

Prepared for
Planning and Development Services
City of Whitehorse

Submitted by **Gartner Lee Limited**

In association with Vector - Research

November 2006





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November 10, 2006

Mike Gau Planning and Development Services 2121 Second Avenue Whitehorse, Yukon Y1A 1C2

Dear Mike Gau:

Re: 60679 -Porter Creek Bench Socio-Economic Report

We are pleased to provide the City of Whitehorse, Planning and Development Services, with the Porter Creek Bench Socio-Economic Report in anticipation of the planning charrette process planned for November 5-9 of this year and for subsequent submission of the subdivision plan to the Yukon Environmental and Socio-Economic Assessment Board.

Yours very truly,
GARTNER LEE LIMITED

Kirk Cameron, B.A, Lead Consultant

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1. Introduction

The Porter Creek Bench is the next major residential development planned for the City of Whitehorse. The *Official Community Plan* (OCP) identifies it as a potential "fully serviced neighbourhood". The City of Whitehorse has indicated its intention that the Porter Creek Bench becomes an exemplar development for "Smart Growth".

The City will use a variety of planning approaches to create the design for the Porter Creek Bench development, most significantly a design charrette scheduled for November 5 to 9. The City hosted a "kick-off" meeting on September 12 of this year in anticipation of the design charrette where the City and its consultants presented information addressing sustainable infrastructure options, socio-economic background, environment and special places, heritage issues, and traffic (City of Whitehorse, 2006c).

The Socio-Economic team presented a series of five posters containing background information on demographics and economics, current housing stock, future housing demand, existing interests and land use, and planning and infrastructure. This report includes the information presented in the posters at the September 12 kick-off meeting, in greater depth, as well as a section describing schools and other community services expected to be available to future Porter Creek Bench residents. This report will provide design charrette participants with up-to-date social and economic information specific to Yukon, Whitehorse, and the Porter Creek Bench.

This report is composed of the seven following sections: (section 2) demographic and economic characteristics of City and Yukon residents; (section 3) current housing stock characteristics; (section 4) future housing demand; (section 5) existing interests and land uses; (section 6) planning and infrastructure; (section 7) institutions and services available to current City residents. The report concludes in section 8 with a brief summary and conclusions.

2. Demographics and Economic Factors

2.1 Population¹ Changes and Characteristics

The population of the City of Whitehorse has been growing since 2003 and is anticipated to continue growing at a moderate pace (YED, 2006). The overall number of births has been declining since 1990 indicating that population growth will be driven by in-migration. Migration is largely dependent upon economic drivers, which are discussed in section 2.2. The increasing age of the population along with the decreasing number of persons per dwelling unit are signaling a shift in family composition and dwelling type needs. Further, the City of Whitehorse is experiencing a decrease in population mobility, where those who move to Whitehorse are increasingly more likely to stay for at least 5 years.

Smart Growth aims to manage growth and provide affordable housing (CMHC, 2003).

2.1.1 Population Growth

- Current estimates indicate that the population of the City of Whitehorse is 23,638 people.²
- Over the last 20 years, the total population of the City has increased by more than 10,000 people.
- Figure 1 shows the actual population change between 1974 and 2006.
- The peak population for the City was 24,143 people in December 1996.
- Between 1996 and 2003 the population declined.
- Since 2003, the population has been growing towards its peak population figure.
- Using the projected rates of increase utilized in the City's *Official Community Plan* (OCP), Figure 2 shows that the population could reach anywhere between 26,002 and 33,093 people by 2026 (City of Whitehorse, 2002; YBS, 1974-2006).

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¹ Population figures are derived from Yukon Health Care population estimates, which include those residents who hold a valid Yukon Health Care Insurance Plan card and have indicated "Whitehorse" for their health card registration mailing address. As such, the population numbers include those residents residing outside of municipal boundaries or those who temporarily live out of the Territory (e.g. students). The health care counts have been used rather than 2001 Statistics Canada census counts since the health care counts provide more up-to-date information at this time.

² This Yukon Health Care population number refers to estimates from June 2006.

Figure 1. Population Growth for City of Whitehorse, June 1974 to June 2006

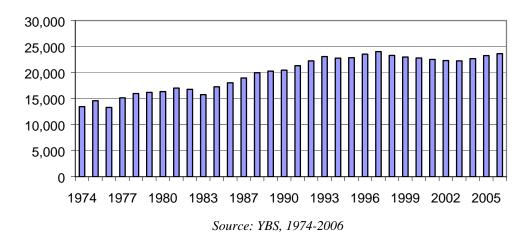
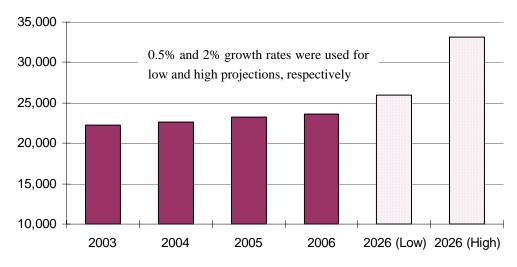


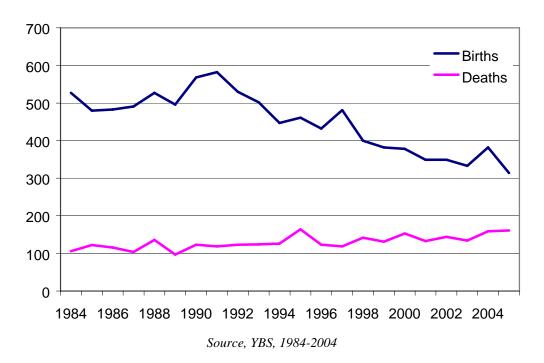
Figure 2. Population Growth for City of Whitehorse, 2003 to 2006, and Projected Population Growth, 2026



Source: YBS, 1974-2006; City of Whitehorse, 2002

- Figure 3 shows a net decrease in the number of births at the same time the population increased between 1984 and 1996. Along with a slight net increase in the death rate, these numbers suggest continuing natural population decreases.
- The rate of natural increase is slightly below the Canadian average and below replacement levels (YBS, 1984-2004).
- Low natural increase numbers signify population growth is heavily dependent upon in-migration.
- Figure 4 shows migration patterns for Yukon. Between 1997 and 2002, 20,998 people moved to Yukon and 26,368 people left, for a net loss of 5,370 people.
- This migration pattern reversed, between 2003 and 2004, where there was a net increase of 770 people.
- If the trend of recent population increases continues, net migration is also expected to continue to be positive.

Figure 3. Total Number of Births and Deaths for Yukon Territory, 1984 to 2004



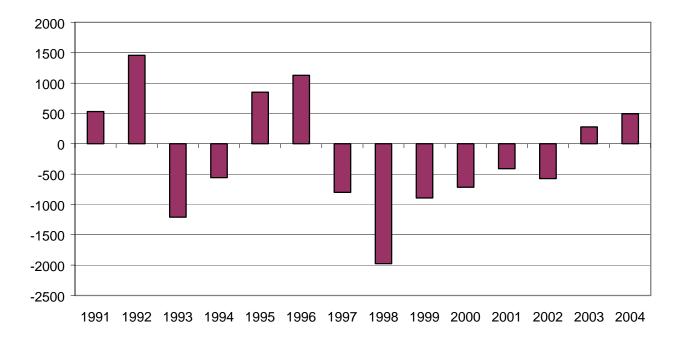


Figure 4. Net Migration for Yukon Territory, 1991 to 2004

Source: YBS, 1991-2004

2.1.2 Aging Population

- Similar to the rest of Canada and other "developed" countries, the population is growing fastest for those over the age of 55, causing what is commonly known as "the aging population".
- Figure 5 shows the change in age composition for the City of Whitehorse between 1996 and 2006.
- It is evident that residents over the age of 65 are making up a larger proportion of the total population, an increase of approximately 134% since 1996 (YBS, 1996; 2006).
- In addition, the aging population will likely cause an increase in the death rate resulting in a more pronounced natural population decrease (CMHC, 2003).

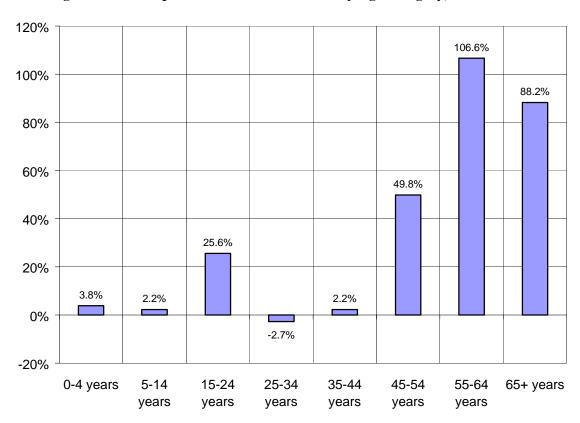


Figure 5. Population Growth for Yukon by Age Category, 1996 to 2006

Source: YBS, 1996; 2006

2.1.3 Household Composition

- In Canada, the average number of persons per household fell from 3.9 to 2.6 between 1971 and 2001 (Statistics Canada, 1961 and 2001, Analysis Series, in CMHC, 2003).
- Figure 6 shows the average number of persons per dwelling for City of Whitehorse residents between 1981 and 2001, which has been decreasing similar to the rest of Canada. This helps to explain why the number of houses has been steadily increasing since 1996 while population levels have only recently returned to near-1996 levels.

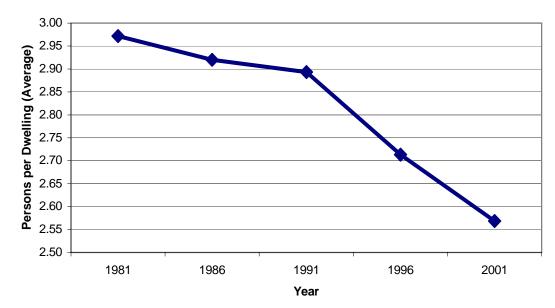


Figure 6. Average Number of Persons per Dwelling Unit for the City of Whitehorse, 1981 to 2001

Source: StatsCan, 2002; 1997; 1987; YBS, 1985

- While housing density analyses specific to the City of Whitehorse are not currently available, data trends at a national level (i.e. CMHC, 2003, page 14) suggest that the number of persons per dwelling is decreasing due to:
 - A proportional increase in non-family dwellings (i.e. people living alone or with unrelated individuals); and,
 - A proportional increase in "non-traditional households" (e.g. childless couples, elderly couples, same-sex couples, young and elderly singles).

2.1.4 Mobility

- While most northern municipalities tend to experience substantial out-migration to southern, urban centres (CMHC, 2003), Whitehorse residents are increasingly likely to reside in the Territory for more than 5 years.
- Figure 7 shows that the proportion of residents who live in the Yukon for at least 5 years has increased between 1981 and 2001.
- In percentage terms, only 35% of the population of Whitehorse had lived in the City for 5 years or more at the time of the 1981 Census. In contrast, 83% had lived in Whitehorse for 5 years or more at the time of the 2001 Census.

• While the total foreign-born population of Whitehorse has increased between 1981 and 2001, the proportion of foreign-born to Canadian-born residents remains the same (StatsCan, 2002; 1997; 1987; YBS, 1985).

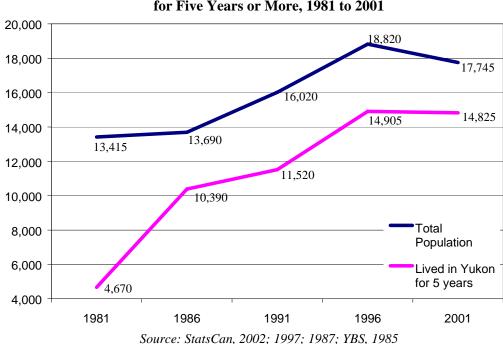


Figure 7. Number of Whitehorse Residents who lived in Yukon for Five Years or More, 1981 to 2001

2.2 Economic Characteristics

The Yukon Territory's economy has been growing in the last 3 years, due in part to investment related to the 2007 Canada Winter Games (YED, 2006). Statistics Canada (2005a) and Yukon Government (YED, 2006) identify the "tight" labour market as a main contributor to increased incomes and increased personal expenditure and housing demand. Tourism and accommodation services, mineral exploration, and construction have also helped to drive this growth. Mineral exploration and mine development investment are expected to drive economic growth in 2006 (YED, 2006).

2.2.1 Macro-economic Characteristics

While government employs a large part of the labour force, employment and income remains very
dependent upon the resource industry, especially mining. As such, the global market and the price of
metals affect the local economy.

• Figure 8 shows the prices of gold and silver from 1985 to 2006 in U.S. dollars.

Figure 8. Average Month-End Prices of Gold³ and Silver from 1985 to 2006 in USD

Source: London Bullion Market Association, 1985-2006; London Metal Exchange, 1985-2006; Bank of Canada, 1985-2006

- 2006 figures show an upward trend, where the average month-end price for gold in 2006 \$601.21 / Troy ounce and 1,120.78 cents / Troy ounce (London Metal Exchange, 1985-2006).
- These prices enhance economic viability of previous discoveries such as Minto, Skookum, United Keno Hill, and Dublin Gulch (YED, 2006).
- At present, the price of metals as well as oil and gas is attracting investors to the area and a number of projects have been proposed in the territory. Table 1 lists these projects and their phases.
- Interest rates, such as one-year mortgage rates, are often used to predict homebuyers spending intentions.
- Figure 9 shows one-year and five-year mortgage rates for Canada from January 1980 to September 2006.
- Record low interest rates have encouraged housing investment through relatively low risk mortgages over the past four years, though recent hikes in 2006 may suggest that this trend is changing.

³ Gold prices use a.m. fixed prices.

Table 1. Major Projects Planned or in Operation in the Yukon Territory, 2006

Project	Project Phase	
Mining – metals		
Minto (Sherwood Copper Corporation)	Construction	
Wolverine (Yukon Zinc Corporation)	Permitting / Feasibility	
Howard's Pass / Selwyn Basin (Pacifica Resources)	Advanced Exploration / Pre-Feasibility	
Carmacks Copper (Western Copper)	Advanced Exploration / Pre-Feasibility	
Red Mountain (Acero-Martin Exploration Inc.)	Advanced Exploration / Pre-Feasibility	
Mining – coal		
Division Mountain (Cash Minerals)	Advanced Exploration / Pre-Feasibility	
Oil and Gas		
Kotaneelee (Devon)	Producing since 2005	
Pointed Mountain Pipeline (Duke Energy)	Operating	
Eagle Plains (Northern Cross Yukon Ltd)	Feasibility	
Alaska Highway Pipeline Project	Permitting	
(TransCanada Pipelines Ltd.)		
Mackenzie Gas Project (Imperial Oil Resources)	Permitting	

Source: YED, 2006

Figure 9. Interest Rates for One-Year and Five-Year Mortgages in Canada, 1980 to 2006



Source: Bank of Canada, 1980 - 2006

2.2.2 Income, Labour Force and Employment

- As shown in Table 2, 21% of the Whitehorse labour force was employed in the government services sector in 1996.
- The number of people employed in government increased by 300 people in 2005. At the same time, those employed in the private sector decreased by 200 people (YED, 2006).
- Self-employment grew by 300 people in 2005 (YED, 2006).
- According to Yukon Economic Development (2006), Yukon's total labour force increased in 2005. The unemployment rate decreased from 2003 to 2005, with a small increase in 2006 (see Figure 10).
- Figure 11 shows the average weekly earnings for Yukon Territory. In nominal terms (i.e. not adjusted for inflation), earnings have increased by 20.8% between 1991 and 2005. In real terms (i.e. adjusted for inflation), however, earnings have decreased by 3.3%.

Table 2. Labour Force Composition for the City of Whitehorse, 1996

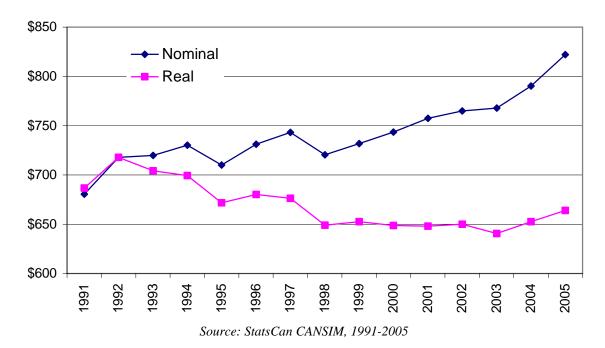
Industry	Proportion of Whitehorse Residents Employed
Government Services	21%
Wholesale Trade	15%
Accommodation Services	9%
Health and Social Services	9%
Construction	8%
Education	7%
Other Service Industries	7%
Business Services	6%
Transportation and Storage	6%
Communications and Utilities	5%
Finance, Insurance and Real Estate	4%
Primary	3%
Manufacturing	1%

Source: StatsCan, 1997

14% 13% 12% 11% 10% 9% 8% 7% 6% 5% 4% 2006 1992 1993 1995 1996 2002 2003 2004 2005 1994 1997 2001 Source: YBS, 1992-2006

Unemployment Rate for Yukon Residents (June figures), 1992 to 2006 Figure 10.

Figure 11. Average Weekly Earnings (Real and Nominal) for Residents of Yukon Territory, 1991 to 2005



3. Current Housing Stock

The housing stock in the City of Whitehorse has been growing and at a faster pace than the population. Construction numbers suggest that the housing stock will continue to grow. This growth is characterized by an increase in the number of dense housing types such as multiple-family residential units during the last three and a half years. The increase in supply may be explained by the larger demographic shift towards more non-traditional household types, non-family dwellings and a need for accessible housing.

The cost of housing is increasing throughout the City, but low interest rates suggest that housing may be more affordable. At this time, however, it is unclear whether housing is becoming more or less affordable. The subsections below help to explain the factors that frame this issue.

Smart Growth creates a range of housing and transportation options and opportunities and makes decisions in a fair and cost-effective manner (CMHC, 2003).

3.1 Housing Stock Growth

- Table 3 shows the total number of dwelling units in Whitehorse has increased by 2,435 units between 1981 and 2001 or by 122 units per year.
- Figure 12 shows the total number of dwelling units constructed (i.e. combined single-family and multiple-family residences) in Whitehorse from 1998 to 2005.
- The dwelling unit construction rate has increased in the last five years to 143 dwelling units per year, where 231 units were constructed in 2005 alone (City of Whitehorse, 1998-2006).

Table 3. Number of Dwelling Units in Whitehorse, 1981 to 2001

	1981	1986	1991	1996	2001
Total Number of Dwelling Units	4985	5205	6195	7060	7420

Source: StatsCan, 2002; 1997; 1987; YBS, 1985

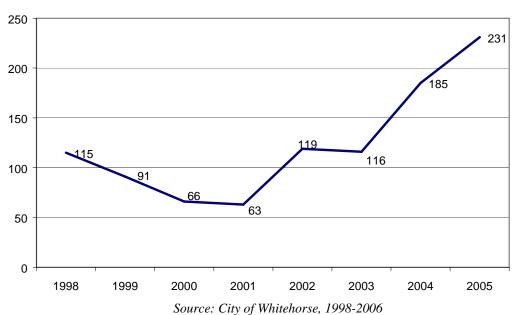


Figure 12. Total Number of Dwelling Units Constructed, 1998 to 2005

• According to Table 4, between 1981 and 2001 the number of dwelling units grew at a significantly faster rate than the population between 1981 and 2001.

Table 4. Number of Dwelling Units and Population of Whitehorse, 1981 to 2001

	1981	1986	1991	1996	2001	Rate of Increase
Total Number of Dwelling Units	4985	5205	6195	7060	7420	42%
Total Population	17023	18043	21322	23538	22526	32%

Source: StatsCan, 2002; 1997; 1987; YBS, 1985

- On September 20, 2006, a lottery for 119 residential lots in the Copper Ridge area of Whitehorse sold 44 out of the 84 available lots to the public. There were 35 designated lots for builders, all of which were sold the following day. The remaining 40 lots available to the public will be put into a lottery in March 2007 for the public (pers. comm. October 2, 2006, Theresa Muir).
- An additional 110 country residential lots will soon be made available, with 52 available in November 2006 and 58 available in Spring 2007. Thirty-one industrial lots will be made available at this time in Mt. Sima.

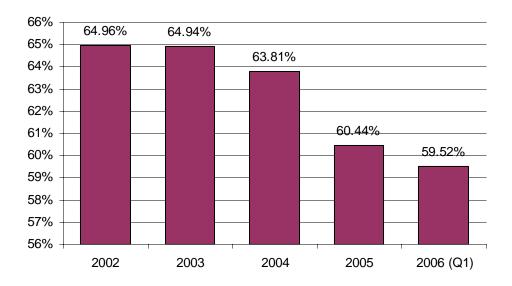
 Raven's Ridge and Fox Haven Estates are two planned subdivisions currently under construction that will develop an additional 18 and 26 country residential lots, respectively (Raven's Ridge, 2006; Underhill Geomatics, 2006).

3.2 Housing Characteristics

3.2.1 Housing Types

- While the number of single-detached houses sold in the City increased from 406 houses in 2002 to 439 houses in 2004, the number sharply declined 2005 to 382 houses.
- At the same time, the proportion of single detached houses sold in the City between 2002 and 2006 has decreased. Figure 13 shows the proportion of single detached houses has decreased from 64.96% in 2002 to 59.52% in the first quarter of 2006 (YBS, 2002-2005).

Figure 13. Proportion of Single Detached Houses Sold in City of Whitehorse Relative to other Real Estate Types, 2002-2005



Source: YBS, 2002-2005

• The number of condominiums and mobile homes sold between 2003 and 2005 has increased by 41 and 21 units, respectively. However, the number of duplexes sold had decreased by 43 units since 2003, as shown in Figure 14.

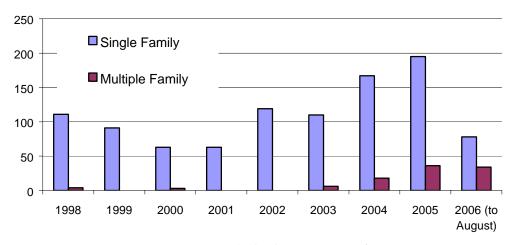
120 Mobile Homes
100 Condos
80 Duplexes
60
40
20
2002 2003 2004 2005

Figure 14. Total Mobile Homes, Condominiums and Duplexes Sold in the City of Whitehorse, 2002 to 2005

Source: City of Whitehorse, 2002-2005

- Figure 15 shows that densely constructed dwellings, or multiple-family dwellings, have been constructed in greater numbers in recent years.
- Decreasing vacancy rates, shown in Figure 16, suggest that demand for rentals is increasing.
- Riverdale has experienced the greatest declines in vacancy rates.

Figure 15. Number of Single Family Residential and Multiple-Family Residential Dwelling Units Constructed, 1998 - August 2006



Source: City of Whitehorse, 1998-2006

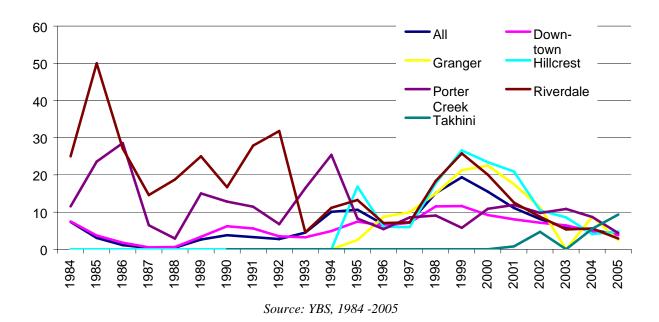


Figure 16. Vacancy Rates for the City of Whitehorse, 1984 to 2005⁴

• For those dwelling units contained in buildings with four or more dwelling units, there was only a net increase of 10 occupied rental dwelling units for the entire City between 1996 and 2001. Between 2002 and 2006, however, there was an increase of 36 rental dwelling units (YBS, 2002-2006). Figure 17 shows the number of rental units for the City of Whitehorse.

- In percentage terms, the number of rental dwelling units increased by 3.4% between 2002 and 2005. The decrease in vacancy rates between 2002 and 2005 (4.4 percentage points) along with the increase in the number of dwelling units suggest that rental supply may not be meeting demand.
- Figure 18 shows that more residents own their homes rather than rent.
- Decreasing vacancy rates, along with increasing ownership rates, may suggest that rental options are more limited than owning options.

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⁴ These figures are averages of quarterly rates. Granger and Hillcrest first became part of the rental survey in 1995 and Takhini in 2001.

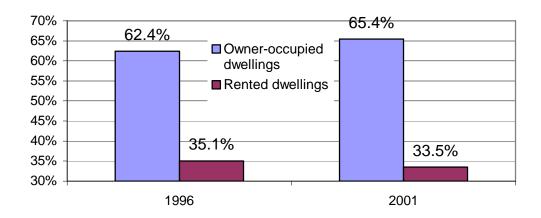
⁵ These numbers are collected from those rental units that require a business licence. As such, the actual number of rental units in the City is much higher and does not include the following rental types: those with less than 4 units, illegal suites, and those with four or more suites whose owner refuses to provide information.

Figure 17. Total Number of Rental Dwelling Units for those Buildings with Four or More Dwelling Units, 2nd Quarter 2002 to 2nd Quarter 2006



Source: YBS, 2002-2006

Figure 18. Proportion of Whitehorse Residents in Privately Occupied Dwellings who Own and Rent, 1996 and 2001



Source: StatsCan, 1997; 2002

3.2.2 Public and Social Housing

- Yukon Housing Corporation's Whitehorse Housing Authority operates a public housing program for those who cannot secure affordable, adequate and suitable housing. The rent is equivalent to 25% of total household income before deductions.
- At this time, more individuals and families wish to use public housing than what is available from the Whitehorse Housing Authority. A total of 91 individuals and families are on the waiting list for public housing.
- Additional social housing is offered by a variety of non-governmental organizations.
- Table 5 describes the public housing stock offered by the Whitehorse Housing Authority and the social housing stock offered by non-governmental organizations.

Table 5. Public Housing offered by the Whitehorse Housing Authority and Social Housing offered by Non-Governmental Organizations

Housing Description	Housing Type	Number of Dwelling Units
Whitehorse Housing Authority		
Closeleigh Manor and Greenwood Place	Senior's Units	94 units
Various apartment complexes, row housing, duplexes, and single-family dwellings	Family Units	193 units
Rent Supplements, including 6 co-op housing units	Subsidizes rent in eligible private rental dwellings	44 units
Total Public Housing - Whitehorse House	sing Authority	331 units
Non-Governmental Organizations		
Gateway Housing	Senior's Units	39 units
Kaushee's Transition Home	25 Beds and 5 Second-Stage Housing Units	30 units
Grey Mountain Housing Society	Housing Units for Aboriginal Peoples	75 units
Total Social Housing – Non-Governmen	144 units	
Total Social and Public Housing Combi-	475 units	

Source: Yukon Housing Corporation, 2006; pers. comm., October 3, 2006, Dwayne Wheeler.

3.2.3 Housing Cost

• The average cost of houses sold between 2002 and 2005 has been increasing throughout the City of Whitehorse.



- Figure 19 shows Riverdale and Country Residential areas have experienced the most dramatic increase in house cost.
- Housing construction and renovation sectors help contribute to the rise of housing costs, through the limited labour pool and resultant cost of labour and a dependence on shipping construction materials (CMHC, 2003).
- Rent has not increased significantly in the past 10 years, where the annual average rent has ranged from \$650 to \$671 in that time period (YBS, 1995-2005).
- While available data does suggest that rent is not increasing, anecdotal evidence suggests that rents have increased in 2006.

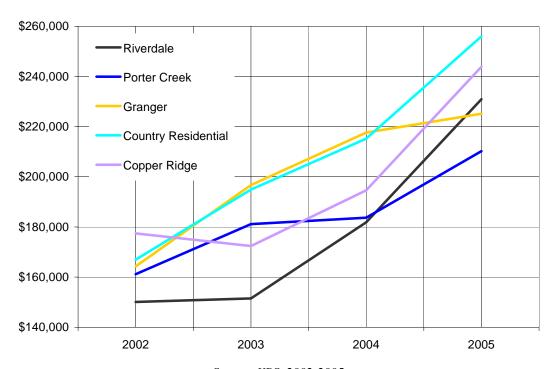


Figure 19. Cost of Houses Sold in Whitehorse by Neighbourhood⁶

Source: YBS, 2002-2005

 $^{^6}$ The figures are from the Yukon Real Estate Survey (YBS, 2002-2005) and only include 4^{th} quarter numbers.

3.3 Affordability

- The evidence provided above and in this section does not suggest a clear upward or downward trend for housing affordability. In other words, it is not clear whether housing is becoming more or less affordable for residents of Whitehorse. The evidence that frames this issue is presented below.
- Considering the macro-economic characteristics and the income and employment situation discussed
 above, as well as strong personal finances for Yukon residents, a case can be made to argue that
 housing is becoming more affordable for most Whitehorse residents. At the same time, however, the
 increasing cost of home ownership suggests that some City residents are increasingly finding it
 difficult to access affordable housing in Whitehorse.
- Yukon's social housing programs aim to address this need for affordable housing.
- According to a Yukon Housing Survey (2000), the majority of Whitehorse residents feel that affordability (where shelter costs were equal to 30% or more of your income) is not a problem, as illustrated by Figure 20. Given that this information is six years old, it may be inferred that the greater increase in housing costs relative to the smaller increases in income in this time period have shifted attitudes from "affordability is not a problem" to "affordability is or is possibly a problem".
- Yukon's personal savings rate is much higher than the rest of Canada, as Figure 21 illustrates.

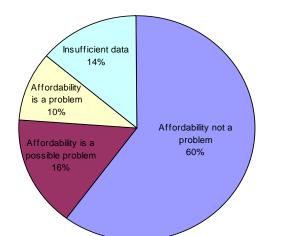


Figure 20. Level of Affordability for Whitehorse Residents, 2000

Source: Yukon Housing Corporation, 2000

25% 20% 15% 10% Canada 5% Yukon Territory 0% -5% 1992 1993 1995 9661 8661 1983 1985 986 0661 1994 1997 1984 1987 1991 2000 2001 2002

Figure 21. Personal Savings Rate for Yukon and Canada, 1981 to 2005

Source: StatsCan, 1981-2005, table 384-0012

• As Figure 22 illustrates, income disparity has remained relatively unchanged in recent years. There has been a slight decrease in the number of people who make less than \$15,000 per year and a slight increase in the number of people who make more than \$50,000 per year. In other words, incomes are rising for most income groups (StatsCan CANSIM, 2000-2004).

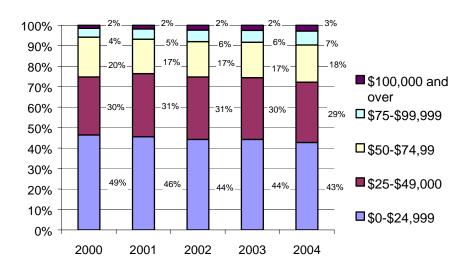


Figure 22. Income Groups for Residents of the City of Whitehorse, 2000 to 2004

Source: StatsCan CANSIM, 2000-2004

- This financial picture, alongside record low interest rates, low unemployment, optimistic future project development, and a high labour force participation rate suggest that housing in Whitehorse is becoming more affordable.
- However, a number of other factors, illustrated below, may suggest otherwise.
 - Rental availability is a general concern across Canada's municipalities but is particularly pronounced in Canada's northern municipalities (CMHC, 2003). According to vacancy rates presented in section three, it appears that rental availability is decreasing.
 - The Canada Mortgage and Housing Corporation (CMHC; 2003) suggests that the demand for rental units is increasing across Canada and especially in northern Canada. Along with transient workers and professionals, there is a demand for rentals in northern communities among new immigrants, where 70% of most-recent immigrant households are tenants of rental units (CMHC, 2003, 36).
 - CMHC (2003) also suggests that the aging population will increase the demand for rentals and other types of affordable housing⁷ across Canada.
 - While most incomes are increasing, 1,700 individual income earners in Yukon make less than \$5,000 per year and a larger portion (i.e. 3,770) of residents who make less than \$10,000 per year.

3.4 Accessibility

- It is expected that the aging population will contribute to increased demand for accessible housing.
- According to the Yukon Housing Corporation (2000), 12.9% of Whitehorse households have one disabled person, where most homes are equipped with features such as ramps and wheelchair access.
- 38.8% seniors identify mobility as an issue for dwelling suitability (Yukon Housing Corporation, 2000).

Gartner Lee

⁷ CMCH (2003) identifies a number of additional affordable housing types, including condominiums, co-housing, life-leases (pay entrance fee, monthly fees), retrofitting options to create rental units, and sustainable or "green" buildings.

4. Future Housing Demand

4.1 Demographic and Economic Drivers

- Findings presented in the previous sections reveal a number of demographic and economic characteristics that will likely drive future housing demand:
 - Moderate increase in population;
 - Decrease in number of persons per dwelling;
 - Decrease in outward migration for Yukon;
 - Anticipated economic growth;
 - A larger labour force and a lower unemployment rate;
 - Slight increase in homeownership; and,
 - Low interest rates, a high savings rate, and higher than average amounts of disposable income.

Smart Growth creates a range of housing and transportation options and walkable communities (CMHC, 2003).

4.2 Demographic and Economic Impediments

- Findings presented in the previous sections reveal a number of demographic and economic characteristics that have implications for future housing demand:
 - Housing price increases;
 - A decreasing, but significant, portion of individuals have very little income; and,
 - Small increases in interest rates in 2006.

4.3 Housing Supply

4.3.1 Housing Quantity

- Previous residential household projections were based solely on demographic projections at a time when the City's population was shrinking (i.e. Zanasi, 2004). The authors suggested that under a low population growth scenario there would be no net demand for housing by 2023 and under a high population growth scenario there would be a net demand of 2,882 new households by 2023. Given that the population has been growing since 2003 and the rate of dwelling unit increase exceeds the population increase (see section 3.1), it is likely that these projections are low.
- Moderate increases in dwelling unit numbers suggest a continued growth in housing supply.

• If growth in dwelling unit numbers over the last 5 years continues over the next 20 years, where an average of 143 new units are built per year, the City will need 2,856 additional dwelling units.⁸

4.3.2 Housing Types

- Findings in the previous sections reveal a number of demographic, economic and housing characteristics that have potential implications for future housing types.
- Implication 1: An increasing supply for more dense dwelling units due to:
 - Increases in number of multiple-family units constructed; and,
 - Decrease in proportion of single-detached houses sold.
- Implication 2: An increase in demand for more dense dwelling units due to:
 - Increases of non-traditional household types and decrease in number of persons per unit.
- Implication 3: An increase in rental demand that may exceed increases in rental supply due to:
 - Decreasing vacancy rates;
 - Small increases in number of rental units; and,
 - CMHC (2003) suggests that the aging population, transient workers, young professionals and new immigrants may increase demand for more rental homes.
- Implication 4: An increase in demand for accessible housing due to:
 - CMHC (2003) suggests that the aging population will likely demand more accessible housing.
- In addition, CMHC conducted a study in Whitehorse in 2006 (CMHC, 2006). Two meetings took place with 35 and 29 participants, respectively, in an attempt to generate a dialogue on housing and sustainable community design. Many of the participants hoped that the City will develop according to a number of sustainable community design principles, which include the consideration of wilderness and nature preservation, using green building design and technologies and addressing downtown revitalization and "big-box" developments.

⁸ This figure is for illustrative purposes only as it relies solely on past increases in dwelling numbers. Without considering existing City plans or other demographic and economic trends, this prediction should not be used for planning purposes. The authors expect CMHC to produce a housing projection report for the purpose of the Porter Creek Bench charrette planning process.

5. Existing Interests and Uses in Development Area

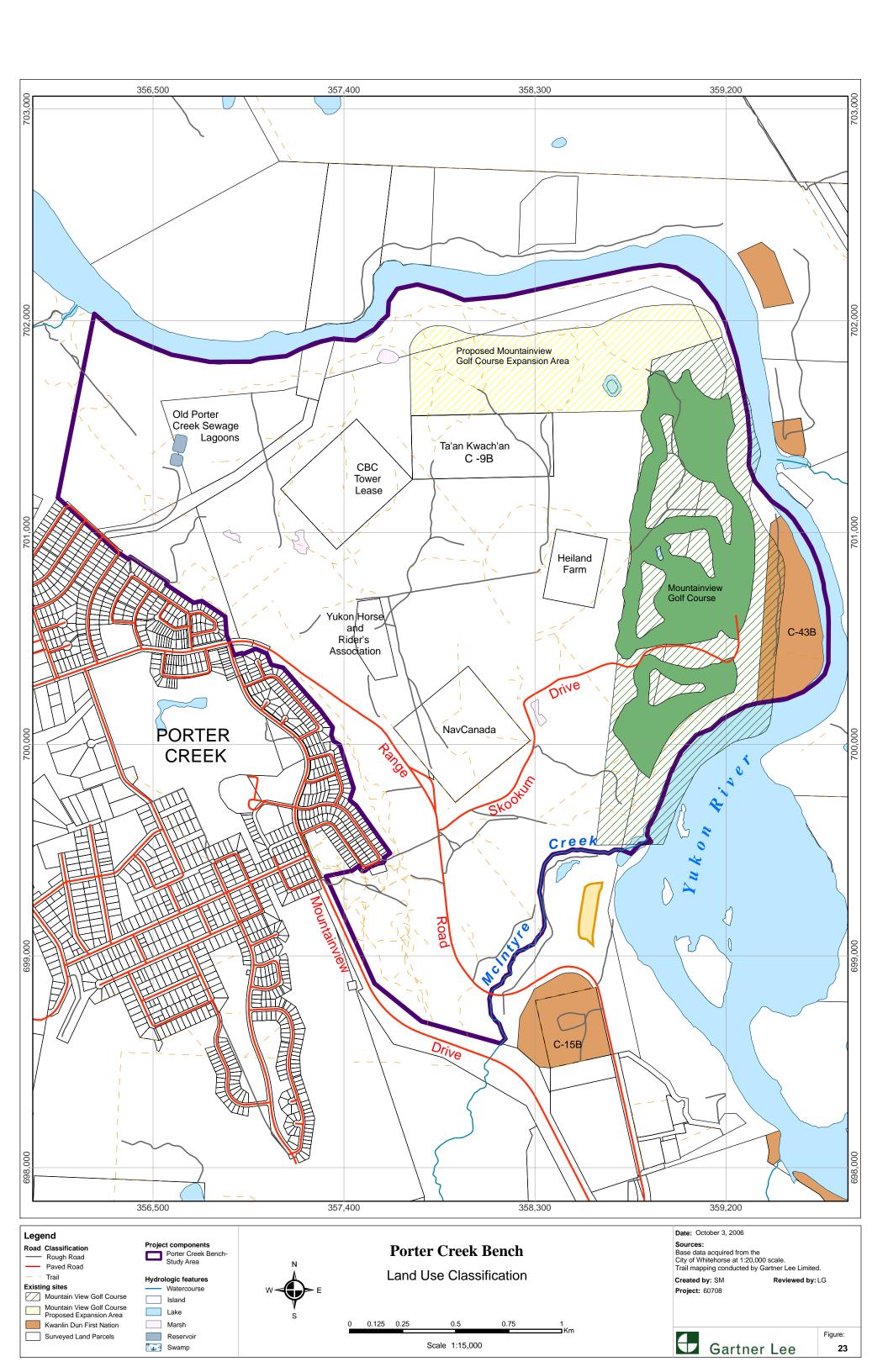
5.1 Existing Land Uses

- A limited number of land uses currently exist in the Porter Creek Bench.
- The Mountainview Golf Course occupies 35% of the land area and 45% is Commissioners Land (Nairne & Associates, 1994). Figure 23 shows the land use composition.
- The 1994 study by Nairne & Associates determined that 290 hectares of land is suitable for development.
- Recent residential developments in the city have been somewhat smaller, with Granger / Logan / Arkell / Copper Ridge encompassing a total of 240 hectares (City of Whitehorse, 2006a).

Smart Growth uses mixed land use development and preserves open space, natural beauty, and critical environmental areas (CMHC, 2003).

5.1.1 Mountainview Golf Course

- Mountainview Golf Course is an 18-hole golf course with a driving range and target greens, putting green, Pro Shop, Clubhouse with a licensed restaurant and lounge, a deck overlooking the 18th green, on-course beverage car, tent facility for banquets, and parking.
- The season runs from May to September.
- While Mountainview Golf Course hopes to expand to another 9 holes, its primary competition, Meadowlakes Golf and Country Club, recently decided against expanding to 18 holes, which suggests soft future growth potential.
- Mountain Golf Course values its natural feel and would like to see green space protected and a buffer between housing and the course. Mixed housing types, seniors housing, and high end condos are preferred development options for the area.
- Mountainview Golf Course has expressed concerns are about liability and vandalism on the course
 due to increased potential access, including winter use by ATVs and snowmobiles.



5.1.2 NavCanada

- NavCanada has located the Non-Directional Beacon for the Whitehorse Airport just north of the golf course access road.
- Two towers, approximately 16 metres high, transmit high voltage radio frequencies.
- No structures or obstacles are permitted within 150 m, either above or next to the tower structure for operational and safety reasons.
- A building 150 m from the tower can be no taller than 7.86 m. At the edge of the property, at 228.5 m from the tower, buildings can only be 12 m tall (Transport Canada, 2005). 9

5.1.3 Ta'an Kwäch'än Council

- Ta'an Kwäch'än Council (TKC) claims parcel C-9B within the study area.
- The land parcel is approximately 20 hectares.
- The TKC suggested they would like to develop the parcel for serviced residential use or mixed use development. Using the parcel for residences can provide a revenue base for the TKC
- The TKC Final Agreement mandates sustainable community development for their parcel.
- TKC identifies an interest in compact, efficient, good quality low and mixed income housing for a variety of household types. Integrating the transit system, respecting heritage values, and creating complete neighbourhoods are important. The Council is also concerned with a need to protect the river and water bodies in the study area and keeping trails connected.

5.1.4 Kwanlin Dün First Nation

- Kwanlin Dun First Nation (KDFN) claims an 18-hectare parcel of land, C-43. There is currently one cabin on the parcel.
- KDFN does not have plans to develop their parcel in the near future. However, access to the parcel and any resulting impact on the parcel by new residents in the area are important concerns. In addition, habitat and natural area connectivity, access to the parcel and traffic flow, and access o water are concerns.
- The First Nation would like to see a multi-generational housing project, the use of sustainable community design and natural spaces.

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 $^{^9}$ A 3 $^\circ$ line from the base of the tower to the edge of the NavCan property measures height restrictions for buildings, which is 228.5 m from the centre of the property.

5.1.5 Canadian Broadcasting Corporation Transmitter

- The Canadian Broadcasting Corporation (CBC) Transmitter is a 90-metre tower with 150-metre radius of buried ground grid.
- In 1994, CBC suggested that they would not reduce the size of their leasehold and would require the city to maintain a safety setback from facilities. They have estimated a minimum \$1,000,000 relocation cost.

5.1.6 Heiland Farms

- Heiland Farms is a 9-hectare agricultural parcel.
- The owner / operator suggested that he would like to subdivide his property into residential lots.
- The Farm is interested in seeing high density, mixed use, and mixed housing types allowing for rental units to be integrated throughout and units for seniors, including rises to leave more green space. Green space preservation, managing light pollution from street lights, and conserving energy and water use are concerns.

5.1.7 Gymkana, Yukon Horse and Rider Association

- Gymkana is an equestrian facility operated by the Yukon Horse and Rider Association.
- The facility is composed of a grandstand and horse corrals and is approximately 3 hectares in size.
- Development in this area may conflict with the existing trail system, including decommissioned trails,
 as well as their use of large trailers traveling to stable grounds. The Association would like to see
 large lot sizes to have horses on them, mixed housing with low densities, sidewalks and pedestrian
 right of ways, neighbhourhoods connected through multi-use trails and other design features to get
 people outside.
- The Association has signed a lease with the City, which includes a 1-year cancellation clause. They would like 15 acres of land, where the use of a fence is likely needed. The Association feels that their facility is important and compatible with a residential area.

5.1.8 Porter Creek Sewage Lagoon

• Porter Creek Sewage Lagoon is the former site of the sewage lagoon for the City of Whitehorse and, while it continues to be used, it is used infrequently.

5.2 Other Land Uses

- Within the Commissioners Land are a series of trails that weave throughout much of Porter Creek Bench.
- A small network of local, gravel roads and rough roads also service the area.
- Specific land uses and interests will be identified through ongoing stakeholder consultation conducted by the City of Whitehorse.

6. Planning and Infrastructure

6.1 Planning

The City of Whitehorse is characterized by small pockets of settlement situated along the Alaska Highway north and south of the downtown core. While urban residential homes are most common, country residential homes are also common. These homes sit on relatively large lots (typically one hectare or larger) and represent a "valued lifestyle" for some City residents (City of Whitehorse, 2002). They are not connected to municipal sewer or water systems.

- The Downtown Plan (City of Whitehorse, 2006b) envisions the Downtown as safe, attractive, the region's centre for shopping, arts and culture, services, business, and a place to live. The Riverfront Plan (City of Whitehorse, 2005a) has a goal of revitalizing the waterfront area of downtown. The Draft Plan for Porter Creek "D" (City of Whitehorse, 2005b) and Takhini North Subdivision Pre-Design Concept (City of Whitehorse, 2003) will be used to create residential development plans. The City's Strategic Plan (2004b) identifies a number of goals, including creating a sustainable community.
- The OCP (2002) stresses the importance of directing development to more urban forms of housing, by encouraging smaller lot sizes and multiple-family dwellings as well as a range of housing options. Porter Creek Bench along with White Pass Tank Farm and Beyond Copper Ridge are identified as areas that will become fully serviced neighbourhoods with housing, neighbourhood commercial uses, schools, places of worship and parks. The area has been set aside for new homes with densities between 9 units per hectare to 16 units per hectare. Table 6 outlines the goals identified in the OCP and those design features proposed for Porter Creek Bench to help the City attain these goals.

Table 6. Porter Creek Bench Goals and Design Features Identified in the *Official Community Plan* (City of Whitehorse, 2002)

OCP Goal	Porter Creek Bench Design Feature
Manage growth through defined land	Accommodate projected growth in city while maximizing use of
use	existing urban areas / future designated urban areas (page, 17)
Minimize vehicular trips by providing	Neighbourhood commercial development encouraged (page, 54)
shopping opportunities close to	
residential areas	
Protect trail corridors	New development areas will be designed to protect significant trail
	corridors (page, 56)
Address concerns from Porter Creek	Existing concerns such as loss of greenspace, trails, increased wood
residents	smoke and noise shall be addressed (page, 56)
Consider educational facilities	Planned in cooperation with the Department of Education (page, 99)
Allow for potential Porter Creek Bench	A new location should be investigated for the existing CBC tower
development	(page, 116)

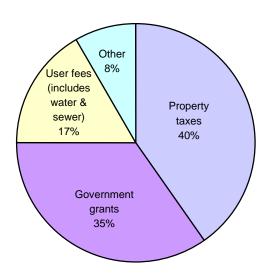
• The City hosted a kick-off meeting on September 12 of this year in anticipation of the design charrette scheduled from November 5 to 9. The City and its consultants presented preliminary information addressing sustainable infrastructure options, socio-economic background, environment and special places, heritage issues, and traffic (City of Whitehorse, 2006c). The public was encouraged to interact with City staff and its consultants throughout the open house and a formal question and answer period.

Smart Growth directs development to existing communities and uses compact neighbourhood design (CMHC, 2003).

6.2 Levies and Fees

• As Figure 24 shows, a large portion of City-generated revenues is derived from property taxes.

Figure 24. Percentage of Total Consolidated Revenues for City of Whitehorse, 2005



Source: City of Whitehorse, 2005c

- Department of Community Services, Yukon Government, is responsible for providing annual grants to municipalities, which contributes a large portion of City revenues.
- In 2005, the City had an operating surplus of \$88,213.
- Similar to most municipalities, current City bylaws (e.g. Fees and Charges Bylaw 98-12) do not
 provide financial incentives for developers to build more affordable types of housing, such as rental
 units. As such, the risk associated with building rentals is greater relative to single detached houses.

7. Institutions and Services

7.1 Schools

- There are a total of 15 schools in the Whitehorse area. Ten of the schools provide educational services at the elementary level (Kindergarten to grade 7), one provides instruction at the primary level (kindergarten to grade 3) and four provide instruction at the secondary level (grades 8 to 12).
- Figure 25 presents current enrollment levels for each of the 15 schools.
- Figure 25 also shows the peak enrollment levels at Whitehorse schools over the eighteen -year period between 1989 and 2006 as well as their "ideal capacity". 11,12
 - All schools, with one exception¹³, are currently operating below their peak enrollment levels.
 - All but two schools are operating below their ideal capacity. 14
- To the extent that new residents of the Porter Creek Bench development are new residents of Whitehorse, (i.e. they do not simply move from another area of the City of Whitehorse to the Porter Creek Bench area), demand for additional educational services will be created.
- Total enrollment in the Whitehorse school system stands at 4,017. 15
- Given the current population of Whitehorse is 23,638, approximately 17% of the population was attending an elementary or secondary school at the end of the most recently completed school year.
- If the ratio of elementary and secondary school enrollees to the overall population stays constant, every 100 residents of Lower Porter Creek who are new residents of Whitehorse will result in an increase in demand of 17 spots for elementary and secondary-level school services.



¹⁰ Enrollment numbers were compiled by YBS and refer to those students enrolled on May 31, 2006.

¹¹ Ideal capacity figures were provided by the Department of Education. The ideal capacities account for all potential teaching spaces, including Resource Rooms and are based on allowable class sizes of: Kindergarten - 20; Primary - 23; Intermediate - 26; Resource (elementary) - 8; Secondary - 27; Industrial Arts - 15; Home Economics - 18; Resource (secondary) - 16. The Department of Education notes that "....at various times in the past, the enrollments of certain schools have exceeded their respective ideal capacities. But the operational situation within the school becomes quite challenging and uncomfortable when that number is exceeded". (Gordon DeBryn *personal communication*, October 18, 2006).

¹² Ideal capacity information is not available for the Individual Learning Centre.

¹³ The exception is the Individual Learning Centre, which opened in February 2005.

¹⁴ The two schools currently operating above ideal capacity are Christ the King Elementary and Holy Family Elementary.

¹⁵ Data compiled by YBS; refers to those students enrolled on May 31, 2006.

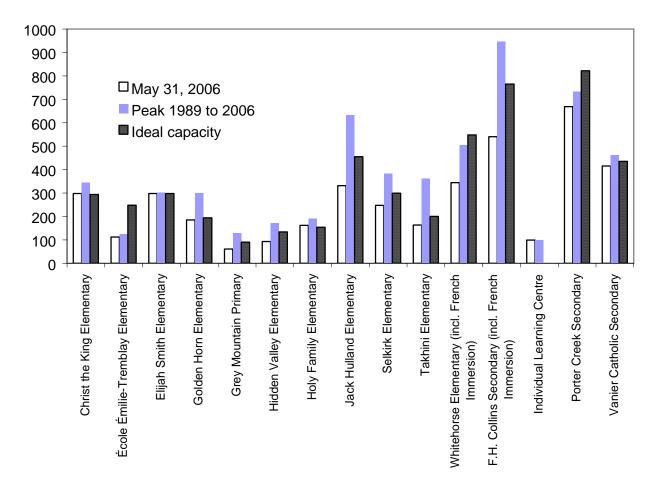


Figure 25. Whitehorse Area School Enrollment Numbers for May 31, 2006 and Peak Enrollment from 1989 to 2006

Source: YBS, 2006b; 1989-2006; YDE, 2006.

• Elementary and secondary school students in Whitehorse are expected to enroll at the school located within their attendance area unless eligible to attend an alternate school. For example, students eligible for French First Language Education (as determined by Section 23 of The Charter of Rights and Freedoms) may attend École Émilie-Tremblay, which is located in the Logan area of Whitehorse. Table 7 outlines the attendance options for current Porter Creek residents.

Table 7. Elementary and Secondary School Options for Current Porter Creek Residents

Children of elementary school age living in Porter Creek may attend	if they are	where in May 2006 enrollment was	and where peak enrollment between 1989 and 2006 was
École Émilie-Tremblay	eligible for French First Language education	112	124
Holy Family Elementary	of the Roman Catholic faith	162	191
Jack Hulland Elementary	n/a	331	633
Whitehorse Elementary French Immersion	n/a	327	327
Children of high-school age living in Porter Creek may attend	if they are	where in May 2006 enrollment was	and where peak enrollment between 1989 and 2006 was
Porter Creek Secondary	n/a	669	773
Vanier Catholic Secondary	of the Roman Catholic faith	415	463

Source: YDE 2006b; YBS 2006b.

7.2 Community Services

• The Porter Creek Bench is a "greenfield" development project. As such, all location-specific community services will be constructed as part of the project. Indeed, it is the greenfield nature of the development that creates the opportunity for the project to be a showcase for "Smart Growth". Table 8 illustrates the location-specific community services that will be supplied as part of Porter Creek Bench development, as well as the expected supplier of each service.

Table 8. Location-Specific Community Services expected for Porter Creek Bench

Service Type	Service Supplier
Roads and sidewalks	City of Whitehorse
Public transit services	City of Whitehorse
Water delivery	City of Whitehorse
Sewage disposal	City of Whitehorse
Waste collection	City of Whitehorse
Parks, playgrounds, rinks	City of Whitehorse
Pathways	City of Whitehorse
Electricity	Yukon Electrical Company Limited
Telephone	Northwestel
Cable TV	WHTV
Internet	Northwestel and WHTV

• Porter Creek Bench residents will also demand a wide variety of non-location-specific (or, common) community services. Community services already supplied to residents of Whitehorse, which will be available to Porter Creek Bench residents, are shown in Table 9. Unlike the location-specific community services that will be built to a scale that matches demand, common community infrastructure is typically built to a scale that can accommodate future growth.

Table 9. Common Community Services for the City of Whitehorse

Service Type / Facility	Service Supplier
Canada Games Centre (pool, ice rinks, soccer pitch, flexihall)	City of Whitehorse
Takhini Ice Arena	City of Whitehorse
Mount McIntyre Recreation Complex (curling, cross country skiing)	City of Whitehorse
Mount Sima (alpine skiing, snowboarding)	Great Northern Ski Society
Takhini Softball Complex	Softball Yukon
Landfill and waste management	City of Whitehorse
Whitehorse General Hospital	Yukon Hospital Corporation
Whitehorse Public Library	Government of Yukon
Whitehorse International Airport	Government of Yukon
Yukon Arts Centre	Yukon Arts Centre Corporation
Post-secondary Education	Yukon College

7.3 Emergency Services

• Emergency services will also be supplied to Porter Creek Bench residents. Table 10 outlines the emergency services and their suppliers. Emergency services are typically scaleable to the size of the community such that as a community grows the volume of services made available to residents is increased to match the growth.

Table 10. Emergency Services for the City of Whitehorse

Service Type	Service Supplier
Police/bylaw enforcement	RCMP/City of Whitehorse
Fire protection	City of Whitehorse
Ambulance	Government of Yukon

8. Summary and Conclusions

This report provides a summary overview of the existing socio-economic environment for the purpose of the Porter Creek Bench planning charrette and subsequent submission to the Yukon Environmental and Socio-Economic Assessment Board. This report summarizes the trends in population, economics, current trends and a future outlook on housing stock and characteristics, existing interests and uses in the development area, existing planning and municipal infrastructure and community services such as schools.

Considering the information in this report, there are a number of socio-economic factors to consider in light of the Porter Creek Bench development. A number of demographic trends suggest that there is a shift in the demand for housing from single detached houses to multiple-family dwellings that are suitable for non-traditional households, non-family dwellings and seniors. Economic trends suggest that housing is becoming more affordable, but housing stock characteristics, such as increases in housing costs, may be impeding this trend. The apparent increase in demand for rental units may be arise from the aging population, needs of low-income earners, immigrants, and transient professionals. The summary of existing interests and uses indicate that existing land uses must be considered in the planning phases. Planning initiatives for this and other residential developments have been ongoing and goals have been refined over time. Current stock of schools in the City appear to be below capacity at this time, suggesting that the immediate impact of Porter Creek Bench on existing schools is will be low.

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