in combination with the keywords "land use", "planning", or "community".

3. NIMBY denotes a common occurrence in community planning whereby residents lobby against particular types of land uses (i.e., group homes, halfway houses) or land uses which will contribute to additional growth.

4. Healthy community development and development based on principles of sustainability is defined as economic and social activities which maintain and improve ecological systems (water, land, air, etc.) required for continued life. Presently degraded ecological systems should be rehabilitated to improve the quality functioning of human life-support systems.