A.1 DEMOGRAPHICS Claire Tebbs. Mark Pickersgill

Population A.1.1

In 1931 the Squamish population was 589. By 1941 it was 1,292. By 1961 the population was up to 4,240 and has been rapidly growing ever since. 1 In 2003 Squamish had a population of approximately 15,000 and sits in the fastest growing region of British Columbia. Since 1985, The Squamish-Lillooet Region has had a 3.4% average annual growth rate and Squamish a 2.1% growth rate compared to the average provincial growth rate of 1.9%.²

A.1.2 Age and Gender

Today Squamish is home to a relatively young population, with a median age of 35.5 years. This is roughly 3 years younger than the provincial average and 2 years younger than that of Greater Vancouver. For the last ten years, youth and the 25-39 age group made up the largest proportion of the population. The number of seniors in Squamish, as a proportion of the total population, is relatively low compared to the provincial average (7.0% compared to the 13.6% in 2001).³ At present, the senior population, at 9%, is smaller than most communities in BC. However, natural growth of the senior sector is currently outpacing the growth of the general population and by 2013 the senior population in Squamish is projected to grow by as much as 110%. 4

What we see

Spikes in the Squamish population can easily be correlated with increased levels of accessibility to and from the community. At first Squamish could only be reached by boat, then railroad and finally, in 1958 by the Sea to Sky highway. Squamish now advertises itself to the world: "The recreation capital of Canada". 14,000 cars drive by a day. With a new University on the way and densified urbanites wanting peace and quiet, Squamish is becoming attractive to a diverse population, and vulnerable to growth pressures.

Future projections are likely to see continued growth as youth begin to enter the workforce and as those currently aged 25-39 begin to have families of their own.

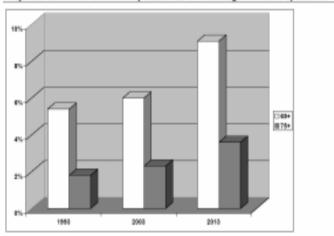
Statistics Canada?

² District of Squamish: Community Profile (draft) – BC Stats Population Estimates

³ Statistics Canada Community Highlights for Squamish (DM), 2001 Census – Population Statistics

⁴ BC Stats – 2003 Squamish Local Health Area Survey

Projected Growth of Seniors Population as a Percentage of Total Population²



Source: BC Stats

Squamish, DM BC							
Total population	13,990 3,724,500						
Male Female	51% 49% 49% 51%						
1 51111885	Group, percent distribution						
ropulation by Age	Group, percent distribution						
□BC	# Squamish, DM						
45							
40							
35							
30							
25							
20							
15							
10							
5 HT H H	▎ <mark>▐</mark> ▊▎▐▊▎▗▄▗▔▗▃						
0-4 5-19	20-44 45-64 65-74 75+						
years years	years years years years						
	Source: BC Stats						

As the older working population ages, a greater demand on housing and care facilities for the aged will need to be considered.



The young nature of the population indicates that housing for families will continue to be a priority. However as children age over the next 20 years, demand for single occupancy housing may increase.

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A.1.3 Household and Family Characteristics

According to the 2001 Census there are 5,150 households within the municipality of Squamish. The average household size of 2.7 persons is larger than both provincial and GVRD averages, a trend opposite from the rest of the province. 1 person households in Squamish are significantly less prevalent than provincial and GVRD averages, while 4 - 5 person households are slightly higher than these same averages. These trends are consistent with the demographic profile of a younger population base with a greater number of families (with children) than the average BC community. According to the 2001 census there are a total of 4,005 families in Squamish, with nearly 75% of these being married-couple families. further illustrating a significant family component to the demographic profile could experience a growth rate of as much as 151% by the second decade of the 21st Century

According to Squamish's demographic profile, current migration and tenure patterns indicate that a continued demand for owner occupied dwellings will remain.

A.1.4 Migration and Tenure

In the 5 years leading up to 2001, just over half of Squamish residents did not change their primary residence, while about 25% of the people moved elsewhere within Squamish. Statistics also show that the number of owner-occupied dwellings far outnumbers rented dwellings and is larger than the provincial average, indicating a relatively stable population base.

A.1.5 Ethnicity and Immigration

Recent international immigration trends point to the influx of 335 international immigrants between 1996 and 2001. Approximately 20% of the population is foreign born, with a significant number of immigrants of Indian decent - highlighting a strong Indo-Canadian population within the municipality. The United Kingdom, Germany, and the United States have the next most international immigrants respectively. In each case, the share of the Squamish immigrant population is higher than both the province and GVRD.

From an ethnic standpoint Squamish has a relatively diverse population mix for a community of it's size. Visible ethnic minority groups compose 17% of the population. The primary language is English, and the major ethnic origins are Canadian, South Asian, British, and German. Despite their major historical role, only 360 members of the Squamish First Nation live within the municipality itself, however a growing number of young First Nation residents are choosing to stay within the area.

The significant South Asian population may help to further attract family and relations to the area in continually steady numbers.

The tendency for First Nations youth to stay in the region, indicates a likelihood for an increased presence in the community.

Trends show that ethnic diversity will continue to grow and remain a significant **characteristic of the community**.

⁵ District of Squamish: Community Profile (draft)

⁶ Statistics Canada Community Highlights for Squamish (DM), 2001 Census – Families and Dwellings

A.1.6 Education Levels/Fields of Knowledge

Squamish has been a natural resource based community for hundreds of years. For at least the past 65 years, Squamish has attracted labourers to work in mining, logging, pulp and fishing industries. Such work demands very specific mechanical and technical skills. It is not surprising then that within the population, there has been a typical trend of trade, skills and non-university education over obtaining a university degree. As recently as 1996, only 8% of the population 15 and older had a university degree. Thirty-five percent had trade/vocational diplomas or college certifications.⁷

Provincially, British Columbia had 5% more people with university degrees, but 7% less with trade certifications or college diplomas. In the last ten years the percentage of university degree holders in Squamish has risen to 13%. Twenty percent have college diplomas and only 5% have trade certifications. In 2001 26% of the community were working in business and service professions while only 4.3% were working in the forestry industry. The percentage of People working construction equalled that of those working in health care and social service professions, both at 8%.





While it still maintains a population vital to the successful functioning of local forestry and mechanical industries, Squamish is becoming increasingly diverse in the knowledge base and skill sets offered by the community. With the addition of the Sea to Sky University, set to open in 2005, this knowledge base will only increase as experts move to fulfil academic positions

Community expansion and profession diversity goes hand in hand. Squamish will need to find ways to celebrate and capitalise on this diversity of knowledge.

⁷ BC Stats, Community Profile - Squamish, 1996.

⁸ BC Stats, Community Profile – Squamish, 2001.

A.1.7 Labour and Income

Since 1985 Squamish has shown consistently higher average annual income rates than that of surrounding communities. In 1985 the average income (for males) in Squamish was \$27,000. Adjacent communities' average income was between \$21-22,000.9 In 1995 the average income for full time male employees was \$49,000 and \$30,000 for females. This was 3% higher than the BC average at this time. However, the table below shows how the Squamish average income, in 2000 was approximately 8% lower than that of the surrounding GVRD.

Average Full-Year, Full-Time Work Earnings, 2000

	Squamish	GVRD	BC	
Total	\$42,891	\$46,806	\$44,307	
Male	\$49,007	\$53,095	\$50,191	
Female	\$34,437	\$38,118	\$35,895	

Source: Statistics Canada, 2001 Census

In 1995 the BC unemployment rate was at 9.5%, while in Squamish the rate was 8.4%. 17% of males between the age of 15-24 were unemployed in British Columbia. In Squamish, only 11% of the population was unemployed. In 2001, the unemployment rate decreased to 7.3%. This is almost 1.2% lower than the provincial unemployment rate of 8.5%. ¹⁰

In 1995, 51% of the population worked only part time. In 2001 still only 49% of the working population were working full time, 51% part time. This is similar to provincial statistics that show 52% of British Columbia's population currently works part time. ¹¹

Squamish has a steady work history and maintains a comparatively healthy employment rate. People have come to Squamish because there was work there.

The continued growth of the tourism and recreation industries, along with jobs associated with Olympic preparations will increase the number of jobs available throughout the next 10-20 years.



Historically men in Squamish have made more money. This is principally due to the high-risk, unionised industrial jobs that were available to them. As more types of labour options are available the discrepancy between male and female wages will most likely lessen.

⁹ Statistics Canada 1986 (721)

¹⁰ District of Squamish: Community Profile (draft)

¹¹ BC Stats

A.2 SOCIAL HISTORY Chandra Lesmeister, Lisa Larson

What we found

First Nation history (-1791): The Squamish Nation has, since before written history, inhabited a vast traditional territory spanning from Vancouver in the south to the headwaters of the Elaho River in the north. Their occupation of the Squamish Valley is evidenced by archaeological sites dating back 4000 years within the town of Squamish and others dating back 10 000 years further up the valley and into its mountainous surrounds. Their territory in the valley was the hub of a major trade route from the Coast to the Interior, and the Squamish people were both the enemies and allies of other First Nations around the province. This region was also the demographic centre of Squamish society to which numerous tribal groups, whose collective population was in the 1000s, returned for the winter months. In these settlements themselves, longhouses were the main venue of the Nation's complex social and political structures and relations, which were based on kin groups and an economy of trade, subsistence, and prestige.

European contact (1792-1859): In 1972, British explorer George Vancouver and his crew sailed their ship into Howe Sound's Darrell Bay, just south of the present day town of Squamish. Social interaction between these first European explorers, their later counterparts, and the region's original inhabitants is said to have been relatively amicable. It was mostly sporadic and indirect in the valley because the hub of economic activity between First Nations and European traders in Southwestern BC was at Fort Langley on the Fraser River. During these years few white explorers, surveyors, or traders themselves ventured up into Howe Sound.

Changes on the land (1860-1912): After 1859, life in the Squamish valley changed more dramatically as events and persons within the community and from the outside began to have more substantial impacts on the social fabric of the area. During these times the Squamish people faced massive change that dramatically altered their way of life. Their demographic centre shifted from Howe Sound to the Burrard Inlet, small pox epidemics wiped out a large portion of their population, the potlatch was outlawed by government officials, and reserves began to be established. There also was an increase of both transient and permanent foreign presence in the Squamish valley as speculators and surveyors (guided by local First Nations) poured into the region beginning in the 1860s, and as settlers began pre-empting, felling, and farming land in the late 1880s. By 1912 the number of white farmers and loggers, Chinese dyke and railway builders, and Punjabi sawmill workers had reached into the 100s and a number of community services such as schools, hotels, churches, stores, and a post office were established in the new communities of Newport and Brackendale.







Industrial connection and social separation (1913-1955): The completion of the railway to Pemberton in 1913 and Prince George in 1926 affected both the economic and social fabric of the region as logging replaced agriculture as the main local industry and as the geographic mobility of area residents increased. The Depression not long after also affected the economy, and saw many Valley residents lose their jobs. The social and spatial isolation of ethnic groups continued with many First Nation people living on reserves, Japanese pulp mill workers residing across the Sound at Woodfibre, and Chinese railway and Sikh sawmill workers living away from the European population in separate areas of the newly named village of Squamish. World War II resulted in the internment of 500 Japanese workers and their families which was half of the Valley's population. During this time Squamish children continued to be taken forcibly to residential schools, thousands of acres of reserve lands (most of which on today's town site) were sold to a Vancouver business man, and sixteen different Squamish-speaking tribes amalgamated into the Squamish Nation.

Shifting gears (1956-1980): The social networks and mobility of Squamish and Brackendale residents began to change even more dramatically from the mid-1950s with the completion of the Squamish-Vancouver railway and the Sea to Sky Highway. The highway was an instant tourist attraction, and its opening marked the beginnings of Squamish's tourism and outdoor recreation industries. However, the highway also brought with it the opportunity to commute between Squamish and Vancouver, and by the mid-1970s up to a quarter of the newly incorporated Municipality's working population was making this journey each day. Another important social force during this time was the migration of previously more geographically remote groups within the region to the town itself, lured by easier access to schools, services, and 'the Big City'. It is said that the social fabric of the region began to unravel during this period as the ease of mobility increased, development boomed, and the Valley's population rapidly grew (though in uneven spurts) – reaching 8000 by 1970 and 10 000 by 1981.

Movers and hikers (1980-present): Major trends in Squamish's recent social history have coincided with a decline in its economic resource base (a result of overlogging, overfishing, and industrial pollution), the rise of Whistler as a year-round resort destination, and its discovery as an affordable and strategically located bedroom community by residents of nearby municipalities and 'urban refugees' from around the world. In response to these changes the expanding town began relying more heavily on its growing recreation and tourism service sectors, and its population became more transient with up to 1/3 of the workforce employed outside of the community and scores of people migrating into and within its municipal bounds each year. Ironically however, Squamish's diverse population — long having been segregated on ethnic, political, and occupational grounds — became more inclusive, integrated, and cooperative over this same time (which is not, however, to say that divisions over land and development no longer exist).



What we see

A hub of social and economic activity

An area influenced by external economic and political forces

An ethnically diverse population that until recently has been socially and geographically segregated

A rich economic history of subsistence, trade, agriculture, forestry and industry, and recreation

An ebb and flow of people in search for land, riches, trade routes, jobs, recreation, and home

An increase in transience and mobility over time



Current Social Groups, Networks, and Trends: This community is currently in a phase of rapid development, growth, and social integration. It is often referred to by locals "as a community in transition". As a result, there exists a complex network of social groups that cannot be easily categorized. The following describes some of the key social groups in Squamish whose lives may be impacted by both current and future development and change.

Young families: Many locals feel that Squamish is a safe and desirable community in which to raise children. The Brennan Park Leisure Centre is a hub for these families because of the diversity of recreation and social opportunities it offers for people of all ages.

Adventure Seekers: Within this group there are both individuals and organized associations of climbers, kayakers, windsurfers, mountain bikers, and other outdoor enthusiasts. There are notable seasonal trends in the presence of these sub-groups in the town of Squamish, as they return predictably, in growing numbers, to the same hangouts each year. Currently, many adventure seekers are divided against the Squamish Nation and the Town Council over the proposed power project on the Ashula Creek.

Sikh Community: The Sikh population currently makes up over a third of the town's immigrant population. Most work in the hospitality industry and commute daily to Whistler. They are an organized and visible group, with a Squamish Sikh Society, a temple housing a community kitchen and school, and political representation on council. Many members of this community speak Punjabi as a first language, and a growing number of townspeople are learning to speak it as well.

Youth: Though there are areas and events in town geared toward youth, many state that there isn't much for them to do in Squamish. Like most adults, some travel to Vancouver at least once a week for sports practice, recreation, or shopping. Generally, the trend is for high school graduates to move out of Squamish, and choose to move back a few years later to settle down. Interestingly, the trend among First Nation youth is to stay, become more involved in their communities and culture, and seek out educational and job opportunities in the Valley.

Squamish Nation: Though their population in Squamish is small, their community is strong, and their involvement in municipal affairs is increasing. Their young population is growing rapidly. The Nation is set to play an important role in the area's economic and social development, especially in ecotourism and "green" energy generation. People want to move back onto the land for cultural and spiritual purposes. However, the increasing lack of untouched areas, as result of over logging and recreational development, make this increasingly more difficult.





What we see:

A town immersed in intense development

A shifting economy that is impacting social groups and networks

A lively community with many social, art, and recreation events

A town divided on many development issues

A town dependent on Vancouver for entertainment, sports, and business

A mobile community

Optimism about the student population and the opportunity for diversity



Artists: The local arts community is organized and growing; however, they still do not have a visible presence in the town. This situation may be remedied by the new artisan village development in the downtown core. For now, many members of this group show their work in Vancouver or Whistler and some commute at least once a week for business purposes.

Retirees: Most locals see the seniors living in Squamish as an active group that participates in many recreation activities. Though they don't see Squamish as a "retirement community", this population is growing, and they are actively engaged in senior's issues and support networks within the district.

Loggers and Industrial Workers: Members of this group have been adversely affected by the recent downturn of logging and industry, which has resulted in many job losses. As a result, tensions can be high between workers, unions, and the Town Council. Many are faced with the choice of taking lower paid tourism and service jobs, or leaving the area in search of new employment and educational opportunities.

Future Implications

A glimpse into Squamish's social history suggests that the town is more than just the "Recreation Capital of Canada". There is an opportunity for Squamish to look deeper into its past to develop a rich community identity which could be used to inform design and development. With a greater sense of place, the community can perhaps change the historical trend of outside development dictating its future. With the Olympics on the horizon, there is excitement and hesitation about what this "new gold rush" could bring to this small town. One can envision that development has the potential to progress in a number of directions, two examples of which are outlined below.

Design and development from the outside for the "total tourism": This type of growth could bring high-end resorts with an emphasis on services and attractions. It could also bring a sense of placelessness, of a recreational town like any other, devoid of local community vibrancy, vision, or involvement. In this scenario increased mobility and transience, and decreased affordability, is likely, which could translate into local social instability or decline.

Design and development for the community: If fine scale and locally sensitive growth occurs – with community involvement, vision, and social history, there is the potential for Squamish to become a much more stable and liveable community for its diverse population. There could be a continuation of the social integration evident in recent years. There is an opportunity to celebrate the uniqueness of Squamish and its historically rich past long into the future.



A.3 PHYSICAL HISTORY OF THE COMMUNITY

Monika Schenk, Lu Xu

Geological background

Squamish is situated some 50 kilometres north of Vancouver in a N-S oriented valley at the end of Howe Sound. The valley was formed during the Ice age by glaciers coming down from the mountains cutting deep "fjords" into the granodioritic rocks. When retreating, the valley was filled with glacial and alluvial debris by the braided streams meandering across the valley. The volcano Mount Garibaldi was active again in the late stage of the ice age spilling lava towards the valley. Giant rock avalanches were deposited in the area of Brackendale, forming a large fan and the terraced topography which today underlies Alice Lake Provincial Park. Large mudflows continued as long as just 1000 years ago in that area, and also today debris flows occur occasionally. Nevertheless, it was on this colluvial fan that the best soils developed while in the lower parts of the Valley the braided streams continued meandering, eroding and depositing, changing their course several times and forming a large floodplain.

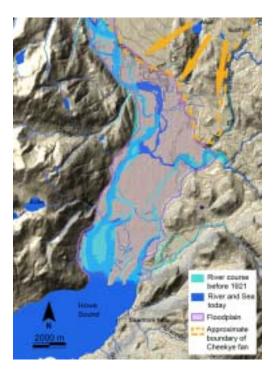
The most recent dramatic change was 1921, when the Mamquam River altered its course and, instead of flowing in its own bed to the Sound forming a new confluence with the Squamish River. Flooding occurred frequently and destroyed parts of the European Settlements about every 20 years, until in 1972 a training dike was built to keep the Squamish River to the western side of the valley. The first settlers from Norway were flooded away in 1895, and there were disastrous flooding events in 1921 and 1940. The area of downtown Squamish is part of the floodplain and was most probably quite swampy.

Howe Sound and the Squamish valley is a typically U-shaped fjord (deep glacial valley) with rocky shores and steep mountain slopes. When George Vancouver 1792 first sailed into the Sound he did not consider the valley to be a good place for settlements. There was almost no place to anchor and getting ashore and little of the land seemed suitable for agricultural use.

The word "Squamish" is derived from an Indian word meaning either strong wind or birthplace of the wind. It refers to the prevailing, often cold and strong winds from the Northeast.

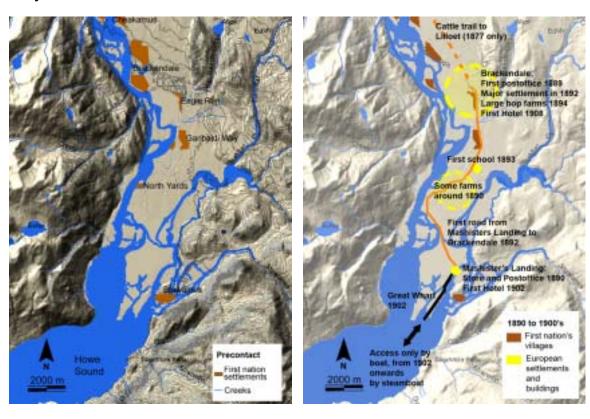


Howe Sound from Bowen Island



Early settlements

Early settlements

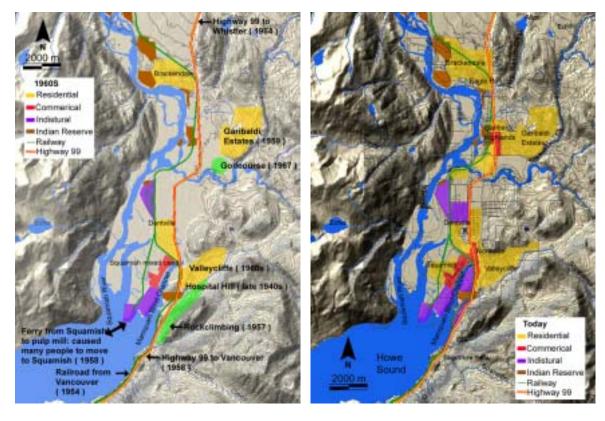


The Squamish First nation had at least 7 villages along the river. They where considered as wealthy: There was salmon in the rivers, game in the forests, fish in the Sound, there were plenty of creeks for freshwater, building materials in the forests and lots of berries. Some of the villages were probably just used seasonally, but all were chosen wisely and through the experience of previous generations. The largest permanent village with longhouses was situated just to the east of today's downtown on the sunny, southern slope of a small hill, besides the Stawamus River providing freshwater, close to the shore but high enough in case of flooding. It was sheltered from the NE winds and had a great view over the sound to lookout for possible enemies.

The first European settlers were less lucky in choosing their sites. The cattle drive from Lillooet to the Lynn Valley proved to be too difficult for the cattle and was given up after one year (1877). The first settlement was flooded in the very year it was built (1885). Successful were the settlements from 1889 onwards on the colluvial fan in Brackendale, outside the floodplain and with the best soils. Old villages in the alpine valleys in Europe were usually built on such sites for the same reasons. Others settled just north of today's industrial park.

Near the landing, today's downtown area might have been a good cattle pasture (staked in 1874), but was not very suitable for settling, presumably swampy, exposed to winds, with silty soils of the floodplain and just large rivers for fresh-water. But 1890 a store and post office was built at Mashiter's Landing and 1892 a road from the shore to Brackendale. By 1892 about 30 European families lived in the area, most of them in the area of Brackendale, where at least 3 large hop farms thrived that served the European market. In 1902 a deep water wharf was built, so that finally access was possible for large steamboats. However, there was still no overland way to either Vancouver or to the Interior.

The 20th century



By 1912 there were approximately 300 people living permanently in the valley, and downtown Squamish established. Timber extraction was expanding, mostly around the area of Brackendale, in the Diamond Head area and along the side valleys. In the following years some dramatic changes happened: In 1914 the railroad to the interior was opened, the first World War set an end to the hop farming, and a disastrous flood in 1921 changed the course of the Mamquam river. In 1921 the pulp mill at Woodfibre (west of Squamish) was built and from 1926 large scale logging started. The Squamish Valley subsequently altered its appearance from agricultural to more industrial.

Around 1930 houses were build around Dentville and in the late 1940's at Hospital hill. However, it took another 20 years until the railway and later the road through the difficult passage along the Howe Sound to Vancouver was built. In 1954, the railway connection to Vancouver was established and in 1958, Highway 99 was opened.

Residential development started on former farm sites with the "sunny" Garibaldi estates in 1959 and Valleycliffe, which by some was considered as being in the "cold shade" of the Chief.

Recreational use of the mountains, rivers and forests in the area occurred from the late 1950's.

A training dike built in 1972 reduced the flooding hazard and keeps the Squamish River to the West of the valley.

From 1965 a Chlorine-Alcali plant operated at the tip of the peninsula south of downtown until 1991. The area is now remediated and shall be redeveloped.

Conclusions and outlook

The Squamish valley is dominated by the confluence of 6 glacial rivers. Most of the valley is below the 3 m contour line, which is regarded as the edge of the floodplain. Flooding occurred frequently and with much damage until the building of the training dike in 1972. Squamish was named after the strong winds from NE that are typical for the area and much loved by windsurfers.

Topographically, exposed bedrock and colluvial deposits result in a high relief and steep slopes especially to the West and South. Debris flows and avalanches occur occasionally.

The agricultural heritage and physical history resulted in a scattered building pattern, the built areas lined up along the highway like pearls on a thread. Industrial development took advantage of the river (logging) and the waterfront, the commercial emerged along roads, near the station and in the town center.

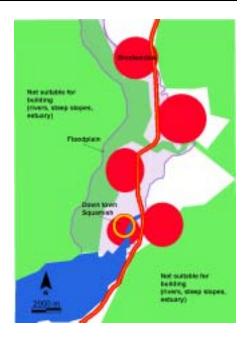
In relation to the physical history we see the following opportunities and constraints:

Opportunities:

- Very beautiful surroundings (mountains, estuary, Howe Sound), attractive for a broad variety of recreation and tourism.
- Abundant natural resources (fresh water, forests, some gravel pits, wind energy).
- Well developed town center in downtown Squamish.
- Remediated land for redevelopment along waterfront near downtown.
- Close to Vancouver and Whistler, but today mostly accessed by road (railway closed recently, railway track apparently not suitable for fast trains).

Constraints:

- The area that can be built on is restricted either by the topography, the rivers or the estuary and is for a large part situated in the floodplain (flood hazard).
- There is not too much space for development around downtown.
- More built up areas will change the visual appearance considerably, as forest corridors will be removed and hillsides will be built up.
- Today's built areas are scattered around the valley, the geographical center being somewhere between Brackendale and Squamish. Further development will have to occur mostly in places away from downtown and it may be difficult to establish or keep a town center at the edge of the area. However, its setting near the waterfront is attractive.
- The downtown area is exposed to strong winds from NE, the street pattern oriented in the same direction.



Today's built areas are lined up along the highway like pearls on a thread. Downtown Squamish is situated at the South edge of the area. The areas more or less suitable for further development are shown in white. They will shift the "geographical weight" again away from downtown. The question will be, how downtown can be preserved and further established as the center. Or — thinking the unthinkable - if an entirely new arrangement should be looked for.