PLANNING FOR RESILIENCE:
A CASE STUDY OF KITIMAT, BC

by

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Abstract

Kitimat, British Columbia was the first comprehensively planned town in the province. Built in 1954 to house the workers of Alcan, it was planned to be a town with strong social cohesion, a high quality of life, and resilient to change over time. The physical plan intended to encourage interaction while the social plan was meant to solidify those bonds, thereby developing social cohesion and community capacity supports for the town to potentially remain resilient. A triangulated research approach combines an historical analysis of Statistics Canada data, mapping techniques, as well as focus group and key informant interviews. The findings suggest that the physical organization of Kitimat encourages interaction and serves to support the development of social cohesion. Social cohesion is further developed through relationships based on factors such as ethnicity, job-type, length of residence, and interests.

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Acknowledgements

Two years and some months later this journey comes to an end. I have sincerely enjoyed the entire process of earning my master's degree. It has been challenging, but the challenges provided me with learning opportunities that I would have missed otherwise. There are many people who deserve thanks and recognition for the roles they played in the creation of this work.

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Chapter 1 Introduction

1.0   Introduction

As a young girl, I played in the ruins of the town where my mother was born, where my grandmother was a nurse, and my grandfather was a gold miner. When I asked why no one lived in Bralorne anymore they told me that the people left once the Company closed the mine. The town was owned by the mine and people had no work and, therefore, no reason or ability to stay. Returning to that ghost town, my mother can point out where the workers lived, where the managers lived, and where the families lived. The town was organized to maintain control and maximize productivity (Herkes 2004:Pt.III). But it was also where people interacted with their neighbours and co-workers. Strong relationships were formed that persevere today. People went to that town in British Columbia for work in the mine but 'lived' in the town. They shared experiences with their neighbours and developed friendships based on those experiences and the place. As an adult, through my education, I realize the affect that place and placement can have on how, and with whom, people interact.

The town of Kitimat was built in 1954, on the west coast of northern British Columbia (BC), to house the workers of Alcan. The town was planned using comprehensive planning principles to develop a resilient town, independent of the industry, which could thrive and grow. The plan intended to facilitate and structure interaction and, through this interaction, encourage the development of resilience. I chose to research the town of Kitimat because it is a town specifically planned to encourage and manipulate interaction, planned to avoid the same demise as my mother's birthplace. Kitimat is a town whose economy is heavily reliant on a resource economy (Statistics Canada 2006a) just like my mom's town, but planners

implemented various social and physical structures to avoid the same fate. Given the specific plans for Kitimat, I was interested to see if Kitimat is a community where everyone knows everyone, friendly nods, waves, and greetings are exchanged in the streets and walkways, and neighbours help neighbours in any way they can. I was pleasantly surprised to find that most of these idyllic notions are a reality, at least to some degree, in Kitimat.

The purpose and intent of the planning in Kitimat interested me. I questioned to what extent planning affects interaction and relationships in a town. So, the purpose of my research and this thesis is to determine:

1. What is structuring interaction and relationship formation in Kitimat?
2. Has comprehensive planning of Kitimat resulted in a resilient town?

Kitimat was comprehensively planned by Clarence Stein, a renowned planner of the time, who envisioned a town that would grow, prosper, and thus remain potentially resilient over time. This chapter provides a brief introduction to the reasons for using comprehensive planning, the rationale supporting the development of resiliency through interaction, the town of Kitimat and Clarence Stein's vision for the town, and concludes with an outline of the thesis.

1.1 Comprehensive Planning

Comprehensive planning was introduced to Canada after the Second World War to address development concerns in resource and industry based towns (Halseth and Sullivan 2002:Ch.2). Over the last 100 years, a dependence on external forces, resulting from reliance on resources and industry, has resulted in the prosperity of some towns, and the demise of others (Lucas 1971:96, Himelfarb 1977). Comprehensive planning is designed to support the

commercial, educational, health, recreational, cultural, social, government, and industrial aspects of a town's development (Larsen 2005). My research addresses the questions of whether comprehensive planning principles play a role in structuring interaction and / or encouraging resilience of a town.

1.2 Resilience

Resilience is the capacity for a town, or community, to adapt to change, face challenges, and be resistant to future negative events. Resource and industrial towns are susceptible to boom and bust cycles and, as a result, experience times of prosperity and hardship (Lucas 1971:96). In order to survive the bust periods, towns need to be resilient, they need the ability to adapt to change, there needs to be support systems and resources that residents can rely on as an alternative to leaving (Jackson *et al.* 2003, Sullivan and Halseth 2005). These support mechanisms lend to resiliency, and are attributed to strong social cohesion, high levels of community capacity, and social capital (Jackson *et al.* 2003, Halseth and Sullivan 2005). The development of these attributes in resource and industrial towns has been researched from a variety of perspectives including interaction and friendship formation (Gill 1990, Saglio 1991, Robinson and Wilkinson 1995), community capacity (Sullivan and Halseth 2005), inclusion / exclusion (Larsen 2004), and autonomy (Russel and Harris 2001). My research draws from, and builds upon, existing research to examine the underlying forces that structure the development of resilience. That is, what allows or prohibits interaction and association that leads to the development of social capital, community capacity, inclusion, and resiliency?

To examine resilience, the concepts of social capital, social cohesion, and community capacity need to be addressed. Social capital is the trust developed through interaction, between individuals, groups, and organizations, which can later be used to acquire or mobilize support (Wallis 1998). Social cohesion expands beyond individual interactions and is the creation of networks made through various shared commonalities (Valentine 2007:112). The accumulation of social capital and social cohesion contributes to a town or community's capacity to cope and deal with change or threats (Hays and Kogl 2007). Inherent in the development of each of these is the role of interaction, and the question remains: what is structuring interaction? To answer this question, my research investigates how, why, and with whom people interact. I also examine how these interactions relate to space and social characteristics in Kitimat, as well as the level of interaction between different social groups. This research will indicate if and how planning affects interaction, and to what extent it may influence resilience. With a better understanding of the factors that structure interaction, planners (social and physical) can implement more suitable programs and structures to create a co-operative/interactive community. It will also help me to understand the sense of community that my family may have experienced, and lost, in Bralorne.

1.3   Kitimat

The research is conducted in the town of Kitimat, BC which was the first comprehensively planned town in Canada. Planned in 1951 by Clarence Stein, it has been used as a model for the planning of many other towns. A focused research project on a single town will provide a case study and clear understanding of how physical layout and location structure interaction. Because it was Canada's first comprehensively planned town, and its planning history has

been well documented, Kitimat is a perfect place to research the affects of planning on interaction and resilience. Furthermore, Kitimat displays many attributes believed to be characteristic of resource and industrial towns: remote and isolated location, economy and employment dominated by resource or industry, and male dominated employment (Statistics Canada 2006a). By providing an in-depth study, future research can use it as a comparison to broaden our understanding of the factors structuring interaction and community development in other resource and industry based towns.

Clarence Stein, a major proponent of comprehensive planning, understood that participation and interaction would be required for the town to succeed (Stein 1954). Therefore, he implemented physical plan elements to encourage interaction within the townscape to create community capacity, which we now understand in terms of social cohesion and social capital. The intent of my research is to determine if Stein's plan for Kitimat supports the desired interaction; or if other social factors intervene and play larger or smaller roles in the town's resilience.

Kitimat was built to house the workers of Alcan, but the application of comprehensive planning principles was intended to decrease the town's reliance on industry and provide the town with the ability to adapt and cope with change. Kitimat has faced many changes; the first 30 years saw continuous population growth, the introduction of a pulp mill (Eurocan) and a methane plant (Methanex) to provide a more diverse economy (BC Statistics 1976-2008, Statistics Canada 1966, 1971, 1976, 1981, 1986, 1991, 1996, 2001a, 2006a). Several schools and successful commercial services existed in each of the neighbourhoods and the mall was full of stores and services for its residents. These were the 'boom' times. Changes

in the economy meant fewer job opportunities and population out-migration, particularly younger residents. The town has seen a decline in population since 2000 (BC Statistics 1976-2008, Statistics Canada 1966, 1971, 1976, 1981, 1986, 1991, 1996, 2001a, 2006a). School closures are a reality for Kitimat, with more closures on the horizon (Northern Sentinel 2009b). The neighbourhood commercial centres sit mostly vacant, the mall is a site of many empty storefronts. Methanex closed in 2006, and Alcan and Eurocan continue to decrease their number of employees (Alcan Report 1999, 2007). The town awaits news as to whether Alcan will continue with its plan to modernize or whether the aluminum company will close its doors (McFarlane 2009). Thankfully, Kitimat was planned and built in anticipation of such changes and threats. The question is whether the comprehensive planning principles succeeded in creating a community that can come together and persevere despite the challenges it faces.

1.4   Thesis Outline

This thesis is presented in six chapters. Following this introduction, the second chapter provides a review of the literature concerning resource towns and the topic of resilience. To present a thorough review, literature is drawn from diverse fields of study including geography, sociology, psychology, history, archaeology, and gender studies. The third chapter presents a description of the Kitimat study area to provide a specific context for the research. The fourth chapter describes the methods used in the research. This is followed by the analysis and discussion chapter derived from the field work data. Finally, the research is concluded by tying together key findings and suggesting directions for future research.

Chapter 2 Literature Review

2.0 Introduction

Resource and industrial towns have been part of the Canadian landscape since early settlers arrived to stake claim to the available rich resources (Lucas 1971:20, Bowles 1992). These towns have evolved and developed over time to address the changing needs and concerns of the industry, multiple levels of government, and the inhabitants (Porteous 1974, Bradbury and Sendbrehler 1988, Beckley 1996, Schulman and Anderson 1999, Baxter and Ramlo 2002, Tolbert *et al.* 2002, Sullivan and Halseth 2005). The result is an assemblage of towns whose diversity is based on different responses over different periods of time to challenges common to resource communities such as economic dependency, isolation, and industry dominance (Bowles 1992, Randall and Ironside 1996).

Planning principles were implemented to address some of these challenges and create more resilient towns (Hall 2002:Ch.4, Hodge 2003:50). In Kitimat, these principles included integrating commercial, educational, health, recreational, cultural, social, government, and industrial features with the physical plan (Larsen 2005). The physical layout of comprehensively planned towns organized roads, walkways, greenspaces, recreational areas, and commercial areas to promote interaction (Hodge 2003:51). The intended outcome was towns that would foster participation, involvement, and a sense of community, resulting in the capacity to overcome hardship, contend with change, and resist negative events (Stein 1954, Larsen 2005). This thesis examines whether the planning principles applied in Kitimat succeeded in creating a potentially resilient town, a town that has the potential to overcome hardship and adapt to changes in order to avoid becoming a ghost town like my mother's

hometown (Jackson *et al.* 2003). This literature review addresses several variables considered important in the development of resource town resilience, beginning with place and the planning of place, followed by how interaction is structured and addressing the concepts of social capital, social cohesion, and community capacity in resource towns and how they affect resilience. These variables are considered throughout the analysis in terms of relationship formation, place-based interaction, social cohesion, and resilience.

2.1 Place

Place, as a physical locus, plays an important role in town resiliency as it can affect and structure the interaction of residents. In resource and industrial towns, factors that affect place, and commonalities based on place, include: isolation, industrial influence, and spatial organization of the town (McCann 1978, Randall and Ironside 1996). Many resource and industry based towns are located in isolated and remote areas in order to facilitate proximity to resources (Lucas 1971:393, Bowles 1992). Geographic isolation plays an important role in the creation of social cohesion as it serves to develop and maintain known boundaries for the town and community, and a shared boundary increases residents' connection to place (McCann 1978, Bowles 1992, Cochrun 1994). The "connectedness in particular places, reinforced by the sharing of those places, supports certain forms of participation" (Hays and Kogl 2007:185). Despite the fact that my mother's hometown now lies in ruins, the people who lived there share a close bond. Every three years a reunion brings together the residents of that town to share memories of a place that they experienced together. Larsen's (2004) description of a north-central BC town (Southside), accessible only by ferry, exemplifies the impact of isolation. Isolation resulted in an increased interaction of place and people which, Larsen (2004) argues results in an increased place identity.

The sharing of place provides opportunities for commonalities and the land is often the source of the work for many of the inhabitants. This investment in place lends to an increased place-based sense of community (Baxter and Ramlo 2002, Tolbert *et al.* 2002, Worster and Abrams 2005). However, the economic dependence on a single industry or resource contributes to the instability of resource towns noted by social geographers (Himelfarb 1977, Halseth and Sullivan 2002:Ch.5). Often, the majority of the population is employed in one industrial and / or manufacturing sector with the result that the town as a whole is susceptible to external factors, such as market fluctuations, over which they have no control. As determined by Tolbert *et al.* (2002:111), "communities dominated by one or more large national or multinational firms are vulnerable to greater inequality, lower levels of well-being, and higher rates of social disruption than localities where the economy is more diversified." Industry also influences the social organization of resource and industrial towns (Cater and Jones 1989:Ch.1, Gill 1990, Stedman *et al.* 2004). Research conducted in the 1970s found that the social composition of resource towns generally involves a young, highly mobile population made up primarily of young married couples and single males (Mathiasson 1970, McCann 1978), a result of the types of people attracted to work in the industry. Isolation, reliance on industry, and a transient population can hinder the resilience of resource and industrial towns (Lucas 1971:390, McCann 1978, Randall and Ironside 1996).

To address the issues of single-industry reliance and the transient populations resulting from that reliance, some post Second World War planners adopted comprehensive planning principles. Legislation in 1965 allowed for the development, in British Columbia, of 'instant

towns' that contrasted with the company owned towns that previously characterised resource and industrial towns.

'Company towns' are built by a company as a means of housing the necessary labour force for the extraction or manufacture of a resource (Porteous 1970a, Himelfarb 1977, Baxter and Ramlo 2002, LeBlanc 2003:Ch.1). As a result, construction is often rushed, erratic, and timed with a boom period. Company towns are owned by the company; all facilities, housing, and amenities are operated by the company. The resulting social characteristics are a largely single-male, transient demographic that results in high labour turn-over rates (Lucas 1971:Ch.3, Himelfarb 1977). A constant sense of impermanence tends to result from the knowledge that as soon as the company no longer needs the town, it will no longer exist (Bradbury 1980). The sense of impermanence and the transient demographics negatively affects the development of a commitment to place which severely hinders resilience. When the mine closed in my mother's hometown of Bralorne nothing remained to keep people in the community. The company closed the mine and the town. The workers left, leaving behind rows of empty homes and many memories.

In 1965, the BC government passed the Instant Towns Act. This legislation allowed for the creation of 'instant towns' associated with resource development to quickly become incorporated with a local government (Bradbury 1977:Ch.5, RSBC 1996). The development of instant towns sought to counter some of the negative characteristics borne of economic dependence (Halseth and Sullivan 2002:25). Incorporation decreases the control that companies have over the structure and development of towns, and encourages, according to Lucas (1971:Ch.5), their maturation. Incorporation intends to alter the control of space

although the purpose of the space remains the same. It begs to question whether incorporation can help with resilience if the purpose of the towns remain the same. The resulting instant towns are typically planned, municipally governed, and demonstrate a more stable population. The municipal government releases the companies from their 'paternalistic' roles (McCann 1978, Beckley 1996) and allow the towns to develop beyond the control of the industry (Porteous 1970b). Researchers argue that despite the intentions of this legislation, many of the problems remain because the causes, such as economic instability in global commodity markets and the gender biases of industry, were not addressed by the legislation (Bradbury 1980, Halseth and Sullivan 2002:24). Nevertheless, the more stable population and decreased sense of impermanence encourages the development of commonalities based on place, which in turn encourages interaction and resilience.

After the Second World War, planners adopted methods to address issues of transience and impermanence by implementing comprehensive planning (Larsen 2005). Comprehensive planning incorporate not only physical planning, but also social, political, and economic planning (Bowles 1992). Clarence Stein, a prominent American planner, believed that through comprehensive planning, the physical layout of a town could be designed to create a place that could adapt and change (Hodge 2003:9, Larsen 2005). Stein (1954) felt that structure and planning could be used to create spaces conducive to interaction. These planning principles were applied to many instant towns in British Columbia.

McCann (1978) describes the patterns of comprehensive planning evident in post-Second World War resource towns as zoning (resource industry, town center, service industry, and

residential), street hierarchy, green space, and pedestrian access. Many of the comprehensive planning features applied to instant towns emphasize socialization and interaction (Bowles 1992, Bothwell *et al.* 1998, Grant 2000). Comprehensive planning encouraged the development of a connection to place, with the intention that increased investment in place would result in long-term residency and decreased mobility. The built environment allows for the development of social relations and expressions, allowing people to feel comfortable and stable in their place; thereby increasing the desire to stay (St. John *et al.* 1986, Rotman and Nassaney 1997, Brown 2001). Clarence Perry was a sociologist-planner (1872-1944) whose philosophy stressed the importance of intimate face-to-face association for the development of neighbourhoods (Campbell 1990, Bolland and McCallum 2002, Hall 2002:129, Hodge 2003:51). Clarence Stein employed Perry's philosophy and developed super-block planning that employed hierarchical street networks to develop neighbourhoods that would be mostly self-sufficient (Hodge 2003:Ch.2). Land-use planning, the assignment of specific purposes to specific pieces of land, was implemented to further encourage interaction (Hall 2002:60). This type of planning introduced the division of land into 'zones' based on their intended uses such as commercial, industrial, and residential (Porteous 1970b, Grant 2000, Baxter and Ramlo 2002).

In instant towns, the combined characteristics of prescient construction, municipal government, and comprehensive planning were intended to encourage interaction and allow for the development of place-based identities. Theoretically, this would lead to a less transient population with a vested interest in the community (Bradbury 1980). The planning principles seek to structure and encourage interaction in order to increase connections to place, decrease transience, and thereby enhance the potential for resilience.

2.2 Commonalities

Comprehensive planning principles intend to influence interaction, however, interaction is also structured by commonalities and various other social factors. 'Commonality' is a connection between individuals that can be based on the sharing of identification, relations, interests, or place (Brubaker and Cooper 2000, Chavez 2005). In resource and industrial towns, frequently acknowledged commonalities include those based on gender, ethnicity, religion, socio-economic class, type of work, permanence of work, family type/size, housing tenure, and length of residence (Lucas 1971:Ch.1, Bowles 1992, Halseth and Sullivan 2002:Ch.10). These commonalities play important roles in organizing and structuring interaction (Gill 1990, Pavey *et al.* 2007).

2.2.1 Attributes

The need to belong and be accepted results in the desire to find others who share common attributes, and develop groups based on these attributes (Martinez-Brawley 1990:27, Chavez 2005). A person can relate to others by how they identify themselves and develop a sense of belonging. The sociological perspective of social identity is the identification by oneself or an 'other' that is determined primarily by categorical attributes (Grace and Woodward 2006:Ch.1, Brubaker and Cooper 2000). Categorical attributes are those which categorize individuals based on sharing or not sharing an attribute such as gender or ethnicity. Attribute-based commonalities can develop in places and create small communities within the larger town setting such as ethnic groups, gender and age based groups, groups based on socio-economic status, and even based on which shift is worked at the local industrial plant (McCann 1978, Gill 1990, Chavez 2005). Attribute-based commonalities tend to be the most exclusive since attributes are particular and specific.

Commonalities based on job-type or social class are common in resource and industrial towns (Lucas 1971:144, Gill 1990). Knox (1995:41) remarks that, "personal income is the single most significant indicator of inequality and differentiation." Individuals who work closely together and perform similar jobs share that commonality. They often have similar work schedules which facilitate interaction (Gill 1990) and they earn similar wages. In resource and industrial towns a division between managers and labourers often exists, and even further divisions among part-time, seasonal workers and full-time, long-term workers (Himelfarb 1977, Randall and Ironside 1996). Schulman and Anderson (1999) found hierarchical social organization in instant towns and argued it is a reflection of hierarchy within the industry. LeBlanc (2003:Ch.8) notes the existence of 'occupationally-based socialization' in the town of Cassiar, BC, where the socializing of adults fell along lines of management and hourly-wage earners. In company towns, management housing is generally segregated from the workers, and full-time permanent workers are segregated from transient part-time workers (Porteous 1970a, Herkes 2004:Pt.IV). While this segregation decreased in instant towns, it continued to some degree since home ownership was attainable based on wage, and wages also determined the size and location of homes (Bradbury 1993). Neighbourhoods created by individuals sharing similar wages and possible job-types are not unusual (Campbell 1990, Arthurson 2002).

Commonalities based on gender are not unique to resource and industrial towns, however, gender issues are often studied in these towns because of the male dominance of the economy (Halseth and Sullivan 2002:Ch.7). Many researchers acknowledge the important role of women in developing social relationships (Lucas 1971:55, Bell and Ribbens 1994, Reed 2003, Edwards 2004), however, the lack of services for women and children, coupled with a

lack of employment opportunities for women, can result in resource towns seeming isolating

and oppressive to them (Valentine 2001:251). Reed (2003:373) researched the marginality of

women in forestry communities, claiming that "women were considered part of forestry

communities only when they were attached as partners to male workers". Women often find

it difficult to contribute to society while the economy is dominated by men; the common

result is participation in volunteer groups and organizations (Halseth and Sullivan 2002:170).

Participation in community organizations allows women to develop and maintain a sense of

community (Brandth and Haugen 1997, Teather 1997). Men, on the other hand, tend to

develop their social relationships through their job (Gill 1990). Gender, therefore, structures

how and with whom individuals interact.

Commonalities in resource and industrial towns are also based on shared age. In towns where

the dominant work force tends to be young, able-bodied males, the youth and aged are often

marginalized (Valentine 2001:123). Halseth and Sullivan (2002:Ch.10) remark that small

towns often have very active youth and senior's groups, and as with women, the participation

in social organizations allows these groups to develop and maintain a sense of community.

The desire for adolescents to socialize amongst themselves is hampered by the isolation and

lack of mobility (Valentine 2001:261). It is important for the towns to encourage the

development of these organizations in order to maintain their populations (Lucas 1971:Ch.5).

The division in access to means of participation indicates that age structures interaction.

Religion often serves as a means of creating and maintaining commonalities (Martinez-

Brawley 1990:44, Mitchell 2006). Churches and religious groups serve an important social

role in resource and industrial towns by providing support, sponsorship, and volunteers for

many community programs (Halseth and Sullivan 2002:217). Lucas (1971:Ch.13) notes that it is rare to find multidenominational churches, even in small towns, indicating that the particularities of individual denominations are important and can serve to structure interaction.

The length of time that an individual lives within a town affects their interaction (Everitt and Gill 1990, Cuba and Hummon 1993). Length of residence can act as a means of increasing comfort and loyalty to a town which can affect how people interact (Reimer 2004). Robinson and Wilkinson's (1995:146) study regarding cohesion in a remote mining town, found that length of residence is "positively and significantly related to [neighbourhood cohesion]". Their research found that length of residence affected how and with whom they interacted. Marshall (2001) found that on the eastern Canadian island of Grand Manaan, newcomers and even returning residents have feelings of exclusion that structure their interaction. It is evident that while place structures interaction and the development of commonalities, the length of residence further structures relationship development.

Finally, ethnicity is a source of commonality in resource and industrial towns. The physical labour with a promise of high wages often attracted new Canadians to work in resource towns (Lucas 1971:Ch.2). The result was often large identifiable ethnic groups (McCann 1978). For Belshaw (2002:Ch.5), the divisions between British miners, Asian miners, and First Nations miners was evident in the Nanaimo, BC coal fields. Chavez (2005) remarked that the town he researched seemed to have two distinct communities based on ethnicity. Also, language restrictions and ethnicity are occasionally attributed to differential accessibility to jobs, resulting in many ethnic groups also sharing similar employment

(McCann 1978, Halseth and Sullivan 2002:163, Reed 2003, Chavez 2005). It is clear from these examples that ethnicity can play a role in structuring interaction in multi-ethnic towns (Anthias 2001).

Numerous commonalities structure interaction in resource and industrial towns, including those addressed in the previous section: job-type, social class, gender, shared age, religion, length of residence, and ethnicity. Previous research has provided many examples that these characteristics structure interaction. Other social factors, however, affect interaction in these communities as well.

2.2.2 Interests

Commonalities based on interest are more fluid than those based on categorical identifiers since individuals have multiple interests and many of those interests are non-exclusive. In a single-industry instant town, most of the inhabitants work in the industry or have an immediate tie to the industry. These are people who share commonalities which are not necessarily tied to categorical identifiers or to place. The interest and participation in the industry act as a shared commonality among the inhabitants (St. Martin 2006). The shared interests result in the interaction between managers and workers, and since the labour pool is restricted by location, this interaction forms ties that influence hiring, promotion, and the maintenance of employment within the community (Tolbert *et al.* 2002). Relationships may be further reinforced in cases where individuals already know each other prior to moving to this location (Gill 1990). Interest-based commonalities also form based on interests in similar activities such as sports, arts, and recreation.

Interaction is structured by commonalities in that individuals interact with each other and develop relationships based on commonalities, be they based on interests or shared characteristics. Social interactions of any kind play an important role in empowering the participants in the construction and reconstruction of identities (Bryant 1995, Cox 1998). The importance of interaction is demonstrated by Freudenburg's (1986:57) research into the changes in the density of acquaintanceship in a boomtown which argued that despite rapid growth, interactions at the individual level continued and allowed for the maintenance of 'psycho-social morale'. Further, individual interaction accounted for half of the factors used in determining the level of neighbourhood cohesion in Robinson and Wilkinson's (1995) study of a remote Canadian mining town. Wellman and Wortley (1990) found that how and why people interact with each other affects how they support each other. Therefore, interaction structured by commonalities plays an important role in the development of resilience.

2.3   Interaction

Interaction, no matter how it is structured, often develops trust and networks between individuals and groups (Wellman and Wortley 1990, Hofferth and Iceland 1998, Wallis 1998). Interaction is the foundation of social capital, social cohesion, community capacity, and resilience. These phenomena are interrelated in a complex, recursive relationship, and are affected by factors of inclusion and exclusion that structure interaction.

Trust acquired through interaction is considered to be 'social capital' and it can function as a source of control, support, or benefit (Portes 1998). Falk and Kilpatrick (2000:103) explain that, "social capital is the product of social interactions with the potential to contribute to

social, civic, or economic well-being of a community-of-purpose." Individuals can draw upon social capital for support as well as obtaining alternatives to limited local services or amenities (Portes 2000, Whittaker and Banwell 2002, Lelieveld 2004).

Whittaker and Banwell (2002) relate the need and desire to acquire social capital to the accessibility and availability of services. When services are unavailable, individuals can access similar services through social capital. An increase in social capital, through interaction, encourages groups and individuals to provide services varying from financial to social control (Portes 1998). Furthermore, the type and scale of interaction between individuals influences the reciprocation of social capital (Wellman and Wortley 1990). On the island of Grand Manaan, Marshall (2001) noted that in order to cope with husbands' long absences, the women of the island interacted in order to maintain social relationships. In addition to social needs, inadequate access to public services increases the need to acquire social capital (Hofferth and Iceland 1998). Social capital is important to resilience because the building of trust results in increased commitment and confidence in relation to individuals, groups, or the community (Gill 1990, Lochner *et al.* 1999, Hays and Kogl 2007).

Interaction also results in the development of 'social cohesion'. Social cohesion develops through interactions based on commonalities and increases with increased interaction (Davidson and Cotter 1986). Developing relationships based on different commonalities, or intersectionality, results in networks of trust (Beckley *et al.* 2002). A cohesive community or town has an increased chance to be resilient resulting from the networks of trust that serve to bind them together (Randall and Ironside 1996, Sullivan and Halseth 2005). Social cohesion

is affected by factors such as inclusion and exclusion, intersectionality, and social organization participation which in turn affect resilience.

The processes of inclusion and exclusion can also result in social divisions and hinder social cohesion across those divisions (Anthias 2001, Garland and Chakraborti 2006). Social divisions are the manifestation of divisions between social groups created and asserted by these processes (Wotherspoon 2002, Reimer 2004). Inclusion and exclusion each contribute to potential social barriers, restricting access to membership either actively or passively (Vessilinov *et al.* 2007). The processes of inclusion and exclusion require the existence of group criteria upon which membership is based. Inclusion is the process that allows membership into a group, in that the individual meets the requirements to be included and participate in the group. Exclusion is the process that denies admittance to a group based on an individual's lack of required characteristics. The development of these social divisions can result in communities within communities as noted by Chavez (2005) who identified two distinct ethnic communities within one town. In Chavez's research, there was very little interaction between the communities, resulting in division rather than cohesion. Interaction also reinforces group identities through the sharing of information (Saglio 1991, West and Fenstermaker 1995, Worster and Abrams 2005).

Inclusion within a group does not always result in exclusion from other social groups. 'Intersectionality' allows for participation in multiple groups, and fosters interaction between groups (Burman 2004, Valentine 2007). Intersectionality refers to the intersecting relationships between different groups whether they are based on categorical commonalities or interests (Valentine 2007). A town is inhabited by individuals who have multiple,

intersecting social characteristics, and who may belong to multiple social groups (Kaufman 1959, Burman 2004). The intersectional and multiple character of social categories and commonalities allows for interaction between groups (West and Fenstermaker 1995). It is the multiplicity of categories that creates the differences among resource communities noted by Randall and Ironside (1996) in their economic geography of resource towns. The intersectionality allows for the development of social cohesion as individuals develop relationships with multiple groups of interrelated individuals (Jenkins 2005).

Social cohesion further develops through participation and interaction in community organizations and groups (Teather 1997, Wilson and Musik 1997, Jones 2000). Kaufman (1959) found that actions and participation can measure interaction and that such interaction defines the level of community cohesion. Hays and Kogl (2007) suggest that participation acts as an investment in place and a commitment to community indicating that participation serves to bond people together through place. Interaction through voluntary organizations should, therefore, increase social cohesion. Participation allows individuals different ways to show their participation and inclusion in place (Cuba and Hummon 1993, Teather 1997, Hays and Kogl 2007). Social organizations provide opportunities for individuals to come together, become part of a group, and interact with others who share common interests, attributes, or goals. As mentioned previously, individuals are able to gain membership, and participate in multiple groups. Sullivan and Halseth (2004) found that voluntary organizations in Tumbler Ridge played an important role in the development and maintenance of social cohesion within the town. Through the development of networks based on social organizations, a town or community can create cohesive bonds.

Saglio (1991:538) stresses the importance of interactions by explaining that a 'failed social exchange' results in the impairment of the community, meaning that if interactions are not realized, the community suffers. Interaction allows individuals to relate to each other and in so doing, creates cohesion amongst them (Putnam 2000:22, Beckley *et al.* 2002). Allowing for interaction across a variety of scales increases the cohesion of those scales. While inclusion and exclusion act to define and determine groups, intersectionality allows for the participation and inclusion in multiple groups (Valentine 2007). Participation in social groups and organizations provides opportunities for interaction and contributions to social cohesion through the development of networks of relationships (Hays and Kogl 2007). Increasing social cohesion lends to increased 'community capacity'. It is this capacity that allows a town or community to face stresses and challenges.

Community capacity is the ability to work together to overcome hardships and to achieve common goals that will allow for resilience despite change (Jackson *et al.* 2003). In order to attain this capacity, a community must have both social cohesion and social capital developed through interaction (Temkin and Rohe 1998). Threats often serve to identify and define a cohesive unit through the necessity to come together to address the threat (Dalby and Mackenzie 1997). The trust inherent in social capital and the networks inherent in social cohesion can be drawn upon to address such threats or needs.

Resource and industrial towns are susceptible to boom and bust periods which lead to threats such as closure of the primary place of work for the residents (Bradbury and St Martin 1983, Bowles 1992). For example, the closure of the Quintette Mine in Tumbler Ridge, BC, threatened the existence of the town. The community drew upon existing social capital and

encouraged interaction among the residents resulting in a community prepared to offer mutual support and ready to challenge the threat (Sullivan and Halseth 2005). Randall and Ironside (1996:23) argue that, "despite the inevitable booms and busts facing these communities, the population and labour market are extremely resilient to change, and households put into play a whole host of adaptive strategies to counter crises".

Community capacity is, therefore, the ability for a community or town to come together in times of need (Dalby and Mackenzie 1997, Beckley *et al.* 2002). This ability is crucial for resilience. Jackson *et al.* (2003:345) define community capacity as, "the potential of a community to build on its strengths in order to work towards and achieve its goals and dreams." If a town or community is characterized by a lack of interaction, social capital, and social cohesion, the lack of trust and networks will limit the ability to work together and overcome challenges or threats. In resource and industrial towns that are susceptible to external factors, it is important for the residents to develop the capacity to deal with issues that may arise from this susceptibility.

2.4 Summary

Resilience in resource and industrial towns is contingent on many factors. The literature review indicates that resilience relies on the capacity of a community to come together in times of need (Jackson *et al.* 2003). This capacity develops through the creation of networks and trust associated with social cohesion and social capital. Each of these is a result of interaction which is structured by place and by social factors (Campbell 1990, Temkin and Rohe 1998, Whitaker and Banwell 2002).

Isolation, coupled with the influence of industry, permeates all aspects of community in resource and industrial towns (Bowles 1992, Randall and Ironside 1996). These characteristics can help or hinder resilience. They can function as commonalities or they can deter residents from long-term residence. In comprehensively planned instant towns, design elements such as public walkways and greenspaces, commercial centres, and recreational facilities are implemented to encourage interaction with the goal of achieving place resilience (Stein 1954, Hodge 2003:50). Planning serves to give purpose to place beyond the resource and industry.

Identification and interaction result in distinct interest-based and place-based communities that exhibit different cohesions, different social capitals, and different capacities at various scales. Increased interaction and cohesion allow for the accumulation of social capital which can be drawn upon when necessary to demonstrate community capacity and resilience. Therefore, in order to understand resilience there must be an understanding of the factors that structure interaction including place and identification. This thesis will examine the factors structuring interaction in an instant town and whether the comprehensive planning of the town facilitates the development of resilience.

Chapter 3 The Instant Town of Kitimat

3.0 Introduction

This is a case study of the planned instant town of Kitimat, in north western BC (see Figure 3.1). Kitimat was built in 1954 to provide housing for the workers at a new aluminum smelting plant built by Alcan. This chapter presents an historical description of the governance and economic influences within the town, followed by a description of the evolution of the physical layout of the town from its comprehensive planning roots, and concludes with a look at the town's demographic and social organization.

Figure 3.1 Map of British Columbia
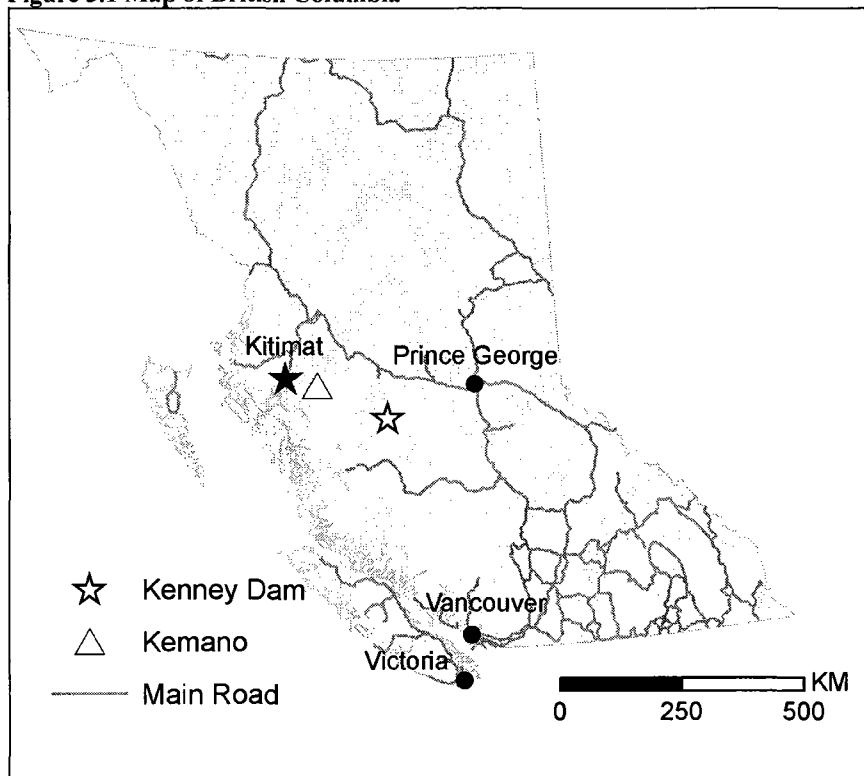
Source: Author

3.1 History

Kitimat Valley was chosen in 1950 by Alcan because of its potential for the development of a hydro-electric project (Kenney Dam and Kemano power station, see Figure 3.1), a smelter, and a port (Beck 1983:Ch.5). These elements would ensure the self-sufficiency of Kitimat, at least as far as Alcan was concerned. Kitimat was a resource town unlike any other in its time. Alcan was adamant that Kitimat not be a 'company town', and there was no intention of the company owning housing or controlling business endeavours beyond the smelter (Beck 1983:49). The provincial government and Alcan worked together to plan and develop a town that would serve the labour needs of the Alcan projects as well as be autonomous and self-sufficient.

In order to achieve their goals, Alcan hired Clarence Stein to plan the town. Clarence Stein was a major proponent of comprehensive planning during its inception and his planning principles influence how we view and approach modern land use (Hodge 2003:Ch.2). His key contributions include the development of a street pattern, called the Radburn style, which has main arteries radiating towards a city centre and then cul-de-sac style residential roads to minimize the affect of traffic in residential areas and maximize the face-to-face interaction of the residents (Hall 2001:60). Stein was given the opportunity, by Alcan, to plan the first Instant town in Canada, Kitimat. The desires of the planners and the company are nicely expressed in this article from Architectural Forum (Stein 1954:134):

> The purpose of Kitimat is the industrial success of the plant, that
> success will depend on the degree that the workers are content.
> Unless the town can attract and hold industrial workers, there will be
> a continuous turnover and difficulty. The worker must be enthusiastic
> about Kitimat as a place to bring up their families. It must become the
> town they are going to make their own. There is much to contend
> with in Kitimat, climate, remoteness, strangeness. Men will pioneer

for a time in the wilderness for good pay and plenty of food and a
free trip every two months. However, labour turnover is incompatible
with the aluminum industry because lengthy training is required for
workers. At Kitimat, the setting for a good life must be hewn out of
the unknown wilderness. Pioneers must become old-timers bound to
Kitimat by their love of the town and its unusual qualities.

It is clear that the success of the company remained the priority; however, it is acknowledged

that a well planned town is important to retain a workforce and ensure that success.

To ensure that "Kitimat will be self-governing and not a Company town. The Municipality of

Kitimat was established on March 31st 1953" (*Northern Sentinel* 1954b). However, despite

the existence of a municipal government, and the apparent preclusion of Alcan as a

paternalistic feature, membership in early councils belonged to Alcan employees. An

advertisement, paid for by the United Steelworkers of America, in the *Northern Sentinel* from

March 3 1955(b) expressed the union's concern that Alcan funded chosen individuals in their

home purchases in order to make them eligible to become council members, thereby

demonstrating Alcan's power behind the council. Over time Kitimat's economic base has

diversified but Alcan remains an important economic power.

3.2 Planning

The Kitimat Valley has been occupied for thousands of years: initially by the Haisla who

settled in the valley that was rich in fish, game, and berries; and followed by European

pioneer settlers who moved into the valley with rumours of a railroad terminus in the late 19th

century (Beck 1983:Ch.1, Varley 1981). The Haisla remained in the valley and Kitamaat

Village, located 15 kilometres from the town of Kitimat, is currently home to 700 Haisla

(Haisla First Nation 2009). The original railway construction did not occur and the area was

industrially undeveloped in 1951 when Alcan decided to develop the new town of Kitimat. This provided the opportunity for the town to be completely planned and developed from the ground up.

Clarence Stein's original plan for Kitimat included the development of three 'superblock' neighbourhoods. Each of the neighbourhoods could be self-contained with access to elementary schools and commercial services (Stein 1954). The development of neighbourhoods was facilitated by zoning which separated the industry, commercial, and residential areas. When early residents questioned the zoning, the Reeve replied, "the zoning by-law is not designed to frustrate people in their home use, but rather to protect property values and ensure a maximum of orderly growth for the best use of the community" (*Northern Sentinel* 1954a). The zoning created specific areas of commercial use, which became commercial centres. The central locations for commercial activity encourage residents to come together.

The residential neighbourhoods were planned with cul-de-sac and horseshoe roads surrounded by ample park space and interwoven with several walkways. The main arteries lead to a commercial town centre (Figure 3.2). The hierarchical street style was intended to minimize the affect of traffic in residential areas and maximize the face-to-face interaction of the residents (Hall 2002:Ch.4). Interwoven among the streets is an elaborate system of walkways, intended as alternate means of local mobility. The original plan encouraged the houses to be orientated towards the walkways and greenspaces rather than the roads, and discouraged the construction of fences to separate the private from the public (Larsen 2005). These principles intended to encourage interaction through the sharing of the public areas. Despite intentions to reduce barriers between the public and the private, many homeowners

construct fences to increase their privacy, and houses built after the initial building periods

face the streets rather than the walkways and greenspaces.

Figure 3.2 Map of Kitimat
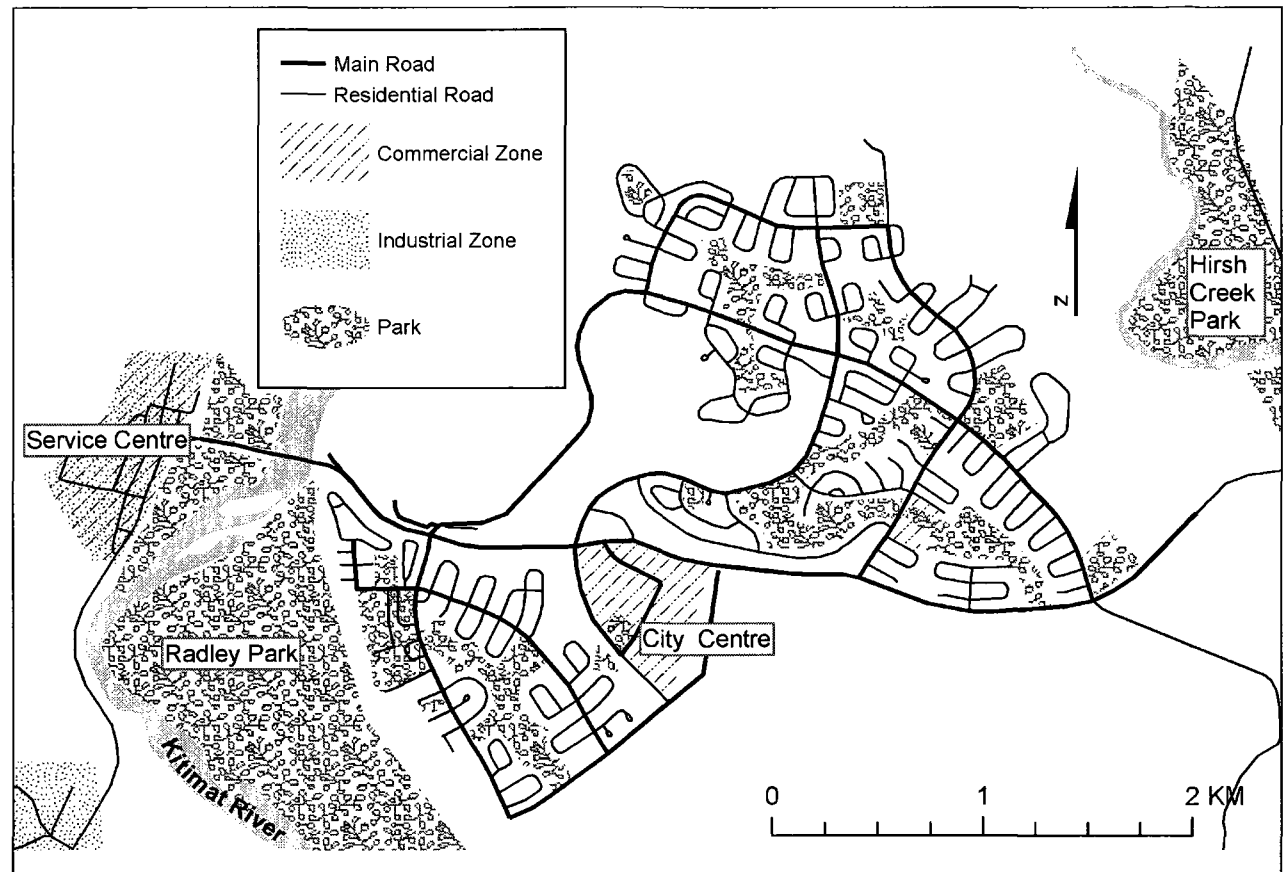
Stein incorporated mixed housing into his plan for Kitimat. Single detached houses, row

houses, and low-rise apartments are found mixed within the neighbourhoods. The application

of mixed housing helped achieve two goals: a desire that "the town must be and look

complete at every stage", and to discourage separation based on social divisions (Stein

1954:140, McCann 1978). Stein's plan was to create a town where all neighbourhoods were

accessible to all residents by providing a variety of dwelling options.

Inherent in Stein's (1954) plan for Kitimat was the ability for the town to grow spatially and

socially. The plan was developed in anticipation of growth with planners envisaging a

community of 30,000 to 50,000 residents. To be successful, the plan included the

maintenance of planning staff after the initial planning stages. Stein (1954:140) explains that,

"too rigorous a plan, too fine a finish, may forestall development, dampen citizen initiative".

By providing a venue for citizens to participate in the development of the town, the plan

allows for increased investment in place and increased participation, strong factors that lend

to growth and resilience. Despite Kitimat's population maximum of 13,422 in 1982 (BC

Statistics 1976-2008), many of the planning principles initially developed for the town have

continued to be applied (District of Kitimat 1987, Stantec 2007).

According to the Official Community Plans (OCP) of 1987 and 2007, development in the

residential and commercial areas would be most successful if they followed the original

master plan. The majority of Kitimat's residents live within the three neighbourhoods of

Kildala, Nechako, and Whitesail, originally developed by Stein, and constructed during the

first decade of Kitimat's development (Figure 3.3, District of Kitimat 1987, Stantec 2007).

There are a few exceptions, including the development of the Cable Car subdivision, which

lies seven kilometres north of the City Centre, and was built up between 1977 and 1981 to

suit individuals who preferred a rural neighbourhood (Stantec 2007). New subdivisions

extend from the existing neighbourhoods, including Forest Hills Heights (extending from

Whitesail) and Strawberry Meadows (extending from Kildala).

Figure 3.3 Kitimat Neighbourhoods
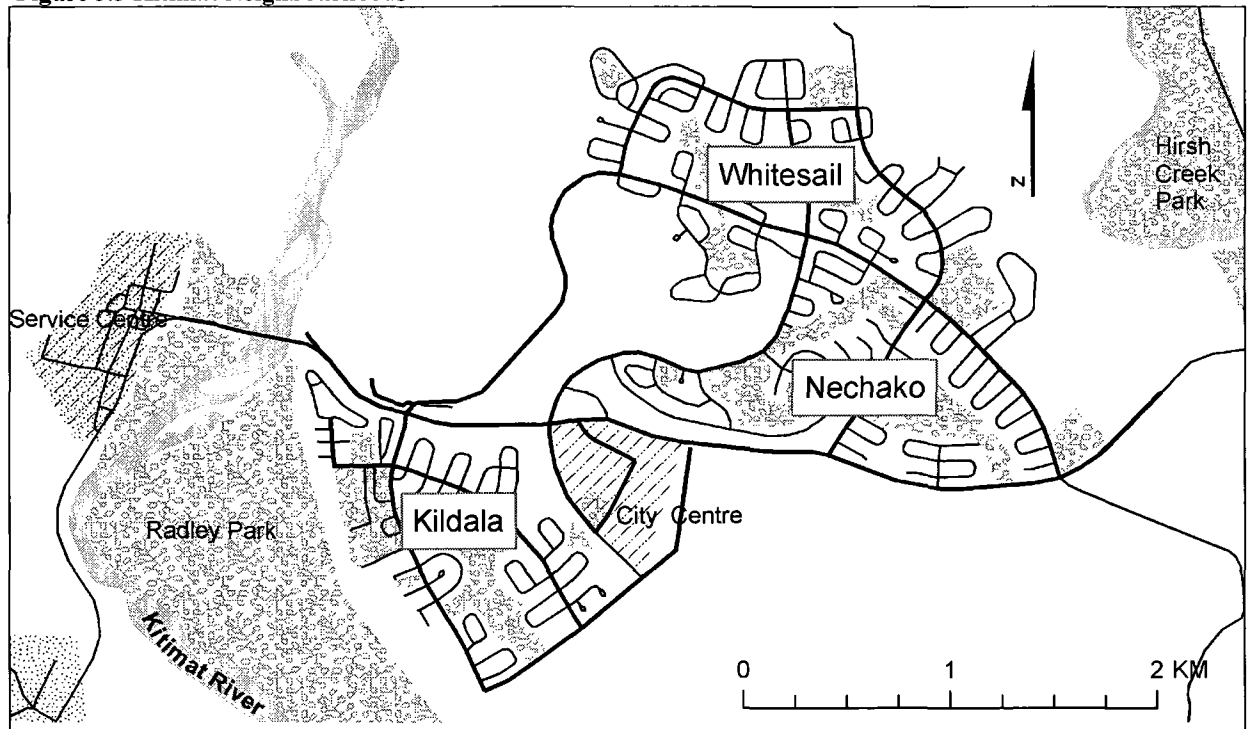
Source: Author

The neighbourhood designs were originally developed to create self-contained, self-serviced

neighbourhoods (Stein 1954). Without population growth, Kitimat cannot warrant the

development of new amenities and neighbourhood centres; therefore, the new subdivisions

allow for residential development that makes use of the existing amenities in the adjacent

neighbourhood. Also, declines in population have resulted in decreased commercial offerings

within the neighbourhoods. The outcome is an increased dependence on the City Centre as a

primary commercial zone.

The walkways and greenspaces in Kitimat continue to be important components of the town.

However, new subdivisions do not have these features incorporated into their design and are,

therefore, not connected by the walkways, and have limited accessibility to the rest of the

town.

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Preference for single family dwellings on individual lots characterizes later construction in

Kitimat (DOK 1987) (Table 3.2). This trend affects the amount of mixed housing within

these neighbourhoods. The Cable Car neighbourhood, for example, has no multi-family

dwellings, is not contiguous with the other neighbourhoods, and was developed to provide a

more 'rural' atmosphere for residents.

Table 3.1 Kitimat Dwelling Type, by Year

Dwelling Type	1971*	1976	1986	2006
Single-detached house	46%	47%	63%	63%
Other dwelling type (semi-detached, row, duplex, low-rise apartment)	49%	47%	33%	34%
Moveable dwelling	5%	6%	4%	3%
One family households	2640	2855	2930	2650
Multiple-family households	65	45	25	25
Non-family households	420	425	595	950

*1966 data not available used 1971 in lieu   Source: Statistics Canada 1971, 1976, 1986, 2006a

Stein's plan for Kitimat intended to create a town where the physical layout would encourage

interaction and lend to the development of social cohesion which would potentially decrease

transience common to resource and industrial towns. Furthermore, Stein's plan allowed for

growth and future development within the principles of the plan. Over time, while changes to

the plan have affected Kitimat's physical layout many of the principles initially applied by

Stein remain.

3.3   Demographic and Social Organization

The town of Kitimat has a population of 8950 (Statistics Canada 2006). In many ways, the

demographic character of Kitimat's population is a reflection of the influence of industry

over time. Kitimat today is a community with a very diverse population in terms of its

demographics and its social participation. The population is introduced in this chapter by

reviewing Kitimat's historical population, the cultural and ethnic diversity found in Kitimat,

the aging of the population, and finally the potential for participation within the town.

Kitimat continued to grow after its whirlwind inception. Over the following decades, the

Eurocan Pulp Mill and Methanex methanol production plant joined Alcan, in 1966 and 1981

respectively, to form the 'big three' industrial businesses in the town. By 2001, these three

companies employed 43% of the working population (Statistics Canada 2001). Despite

seeming diversification, the economy was still dependent on resources and with increased

costs associated with production, Methanex was forced to close its doors in 2006, while

continued stresses in the forestry industry has resulted in current decreased employment at

Eurocan[1]. The result is a decrease in population since 2000 (BC Statistics 1976-2008) (Figure

3.4).

Figure 3.4 Kitimat Population

Kitimat Population 1966-2006

——— Population: BC Stats ■ Population: Stats Canada
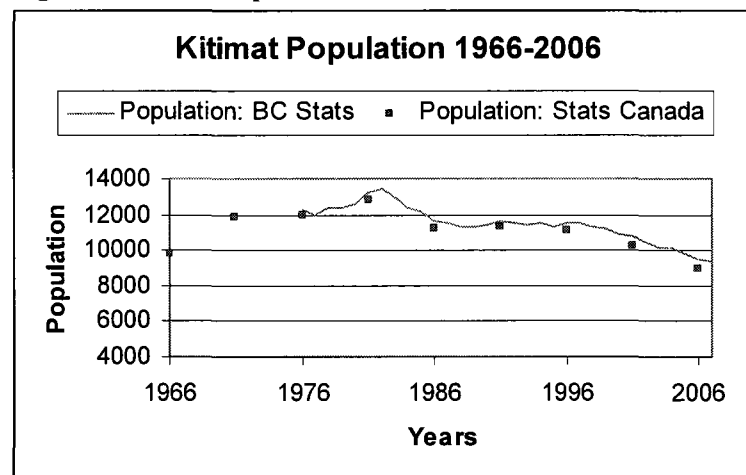
Sources: BC Statistics 1976-2008, Statistics Canada 1966, 1971, 1976,
1981, 1986, 1991, 1996, 2001a, 2006a.

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[1] West Fraser, the parent company of Eurocan, announced in late October of 2009 that Kitimat's Eurocan pulp mill would be closing permanently on January 31st, 2010 (*Northern Sentinel* 2009a).

Twelve years after people began to move into this town, the 1966 population (Figure 3.5) is dominated by young families with large numbers of workers 20-35 years old and high birth numbers which is characteristic of a town in the 'recruitment stage' (Lucas 1971:Ch.3). The 1966 population was 9,792 (Statistics Canada 1966), and it continued to rise as opportunities for work in industry continued to attract young families. Only 1% of the population was older than 60 years, a result of the young age of the town and its workforce.

Figure 3.5 Kitimat Population 1966
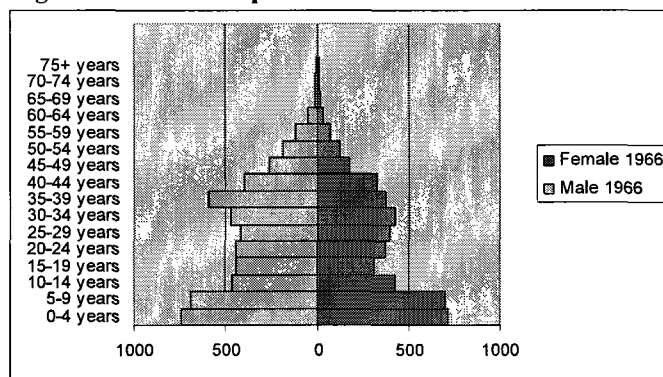
Source: Statistics Canada 1966

In 1986, a year of economic downturn in the country, the population of Kitimat began to decline. The 1986 population pyramid (Figure 3.6) is more balanced, with a slight 'indent' of 20-24 year olds, likely highlighting a trend to leave the community to pursue post-secondary education and employment which reflects Lucas' (1971:Ch.5) stage of 'maturity' characterized by a lack of job mobility and a propensity for youth out-migration. There is an increase in retired individuals from 20 years earlier. The gender profile for 1986 is far more balanced than that of 1966, an indication of greater opportunities for women in an industrial economy and the maturation of the community.

Figure 3.6 Kitimat Population 1986
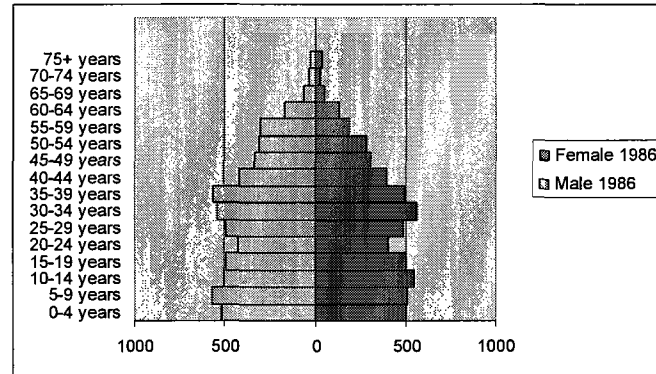
Source: Statistics Canada 1986

The 2006 census describes the majority of individuals in Kitimat as aged 30 to 64. The population pyramid (Figure 3.7) reflects the trend found in many rural and small town places of the out-migration of youth aged 20-29 seeking education and employment (Lucas 1971: Ch.5., Beshiri *et al.* 2004). When compared to population pyramids from Kitimat's history there is a trend of increasing number of seniors and retirees and a decrease in 20-35 years olds as well as children. As industry modernizes fewer job positions are available, and the existing positions require more specialization and training than those found in the early years. Youth are no longer able to get a job on the pot lines as soon as they graduate as did their parents. As a result, many youth choose to leave the town in order to obtain post-secondary education or to take other job possibilities elsewhere. Hanlon and Halseth (2005) noted increases in elderly residents in resource communities, and Kitimat is no exception. Residents are choosing to 'age-in-place', rather than retiring in a different town which is related to the connection to place that many long-term residents refer to in the interviews.

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Figure 3.7 Kitimat Population 2006
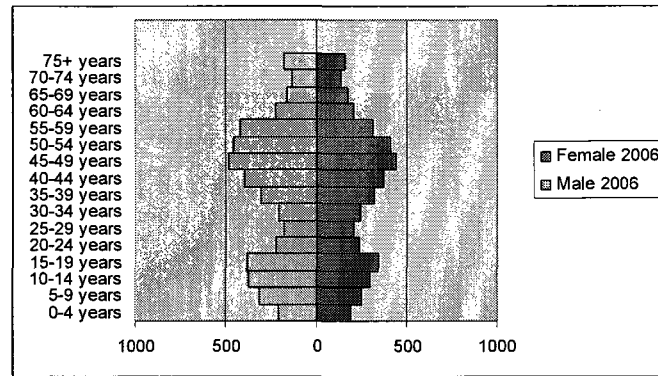
Cultural and ethnic diversity have always been an aspect of Kitimat's demography. Hallman

identified diverse cultures in 1956 (Corporation of the District of Kitimat 1958). In the early

years, Kitimat was known as a place where newly arrived immigrants could find work that

required few skills and provided good wages (Focus Group 2). Heritage Park is found at the

entrance of town and proudly displays flags representing the multiple ethnicities present in

the town (Figure 3.8). The cultural diversity is further evidenced by a number of cultural and

ethnic social groups such as: the LUSO Club (Portuguese), the Association des

Francophones, Francophiles du Nord-Ouest de la Colombie Britannique (French speaking),

the Kitimat Multicultural Society, the Fiji Canadian Association, the Italian Canadian club,

the Chinese Canadian Association, the Haisla youth group, and the Kitimat Sikh Society.

Many of these groups were formed during Kitimat's early years and continue to be successful

organizations, indicating that Kitimat continues to be ethnically and culturally diverse despite

other changes to its demographics over time.

Figure 3.8 Heritage Park, Kitimat

Source: Author

A sociologist was employed in the planning stages to ensure the social well-being of the people and the result was the support and encouragement to create and develop social organizations (Stein 1954). Today, these social organizations include institutional organizations, such as schools, hospitals, unions, firefighters, as well as volunteer organizations, such as the Rotary, Kiwanis, Legion, and religious groups. Many social activities were organized with the founding of Kitimat: a recreation department was created in 1955 (CDK 1958); Alcan sponsored a sports association (Kitimat Museum 2004); and celebrations such as Dominion Day continue to be celebrated by the community. A review of the local newspaper indicates that social groups have always been important to the community and is supported by the presence of a column devoted to community events and activities since the inception of *The Northern Sentinel* in 1954. A current list of 138 community organizations in Kitimat, which I compiled, using publicly available resources, indicates that social organizations remain an integral part of Kitimat's social plan (Table 3.2).

Furthermore, Jones (2000) found that community involvement increased with age, suggesting that Kitimat's aging community will continue to contribute to social organizations.

Table 3.2 Kitimat Social Organizations

Type of Organization	Number of Organizations
Arts and Crafts	7
Cultural Interests	11
Service groups	20
Community Services	26
Senior Citizens	2
Ethnic Groups	10
Youth Groups (not sports)	8
Women's Groups	4
Sports	43
Religion	7

Source: Kitimat Community Guide, *Northern Sentinel*, Kitimat Chamber of Commerce.

3.4 Conclusion

Kitimat is a relatively young town that was ambitiously planned and created. Clarence Stein planned Kitimat to become a prosperous and resilient community and employed many techniques to encourage that development. The organization of place plays an important role in the structuring and frequency of interaction. Over time, the composition of the community has changed and adjustments were made to the plan to address the current needs of the community. Kitimat's location, history, planning, demographics, and social organizations each play important roles in structuring interaction in the town. My research project explores to what extent these attributes affect interaction and whether the plan has succeeded in achieving those initial goals of interaction and resilience.

Chapter 4 Methods

4.0   Introduction

To address the success of Stein's plan for Kitimat, and determine if planning elements are encouraging or discouraging interaction, I approach this research with the idea that interaction is the foundation for the development of resilience (Wilkinson 1991:Ch.1). My research considers both the physical place and physical organization of the town, as well as participation and social interaction, and their roles in the development of resilience. I chose to conduct a case study to obtain a depth of understanding concerning the development of social capital and social cohesion, and whether the planning of Kitimat can be credited for local place resiliency. Case study inquiries allow the researcher to be more descriptive and possibly provide greater insight (Merriam 1988:Ch.1, Neuman 1997:331) to the structuring of interaction. Because Kitimat is designed and planned, and used as a model for other towns, it is a perfect candidate for a case study to contribute to understanding whether the theories applied in its planning were successful in practice (Yin 1994:47).

The case study is informed with a mix of both qualitative and quantitative methods. To compensate for the disadvantages inherent in any singular data collection method, I use multiple methods (Babbie 2004:113, Berg 2004:318). The various methods inform one another to create a more clear, in-depth understanding of what is structuring interaction and the development of resilience. Qualitative information, obtained from a focus group and interviews, supports and justifies the quantitative information obtained through Census and mapping data (Wellman and Wortley 1990, Hays and Kogl 2007). It is imperative that these methods are not mutually exclusive, but that they support each other to allow for increased understanding. To maintain a manageable amount of research it is important that methods

cooperate to reduce the amount and breadth of data (Creswell 2009:14). My research

includes measures such as reviewing local newspapers, using Census data, and GIS mapping

as well as interviewing key informants and holding focus groups. The use of interviews and

focus groups allows for an understanding of how individuals perceive the context described

by the other supporting methods.

My work was conducted over a two year period beginning in the fall of 2007 and finishing

the fall of 2009. The early stages of the research encompassed many unobtrusive methods

and included reviewing the literature available, compiling data for Kitimat, and performing

some preliminary analyses to support the interviews and focus groups. The interviews and

focus groups were conducted the summer of 2008. The following months were spent

reviewing and analysing the data I collected in order to present my discussion and

conclusions.

4.1   Unobtrusive Methods

I began the research project by compiling data from the Census as well as historical, primary

resources to help in developing an understanding of the background of Kitimat's planning

and population to provide a context for the themes that arise from the interviews and focus

group. The data provide information that can be corroborated (or not) by other methods

thereby playing an important role in data triangulation by using multiple methods to 'test' the

results (Babbie 2004:113). The unobtrusive methods that I use in this research include

Census data analysis, a review of local newspapers, and GIS analysis.

4.1.1 Census Data

To provide a historical socio-economic description of Kitimat, I compiled Statistics Canada data concerning Kitimat for the period from 1956 to 2006. The data available from 1956 - 1971 is regional, while the district municipality (DM) of Kitimat has Census data from 1971 to 2006. The data are analysed at the Census subdivision (CSD) level to allow for the greatest amount of temporal comparison and the highest level of resolution. Statistics Canada defines a CSD as an "area that is a municipality or an area that is deemed to be equivalent to a municipality for statistical reporting purposes" (Statistics Canada 2008b). Statistics Canada data provide valuable information to inform many of the categorical identifiers that influence interaction addressed in the literature review, including: length of residence, income, ethnicity, gender, age, and job-type. I explore these identifiers through the analysis of the Statistics Canada Census data, and analyse them in terms of changes over time.

The use of Statistics Canada Census data is helpful but not without its disadvantages. Some disadvantages include boundary changes over time and changes in the questions asked. Analysis at the CSD level is chosen to address issues of boundary change since the municipality has had stable boundaries. Changes in questions and data categories are addressed and concerned for each individual identifier. For instance, it is extremely difficult to make historical comparisons about ethnicity because of differences in definitions each Census year. Conversely, categories relating to income, population, and age are easier to compare historically because reporting of these variables has not changed. It is important to determine whether meaningful historical comparisons are possible for each category prior to analysis.

4.1.2 Newspaper Review

Newspapers provide data that allow for processes to be reviewed over time (Babbie 2004:335, Berg 2004:212). I reviewed the *Northern Sentinel*, Kitimat's local newspaper in order to help triangulate my other methods of research[2]. The newspapers provide background and supportive information to situate my research. The newspaper began publication in 1954, the year that Alcan opened operations, and continues today in both online and print formats. The newspaper record allows for a review across the entire span of Kitimat's existence.

The newspapers analysis provides background information and context for issues concerning planning elements as well as social organizations and participation in the town. This analysis helps to identify issues that affected social cohesion and community capacity over time. I used information from the newspapers to support arguments and themes identified by other methods of research. The disadvantage of using newspapers as a source is that the information published is authorised by editors whose biases are unknown and thus the information can be affected by ideological biases (Mullainathan and Sleifer 2002).

4.1.3 Mapping Techniques

The review of literature concerning interaction in resource towns noted that identifiers such as ethnicity, religion, socio-economic class, and job-type affect interaction and social

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[2] Due to the numbers of newspapers and the amount of time available for my research, I used a systematic sampling procedure (Babbie 2004:203). After reading every issue from one year, I found that many events and news items are repeated either in articles or in letters from readers. For the sake of time management, every fourth newspaper, was reviewed beginning with the first issue of the year (1, 5, 9, 13, 17, 21, 25, 29, 33, 37, 41, 45, and 49), which ensured that an issue from each month was analysed (Riffe *et al.* 2005:112). If an unfamiliar news item is commented upon, I refer to the original article whenever possible. Each year between 1954 and 1960 are reviewed, as well as 2000-2008. For the years in between, every 5th year (1965, 1970, 1975, 1980, 1985, 1990, and 1995) is reviewed. The rationale for this is an emphasis on the early, 'formative', years of Kitimat and then the most recent decade.

cohesion. This information is mapped using GIS software (ArcGis 9.3) to display spatial

distribution in order to support the analysis of interaction (Yeates 1998:335, Serrano *et al.*

2002). The maps provide a visual interpretation of how areas are characterized based on

identifiers found in the literature review and supported by Statistics Canada data. Physical

boundaries and barriers to interaction can be identified with the ability to view distribution of

social characteristics spatially. Visual representation allows clusters and divisions to be

'seen'.

Figure 4.1 2006 Kitimat Neighbourhoods
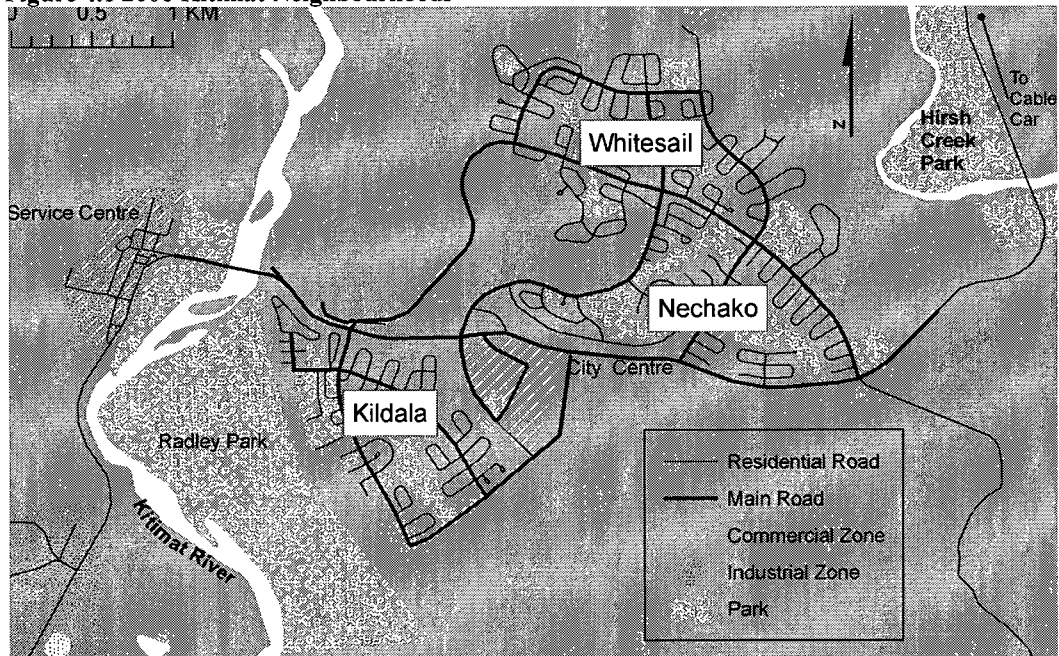
Neighbourhoods are used as the unit of analysis. Neighbourhoods in Kitimat are easy to

identify and define because they are bounded by the main roads (Figure 4.1). Also, streets

within the neighbourhoods are named based on a common theme. A resident explained that it

"is really easy, if the road is the name of a person, that is someone important in our town

history, you are in Whitesail. If it is a bird, you go to the Nechako area, if it's a river or lake

you go downtown, and if it's a fish you are out in Cable Car. It's pretty easy really"

(Interview 18).

Figure 4.2 2006 Kitimat Dissemination Areas (59490)
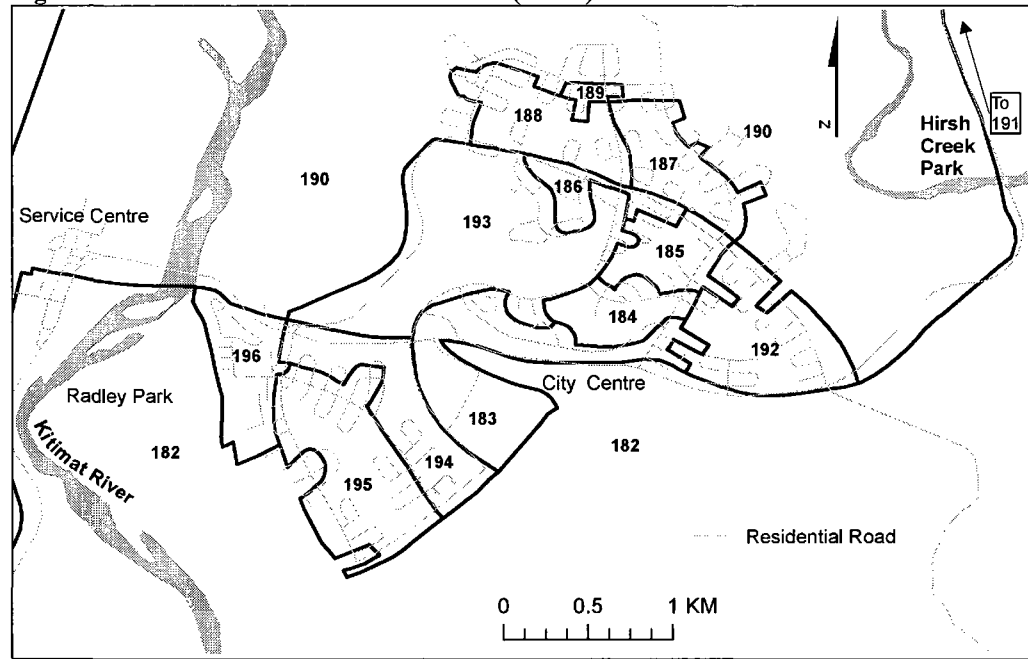
Each neighbourhood consists of multiple dissemination areas (DA) within the Kitimat

Census Subdivision (CSD) from 2006 (Figure 4.2). Dissemination Areas represent small

areas for which Census data are made available, or 'disseminated'. The DA boundaries tend

to follow roads and delineate areas with populations between 400 and 700 people (Statistics

Canada 2009). For the analysis, thematic maps are generated using Dissemination Areas

grouped into neighbourhoods in order to make conclusions relevant to the information from

the interviews (Table 4.1). In Kitimat, the DAs do not precisely follow the neighbourhoods,

in instances where DAs fall into multiple neighbourhoods they are assigned to the

neighbourhood where the most area of the DA is contained. The maps created illustrate some

of the identifiers that structure interaction in resource towns: specifically, income and work-

type. The data are illustrated based on the proportion of individuals within each group,

determined by Census data, in relation to the total population. By using a proportion or

percent, I can make comparisons between neighbourhoods despite differences in

demographics.

Table 4.4.1 Grouping of Dissemination Areas into Neighbourhoods

Neighbourhood	Dissemination Areas (Prefix: 59490)
Whitesail	187, 188, 189, 193, 190, 186
Nechako	184, 185, 192
Kildala	183, 194, 195, 196
Cable Car	191
Other (outside of 'planned' areas)	182, 190

Source: Statistics Canada 2006

The town is physically divided by a steep hill with the majority of the residential areas

located 'up the hill' and the commercial town center, along with some residential areas,

located 'down the hill'. The maps help determine if this physical barrier also acts as a social

barrier. This information is referenced during interviews and focus group discussion. The

maps generated are also compared to earlier spatial analyses such as that conducted by

McCann (1978) which allows for a general historical comparison of the spatial organization

of Kitimat residents.

The confidentiality features employed by Statistics Canada are important, however, they can

cause problems when researching DAs in towns with small populations. Statistics Canada

suppresses data if there are not enough individual respondents to maintain anonymity. For

example, all data are withdrawn if there are fewer than 40 individual respondents who meet a

criterion (Statistics Canada 2007). When the data concern income, the threshold for

withdrawal is 250 (Statistics Canada 2007). The result is that some data are unavailable to

produce thematic maps.

4.2 Obtrusive Methods

To complete triangulation and corroborate the trends noted in the previous methods, I conducted a focus group and individual interviews with current and past residents of Kitimat. Lochner *et al* (1999) note that investigations of social cohesion, a key element in resilience (Temkin and Rohe 1998), are typically approached by obtaining individual responses and aggregating them to the community level. They suggest that obtaining better 'community' level data may provide greater insight to the levels of social cohesion. The focus group session is developed to compile community level data, while the interviews were conducted to expand on themes derived from the focus group.

4.2.1 Focus Groups

Focus groups are organized to bring together a group of people to discuss a topic. Focus groups are an interactive tool where participants can collectively provide information about the research topic (Kitzinger 2008). This interaction allows the researcher to observe group dynamics as well as obtain a large number of opinions and ideas. While the planning, organizing, and completing successful focus groups is challenging, they serve a valuable purpose. The focus group was planned to encourage open discussion about the community and provide insight into how and with whom the different social groups interact. Finally, focus groups serve as a valuable orientation into the community and provide potential themes to be addressed and further explored in the interviews (Hopkins 2007, Mendis-Millard and Reed 2007).

Three focus groups of eight-ten people were planned in order to balance having enough people to stimulate conversation while not limiting participation opportunities within the two

hours allocated (Babbie 2004:303, Berg 2004:Ch.5, Cameron 2005). Participants were chosen based on their membership and participation in one of the more than 125 local organizations found in the town. One intention of the focus group is to determine whether or not the *potential* noted in the large number of community groups (Teather 1997) is *realized* through collective community capacity. Attempts to call each of the individuals who represented the social groups in town were met with very little enthusiasm. Given the large number of organizations, the participation in focus groups was not as great as expected and it became clear involvement in community organizations was not directly related to interest in research concerning the community. The local inter-agency committee was helpful in circulating requests to attend these meetings; this group's ability to bring together participants indicates a strong interactive network within the town. Furthermore, I attended a public meeting regarding revisions to the Official Community Plan (OCP), where I invited people to attend the focus groups. The result was one very successful focus group of 8 individuals, and two others where only one person attended and which were conducted as interviews.

The focus groups were held at Riverlodge, Kitimat's community centre in April of 2008. Participants included residents who were involved in at least one community organization. Any data from the focus groups are presented simply by their number (Focus Group 1, Focus Group 2, etc.) in order to maintain anonymity. The focus groups were held one week after the public OCP meetings. The meetings lasted two hours for the group and approximately one hour for the meetings conducted as interviews.

To provide contextual information about group formation and membership, each participant in the focus group was asked to complete a short, one page, questionnaire that provided specific information about the community organization that they represent (Appendix I-B). Using questionnaires is preferable because they gather more specific information than can be collected in focus group discussions and they provide important categorical information to inform the interpretation and analysis of the focus group discussion (McGuirk and O'Neill 2005).

The purpose of the focus group is to address the issues of participation and interaction among social groups in Kitimat as well as obtain a sense of how residents feel about the physical plan of the town. Questions focused on interaction, participation, and opinions about levels of local social cohesion (Appendix I-A). Participants were asked to name distinct areas of town and provide descriptions for each of those areas. The interactive discussion in the focus group allowed for more communal rather than individual themes to be assessed, it also allowed the participants to voice their pride and concerns for their community.

The focus group succeeded as an important introduction to the community. It provided me important contacts with residents of Kitimat, and also provided me with information concerning how residents perceived their town divided socially and physically. The data obtained during the focus group is used to develop and create questions pertinent to interaction, social cohesion, community capacity, and resilience in Kitimat.

4.2.2 Interviews

The literature review demonstrated that individual interaction serves as the foundation for the development of resilience. The goal of the interviews is to identify general themes that speak

to the development of resiliency. Key informant interviews were conducted, during the summer of 2008, to provide depth to the themes observed in the focus group, gain an understanding of how individual and group interaction is structured, and explore how social cohesion, community capacity, and resilience are perceived (Dunn 2005). Eighteen interviews were conducted and included 19 participants. Participants included current and past residents of Kitimat. Interviews were conducted often in the homes of the participants and occasionally in public locations such as the mall or a park. The identities of participants are kept anonymous. The participants were chosen based on a sampling framework determined after an initial round of interviews to ensure a broad community perspective on the research questions.

Interview participants were selected using a snowball technique (Babbie 2004:184). People met during the focus group were approached to provide lists of individuals who might be willing to participate in an interview. The response using this technique (having a known community member's reference) rather than the 'cold calling' approach used for the focus groups was overwhelmingly positive. After each interview, the participant was asked if they have any further people to suggest. The result is 19 participants.

Given the scope of the research question, I sought the views and input from a wide range of individuals within Kitimat. As a result, I chose not to conduct a deep ethnographic inquiry based upon recursive interviews and interactions with individuals. Single event key informant interviews were conducted to collect information with respect to a limited number of issues related to the topics of interaction and place resiliency. This approach follows

similar work on interaction and community capacity by Gill (1990), Falk and Kirkpatrick (2000), Sullivan and Halseth (2004), and Hays and Kogl (2007).

After visiting the community, conducting the focus group, and conducting 8-10 interviews, I was able to develop a sampling framework that allowed me to cover various categories deemed important by community members including: income levels, job-type, length of residence, ethnicity, and gender (Appendix I-D). Interview participants are identified throughout the text by the interview number, gender, length of residence, and whether they were employed in industry or not. For example: Interview 18, Female, left Kitimat, employed in industry. The labels serve to maintain the anonymity of the participants while providing characteristic information about the participants.

The interviews are semi-structured in order to direct questions to determining influences of interaction and resilience. The semi-structured nature allows for prompting beyond the initial questions in order to gain more information and allows for detailed answers that may reveal thinking processes and frames of reference (Dunn 2005, Neuman 1997:371). The use of open-ended questions can also lead to a number of disadvantages in the analysis such as having different levels of detail as well as the inclusion of irrelevant detail (Neuman 1997:241). Questions were developed from the themes noted during the focus group as well as those identified in the literature. The interviews varied in length from 30 minutes to 2 hours. In order to verify accuracy and to validate the analysis, participants were provided with a copy of the interview notes sent either electronically, or by mail. I had a good response to the follow-up, and only a few minor omissions were requested. Omissions were requested

to protect personal interests and have little effect on the analysis concerning interaction and resilience.

The interviews provide information concerning individuals' insights into their town. The sampling framework ensures that opinions are obtained from a variety of people with experience in Kitimat. Overall, the research was met with positive participation and participants were eager to share their opinions of the town.

4.2.3 Interview Analysis

The interview analysis was conducted using content analysis (Robinson 1998:428, Bailey *et al.* 1999, Cope 2005). The interviews and focus group materials were coded to generate themes and organize the data based on categories. Maxwell (1996:78) describes coding as a means to "rearrange [data] into categories that facilitate the comparison of data within and between these categories." The content analysis addresses both 'latent' and 'manifest' content in order to identify themes to explain what is structuring interaction, and what is affecting the resilience of Kitimat. All available content was analysed, and themes were derived from explicitly mentioned patterns (manifest) as well as those that are simply inferred (latent) (Babbie 2004:319). The interviews were recorded when possible, and notes were taken during the interview as well. Recording allowed me to be more involved in the conversation with the participant than writing notes (Hay 2005:95). Taking notes helped me to note possible prompts to be taken in the interview (Hay 2005:96). The interviews were transcribed from the digital recordings. The transcriptions were not verbatim and allowed for the omission of repetitive words and unnecessary pauses as well as false starts (Hay 2005:99). Coding serves to categorize phenomena in the data (Strauss and Corbin

1990:Ch.5). It is "the initial classification and labelling of concepts in qualitative data analysis" (Babbie 2004:377). I did three rounds of analysis. In Round 1, I created lists of terms and themes for analysis in the following rounds (Bailey et al. 1999). In Round 2, I determined if the themes and terms from Round 1 were present in the texts, and how often (Sherry 2004). In Round 3, I looked at the concepts and themes identified in the first two rounds and reconsidered them in terms of their relationships to one another as well as to the research question (Strauss and Corbin 1990:Ch.7).

I began Round 1 by brainstorming keywords and themes found in my initial reading of the notes from the interviews. The keywords provide the manifest content for analysis. Manifest content "assesses the visible, surface content of documents" (Dunn 2005). Round 1 of the analysis was very 'interactive', and the list of terms was added to during the reading of the text. The texts were read three times to obtain a complete list. The manifest content list contains many root words so analysis includes all the derivatives of the word (for example 'neighbour' was used and the analysis includes neighbourhood, neighbourliness, and neighbourly). Following the manifest content, attention turns to latent content. Latent content includes themes drawn from the text by considering the meaning behind the text (Babbie 2004:319). Themes that are expected from the interviews based on the literature review were also added to the latent content list for analysis in Round 2 (Robinson 1998:425). Identifiers that are considered to structure interaction such as ethnicity, gender, job-type, and income are included. The result is a broad list of themes and keywords derived from the interviews (Appendix II-A).

Round 2 considered both the latent and manifest content and consisted of counting the occurrence of each keyword or theme within the interviews. The manifest content in Round 2 was searched for using both a search tool in Microsoft word (using the root of the word), as well as manual double checking in the interview texts to ensure complete coverage. Counting keywords allows me to see the actual number of occurrences rather than assuming prevalence. For example, the term 'interaction' is central to my research, and is therefore, expected to be a prominent term in the texts. However, the term was found only 15 times and occurred in just over half of the interviews. I developed a hierarchy of terms and themes based on the number of occurrences. I tallied the number of different participants using the terms in order to recognize trends and make reference to the sampling framework to determine if certain keywords and themes were used by certain groups of people within the town.

The themes analysed in Round 2 were general in nature such that any mention of ethnicity is recorded as pertaining to the 'ethnicity' theme. The entire set of interview texts was analysed for a single theme at a time which proves to be a very valuable method since it requires the interviews to be read several (31) times and helps to catch any themes missed in previous readings. After the interviews were coded for all of the themes, they were read a final time to ensure that none are missed. The list of themes for Round 2 is ordered based on occurrence (Appendix II-B).

Analysis of Round 2 allowed for the 'tidying' of both the manifest and latent content to obtain more concise list of themes pertinent to the research question. This round serves to recognize relationships among themes and terms as well. For example, in the first round of

analysis 'meet' and 'gather' were considered as separate keywords, each received 46 and 10 occurrences, respectively. These terms were grouped together when it was considered that they are used to convey a similar meaning. In some cases, themes were merged into a single theme such as being 'stuck in a rut' and 'unwilling/afraid of change'. These themes recur together in the texts so they were merged together for the third round of analysis. Round 2 concluded by grouping themes together based on relations to each other and their relevance to the research question (Bailey 1999, Sherry 2004). After themes were merged and re-evaluated, they were categorized based on their relationship to the research question and the theoretical framework. The themes were then divided into four (4) categories: *Relationship formation, place-based interaction or bonds, social cohesion*, and *resilience* (Appendix II-C).

The themes that relate to *relationship formation* involve how friendships and relationships are made. These include categories identified in the literature such as gender, job-type, ethnicity, income or class, length of residence, or interests. Other means of relationship formation come to light, including adults making friendships because of their children and their children's activities. Participation is included in this theme since it refers to instances when participation in groups results in people making friends and developing relationships. I also include whether groups were welcoming or not in this category as it has bearing on how individuals could develop relationships, particularly through interests.

Place-based bonds relate to connections made because of physical geographic circumstances as well as physical planning elements. Included in this category are: the affect of planning elements on interaction, including the recreational facilities, and the possible 'up the hill' / 'down the hill' division; the notion of the geographic isolation of the town, and the idea that

Kitimat is a place where people from all over come together; the urban / suburban feel of the town; and the notion of place as a commonality, in that being from Kitimat provides a bond between individuals.

Themes associated with *social cohesion* include: references to people and groups coming together in times of need, the concept of Kitimat as a small town where everyone knows you, and instances of relying on neighbours; that Kitimat is a safe and comfortable place; and the association of family and having roots as reasons to stay in the town. Also included in this theme are the issues of volunteerism as well as population transience. These are all references to concepts of social cohesion that are detailed in the literature.

Finally, many themes identified in the texts make reference to *resilience* and looking to the future of Kitimat. Included in this category are themes regarding demographic changes such as population numbers, changes in age structure, and changes in ethnic group numbers. It also includes accessibility to services and amenities, a common concern among many of the people interviewed respecting the ability of Kitimat to remain resilient. Finally, Alcan is referred to in many situations concerning the future of this town, so those themes are also included.

Round 3 involved only latent content analysis and reviewed the interviews in terms of the broader categories, and searching for the themes within those categories. The set of interviews were read twice through for each category in order to avoid missing any themes. Similar to Round 2, the number of occurrences for each theme was recorded as well as the number of respondents who mentioned the theme (Appendix II-C). This final round provides data and information to address the research question in terms of the theoretical framework.

4.3   Conclusion

Multiple methods were applied in this research to determine what is structuring interaction and the development of relationships, as well as whether Stein's plan for Kitimat has affected interaction and the development of social capital and social cohesion that would provide the town with the capacity to remain resilient. The research includes historical and mapping research as well as focus group and interview research to answer the question. The background research provides information to help in the interpretation of the themes identified in the analysis of the interviews. Together the data provide the information necessary to address the research question.

Chapter 5 Analysis & Discussion

5.0 Introduction

To address the questions of how relationships are formed and whether comprehensive planning succeeded in creating a town with the potential capacity to remain resilient, the analysis is divided into sections based on meta-themes determined in the content analysis. These are: relationship formation, place, social cohesion, and resilience. Each of these themes are interrelated but are considered individually for clarity. The analysis includes data obtained from the interviews, focus group, newspapers, mapping analysis, and Statistics Canada. The data are discussed in relation to the existing literature in order to situate the research.

5.1 Relationship Formation

The literature describes social relationships as vital to the development of social cohesion (Beckley *et al.* 2002, Chavez 2005). Associations based on job-type, class, gender, age, religion, interests, length of residence, and ethnicity are specified (McCann 1978, Gill 1990, Pavey *et al.* 2007). According to one participant, "there are many different social groups. These include those based on ethnicity, work related, sporting and other interests, and in some cases, religious ties" (Int.#12: Male, returned resident, born in Kitimat, employed in industry). The following sections will address how each of these associations structures interaction in Kitimat.

5.1.1 Job-Type

The literature explains that relationships based on job-type are easy to make because individuals share similar experiences (Portes 1998, Schulman and Anderson 1999). In industrial towns, sharing a job-type can also mean sharing shift work and similar schedules (Gill 1990). The role played by job-type in relationship formation and social divisions was mentioned by all participants except one. The only individual who did not mention job-type as a means of creating relationships was unemployed. Since she does not have a job, the relationships she forms never rely on job-type.

Table 5.5.1 Kitimat Occupations (2006)

Occupation	Kitimat (B.C.)	Percent
All occupations (labour force 15 years and over)	4635	
Management occupations	250	5.4
Business, finance and administration occupations	465	10.0
Natural and applied sciences and related occupations	205	4.4
Health occupations	205	4.4
Occupations in social science, education, government service and religion	355	7.7
Occupations in art, culture, recreation and sport	90	1.9
Sales and service occupations	1035	22.3
Trades, transport and equipment operators and related occupations	1115	24.0
Occupations unique to primary industry	105	2.3
Occupations unique to processing, manufacturing and utilities	810	17.5

Source: Statistics Canada 2006a

The Census data indicate that 44% of the labour force aged 15 and over in Kitimat is employed in trades, primary industry, and/or processing, indicating the potential of many individuals to share an association based on job-type (see Table 5.1). Thematic mapping of

Kitimat based on job-type indicates that employment in industry has limited bearing on where individuals live. Figure 5.1 shows that there is a range of percentages in each of the neighbourhoods. Job-type does not result in discrete physical divisions in the town, furthermore, the highest ratio represented in any neighbourhood is just over half. Job-type does not create a physical division in Kitimat as has been reported for company towns (Porteous 1970a, Herkes 2004:Pt.IV). There is a general sense that job-type is a means of meeting people and provides opportunities to develop relationships. A recent returned resident describes her husband's experience of making friends as a new resident of Kitimat: "The only people he socializes with are the people at work or my family. No one has really tried to approach him. You meet people at work but if you are not working it is almost impossible unless you are a very outgoing person" (Int.#17: Female, returned resident, born in Kitimat, not employed in industry).

Figure 5.1 Employed in Industry
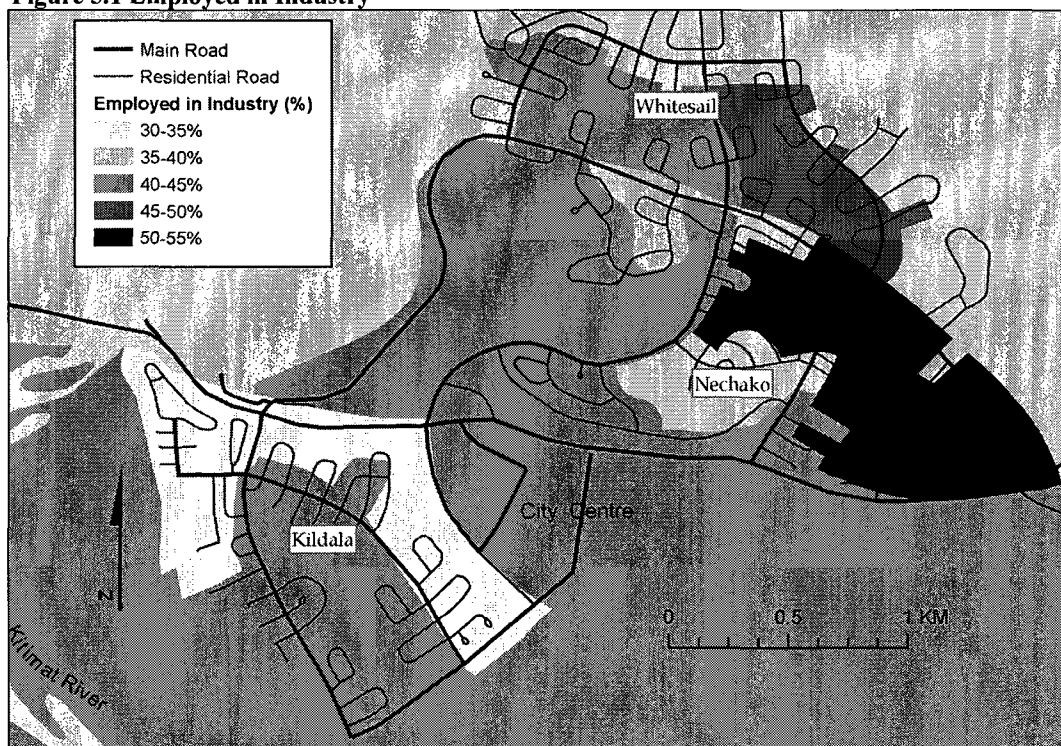
Source: Author

Those employed in industry make more reference to the importance of relationships based on their job than do other participants. A retired Alcan employee explains: "We are a special community; I am talking specifically now of Alcan employees, now Alcan doesn't mean anything once you leave here" (Int.#4: Male, long-term resident, employed in industry). Another resident employed by industry commented, "the Alcan people all know each other. I played Beer League, most of the people that played were all Alcan people but there was one Eurocan guy, so he knows all these Alcan people" (Int.#14: Female, long-term resident, born in Kitimat, employed in industry). Those not employed in industry indicated that their relationships are typically based on characteristics other than job-type and feel that there is no division based on where people work. A resident employed in industry describes relationships based on job-type, "I don't think there is division based on income or job-type, you either work at Eurocan or you work at Alcan, or Methanex as well, or you own your business. I don't think there is that much division" (Int.#16: Female, returned resident, born in Kitimat, not employed in industry). Emphasis on relationships developed through job-type was also reliant on length of residence. Individuals born in Kitimat or who lived there for longer than 25 years put less emphasis on the role that job plays in relationships likely because they have had time to create relationships in other ways. A long-term resident said: "Being here so long, I have known these people for so long their job doesn't matter" (Int.#15a: Male, long-term resident, employed in industry).

Sharing a job provides the opportunity to develop a relationship since the workplace acts as a place to interact (Gill 1990, LeBlanc 2003), therefore, "friendship bonds are based on working for the same employer. You have friends that come from the same job" (Int.#4: Male, long-term resident, employed in industry). However, mention of job-type as a

commonality was made only by long-term industry employees so the role played by job-type in relationship formation may be dependent on the type of job. Considering that almost half of the labour force is employed in similar job-types, and those involved in industry are the ones who recognize job-type as a commonality it is likely that job-type plays an important role in the structuring of relationships in Kitimat.

5.1.2 Socio-economic Class

Closely linked to job-type is the effect of income or socio-economic class on relationship formation. According to the literature, disparate income levels can affect interaction between individuals and, therefore, the development of relationships (Knox 1995:41, Bradbury 1993, Schulman and Anderson 1999). One resident remarked, "I have recently seen differences between people who don't have access to jobs in industry. If you are here and don't work in industry, well...commercial jobs pay low. People think things are wonderful here because we are so well looked after, but not everybody works in industry, it is a disparity, it's problematic" (Int.#2: Female, new resident, not employed in industry). The Census data (Table 5.2) show that there is a high average family income in Kitimat and more than 50% of economic families are earning $80,000 or more annually compared to only 38% provincially. Only 17% of Kitimat's economic families are earning less than $40,000 compared to 26% provincially. This disparity strengthens potential barriers based on income because lower income residents are unable to participate in many of the same activities as those with higher incomes (Knox 1995:41). In general, my study participants acknowledged divisions based on income and class.

Table 5.5.2 Family Income (2006)

	B.C. (%)	Kitimat (B.C.)	%
Family income in 2005 of economic families - 20% sample data		2680	
Under $10,000	3.2	50	1.9
$10,000 to $19,999	4.8	65	2.4
$20,000 to $29,999	8.2	155	5.8
$30,000 to $39,999	9.5	175	6.5
$40,000 to $49,999	9.7	165	6.2
$50,000 to $59,999	9.3	205	7.6
$60,000 to $69,999	8.8	200	7.5
$70,000 to $79,999	8.2	190	7.1
$80,000 to $89,999	7.2	280	10.4
$90,000 to $99,999	6.1	295	11
$100,000 and over	24.9	900	33.6
Median family income $	65,787	85,871	
Average family income $	80,511	87,674	

Source: Statistics Canada 2006a

A thematic map of the spatial organization of households based on income shows that there is a spatial separation within the town based on income (Figure 5.2). Considering that the average household income in Kitimat is $87,674, there are several clusters with lower average incomes. In the Kildala neighbourhood, all the Dissemination Areas have average household incomes less than the town average. The neighbourhood of Whitesail shows a concentration of higher household incomes which indicates that divisions based on income are manifested physically, and result in neighborhoods of individuals who share similar household incomes (Campbell 1990, Arthurson 2002). These divisions can decrease opportunities for interaction and social cohesion because of socio-economic segregation (Kawachi and Kennedy 1997).

Figure 5.2 Average Household Income
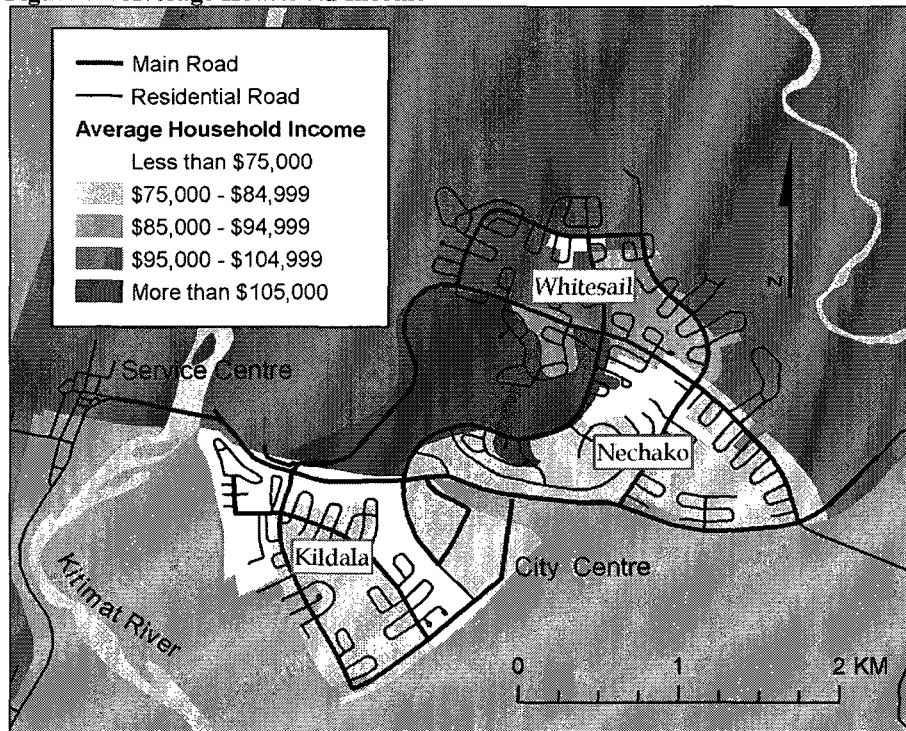
Two respondents who referred to income or class in terms of friendship formation claimed

that it was not divisive. One said, "I don't think there are divisions in town based on income

or job-type, I am not aware of them" (Int.#9: Male, long-term resident, employed in

industry). They were both long-term residents, and employed in industry, suggesting that

since they were not experiencing exclusion, perhaps they had not noticed it. Low income

affects access to some services and amenities as well as affecting levels of participation

(Baum *et al.* 2000). To explain how income may affect interaction one resident said that,

"less fortunate citizens may not be participating to the same extent as the better off because

they can't always afford to. The division comes from people with lower incomes not being

able to financially participate in all the activities" (Int.#12: Male, returned resident, born in

Kitimat, employed in industry). To describe their group of close friends one respondent said,

"there are a range of incomes but I'd say the people we are closest to would not be in the

lowest quartile of income" (Int.#3: Female, new resident, not employed in industry),

indicating that the division is likely separating out the families and individuals living with the

lowest incomes.

5.1.3 Gender

Gender divisions are commonly referred to in the literature concerning resource industry

towns because of the disparity in employment found in many of these towns and the resulting

participation of women in community activities as a means to become involved (Bell and

Ribbens 1994, Halseth and Sullivan 2002:Ch.7, Edwards 2004). The population of Kitimat is

divided relatively evenly, with 4,345 females and 4,645 males. Unequal labour force

participation shows dramatic income differences between men and women (Table 5.3).

Females do not participate in the labour market as much as men, and when they do, they are

less likely to be employed. When employed, the median income for women is less than a

third of that of men.

Table 5.5.3 Participation Rate, Unemployment Rate, and Income Comparisons

	Participation rate	Unemployment rate	Median Income
Male	74%	8%	$60,074
Female	56%	11%	$18,964

Source: Statistics Canada 2006a

Gender was discussed in the interviews in terms of social organizations. A male resident

explains that he finds it hard to make male friends and implies that it is easier for women,

"As a man, a lot of the people I grew up with and worked with, a lot of them left to retire. It's

actually for a male, unless you are very social, which I am not, it's very hard to form new

friendships as people leave. Most groups are female" (Int.#15a: Male, long-term resident,

employed in industry). Seven participants mentioned gender, 40% of the males and 36% of

the females. Despite the economic and employment barriers resulting from gender in Kitimat, it seems that the participants do not perceive gender to be an issue related to relationship formation and interaction. When asked what formed the strongest relationship bonds, one respondent said, "I don't think gender is an issue" (Int.#17: Female, returned resident, born in Kitimat, not employed in industry). The lack of recognition of gender as a factor in interaction can be explained by the paradigm of women's community participation in industrial towns (Reed 2003). The residents do not recognize gender as creating a barrier because it is part of the norm.

5.1.4 Ethnicity

Ethnicity and multiculturalism are important to Kitimat's identity. Members of the focus group mentioned the Multicultural Association of Kitimat, and the multicultural food fair was referred to as the highlight of the July 1st activities. As described by Lucas (1971:Ch 3) and McCann (1978), resource industry towns are often home to multiple ethnic groups. Kitimat is no exception and many immigrants came with minimal skills and obtained good-paying jobs. A 1965 description of Kitimat suggested that "almost every nation of the Western World is represented in the birthplace of its residents and practically all of them are now Canadian Citizens" (*Northern Sentinel* 1965a). In general, interviewees indicate a decrease in Kitimat's ethnic diversity. When discussing the topic of social relationships, a respondent said that, "ethnicity forms the strongest bonds, but as groups, they are fading away. It's not as multi-ethnic as it once was" (Int.#2: Female, new resident, not employed in industry). Changes in Statistics Canada's definitions concerning ethnicity limit temporal comparative analysis. In the 1971 Census, there were 21 ethnic categories, while the 2001 census has over 200 categories which could be supplemented with written additions (Statistics Canada 2008a).

Early Census questionnaires requested single, patrilineal, ethnic origins. Later Census results show that individuals may claim multiple ethnic origins and that ethnicity can be traced matrilineally as well as patrilineally (Statistics Canada 2008c).

The 2006 Census shows that the people of Kitimat are multiethnic, with over 65% of the population claiming ethnic origins outside of North America, and almost 10% claiming North American aboriginal origins (Table 5.4). Five ethnic groups were mentioned explicitly in the interviews: Portuguese, Italian, German, Filipino, and East Indian. Table 5.4 shows that 38% of the Kitimat community claim ethnic origins to one of those five groups. The British were not mentioned as a strong ethnic community in the interviews; however, 39% of the community claimed British ethnic origins.

Table 5.5.4 Ethnic Origins (2006)

	Kitimat (B.C.)	Percent
Total population	8950	
British Isles	3510	39.2
French	930	10.4
North American Aboriginal	855	9.6
Other North American	2260	25.3
Caribbean	65	0.7
Latin, Central and South American	70	0.8
European	4735	52.9
Western European	2060	23
German	1570	17.5
Northern European	570	6.4
Eastern European	905	10
Southern European	1760	19.7
Italian	210	2.3
Portuguese	1450	16.2
Other European	10	0.1
African	30	0.3
South Asian	260	2.90
East Indian	220	2.5
East and Southeast Asian	285	3.2
Filipino	120	1.3
Oceania	10	0.1

Source: Statistics Canada 2006a

Language and integration are factors which identify ethnic groups as separate and act as reasons for the development of relationships, and can also create barriers to interaction (Nijkamp *et al.* 1990). One respondent explains that "there are ethnic communities, you grew up in those communities, Portuguese, Italian, German. You can speak the language with them, language is culture. You can have that opportunity to speak. There is nothing like it, it's like speaking with family" (Int.#2: Female, new resident, not employed in industry). A resident of German descent explains, "some ethnic groups have worked hard to pass their historical roots onto younger generations such as the Portuguese, Philipino, and Italians. They share their culture with the wider community. Other ethnic groups such as the British and Germans, have assimilated and largely been absorbed into the community, and have not placed as much emphasis on maintaining historical cultural roots" (Int.#12: Male, returned resident, born in Kitimat, employed in industry).

No consensus emerged on whether ethnic groups are exclusive or welcoming. Eight participants felt that ethnicity formed exclusive communities that were hard to join. One resident explains, "You have communities that are multicultural, multi-ethnic. The ethnic communities, you just aren't a part of" (Int.#2: Female, new resident, not employed in industry). Ten participants felt the ethnic organizations are very open and welcoming. One said that, "Kitimat is very multicultural, I guess it's been that way since day one, and people grew up here with every different kind of nationality around them, and multiculturalism, and the dinners and everything is really promoted" (Int.#15b: Female, long-term resident, employed in industry). Once again, the disparity in opinions is related to length of residence. Only two long-term residents claimed the groups to be exclusive, indicating that longer term residence may overcome barriers perceived by 'newcomers' (Everitt and Gill 1990, Cuba and

Hummon 1993, Marshall 2001, Reimer 2004), and multiculturalism is an inherent part of Kitimat. As described by one resident, "there are definite [ethnic] groups but they are not definite, everyone mingles" (Int.#18: Female, left Kitimat, born in Kitimat, employed in industry).

5.1.5 Interests

Interaction based on interests is the most open means of developing relationships (Pavey *et al.* 2007). The literature indicates that participation in the community increases social capital and social cohesion by providing more opportunities for interaction (Jones 2000, Sullivan and Halseth 2004). Kitimat has over 120 interest-based community groups. A participant explains that, "the large number of groups says that Kitimat is the kind of place where joining an association allows you to make friends" (Focus Group). In general, most participants feel that common interests allow for the strongest friendship bonds and that participation and involvement lead to belonging and acceptance in the community. The perception of whether social groups were exclusive or welcoming is divided among the participants.

Sixteen participants spoke of relationships based on interests. A newer resident explains that the "strongest bonds are formed through a shared interest. Same activities, that is what holds people together, we differ wildly politically and religiously but we share one important common interest" (Int.#3: Female, new resident, not employed in industry). Seventeen individuals mentioned participation and involvement as playing important roles in belonging to the community. A long-term resident says, "when you join something or get involved in something you are welcome, and there is an appreciation for what you do' (Int.#15b: Female, long-term resident, employed in industry). The majority of participants feel that relationships

within the town are formed through participation in common activities, "friendships are formed through social interests and events, you go to events and get to talking" (Int.#7: Female, returned resident, not employed in industry). These references indicate the importance of participation in the development of social cohesion and a feeling of belonging (Teather 1997, Wilson and Musik 1997, Hays and Kogl 2007).

Differences of opinions are evident in terms of the exclusiveness or openness of social groups. Twelve participants claim that groups are welcoming, explaining that "if you have an interest, I think you will find there is a group you can participate in if you choose" (Int.#12: Male, returned resident, born in Kitimat, employed in industry). However, seven agree that "there are definite social groups and they are exclusive" (Int.#1: Male, left Kitimat, employed in industry). Only two of those to consider the groups exclusive are long-term residents and only one is employed in industry. The indication is that feelings of exclusion result from being a new resident without previous strong relationship ties (Marshall 2001). This sentiment is expressed by two participants: "The community is somewhat closed because there are groups of people that have known each other for a long time, it's hard to get into those groups" (Int.#2: Female, new resident, not employed in industry); and, "Once a group is formed they don't like to let people in. I think it would be hard for a *new* family to move here from a completely different place" (Int.#17: Female, returned resident, born in Kitimat, not employed in industry). As noted previously, individuals employed in industry put more emphasis on the role of their job in relationship formation than those not employed in industry indicating that they may not consider or notice groups to be exclusive.

5.1.6 Length of Residence

Length of residence is often used in the literature as a measure of social cohesion, implying that the longer people live in one place, the more likely they are to become involved and interact (Robinson and Wilkinson 1995). The transience of populations living in resource and industrial towns has been referred to as a deterrent to cohesion (Bowles 1992, Halseth and Sullivan 2002:Ch.2). Lucas (1971:Ch.5) argues that a decrease in transience is a characteristic of a mature community. The focus group and interviews indicate that in the past, the high wages and low cost of living found in Kitimat made it the ideal place for young adults to earn money and work-experience. Industry offered short-term contracts of three to fifteen years, and many people left soon after fulfilling the contract. According to the interviews, many people also chose to leave as soon as it was time to retire. As a result, Kitimat acted as a career stop for many and resulted in a high level of transience despite Stein's comprehensive planning efforts. As the community aged and those young workers started families, many chose to stay, comfortable with the high wages and low cost of living. The result has been a decrease in transience. The Statistics Canada data show there is an increase in non-movers over time (Tables 5.5 and 5.6).

Table 5.5 Length of Occupancy (1971)

Length of Occupancy	Less than 1 year	1 - 2 years	3 - 5 years	6 - 10 Years	More than 10 years
1971	985	575	410	490	575

Source: Statistics Canada 1971

Table 5.6 Mover and Non-Movers

Year	Non-Movers[3]	Movers	Movers, non-migrants	Movers, migrants	Migrants, same province	Migrants, different province	Migrants, different country
1981	4270	7200	3450	3750	1550	1590	605
1991	5580	4740	2740	1995	1355	470	175
2001	6085	3540	2320	1220	1140	655	480

Source: Statistics Canada, 1981, 1991, 2001a

In 1971, there were twice as many movers as non-movers (within 5 years) and by 2001, that trend had reversed, indicating an increase in population stability in Kitimat. However, the decrease in migrant movers indicates a lack of in-migration. The decrease in new residents is evidenced by the continual decrease in population since 1981. There is a sense that this decrease in transience has provided a means of relationship formation based on the length of residence (Cuba and Hummon 1993, Gill 1990). As mentioned previously, 'newcomers' feel that it is hard to enter into established groups while longer-term residents feel that groups are open and welcoming.

Participants who claim they develop relationships because of length of residence, for the most part, are either born in Kitimat or have lived there for more than 25 years. Five of the participants born in Kitimat claim that length of residence had an affect on relationship formation. This finding is likely because of the experience of growing up in the community and having 'roots' there (Reimer 2004). A long-term resident explains that, "a lot of people

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[3] **Non-movers** are residents who have not changed their place of resident in the last five years.

Movers are residents who have changed their place of residence in the last five years.

Movers, non-migrants are residents who have changed their place of residence, but have remained in the same town in the last five years.

Movers, migrants are residents who have moved their place of residence outside of the town they previously lived in the last five years.

Migrants, same province are residents who have changed their town of residence but remained in the same province in the last five years.

Migrants, different province are residents who have changed their province of residence in the last five years.

Migrants, different country are residents who have changed their country of residence in the last five years.

who are here, grew up here or their kids grew up here so you get to know people" (Int.#15b: Female, long-term resident, employed in industry). Another said that relationships are "based on how long you have known someone. My mom is still friends with the people she grew up with" (Int.#16: Female, returned resident, born in Kitimat, not employed in industry). Only three long-term residents mention length of residence in terms of relationship formation which could be a reflection of the number of people who are leaving after retirement and, therefore, breaking the relationship. If transience continues to decrease, it is likely that more individuals will consider length of residence to be important in relationship formation. As seen in the earlier analyses, long-term residents felt less excluded by categories such as ethnicity and job-type than do short-term residents. A feeling of being welcome everywhere comes with comfort in the town and with the people, achieved by longer term residence. A long-term resident explains that he belongs in Kitimat "because I have been here longer than grass" (Int.#15a: Male, long-term resident, employed in industry), referring to the fact that he moved to town as a young boy, before the grass was planted.

The literature argues that decreased migration and increased length of residence affects people's attachment to place, and that interaction between residents can be affected by this attachment (Robinson and Wilkinson 1995, Marshall 2001). In Kitimat, the long-term residents find groups to be less exclusive, and express that they feel welcome in any group or organization and will participate in any event. The implication is that longer residence increases the number and types of relationships one develops. Length of residence seems to transcend other social barriers. This finding supports the notion that length of residence and decreased migration structure interaction through the dissolution of some barriers.

5.1.7 Summary

According to the literature, relationships based on shared attributes are common in resource and industrial towns (Lucas 1971:Ch.1, Bowles 1992, Halseth and Sullivan 2002:Pt.IV). These types of relationships tend to be exclusive and structure interaction by denying membership to individuals who do not meet specific criteria (Brubaker and Cooper 2000). In Kitimat, relationships based on identifiers, such as job-type and ethnicity, are considered to be common, especially to those excluded from them. The research shows that individuals who are not part of a particular group can easily identify the existence of the group and its exclusivity. For example, those who claimed ethnic origins outside of North America felt that the ethnic organizations were very welcoming. The importance of job-type on relationship formation is found primarily among those who work(ed) in industry, indicating that trades-type occupations provide a strong commonality. Those not employed in industry placed more emphasis on interest-based relations. Relationships can develop through various methods, and despite the acknowledgement of relationships based on other attributes, the research finds that relationships in Kitimat are more likely to be based on interests. Interest-based groups are less exclusive than other groups because membership depends only on sharing common interests rather than categorical identifiers (Tolbert *et al.* 2002, St. Martin 2006). This research supports the argument in the literature that shared attributes and interests structure interaction through the processes of inclusion and exclusion (Wotherspoon 2002, Vesselinov *et al.* 2007).

5.2   Place

The physical location and layout of the town plays an important role in structuring interaction and developing social cohesion and resilience. The literature argues that people share bonds

based on the places they live and the experiences they have as a result of living in those places (Cochrun 1994, Hays and Kogl 2007). Comprehensive planning emphasises the notion that the physical organization of a town can affect interaction, social cohesion, and resilience (Larsen 2005). Place is analysed, therefore, in terms of geographic place as a commonality, and the effects of the plan on developing bonds and encouraging interaction.

5.2.1 Location

According to the literature, the geographic location of a town plays an important role in the development of social cohesion (McCann 1978, Bowles 1992, Cochrun 1994). People relate to feeling connected to a place (Hays and Kogl 2007), ownership of place because of individual investment (Worster and Abrams 2005), and the feeling of commonality because of being removed and secluded in a remote place (Bowles 1992). The physical location of Kitimat has it situated at the 'end of the road', creating a sense of removal and isolation. The literature argues that such isolation can play an important role in structuring interaction by minimizing the space and people available (Valentine 2001).

Kitimat is located 51 kilometres south of its closest neighbour Terrace, and a six hour drive from Prince George (Figure 3.1). Its weather is characterized by some of the highest annual snowfall rates in Canada at an average of 424 centimetres per year (National Climate Data and Information Archive 2009). When asked what individuals disliked about living in Kitimat, 11 answers included reference to the weather and / or the distance to get out of Kitimat. Nevertheless, when asked about bonds shared by Kitimatians (residents of Kitimat), 10 respondents claimed that being from Kitimat, sharing feelings of isolation, and contending with the weather defined them as Kitimatians and provided a common bond. Kitimatians are,

a group of people who have the guts to live in a hostile environment at the end of the road in the middle of nowhere, and like it. We are at the end of the road, the weather is terrible, but we live here and we like it here. What defines us is that certain type of stubbornness, courage, just to live here and like it. It takes a certain kind of person. It's not for everybody (Int.#15a: Male, long-term resident, employed in industry).

A focus group participant said that, "isolation requires the community to become an extension of your family" (Focus Group). The importance of weather to Kitimatians is exemplified by a photo contest conducted by the *Northern Sentinel* (2003a:8) in 2003 where, "deep snow shots indicated the focus of many memories".

All but one of the participants born in Kitimat mention place as being a commonality among the residents. Long-term residents and those born in Kitimat generally refer to place as an essential part of being Kitimatian; sharing a common bond "built on the fact that we are north of Hope, outside of the political mainstream in terms of the political structure of our province" (Int.#3: Female, new resident, not employed in industry). Reference is made to the idea that living in Kitimat is something that residents held in common even after leaving the community:

I [feel I share a common bond with other Kitimatians] even now, working [in Prince George]. I see people I went to school with, or people come in with an Alcan jacket, and I will ask if they are from Kitimat and it will start a conversation. There is still that bond of being from a very small town, where you know everybody (Int.#18: Female, left Kitimat, born in Kitimat, employed in industry).

There was reference in five of the interviews to Kitimat as a 'meeting' place, where people come from all over, and that "the people and the community here in Kitimat are very strong, because they are from different places, different countries, people are unique together" (Int.#5: Female, long-term resident, not employed in industry). The participants who mentioned this point belong to no particular category and include long-term residents, those

born in Kitimat, those claiming ethnicity outside of North America, as well as those who have lived in Kitimat for less than 25 years which suggests that place may be more important in structuring interaction than ethnicity or other categorical identifiers.

Isolation lends to increased association with place and the development of inclusive measures of belonging (Larsen 2004). The residents of Kitimat express that the feeling of being removed serves as a commonality among them. There is a sense that they share similar hardships and this provides them with a bond. Once a person lives in Kitimat, it is something they will always share with other residents, both past and present. This commonality provides a reason for interaction among residents. The development of a 'Kitimatian' identity based on residence supports arguments that place plays an important role in structuring and supporting interaction.

5.2.2 Planning

An important feature of Kitimat is its comprehensive planning foundations. It was planned in reference to 'superblock' neighbourhoods found predominantly in urban settings (Hodge 2003:Ch.2). As a result, the physical plan of Kitimat offers a surreal 'suburban' feel, in juxtaposition to its remote and removed geographic location. This feeling is noted by about ¼ of the participants. When asked about their first impressions upon coming to Kitimat, one participant said, "I thought somebody had dropped a suburb out in the middle of nowhere, or lost a suburb. Now I appreciate the closeness, and I know the history so I appreciate it" (Int.#11: Female, new resident, not employed in industry). Stein's plan for Kitimat intended to provide opportunities for interaction, prevent social divisions, and allow for growth both physically and socially (Larsen 2005). In general, the participants are well educated on the

history of Kitimat and the general concept of the physical plan. Stein's plan was well accepted by the participants with only a few suggestions for improvement. The planning included specific elements such as zoning, mixed housing, interconnecting walkways, cul-de-sac roads, greenspace, and recreational facilities. Each element is addressed in the interviews and focus group. The consensus is that the physical and social planning does encourage interaction and in some cases 'forces' it. The topography, however, has resulted in a physical division of the town that is also perceived to be a social division.

5.2.2.1 Zoning

The town is divided into zones with the industry and related services physically separated from the town on the west side of the river. The location of the aluminum smelter was chosen after directional smoke tests were conducted and it was found that the smoke held to the mountains on the western side of the river. The planners felt that removing the industry would result in less pollution for the residents. The division is also a spatial metaphor for the plan's intended separation of the town from industrial control, in opposition to the physical plan of many early company towns where the industry remained in view, acting as a reminder to the residents (Lucas 1971:Ch.14, Rotman and Nassaney 1997). The zoning also created a centralized shopping area and potential centre of interaction. Finally, residential zoning lends to increased neighbourhood interaction and participation, providing opportunities for increased social cohesion (Bothwell *et al.* 1998, Grant 2000). The separation into zones is generally considered a positive aspect of Kitimat's layout.

All of the respondents appreciate the physical separation of industry. Some feel that it adds to the aesthetic of the town in that the "separation makes it a pleasant place to live as well as a

good place to live" (Focus Group), and "I think it is important to have things in different areas of town for image" (Int.#6: Female, returned resident, born in Kitimat, not employed in industry). Others focused on the benefits like, "we don't have to have a factory next to us" (Focus Group), "the industry is quite polluting so separation of living from industrial is good" (Focus Group), and "the separation of the industry is a really good thing. In Kitimat I can never smell the mills, I think that helps a lot" (Int.#14: Female, long-term resident, born in Kitimat, employed in industry).

The original intention of the planners was to have a large central commercial area as well as supporting neighbourhood commercial areas. Unfortunately, decreases in population have resulted in the closure or decline of neighbourhood commercial zones leaving the 'City Centre' as the primary commercial area for all residents. In general respondents feel that the centralized commercial area acts as a centre of interaction. That "you go up town to that little mall and you can't go ten minutes without seeing someone to say hello to" (Int.#4: Male, long-term resident, employed in industry). Eleven respondents provided places in City Centre as locations where people meet informally. For example, "Overwaitea is the best place to meet people. If you are feeling lonely in your house, just go shopping. I'm sometimes there for a couple of hours" (Int.#2: Female, new resident, not employed in industry).

5.2.2.2 Neighbourhoods

The residential neighbourhoods were designed to be a focus for interaction, with cul-de-sac roads and interconnecting walkways to provide safety and opportunity to interact (Stein 1954). The result is neighbourhoods where people know each other and can take opportunities to interact with each other. In general, the neighbourhoods are considered to

promote interaction, such that one resident said, "planning works with interaction, my street had a block party July 1st. I know all the people that live on my street. We have these events and other streets do too" (Int.#10: Female, long-term resident, not employed in industry). Eleven respondents feel that the neighbourhood planning encourages interaction. A participant who has left Kitimat said, 'I think [the planning] forces you to get to know your neighbours and who is behind you. We knew the people who lived behind us. I live in an apartment here and I don't know the people who live down the hall, because I am not forced to interact with them. The way the houses are built [in Kitimat], you need to" (Int.#18: Female, born in Kitimat, left Kitimat, employed in industry). The physical layout promotes interaction so well that it can affect privacy as indicated by one participant: "The problem with the layout is that sometimes you would like to avoid someone and can't because the street system, or walkways, force you to pass near them" (Int.#8: Female, new resident, not employed in industry). In fact, 16 participants imply that interaction is forced by proximity. Interestingly, the three who did not mention this point were all residents who had returned after leaving Kitimat for a period of time indicating that perhaps the desire for interaction and knowing your neighbours is what makes them comfortable and why they returned.

5.2.2.3 Mixed Dwelling Types

In Kitimat, the mixing of different types of dwellings was important to the maintenance of social interaction and social cohesion (Stein 1954). The intention was to provide a variety of dwelling types so individuals and families of different socio-economic descriptions would live in the same neighbourhoods and, as seen just previously, the physical layout of the neighbourhoods would encourage those different groups to interact (Arthurson 2002). The Census data show that each neighbourhood has a mix of dwelling types. The Whitesail

neighbourhood, however, shows a larger percent of detached homes, indicating less diversity

of dwelling type than is found in the other neighbourhoods (Table 5.7).

Table 5.7 Dwelling Type, in Percent (2006)

Neighbourhood	Dwelling Type					
	Detached	Semi-Detached	Row	Duplex	Apartment	Moveable
Whitesail	80	3	5	2.5	9	0.5
Nechako	41	29	16	2	12	0
Kildala	54	12	13	1	11	9
Cable Car	84	11	0	0	0	5

Source: Statistics Canada 2006b

The Nechako and Kildala neighbourhoods have greater levels of mixed dwelling type and

almost the same average household income while the Whitesail and Cable Car

neighbourhoods, with mostly detached homes, have a much higher average household

income (Table 5.8). Where mixed-housing is implemented, the mix of socio-economic

groups results in a lower average household income.

Table 5.8 Average Household Income, by Neighbourhood (2006)

Neighbourhood	Average Household Income
Whitesail	$97,923
Nechako	$75,214
Kildala	$75,193
Cable Car	$110,307

Source: Statistics Canada 2006b

The differences in the dwelling type distribution is explained by the period of construction

(Table 5.9). Half of the buildings in the Nechako and Kildala neighbourhoods were built

before 1960. The first building phases adhere more closely to Stein's plan. The buildings in

the Whitesail neighbourhood were mostly built after 1960, with 48% built after 1970.

Construction in the Whitesail neighbourhood did not stick to Stein's plan of mixed dwelling

type and the result is a neighbourhood comprised of residents of higher socio-economic class.

Mixed housing was mentioned by four participants in that "the planners mixed the

neighbourhoods well" (Int.#1: Male, left Kitimat, employed in industry).

Table 5.9 Period of Construction, in percent (2006)

	Pre 1946	1946-1960	1961-1970	1971-1980	1981-1985	1986-1990	1991-1996	1996-2000	2001-2006
Whitesail	-	17	23	37	14	2	3	4	-
Kildala	-	50	23	19	3	2	-	2	1
Nechako	4	75	14	6	1	-	-	-	-
Cable Car	-	-	12	47	17	12	12	-	-

Source: Statistics Canada 2006b

5.2.2.4   'Up the Hill' and 'Down the Hill'

The literature argues that physical place affects interaction, and that interactions structured by place transmit local social knowledge (Worster and Abrams 2005). Furthermore, the organization of place can act to support, or hinder, participation and cohesion (Hays and Kogl 2007). Therefore, physical barriers can play an important role in structuring interaction. The town of Kitimat is physically divided by a steep hill. The hill provides housing 'up the hill' that is farther removed from industry, and removed from the commercial centre. The socio-economic division and difference in mixture of dwelling type between neighbourhoods noted previously coincide with the physical barrier of the hill. The neighbourhoods of Whitesail and Nechako are found 'up the hill' while the neighbourhood of Kildala is 'down the hill' adjacent to the City Centre. Higher average incomes are concentrated in the Whitesail neighbourhood, found up the hill, while there are lower average incomes found down the hill (Table 5.8). The spatial analysis indicates that a higher percentage of Whitesail residents are employed in management, than those living in the Nechako neighbourhood (Figure 5.3). A division based on neighbourhoods, related to the dwelling types as well as disparities in income mentioned in previous sections rather than 'up the hill' or 'down the hill'. Nevertheless, a division is generally noted by the participants and discussed in the focus group.

Figure 5.3 Individuals Employed in Management
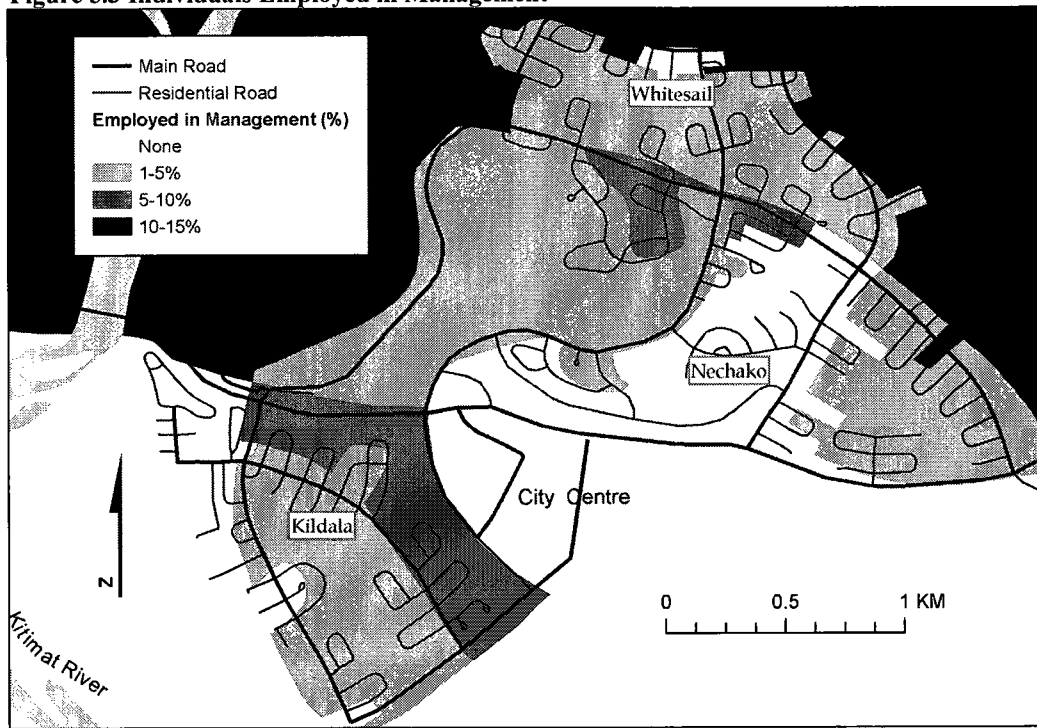
Source: Author

Nine participants mention a division between 'up the hill' and 'down the hill' and seven of those consider it to be a socio-economic division. The two who do not agree are residents who live 'down the hill', are not low-income, and believe that the division is only, "a perceived division based on income. If you live in Kildala you are perceived to be lower income but it's not true, I live there. It has always been perceived that way" (Int.#10: Female, long-term resident, not employed in industry). The data support the existence of a division in income levels based on neighbourhoods found up the hill or down the hill, and the income divisions affect the interaction and socialization of the residents. There are "definite divisions based on income. People who live up the hill don't socialize with people down the hill" (Int.#6: Female, returned resident, born in Kitimat, not employed in industry). The importance of job, socio-economic class, and interests on interaction is noted previously and it is also observed that the lowest income residents may not be participating as much as

higher earning residents. Socio-economic status divisions are exacerbated by the hill. Despite the fact that the Kildala (down the hill) and Nechako (up the hill) neighbourhoods have the same average household incomes and similar dwelling types, the physical barrier of the hill creates a division. There is a perceived division in the town and the physical barrier of the hill has become a social barrier despite attempts to avoid social divisions. Place appears to be structuring interactions between residents who live 'up the hill' and those who live 'down the hill'.

5.2.2.5   Greenspace and Walkways

Providing greenspace and walkways was an important feature in Stein's comprehensive plan for Kitimat (Larsen 2005). These elements provide residents opportunities to interact and enjoy active lifestyles. Initially, the walkways provided a safe means of movement to residents who did not have vehicles. Today, the walkways serve as alternative means of transportation and lend to an active lifestyle (Meurs and Haaijer 2001). The walkways are arranged within neighbourhoods to avoid streets, and the dangers associated with them, and provide a connective network to travel through the entire town. These walkways are considered to be well used and are generally well maintained, in terms of clearing and cleaning, by the municipality. The respondents agree that they offer ample opportunities for interaction, are often more convenient for transportation than the curvilinear streets, and provide accessible active living options for people of all ages and abilities.

When asked about the role played by the walkways and their importance to Kitimat, the response was overwhelmingly positive. Disappointment is directed toward the municipality

for not investing in the construction of new walkways in newer subdivisions, and in the lack of maintenance to some existing walkways. The walkways

> are one of the unique features of the greenspace and the original plan. Ties into what Kitimat wants to do now, accessibility for those in scooters and wheelchairs, fits in with Measuring up the North, Kick it up Kitimat, to have an active community. The walkways all work together and that is why they are important. They could do well if they can maintain them (Int.#2: Female, new resident, not employed in industry).

The walkways are considered an important aspect to keeping Kitimat connected and accessible. One respondent said, "the layout of the town is really pretty, you can walk everywhere in this town" (Int.#16: Female, returned resident, born in Kitimat, not employed in industry). And a resident explains his choice of home location: "One of the reasons I chose the lower area was because there are no hills to climb, the hospital, mall, and rec. centres are all within walking distance with the interconnecting walkways to get there" (Int.#4: Male, long-term resident, employed in industry). The walkways are also mentioned in terms of active healthy lifestyles. A retired, long-term resident explains how "the walkways are a very important part of Kitimat, especially as the town ages. When you retire you have more time to walk and it's good for you to get out and walk. If Kitimat continues to be a community that ages it will be even more important to have and maintain good walkways" (Int.#10: Female, long-term resident, not employed in industry).

Twelve participants describe the walkways as places of interaction and socialization. The connectivity of the walkways and their separation from the roads allows them to be safe places for people to walk and socialize, meet people to join them, or just to offer casual greetings as they pass by. A participant said: "We always use the walkways. If there is nothing to do, you go for a walk. They are nice and big sidewalks so you can walk in groups.

There are walkways in other towns but in Kitimat it connects everything" (Int.#14: Female, long-term resident, born in Kitimat, employed in industry). "There is a lot of walking on the sidewalks and interaction" (Int.#9: Male, long-term resident, employed in industry) said one participant of the role played by walkways in Kitimat. It is obvious that this element of Stein's plan is considered important by my research participants and that they maintain the plan's goal of providing places for residents to interact and socialize, such that "walkways act as a leisure route, a social area. They allow huge accessibility" (Int.#13: Female, long-term resident, born in Kitimat, not employed in industry).

5.2.2.6   Recreational Facilities

A final aspect of the planning of Kitimat that concerned interaction was the development and organization of recreational facilities to provide places and opportunities for people to come together and socialize. Kitimat has several recreational facilities including the Riverlodge recreation centre, the Sam Lindsay Memorial swimming pool, the Tamitik and Kitimat Ice arenas, a curling rink, and the Hirsch Creek golf course. These facilities provide places, and organized activities, for the residents to come together and interact. The facilities are considered community assets and some participants feel that the quality of facilities is something unique to a town the size of Kitimat as described by a long-term resident: "We have our recreation department that is very much involved. If you checked out what all happens in the Rec. Department you would be hard pressed to find any other community with the same amount of stuff" (Int.#4: Male, long-term resident, employed in industry).

Eight participants mention the role that recreational facilities play in facilitating interaction, most of whom are either long-term residents or were born in Kitimat. The facilities are considered an important part of the town and

> the municipal government promotes all of these [recreation] programs because everyone knows, including the District, that if you want to keep people happy, you have to keep them doing something. The more there is for people to do, of course, the happier people are. The winters are very long and if you are not involved in something it can get extremely depressing…For a community this size, we have more facilities, more activities, more programs than any other small town I know of (Int.#15a: Male, long-term resident, employed in industry).

A quote from the *Northern Sentinel* explains the role of recreational activities: "In Kitimat, hockey has evolved to become part of the city's collective identity during the winter months" (2004b:19). One respondent explains how she uses the facilities as a means of socializing: "[I] socialize a lot at kid's sporting events at the pool or the rink or the ballpark. Still socialize when I watched my grandkids swimming" (Int.#15b: Female, long-term resident, employed in industry). It is apparent that the recreational facilities are well used and they serve as important venues for interaction, at least for long-term residents. The numerous facilities provide multiple options for residents and allow them to interact and develop relationships based on interests, an important means of interacting and developing relationships.

5.2.3 Summary

The physical location and layout of Kitimat play important roles in the development of a connection to place shared by its residents and the interaction of those residents within the place. The intention of comprehensive planning in general, and Stein's plan specifically, was to encourage face-to-face associations and interaction (Stein 1954, Bowles 1992, Larsen

2005). The research finds that in general the plan provides multiple opportunities for accidental and purposeful face-to-face interaction. The organization of neighbourhoods successfully places individuals in proximity to each other which allows for the development of relationships that potentially lead to opportunities to provide assistance and help when needed (Wellman and Wortley 1990). The zoning intends to bring people together in areas designated by use (Baxter and Ramlo 2002). The central commercial area in Kitimat provides a meeting place where "you can't go 10 minutes without seeing someone you know" (Int.#4: Male, long-term resident, employed in industry). The installation of green spaces and pedestrian access are features common to resource towns developed after the Second World War and emphasize socialization (McCann 1978, Bowles 1992). In Kitimat, the multiple park and outdoor activity spaces provide opportunities for interaction from casual greetings to organized events. Furthermore, the walkways connect the town and also provide a public space where people meet and interact. Therefore, the application of specific physical planning elements in Kitimat has succeeded in promoting interaction and face-to-face associations.

5.3   Social Cohesion

The previous sections demonstrate that interaction is encouraged through shared interests and commonalities such as gender, age, ethnicity, and job-type. Furthermore, the physical place and the organization of that place lend to the promotion of interaction. The high levels of interaction in Kitimat lend to the development of social cohesion. Social cohesion is represented by acts of coming together in times of need (Jackson *et al.* 2003), as well as feelings of comfort and safety within a place, a sense of that place as home, and that everyone knows who you are, that you are important (Chavez 2005, Martinez-Brawley

1990:Ch.1). It is often represented in a town by levels of participation and volunteerism

(Jones 2000). Social cohesion develops through the interactions that are encouraged

throughout the town of Kitimat and it increases with increased interaction (Davidson and

Cotter 1986), which is strengthened by the small population, high population density, and

distance from other communities (Bowles 1992, Cochrun 1994). Phenomena such as

transience and political divisions can act to inhibit social cohesion (Robinson and Wilkinson

1995). This section deals with interview and focus group themes that fall within this category

of social cohesion.

5.3.1 Coming Together

People come together in times of need at different scales, it can be neighbourly acts of

helping, contributing to community aide, or helping to raise funds for national programs such

as the Canadian Cancer Association (Dalby and Mackenzie 1997, Beckley *et al.* 2002).

Eighteen participants mentioned coming together at a community level. The Aluminum City

Telethon, held annually for the past 29 years, raises money that is distributed within the

community to various charities and organizations. In 2008, over $63,000 was raised

(Northern Sentinel 2008). The telethon, which runs entirely on volunteer work, is organized

by a committee and features participation from multiple organizations and individuals in the

town. It is a successful example of the community coming together and "for a population of

8,000 people, the amount of money that is raised, that all stays here, is amazing" (Int.#15b:

Female, long-term resident, employed in industry). Alcan's community partnership website

describes the telethon as "a key opportunity for members of the Kitimat community to

support a range of non-profit organizations, to whom the significant funds raised are

distributed" (Alcan 2009). Every interview participant mentions acts of neighbourliness and

coming together in times of need. There are three specific examples of situations when the community came together that recurred in the interviews: the triple homicide, the Baxter St. fires, and the threatened closure of the Kildala elementary school. Each of these events affected the town as a whole and resulted in the town coming together to deal with the events.

In 1997, a triple homicide in Hirsch Creek Park affected all the residents of Kitimat and drasticly decreased public use of that space. A resident explains that they "no longer feel welcome in Hirsch Creek Park because of its criminal past" (Int.#3: Female, new resident, not employed in industry). The homicides brought the community together: "The Catholic Church was full; people were in the parking lots watching it" (Int.#6: Female, returned resident, born in Kitimat, not employed in industry). A resident describes that "everyone was there, we pulled together. Kitimat pulls together in times of need" (Int.#13: Female, long-term resident, born in Kitimat, not employed in industry).

In 2008, a fire destroyed an entire apartment building. One resident describes the generosity and compassion of the people of Kitimat, "people do come together, like the Baxter Street fires. The whole building went up along with everyone's belongings. A local shop started taking donations and had to advertise to stop bringing donations because they had no room for it" (Int.#6: Female, returned resident, born in Kitimat, not employed in industry). A newspaper article concerning the fire quotes the manager of the apartments,

> the families are quite impressed with the love that has come from
> Kitimat, the support that has come from the town and the services that
> are here. The mental health support workers were there, social services,
> the churches and the fire department. I'm really quite impressed with the
> fire department. Having the whole town coming to help those families
> who need it. That's really quite excellent (McFarlane 2008a).

Kitimat has also recently faced the threatened closure of the Kildala school. This is the only elementary school found 'down the hill' and the people of Kitimat were not going to let the closure happen without being heard. In terms of community issues, "the four day school week and possible Kildala school closure have mobilized citizens. There has been very strong participation and community involvement in protecting these services" (Int.#12: Male, returned resident, born in Kitimat, employed in industry). Attendance at rallies and voicing their opposition has prevented the closure of the school and school trustee Raymond Raj is quoted saying, "we had the community consultation and we learned so many things that we did not know. The board listened to the evidence, which came to us in triplicate and stared at us, we cannot deny. There is nothing stronger than the truth. That is why the committee decided that this is not the right decision. We will leave Kildala alone." (McFarlane 2008b).

These examples demonstrate that the people of Kitimat have the cohesion to come together and provide help and support in times of need. Building upon the processes and structures that support interaction, groups and individuals come together to work at overcoming hardship and helping to provide for residents.

5.3.2 Neighbours

The foundation of interaction and development of social cohesion occurs at the neighbourhood level (Lochner *et al.* 1999). Five of the participants discuss coming together at the neighbourhood level. The participants consider Kitimat to be a friendly place where neighbours help each other, "I have a friend, she used to come home and her driveway was cleared, she thought her husband had done it, and he thought that she had come home and done it. It was the neighbour and for years they didn't even know he had done it. There is a

lot of that kind of help that goes on. The community rallies around, you help each other out"

(Int.#15b: Female, long-term resident, employed in industry). One resident who has moved

from Kitimat explains that one thing they liked about living there was "the closeness of

neighbours if you were in trouble. Neighbours were helpful in times of need" (Int.#1: Male,

left Kitimat, employed in industry). A letter to the newspaper in response to support from the

community of a family whose son has leukemia states how "it's just overwhelming and

proves to me the kind of closely-knit community that Kitimat is" (*Northern Sentinel*

2004a:8). People are willing to help their friends and neighbours and this lends to a cohesive

community.

5.3.3 Participation

Participation in organizations and volunteerism is acknowledged as playing an important role

in the development of social cohesion (Teather 1997, Jones 2000). The March 3rd, 1955 issue

of the *Northern Sentinel* (1955b:8) provided a community guide and said, "this directory has

been compiled...to assist local citizens in knowing their community better". The list included

57 social organizations divided into 10 categories indicating that these types of groups were a

part of Kitimat's early development. A 1965 article describes, "Kitimatians are doers and

participants. Nearly everyone is involved in some community endeavour" (*Northern Sentinel*

1965a:2). The 2008 Community Directory includes 134 organizations divided into similar

categories (Kitimat Recreation Department 2008). The availability and existence of so many

groups suggests high levels of participation, however, the interviews and focus group

indicate that the level of volunteerism may be declining in Kitimat. A resident explains how

"there are a few people who are really keeping this community together. In a population

around 8000, there are 80 people who are fighting every single day, they are exhausted"

(Int.#6: Female, returned resident, born in Kitimat, not employed in industry). The concern is that the aging population results in fewer volunteers as those who have given their time for many years are beginning to remove themselves from active participation. One person agreed: "for 30 years I was active and participated, now I am a member, I go to meetings and speak my opinion but I don't volunteer anymore, I have done my share" (Int.#4: Male, long-term resident, employed in industry). Participation and volunteerism have been attributed as important factors in the development of community capacity (Teather 1998, Jones 2000). Given the importance placed on volunteerism (Wilson and Musik 1997, Sullivan and Halseth 2004), this is an important concern that needs to be addressed in order to maintain Kitimat's capacity to address change.

Volunteerism and participation are mentioned by 15 of the interviewees. Nine of those respondents express concern that volunteerism is decreasing and that Kitimat's sense of community was stronger in the past because of higher levels of participation. A participant describes how, "there were far more clubs back then and more interest in being part of a club like Kinsmen, Rotary, Kiwanis; ask any members and they will tell you their membership has dropped off" (Int.#2: Female, new resident, not employed in industry). Participation in any organization provides opportunity for interaction and the development of social capital and cohesion (Jones 2000), however, organizations based on interest cater to much smaller groups than those based on community-wide events. One resident says, "I have volunteered in tons of stuff, I feel there are too many groups and too many events and too much stuff going on. It would be nice if we could have fewer things and have more people involved" (Int.#11: Female, new resident, not employed in industry). Organizing activities that are open, and appeal to all residents is a potential means of increasing interaction and social

cohesion. For example, the 50th anniversary of municipal incorporation was "an opportunity to promote a new sense of unity in the community" (*Northern Sentinel* 2002a:14). Whether participation occurs in interest-based, or community-wide activities, each provides opportunity for interaction and the development of social cohesion (West and Fenstermaker 1995, Falk and Kirkpatrick 2000). Kitimat provides many opportunities for interaction and participation in the multiple groups and activities offered. There is opportunity to develop social cohesion as long as people are volunteering and participating.

In Kitimat, the research indicates that participation in social organizations is a necessity to belonging in the town and the number of groups catering to a variety of interests indicates that there are many opportunities for participation. A newer resident explains the necessity of participation in interest-based organizations for socialization, "it's hard to get to know people here. I am not a joiner of clubs but I realized soon I had to join clubs because there are no other ways to meet people, you have to join things" (Int.#2: Female, new resident, not employed in industry). There is evidence for high levels of interrelation between social organizations. Not one of the focus group participants claims to belong to a single group or organization indicating that interaction was spread out through diverse interests and characteristics. The research also indicates that most community events are the result of multiple organizations working together. The emphasis on participation in social organizations and the interaction across those organizations indicate high levels of social cohesion.

5.3.4 Belonging

Increased social cohesion leads to increased comfort in one's community (Freudenburg 1986). The literature says that the more people are acquainted with each other, the higher potential for interaction and development of social capital that will lead to social cohesion (Hays and Kogl 2007). In an isolated small town, there is a tendency to see the same people daily and develop relationships because of this repetitive interaction (Wellman and Wortley 1990, Valentine 2007). The sentiment is explained by a resident, "it's strange that you work with these people and then you have to go and play badminton with these people" (Int.#8: Female, long-term resident, not employed in industry). For the most part, the participants feel that everyone knowing your name, or at least face, is comforting and results in Kitimat feeling safe and welcoming.

All of the participants mention that Kitimat's size provides a small town feeling where everyone knows who you are. Two of those respondents feel that this can be a negative characteristic in that "there are a lot of judgmental people and basically your business is everyone else's business" (Int.#17: Female, returned resident, born in Kitimat, not employed in industry). One person moved from the community and the other is a recently returned resident. The majority of respondents, however, feel that it is a positive feature that makes living in Kitimat comfortable and welcome. When asked what they would show a visitor to Kitimat, one participant responded, "I would want someone to get the feeling of happiness that you get when you are walking on the paths and people say 'hi' to you. Living in Kitimat is like living in a big bubble" (Int.#6: Female, returned resident, born in Kitimat, not employed in industry). It is a sense of familiarity that lends to a feeling of comfort and safety,

"You know your way around, you know lots of people, it's comfortable and feels like a safe environment" (Int.#15b: Female, long-term resident, employed in industry).

Feelings of comfort and familiarity work to develop trust. This trust can be drawn upon for support (Wallis 1998). In Kitimat, there is evidence that residents invest their time and money into their town. These investments support many members of the town. The research provides many examples of neighbours and friends giving social, emotional, and financial support to address needs from snow covered driveways to family illness. This safe environment leads to a sense that Kitimat is home, and as people and families choose to extend their residence in Kitimat after retirement, it is becoming a place where familiar faces and 'family' are found. Every one of the interviewees born in Kitimat refer to its safety and comfort, and all but two of the long-term residents do so as well. To describe what they liked best about Kitimat one answered, "the closeness of everything and the friendliness of the people. Just feel comfortable" (Int.#15b: Female, long-term resident, employed in industry). When asked where they felt most comfortable an answer included "nowhere special, nowhere un-special. You go where you want, you do what you want and nobody really minds" (Int.#15a: Male, long-term resident, employed in industry). In fact, when asked if there were places in town where people felt uncomfortable or unwelcome, very few respondents thought of any examples. In closing the interview, one respondent said,

> I think Kitimat is pretty awesome. It is one of those things, it will
> always be home for me. I still have a lot of friends there, who will
> never leave. I always wanted out but I still go home and it is still
> comfortable. I still go to the same church I went to my entire life. It
> just never changes, which is great in a weird way (Int.#18: Female,
> born in Kitimat, left Kitimat, employed in industry).

Developing social cohesion can be difficult in a transient community because of short lengths of residence and a lack of continuity (McCann 1978, Randall and Ironside 1996). Lucas (1971:Ch.5) argues that decreases in mobility result in a mature town and Robinson and Wilkinson (1995) argue that decreased mobility results in stronger cohesion. As mentioned previously, a decrease in transience results in an increase in familiarity. The decrease in transience noted earlier was recognized by many of the participants, however, the lack of employment opportunities for young adults results in an exodus of youth who potentially will not return after earning an education (Lucas 1971:Ch.5). One young adult who has left the town said, "it used to be that once you finished high school you would just go work in the pot rooms [Alcan] and that is no longer there" (Int.#18: Female, born in Kitimat, left Kitimat, employed in industry). A resident whose children have since left Kitimat explains, "you raise your children, they grow up and move out and don't want to come back, most children. There are few children who like Kitimat but again there is no jobs for them" (Int.#5: Female, long-term resident, not employed in industry). A long-term resident remarked, "not a lot of kids would go away to school and now, in the last 20 years, most kids go away to school" (Int.#10: Female, long-term resident, not employed in industry). Despite an increase in long-term residents, it seems that the economy makes it difficult for the younger generation to stay in their home town due to a lack of employment opportunities.

The literature argues that in some cases, networks that lend to social cohesion can be so cohesive as to create exclusionary barriers (Wotherspoon 2002, Chavez 2005). The residents of Kitimat share many commonalities, and the result is a town where people are familiar and comfortable with each other. This is a good indicator of social cohesion; however, it may become a barrier to new residents. In Kitimat, long-term residents describe the community as

welcoming and open, while new residents describe barriers. The research indicates that people find it hard to develop relationships as new residents and participants feel that this is the result of strong relationships within groups. The strong social cohesion within Kitimat allows for interaction and interrelation between existing residents, but may act as a barrier to new ones.

5.3.5 Summary

A decrease in transience, the ability to come together in times of need, and providing help and support are indications of Kitimat's social cohesion. The cohesion is demonstrated through strong neighbourhood relations and results in a place that is considered familiar and safe. The existence of many organizations indicates the potential for high levels of community participation; however, there is the emerging challenge of a possible decrease in volunteerism resulting from an aging population. There are many indications that the residents of Kitimat are interacting and developing social cohesion despite perceived drops in participation.

The research indicates that Kitimat has developed social cohesion in ways that correspond closely to the literature. The population density and planning encourage opportunities for intersectional interaction which allow for the development of strong networks based on trust. These networks are strengthened by high levels of participation in social organizations, and the interaction between these organizations. While the cohesion within Kitimat seems high, it may be acting as a deterrent to population growth and stability as it acts as a barrier to new residents to feel included.

Drawing upon social capital and social cohesion enables the people of the town to come together, resulting in community capacity (Wallis 1998). The residents of Kitimat demonstrate that they come together not only in times of need, but in anticipation of need. Community capacity provides opportunities to adapt to change, achieve goals, and remain resilient (Jackson *et al.* 2003). There is concern for Kitimat's capacity pertaining to decreases in participation as well as perceived feelings of complacency. The research also indicates that there is a sense that Kitimat has never faced any real challenges and may not be prepared for something significant. However, the demonstrated ability to come together and face small challenges shows the potential to work together to achieve goals, big or small.

The research illuminates several examples of the town's ability to come together. The Aluminum City Telethon is a prime example of volunteers and donors working together to provide funding to social organizations within the town that help the residents directly. The coming together of the town to save the Kildala school indicates that there is enough social cohesion to bring residents from all over the town to address this issue. Rallies such as this indicate that when necessary, the town can come together and achieve its goals.

5.4   Resilience

Resilience is the ability to adapt positively to changes (Randall and Ironside 1996). In resource and industrial towns, resilience often depends on an economic reliance on industry as the primary employer as well as the primary tax base (Bish and Clemens 2008:Ch.12). While the reliance on industry can cause problems in terms of resilience, the literature increasingly shows that social structures can succeed in developing the capacity to supplement or maintain place resiliency (Bradbury and St.Martin 1983, Bowles 1992,

Halseth and Sullivan 2002, Sullivan and Halseth 2005). Resilience can be achieved by demonstrating strong social cohesion that is earned through the development of social capital that is acquired through interaction (Temkin and Rohe 1998, Jackson *et al*. 2003). The previous sections demonstrate that Kitimat offers multiple opportunities for interaction and these are manifested in both the social and physical organization of the town. The community shows social cohesion on many scales with concern only in terms of reductions in volunteerism and continuing transience within the population. Kitimat has the foundation of social capital and social cohesion to provide the potential to be a resilient community. However, some issues which participants touched upon should be considered before making any conclusions including the role an influence of industry, accessibility to amenities and services, changes in demography, and issues concerning the future of Kitimat.

5.4.1 Reliance on Industry

The literature addressed how reliance on a company hinders a town's stability (Himelfarb 1976, Bowles 1992, Randall and Ironside 1996). Kitimat is an instant town, not governed by a company. However, Alcan has played, and continues to play, an important role in the town. Along with the two other major industries (Eurocan and Methanex), industry makes up the greatest percentage of the town's tax base and, therefore, plays an important economic role[4]. Many residents feel that Kitimat's resilience relies primarily on Alcan's success, that of other industries, or the potential of new industries. One resident describes how "our reliance on a major industry continues to be our Achilles heel" (*Northern Sentinel* 2002b:3). There is an implication that, without industry, Kitimat would no longer exist. The community faced a divisive challenge when the District of Kitimat legally questioned Alcan's proprietorship of

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[4] Since this research was started, Methanex has closed. In October 2009, it was announced that Eurocan paper mill would close January 31st, 2010 (Northern sentinel 2009a).

the hydro electricity generated by the Kemano power plant in 2005. The residents of Kitimat were divided in their support. One resident explains, "we were divided. I found the issue really divided the community. There was one group that thought the District was biting the hand that fed them, Alcan. Others believed that the water doesn't belong to Alcan, but to the people of BC. People were fearful that Alcan would leave. Fifty-fifty split" (Int.# 10: Female, long-term resident, not employed in industry). Many in the community felt that the district was right in standing up for the rights of the northern community to hydro and water. Many others felt that the district was attacking the company that helped to build the town, and that such actions threatened the existence of the town: "The whole issue scared commerce away and really hurt this town. Because, if council is going to sue Alcan, which provides so much, then what would prevent them from doing it to any other company coming in?" (Int.#8: Female, long-term resident, not employed in industry).

Some respondents feel that Kitimat's resilience is directly related to Alcan's success, "I would doubt the resilience of the town if Alcan closed. People would just look after themselves" (Int.#4: Male, long-term resident, employed in industry), implying that any cohesion that exists in the town would be inconsequential if faced with the closure of Alcan. Another replied, "if Alcan pulled the plug, we are screwed" (Int.#11: Female, new resident, not employed in industry). The resilience of Kitimat is tied to Alcan's success because Alcan played an important role in the creation of Kitimat, "Alcan is the first thing I think of when I think of Kitimat [...] Kitimat was created by Alcan, it's a community that was built" (Int.#6: Female, returned resident, born in Kitimat, not employed in industry). All of the participants mention that dependence on industry affects Kitimat's resilience. One participant expressed concerns that "Kitimat is very susceptible to instability because of industry and the fact that

there isn't a back-up plan" (Int.#6: Female, returned resident, born in Kitimat, not employed in industry). Suggestions for the future remain focused on industrial opportunities, "the people in Kitimat have been intimately attached to heavy industry so they are welcoming to those types of prospective projects. You need to anchor employers to maintain the population base upon which further growth can take place" (Int.#12: Male, returned resident, born in Kitimat, employed in industry). Kitimat is strongly tied to industry; however, this does not have to hinder its capacity for resilience. The literature suggests that social structures can help to support place resiliency (Halseth an Sullivan 2002, Sullivan and Halseth 2004). Previous sections demonstrate that the physical and social planning of Kitimat provides an environment that is conducive to interaction, social cohesion, and community capacity. The connections between residents provide opportunities to work together to overcome challenges and remain resilient (Jackson *et al.* 2003).

5.4.2 Commercial Accessibility

Portes (1998) argues that decreased accessibility can increase social capital, however, with transportation and internet access, commercial services remain accessible despite isolation but often require residents to leave town to get them. Kitimat's resilience is affected by the lack of accessibility to many commercial amenities and services. In the interviews, residents expressed concern that Kitimat's local offerings are dwindling as more residents drive to Terrace to purchase goods at lower costs, to the detriment of the town's economy. Attempts to increase commercial spending in Kitimat have a long history. A 1965 advertisement in the *Northern Sentinel* quotes, "Help Kitimat Grow....Buy it in KITIMAT! Let Kitimat dollars work for you" (1965b:8). Similar adverisements published more recently include the

development of Kitimat Kash, which offers $5000 interest-free loans at participating businesses, accompanied by the slogan, "Shop Kitimat First" (*Northern Sentinel* 2005:1).

Inaccessibility to commercial venues is a common concern among my participants and is mentioned by 18 of them. When asked what residents disliked about Kitimat, ten responded the lack of commercial venues. One resident dislikes how "the commerce here is so sad. I just wish things were a bit more upscale, funky, interesting. I just have to go somewhere else to get that" (Int.#2: Female, new resident, not employed in industry). Another resident explains, "Kitimat is a strange place, the business sector is very small in terms of the population, compared to Terrace. Terrace is only twice as big, but has four times the commerce. People are going to Terrace for the deals and it's impacting commerce" (Int.#9: Male, long-term resident, employed in industry). The movement of money out of the community can impact the resiliency of both business and population (Halseth *et al.* 2005, Parkins *et al.* 2004). If the commercial sector increases, the diversification will decrease the reliance on industry. More amenities can attract new residents and persuade current residents to stay which increases a town's resilience.

The lack of services noted by many of the residents indicates a necessity for the town to draw upon their social capital to fill those needs (Whittaker and Banwell 2002). There are some examples that Kitimat already provides for missing services, such as the multicultural dinners that regularly occur in town and provide access to ethnic foods that would otherwise be unavailable. However, many residents choose to travel to other towns to obtain services that are lacking in Kitimat. In this sense, drawing upon social capital may not always be able to provide necessary services.

5.4.3 Demographics

Demographics in Kitimat are changing. These changes include overall decreases in population accompanied by an increase in retirement-aged individuals and an out-migration of young adults (20-29 year olds). A concerned resident explains how "this kind of shift can only be described as unhealthy in terms of maintaining a complete and vibrant community" (*Northern Sentinel* 2002c:4).

Demographic changes are noted by eight of the interview participants. A long-term resident, who came to Kitimat as a child, explains, "when I was eight, we went to Vancouver and I saw my first old person. And now I would say 50% is retirement age or close" (Int.#15a: Male, long-term resident, employed in industry). Another long-term resident notes that "demographically, our seniors are growing in numbers and as a percentage of the total population. In the 1950's and 60's seniors comprised a very small proportion of what was then a very young town" (Int.#12: Male, returned resident, born in Kitimat, employed in industry). The changes in age composition are noted primarily by long-term residents.

5.4.4 Future Potential

To acknowledge loyalty and a potential future for the town is a sign of resilience (Temkin and Rohe 1998). The future of Kitimat is mentioned by 13 participants. In general the residents feel potential exists in their town and that it will remain successful, despite some reference to complacency and concern about an unwillingness or fear to make changes. Nine respondents express concern about Kitimat's unwillingness to change, and how this has a detrimental effect on the town. It is mentioned by three of the five returning residents and four of the 10 long-term residents. One returning resident claims, "I have seen how things

can change, and success can come from it. For some reason in this community many types of improvements are kiebashed before they are even looked at often times. Not even just at a political level but right down to the individual sitting on their couch saying there is nothing to do when I know there are seven events happening that night" (Int.#6: Female, returned resident, born in Kitimat, not employed in industry). Another returning resident said, "there is a lot of potential for this little community but they don't want anything new" (Int.#17: Female, returned resident, born in Kitimat, not employed in industry). A long-term resident offers a possible explanation: "Maybe having a planned community affects how you modify, maybe it makes it hard to change?" (Int.#9: Male, long-term resident, employed in industry). The benefits of the physical plan of Kitimat are noted, however, the participant raises a valid point as to the rigidity of the plan. Stein's plan tried to avoid being too rigorous as to stifle growth and adaptation. I feel a more likely explanation for unwillingness for change is related to the feelings of comfort mentioned earlier. Residents are choosing to remain in Kitimat longer because they are comfortable, and there is a fear that change may affect that comfort. It is residents who have left and experienced other towns and communities who comment how Kitimat is caught in a repetitive cycle.

Thirteen respondents referred to Kitimat's future and the town's potential, including comments of concern as well as expressions of hope. Concerns are expressed about the potential for Kitimat to sustain itself: "Kitimat has too much concern for growth and not enough concern about sustainability" (Int.#1: Male, left Kitimat, employed in industry). However, nine respondents express positive comments focussing on the potential Kitimat has and the possibilities the future holds. One respondent explains that, "we are a multicultural, industry town, that was planned and created, and has so much potential. And the people in it

have so much potential as well" (Int.#6: Female, returned resident, born in Kitimat, not

employed in industry). The negative comments come from residents who have left the town,

are relatively new to the town, or recently returned to the town. The positive responses come

primarily from long-term residents or returned residents. A quote from the *Northern Sentinel*

in 2003 (b:7) illustrates resident's desires to fight for their community,

> In the spirit that makes the Aluminum City Telethon one of the most
> successful on the North American Continent, the annual Multicultural
> dinner so warm and wonderful, the Cancer Relay for a Friend, the July
> 1st celebrations, and so many other 'Kitimat' things we pride ourselves
> on and treasure, I implore you to get a fire in your belly and to support
> any initiative to save our town, which was, in the beginning, Alcan's
> pride and joy, A well-researched, well-developed, and architecturally
> planned community to attract Alcan workers and their families.

The feelings of pride for Kitimat, as well as positive hope for the future indicate that

residents are willing to fight for their town; it is this characteristic that lends further potential

to a town's capacity for resilience. These feelings grow as a result of all of the opportunities

for interaction, social cohesion, and community capacity found in Kitimat.

Facing real threat is the true test of community capacity (Sullivan and Halseth 2005). The

research indicates that participants feel that they had not faced any true challenges and,

therefore, could not comment on their community's capacity. However, the town of Kitimat

has faced many challenges including the closure of Methanex, one of its primary industries,

and a triple homicide, among others. These challenges were met and overcome through the

community's capacity to come together to address them. In the case of Methanex, many of

the employees were absorbed into the other industries in town. And the community came

together as a large group to share the mourning of the homicide victims. The apparent

ignorance to the threats and challenges that the town has already faced indicates that the

capacity is so firmly entrenched in the town that it is not recognized as something out of the ordinary.

5.4.5 Summary

This section has outlined the important role played by the economy in the resilience of a town that is reliant primarily on large industrial employers. This reliance coupled with changing demographics, an apparent complacency, and a lack of commercial facilities are all challenges Kitimat must face in order to remain resilient. However, it is evident through the previous sections that Kitimat is equipped with the interaction, social capital, and social cohesion assets to address the challenges and potentially remain resilient.

The research questions are concerned with Kitimat's resilience. Through the interaction encouraged by Stein's plan, the development of social capital and social cohesion through the development of networks and trust, Kitimat has demonstrated a capacity to adapt to change and achieve its goals. The people of Kitimat contribute their time, money, and energy to the other people of their town, and they have already overcome threats and challenges. In order to maintain this capacity, the residents of Kitimat must continue to build social capital and social cohesion through interaction and participation.

Drops in employment availability have resulted in a decrease in population, an outflow of 20 to 30 year olds, as well as a steady increase of residents over the age of 50. The increase in retirement aged residents indicates community maturity and can reflect a movement to a more stable population (Lucas 1971:Ch.5). However, accompanied by the out-migration of younger residents, there is concern about whether Kitimat can sustain its population.

5.5 Conclusion

A town can be considered resilient if it has the capacity to overcome hardship, contend with change, and continue to persist (Sies 1997). In resource and industrial towns where the economy is strongly dependent on industry, questions of resilience surface every time industry is threatened (Randall and Ironside 1996). This thesis presents the social factors of interaction, social cohesion, and social capital that lend to a community's capacity to be resilient despite economic reliance on industry.

The data from the interviews, focus group, Census, and mapping analysis provide insight into the success of Kitimat's plan, the interaction and participation within the community, as well as the possibility of resilience. Relationship formation is based primarily upon interest-based interactions, and the physical and social planning of Kitimat encourages that interaction. The topography of the town results in a physical division of residents, a division that is also socio-economic. Transience, demographic change, and lack of diversification in the economy act as barriers to resilience. Kitimat has several barriers to overcome, however, the research demonstrates that the town has a good sense of social cohesion and several social capital resources to draw upon, providing it with a high potential of resilience.

The research question asks whether Stein's plan for Kitimat resulted in a resilient town. The foundation of resilience is interaction and Kitimat's plan has certainly encouraged interaction. Interaction can be inhibited by many barriers, both social and physical (Russell and Harris 2001, Vesselinov et al. 2007). The interaction in Kitimat is structured by physical as well as social characteristics. The physical division by the hill in town acts as a barrier to interaction and influences the development of exclusion through social divisions. However,

planning elements work to counter barriers and encourage accidental interactions such as meeting at the grocery store or on a walkway. Social barriers are challenged by the high levels of inclusion in most groups and the emphasis on interest-based relations over those based on other characteristics. Relationships are based on multiple social characteristics (Reimer 2004), and the multiple options for interaction available to Kitimatians support the development of relationships. The ability to belong and participate in different groups increases social cohesion through the development of connections between different groups (Burman 2004, Valentine 2007). A combination of planning features that encourage interaction, and the ability to participate and belong to multiple groups, has resulted is high levels of interaction.

The capacity to come together in times of need indicates resilience and Kitimat demonstrates the ability to come together and cope with threats. Social cohesion needs to develop in order to have networks to encourage capacity (Hays and Kogl 2007). Kitimat shows high levels of social cohesion resulting from participation and interaction between multiple groups and organizations. Finally, resilience, capacity, cohesion, and social capital depend on a foundation of interaction (Hofferth and Iceland 1998, Wallis 1998). The physical layout of Kitimat encourages interaction and develops stores of social capital as a result of those interactions. All of these features considered together indicate that Kitimat can be resilient and that the plan contributes to this resilience in many ways.

Chapter 6 Conclusion

6.1 Introduction

In order to address concerns of resilience in resource towns, planners began applying comprehensive planning principles. Comprehensive planning included both social and physical planning elements that would encourage interaction. Kitimat was the first comprehensively planned town in British Columbia. The literature suggests that in order to build potential resilience, a town must demonstrate the capacity to come together in times of need to achieve their goals (Temkin and Rohe 1998, Jackson *et al.* 2003). The research model proposes that high levels of interaction, social cohesion, and social capital lend to increased potential and capacity to face change and potentially remain resilient.

6.2 Research Questions

Two research questions are addressed by this thesis. The first is concerned with how interaction is structured in Kitimat. Interaction in Kitimat is affected by the physical plan. Stein's plan for Kitimat includes many elements that result in accidental opportunities for interaction. Relationships in Kitimat form through common characteristics such as ethnicity, job-type, and length of residence. Income is one of the only characteristics that results in exclusion. Stein's plan for Kitimat also encourages interaction between socio-economic groups. The neighbourhoods that do not adhere to Stein's plan fail to encourage as much interaction between these groups as seen elsewhere in the town and this results in a potential division in the town. Overall, fluid relationships based on interests are emphasized. Relationships in Kitimat are very intersectional, with residents belonging to multiple social groups and organizations.

The second question asks whether Stein's plan for Kitimat succeeds in creating a resilient town. The potential for resilience is measured by the community's capacity to come together in times of need. This ability is achieved through high levels of interaction, social cohesion, and social capital. In Kitimat, the research shows that Stein's plan provides multiple opportunities for interaction and social cohesion, resulting in stores of social capital. These assets result in several examples of the community's capacity to come together to address specific times of need. The research identifies some obstacles to resilience, such as lack of commercial services, transience, and demographic change. Kitimat has a strong foundation of social capital, social cohesion, and community capacity, these assets support the potential capacity to come together; however, goals need to be identified in order to achieve them, how these assets are put to use remains to be seen.

6.3   Future Research

The process of researching Stein's plan for Kitimat, and its influence on the development of relationships and resilience, led to further potential research topics and issues:

1. This research provides a case study of the first comprehensively planned, instant town in British Columbia. How do the plans from instant towns modelled on Kitimat, such as Tumbler Ridge and Mackenzie, differ? And, have those differences served to overcome, or exacerbate, some of the issues found in Kitimat? This is important to determining if there are any planning elements that can be applied to address the issues, or if other approaches are necessary.

2. The research finds that there is a social division between individuals and families of low socio-economic status. It is also hard to get these individuals involved in

research. A future research project should focus on that particular socio-economic group to further explore the causes of the social division, and how to address it. Social divisions of any kind in a small community can be debilitating to resilience and, therefore, need to be addressed.

3. One of the concerns in Kitimat is the declining levels of volunteerism. The sense is that individuals who have been active, are growing old, and are choosing to lessen their participation. The changes in demographics show a reduction in the number of younger residents and fewer of those younger people are willing to take the place of older volunteers. Future research should address the factors that are deterring younger resident participation in the community's volunteer sector. This is important since it has been determined that participation in social organizations is important in the development of social cohesion, and a decrease in participation can be detrimental to potential resilience (Sullivan 2002).

4. The role that the internet plays in the deterioration of interaction and community participation is worthy of future research. Several respondents claim that individuals chose to participate in online communities rather than their local communities. Furthermore, the accessibility of goods and services available through the World Wide Web can affect the commercial services within the local community. It is important to determine how much this is affecting community participation and whether there are any ways to address the issue to decrease any negative effects.

5. The demographics in Kitimat are changing towards an older population. Kitimat was once considered a 'town ahead of its time'; its ability to address these changes in demographics is a true test of that adage. Future research to determine if such towns

are prepared for the aging demographics are important to determine what, if any, changes can be made to support accessibility.

6. In many respects, Kitimat was designed to serve Alcan. The data suggest that there is concern that despite strong community capacity, the town could not survive if Alcan left. There were suggestions that the town remained industrial despite attempts at diversification. Future research can look at the potential of resource industry towns to successfully diversify away from industry. If a town is constructed specifically to serve an industrial population, with a heavy reliance on taxes earned through industrial companies, is there means to develop a diverse economic base in order to escape reliance on industry? What measures need to be in place to achieve this?

7. Job-type plays an important role in structuring interaction among those who work(ed) in industry. Further research concerning the structure of this interaction in terms of union organizations and their roles in industrial communities would be valuable. These relationships have great potential in developing social cohesion, however, the exclusive nature of the organizations tends to keep those stores of social capital separate from the rest of the community.

8. This research recognizes that Kitimat shows high levels of social cohesion that is a potential barrier to interaction with new residents. Future research should look at whether this barrier affects relations with neighbouring communities, especially I cases where the neighbouring community is a First Nations reserve. Many respondents refer to relationships with Kitamaat village as strained. Research to determine what is structuring the interaction between the two communities should be conducted.

9. The recent announcements concerning the imminent closure of the Eurocan paper mill (Northern Sentinel 2009a) provide an opportunity for future research to focus on which mechanisms, if any, are used to cope, and how the resilience of the town is tested.

6.4 Conclusion

This thesis demonstrates that Stein's plan for Kitimat has succeeded in providing opportunities for interaction through the physical organization of the town, as well as the application of multiple social groups and organizations. Social cohesion and community capacity do not develop through singular acts, but through the culmination of multiple and on-going aspects. The social cohesion of Kitimat benefits from its remote location and shared sense of place. Furthermore, Stein's plan for Kitimat provides ample opportunities for interaction by encouraging face-to-face communication. These features, along with multiple options for interaction based not only on categorical identifiers, but also on interests, provide many routine chances to develop social cohesion. An important point to be drawn from this thesis is that Kitimat's potential resilience cannot be attributed solely to the physical plan, but to all of the features that encourage interaction. Stein's plan for Kitimat facilitates the interaction that is encouraged by place, and social opportunities.

This research indicates that Kitimat possesses stores of social capital, social cohesion, and has demonstrated the community capacity to come together in times of need. The literature argues that these are the foundational elements of resilience. Kitimat's potential for resilience has yet to be tested, however, my research suggests that Kitimat has this potential to be resilient because it has the necessary foundation built from social capital and social

cohesion. Unlike the town of Bralorne where my mother was born, Kitimat was planned to

encourage the development of a strong social foundation.

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Appendix I   Research Tools

A   *Focus Group Guide*

Kitimat Sense of Community Project
Focus Group Guide

Focus Group:_____

Facilitator:_____ Note taker:_____

Date:_____ Place:_____

Start time:_____ End time;_____

QUESTIONS

- Opening Questions
  - o Around the table: What is your name? How long have you lived in Kitimat? What organization(s) do you belong to? How long have you been part of your organization(s)?
- Participation
  - o Are there special requirements to belong to your organization(s)?
    - Prompts: selection committee? Inclusion/exclusion, identification
  - o Does your organization have a particular meeting place?
  - o Which groups are the most active in the community?
    - Prompts: activities and events
  - o Are there any groups that do not participate in the community?
  - o What do you think would improve community participation?
    - Prompts: Government social planning, places
- Interaction
  - o Do your organizations work with other groups? Which ones? Why?

  - o Are there particular community events where several organizations come together? Which ones are the most successful? Why?
- Sense of Community
  - o Would you say that Kitimat has a strong or weak sense of community?
    - Prompts: Examples? Reasons?
  - o What do you feel is your organization's role in the community?
    - Prompts: Who benefits? Why do you participate?
  - o What do you think would improve the sense of community in Kitimat?
  - o Are there any events in particular that reflect Kitimat's sense of community?
- Concluding Questions
  - o From your experiences as active members in the community, do you have anything else to add that we have not touched on or that you would like to add?
  - o Are there any questions that you thought I would ask that I didn't?

B   Focus Group Questionnaire

Name of organization_____

Address of meeting place_____

How long has the organization been established in Kitimat?_____

Which, if any, organizations in Kitimat are directly affiliated with yours?

_____

Organization's mission statement

_____

_____

Organization's Area of interest (check all that are applicable)

O Religion	O Youth	O Seniors
O Business	O Sports	O Ethnic
O Arts	O Social	O Women

What are the membership requirements to belong to your organization(s)?

_____

_____

_____

Does your organization have a board of directors? How is the board chosen?

_____

_____

_____

What activities and/or events is your organization usually involved in?

_____

_____

_____

Please attach a copy of your organization's charter if possible.

C   Focus Group Consent Form

Kitimat Sense of Community Project

Purpose: The purpose of this project is to examine how groups are participating in the town of Kitimat, and to examine how this participation forms a sense of community. The goal is to determine how a sense of community is developed. In order to achieve this, the project will include: a socio-demographic analysis of the population as well as focus groups and key informant interviews with active participants in community groups.

How Respondents Were Chosen: Focus group participants were chosen from social groups and organizations. The participants represent active members in community social groups and organizations. They were selected for their potential to provide insight into community participation and the development of a sense of community.

Anonymity and Confidentiality: Name of participants will not be used in any reporting or presentation of the material. Any information that may allow for identification of an individual will also be withheld. All information gathered will be held in strict confidence by the researcher. Information related to the focus group will be kept until the project is complete and then it will be destroyed.

Potential Risks and Benefits: The project has been assessed by the UNBC Research Ethics Board. There is considered to be no risks to participating. The focus groups will offer a chance for you to provide information about the community of Kitimat and discuss potential improvements.

Voluntary Participation: Participation in the project is entirely voluntary and, as such, you may choose not to participate. If you participate you may choose not to answer any questions that make you feel uncomfortable, and you have the right to end your participation at any time. You may also have all of the information that you provided withdrawn from the study if you desire.

Research Results: If you have any questions concerning the research, please feel free to contact Jen Herkes (250.960.5267, herkes@unbc.ca), Geography Master's student at UNBC. The thematic analysis of the focus group meetings will be distributed to participants and the final project will be made available to interested participants.

Complaints: any complaints about this project should be directed to the Office of Research, UNBC (250) 960-5820, reb@unbc.ca.

I have read the above description of the study and I understand the conditions of my participation. My signature indicated that I agree to participate in this study.

Name (please print)   **Signature**   **Date**

D   Interview Script

Interviewee name_____

Contact Information_____

_____

Date_____Place_____

Interview time: Start_____   Finish_____

Section A: Background Information Questions
The first section asks you how long you have been in Kitimat, and what you like about living here.

A1. How long have (did) you lived in Kitimat?

A2. What is/was your occupation?

A3. What brought you to Kitimat initially?

        Prompt: *Employment*-what sector?

                      Family-why did they come?

A4. What were your first impressions of the town?

        A3a. Were your impressions correct?

A5a. If moved: Why did you leave Kitimat?

A5b. If still in Kitimat: Do you intend on staying in Kitimat for a long time?

        1. Yes   2. No   3. Not sure

        A5a. If **YES**, what makes you want to stay?

        A5a. If **NO**, where will you go? Please explain why?

        A5b. If **NOT SURE**, why? Please explain.

A6. What do (did) you like the most about living in Kitimat?

A7. Are there any things you dislike about living here?

A8. How do you feel about the community of Kitimat?

        Prompts: Friendly

                      Active

Section B   **Interaction**

In this section, I would like to ask you some questions about participation and interaction in Kitimat.

Part I Organizations

B1a. What do you feel is the level of participation in community events in Kitimat? Do the events have good turn-outs? Does the majority of the town participate?

B2. Are there events which you do not participate in?

      Prompts   (list of events)

      C2a. Why don't you participate?

      C2b. Would you like to participate?

B3. Are there events from which you are excluded? Please explain why.

B4a. What events would you consider to be the most successful in town?

      B4b. What makes them successful in your opinion?

B9a.   How would you describe the involvement of the municipal/town government in the community?

      B9b. Does the government participate in many community events?

      B9b. Which ones?

      B9c. How do they participate?

            Prompts   Financially

                        Planning

                        Active participation/involvement

Section C.   Social Organization

In this section I would like to ask you some questions about the social organization in Kitimat.

C1a. Do you find that there are definite social groups in Kitimat?

    C1b. Do these groups tend to be exclusive?

    C1c. How are these groups formed? (Based on gender, age, etc...)

C2a. Do you feel that there are divisions within the town based on income or job-type?

    Prompts   Low income v. Wealthy

                 Managers v. labourers

                 Service v. manufacturing

    C2b. How do you notice these divisions? How are they represented?

C3. What characteristics do you feel form the strongest bonds in Kitimat?

Prompts	Job-type	Age
	Income	Ethnicity
	Religion	Social interests (sports, arts)
	Gender	

C4a. I know there are formal meeting places such as the Legion, LUSO club, and Riverlodge, but are there places in town where people tend to get together to meet casually? (coffee shops, parks, walkways)

    C4b. Are there particular groups or types of people who meet regularly in specific places?

Section D   **Sense of Community**

In this section, I would like to ask you some questions about the sense of community in Kitimat now and in the past.

D1. Do (did) you feel that you are an important part of the community? Please explain.

D2. Do (did) you feel like you belong in Kitimat?

D3. Would you be upset if you had to move away from Kitimat? Please explain.

D4. Do you feel like you share a common bond with other Kitimatians? What is the basis of this bond?

D5. Do you feel Kitimat has a strong sense of community?

D6. Can you define what it means to be a Kitimatian?

D7. How do you feel Kitimat expresses its sense of community?

D8. Do you feel Kitimatians come together in times of need? Can you give me any examples?

D9. How did Kitimat as a community deal with the closure of Methanex? What about the issue of power sales? And the rebuilding of Alcan? What about the threat of school closures?

         D9b. If there were divisions within the community, what do you think these divisions were based on? (job-type, socio-economic status, etc..)

D10. Do you feel that Kitimat in general has a stronger sense of community now or in the past? Please explain.

D11. Are there any events that you recall that have resulted in the community coming together to work towards a common goal?

D12. Have there been any events that you feel have caused the community to grow apart?

Section E   **Planning**

In this section I would like to discuss the planning of Kitimat and its influences on community in Kitimat.

E1. Are there any places in town that you consider representative of Kitimat? If you were giving an outsider a tour of the town, which places do you feel would be the most important to give them an idea of what Kitimat is like?

E2. Are there places in town that you do not feel welcome?

E3. Which places in town do you feel most comfortable?

E4. What do you know about the planning of Kitimat?

E5. Did you realize that Kitimat was planned to encourage the development of a resilient town that could adapt to change?

        If **YES** Go to question E6.

        If **NO:** Yes, Clarence Stein planned Kitimat with the intention that the plan would encourage a strong community to develop and that that community would be able to adapt to change and overcome challenges that the town may face. The planning included the development of neighbourhoods with cul-de-sac roads, a division of commercial, industrial, and residential and, ample greenspaces and walkways

E6. Do you like Kitimat' physical layout? Why or Why not? What in particular?

        Prompts   Walkways

                            Road system

                            Zoning

E7. Do you think the walkways are an important part of Kitimat? Please explain.

E8. Do you feel that the encouragement of interaction with the cul-de-sac roads, walkways, and central commercial areas has resulted in a closer knit community or would things have been the same with a grid type organization?

Section F   **Concluding Questions**

F1. Based on your experiences in Kitimat, do you have anything else to add that has not been touched on here concerning the sense of community in Kitimat and Kitimat's resiliency?

F2. Can you think of any other people who would be willing to participate in this research. People who may just want to talk about Kitimat?

E   Interview Consent Form

Kitimat Resiliency Project

Purpose: The purpose of this project is to examine how groups are participating in the town of Kitimat, and to examine how this participation forms a sense of community. To achieve this, the project will include: a socio-demographic analysis of the population as well as focus groups and key informant interviews with active participants in community groups. This consent is only for the interview part of the project.

How Respondents Were Chosen: The interview participants were chosen based on their length of residents as well as past and/or present participation in social organizations in Kitimat. Informants were selected from publicly available lists as well as suggestions received from current active members in organizations.

Anonymity and Confidentiality: Name of participants will not be used in any reporting or presentation of the material. Any information that may allow for identification of an individual or organization will also be withheld. All information gathered will be held in strict confidence by the researcher. Information gathered during interviews will be kept in a secure location at UNBC until the project is complete, to a maximum of 5 years, and then it will be destroyed. .

Potential Risks and Benefits: The project has been assessed by the UNBC Research Ethics Board. It is considered that there no risk to participating. The interview will offer a chance for you to provide information about the community of Kitimat, reflect upon changes over time and discuss potential improvements.

Voluntary Participation: Participation in the project is entirely voluntary and, as such, you may choose not to participate. If you participate you may choose not to answer any questions that make you feel uncomfortable, and you have the right to end your participation at any time. If you withdraw from the study, all of the information that you provided will be withdrawn.

Research Results: If you have any questions concerning the research, please feel free to contact Jen Herkes (250.960.5267, herkes@unbc.ca), Geography Master's student at UNBC or Dr. Greg Halseth (250.960.5826, halseth@unbc.ca), in the Geography Program at UNBC. Participants will be asked to review a summary of the interview notes for accuracy. The final project report will be made available to interested participants.

Complaints: any complaints about this project should be directed to the Office of Research, UNBC (250) 960-5820, reb@unbc.ca.

I have read the above description of the study and I understand the conditions of my participation. My signature indicated that I agree to participate in this study.

Name (please print)   **Signature**   **Date**

F   Sampling Framework

* See sampling framework definitions on following page

Interview #	Residence					Job-type		Gender		Socio-economic class			Ethnicity					
	Born	>25 yrs	Returned	<25 yrs	Left	Industry	Non-industry	Male	Female	Upper	Middle	Lower	Por	Ger	UK	Can	S. Am	FN
1					X	X		X				X				X		
2				X			X		X		X					X		
3				X			X		X	X						X		
4		X				X		X			X			X		X		
5		X					X		X		X						X	
6	X		X				X		X		X					X		
7			X				X		X		X					X		
8		X						X		X					X			
9		X				X		X		X					X			
10		X					X		X		X					X		
11		X					X		X		X					X		
12		X				X		X		X				X				
13	X						X		X		X		X					
14	X					X			X			X	X					
15a *		X				X		X			X			X		X		
15b *		X				X			X		X							
16	X		X				X		X			X				X		
17	X		X				X		X			X				X		X

* Interviews 15a and 15b were conducted simultaneously of a married couple who were both long-term residents.

Sampling Framework Definitions

Residence:

Born	individual was born in Kitimat but did not necessarily stay
>25 yrs	individual has lived in Kitimat for less than 25 years
Returned	individual had previously lived in Kitimat, resided somewhere else, and then returned to Kitimat
<25 yrs	individual has lived in Kitimat for more than 25 years
Left	individual lived in Kitimat but is no longer living there

This category was pertinent to the research question since themes of transience emerged, as well as length of residence playing an important role in relationship formation. Also, being born in Kitimat seemed to affect individual's place connection.

Job-type:

Industry	individual is or was employed in industry, or by one of the leading industrial companies (Alcan, Methanex, Eurocan)
Non-industry	individual is not employed in industry. Employment included service sector, municipal employment, health employment, etc...

Industry plays an important role in the resilience of Kitimat and was mentioned numerous times in reference to Kitimat's future. The literature indicates that people who work together or have similar jobs develop relationships.

Gender: This column refers to the sex of the individual, male or female. The literature indicates that gender is an important characteristic that determines interaction and relationship formation.

Socio-economic status: This category was determined purely by supposition based on job-type, residence, and comments. No questions were asked pertaining to income levels of the participants.

The literature argues that socio-economic status affects interaction and can act as a barrier for interaction between classes.

Ethnicity: These are the ethnicities that the individuals recognized themselves as.
Por.-Portuguese
Ger.-German
UK- English, Irish, Scottish, or Welsh
Can.-Canadian
S. Am-South American
FN- First Nations

Ethnicity is another characteristic that was identified in the literature to influence interaction and relationship formation. It was also a very common theme in the interviews and the manifest analysis found that 'ethnicity' and its variants was one of the 5 most prominent terms used in the interviews and was mentioned by 18 of the 19 participants.

Appendix II   Analysis Results

A   Round 1 Lists

Manifest Content

Division/divide/divisive
Clique/cliquey
Separate/separation
Welcome/welcoming
Include/inclusive/including
Interact/interaction
Social/socialize/socializing
Events
Meeting/meet
Gathering/gather
Support/supportive/supporting
Help/helping/helpful
Ethnic/ethnicity [Portuguese, German, Italian, First Nations (Haisla), French (Quebecois)]
Group
Interest
Home
Safe/safety
Volunteer/volunteerism
Comfortable
Participate/participation/participant
Friendly/friend/friendship
Industry/Alcan/Methanex/Eurocan
Closeness
Exclusive
Recreation
Neighbour/neighbourhood/neighbourline
ss/neighbourly
Community
Multicultural/multi-ethnic
Transient/transience
Involved/involvement/involve
Join
Club
Member/membership
Bond
Committed
Pride/proud

Latent Content

Ethnic divisions closed because of language and culture
Economic inclusion in the community (ability to afford to participate)
Sense that Kitimat is 'home', is safe, welcoming, and comfortable.
Interaction is forced
Stuck in a rut, complacent
Afraid/unwilling of change
Feelings of remoteness, removed, distant
Bonds because of shared experiences
Come together in times of need
Friendships based on interests
Friendships based on length of residence
Planning elements (walkways, town centre, neighbourhoods, etc...) encourage interaction
Place (geographic) encourages commonality.
Groups are welcoming
Relationships between children as a source of interaction
Alcan as founder of 'community' not just town
Suburban/urban feel
Reliance on neighbours
Recreational facilities providing opportunities of interaction
Walkways as meeting places
Transience
Accessibility/inaccessibility to amenities and services
Small town 'feeling' (everybody knows who you are)
Participation and involvement lends to belonging
Relaxed/stress-free/laid back
Coming from all over provides a bond
Volunteerism declining
Up the hill/down the hill division
Family as a reason to stay/return/feel comfortable

B   Round 2 Themes and Occurrences

Term	Number of occurences	# of different interviews (out of 19)
Committed	2	1
separate/separation	6	4
transient/transience	9	5
pride/proud	10	5
clique/cliquey	11	6
exclusive/inclusive	14	7
bond	14	10
close/closeness	15	6
interact/interaction	15	11
recreation/rec. centre	19	8
join/member/commit	24	9
welcome/welcoming	24	10
interest	26	14
support/supportive/supporting	28	11
neighbour/neighborhood/neighbourliness/ neighbourly	36	13
safe/comfortable	37	15
help/helpful/helping	39	14
social/socialize/socializing/socially	41	17
event (s)	44	15
home	53	16
Division/divide/divisive	54	17
gather/gathering/meet	71	18
friend/friendly/friendship	82	17
volunteer/volunteerism/participate/involved	107	18
club/group	109	18
ethinic/ethnicity [portuguese, german, italian, east indian, first nation, french]/multicultural/multi-ethnic	127	18
industry/industrial/alcan/methanex/eurocan	146	18
community	222	18

Theme	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15a	15b	16	17	18	Total	#
Ethnicity	8	10	1	4	9	6	1	3	2	3	4	3	10	3	1	6	3	2	4	83	19
Planning elements	4	6	1	3	2	5	2	3	7	1	6	2	6	5	3	5	2	2	5	70	19
Groups are welcoming/not welcoming	2	2	2	4	5	4	3	3	2	2	1	5	2	2	2	7	1	4	2	55	19
Kitimat is 'home, safe, welcoming, and comfortable	0	5	5	4	3	2	0	1	0	1	1	2	3	5	2	7	4	2	7	54	17
Small town feeling	1	1	1	1	3	3	2	2	4	2	3	1	1	6	3	4	4	3	6	51	19
Transience	3	4	1	3	2	0	2	2	3	4	1	3	2	2	2	5	2	4	3	48	18
Looking to the Future	2	2	4	2	2	7	1	0	2	3	3	7	1	1	3	1	3	4	0	48	17
Come together in times of need	1	1	1	2	3	4	2	1	3	2	1	4	4	1	1	8	4	3	1	47	19
Friendships based on interests	0	3	4	0	3	0	1	2	3	3	3	2	0	4	2	5	4	4	1	44	15
Interaction is forced by proximity	6	1	1	2	2	1	1	5	1	1	4	2	1	3	2	3	1	2	4	43	19
Stuck in a rut, complacent	0	0	0	0	0	12	0	0	1	1	1	4	7	0	0	1	2	6	5	41	11
Place (geographic)	0	2	3	2	2	4	0	0	3	2	1	4	1	3	3	1	4	2	1	38	16
Social divisions caused by income/class	3	3	1	1	1	3	1	1	1	2	2	5	2	1	2	3	0	1	0	33	17
Participation and involvement leads to belonging	1	1	1	1	2	3	1	2	0	0	2	3	1	0	1	2	1	3	3	28	16
Relationships formed through job	1	2	3	4	1	0	0	2	1	2	1	1	1	1	5	1	1	1	0	28	16

Interview

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Theme	Interview																			Total	#
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15a	15b	16	17	18		
Industry	0	3	0	3	1	1	0	2	1	2	2	0	4	5	1	1	0	1	1	28	14
Recreational facilities	1	0	1	3	0	0	0	0	2	0	0	3	0	1	4	7	2	1	0	25	10
Accessibility/inaccessibility to amenities and services	1	2	2	1	2	0	0	1	1	1	2	3	1	2	0	1	0	3	1	24	15
Shared experiences	0	1	0	3	2	0	0	0	0	0	1	1	1	1	5	2	2	3	2	24	13
Volunteerism	0	3	0	3	3	3	0	3	1	0	0	1	0	0	1	3	1	0	0	22	10
Changes in demography (ages and ethnicities)	0	1	0	3	0	1	0	0	0	5	1	2	2	0	4	2	0	0	0	21	9
Feelings of remoteness, removed, distance	1	1	1	0	0	0	0	1	2	2	2	2	0	1	2	2	2	0	0	19	12
Friendships based on length of residence	1	1	2	0	0	1	0	0	0	1	0	1	0	1	3	2	2	2	2	19	12
Family as a reason to return/stay	0	1	0	3	1	0	1	0	1	2	1	2	1	0	1	1	1	1	1	18	14
Up the hill/ down the hill division	1	0	0	2	1	2	0	0	0	1	0	0	0	3	2	2	0	0	1	15	9
Children	0	0	1	2	3	0	0	2	0	0	1	0	0	0	1	4	0	0	0	14	7
Gender	0	0	0	0	0	1	0	0	2	2	0	0	0	0	4	3	0	1	0	13	6
Relaxed/stress-free environment	0	2	0	0	1	0	0	0	0	0	0	1	2	1	1	2	2	0	0	12	8
Afraid/unwilling of change	1	1	0	0	0	5	0	0	1	0	0	0	0	0	0	0	0	4	0	12	5
Reliance on neighbours	1	0	0	0	0	1	1	0	0	0	0	1	0	0	1	3	0	0	2	10	7
Suburban/urban feel	1	3	1	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	8	5
Coming from all over	1	1	0	1	1	1	0	0	0	0	0	1	0	0	0	1	0	0	0	7	7

C   Round 3 Themes and Occurrences

										Interview											
Theme	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15 a	15 b	16	17	18	Total	#
Ethnic divisions and interaction	6	7	0	3	4	5	1	2	1	2	2	1	6	3	1	4	3	3	3	57	18
Groups are welcoming/not welcoming	5	4	3	6	5	3	1	3	2	2	1	4	4	4	2	4	3	6	3	65	19
Friendships based on interests	1	0	6	0	0	1	1	2	3	5	4	2	3	4	2	6	5	4	3	52	16
Social divisions caused by income/class	4	3	2	1	0	2	0	1	1	3	1	2	2	1	1	2	0	1	0	27	15
Participation and involvement leads to belonging	2	9	3	4	6	2	0	3	1	1	4	0	2	0	1	4	1	1	1	45	16
Relationships formed through job	3	3	2	5	2	2	0	2	3	3	1	1	3	1	7	2	2	4	1	47	18
Bonds because of shared experiences	0	1	1	0	1	1	0	0	0	0	1	0	1	1	2	1	1	1	0	12	11
Friendships based on length of residence	0	2	1	0	0	1	0	0	0	1	0	1	0	0	3	2	2	1	2	16	10
Children as a source of adult interaction	0	0	1	2	2	0	0	1	0	0	1	1	0	0	2	6	1	0	0	17	9
Gender and interaction	0	0	0	0	0	1	0	1	1	3	0	0	0	0	3	3	0	1	0	13	7

Relationship Formation

	Theme	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15 a	15 b	16	17	18	Total	#
Place-based Interaction	Planning elements encourage interaction	3	2	2	5	3	5	3	3	4	1	3	3	5	4	0	3	1	2	5	57	18
	Interaction is forced by proximity	4	1	1	1	3	0	0	3	1	2	1	1	1	1	1	1	1	0	3	26	16
	Place (geographic) as commonality	0	0	3	1	0	3	0	1	0	2	1	1	0	3	1	1	3	1	1	22	13
	Recreational facilities and interaction	1	0	1	1	0	0	0	0	2	0	0	3	0	1	1	6	1	0	0	17	9
	Remote, removed, far from centers	1	0	0	0	0	0	0	1	1	1	2	1	1	1	3	2	2	0	0	16	11
	Up the hill/ down the hill division	1	0	0	2	1	3	0	0	0	1	0	0	0	3	2	1	0	0	1	15	9
	Relaxed/stress-free environment	0	2	0	0	0	0	0	0	0	0	0	1	2	1	1	2	0	0	0	9	6
	Suburban/urban feel	1	3	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	7	5
	Coming from all over provides a bond	0	2	1	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	6	6
Social Cohesion	Kitimat is 'home, safe, welcoming, and comfortable	0	1	4	2	7	4	0	0	3	1	0	4	2	6	4	8	2	2	6	56	15
	Small town feeling, everyone knows you	1	1	1	1	3	2	2	1	4	3	5	1	2	5	2	5	2	2	6	49	19
	Transience	2	3	0	1	3	1	0	1	3	2	2	2	2	0	2	1	0	1	1	27	15
	Come together in times of need, and neighbourliness	2	2	1	2	1	3	2	1	1	1	1	3	2	2	4	6	5	2	3	44	19
	Volunteerism and Participation	0	2	0	1	1	5	0	3	1	1	2	3	2	0	2	5	2	1	1	32	15
	Family as a reason to return/stay	0	3	0	1	1	0	1	0	0	3	0	1	0	1	0	1	1	2	1	16	11

	Interview														15 a	15 b					
Theme	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15 a	15 b	16	17	18	Total	#
Looking to the Future	1	3	4	0	3	11	1	0	3	2	1	8	1	2	0	0	2	1	0	43	14
Stuck in a rut, complacent, unwilling, afraid to change	1	0	0	1	0	9	0	1	1	0	0	0	3	0	0	0	3	4	3	26	9
Alcan's influence, jobs, and economic resilience	1	7	3	2	4	4	1	2	2	2	7	4	4	1	4	2	1	5	3	59	19
Accessibility/inaccessibility to amenities and services	2	1	2	1	2	1	1	2	2	1	1	5	2	2	1	3	0	2	1	32	18
Changes in demography (ages and ethnicities)	2	3	0	4	1	1	1	0	1	4	1	3	2	2	4	2	0	2	0	33	15

Resilience

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