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# **Canmore Community Monitoring Program**

# 2008 Final Report



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## **2008 EXECUTIVE SUMMARY**

The purpose of this report is to monitor and evaluate trends developing in Canmore. The focus is on the demographic, social, economic and environmental issues that Canmore faces. The sections of the report are organized as per the 2006 Mining the Future Vision of Canmore, which provides foundational values and goals for the community. The report uses the most recent information available, up to the end of 2008 where possible.

Over the past 18 months there have been significant changes to the global economy. In mid 2007 the United States began to experience a financial crisis, which intensified through 2008. Markets and economies around the world have also been impacted. The effects of these global economic problems have begun to make themselves felt in Canmore. It is important to remember that the data available at this point in time may not show the full extent of the economic changes that are now underway. As these events are currently unfolding, it is difficult to comment or interpret what the impacts on Canmore are, or will be in the near future.

## Identity

Canmore's recently completed Sense of Community Survey indicates that there is a strong sense of community and civic pride amongst a substantial portion of both the permanent and non-permanent residents.

In 2008, Canmore's total combined population was 17,572 residents (12,005 permanent and 5,567 non-permanent). The growth of the permanent population has slowed substantially since the mid 1990's with most of the growth in the past few years occurring in the non-permanent population. Non-permanent residents now represent over 30% of the total population.

Results from the 2006 Second Home Owner Survey showed that second home owners are predominantly regionally-based and who own these properties as places for relaxation, recreation, and enjoyment. Like the permanent population, they value the small town feel, mountain environment, and recreational opportunities that Canmore provides.

Canmore's permanent population has been shifting towards an older demographic age structure. The most rapid growth is in the 45-54, and 55-64 year old age brackets, while the population of children and youth and adults aged 25-44 are generally stagnant and/or in decline.

Canmore remains less ethnically diverse than many major cities, and more than 84% of the permanent population are native English speakers. During the past decade the number of people in Canmore who have French as first language has more than doubled.

## Economic Sustainability

Note: At this time, the impacts of the troubled global economy are filtering down to Canmore. The numbers available for 2008 show the partial impacts of changes that are currently in progress. The available data does not indicate what the extent of the economic impacts to Canmore will be.

Over the past several years Canmore's labour market has been characterized by extremely low unemployment, high participation rates, and seasonal labour shortages. This has created a number of challenges for employers both for obtaining and retaining staff. In the last half of 2008 the labour market appears to have softened with a slight increase in the regional unemployment rate. At this point in time full statistics are not available so the exact extent of these changes is not fully known.

While tourism is a strong economic driver in the community, the rapidly growing numbers of non-permanent residents are an increasing influence on the local economy. The construction industry is also an important component of the economy, and in recent years has been fuelled by an expanding non-permanent population and construction of vacation properties. Construction directly employs 14.7% of the work force, while 45% of all registered businesses are in the Real Estate, Building, and Construction sector. At this point in time, data is not available to measure the effects of the current economic slowdown on the construction industry and local businesses.

Average individual income levels are higher in Canmore than in Alberta or Canada. There are higher than average levels of non-employment income (e.g. investments, pensions), and lower levels of income from employment insurance or social assistance. The participation rate in the labour force is also much higher, probably contributing to the higher than average income levels. The high participation rate is likely due to the high cost of living in the community (driven primarily by high real estate prices).

The municipal tax base ratio continues to be heavily skewed towards the residential component, which accounts for 82% of the total assessments. Achieving an appropriate balance between the residential/commercial tax base is very important for economic sustainability in Canmore.

Both building permit values and real estate values reached new highs in 2006 and 2007 due to high demand for properties and escalating construction costs. Affected by the global economic situation, the market began to cool in 2008. With lower demand and less accessible financing the high values from 2006/7 are unlikely to be attained in the near future. This downturn in local real estate and the construction industry underscores the need for continued efforts towards economic diversification in the community.

## Social Fabric

There are a relatively low number of students for the three operational school boards, and a declining population of children and youth in the community. Class sizes are generally

at or below the recommended levels, but the generally low enrolment numbers have created some challenges for the local schools.

Overall the community has a low proportion of people receiving social assistance payments. This is partially a reflection of the typically low unemployment rates and high participation rates in the labour force. It may also be due to the high cost of housing which limits the ability of those who rely on social assistance programs to remain in the community. The cost of housing has risen significantly; while there have been few increases in the level of financial support provided by social assistance programs. While Canmore is often perceived to be a wealthy community, there is still consistent demand for food assistance programs.

Since 2005 the number of property crimes has dropped sharply, but the rate of both personal and property crimes remains higher than the average for Canada (but lower than the average for Alberta). Most crimes in the community are petty theft, or 'crimes of opportunity'. Domestic abuse remains the single most frequent occurrence responded to by Bow Valley Victim's Services (BVVSA). The BVVSA office in Canmore was closed in 2007 (the Banff office remains open) resulting in fewer victims being assisted by the program.

Emergency room visits at the Canmore Hospital have increased by almost a third over the past two years. This is partly due to increased use of the hospital by patients from other communities where there are significant waiting times to access medical services. There are 93 full and part time physicians with privileges at the Canmore hospital. This provides residents access to a wide variety of specialists and family physicians.

There are more than twice as many dwelling units in Canmore as there were in 1995. There are also many more multi-family units, changing the overall composition of the housing stock. While the number of permanent residents owning or renting these units has increased, the proportion of dwelling units owned and occupied by permanent residents has dropped from 60% to 46%. The most significant increases have been in the number of units occupied by non-permanent residents, who now occupy more than 29% of all units in the community.

Since 2002 rental costs in Canmore have increased by more than 65% for a two bedroom unit, with average monthly rents reaching over \$1,500. Vacancy rates have also been very low creating challenges for those looking for accommodation. Rapid price increases in home resale values through to 2007 led to a peak in average prices of over \$640,000 in 2008 (average for all unit types). This is an increase of almost 290% from 1995. End of year data from 2008 indicates that average prices had dropped by -1.6%, however this likely does not fully reflect the current ongoing impact of the global economic situation.

Housing affordability continues to be a challenge in Canmore as the gap between incomes and housing costs has widened. Even with sufficient cash for a 25% down payment, the price of the median priced home is still out of reach of a median income family. The new 2008 Canmore Housing Action Plan (CHAP) outlines a program to

increase housing options in the community, including Perpetually Affordable Housing units (PAH), employee housing, and rental options. Although housing price increases appear to have moderated somewhat in the last half of 2008, affordability still remains a concern and purchasing a home remains out of reach of many Canmore residents.

## **Environmental Stewardship**

Many of Canmore's Environmental Care Programs target goals are set on a per capita basis (permanent population) and need to be adjusted to take into account the population of non-permanent residents. Additionally the goals need to be re-examined to ensure that they are relevant and achievable, and consistent with the principles of the Natural Step and the directions of the new Community Sustainability Plan (CSP).

There is a shortage of current and accessible air quality data for Canmore. Previous air quality studies have identified vehicle traffic as a major source of pollutants and greenhouse gas (GHG) emissions in the Canmore area. The proportion of people who drive to work in Canmore is only slightly less than the national average, so there is a continued need to facilitate and promote alternative methods of transportation in the community.

Total water consumption in Canmore increased substantially in 2006 and 2007, driven largely by demand from the industrial, commercial, and institutional sector. A more detailed breakdown of water use within the sector is needed to understand this demand and develop a plan to meet the water conservation goal. Since 2004, residential water consumption has been close to meeting the water conservation goal. Water system leakages continue to be reduced bringing the Town close to meeting its goal for reducing water losses.

Recent upgrades to Banff and Lake Louise's water treatment plants have greatly reduced nutrient levels in the Bow River, helping to improve water quality, and return it to a more natural state. Downstream of Canmore, the water quality at Cochrane is generally rated as "excellent". The precise impacts of Canmore on the Bow River are not well quantified due to the long distance between the outflow from Canmore and the sampling station at Cochrane.

On a per capita basis, the quantity of waste going to landfill is still more than double that recommended by the waste management goal (SWAP), and the diversion rate is 20% lower than the BVWMC goal. The quantity of residential waste has remained fairly consistent (on a per capita basis), while recycling depot rates have shown steady increases. The total quantity of waste materials generated in Canmore is strongly affected by rate of Construction and Demolition waste, and major improvements have been made to the waste diversion programs at the Class III Landfill and Recovery Centre. A solution to separating organic waste from the municipal solid waste stream has not yet been implemented. Diverting organic waste to compost would greatly reduce the total waste being sent to the Calgary area landfill.

While there have been a number of municipal and community initiatives targeted at reducing energy use and GHG emissions, it is not known if energy use and emissions have increased or decreased. Updating the previous emissions estimates (year 2000) will be required to determine if the Town is moving towards its energy management goals.

Many wildlife corridor issues have been addressed in the last few years, and several processes are underway to resolve the outstanding issues. Monitoring of wildlife activity and corridor functionality continues, current studies indicate that the corridors are functioning to varying degrees for different species. Public education programs such as Bow Valley WildSmart are promoting awareness of human-wildlife safety. The realignment and signage of an official trail network is underway. This will help manage human use and reduce the impact on the wildlife corridors.

Bear proof garbage bins and attractant management strategies have reduced the number of bear incidents over the past decade. The removal of buffaloberries from some residential areas has greatly reduced the amount of bear activity in these neighbourhoods. While there have been serious bear incidents in and around the town, including one fatality, their number is very low relative to the total number of bear sightings. The number of cougar incidents remains low, but there is still concern that some residents have been feeding other wildlife which could lead to serious incidents.

Decades of forest fire suppression in the region have resulted in forests with heavy accumulations of fuel and an aging forest structure, raising the risk of wildfire and pine beetle infestations. Vegetation management programs in and around the Town are targeted at reducing the threat of wildfire and decreasing beetle populations. Fire and beetle management is done in an integrated fashion, with considerations for mitigating forest fire hazard, improving forest health, and impacts on wildlife and their habitat.

## Civic Engagement and Leadership

The Town of Canmore has recently initiated two community engagement significant programs. The 2006 Mining the Future process involved a broad spectrum of the community in helping to set forth a new community vision. Subsequent to the visioning process, the Town has once again engaged the community in developing the Community Sustainability Plan (CSP). This will replace the previous Municipal Development Plan (MDP) as the key planning document for a community. The creation of the CSP is ongoing and nearing completion in the early 2009.

The Town has shown other significant examples of civic leadership in recent years, such as the 1995 Growth Management Strategy and the subsequent Canmore Community Monitoring Program. In terms of environmental sustainability the Town of Canmore has crafted a comprehensive Environmental Care Program with a series of goals and associated action plans. The Town of Canmore has adopted the Natural Step framework as a means to better integrate sustainability into the municipality. The Natural Step's principles form part of the backbone of the new CSP and have been integrated throughout the municipal process, from development approvals to sustainable purchasing programs.

In 2007, the Town of Canmore mandated Sustainability Screening Reports (SSR) for all future developments. The process was developed to ensure that development projects will have a net benefit to the community. Through the SSR process, proposed developments must show how they relate to the Mining the Future Vision and how they benefit the social fabric, environment, and economy of Canmore.		

## **PREFACE**

## The Program

The Canmore Community Monitoring Program (CCMP) was established to monitor and evaluate trends developing in the community. This was a recommendation in the 1995 Growth Management Strategy Report. The Canmore Community Monitoring Program is designed to assist with municipal and community decision-making; serve as part of an early detection system that assists in identifying risk areas that threaten the health of the community; and present a snapshot of the community's progress towards its current vision. For this report that vision is the 2006 Mining the Future: A Vision for Canmore.

The Monitoring Program involves...

- <u>identifying indicators</u> to be tracked in the demographic, social, economic and environmental sectors:
- <u>developing baseline data</u> for each indicator, including current statistics and historical figures for Canmore, provincial or national averages, and comparative data from similar relevant locations where possible;
- <u>establishing thresholds</u> for indicators when appropriate (defined in the GMS Report as "the point or level at which the undesirable begins to present itself")
- monitoring and updating the data annually for each indicator where available; and
- reporting regularly to Canmore Town Council and the Public on the general health of the community, identifying areas requiring further attention or where progress has been made.

## The Indicators

An indicator provides information about an issue or condition. A trend shows the direction in which the issue or condition is heading over time. As this program continues to develop, the indicators will be further refined and more precisely and consistently measured.

## The Thresholds

A threshold is a federal, provincial or locally accepted standard. In this report, some of the indicators have thresholds; others still need to be developed. The Community Sustainability Plan (CSP) is expected to be completed in the winter of 2009. This document will provide specific goals, targets, and objectives that will lend themselves to indicator development.

## The Report

This report is based on the most current data collected to date. For instance, statistics from the federal 2006 Census of Canada or the municipal 2008 Census of Canmore are both utilized as they are the most recent of their respective versions. Comparative data on a community, provincial, or national level is included where appropriate or available. Indicators are restricted to data that is currently being collected as conducting surveys or collecting primary data is beyond the scope of this process.

The report begins with an Executive Summary highlighting the trends that have been developing. The body of the report is divided into Demographic, Social, Economic, and Environmental Sectors, each with multiple indicators. The layout of each indicator category consists of a definition, a graph(s) or table(s), the source of the data, observations and interpretations. Where available, indicator thresholds, community initiatives and recommendations are also included.

This report and the data appendix are available on-line at <a href="www.canmore.ca">www.canmore.ca</a>.

## **Preceding Documents**

- Town of Canmore Growth Management Strategy Committee 1995 Strategy Report June 1995.
- Canmore Growth Management Strategy: Thresholds & Monitoring Program 1999 Report September 1999.
- Canmore Community Monitoring Program 2001 Report November 2001.
- Canmore Community Monitoring Program 2003 Report January 2004.
- Canmore Community Monitoring Program 2006 Report December 2006.
- Mining the Future: A Vision for Canmore 2006

These reports are available at the Town of Canmore, The Biosphere Institute Resource Centre and the Canmore Public Library.

## Acknowledgements

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The following are excerpts from the 2006 document Mining the Future: A Vision for Canmore

## **Mining the Future Vision Statement**

As citizens of Canmore, we are proud of our community's mining and mountain heritage, of the inspiring mountain landscape and the rich natural environment we share with species that define the Canadian West and wilderness, of the astonishing range of skills and talents demonstrated by our residents, of our exceptional commitment to the well-being of others in the community, and of our collective effort to be leaders in finding solutions to the challenges that confront our own and other mountain communities. Understanding where we have come from, and what we value today, we imagine a future in which Canmore is:

- An accessible, friendly, inclusive and closely-knit community with a small town feel and a distinct identity anchored in its mountain surroundings and its mining past;
- A community populated by a wide range of individuals and families from different backgrounds and of different ages, interests, values, skills and economic means;
- A community that supports its diverse population with affordable housing, a strong and varied economy, a healthy environment, a full array of social services, abundant open space and ample opportunities for recreation and artistic expression;
- A community that acknowledges and works within the limits imposed by its geography and ecology, and that uses the best the world has to offer in designing a built environment that respects and is worthy of its natural environment;
- A community that has become a leader in integrating its social, economic and environmental activities in ways that ensure its future generations will enjoy the same opportunities and quality of life as its current generations.

The Canmore of the future is a prosperous, vital, and vibrant community. Its great strength is its varied, resourceful, and engaged citizens, who thrive together on the strength of the community's long-term commitment to the diversity of its people and the health of the mountain landscape that shapes and sustains it.

## **Foundational Values for Canmore**

**SUSTAINABILITY:** . . . integrating our social, economic and environmental activities in ways that will enable us to meet the needs of the current generations without compromising the ability of future generations to meet their own needs.

**DIVERSITY:** . . . managing our community in ways that attract, include, keep, and celebrate a wide range of people, perspectives, and lifestyles.

**CONNECTEDNESS:** . . . managing our community in ways that foster a shared sense of belonging among all citizens.

## RECOMMENDATIONS

## **Identity**

- 1. Different survey methodologies may be required to obtain a higher response rate from the 18-24 and 25-35 year old age categories.
- 2. Continue to track the sense of community indicators over time to help better understand how changes in Canada are affecting resident's perceptions of the community.
- 3. Additional exit surveys such as the one on health care workers would help to better understand why people are leaving the valley (e.g. housing prices, employment options, services, etc.) and who they are (e.g. do they have school age children). Although this data would be difficult to collect, it could provide valuable insight into what factors contribute towards people and families leaving Canmore.
- 4. Canmore's Vision states that a Goal is to integrate residents of all ages. To meet that goal, Canmore must "make decisions that contribute to a dynamic, well-stratified demographic profile". This will require an effort to maintain and restore the populations of families with children and adults aged 25-44 as these groups seem to have been the most impacted. Canmore will need to create change through mitigation strategies rather than just move with the trends
- 5. Non-permanent residents are a major social and economic presence in Canmore and will likely continue to become a greater proportion of the total population. Engaging the non-permanent population and involving them can help to build a stronger community. This is critical to avoid developing an antagonistic "us and them" syndrome that creates negative feelings in some other resort communities.
- 6. Striving for greater understanding and inclusiveness of the non-permanent population is important. However, it is also necessary to develop a community with a strong and vibrant permanent population. Affordable housing, recreational and cultural facilities, educational opportunities, employment and economic opportunities, and most importantly a sense of community are all required to maintain a strong population of long term local residents.
- 7. Efforts to better quantify and understand the non-permanent population of Canmore should continue.

## **Economic Sustainability**

- 1. A valuable addition to the municipal census could be the number of jobs held (full time/part time) and the number of hours worked per week (the number of hours worked per week is recorded in the Town of Banff census). Gathering this information could give an indication of how many people are working long hours and/or multiple jobs.
- 2. The Job Resource Centre provides one measure of labour supply/demand. Some employers hire directly (internet, classified ads). Tracking job listings in the local newspapers could provide another measure of employment demand.
- 3. There appears to have been increased use of foreign temporary workers to fill the labour shortages of the past few years. More information on the number of foreign workers is required to better understand how they impact, and how they are impacted by, labour market changes.

- 4. A better understanding of Canmore's economic drivers is required to fully understand what drives the different employment sectors in Canmore. Traditional tourism, amenity migration, and non-permanent residents all have significance, but the full extent of their expenditures and roles as economic drivers are not fully understood.
- 5. Plans for additional economic diversification are important to strengthen other employment sectors to reduce the local economy's reliance on construction and providing services to visitors and/or non-permanent residents.
- 6. Since Health and Wellness is a targeted sector for economic development in Canmore, splitting the Education, Health, and Social Services category in the next Census could provide better insight into this field of employment.
- 7. The income statistics do not differentiate between income earned in Canmore, or income earned outside of the community (in Calgary or beyond). Given the importance of amenity migration to Canmore it would be interesting to know what proportion of income is generated by employment in the community vs. income generated by employment outside of the community (in 2008, 26.2% of those with jobs worked outside of Canmore).
- 8. Interpretation of the affordability of living in Canmore must also consider factors beyond wages, such as housing costs, and the number of hours worked per week. Continued monitoring of the role of earned employment income versus non-employment income (pensions, investments, government transfers etc.) could provide a useful measure of the changing profile of the community and its residents.
- 9. Continued emphasis still needs to be placed on encouraging commercial development, to ensure that there is sufficient non-residential tax revenue to balance the residential tax base.
- 10. The original goal of a 60/40 tax base ratio needs to be reviewed and revised to an appropriate and attainable number.
- 11. Special events play an important role in Canmore's economy, and raise the community's profile both nationally and internationally. The number of people attending special events and their economic impact should be explored to help provide a better understanding of their importance to the local economy.
- 12. The non-permanent population, regional, national and international visitors are all important contributors to Canmore's economy. It is important to better understand the roles of the non-permanent population and tourists to determine how they are different and to determine their economic impacts and spending patterns.
- 13. It would be useful if the reporting structure for accommodation unit statistics could be based on a more consistent grouping of units and properties. This would improve the quality of the data in the long run.
- 14. Tourist homes are a major part of Canmore's economy with impacts on many facets of the town. More accurate information about them and a better understanding of what is driving these trends, and what challenges/opportunities they create for the community is required.
- 15. Continued emphasis still needs to be placed on encouraging commercial development to ensure that tax burdens are not unduly shifted to the residential sector and to encourage economic diversification and growth.

## Social Fabric

1. That in future versions of the Canmore Community Monitoring Report, the Accountability Pillar results be presented on a school-specific basis for all Canmore schools.

- 2. As information from initiatives such as community garden, food co-ops, the food security group and the Meals on Wheels program becomes available it should be included in this report to give a more complete pictures of the demand for and responses to food need in the community.
- 3. Continue to obtain annual income data from Statistics Canada in order to track changes in the level of social assistance and Economic Dependency Ratio over time.
- 4. More information on the victims of crime, such as whether they are locals or tourists and whether the criminals know their victims would be useful. Information would also be useful on the proportion of crimes that are petty crimes of opportunity i.e. thefts from unlocked cars.
- 5. That the effects of not having a physical space in Canmore for Bow Valley Victim Services be assessed.
- 6. Social marketing campaigns need to be strengthened to effect change, as current reporting of domestic abuse represents only a fraction of actual occurrences.
- 7. An analysis of Emergency Room visits by postal code would help to determine what proportion of use is by local residents vs. visitors from outside the community.
- 8. Average occupancy rates do not indicate what proportion of the population actually lives in an overcrowded situation. Using the raw census data to examine the distribution of occupancy rates would give a better indication of what proportion of the population lives in overcrowded housing.
- 9. This data does not reflect the entire housing market in Canmore as it currently includes resale homes only. Including new units constructed and sold by the developers and builders would better represent the total price range of market housing units in Canmore.
- 10. Information on the total debt loads and debt per capita of Canmore residents would help determine the impact of high real estate prices on personal and household debt levels.
- 11. The addition of housing needs assessment questions to the Canmore Census could be useful to explore the question of affordability. Potential questions include those addressing housing expenses as a percent of household income, and clarifying the "in core housing need" numbers for ownership housing.
- 12. The community faces a long-standing affordability shortfall, so continued action and implementation of the CHAP is required.
- 13. An annual needs assessment of local employers and their staff housing needs would help better understand trends in the market and the level of demand for employee housing.

## Environmental Stewardship

- 1. Local air quality monitoring data for this region should be collected and publically reported on a regular basis.
- 2. Education should continue on actions that improve air quality such as anti-idling, carpooling, alternative fuels and alternative means of transport.
- 3. There is a need to establish if Alberta's air quality guidelines are sufficient for our community. For example, should we have goals for visibility to determine how many days per year we have degraded visibility due to human air quality concerns?
- 4. The Town of Canmore should continue with its efforts to reduce system leakages as well as support public awareness initiatives for water conservation.
- 5. The Water Conservation Rebate Program should continue as an incentive for residents to retrofit their homes with low flow fixtures and toilets.

- 6. A better understanding of ICI water consumption is needed to better target conservation efforts of this sector.
- 7. The rapidly growing non-permanent population should be factored into the per capita water calculations.
- 8. The increase in per capita wastewater generation suggests that targeted efforts are needed to help reduce these numbers. These efforts could include actions to reduce infiltration as well as public education initiatives. As noted in the section above on Water Consumption and Quality, a better understanding of the ICI sector's consumption is required to target areas where conservation could be achieved.
- 9. The Waste Management goals should be re-examined and perhaps separated into different waste reduction goals for residential waste; ICI, and C&D waste (similar to the Water Management Goals). These are essentially separate streams, with the actions of individual residents having little impact on the actions of the construction industry or commercial sector, and vice versa.
- 10. The Waste Management Goals should also be revised to include the non-permanent population in the per capita calculation.
- 11. Work should continue on a regional solution for organic waste composting as well as on promotion the 3 R's in the community.
- 12. As noted in the EARC review of the Environmental Care Program, there is a need to consider the full life cycle impacts associated with transportation of wastes to distant locations. Additionally, the plan needs to be updated to reflect the outcome of recent work done on the Enhanced Recycling Program.
- 13. Recalculating the estimates of energy use and GHG emissions will be required to determine if progress has been made towards achieving the Energy Management Goals.
- 14. The Energy Management goals should be updated to reflect either a) the total population (including the non-permanent component), or b) based on absolute total emissions rather than the current method of per capita intensity based targets.
- 15. The EARC committee recommended that "if Town operations have already met or exceeded their targeted 20% reduction in emission intensity, new goals should be established."
- 16. The residential sector is estimated to produce 50% of the total GHG emissions. Targeting energy efficiency programs and home retrofits at residents could lead to major reductions in community-wide energy consumption and emissions.
- 17. Reducing vehicle use in the Town could have a significant impact both on GHG emissions and improving air quality.
- 18. It is important to ensure that there is a clearly marked and interconnected system of commuter routes and trails to facilitate walking and bicycle commuting in Canmore.
- 19. Monitoring and assessment of corridor viability and function should continue as development progresses and even beyond once Canmore has achieved build-out. This is important to determine if there is a need for modification of the corridors and human use, and to make adjustments to the corridor system if required. This is a core outcome from an adaptive management philosophy.
- 20. There is a need to develop viable metrics of corridor viability and function to better display and represent the extensive datasets of wildlife movement data that has been collected.
- 21. Continued public education about the effects of human use in wildlife corridors and promotion of human/wildlife safety through programs such as WildSmart should continue.

- 22. Continued management of human use and appropriate trail designation and trail design will be necessary to minimize the impacts of a continually growing human population on local wildlife.
- 23. Given their importance to many species of wildlife, continued emphasis should be placed on preserving low elevation/low angle habitats and corridors with good cover.
- 24. Continue the WildSmart program to educate the public about the dangers of habituating wildlife to food sources in the town.
- 25. Continue to monitor the number and type of bear incidents associated with attractants including garbage (both residential and commercial), birdfeeders, sports fields, and golf course vegetation.
- 26. Continue to manage natural food attractants (such as berries) in areas where there is a high potential for human-bear conflict. Continued removal of the bushes will be required as cutting them does not kill the plant, which will regenerate and eventually produce berries again in 5-10 years.
- 27. The 2007 Bow Valley Bear Hazard Assessment makes a number of recommendations to help manage both natural and non-natural attractants. These recommendations include:
  - a. Develop a long term plan, and remove natural attractants (such as buffaloberry) from a number of known high conflict areas
  - b. Strengthen existing education programs to reduce unnatural attractants
  - c. Improve the compliance rate for functional commercial bear-proof bins
  - d. Carry out curbside recycling in such a manner as to not attract bears
- 28. Continue to enforce compliance with garbage, composting, birdfeeder, and off-leash dog regulations to minimize habituation, negative wildlife-human interactions, and harassment of wildlife. Continuing programs like the Bow Valley WildSmart Community Program, and the bear shepherding program will also help reduce the probability of dangerous wildlife/human conflicts in the Bow Valley.
- 29. The Province of Alberta should continue to maintain and refine their wildlife observations and incident reporting system and database (in conjunction with Kananaskis Emergency Services). This information is invaluable in helping to understand trends in human/wildlife conflict and to monitor the affects of the various conflict reduction programs. The utility of tracking wildlife sightings in addition to actual incident should be examined.
- 30. A better understanding of the urban coyote situation in Canmore is required. Coyotes may be increasing in numbers due to access to non-natural food sources or the feral rabbit population or a combination of these and other factors.
- 31. There is a need to continue monitoring the effectiveness of highway fencing and the associated crossing structures. Potential locations for additional fencing and crossing structures should be identified to complete a regional system of highway mitigations.
- 32. The potential impact of further development of the Three Sisters property on the Stewart creek crossing structure should be explored and appropriate mitigation measures put in place.
- 33. Public education efforts should continue and enhanced signage is needed to reduce human use of the wildlife crossing structures at the Rundle Forebay, Stewart Creek, and Dead Man's Flats. Human use of these structures negatively impacts wildlife movement patterns.
- 34. An examination of historical and future land use change in Canmore, and its impact on wildlife and habitat would be an interesting and important study.

- 35. It is important to continue existing initiatives such as public education and fuel modification programs. There should also be connections with other programs such as those targeting forest health, and wildlife issues.
- 36. Opportunities for restoring or maintaining biodiversity should be investigated.
- 37. Education of locals and visitors on the importance of fire and biodiversity should be continued.

## Civic Engagement and Leadership

- 1. To better understand the impacts of the new Community Engagement Policy it will be important to track the results of the civic engagement process: both the number of items that were brought forward for consultation with the community, but also what role the community input played in the final decision.
- 2. That the Town of Canmore continue to show civic leadership by promoting community sustainability and the implementation of the Vision.
- 3. That the Canmore Community Monitoring Report be closely aligned with the forthcoming CSP and that indicators are modified or added to track progress towards the goals outlined by the Vision and the CSP.

## **IDENTITY**

The following Goals and Criteria are Foundational Values for Canmore as described in the 2006 document *Mining the Future: A Vision for Canmore*.

## Identity

#### Goals

- 1. Understand, cherish and maintain the diverse nature of Canmore's landscape, heritage and people
- 2. Recognize that our sense of community, including both ourselves and those who visit us, is the core of our identity
- 3. Acknowledge that our identity includes regional and international tourism, recreation and mountain lifestyles, and a focus on wellness and excellence in sport
- 4. Create a balanced relationship between the Canmore that serves tourists and the Canmore that serves a large local, non-tourist population
- 5. Recognize and redefine our connection and working relationships with the nearby communities of Banff, Exshaw, Lake Louise, Morley, Calgary
- 6. Retain Canmore's small town character open, friendly, easily accessible while developing its global connections
- 7. Preserve and celebrate our mountain heritage
- 8. Develop excellence in arts and culture, environmental stewardship and wellness

## **Criteria**

Decisions consistent with the following criteria will help us move toward achieving our goals. Accordingly, will the decision to be made . . .

- 1. Be consistent with, and strengthen the value of Canmore's identity
- 2. Strengthen our connectedness by creating means to create a strong sense of belonging
- 3. Demonstrate the relationship between the natural landscape and our identity
- 4. Market and promote our identity in a way that supports and enhances our vision
- 5. Communicate Canmore's identity to residents, newcomers and visitors

## **Trends**

The recently completed Sense of Community Survey indicates that there is a strong sense of community and civic pride amongst a substantial portion of both the permanent and non-permanent residents.

In 2008, Canmore's total combined population was 17,572 residents (12,005 permanent, and 5,567 non-permanent). The growth of Canmore's permanent population has slowed substantially since the mid 1990's with most of the growth occurring in the non-permanent population. There has been a recent decrease in migration rates and population turnover, and an increasing length of residency amongst a proportion of the population. In Canmore, the high cost of living in general and housing in particular, can be important factors in the decision to remain, or to leave the community.

Canmore's permanent population has been undergoing a shift towards an older demographic age structure. The most rapid growth is in the 45-54, and 55-64 year old age brackets. The population of children and youth and adults aged 25-44 are generally stagnant and/or in decline. The result of this has been a decline in the number of families, school children, and experienced mid-career workers

The non-permanent population continues to comprise an ever increasing percentage of the total population. In 1995 non-permanent residents represented 13.1% of the total population, and by 2008 they had increased to 31.7% of the total population. The growth rate of the non-permanent population has recently dropped, but will likely continue to grow at a faster rate than that of the permanent population. Results from the 2006 Second Home Owner Survey showed that second home owners are predominantly regionally-based who primarily own these properties as places for relaxation, recreation, and enjoyment. The majority do not intend to retire in Canmore. The increasing proportion of non-permanent residents has implications for the municipal tax base, local businesses and retail as they adjust to meet this change in demand. While striving for greater understanding and inclusiveness of the non-permanent population is important, it is also necessary to focus on developing a community with a strong and vibrant permanent population.

The percent of families that are lone parent families is lower in Canmore than in either Alberta or Canada. Many lone parent families may not be able to afford to live in a community, where many dual income families struggle with affordability. In Canmore, the high cost of housing and the high participation rate in the labour force, suggest a need to understand the potential demands by lone parent families on support services in the community. The recent accreditation and addition of child care spaces in Canmore has helped to relieve the long standing child care deficit in the community.

More than 84% of the permanent population in Canmore list English as their native tongue. From 1996 to 2006 the number of native French speakers in Canmore has more than doubled, suggesting an increasing need for services in French.

## Introduction

The five key indicator categories presented in this section reflect the size, growth, turnover and age structure of the population, the mix of permanent and non-permanent residents, the family composition and the cultural diversity of Canmore.

## **Sense of Community**

1. Sense of Community

## **Population**

- 2. Permanent Population: Length of Residency, Migration and Growth Rate
- 3. Permanent Population: Age Structure
- 4. Non-Permanent Population

## Household

5. Family Composition

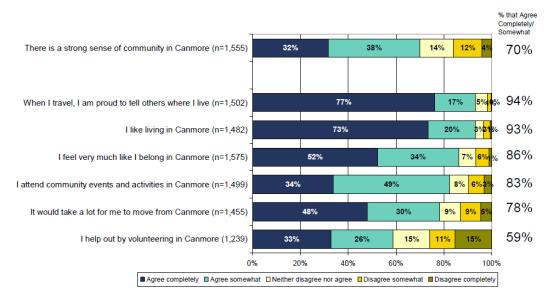
## **Diversity**

6. Mother Tongue, Immigration and Cultural Diversity

## 1. Sense of Community

"a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together." (McMillan and Chavis, 1986)

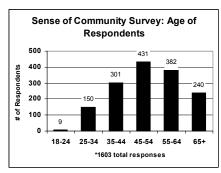
The Mining the Future Vision of Canmore recognizes that "...our sense of community, including both ourselves and those who visit us, is the core of our identity". The concept of "sense of community" is something that is not captured in a standard population census, demographics statistics, or economic indicators. The Town of Canmore commissioned a survey to explore and better understand residents' perception of community, belonging, civic pride, and satisfaction. This survey creates a benchmark for future changes in our own sense of community.



Source: 2008 Town of Canmore Sense of Community Survey (HarGroup, 2008)

#### **Observations:**

The Sense of Community Survey received a total of 1,603 returned questionnaires. Of these 68% were from permanent residents, 29% from non-permanent, and 3% from seasonal residents. While this is a good distribution of responses from permanent/non-permanent, the respondents was somewhat biased towards older age brackets, and the 18-34 age bracket is somewhat underrepresented by the survey. While there was some variation in the response rates the author's consider the results statistically consistent. (Note: random sampling



was used to distribute the surveys and all residents also had the opportunity to complete the online version of the survey)

- 1. The responses to the 2008 Sense of Community Report indicate (70% agreed completely or agreed somewhat) that there is a strong sense of community in Canmore. The respondents like living in Canmore (93%) and feel like they belong in Canmore (86%).
- 2. There is some long-standing concern about population turnover and migration rates in the community, however 78% of respondents agreed that "it would take a lot for me to move from Canmore" (48% agreed completely with that statement).
- 3. The survey also indicated that when travelling, 94% of respondents are proud to tell others that they live in Canmore.
- 4. The responses to community involvement were slightly lower with 83% agreeing that they attend community events and activities, and 59% indicating that they help out by volunteering.
- 5. While there were many similarities between the responses from permanent and non-permanent residents, there were a few differences as well. In general slightly more non-permanent residents agreed that there was a strong sense of community (78% vs. 67%). Significantly more permanent residents help out by volunteering in Canmore (69% vs. 23%).
- 6. Respondents were queried as to what amenities or attributes contribute most to their sense of community. The most common response was "community pathways" (20%).
- 7. Additional information from the Sense of Community Survey is included throughout this report as it relates to specific indicators (e.g. crime, wildlife and human safety, non-permanent population etc.) (HarGroup, 2008).

#### **Interpretation:**

1. Resident's perceptions generally suggest that there is a strong sense of community in Canmore from both the permanent and non-permanent population. This helps establish an important baseline statistic for the community.

#### **Recommendations:**

- 1. Different survey methodologies may be required to obtain a higher response rate from the 18-24 and 25-35 year old age categories.
- 2. Continue to track the sense of community indicators over time to help better understand how changes in Canada are affecting resident's perceptions of the community.

# 2. Permanent Population: Length of Residency, Migration and Growth Rate

An important goal for Canmore is to "meet the needs and aspirations of permanent residents while integrating new full and part time residents" (Mining the Future: A Vision for Canmore 2006). The Town of Canmore's total population is divided into two main components: permanent and non-permanent. The permanent population are those for whom Canmore is their primary residence. The non-permanent population are those who own a second home or property in Canmore. They maintain a primary residence elsewhere, but may spend weekends or even longer periods at their property in Canmore. Canmore's maximum population will be restricted by its land base, which is surrounded by provincial and federal parks and protected areas, and its zoning. The town's rate of growth and the changing composition of its population will be a factor in the health of this community, and result in changing infrastructure and community service needs. Other important indicators of community health include the length of residency in the community, migration, and population turnover. The following measurements include the permanent population numbers only. The non-permanent population will be discussed in the section following the permanent population section.

**Threshold:** Population change and migration relative to the total for Alberta.

#### **Definitions:**

**Permanent Resident:** For the purposes of the Canmore Census, the definition of "permanent resident" is expanded to include the usual residents of the municipality, and anyone who has been resident at least 15 days, and is employed at the time of the census.

**Migration:** In-migration is derived from the Canmore Census using the number of residents who have lived in Canmore for one year or less, while out-migration is calculated as in-migration less net population growth (expressed as a percent).

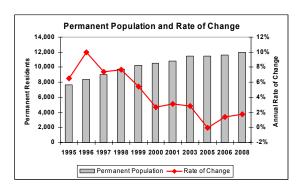
**Population Turnover:** The sum of in-migration and out-migration, divided by the permanent population (expressed as a percent).

**Note:** The Canmore Census was not conducted in 2002, 2004, or 2007. For these years rates were estimated at 50% of the 2-year growth rate (assuming linear change between the two census years).

#### **Observations:**

## **Population Growth**

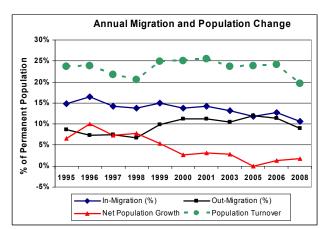
1. Canmore's permanent population grew by 57.3% between 1995 and 2008, reaching 12,005 in 2008. The population has increased annually, with the exception of a slight decrease of 16 residents between 2003 and 2005. Following 2005 there were some modest increases in population (157 people in 2006, and an additional 406 people in 2007/8).



2. The annual growth rate of Canmore's permanent population has slowed substantially since the 1990s. The growth rate peaked at 10.0% in 1996 and had decreased to 2.8% by 2003. There was a slight decline in permanent population between 2003 and 2005, followed by a modest annual increase of 1.4% in 2006 and 1.8% in 2008. In comparison, the growth rate for Canada has remained at or near 1.0% from 2004 to 2008. The growth rate in Alberta rose to 3.0% in 2007, declining to 1.8% in 2008. (Town of Canmore, 2008a)

## **Migration and Population Turnover**

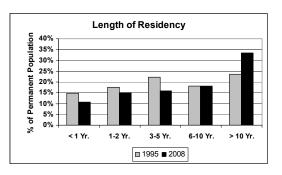
- 3. Population turnover (sometimes referred to as "population churn" continues to be high, however there is a recent trend towards a lower rate of population turnover. Population turnover has dropped from a high of 25.5% in 2001 to 19.6% in 2008.
- 4. In-migration reached a high of 16.5% (as a % of the permanent population) in 1996 and has generally trended downwards since



then. Out-migration has generally increased since 1998, reaching a high of 12.0% in 2005. In 2005, the trend lines converged and out-migration slightly exceeded in-migration (12.0% vs. 11.9%). In 2008 both in and out-migration had decreased to 10.6% and 8.9% respectively (or 1,276 persons in, and 1,073 persons out). (Town of Canmore, 2008a)

## **Length of Residency**

5. Relative to 1995, there were an increasing proportion of long-term residents in 2008. The proportion of recent arrivals (<1 Yr) has dropped from 14.9% to 10.6%, while the proportion of long term residents (> 10 Yr) has increased from 23.5% to 33.4%. (Town of Canmore, 2008a)



#### **Other Observations**

6. An exit survey by the Canmore Hospital found that their staff had left for the following 3 main reasons: 1) cost of living (especially for entry level and support service staff; 2) Offer of a job elsewhere (these positions are highly mobile); 3) The inability to "get ahead" if you have a family and want to own a home in Canmore. (Barb Shellian, per.comm)

## **Interpretation:**

- 1. The growth of Canmore's permanent population has slowed substantially since the mid 1990s, however, the high rate of population turnover remains a factor, with implications for planning in many sectors including staffing, housing, facility use, childcare and schooling. Effects of this population turnover on community stability, volunteerism, and the effects of migration on children also need to be considered.
- 2. The recent (2006-8) decrease in migration rates and population turnover, and the increasing length of residency amongst a proportion of the population are positive trends for community stability and population retention.
- 3. In Canmore, the high cost of living in general and housing in particular, can be important factors in the decision to remain, or to leave the community.

#### **Recommendations:**

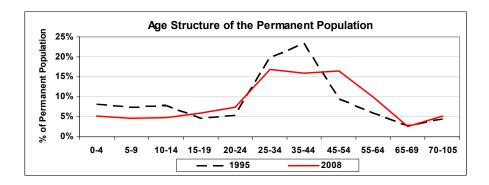
1. Additional exit surveys such as the one on health care workers would help to better understand why people are leaving the valley (e.g. housing prices, employment options, services, etc.) and who they are (e.g. do they have school age children). Although this data would be difficult to collect, it could provide valuable insight into what factors contribute towards people and families leaving Canmore.

## 3. Permanent Population: Age Structure

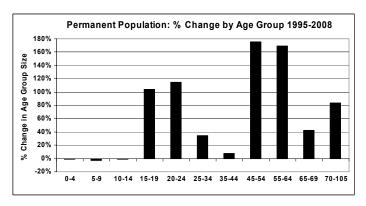
The age structure of the permanent population is an important indicator for determining current and future community needs. These include the demands on programs and facilities for children and seniors, as well as demands on the health care system. It is important to "contribute to a dynamic, well-stratified demographic profile" and to "recognize and strengthen Canmore as a diverse, inclusive community, integrating residents of all ages, income levels and skills" (Mining the Future: A Vision for Canmore 2006).

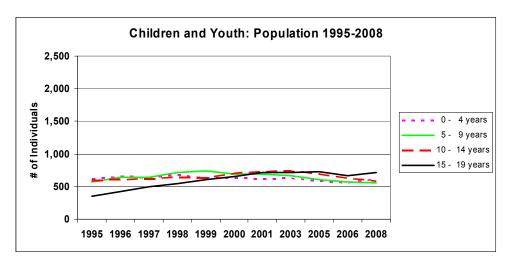
#### **Observations:**

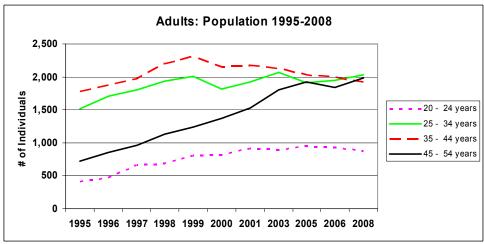
1. From 1995 to 2008 there has been a general trend in Canmore towards a decreasing proportion of the population aged 44 and under, and an increasing proportion of the population comprised of individuals that are 45 to 64 years old (a series of graphs detailing all age cohorts is available on the next page).

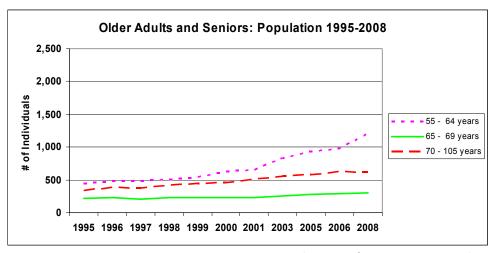


- 2. The population of children aged 0 to 14 trended generally upwards from 1995 to 2003 but then decreased by 16.1% from 2003 to 2008. In 2008 there are 34 less children in Canmore than in 1995. As a percent of the population, the proportion of children age 14 and younger has decreased from 23.3% in 1995 to 14.3% in 2008. From 2006 to 2008, there was an increase of 54 children under the age of 4 (the first such increase since 2003).
- 3. The number of youth aged 15 to 19 increased by 104.3% from 1995 to 2008.
- 4. From 1995 to 2008, the number of adults aged 45-54 and 55-64 increased by 175.2% and 168.2% respectively. As a percent of the population these two groups increased from 15.4% to 26.6% of the total population. (Town of Canmore, 2008a)



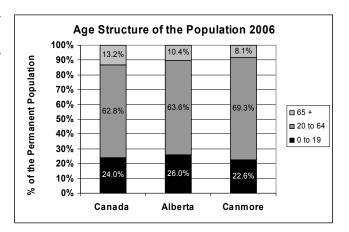






(Town of Canmore, 2008a)

5. In 2006, relative to the demographics of Alberta and Canada, Canmore had a lower proportion of seniors and of youth. Youth aged 0-19 represented 22.6% Canmore's of permanent population in 2006 (compared to 24.0% in Canada, and 26.0% in Alberta). Seniors were only 8.1% of the population, compared to 13.2% in Canada, and 10.4% in Alberta (Statistics Canada, 2006a).



## **Interpretation:**

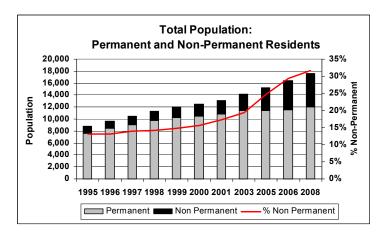
- 1. Canmore's permanent population has been undergoing a shift towards an older demographic age structure. The most rapid growth is in the 45-54, and 55-64 year old age brackets. The population of children and youth and adults aged 25-44 are generally stagnant and/or in decline. The result of this has been a decline in the number of families, school children, and experienced mid-career workers.
- 2. It is important to remember that there is a general trend in Canadian society towards an older population, as a large contingent of "Baby Boomers" enters their 60's. In spite of the shifting age structure of the population Canmore still has a lower proportion of 65+ seniors than society in general.
- 3. As the age structure trends of Canmore's population continue there will be a considerable impact on community services and facilities. If current trends continue there will be an increasing number of older adults and seniors, and fewer children and youth. This will have implications for programs and facilities in many sectors such as education, recreation and health care.
- 4. A combination of housing affordability, employment opportunities and childcare spaces in Canmore, have likely been key drivers of this demographic shift. As of 2008 there are considerably more childcare spaces in the community, however the cost is substantially higher than in Calgary (the childcare subsidy remains the same).
- 5. The question remains as to whether to focus our services and recreational facilities, etc. on those over 45 years old, or whether to try to attract other age groups like young families etc. through the provision of targeted services and facilities.

#### **Recommendation:**

Canmore's Vision states that a Goal is to integrate residents of all ages. To meet that goal, Canmore must "make decisions that contribute to a dynamic, well-stratified demographic profile". This will require an effort to maintain and restore the populations of families with children and adults aged 25-44 as these groups seem to have been the most impacted. Canmore will need to create change through mitigation strategies rather than just move with the trends.

## 4. Non-Permanent Population

Canmore's goals not only include meeting the needs and aspirations of permanent residents, but also integrating new full and part time residents (Mining the Future: A Vision for Canmore 2006). Canmore is a popular destination for weekend residents and second home buyers, who reside in the town on a part-time basis. This non-permanent population is rapidly becoming an increasingly larger proportion of the total population. Tracking changes in the non-permanent population provides a more complete picture of the community and allows for better estimations of a variety of needs and services that may be affected by this growing component of the population.

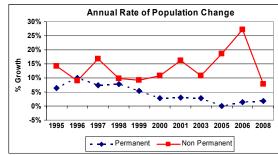


**Note:** The Canmore Census was not conducted in 2002, 2004, or 2007. 2003, 2005 and 2008 growth rates were estimated at 50% of the 2-year growth rate.

#### **Observations:**

#### **Canmore Census**

- 1. The non-permanent population has been the primary source of the increase in Canmore's total population. The number of non-permanent residents increased by 382.8% between 1995 and 2008 (from 1,153 to 5,567 people). By comparison, the permanent population only increased by 57.3% during this same period.
- 2. In 1995 non-permanent residents represented 13.1% of the total population, by 2008 they had increased to 31.7% of the total population.
- 3. The annual growth rate of the non-permanent population reached a high of 27.1% in 2006 (over a thousand non-permanent residents joined the community between 2005 and 2006). The annualized growth rate for 2007 and 2008 had moderated to 7.8% with a total of 749 new non-permanent residents during that two year period. (Town of Canmore, 2008a)



## **2006 Canmore Second Home Owner Survey**

- 4. The 2006 Second Homeowner Survey explored the interests, motivations, and future intentions of the non-permanent population. The study was a collaboration between Mount Royal College and the Town of Canmore. A total of 530 responses were received and were subdivided into four survey categories based on geographic origin: Canadian, American, UK, and "other international".
- 5. The study revealed that second home owners in Canmore tend to be Baby Boomer (50-65) couples or families, primarily drawn from a regional market (Alberta/Canada). The majority of respondents indicated that they did not have plans to become permanent residents or to retire here, but that many would like to increase their own personal use of their properties.
- 6. While there are many factors influencing their decisions to purchase a property in Canmore, trails, mountain environment, small town atmosphere, and outdoor recreation and leisure opportunities ranked very highly as important resources. (McNichol and Sasges, 2008)

## **2008 Sense of Community Report**

- 7. The Sense of Community Report provided an opportunity to make suggestions on how to improve Canmore's sense of community. The range of responses was very broad, and none of them were suggested by a majority of the respondents (Note: of the 1,603 responses 31% were from non-permanent residents). Several of the suggestions did specifically relate to the non-permanent population:
- 8. 10% of the respondents suggested that there should be "fewer non-permanent residents". Some (3%) felt that the social fabric could be improved by the non-permanent residents spending more time in the community.
- 9. Refraining from categorizing residents (segregating or treating non-permanent residents differently) was suggested by 6% of the respondents. (HarGroup, 2008)

#### **Interpretation:**

- 1. The 2006 Second Home Owner Survey provides a very detailed characterization of the non-permanent population. Contrary to some commonly held assumptions, the market for second home owners is predominantly regionally-based. The survey indicates that the recreational opportunities and mountain environment are of key importance to this group and that local events, facilities, and job opportunities generally of less importance. Primarily they own these properties as places for relaxation, recreation, and enjoyment.
- 2. Previously it was speculated that the non-permanent residents might have plans to retire to Canmore in large numbers. The results of the Second Home Owner Survey indicate that while some of them do intend to retire here, the majority do not.
- 3. The current trend of the non-permanent population growing at a faster rate than the permanent population is expected to continue, but at a more moderate pace. Further growth in the non-permanent population will probably still result in an increasing proportion of non-permanent residents.
- 4. The ever-increasing proportion of non-permanent residents has implications for the municipal tax base, local businesses and retail as they adjust to meet this change in demand.

#### **Recommendation:**

- 1. Non-permanent residents are a major social and economic presence in Canmore and will likely continue to become a greater proportion of the total population. Engaging the non-permanent population and involving them can help to build a stronger community. This is critical to avoid developing an antagonistic "us and them" syndrome that creates negative feelings in some other resort communities.
- 2. Striving for greater understanding and inclusiveness of the non-permanent population is important. However, it is also necessary to develop a community with a strong and vibrant permanent population. Affordable housing, recreational and cultural facilities, educational opportunities, employment and economic opportunities, and most importantly a sense of community are all required to maintain a strong population of long term local residents.
- 3. Efforts to better quantify and understand the non-permanent population of Canmore should continue.

## 5. Family Composition

Family composition is a standard indicator of socio-economic stress. Generally, two parent families with fewer children are, on average, under less social and economic pressure than single/lone parent families, or families with an above average number of dependent children. Typically, families with a single/lone parent have been found to be most in need of social and economic support services.

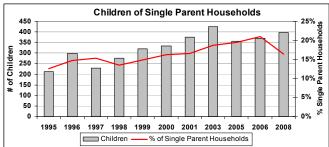
**Threshold:** The proportion of single parent households in Alberta and Canada.

#### **Observations:**

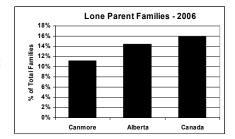
1. As reported by the Canmore Census, the number of children in school from single parent households has increased from 213 in 1995 to 426 in 2003, dropping slightly and then rising to 397 in

2008.

2. The proportion of single parent households with children in school increased from 12.6% in 1995 to 21.0% in 2006, dropping to 16.4% in 2008. (Town of Canmore, 2008a)



3. The Census of Canada reported that there were 310 lone parent families in Canmore in 2001 and 375 in 2006. This represents 11.1% of the total families in 2008. This is less than the percentage of lone parent families in Alberta (14.4%) and Canada (15.9%). (Statistics Canada, 2006a).



4. The apparent difference between the Canmore Census and Statistics Canada data can be accounted

for by differences in census definitions and methodology. The Canmore Census figures are derived by dividing the number of single parent families with children in school, by the total number of families with children in school. The Census of Canada divides the number of lone parent families by the total number of families (who may or may not have children living at home).

5.

## **Community Initiatives:**

- 1. The Town of Canmore's Family and Community Support Services (FCSS) offers bi-annual *Parenting After Separation* workshops that are a legal requirement for divorce and or separation in Alberta.
- 2. FCSS also offers the Rainbows program which is a series of workshops for parents and child who are transitioning through divorce or separation.
- 3. The Bow Valley Parent Link Centres in both Banff and Canmore offer places where parents can feel supported and receive the information and resources they need.

#### **Interpretation:**

- a. The percent of families that are lone parent families is lower in Canmore than in either Alberta or Canada. Many lone parent families may not be able to afford to live in a community, where many dual income families struggle with affordability. In Canmore, the high cost of housing and the high participation rate in the labour force, suggest a need to understand the potential demands by lone parent families on support services in the community.
- b. The recent accreditation and addition of additional child care spaces in Canmore has helped to relieve the long standing child care deficit in the community.
- c. It is important to note that across Canada, lone parent families headed by women comprise a disproportionate share of all children living in a low-income situation in Canada (Statistics Canada, 2006b).

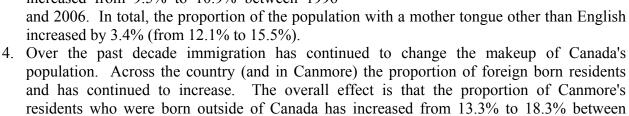
# 6. Mother Tongue, Immigration and Cultural Diversity

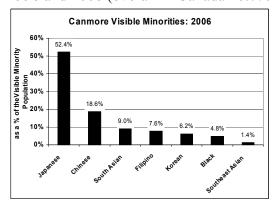
The cultural diversity of a community may, in part, be measured by the mother tongue of its citizens, the number of immigrants from other countries, and its proportion of visible minorities. Monitoring these aspects helps determine if there is a need for changes in services, such as programs in other languages.

### **Observations:**

- 1. As recorded by the 2006 Census of Canada, the proportion of native English speakers in Canmore declined slightly from 87.2% of the permanent population in 1996 to 84.2% in 2006. This mirrors the overall decrease in Alberta and Canada during the same period.
  - Relative to Canmore, the proportion of native English speakers in Alberta is slightly lower and much lower in Canada.
- 2. From 1996 to 2006 the number of native French speakers in Canmore has more than doubled from 220 to 550 (an increase from 2.6% to 4.6% of the permanent population). During the same period of time in Alberta the proportion of French speakers increased from 1.7% to 1.9%.
- 3. The proportion of the permanent population having "other languages" as their mother tongue increased from 9.5% to 10.9% between 1996

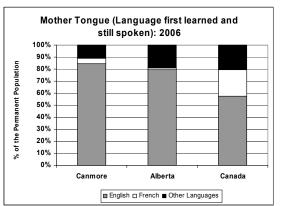
increased by 3.4% (from 12.1% to 15.5%).





- 5. The total number of Canmore's residents belonging to visible minorities more than doubled from 320 in 1996 to 725 in 2006.
- 6. The proportion of permanent residents from a visible minority increased from 3.8% in 1996 to 6.0% in 2006. Overall the number of visible minorities in Canmore remains relatively low compared to Canada (16.2%) or Alberta (13.9%).
- 7. Japanese are the most common visible minorities (52.4%), followed by Chinese

Asian and south Asian residents account for over 95% of the total visible minorities in Canmore. (Statistics Canada, 2006a)



1996 and 2006 (overall in Canada 20.7% were foreign-born).

# **Community Initiatives:**

- 1. In Canmore, French preschool is available, as is French Catholic schooling from kindergarten to grade 6.
- 2. A French resource centre has been established.

# **Interpretation:**

There will be an increasing need for services in French (and other languages) if these trends continue. As seen above, these services are already beginning to develop.

# **ECONOMIC SUSTAINABILITY**

The following Goals and Criteria are Foundational Values for Canmore as described in the 2006 document *Mining the Future: A Vision for Canmore*.

# Economic Sustainability

## **Goals**

As citizens of Canmore, we believe the following goals must be actively and tirelessly pursued if we are to realize our Vision. As a community, we must:

- 1. Build a strong, vibrant and diversified local economy and business base that is resilient to changes in any one sector
- 2. Develop and implement a clear marketing plan based on Canmore's strengths and that has positive consequences for the social fabric
- 3. Blend and integrate the needs of Canmore's local population with the needs of its visitors and those who serve them
- 4. Develop a large base of staff who are committed to local businesses, and provide diverse, permanent employment opportunities for locals
- 5. Research and distribute information regarding current and emerging economic drivers, including tourism, knowledge-based work, second-home ownership, retirement and investment income, entrepreneurship, wellness, and lifestyle

## **Criteria**

Decisions consistent with the following criteria will help us move toward achieving our goals. Accordingly, will the decision to be made....

- 1. Support local businesses
- 2. Encourage economic diversity
- 3. Increase our capacity to attract new business that will enhance and complement the tourism industry through policies of the Town
- 4. Promote entrepreneurial networking among business professionals, including selfemployed residents
- 5. Integrate all of our values and guiding principles into our economic decision making

## **Trends**

For years, Canmore's low level of unemployment created challenges for businesses, making it difficult to find staff to begin, continue, or expand operations. In mid 2008, as the global economy changed, Canmore's labour market changed, with more workers and fewer jobs available. It remains to be seen, whether this trend will continue. Canmore residents have high participation rates in the labour market which is likely due to both a strong labour market and the high cost of living in Canmore. A greater proportion of families with both parents in the workforce impacts childcare needs in the community. These needs have recently been addressed with daycare facility accreditation and increased childcare facilities.

The tourism industry is a strong driver of the economy and source of employment in Canmore. The rapidly growing number of non-permanent residents is an increasing influence on the service and retail industries. There is a strong construction industry in Canmore, with 14.7% of the jobs in that field in 2008. The current level of employment in the construction industry is not sustainable in the long term, as construction will slow down during economic downturns and at full build-out. The community needs to have economic plans in place for this eventuality.

Both average and median income levels in Canmore are higher than in Alberta or Canada. This may be due in part to the high participation rates in the labour force and/or working multiple jobs to afford the high cost of living. It is also a reflection of the higher than average levels of non-employment income (e.g. investments, pensions). An interpretation of the affordability of living in Canmore must also consider factors beyond income, such as housing costs, local employment incomes, and the number of hours worked per week. The great disparity between the average and median incomes of females compared to those of males remains a concern given the higher than average labour force participation rate of females in Canmore.

The residential portion of the residential/commercial tax base ratio has remained above 82% since 2005. There is expected to be a substantial (non-tax) revenue drop for the municipality when build-out is reached and the pace of construction slows. Achieving an appropriate balance between the residential/commercial tax base is very important for economic sustainability in Canmore.

Of the 1,610 businesses registered in Canmore in 2008, more than 45% of them are in the Real Estate, Building, and Construction sector. This is followed by Tourism, Accommodations, Food & Retail which totals over 25% of all registered businesses. The number of home occupied businesses continues to grow. Non-resident businesses tend to account for 50% or more of the total licensing fees. These businesses are often out-of town trades in the construction industry. These numbers will likely be much lower during economic downturns, or when the town reaches build-out and new construction decreases.

Tourism plays an important role in Canmore's economy and takes many forms. Canmore's Travel Alberta Centre recorded stable numbers of visiting parties in 2006 and 2007. The large increases in non-permanent residents are driving many of the changes in Canmore's retail, hospitality, construction, and tourism sectors. Canmore is not simply a place for tourists to visit for a single vacation trip, rather many people are buying properties to reside in part-time or to a

limited extent, use as rental units. From 2000-2007 occupancy rates of registered accommodation units remained relatively stable fluctuating around 60%.

A sudden spike in building permit values for 2006 and 2007 was due to a combination of factors including a strong economy and high construction costs. During that time construction costs in Alberta skyrocketed as the supply of labour and materials was extremely tight. There were also several large commercial and tourist home/vacation rental suite properties under construction at that time. It now appears that the recent spike may have been an outlier, rather than part of a long upwards trend. Demand is lower and financing has become harder to obtain, making it highly unlikely that numbers like those from 2006 and 2007 will be attained in the near future. A downturn in the local construction industry has potentially significant consequences for the local economy, underscoring the need for continued efforts towards economic diversification in the community.

## Introduction

The Town of Canmore's 2006 document Mining the Future: A Vision for Canmore acknowledges the importance of a strong economy to Canmore's overall wellbeing. It is also important that the economy remains viable over time. There is no single statistic or number that can accurately indicate the strength or viability of Canmore's economy. Rather, there are a number of key indicators, which, when taken together, can provide a better picture of how Canmore's economy is performing over a period of time.

Employment status, employment opportunities and income levels are just part of the economic picture. Tourism continues to be a strong driver of Canmore's economy, and the non-permanent population is a rapidly growing economic factor. A diversified economic base is important for economic sustainability. A balanced tax base will also help the community remain sustainable over time.

Taken together, the following indicators can help to determine whether or not Canmore is moving forward in creating an economy which is balanced and which develops opportunities for employment to enable residents to live and work affordably.

# **Employment and Income**

- 1. Employment Status of Adults
- 2. Employment by Industry
- 3. Income and Wages

# **Business and Development**

- 4. Municipal Tax Base Ratio
- 5. Business License Registry
- 6. Building Permit Summary

## **Tourism**

- 7. Tourism Industry
- 8. Tourist Accommodations and Occupancy Rates

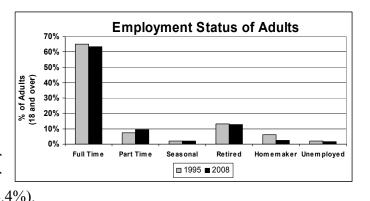
# 1. Employment Status of Adults

Employment status is useful for assessing the overall health of the local economy. A high unemployment rate, lack of full time work, or low participation rate in the labour market may indicate depressed economic conditions in a community. An unemployment rate of 4-6% is generally considered "healthy" by economists as there is sufficient flexibility in the potential labour pool to accommodate fluctuations in the supply/demand of the job market. Unemployment rates lower than this may lead to a shortage of workers or inflationary pressures. A high participation rate in the labour force may indicate strong economic conditions and abundant job opportunities, or it may indicate a high cost of living, requiring households to have two or more income earners. It is also important to note that employment status does not indicate if the income received is sufficient to meet the costs of living in the community.

## **Observations:**

### **Canmore Census**

1. The majority of adults in Canmore are employed full time. The number of adults who are employed full time has risen annually from 3,587 1995 to 6,327 in 2008. The proportion of adults who are employed full time has dropped from a high of 68.2% in 1999 to a low of 63.3% in 2008 (dropping by 4.4%).



in

- 2. The proportion of part-time workers in Canmore has ranged from a low of 7.2% in 1995 to a high of 9.6% in 2008.
- 3. The number of retired adults has increased from 733 in 1995 to 1,285 in 2008. Relative to the number of total adults in the permanent population the proportion of retirees is similar to, but slightly less in 2008 (12.9%) than in 1995 (13.3%).
- 4. The proportion of "homemakers" in Canmore decreased from 6.1% in 1995 to a low of 2.6% in 2008.
- 5. The unemployment rate as measured by the Canmore Census from 1995 to 2008 has fluctuated between 1.4% and 3.1%. In 2005 and 2006, it was 1.6%. In 2008 it was 1.8%. (This rate is very low, but the method and timing of collection may not make it directly comparable to regional or provincial unemployment rates as calculated by Statistics Canada).
- 6. In the 2006 and 2008 Canmore Census, 6.4% and 6.2% of the population (respectively) had an "unknown" employment status. This is a higher proportion of unknown responses than usual for the census (an average of 2.9% for the period 1995 to 2005), creating uncertainty in the interpretation of other categories of employment and unemployment. (Town of Canmore, 2008a)

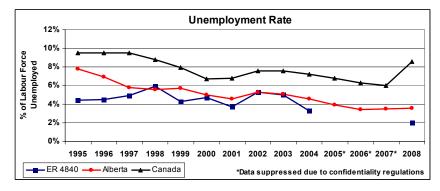
### **Statistics Canada**

- 7. The Census of Canada tracks labour force information at five year intervals. Overall, the 2006 participation rate in the labour force was 5.3% higher in Canmore than in Alberta. The labour force participation rate for men was 2.6% higher, but was 8.1% higher for women in Canmore. The total participation rate dropped slightly from 82.2% in 2001 to 79.3% in 2006.
- 8. As measured by the Census of Canada, the overall unemployment rate in Canmore dropped from 4.3% in 2001 to 2.4% in 2006. In Alberta the unemployment rate dropped from 5.2% to 4.3%. In particular, there was a substantial decrease in the unemployment rate for men in Canmore from 4.6% to 1.3%. (Statistics Canada, 2001 & 2006a)

Participation and		Canmore			Alberta		
U	nemployment Rates	Total	Male	Female	Total	Male	Female
	Participation rate	82.2%	86.0%	78.3%	73.1%	79.6%	66.6%
2001	Employment rate	78.6%	82.2%	75.1%	69.3%	75.5%	63.1%
	Unemployment rate	4.3%	4.6%	4.3%	5.2%	5.1%	5.2%
2006	Participation rate	79.3%	82.9%	75.8%	74.0%	80.3%	67.7%
	Employment rate	77.4%	81.7%	73.1%	70.9%	77.0%	64.7%
	Unemployment rate	2.4%	1.3%	3.4%	4.3%	4.1%	4.4%

Source: (Statistics Canada, 2001 & 2006a)

9. For the entire Economic Region (ER4840: including Banff, Jasper, Canmore and Rocky Mountain House) the unemployment rate (as reported by Statistics Canada) is typically lower than the unemployment rate of Alberta or Canada. The regional unemployment rate dropped from a high of 5.9% in 1998 to 3.3% in 2004. For 2005 to 2007 the unemployment rate data was suppressed by Statistics Canada since the number of unemployed persons did not meet their minimum confidentiality thresholds (of 1,500 persons) (indicating a very low level of unemployment in the region). In 2008 the overall unemployment rate for ER4840 had risen back to 2.0%. (Statistics Canada, 2008a)

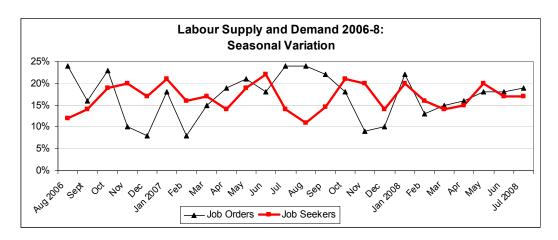


**Source:** (Statistics Canada, 2008a). Note: Data for ER 4840 was suppressed for the period from 2005-2007 for confidentiality reasons.

### **Job Resource Centre**

10. At the local Job Resource Centre the supply/demand of job orders and seekers has followed a seasonal pattern with a slight surplus of job orders in the early spring, a surplus of job seekers

- in late spring, a surplus of job orders in the summer, and a surplus of job seekers in the fall and winter. In 2008 this pattern changed, with a much closer correspondence between the job seeker and order supply/demand curves.
- 11. The Job Resource Centre reports a one year decrease in job postings of 15% (for the February July 2008 period). Part of this decrease is likely explained by the increased use of temporary foreign workers and on-line recruiting. The Food and Beverage sector at 18% represented the greatest number of advertised job openings, followed by Housekeeping and Cleaning at 14%. (Job Resource Centre, 2004-2008b)



**Source:** (Job Resource Centre, 2006-2008b)

#### Other Sources

- 12. Positive People Placement (PPP), a local employment agency currently has more workers than jobs, for the first time in 4 years. This is a result of having fewer jobs available and more people looking for work. Permanent recruitment has dropped to minimal numbers, as businesses are not willing to risk bringing on too many employees in the current economic climate. There is a reduced demand for temporary workers, and many temporary workers are moving on to stable positions. A large slowdown occurred earlier in 2008 in PPP's hospitality placements as more foreign workers arrived, reducing the demand at PPP. There is greatly reduced demand for temporary construction labourers, as several major clients have ceased or gone out of business in 2008.
- 13. For the last several years in Canmore's construction industry it has been very hard to find staff. There is now a sudden big change in the market with job seekers available. This has resulted in a more stable staff base with lots of mid level people (i.e. foremen, superintendants) looking for work.

### **Interpretation:**

- 1. The very low unemployment rate over the past few years resulted in reduced flexibility in the labour market. This has been a limiting factor for local businesses as it has been difficult to replace or hire additional staff, often limiting their ability to maintain or expand their businesses. Seasonally, the end of summer/early fall has been problematic for local employers as many students and seasonal workers leave Canmore to return home.
- 2. Due to recent global economic changes in 2008 the typical gaps in the labour supply/demand curve have narrowed and regional unemployment has risen slightly (but was still at very low

- levels in 2008). At this time data on job seekers vs. job orders is not available for the latter half of 2008. It remains to be seen whether or not the current economic situation will result in increased unemployment and a decrease in labour demand from local employers over the long term.
- 3. The slowdown in the economy is resulting in some other significant changes in the local labour market especially in the hospitality and construction sectors. The past several years of labour shortage caused a number of problems for employers including obtaining and retaining good employees. The decrease in labour demand is likely resulting in some stabilization of the workforce and better options for employers to pick and choose good applicants for available positions.
- 4. The high participation rates in the labour force in 2001 and 2006 were likely due not only to a strong labour market, but also due to the high cost of living in Canmore. Housing costs are higher than most other Alberta communities, so dual incomes may be required by many families in order to afford to live in Canmore. Having a greater proportion of families with both parents in the workforce may also impact childcare needs in the community.
- 5. The affordability and availability of housing remains a major limiting factor for recruitment and staffing of mid to high level positions in Canmore. The recent addition of PAH units to the housing market is an important start, however the number of units available will not significantly impact demographics or the labour market in the short term. In the longer term the availability of PAH and other housing options should have a beneficial impact on employee retention and the labour market.

### **Community Initiatives:**

- 1. The community continues to address the issue of affordable housing with the construction of additional PAH units and the development of the 2008 Canmore Housing Action Plan (CHAP).
- 2. More accessible child care potentially increases the availability and flexibility of potential participants in the labour market. The accreditation of the Canmore Community Day Care and the addition of dayhome child care spaces have helped to relieve the long standing child care deficit in Canmore. The Bow Valley Family Childcare Agency was created to help provide regulated and monitored dayhomes. This resulted in 24 new child care dayhome spaces being created in 2008. The Dragonfly Daycare opened in 2008, creating an additional 80 daycare spaces.
- 3. In 2007 and 2008 employers were increasingly recruiting outside the Bow Valley to fill their labour needs. Some employers were filling vacancies through the federal Temporary Foreign Workers Program. Tourism Canmore has been developing work-practicum tourism programs with Mexican universities. Positive People Placement had been increasingly recruiting workers from eastern and central Canada to fill the labour demand. The recent slowdown in job availability combined with the increase in job seekers in Canmore may impact Federal and Provincial decisions to continue these programs.

#### **Recommendations:**

- 1. A valuable addition to the municipal census could be the number of jobs held (full time/part time) and the number of hours worked per week (the number of hours worked per week is recorded in the Town of Banff census). Gathering this information could give an indication of how many people are working long hours and/or multiple jobs.
- 2. The Job Resource Centre provides one measure of labour supply/demand. Some employers hire directly (internet, classified ads). Tracking job listings in the local newspapers could provide another measure of employment demand.
- 3. There appears to have been increased use of foreign temporary workers to fill the labour shortages of the past few years. More information on the number of foreign workers is required to better understand how they impact, and how they are impacted by labour market changes.

# 2. Employment by Industry

It is important to encourage economic diversity and to build a strong, vibrant and diversified local economy and business base that is resilient to changes in any one sector (Mining the Future: A Vision for Canmore 2006). "A diversified economic base, with employment opportunities in a number of sectors, is more stable over the long term as the economic ups and downs of a particular sector can be balanced out by other sectors which are on a different cycle" (2001 Canmore Economic Development Strategy). Tracking employment by industry helps determine if the Town of Canmore is moving towards a more diversified economy.

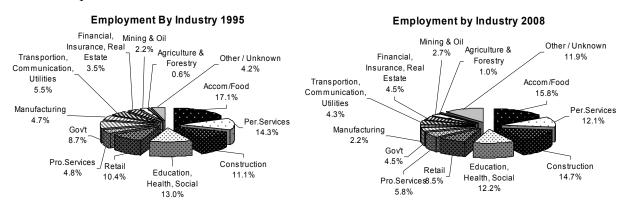
The following definitions are from the Canmore Census:

<u>Personal Services:</u> theatre and staged events, commercial spectator sports, sports and recreation clubs, amusement services (e.g. bowling alley, amusement parks), barber and beauty shops, laundries and cleaners, funeral services, religious organizations, political organizations, and type of repair services (e.g. automotive services, appliance repairs, shoe repairs).

<u>Professional Services:</u> computer services, accounting and bookkeeping, advertising, architectural, engineering and other scientific and technical services, lawyers, etc.

### **Observations:**

1. In 2006 and 2008 the proportion of persons classified as having "unknown" employment by industry were 9.1% and 10.0% respectively. Small variations in census results should be treated with caution, as apparent differences may actually relate to the number of "unknown" responses.



- 2. Since 1995, Accommodation and Food has been the highest employment category in Canmore. The proportion of persons employed in this sector reached a high of 21.4% in 2001, declining to 15.8% in 2008 (the total number of employees has also decreased during the same period from 1,439 to 1,288).
- 3. In 2008 Construction (14.7%) surpassed Personal Services (12.1%) becoming the second most common category of employment. Construction directly employed 1,199 residents in

- 2008. From 1995-2006, the Personal Services category was the second highest employment category but dropped to fourth place in 2008.
- 4. Education, Health and Social Services was the third most common sector of employment in 2008 with 998 persons or 12.2% of the total (just slightly higher than Personal Services).
- 5. The proportion of persons with an "unknown" employment increased to 9.1% in 2006 and 10.0% in 2008, making comparisons of the 2006 and 2008 census with previous versions more difficult due to the increased level of uncertainty.
- 6. In 2008, 2,137 persons, or 26.2% of those who were employed worked outside of Canmore. Banff, Calgary, and other communities in the Bow Corridor were the three most common locations for working outside of Canmore. (Town of Canmore, 2008a)

## **Interpretation:**

- 1. Data from the 2008 Canmore Census may not capture the full effect of the global economic situation on Canmore's employment sector as it reflects the employment by industry only as of June 2008.
- 2. The tourism industry is a strong driver of the economy and source of employment in Canmore. However the growing number of non-permanent residents is an increasing influence on the construction, service, and retail industries. The non-permanent or weekend residents provide a broader base of support for the local economy, likely making Canmore's economy less susceptible to fluctuations in the national or international tourism markets. The exact economic impact of the non-permanent population has not been well quantified.
- 3. The construction and development industries are major employers in Canmore. In recent years that industry has struggled to find sufficient qualified workers due to Alberta's overheated economy. Irrespective of current global economic problems, the recent high levels of employment in the construction industry are not sustainable in the long term. With limited developable land remaining in Canmore, construction activity will be greatly reduced at full build-out. The current economic challenges are having a significant impact on the development industry, and highlight the need to diversify the economy and have alternative economic plans in place for full build-out.

### **Recommendations:**

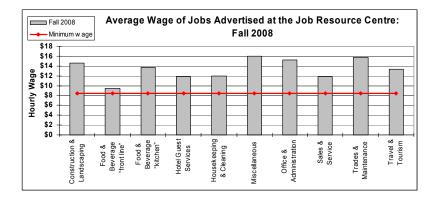
- 1. A better understanding of Canmore's economic drivers is required to fully understand what drives the different employment sectors in Canmore. Traditional tourism, amenity migration, and non-permanent residents all have significance, but the full extent of their expenditures and roles as economic drivers are not fully understood.
- 2. Plans for additional economic diversification are important to strengthen other employment sectors to reduce the local economy's reliance on construction and providing services to visitors and/or non-permanent residents.
- 3. Since Health and Wellness is a targeted sector for economic development in Canmore, splitting the Education, Health, and Social Services category in the next Census could provide better insight into this field of employment.

# 3. Income and Wages

Income levels are a key economic and quality of life indicator. Insufficient income may negatively impact an individual's or family's ability to meet their basic needs. These "working poor" may be constantly subject to stresses from inflationary pressures, increased housing costs, or variable income due to fluctuations in economic conditions. Income is only one component of a more complex equation and has strong linkages to affordability and cost of living. The income/affordability relationship is a key driver of demographic trends in the community as individuals or families who struggle with affordability may leave the community in search of better economic prospects.

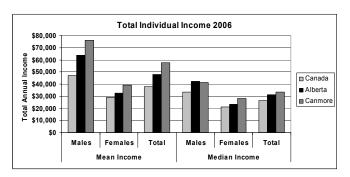
### **Observations:**

1. Canmore's Job Resource Centre tracks the average wages of jobs they post. The food and beverage front line positions are the lowest paid wage (tips not included) positions reported from, while trades and maintenance positions are the highest paid. Note: All jobs posted at the Job Resource Centre must provide wages at or above Alberta's minimum wage which increased to \$8.40 per hour on April 1, 2008 (Job Resource Centre, 2008b).



The following information is drawn from summaries of income tax returns compiled by Statistics Canada (Statistics Canada, 2006c & 2008b). The income data is compiled by postal code, so it reflects income for permanent residents of Canmore (regardless of where they earned the income), but excludes non-permanent residents or temporary workers who maintain a permanent residence in another postal code.

2. The 2006 mean total individual income (from all sources) in Canmore was \$57,453, which was more than \$3,800 higher than the average in Alberta, and more than \$13,000 higher than in the average in Canada. The median income (a more accurate representation of the middle

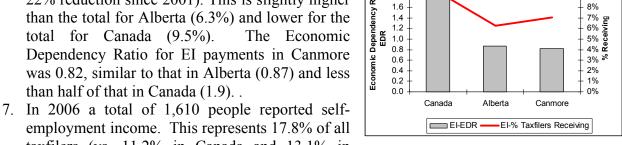


- income point, which helps to reduce the influence of very high or very low values) was \$30,100, more than \$2,700 than in Canada, but \$2,000 lower than the median than in Alberta.
- 3. From 2003 to 2006 the mean individual income in Canmore rose by 35.5%, a much greater increase than the average of 14.1% for all of Canada. The median income rose by 18.4%, higher than the 12.3% for Canada, but lower than the 21.7% increase for Alberta.

Total Individual Income		2003	2004	2005	2006	% Change 2003-06
	Canada	\$33,117	\$34,366	\$35,909	\$37,776	14.1%
Mean	Alberta	\$37,500	\$39,720	\$43,419	\$47,869	27.6%
	Canmore	\$42,412	\$45,950	\$55,066	\$57,453	35.5%
	Canada	\$23,600	\$24,400	\$25,400	\$26,500	12.3%
Median	Alberta	\$25,800	\$26,900	\$28,800	\$31,400	21.7%
	Canmore	\$28,300	\$29,800	\$31,200	\$33,500	18.4%

Source: Statistics Canada, 2006c & 2008b

- 4. The large differential between the mean and median incomes suggests that there are a small proportion of higher income residents that skew the mean income levels. In 2006, 8% of Canmore's taxfilers reported > \$100,000 in total income (compared to 4% for Canada) however the category is open ended and the upper limit and distribution therein is unknown.
- 5. In 2006, there continued to be a growing disparity between the average incomes of females (\$38,976) and males (\$76,177) in spite of high participation rates by both in the job market.
- 6. In 2006 there were a total of 640 persons who claimed EI payments (7.1% of all taxfilers and a -22% reduction since 2001). This is slightly higher total for Canada (9.5%).



- taxfilers (vs. 11.2% in Canada and 13.1% in Alberta). Self-employment produced over \$30 million dollars in income, or 5.9% of total income in 2006.
- values 8. While the fluctuate from year to Canmore's year, residents permanent derive a higher proportion of their income from investments than the average for Alberta or

Investment Income 2006	% Reporting Investment Income	\$ per Person Reporting Investment Income	% of Total Income for All Persons
Canada	34.5%	\$5,056	4.7%
Alberta	36.1%	\$7,817	5.9%
Canmore	40.0%	\$12,702	8.9%

1.8

Source: (Statistics Canada, 2006c & 2008b)

Canada. The amount of investment income per person reporting investment income was more than double the Canadian average. In 2006 investment income accounted for \$12,702

**Employment Insurance (EI)** 

per person or 8.9% of the total income reported by the residents of the community. (Statistics Canada, 2006c & 2008b)

## **Interpretation:**

- 1. The jobs posted at Canmore's Job Resource Centre give an indication of the wages offered for many commonly available positions in Canmore. It is limited in its application, however, as these are only some of the jobs available in Canmore and they may include a higher proportion of entry level or seasonal positions. It is also important to note that tips and gratuities, if applicable, are not included in these advertised wages.
- 2. The higher average and median individual incomes may be partly a reflection of the need to meet the high cost of living in Canmore. This may be due in large part to the high participation rates in the labour force and/or working multiple jobs to afford the high cost of living. In an analysis of income and poverty in Alberta, The Parkland Institute concluded that it is "not the benefits of the boom we are seeing, but families working harder to maintain their standard of living" (Parkland Institute, 2007).
- 3. The great disparity between the average and median incomes of females compared to those of males remains a concern given the higher than average labour force participation rate of females in Canmore

### **Recommendations:**

- 1. The income statistics do not differentiate between income earned in Canmore, or income earned outside of the community (in Calgary or beyond). Given the importance of amenity migration to Canmore it would be interesting to know what proportion of income is generated by employment in the community vs. income generated by employment outside of the community (in 2008, 26.2% of those with jobs worked outside of Canmore).
- 2. Interpretation of the affordability of living in Canmore must also consider factors beyond wages, such as housing costs, and the number of hours worked per week. Continued monitoring of the role of earned employment income versus non-employment income (pensions, investments, government transfers etc.) could provide a useful measure of the changing profile of the community and its residents.

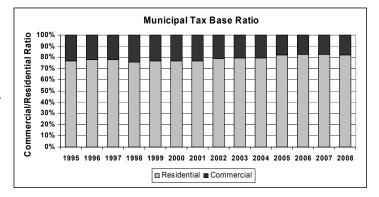
# 4. Municipal Tax Base Ratio

Measuring the Municipal Tax Base Assessment Ratio helps demonstrate whether or not Canmore has a balanced tax base. This balanced tax base ratio is important, as it is generally understood that the residential component of any community provides insufficient tax revenue to support the community's infrastructure. A balanced tax base means the burden of increased taxes is shared on a more balanced basis between residents and businesses, to help maintain affordability for residents.

**Threshold:** the 1995 Growth Management Strategy set a targeted residential/commercial tax base ratio of 60:40. Canmore's new Community Sustainability Plan has not yet been finalized but it is not expected to shift this target ratio substantially.

## **Observations:**

- 1. In 1995 the residential/commercial tax base ratio was 77:23, and had risen to 79:21 by 2003. In 2004 the residential portion of the ratio reached 80%, and has remained above 82% since 2005 (Town of Canmore, 2008b)
- 2. In 2004 the category of "tourist home" was added to the tax assessment database. For the purposes of this report the



- assessment value of tourist homes has been included in the commercial component.
- 3. The as part of the current Community Sustainability Plan a Growth Study Report was undertaken to examine the municipal tax and revenue implications of future commercial and residential development. The model forecast that any loss of the future tax revenue from proposed future developments would significantly reduce future municipal revenue and potential surpluses (which serve as an important financial buffer). The study underlined the importance of commercial development and concluded that the three major developments (Silvertip, Spring Creek, and Three Sisters) "will contribute substantially to the municipal costs necessary to provide the services needed to support the population." (Canmore Sustainability Plan, 2008)

### **Interpretation:**

1. Residential assessments alone are ordinarily insufficient to pay for a complete range of municipal services, therefore an appropriate balance between residential and commercial is essential. The gap in the residential/commercial tax base ratio continues to widen due to the levels of residential construction the historically strong real estate markets.

- 2. There is expected to be a substantial decrease in (non-tax) revenue for the municipality when build-out is reached and the pace of construction slows. Therefore, achieving a more balanced residential/commercial development and the associated tax base is very important for economic sustainability in Canmore.
- 3. Given past trends and expected future development patterns it is unlikely that the targeted tax base ratio of 60/40 will be achieved. If this goal is not possible, it is important to understand the implications to the community and to set targets to an appropriate goal that is potentially achievable.
- 4. Both commercial and residential development are affected by the laws of supply and demand. Successful commercial development will not occur unless the appropriate business conditions are present. The nature of future commercial development will have a direct impact on the economic diversity and employment opportunities in the community.

#### **Recommendations:**

- 1. Continued emphasis still needs to be placed on encouraging commercial development, to ensure that there is sufficient non-residential tax revenue to balance the residential tax base.
- 2. The original goal of a 60/40 tax base ratio needs to be reviewed and revised to an appropriate and attainable number.

# **5. Business License Registry**

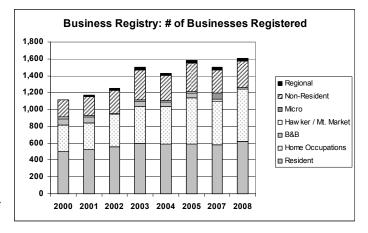
Each business operating in Canmore is required to register for an annual business license. This indicator provides information on the number and type of businesses registered in Canmore each year and the amount of business registry fees collected.

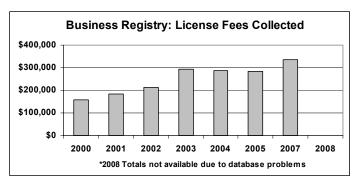
### **Observations:**

- 1. Due to inconsistent categorization of business types in the database and software issues it is difficult to give a detailed analysis of trends. The Town of Canmore and CEDA are working to rationalize the database and resolve the software issues.
- 2. The number of registered businesses fluctuates depending on enforcement and compliance with the registry. The increased number of registered businesses is partly a function of

increased enforcement and compliance, as well as an increase in construction related businesses registering (particularly non-resident businesses).

- 3. During the 2000-2008 period Resident businesses increased from 498 to 620, while Home Occupations grew from 319 to 626. Non-Resident businesses rose from 202 to a high of 339 in 2005, dropping to 315 by 2008. Overall the number of resident businesses increased from 1,112 to 1,610.
- 4. The total fees collected by the business registry rose from \$158,924 in 2000 to \$292,385 in 2003. It dropped slightly over the next two years, and then jumped to \$333,900 in 2007. Due to database problems total numbers are not available for 2008. Due to changes in categorization of the business types a breakdown is not presented here.





However it is important to note that non-resident businesses normally account for 50% or more of the total licensing fees.

5. In 2007 the Business License Registry began categorizing registered businesses by sector. Real Estate, Building, and Construction is by far the largest sector accounting for more than 45% of all registered businesses. This is followed by Tourism, Accommodations, Food & Retail which totals over 25% of all registered businesses. Note: this does not gauge the size, total revenue, or economic impact of these businesses, only the number that are registered. (CEDA, 2008)

Business by Sector	% of Businesses		
Business by Sector	2007	2008	
Real Estate, Building & Construction	46.1%	45.4%	
Tourism: Accommodations, Food & Retail	25.5%	25.2%	
Personal & Residential: Finance, Auto, Transportation & Utilities	9.9%	10.5%	
Business & Consulting	5.5%	8.0%	
Health & Wellness	4.7%	4.4%	
Art & Culture	4.3%	4.1%	
Technologies: Computers, Media & Communications	4.0%	2.4%	
Total	100.0%	100.0%	

**Source:** (CEDA, 2008)

## **Interpretation:**

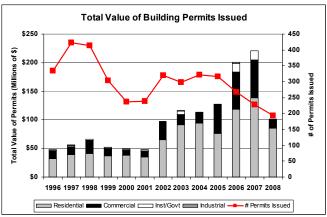
- 1. Fluctuations in the business registry numbers may in part be due to community growth, but may also be influenced by registration compliance.
- 2. Although increased compliance likely plays a role in the large increase in registered Home Occupation businesses, there does appear to be a significant increase in this sector and opportunities for further increases in this type of business in Canmore.
- 3. While many businesses in Canmore are tourism related, there is an increasing trend to branch out into new markets provided by the increasing growth of weekend and non-permanent residents.
- 4. The number of non-resident businesses is in a large part related to out-of town trades in the construction industry. These numbers will likely be much lower during economic downturns, or when the town reaches build-out and new construction decreases.

# 6. Building Permit Summary

The value of building permits issued by the Town of Canmore is one indicator of the growth of the local economy and the community as a whole. The construction and development sector is one of Canmore's primary economic drivers and sources of employment. Comparisons between the residential and commercial values help determine if the future municipal tax base ratio is moving towards sustainable levels.

### **Observations:**

1. From 2001 to 2003 the total value of building permits more than doubled from \$48.6 to \$116.7 million. By 2007 the value reaching \$220.6 million and then dropping sharply to \$101.3 million in 2008 (a decrease of -54.1%). Of the total value of these 194 permits in 2008, 69.0% was residential, 26.3% commercial, 3.8% institutional/government, and 0.9% industrial.



- 2. In 2004 the total value of residential permits had reached \$94.7 million and then peaked at over \$130.0 million by 2007.
  - then peaked at over \$139.0 million by 2007. In 2008 the value of residential building permits dropped by -38.6% to \$85.4 million.
- 3. The value of permits issued for commercial construction rose from \$18.9 million in 2004 to \$65.3 million in 2007. The increased value of commercial building permits was in part due to the increased development of tourist homes/vacation rental suites and large projects such as the Silvertip Clubhouse/Hospitality & Sales Centre. In 2008, the value of commercial permits issued decreased by -78.4% to \$14.1 million.
- 4. The average value of residential permits increased from \$312,784 in 2004 to \$781,065 in 2007, dropping to \$601,491 in 2008. While this is a substantial drop, it is still well above the 10 year average value of \$374,219 per residential building permit. (Town of Canmore, 2008d)

## **Interpretation:**

- 1. The sudden spike in building permit values for 2006 and 2007 was due to a combination of factors. It reflects in part the superheated economy and high construction costs that were prevalent at the time. During this time construction costs in Alberta skyrocketed as the supply of labour and materials was extremely tight. There were also several large commercial and tourist home/vacation rental suite properties under construction at that time in Canmore, contributing to the overall permit values.
- 2. It now appears that the building permit boom of 2006/7 may have been an outlier, rather than part of a long upwards trend. A climate of eager investors and accessible financing has given

- way to global economic difficulties. Financing has become correspondingly harder to obtain, either to begin new projects or to complete current projects, making it highly unlikely that numbers like those from 2006 and 2007 will be attained in the near future.
- 3. Greater volatility is expected in the number and value of building permits issued in the future (more volatile, but within a smaller range). Land availability for additional single family homes is very limited so a greater proportion of higher value multi-family complexes will cause greater swings in the building permit values as the value per residential permit will be much higher than for a single family home.
- 4. The residential construction sector is expected to remain stronger than the commercial/tourist home sector during the current economic downturn (due to the higher risk inherent in large commercial or tourist home projects and greater difficulties with obtaining financing for commercial properties).
- 5. It is important to note that construction of vacation homes, tourist homes, timeshares, and even weekend residences are prone to more risk and volatility during an economic downturn. These types of properties are not primary residences, but are discretionary in the sense that they are purchased as recreational properties or as investments.
- 6. A downturn in the local construction industry has potentially significant consequences for the local economy. This underscores the need for continued efforts towards economic diversification in the community.

### **Recommendations:**

Continued emphasis still needs to be placed on encouraging commercial development to ensure that tax burdens are not unduly shifted to the residential sector and to encourage economic diversification and growth.

# 7. Tourism Industry

Tourism is an important component of Canmore's economy. The town is growing in reputation as a tourism and recreation destination. For Canmore to have a strong and vibrant economy, the tourism industry needs to be fostered, for employers and employees alike. At the same time, the overall economy needs to be diversified, to increase economic stability and reduce the risk of heavy reliance on one sector of the economy.

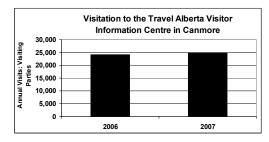
#### **Tourism**

The activities of persons traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes.

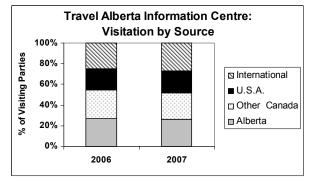
**Source:** World Tourism Organization

#### **Observations:**

- 1. Detailed information on the economic impact of tourism in Canmore has not been updated since the report by Western Management Consultants and Econometric Research "Economic Impact of Tourism to Canmore, Alberta: 1999" (April 2001). This study estimated that initial direct spending by tourists exceeded \$138 million in 1999, sustaining 2,400 equivalent full time jobs and providing \$4.7 million in tax revenues for the municipal government.
- 2. Travel Alberta records the level of visitation and the origin of the visitors at the Travel Alberta Visitor Centre located in Canmore. Not all visitors to Canmore stop at the Centre, nor do all visitors to the Centre spend time in Canmore. Changes in data collection make it impossible to compare Visitor Centre statistics from 2006 onwards with 2005 and earlier.



The number of visiting parties (VPs) at the Travel Alberta Centre was fairly constant in 2006



and 2007 with a total of 24,710 VPs in 2007. The origin of visitors was 26% from Alberta, 26% "other Canada", 21% U.S.A. and 27% International. . (Note: In 2006 Travel Alberta changed the reporting method from # of visitors to the # of "visiting parties". Therefore data from 2006 onwards is not comparable to 2005 and earlier). (Travel Alberta, 2008)

- 3. Due to a lack of available data, Alberta Economic Development has not produced an updated report on visitation to the Canadian Rockies Tourism Destination Region (TDR) since 2004. This is normally the most comprehensive annual update of tourism trends in the region, but is not specific to Canmore as it includes other locations such as Kananaskis, Banff, and Jasper. The tourism importance of the region is significant: in 2006, the Canadian Rockies TDR received 53% of the total overnight international person visits to Alberta and accounted for 46% of their total spending in the Province (Alberta Tourism, Parks, and Recreation, 2008)
- 4. Canmore is host to a number of special events that cater to both visitors and residents. For many events no data is available on the participant numbers. The chart below lists only those

- that do track estimated numbers of attendees. Other impacts to Canmore's event tourism market include the multi-million dollar Nordic Centre upgrades which will increase events and tourism use.
- 5. Traditionally the Bow Valley has been considered to be a gateway for Alberta travellers west to B.C. and Vancouver. Tourism Canmore reports that there are an increasing number of travellers inbound to the Bow Valley and Alberta from B.C.

Conmara Special Events	Estimated # of Attendees			
Canmore Special Events	2006	2007	2008	
Canmore Folk Music Festival	14,100	19,400	16,000	
Canmore Highland Games	8,000	6,500	4,000	
Canmore International Jazz Festival	500	n/a	n/a	
Canmore Quilt Festival	550	558	558	
CAUSE Canada Rocky Mountain Half Marathon (runners				
only)	1,190	n/a	1,438	
Mozart on the Mountain	6,500	(no longer	in Canmore	
24 Hours of Adrenaline (riders only)	1,150	1,700	1,700	
Canmore Winterfest (last 10 days)	n/a	1,750	1,750	
Grab a Slab	n/a	400	400	
Trappers Ball 200	n/a	180	180	
kid & mutt races	n/a	300	300	
Children's Festival	n/a	2,300	2,300	
Canada Day Celebration	n/a	10,000	10,000	
Festival of the Eagles	n/a	1,500	1,500	
Party on the Pond	n/a	3,500	3,500	
Pine Tree Players Spring Production	n/a	850	875	
Pine Tree Players Fall Production	n/a	850	900	
Canmore Miner's Day	n/a	900	1,000	
ArtSpeak	n/a	1,350	1,350	
Canmore Lifefest	n/a	n/a	500	
Approximate Total	31,990	52,038	48,251	

<sup>\*</sup>Note: this is a partial listing, # of attendees is not available for all events

### **Interpretation:**

- 1. The Travel Alberta Visitor Centre statistics only give a very incomplete picture of local tourism trends and do not reflect the total extent of tourist activities. For instance, repeat visitors to the region, golfers, and certain tour groups may be less likely to visit the Centre than those traveling by car and arriving to the area for the first time. The availability of internet information may also affect VIC statistics, as many people do their travel research on-line. The change in how visitor statistics are now recorded means that historical comparisons prior to 2006 are not possible.
- 2. Amenity-migration and "real estate tourism" are emerging trends with different patterns than traditional tourism. The large increases in non-permanent residents and tourist homes are driving many of the changes in Canmore's retail, hospitality, construction, and tourism sectors. Canmore is not simply a place for tourists to visit for a single vacation trip, rather many people are buying properties to reside in part-time or to use as rental units.

- 3. Activity-based or participatory tourism is another growing trend. Participatory tourism tends to be focused on engaging in activities rather than focused on place. With its wealth of recreational opportunities, Canmore is well positioned to capitalize on this increasing market.
- 4. Tourism is a highly competitive, global market. Maintaining a high level of service and a quality product are key to being a favoured destination. The tight labour market and staffing problems of the past few years have made it very challenging for businesses to operate and to continue offering a high level of service to their guests.

### **Community Initiatives:**

1. Tourism Canmore is planning to install data gathering kiosks at key locations around town to gather detailed information from visitors. This will help give greater insight into where they are from, how long they stay in Canmore, and what activities they participate in while visiting here. Additionally, emphasis will be placed on data collection at the 24 Hours of Adrenaline event in 2009. This will help give some indication of the local economic impact of special events like these.

### **Recommendations:**

- 1. Special events play an important role in Canmore's economy, and raise the community's profile both nationally and internationally. The number of people attending special events and their economic impact should be explored to help provide a better understanding of their importance to the local economy.
- 2. The non-permanent population, regional, national and international visitors are all important contributors to Canmore's economy. It is important to better understand the roles of the non-permanent population and tourists to determine how they are different and to determine their economic impacts and spending patterns.

# 8. Tourist Accommodations and Occupancy Rates

Tourism is one of Canmore's major industries. The occupancy rates of local hotels and motels are an important measure of health of the local tourism industry. Occupancy rates and daily rates are affected by levels of visitation, the proportion of overnight visitors, length of stay, and the accommodation choices made by visitors. The accommodation, hospitality, and food sector is one of Canmore's main economic sectors and sources of employment.

### **Observations:**

1. In 2008 there were a total of 2,117 registered accommodation units in Canmore (up from 1,887 in 2006). This total includes including Bed & Breakfasts, hotels, and vacation/rental suites and approximately 375 tourist homes (Tourism Canmore, 2009, Town of Canmore, 2008c).

70%

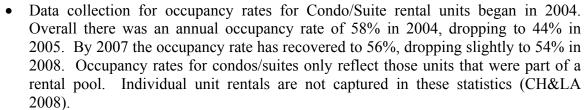
40%

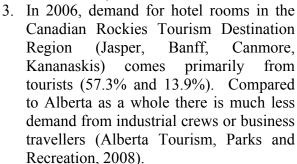
20%

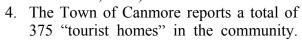
10%

% 60% 50%

- 2. The Canmore Hotel and Lodging Association (CH&LA) tracks occupancy rates of participating properties. The mix of participating properties changes slightly annually, and not all properties participate in the survey:
  - Annual occupancy rates for hotel/motels were 63% in 2000, declining to a low of 52% in 2003, reaching 60% in 2005 and were 57% in 2008.







Source of Room Demand 2006	Canadian Rockies	Total Alberta
Industrial Crews	12.6%	31.3%
Business Travellers	6.8%	25.7%
Tourists	57.3%	28.5%
Tour Groups	13.9%	4.6%
Convention Groups	5.3%	4.4%
Other	4.0%	5.5%

Annual Occupancy Rates: Hotel/Motels & Condo/Suite Units

2002 2003

—— Hotel/Motel Units —— Condo/Suite Units

**Source:** (Alberta Tourism, Parks and Recreation, 2008).

There are also likely several times that number of unofficial (and unlicensed) units that function as tourist homes. Many of these units list in classified ads or on the internet as being available for rent. (Tourist home means a dwelling unit operated as an accommodation unit, occupied by a guest or guests for a period of less than 28 days – typically these operate in an institutionalized and commercialized fashion). These units are not included in the

occupancy statistics and their overall occupancy rate and role as tourist accommodations are not well quantified (Town of Canmore, 2008c).

### **Interpretation:**

- 1. From 2000-2007 occupancy rates appeared to be relatively stable, showing a slight decline around 2003 which was indicative of a general decrease in tourism at that time. It is expected that recent economic difficulties will have negatively affected 2008 and will be ongoing in 2009 (2008 data is not available at this time).
- 2. Canmore did not seem to be as directly affected by the impact of the SARS and 9/11 crises as neighbouring Banff and Lake Louise. This was due primarily to Canmore having a much smaller percentage of group tours and the Asia Pacific markets.

### **Recommendations:**

- 1. It would be useful if the reporting structure for accommodation unit statistics could be based on a more consistent grouping of units and properties. This would improve the quality of the data in the long run.
- 2. Tourist homes are a major part of Canmore's economy with impacts on many facets of the town. More accurate information about them and a better understanding of what is driving these trends, and what challenges/opportunities they create for the community is required.

# **SOCIAL FABRIC**

The following Goals and Criteria are Foundational Values for Canmore as described in the 2006 document *Mining the Future: A Vision for Canmore.* They pertain to both the Demographic Indicators and Social Indicators sections of this document.

# Social Fabric

## Goals

As citizens of Canmore, we believe the following goals must be actively and tirelessly pursued if we are to realize our Vision. As a community, we must:

- 1. Acknowledge and strengthen our social connections and manage the pressure that will be placed on them over time
- 2. Recognize and strengthen Canmore as a diverse, inclusive community, integrating residents of all ages, income levels and skills
- 3. Meet the needs and aspirations of permanent residents while integrating new full and part time residents
- 4. Ensure all citizens have access to basic levels of safe, secure, affordable and appropriate shelter
- 5. Encourage and support a broad range of community activities and programs
- 6. Support the growing community interest in wellness, which encourages personal responsibility and community engagement

### Criteria

Decisions consistent with the following criteria will help us move toward achieving our goals. Accordingly, will the decision to be made . . .

- 1. Contribute to a dynamic, well-stratified demographic profile
- 2. Provide basic social services for all citizens
- 3. Ensure cooperation by community services, education and health authorities, and faith communities
- 4. Ensure access to support and services within the community for people with special needs
- 5. Provide a mix of affordable housing options for all who require it
- 6. Ensure the design of physical facilities and activities that encourage people to come together (pedestrian areas, trails, meeting places in new developments)

## **Trends**

Due to the methods of census and various other data collection which only provide information on the permanent population, the majority of indicators in this section focus on the permanent population rather than the rapidly growing non-permanent population, which now comprises over 30% of the total population of Canmore.

Canmore continues to have a wide range of volunteer and non-profit organizations. In Canmore, there is a high level of community interest in the public library, which includes active use and circulation of materials.

In Canmore, there are a relatively low number of students for the three operational school boards. This results in a division of resources and increases in administrative costs, however, it also provides a wider range of educational choices for Canmore families. The decreasing number of children in the public school system in Canmore, combined with the Alberta Small Class Size Initiative has largely resulted in class sizes falling within the recommendations, but has created other challenges of overall enrolment numbers and resources.

Food assistance programs such as the Christmas Spirit Campaign, the Food Bank, the Canmore Hospital's Food Hamper Program and the Food for Learning Programs are presently meeting the demand from the community. The participation rates in these various food assistance programs suggest that there are not significant increases in demand, but there is a continued need for these services in Canmore.

Compared to provincial and national averages, Canmore has a much lower proportion of people receiving social assistance payments, and a lower rate of economic dependence on these payments. This reflects the high participation rates in the labour force in Canmore, and the very low unemployment rate. Many social assistance programs are not keeping pace with the increasing cost of living, making it more and more difficult for people on social assistance to live in Canmore.

From 2005 through 2007, both the number and per capita rate of criminal code offenses has declined. During that same period, the rate of violent crimes against persons increased slightly, while the rate of property crimes dropped sharply. In 2007, the per capita rate of crimes against persons and the rate of property crimes were higher than the average rate for Canada, but lower than the average rates for Alberta.

In Canmore in 2007/8, 59 victims of domestic abuse were assisted by Bow Valley Victim Services. Domestic abuse was the most frequent occurrence responded to by the program in that year, representing almost half of all BVVSA files in Canmore. The closure of the Canmore BVVSA office in 2007 has resulted in fewer victims of domestic abuse being assisted by that program.

The Alberta Alcohol and Drug Abuse Commission (AADAC) continues to provide treatment, prevention, and information services relating to alcohol, drug, gambling, and tobacco use. In the

Canmore AADAC in 2007/8 the main reasons for treatment for the 122 clients were "alcohol only" (31.0%), "other drugs only" (29.0%), and "alcohol and other drugs" (28.0%).

The number of Emergency Room visits at the Canmore Hospital has increased 31% over a two year period. This increase is partially explained by the large increase in the non-permanent population and increased use of the hospital by patients from other communities. Patients seeking more rapid treatment also come to the Canmore ER from surrounding regions if their local ER is busy. The recruitment of specialists for medical care has been facilitated by the number of physicians who are permanent or part-time residents of Canmore. There are 93 full and part-time physicians with privileges at the Canmore Hospital. This provides access to a wide variety of specialists and family physicians so Canmore does not experience the same difficulty as many communities across Alberta in terms of access to medical services.

The composition and occupancy of the housing stock is shifting. The proportion of multi-family dwelling units continues to increase as redevelopment and new construction predominantly favours this style of structure. The non-permanent population continues to occupy an increasing proportion of the housing stock, reaching a new high of 29.1% in 2008.

Rental rates continued to rise through to 2008, with the average monthly rent for a two-bedroom apartment reaching \$1,539, an increase of \$600 per month from 2002. Canmore remained comparatively more expensive for renters, with monthly payments in 2006 averaging almost 30% higher than other communities in Alberta.

Home resale prices continued to climb sharply until 2008, reaching a peak of over \$641,000 in 2007. The global economic situation started to show it's effect on housing prices in 2008 with a decrease in sales volume and a decrease in average prices of -1.6%. The impacts of the economic situation are still working their way through the real estate industry so at this point in time it is not clear what the final impact on housing prices will be.

Housing affordability continues to be an issue for many in the community as the gap between wages and house prices continued to grow. Recognizing the importance of this issue, the Town of Canmore and community stakeholders developed a Comprehensive Housing Action Plan (CHAP) in 2008, detailing the need for housing options, and outlining a series of actions to address the problem. As of 2008, 83 total units of Perpetually Affordable Housing (PAH) had been brought on-line with an additional 134 units expected in 2009.

It continues to be difficult for individuals to stay in Canmore if they are socially or economically marginalized. Those with a low income, without a support network or without adequate childcare may not be able to afford to remain in Canmore. In order to better serve those in need in the community, Canmore needs information on who is leaving the community and why. With this knowledge, programs or strategies may be developed to enable people to stay in the community.

## Introduction

Measuring the social "health" of a community is challenging because different members of the community perceive social health in many different ways. Canmore strives to be a "community that supports its diverse population with affordable housing, a strong and varied economy, a full array of social services, abundant open spaces and ample opportunities for recreation and artistic expression" (Mining the Future: A Vision for Canmore 2006). For the purposes of this report, thirteen categories of social indicators were chosen out of a myriad of possible sets of data. The Federation of Canadian Municipalities has developed a set of indicators for large cities across the country and where possible we have collected this data locally. Other social indicators are international measures of social conditions.

# **Community Involvement**

- 1. Volunteer Organizations
- 2. Library Facilities and Use

## Education

- 3. Education of Children and Youth
- 4. Education Level of Adults

## **Social Needs**

- 5. Food Security
- 6. Social Assistance

# **Public Safety**

- 7. Crimes against Persons and Property
- 8. Domestic Violence

## Health

- 9. Alcohol and Drug Use
- 10. Health Services

# Housing

- 11. Dwelling Unit Types
- 12. Tenancy Status of Dwelling Units
- 13. Occupancy Rates
- 14. Rental Housing Costs and Availability
- 15. Average House and Condominium Resale Prices
- 16. Housing Affordability

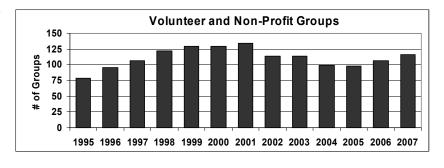
# 1. Volunteer Organizations

Volunteer organizations are a measure of the level of community activity and community spirit. These organizations enhance Canmore's quality of life by providing recreational and cultural opportunities, various religious options, support for those in need, or by protecting the environment

**Note:** In 2002, there was a decrease from the previous years largely because any for-profit groups previously listed in the directory ceased to be recorded. Organizations were counted once, although they may have appeared several times in the directory. Only organizations based in Canmore are included.

### **Observations:**

1. The number of volunteer and community organizations appeared to be increasing with the increasing population until 2001. In 2002 there was a drop in organizations listed due to the removal of for-



profit listings from the service. Since 2005, the number of organizations listed has had an upward trend, increasing from 98 in 2005 to 116 in 2007.

- 2. Based on estimates provided by the organizations listed in the Community Resource and Business Directory in 2006, the organizations listed received over 75,000 hours of volunteer assistance from 2,446 individuals. This information is no longer being included in the Community Resource and Business Directory. (Note: individuals may volunteer for multiple organizations and may be counted more than once, and not all organizations provided estimates on the number of volunteers or hours.)
- 3. There is a wide range of volunteer and non-profit organizations in Canmore. The three most common organizations listed in 2007 are recreation and leisure organizations, human services and helping agencies, and churches and religious organizations. (Town of Canmore, 2007a)
- 4. As of October 2008, there were 47 registered charities in Canmore. This is equivalent to 3.9 charities per 1,000 residents. There were 2.3 charities per 1,000 residents in Alberta and 2.2 per 1,000 in Canada. (CRA, 2008)
- 5. Of 854 responses in the 2008 Sense of Community Report, residents help out in the community an average of 8.6 hours per month (median of 5.0). Of 1,154 responses to the question "I help out by volunteering in the community", 26.0% agreed somewhat, and 32.4% agreed completely. (HarGroup, 2008)

### **Community Initiatives:**

1. There is a "Not for Profit" information sharing network in the Town of Canmore's Family and Community Support Services (FCSS) Resource Centre.

- 2. FCSS also helps recruit and refer volunteers to volunteer opportunities.
- 3. FCSS provides training on volunteer management through community workshops and noon hour lunch discussions.

## **Interpretation:**

- 1. Canmore continues to have a wide range of volunteer and non-profit organizations. As expected, from 1995-2001 the number and variety of volunteer and non-profit organizations increased as Canmore grew. From 2005 through 2007, the number of these groups in Canmore has been on a slight upward trend.
- 2. In 2002, due to the decision to remove any for-profit group listings, there was a drop in the total number of organizations listed. As expected, the number of organizations fluctuates somewhat from year to year. These fluctuations are due to the fact that some agencies do not renew their listings in the Canmore Community Resource & Business Directory, some agencies dissolve, and some do not register.

# 2. Library Facilities and Use

Library membership and circulation are standardized measures that can be compared to other communities. Circulation is the number of items checked out by members throughout the year. In 1999, the Canmore Library switched over to an online library system, which produced an increased number of interlibrary loan requests. People from other libraries can now more easily access the Canmore collection and Canmore residents can more easily access the collections of other communities.

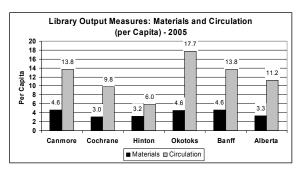
### **Observations:**

1. From 2001 to 2005, the number of people with library memberships (cards) rose steadily, even though since 2003 the permanent population remained relatively stable. In 2006 the memberships dropped to 5,898 as the membership database was purged of inactive records, rising again to 6,427 in 2007. More than half the permanent



population of Canmore has a library card. (Note: Membership numbers not available for 2000 due to database changes)

- 2. From 1997 to 2003, circulation of materials per capita (based on permanent population) remained fairly constant, ranging from an average of 15.1 to 15.9 materials per person per year. By 2006 circulation per capita had dropped to 12.2, rising to 12.6 in 2007.
- 3. The total number of materials circulated rose steadily from 1995 to 2002, and has decreased from a high of 175,021 in 2002 to 141,159 in 2006. Circulation in 2007 rose to 148,647. (Canmore Public Library, 2008)
- 4. In 2005 (the most recent year for which comparison data is available), Canmore had a total of
  - 4.6 materials per capita (based on permanent population), which was equal to the per capita number of materials in Banff and Okotoks but higher than in Hinton (3.2), and in Cochrane (3.0). The average for all Alberta libraries was 3.3 materials per capita. Per capita circulation was lower than in Okotoks (17.7), but the same as Banff (13.8 for both). (Alberta Community Development, 2007a)



5. The Canmore Public Library reports that there have been increasing demands on the library facility and services offered. They attribute this to the increasing permanent and non-permanent population. Demand for computer and internet access is particularly high.

## **Interpretation:**

- 1. In Canmore, there is a high level of community interest in the public library, which includes active use and circulation of materials. Canmore's library is as active, or more active, than nearby communities of similar sizes. The demand for materials and programs must be balanced by the space and staff constraints. Space for a new library is currently under review.
- 2. The Canmore Public Library is active in many other activities that are not included above, such as providing public computer and internet access, interlibrary loan requests, various programs and general visits. The use of the online library system has dramatically increased the number of interlibrary loans both to and from the Canmore library.

## 3. Education of Children and Youth

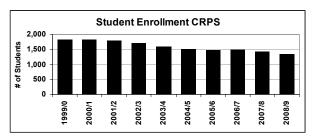
This section includes several measures of various aspects of formal education of children and youth. Included in this section is information on the local school boards, and their enrolment. A major component of this section is Class Size, which is a province-wide indicator that is defined as the number of students in a class with a single teacher. This number does not include teacher assistants, teacher librarians, specialist teachers, or administrators and other educators who have classroom responsibilities.

#### **Observations:**

1. There are now three school boards operating in Canmore: Canadian Rockies Public Schools (CRPS), Christ the Redeemer, and Conseil Scolaire Catholique Francophone Du Sud de L'Alberta. Although Canmore's permanent population has increased by 57.3% from 1995 to 2008, the number of children and youth under the age of 14 decreased by 1.9%.

### **Canadian Rockies Public Schools**

2. Canadian Rockies Public Schools (CRPS) operates three schools in Canmore: Elizabeth Rummel Elementary School, Lawrence Grassi Middle School, and Canmore Collegiate High School. Enrolment in these three schools has decreased from 1,838.5 in 1999/00 to 1,356



in 2008/09 (a total decrease of 26.2%). Over the last school year, enrolment has dropped by 4.9% or 68 students. The greatest drop in enrolment has occurred at Lawrence Grassi Middle School, where the number of students has decreased from 710 in 1999/0 to 378 in 2008/9, a drop of 46.8%. (CRPS, 2008a)

- 3. At Canmore Collegiate, average class sizes for all years from 2003/4 to 2007/8 were below the Alberta Commission on Learning recommendations (with the exception of grade 9 core subjects in 2006/7, which was 0.3 students over the recommended class size).
- 4. At Elizabeth Rummel, class sizes have averaged above the recommended level for the Kindergarten to Grade 3 category, and were above the recommended level for 4 to 6 in 2003/4, but have since remained below the threshold.
- 5. At Lawrence Grassi, average class sizes were above the threshold in 2003/4 but have generally remained below the threshold (with the exception of Grades 4 to 6 which were 0.7 above the threshold in 2007/8). A new building was constructed for Lawrence Grassi Middle School which the students began using in September 2008. (CRPS, 2008b)
- 6. Since 2002, there have been 10 or fewer children per year registered for home schooling with the CRPS.
- 7. As part of the Accountability Pillar, Alberta Education conducts census surveys in schools of all teachers, Grades 4, 7 and 10 students and their parents to gather information on the quality of education provided by Alberta school jurisdictions and their schools. The results showed that of the seven measured categories CRPS board scored "Good" in six and "Acceptable" in one. Board-wide results from Christ the Redeemer were not included here as only one of their schools is in Canmore. (CRPS, 2008c)

## Canadian Rockies Public Schools Accountability Pillar Overall Summary Annual Education Results Reports – October 2008

		Measure			tion's Res		Provir	ncial Resu		Measure Evaluation			
Goal	Measure Category	Category Evaluation	Measure	Current Result	Prev Yr Result	Prev 3 Yr Avg	Current Result	Prev Yr Result	Prev 3 Yr Avg	Achievement	Improvement	Overall	
	Safe and Caring Schools	Good	Safe and Caring	84.7	83.4	82.9	85.1	84.2	83.9	High	Maintained	Good	
Goal 1: High			Program of Studies	77.3	77.1	75.9	79.4	78.5	77.8	Intermediate	Maintained	Acceptable	
Quality Learning Opportunities	Student		Education Quality	85.9	85.3	83.1	88.2	87.6	87.1	Intermediate	Improved	Good	
for All	Learning	Good	Drop Out Rate	3.5	5.8	5.4	5	4.7	5	High	Improved	Good	
	Opportunities		High School Completion Rate (3yr)	70.7	62.8	68.2	71	70.4	70	Intermediate	Maintained	Acceptable	
	Student		PAT: Acceptable	81.5	82.6	79	75.8	75.9	76.7	Intermediate	Maintained	Acceptable	
	Learning Achievement (K-9)	Good	PAT: Excellence	21.9	21.7	19	19.6	19.5	19.3	High	Improved	Good	
			Diploma: Acceptable	90.1	92.8	92.2	85	85.4	85.2	High	Maintained	Excellent	
	Student Learning Achievement (Grades 10-12)		Diploma: Excellence	26.1	31.4	26.8	22.3	23.3	23.1	Very High	Maintained	Excellent	
Goal 2: Excellence in Learner		Good	Diploma Exam Participation (4+ Exam)	58	51.3	52.4	53.6	53.7	53.2	High	Improved	Good	
Outcomes			Rutherford Scholarship Eligibility Rate	40.9	37.8	38.5	38.2	37.2	35.4	High	Maintained	Good	
	Preparation for		Transition Rate (6 Yr)	39.1	54.1	40.7	60.3	59.5	57.1	Very Low	Maintained	Issue	
	Lifelong Learning, World of Work.	Acceptable	Work Preparation	75.6	73.2	69.9	80.1	77.1	76.4	Intermediate	Improved	Good	
	Citizenship		Citizenship	74.5	75.2	73.3	77.9	76.6	76.2	Intermediate	Maintained	Acceptable	
Goal 3: Highly Responsive and	Parental Involvement	Good	Parental Involvement	77.1	71.2	71.9	78.2	77.5	77.2	Intermediate	Improved	Good	
Responsible Jurisdiction (Ministry)	Continuous Improvement	Good	School Improvement	74.7	76.1	72.1	77	76.3	75.7	Intermediate	Improved	Good	

Source: Canadian Rockies Public Schools 2007-2008 Annual Education Results Report (CRPS, 2008c)

Class Sizes -	K to 3				4 to 6				7 to 9					10 to 12						
Core Subjects	03/04	04/05	05/06	06/07	07/08	03/04	04/05	05/06	06/07	07/08	03/04	04/05	05/06	06/07	07/08	03/04	04/05	05/06	06/07	07/08
Canmore Collegiate	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	24.6	20.6	20.4	25.3	23.5	25.9	20.5	25.4	25.3	22.9
Elizabeth Rummel School	22.3	19.9	19.9	20.6	20.3	25.2	20.4	20.0	20.8	19.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Lawrence Grassi Middle School	n/a	n/a	n/a	n/a	n/a	26.2	22.5	22.3	22.7	23.7	26.8	19.8	23.7	23.1	24.4	n/a	n/a	n/a	n/a	n/a
Our Lady of the Snows	16.6	19.0	18.8	20.6	13.3	23.0	21.8	27.8	19.8	23.3	21.0	23.7	22.3	16.7	15.6	n/a	7.0	11.0	8.5	8
Notre-Dames des Monts	12.5	8.8	12.0	17.0	12	4.0	8.8	14.0	15.5	18	n/a	n/a	n/a	n/a	11	n/a	n/a	n/a	n/a	n/a
ACOL Recommendation	17.0			23.0				25.0					27.0							

Class Sizes - All	K to 3				4 to 6				7 to 9					10 to 12						
Subjects	03/04	04/05	05/06	06/07	07/08	03/04	04/05	05/06	06/07	07/08	03/04	04/05	05/06	06/07	07/08	03/04	04/05	05/06	06/07	07/08
Canmore Collegiate	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	21.5	20.2	24.8	21.3	n/a	20.2	23.1	23.3	22.6
Elizabeth Rummel School	n/a	19.9	20.1	20.8	20.4	n/a	20.4	20.0	20.8	19.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Lawrence Grassi Middle School	n/a	n/a	n/a	n/a	n/a	n/a	22.4	22.4	22.5	23.6	n/a	19.8	21.0	20.7	21.3	n/a	n/a	n/a	n/a	n/a
Our Lady of the Snows	16.6	19.0	18.8	20.3	13.4	23.0	21.8	27.8	19.8	22.4	21.0	23.7	22.3	16.0	16.5	n/a	7.0	11.0	9.9	9.6
Notre-Dames des Monts	n/a	10.5	12.0	17.3	12.4	n/a	8.8	14.1	15.5	19	n/a	n/a	n/a	n/a	11	n/a	n/a	n/a	n/a	n/a
ACOL Recommendation			17.0			23.0	23.0 25.0						27.0							

Source: (CRPS, 2008b; Christ the Redeemer, 2008; CSCFSA, 2008)

#### Christ the Redeemer

8. Christ the Redeemer's one Canmore school, Our Lady of the Snows, opened in 2001 with 76 students, increasing to 236 students in 2005/6, and 245 students in 2008/9 school years. For Kindergarten to Grade 3, average class sizes rose above the threshold in 2004/5, dropping well below the threshold in 2007/8. The average class sizes for grades 4 to 6 rose above the threshold in 2005/6, dropping in 2006/7, and hovering at or below the threshold in 2007/8. Grades 7 to 9 have had average class sizes below the threshold for all years, while the newly added grades 10 to 12 have had average class sizes well below half the recommended limit. The new school facility, located in Three Sisters Mountain Village, opened in January 2009. This facility will be shared with the French Catholic school Notre-Dame des Monts. (Christ the Redeemer, 2008)

### Conseil Scolaire Catholique Francophone Du Sud de L'Alberta

9. Conseil Scolaire Catholique Francophone Du Sud de L'Alberta has one French school in Canmore, Notre-Dame des Monts, which was established in 2002 with 16 students. In 2007/8 there were a total of 80 students. Average class sizes were generally well below the recommended thresholds for grades K to 6. (CSCFSA, 2008)

#### **Other Schools**

10. Mountain Gate Community School was a small private school (30-40 students) that offered pre-Kindergarten to grade 6. It ceased operations in 2007.

#### **Community Initiatives:**

- 1. The "Inspiring Hearts and Minds Canadian Rockies Public Schools (CRPS) Futures Planning" was initiated in 2007 as an information and idea gathering process that identified community values, education trends and forces of change affecting education. The Futures Planning process will inform future CRPS strategic planning and decision making, leading to actions that will support student learning. This project was guided by a group comprising school administration, school council members, parents, teachers, other educators and students. An implementation coordinator was hired in September 2008. (Chinook Institute, 2008)
- 2. "Right from the Start" is a school-based mental health capacity building initiative for children and families which is being implemented in Canmore at Elizabeth Rummel School. The three year program began in September 2008. It is designed to increase coping behaviours, knowledge and skills of children to enable them to make healthy choices and adopt behaviours to self-protect their mental, physical and emotional health at as early an age as possible.

### **Interpretation:**

1. There are three operational school boards in Canmore. Two of these school boards have been established since 2001. Canmore has a relatively low number of students and a declining number of children for this number of schools and boards. This results in a division of resources and increases in administrative costs. However, the establishment of these boards also provides educational choices for Canmore families.

- 2. Sustainability of this number of schools and school boards for this number of students becomes an issue as schools diminishing in size must choose between support staff, vice principals, guidance councillors, etc or more frontline staff. Student choices may also become more limited as resources are less efficiently used.
- 3. The Alberta government has concluded that "...reducing class sizes goes a long way to laying a foundation for a positive learning environment". The Small Class Size Initiative introduced in 2004, has focused on reductions in average class sizes to meet targets recommended by the Alberta Commission on Learning Recommendation. The decreasing number of children in the public school system in Canmore has also largely resulted in class sizes meeting or falling below the maximum class size recommendations, but has created other challenges such as decreasing enrolment and fewer resources for staffing.

#### **Recommendation:**

That in future versions of the Canmore Community Monitoring Report, the Accountability Pillar results are presented on a school-specific basis for all Canmore schools.

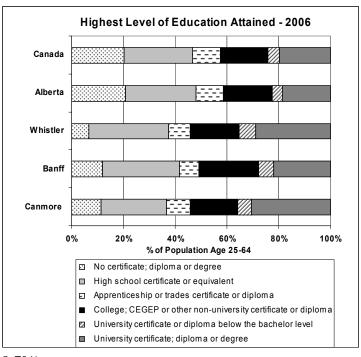
## 4. Education Level of Adults

This indicator compares the highest levels of education attained by adults living in Canmore to those living in other communities. This helps determine specific programs and services that may be needed, such as enhanced learning at the appropriate levels for the community.

\*(Note: Due to changes in reporting categories the 2006 Census of Canada is not comparable to 2001 or earlier data.)

#### **Observations:**

1. In 2006, a total of 30.5% of Canmore's population (aged 25 to 64) had completed a University diploma, or certificate, degree at the bachelor level or higher. This is slightly higher than Whistler (29.0%) and much higher than Banff (21.9%) or the population general of Alberta (18.6%) or Canada (19.7%).



2. The proportion of people lacking any formal educational qualifications was 11.4%, much lower than the average for Alberta (21.0%) or Canada (20.2%). (Statistics Canada, 2006a)

## **Interpretation:**

- 1. A greater proportion of adults in Canmore have attained higher levels of education than the overall proportion in either Alberta or Canada.
- Generally, people with a higher education have higher incomes. However this could also be one of the factors resulting in difficulty staffing entry level positions, as diversity in education levels and skill sets is required for staffing different ranges of jobs.

## **5. Food Security**

There are various programs that respond to food need in Canmore including the Christmas and Food Bank Hamper Programs, and the Food for Learning Programs. Christmas Hampers are requested directly by families in need, or by referral from a neighbour or friend. The number of Christmas Hampers that are distributed is an indicator of this demand and the ability of the community to meet that demand.

Food Bank hampers are given out to people who are having difficulties feeding themselves or their families. There are many reasons people request hampers from the food bank including unemployment, underemployment, needs additional to those provided by social assistance, emergency circumstances, and transience. Families and individuals are limited to six hampers a year.

There are several Food for Learning programs at Canmore schools that provide snacks and lunch or breakfast to children whose families are having difficulty providing adequate food for their child. Lawrence Grassi Middle School, Elizabeth Rummel Elementary School, and Our Lady of the Snows Catholic School all provide such programs. Families in need can self-identify or may be connected to the program by staff aware of the need. Food for Learning programs are supported by various means including by community and corporate donations, volunteers, the Bow Valley Food Bank and the Canadian Living Breakfast for Learning Foundation.

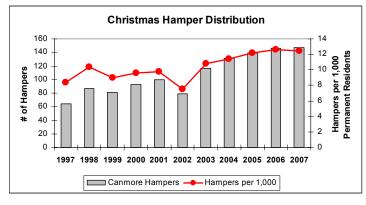
**Threshold:** The supply of food and donations meets the demand.

#### **Observations:**

(Note: The permanent population for 1994, 2001, 2003, 2005, and 2007 was extrapolated assuming linear change between the previous and subsequent census years

## **Christmas Hampers**

1. Christmas hamper distribution in Canmore has more than doubled from 64 in 1997 to 147 in 2007. The number of hampers remained steady at 146 in 2006, and 147 in 2007. Hampers are also provided to residents of Morley as part of the annual campaign (80 hampers in 2007.



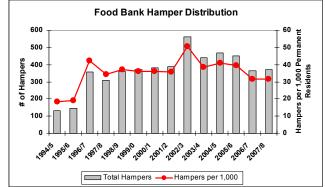
2. The total number of people served increased from 321 in 2003 to a high of 380 in 2006, dropping to 317 in 2007 (note the number of people served is not directly

proportional to hampers distributed as single individuals or larger/smaller families may receive one hamper). This represents a decrease of people receiving hampers from 3.3% of the permanent population to 2.7%. From 2006 to 2007 there was a shift in demographics of those receiving hampers with the number of senior's served rising from 30 to 43, but the number of children dropping from 173 to 124.

- 3. The rate of Christmas hamper distribution has fluctuated from a low of 7.5 hampers per 1,000 permanent residents in 2002, to a high of 12.5 hampers per 1,000 permanent residents in 2007.
- 4. The Bow Valley Christmas Spirit Campaign (Canmore) has been able to meet requests for Christmas hampers with surplus money going to various community groups including the Bow Valley Food Bank. In 2007, they more than exceeded their goals for financial and in-kind contributions from the community. (Bow Valley Christmas Spirit Campaign, 2008)

#### Food Bank

- 5. The total number of Food Bank hampers distributed per year ranged from 132 in 1994/5 to a high of 563 in 2002/3, decreasing to 370 in 2007/8.
- 6. The total number of people served by the Food Bank ranged from 272 in 1994/5 to a high of 957 in 2002/3, dropping to 642 in 2007/8.



- 7. The rate of Food Bank hamper distribution (hampers per 1,000 permanent residents) reached a high of 50.5 in 2002/3, dropping to 31.4 for 2006/7 and 2007/8.
- 8. In 2007/8, 94.2% of the Food Bank's clients were residents of Canmore and 68.8% of the Food Bank clients had lived in the Bow Valley for 1 year or less.
- 9. Only 0.7% of the Food Bank's clients in 2007/8 were age 65 or older, while 35.9% were age 25 or under. (Bow Valley Food Bank, 2008)

#### Food For Learning Program

10. The number of children helped through the Food for Learning Program varies throughout each year and between years. About 15 children per year are helped through the program at Elizabeth Rummel Elementary school with about the same number helped through the Lawrence Grassi program. Our Lady of the Snows has an average of 10-12 students involved in their Food for Learning Program.

#### **Community Initiatives:**

- 1. The Canmore Hospital has food hampers and used clothing access on site to help address those needs for patients.
- 2. Other community food need initiatives available in Canmore include a community garden, food co-ops, a food security group and the Meals on Wheels program.

Information on these programs can be obtained from Family and Community Support Services at the Town of Canmore.

## **Interpretation:**

- 1. The Bow Valley Christmas hamper program, more than adequately supplies the demand for Christmas hampers, with surplus money going to the Bow Valley Food Bank and other community groups
- 2. At present, supply is meeting demand for the Food Bank Hamper service.
- 3. The Food for Learning Program is meeting the identified needs at the three schools in Canmore where it is being offered.
- 4. The participation rates in these various food programs suggest that there is a continued need in Canmore. They also suggest a disconnect between perception and reality, as people think of Canmore as an affluent community where everyone has substantial financial resources.

#### **Recommendation:**

As information from initiatives such as community garden, food co-ops, the food security group and the Meals on Wheels program becomes available it should be included in this report to give a more complete pictures of the demand for and responses to food need in the community.

## 7. Social Assistance

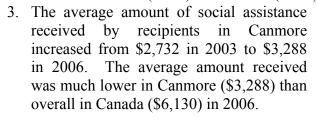
One criterion for moving towards Canmore's community vision is to provide basic social services for all citizens (Mining the Future: A Vision for Canmore 2006). This social assistance indicator previously reported on "Income Support Caseloads" which was based on provincial income support programs (for the period from 1997 to 2002). Data specific to individual communities is no longer available for the period from 2003-2008, due to changes in data management methods. Therefore, this indicator has been replaced by the more inclusive measure of "Social Assistance" derived from Statistics Canada Taxfiler data. Social Assistance includes: "payments made in the year on the basis of a means, needs or income test (whether made by an organized charity or under a government program)" (Statistics Canada: Economic Dependency Profile –User's Guide).

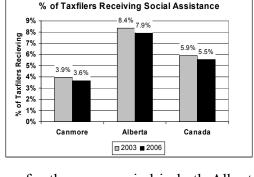
Social assistance programs available to (but not limited to) qualifying individuals include: Assured Income for the Severely Handicapped (AISH), Personal Income Support Benefits (PSIB), Alberta Works Income Support Program, Alberta Adult Health Benefit (AAHB).

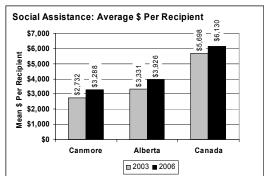
#### **Observations:**

- 1. In 2003 there were 340 people reporting social assistance payments in Canmore, and 360 in 2004, decreasing to 330 in 2006. A total of 190 seniors age 65+ reported receiving social assistance in 2006 (note: totals rounded to meet Statistics Canada confidentiality requirements).
- 2. A total of 3.9% of those filing taxes in Canmore reported receiving social assistance payments in 2003, this decreased

to 3.6% in 2006. There were similar decreases for the same period in both Alberta and Canada. The proportion of persons receiving social assistance in 2006 was lower than both Alberta (7.9%) and Canada (5.5%).



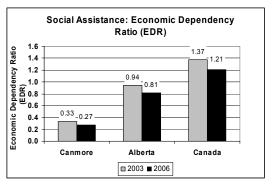




4. The relative importance of social assistance payments to a community can be expressed in terms of an Economic Dependency Ratio (EDR): "For a given area, the EDR is the ratio of transfer dollars to every \$100 of total employment income. For

example, where a table shows an EDR of 12.1, it means that \$12.10 was received in transfer payments for every \$100 of employment income for that area" (Statistics Canada: Economic Dependency Profile-User's Guide).

5. The EDR for social assistance payments in Canmore had decreased from 0.33 in 2003 to 0.27 in 2006. This is much lower than that in Alberta (0.81) or Canada (1.21). (Statistics Canada, 2008b)



#### **Interpretation:**

- 1. Compared to provincial and national averages, Canmore has a much lower proportion of people receiving social assistance. Additionally, Canmore has a lower rate of economic dependence on social assistance payments (relative to employment income). This reflects the high participation rates in the labour force in Canmore, and the very low unemployment rate.
- 2. Some recipients of social assistance in Canmore are short term cases, including young adults who have recently moved to town, have found a job and are waiting for their first pay cheque.
- 3. Many social assistance programs are not keeping pace with the increasing cost of living, make it more and more difficult for people on social assistance to live in Canmore.

#### **Recommendation:**

Continue to obtain annual income data from Statistics Canada in order to track changes in the level of social assistance and Economic Dependency Ratio over time.

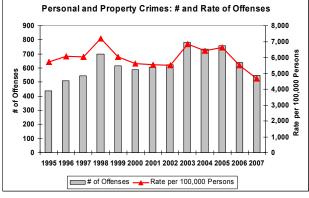
## 8. Crimes Against Persons and Property

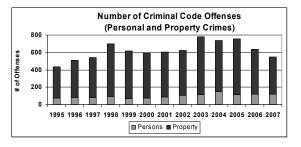
Crimes against persons and property are nationally accepted methods of measuring criminal activity over time. The RCMP responds to all persons and property crimes that are reported. Crime rates are typically expressed in standardized terms of the number of offences per 100,000 members of the population.

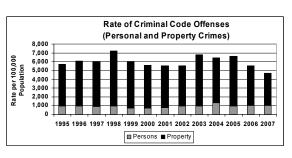
**Threshold:** The threshold for personal and property crimes is the average rate in Alberta and Canada per 100,000.

#### **Observations:**

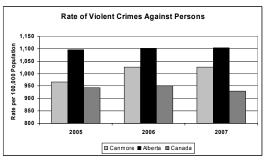
- 1. From 1995 to 2001 the total number of crimes against persons ranged from a high of 94 in 1998 to a low of 72 in 1999. By 2002 the total was 108, rising to 152 in 2004. In 2005 the number of offences dropped sharply to 112, rising to 121 in 2007.
- 2. The rate of offences against persons (based on a rate per 100,000) has fluctuated from a low of 703 in 1999, to a high of 1,328 in 2004. In 2007 the rate was 1,026 per 100,000, slightly higher than the average rate for Canada of 930 per 100,000 persons, and lower than the average for Alberta (1,104 per 100,000).
- 3. The number of property crimes has fluctuated between a low of 362 in 1995 to a high of 671 in 2003. **Property** crimes dropped to 429 in 2007. The majority (approximately 60%) of the property crimes were for "Theft under \$5,000".

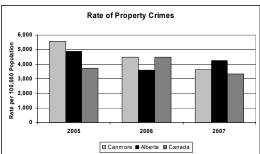






4. The rate of property crimes (based on a rate per 100,000) has fluctuated somewhat on an annual basis, reaching a high of 6,230 in 1998. The rate of property crimes dropped to a new low in 2007 to a rate of 3,638 per 100,000 in 2007. This is higher than the overall Canadian average of 3,320 per 100,000 persons, but much lower than the average rate for Alberta of 4,259 per 100,000 persons. (Statistics Canada, 2008c)





- 5. Responses to the 2008 Sense of Community Report indicate that almost half the population feels that crime has increased over the last 3 years, while almost half feels that it has remained the same. Only 0.9% felt that the rate of crime had actually decreased. Although half the population felt that crime had increased, 81% felt that their feelings of safety in their homes had remained the same.
- 6. On a scale of '1' (very unsafe) to '10' (very safe) 80% of the responses to the Sense of Community Report ranked Canmore as an '8' or higher for perception of safety. (HarGroup, 2008)

## **Community Initiatives:**

- 1. Additional members have been added to the Canmore RCMP over the last several years. The following members have been added: in 2005 one additional member, in 2006 three additional members, in 2007 one additional member, and in 2008 one additional member (based on a March to April fiscal year).
- 2. The volunteer based Community on Patrol program that was active in 2006 is no longer active, due to a lack of volunteers for the program.

#### **Interpretations:**

- 1. From 2005 through 2007, both the number and rate of criminal code offenses has declined. During that same period, the rate of violent crimes against persons has increased, while the rate of property crimes has decreased. In 2007, the rate of violent crimes against persons and the rate of property crimes were higher than the average rate for Canada, but lower than the average rates for Alberta.
- 2. It is important to remember that these statistics reflect *reported* criminal code offenses. The actual number of crimes is likely higher, and reporting rates can vary by the type and severity of crime.
- 3. The increasing population, visitation and highway traffic has surprisingly not resulted in a corresponding increase in crime. Increased police presence may have helped reduce these potential impacts.

#### **Recommendations:**

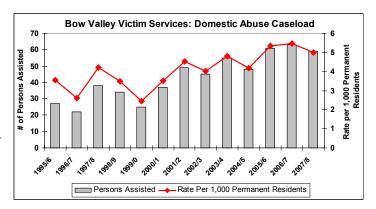
More information on the victims of crime, such as whether they are locals or tourists and whether the criminals know their victims would be useful. Information would also be useful on the proportion of crimes that are petty crimes of opportunity i.e. thefts from unlocked cars.

## 9. Domestic Violence

This indicator records the number of complaints responded to by the Bow Valley Victim Services Association (BVVSA) about harassment, intimidation, and violence by a spouse or common-law partner, or by an estranged spouse or common-law partner in the area serviced by the Canmore RCMP. Only reports of criminal acts, alleged criminal acts or inquiries if a criminal act has occurred are recorded.

### **Observations:**

1. Since 1995/6, the BVVSA has dealt with on average 43 individuals from the Canmore area per year affected by domestic abuse, ranging from 22 in 1996/97 to 63 in 2006/07. In 2007/8, 59 victims of domestic abuse in Canmore were assisted by the program. Domestic abuse



was the most frequent occurrence responded to by the program in 2007/8, representing 45.1% of all BVVSA files in Canmore.

- 2. Proportionally the rate per 1,000 permanent residents has increased from 3.5 to 5.5 per 1,000 (with a steady increase from a low of 2.4 in 1999/0 to a high of 5.5 in 2006/7). In 2008 the rate per 1,000 permanent residents was 5.0.
- 3. Approximately half of all domestic abuse incidents dealt with by the BVVSA are referred to by the RCMP. The other 50% of domestic abuse files are initiated by victims contacting the program directly or through other community agencies.
- 4. The BVVSA office at the Canmore RCMP detachment was closed in January 2007. Services to both Banff and Canmore are now provided from the Banff detachment. BVVSA notes that since the closure of the office 50% less victims of crime are referred to the program by Canmore RCMP. (BVVSA, 2008)
- 5. In the 2008 Sense of Community Report, 6% of the respondents indicated that they were either very or somewhat concerned by domestic violence in the community. (HarGroup, 2008)

#### **Community Initiatives:**

- 1. Bow Valley programs are offered at the Banff YWCA including men's and women's support groups, community workshops, crisis counselling and shelter options.
- 2. The Town of Canmore's Family and Community Support Services (FCSS) offers inschool workshops and presentations to students on bullying, friendship, conflict resolution, leadership and other social development capacity building sessions.
- 3. The BVVSA provides support, assistance and information to victims of crime and trauma, including occurrences of domestic abuse. Other services include school

- programs on relationships and abuse, crisis intervention, court assistance, education programs, safety planning, and information on legal services.
- 4. The Canmore Hospital has been participating in an intervention that has been implemented across all Emergency Rooms in the Calgary Health Region. On admission to the ER all adults are asked specific questions about domestic abuse/violence in their lives. This has resulted in more open conversations about domestic violence and allowed for referral to community resources to those who express a need for help.

## **Interpretation:**

- 1. As the reporting rate of incidents of domestic violence is traditionally low relative to the actual number of incidents, these statistics do not reflect the full extent of domestic abuse within our community. The amount of actual abuse involving a criminal act is often estimated to be 3 to 4 times higher than reported.
- 2. Also, as these statistics only reflect criminal acts, alleged criminal acts or inquiries if a criminal act has occurred, other non criminal forms of domestic abuse such as verbal, psychological, emotional and/or financial abuse are not reflected.
- 3. The data may indicate changes in rates of domestic abuse or may indicate changes in reporting levels to BVVSA of such abuse.
- 4. The BVVSA suggests that the closure of the Canmore office in 2007 has resulted in fewer individuals accessing services from their program after incidents of domestic abuse.

#### **Recommendations:**

- 1. That the effects of not having a physical space in Canmore for Bow Valley Victim Services be assessed.
- 2. Social marketing campaigns need to be strengthened to effect change, as current reporting of domestic abuse represents only a fraction of actual occurrences.

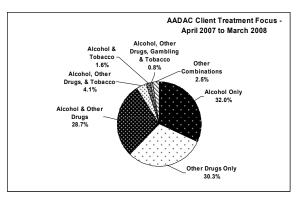
## 10. Alcohol and Drug Use

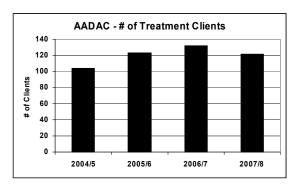
The Alberta Alcohol and Drug Abuse Commission (AADAC) offers treatment, prevention, and information services to help reduce the harms associated with alcohol, drug, gambling, and tobacco use. AADAC treatment services in Canmore are outpatient/by appointment and are free and confidential. Referral to detox, short and long term residential treatment programs are also available. AADAC provides community project funding to community groups and agencies to help prevent addictions by creating healthy communities.

**Threshold:** The average treatment rate for all Alberta communities.

#### **Observations**

- 1. The number of clients receiving treatment at the Canmore AADAC has varied between 104 clients in 2004/5 and 132 clients in 2006/7, there were a total of 122 clients in 2007/8.
- 2. The main reasons for treatment in 2007/8 was "alcohol only" (31.0%), "other drugs only" (29.0%), and "alcohol and other drugs" (28.0%).
- 3. The number of clients under the age of 18 has been highly variable between 2004 and 2008. There were 17 clients under the age of 18 in 2004/5, and 5 clients under the age of 18 in 2006/7, rising back to 16 clients in 2007/8.
- 4. The treatment rate in Canmore for 2006/7 was 11.4 per 1,000 permanent residents, slightly higher than the 9.2 per 1,000 residents for Alberta. Updated provincial rates for 2007/8 are not available at this time. (AADAC, 2008)





## **Community Initiatives:**

Several community programs exist to address addiction issues including AADAC, Alcoholics Anonymous, Al-Anon, and Narcotics Anonymous.

#### **Interpretations:**

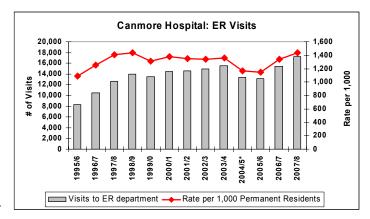
These are minimum numbers as they only include those seeking help through this specific service. Others may not seek help or may seek help through other avenues.

## 11. Health Services

This section reports on the accessibility and level of use of health services in the community. The Calgary Health Region does not calculate population health indicators specific to Canmore due to the relatively small population of the community. Standardized health indicators such as mortality rates, low birth weight babies, injury, disease etc. are available regionally, but since they are not community specific, they are not presented in this report. The regional population health indicators are available in the Health of the Region report from the Calgary Health Region.

#### **Observations:**

1. From 1995/6 to 2003/4 the number of emergency room visits at the Canmore hospital generally increased annually. Emergency room visits dropped from 15,600 in 2003/4 to 13,369 in 2004/5 with the introduction of a walk-in clinic with evening and weekend availability. By 2007/8 the number of



emergency room visits had risen by 31% in two years to 17,193 (1,432 visits per 1,000 permanent residents in 2007/8 from 1,147 in 2005/6).

- 2. Since 2000, the average active waitlist for Continuing Care in Canmore has varied from 2-9 people. In 2005, it had reached a low of 2, but rose to 5 persons by 2007.
- 3. The number of individuals receiving Home Care Services in Canmore continues to increase (from 145 in 2000 to 290 in 2007). During this time, the rate of home care has increased from 13.8 to 24.2 per 1,000 permanent residents.
- 4. The number of babies delivered at the Canmore Hospital has risen sharply due to an increase of the number of physicians in Canmore who have obstetrics as part of their practice, and an increase in the number of patients from the Stoney Reserve, Cochrane and Calgary. There were 91 deliveries in 2005, 86 in 2006, and 301 in 2007.
- 5. The Canmore Hospital reports a recent increase in demand for its health services (especially ER, surgery, obstetrics, CT scans, and endoscopy) by Albertans from other communities due to ready access to these services. For instance the number of endoscopies at the Canmore Hospital has increased by 57% over the past three years and Canmore is now a referral centre for south eastern BC and other parts of Alberta. While demand on services has increased, it has not limited access to these services by community members from the Bow Valley (per comm., Barb Shellian, Calgary Health Region).

- 6. The number of physicians with privileges at the Canmore Hospital increased from 64 in 2006 to 93 in 2008. This increase is due to an increase of specialists and/or physicians with temporary or locum privileges and reflects a minimal increase in the number of family physicians.
- 7. The Canmore Hospital is offering a number of enhanced services, including the Adult Day Support Program in the community, a cardiac testing program (made possible by community fund raising efforts to purchase specialized equipment), and a new vascular surgery program. (Calgary Health Region, 2008)

### **Community Initiatives:**

- 1. Alberta Health has continued to provide the community "Health Link" telephone help line, community public health workshops on family health, and several additional mental health staff doing community outreach
- 2. Many new businesses have opened in Canmore related to the Health and Wellness sector. For more information consult the Community Resource and Business Directory distributed by the Canmore Economic Development Authority (CEDA).
- 3. CEDA has set Health & Wellness sector growth as a priority to reduce Canmore's reliance on one or two economic drivers. CEDA is helping facilitate the creation of a health and wellness alliance, a directory of services and practitioners to move Canmore forward as a destination of healthy living and wellbeing.

## **Interpretation:**

- 1. Increases in Canmore ER visits are partially explained by the large increase in the non-permanent population. Rates of ER visits are based on only the permanent population numbers even though the non-permanent population and visitors also use these facilities. Patients seeking more rapid treatment also come to the Canmore ER from surrounding regions if their local ER is busy.
- 2. The recruitment of specialists for medical care has been facilitated by the number of physicians who have second homes in Canmore. This has allowed community residents increased access to specialist services close to home (cardiology, internal medicine, dermatology, vascular surgery, gynaecology, etc.).
- 3. Canmore has access to a wide variety of specialists and family physicians and does not experience the same difficulty as many communities across Alberta in terms of access to medical services.
- 4. The home care caseload has increased in numbers and acuity. There has been some additional allocation of resources to this program area and this has resulted in the ability to cope with a larger caseload of more complex clients.

#### **Recommendations:**

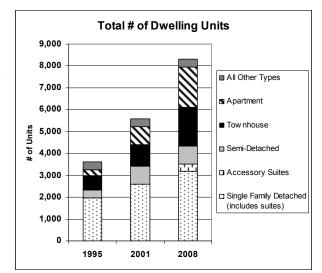
1. An analysis of Emergency Room visits by postal code would help to determine what proportion of use is by local residents vs. visitors from outside the community.

## 11. Dwelling Unit Types

The types of dwelling units available in the community have important implications for affordability, housing density, and infrastructure requirements. The nature of housing in Canmore is changing, as new areas are developed and existing neighbourhoods are redeveloped. An important goal for the community is to "ensure all citizens have access to basic levels of safe, secure, affordable and appropriate shelter" (Mining the Future: A Vision for Canmore 2006).

#### **Observations:**

- 1. In 2008 there were 8,252 total dwelling units in Canmore, up from 7,551 in 2006, and more than double the 3,604 units in 1995. The number of dwelling units has increased by an average of 358 units per year over this 13 year period.
- 2. The total number of single family detached homes (including those with suites) has increased from 1,980 to 3,196 since 1995. They have decreased as a proportion of the total dwelling units (from 54.9% in 1995 to 38.7% in 2008).



- 3. There has been a corresponding increase in the number and proportion of multi-family dwelling units (including semi-detached, townhouses, and apartments). Overall the number of multi-family units increased from 1,281 in 1995 to 4,432 in 2008 (representing 35.6% to 53.7% of the total units).
- 4. From 1995 to 2008, the proportion of mobile homes has decreased from 8.1% to 2.0% as the construction of Spring Creek Mountain Village has been taking place on the former site of the Restwell Trailer Park.
- 5. Two new categories were added to the Canmore Census in 2003 (Single Family with Suite and Accessory Suite) to better account for persons dwelling in suites that are part of a larger dwelling unit. In 2008 these two dwelling types represented 4.8% and 3.2% respectively, of the total dwelling units.
- 6. In 2003 a "tourist home" category was added to the Canmore Census. In 2003 there were 58 tourist homes (0.9% of all dwelling units) and by 2008 there were 255 tourist homes which represent 3.0% of all dwelling units (Town of Canmore, 2008a).

#### **Interpretation:**

1. The information regarding dwelling unit type captured by the Census is useful, but it does not provide answers to other important questions such as the nature and

- suitability of the units in question. For example, number of bedrooms, square footage, and cost are important factors in determining the suitability of the dwelling units for different residents including single persons, large families, retired couples, weekend residents, etc.
- 2. The number and proportion of multi-family homes will likely continue to rise since land zoning and current development plans indicate that the majority of new construction will be multi-family units.
- 3. The addition of the two new categories of suites in the 2003 census means that care must be taken in comparing numbers from previous years, particularly regarding semi-detached and single family dwellings.
- 4. Secondary suites provide additional income for home owners and an affordable housing option for tenants. Zoning regulations permit legal suites in certain neighbourhoods (e.g. R1B) while illegal suites in other neighbourhoods are common.
- 5. The future supply of homes in Canmore is limited due to the fixed land base. The Town is subject to topographical constraints and is surrounded by provincial and federal parkland.

## 12. Tenancy Status of Dwelling Units

The tenancy status of dwelling units provides information on the number and proportion of dwelling units that are owned and those that are rented by occupants. It also demonstrates the number of units that are occupied by the non-permanent and permanent population. The number of dwelling units under construction is also included. This section has important linkages to the indicators of Permanent and Non-Permanent Population in the Identity section.

#### **Definitions:**

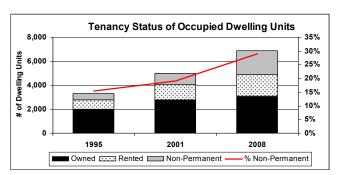
**Owned:** owned and occupied by a permanent resident(s).

**Rented:** rented and occupied by a permanent resident(s).

**Non-Permanent:** owned and occupied (on a part-time basis) by a non-permanent resident(s) who maintains a primary residence in another community.

### **Observations:**

1. The proportion of dwelling units owned and occupied by permanent residents fell from 60.3% in 1995 to 45.5% in 2008 (this excludes vacant dwellings, units under construction, and tourist homes). By comparison 71.6% of all dwelling units in Calgary (Census of Calgary,



2008) and 32.4% of all dwelling units in Banff (Census of Banff, 2007) were owner occupied. During this time the proportion of units rented by permanent residents has remained fairly stable, hovering around 25%. The proportion of units occupied by non-permanent residents has almost doubled from 15.4% in 1995 to 29.1% in 2008 (Town of Canmore, 2008a).

### **Interpretation:**

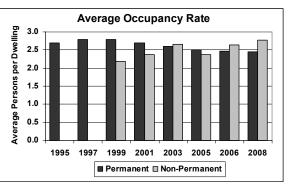
- 1. While the number of units owned and occupied by permanent residents has increased annually, it has done so at a much lower rate than those units owned and occupied by non-permanent residents. As a result the proportion of homes owned by non-permanent residents has almost doubled since 1995. This is reflected in both the population and dwelling unit counts from the municipal census: the permanent population is maintaining or increasing slightly, while the non-permanent population has continued a trend of rapid growth through 2008.
- 2. The decreasing proportion of the total dwelling units owned by the permanent population has important implications for the community's demographics, municipal revenues, social fabric, and local economy.
- 3. While the number of rented units has increased annually this information does not indicate whether or not the stock of available units meets the current level of demand for rental properties.

## 13. Occupancy Rates

This indicator measures the average number of people living in each type of household. Significant increases in these averages can translate into crowded conditions with related stresses within the households and within the community. Reductions in occupancy rates can also reflect a changing community demographic, such as a reduction in the number of families in a community.

#### **Observations:**

1. From 1995 to 2001 occupancy rates in single family dwellings averaged 3.0 persons per unit, but by 2008 they had declined to 2.8 persons per unit. Occupancy rates in townhouses, mobile homes. and apartments followed a similar trend. Occupancy in semi-detached homes remained at 2.5 or 2.6 persons per unit during the 1995-2008 period.



- 2. Overall occupancy rates were 2.7 or 2.8 persons per unit from 1995-2001, and had declined to 2.4 persons per unit by 2008.
- 3. The average occupancy rate for the non-permanent population rose from 2.2 in 1999 to 2.7 in 2003, dropping slightly and then rising to 2.8 in 2008 (Town of Canmore, 2008a).

#### **Interpretation:**

- 1. The decrease in average occupancy rate of the permanent population likely relates (in part) to the change in the age structure of Canmore's population and may relate to decreasing numbers of families with children. The occupancy rate will likely continue to decrease if the percent of children in the permanent population continues to decrease.
- 2. Occupancy rates are an important component of the overall housing situation, but alone do not give an indication if housing is safe or if it is affordable and appropriate which are described as goals in the Canmore visioning document.

#### **Recommendation:**

Average occupancy rates do not indicate what proportion of the population actually lives in an overcrowded situation. Using the raw census data to examine the distribution of occupancy rates would give a better indication of what proportion of the population lives in overcrowded housing.

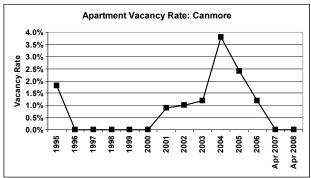
# 14. Rental Housing Costs and Availability

The costs of rental housing and the vacancy rates provide key indicators for community affordability and access and allow comparisons with other communities over time.

#### **Observations:**

## **CMHC Rental Market Report**

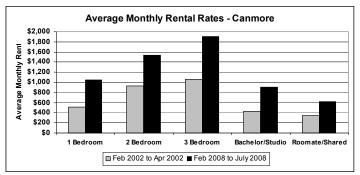
- 1. Apartment rental prices and vacancy rates for communities with a population greater than 10,000 are collected by the Canadian Mortgage and Housing Corporation (CMHC) as part of their annual Rental Market Survey. As noted in previous editions of the Community Monitoring Report, rental rates as reported by this survey seem to significantly underestimate the actual cost of rental housing in Canmore (likely due to the limitations of the sampling methodology). The Canmore Housing Needs Assessment 2000-2001 noted that "Rental rates from the CMHC survey are not included in this report due to concerns regarding their significant underrepresentation of market prices in Canmore." (For 2008, the average rental rates published by the CMHC survey were \$619 less per month for a two-bedroom unit than those published in the Labour Market Review).
- 2. Apartment vacancy rates as recorded by CMHC were close to 0% from 1996 to 2000, indicating a very tight rental market (2.5% to 3.0% is typically defined as a "healthy" vacancy rate). The vacancy rate had risen to 3.8% by 2004. It dropped to 1.2% in 2006 and had returned to 0% for April 2007 and April 2008 (Note: this is



based on a total sample size of only 80 apartment units in 2008). (CMHC, 2008a)

### **Bow Valley Labour Market Review**

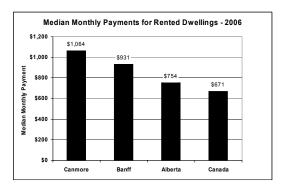
- 3. The Job Resource Centre conducts an annual survey of rental market rates as advertised in local newspapers (and then published in the Bow Valley Labour Market Review). This survey is likely the most accurate representation of what the current market rates are for the whole diversity of rental accommodations available in the community.
- 4. The 2008 survey reported an average monthly rent of \$1,051 for a one-bedroom, \$1,539 for a two-bedroom, \$904 for a bachelor/studio, and \$617 for shared accommodation (for the



- February to July 2008 period).
- 5. From 2002 to 2008 rental rates had increased by 104.1% for a one bedroom, 65.5% for a two bedroom, 79.8% for a three bedroom, 112.7% for a bachelor/studio, and 76.3% for roommate/shared (Job Resource Centre, 2008).

#### **Census of Canada**

6. The Census of Canada reports on the average monthly rental payments (available in 5 year intervals). This includes not only the rental price but also utilities for heat, electricity, and municipal services. Note: the values from the Census of Canada Community Profiles are not comparable from 2001 to 2006 as the reporting method has switched from mean payments to median payments.



7. The average monthly payments in Canmore were higher than the averages in Banff, Alberta, and Canada for both 2001 and 2006. In 2006, the median monthly payments in Canmore were \$310 or 29.1% higher than in Alberta, and \$393 or 36.9% higher than in Canada.

### **Interpretation:**

- 1. While rental rates have continued to rise in Canmore they remain relatively low when compared to the substantial increases in house prices. From an investment perspective it is unlikely that the rent received for a property will cover the cost of a mortgage, taxes, and maintenance (based on the price of a house purchased during the last several years). While affordability is still a challenge for many renters, they have been somewhat shielded from the full cost of the housing market in Canmore. The qualitative gap between rental rates and housing prices could negatively impact the market's willingness to purchase investment properties in Canmore.
- 2. Over the past few years emphasis has been placed on mandating suites in new home construction. However at the price point of these homes it appears that many of the buyers are affluent enough and prefer not to rent the suites in these homes. The Planning Department reports that the majority of these new suites have not been rented out.
- 3. It is uncertain what needs or gaps may exist in the rental market, and for what type/price range of unit there is the greatest demand. For example, whether there is a supply shortage of affordable apartments for singles and low-income individuals.
- 4. Given the questions surrounding the validity of the CMHC data for Canmore it is difficult to make a comparison of rental prices in Canmore with other communities. To make such a comparison it would be preferable to use data that was collected using a common methodology. The 2006 Census of Canada indicates that average monthly payments for renters are higher in Canmore than the average payments in Canada or Alberta.

## 15. Average House and Condominium Resale Prices

Real estate values are an important economic indicator with social and demographic implications. While high house prices may be an indication of high demand and a strong economy, they may also have significant implications for housing accessibility for low and middle income individuals and families. The resale prices of homes in Canmore are compiled locally and recorded in the Canmore Real Estate Industry database. However, many of the new homes are not included in the following data as builders are selling these properties directly, and not through the agencies participating in the database (private sales by the owner are also not included).

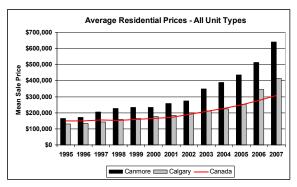
#### **Observations:**

1. Canmore's real estate market saw a period of strong and sustained growth from 1995 through 2007. During this time, average resale housing prices (all unit types) in Canmore increased by 287.8%. From 2006 to 2007 alone the average resale price in Canmore rose by 25.3%. In 2008, average



prices dropped by 1.6% from \$641,685 to \$631,329. (RE/MAX Alpine Realty, 2009)

- 2. From 1995 to 2007 the average resale price of a single family home in Canmore rose from \$200,000 to \$915,149. From 2007 to 2008 average prices dropped by -3.0% to \$887,856.
- 3. The average price of multi-family/condo units rose from \$146,000 to \$535,848 between 1995 and 2007. From 2007 to 2008 they increased only slightly by 1.4% to \$544,496.
- 4. National real estate markets had also shown more than a decade of sustained price increases through to 2007. Canada's average prices (all unit types) had increased by 104.4% from 1995-2007. Price increases in Alberta were much higher with Calgary increasing by 213.4% and Canmore by 287.4%. For 2007, the average house price (all unit types) was \$641,685 in



Canmore, \$414,066 in Calgary, and \$307,306 in Canada. (RE/MAX Alpine Realty, 2009 and CMHC, 2008b)

5. Final 2008 housing statistics have not yet been released by CMHC, but statistics January-November 2008 indicate that the year-to-date decline in prices was approximately -1.9% for Calgary and -10.0% for all of Canada (with total unit sales

- dropping by about one-third). From 2007 to 2008 the average resale house price in Canmore declined by -1.6%.
- 6. In Canmore, the mean stated construction value per single-detached dwelling was \$144,224 in 1996. By 2007 it was \$721,464, an increase of \$577,240, or 400.2%. Over the same time period the construction cost for semi-detached (duplex) dwellings increased from \$117,636 to \$365,388 (an increase of \$247,751 or 210.6%). The increases in average construction value reflect both the demand for higher-end homes in Canmore, and increased construction costs in Alberta.

## **Interpretation:**

- 1. Since new homes sold directly by developers are not listed in the Canmore Real Estate Industry database, the average resale prices presented here are likely lower than the average price of all homes sold (new and used).
- 2. An extended period of economic growth and high oil prices fuelled year after year of rising house prices in Canmore and Alberta. These price increases were largely driven by demand for mountain recreational properties and second homes. A global economic downturn has cooled real estate markets, with a dramatic slowdown of sales volume in Canmore in 2008. At this moment in time, prices have not adjusted downwards very much, however with the reduction in sales volume and ongoing economic changes it is difficult to interpret or predict these results. These economic changes are ongoing so the exact extent or duration of the market correction is not currently known.
- 3. In recent years the growth in the total population and demand in the real estate market (particularly for new home construction) has largely been driven by purchases from the non-permanent population.
- 4. The construction of more high-end homes results in higher average construction costs per square foot as well as the higher average resale price when these properties enter the resale market. High construction costs (for labour and materials) in Canmore and throughout Alberta have also contributing to rising prices.
- 5. Housing prices have risen faster than rental rates in Canmore. From an investment perspective it is unlikely that the rent received for a property will cover the cost of a mortgage, taxes, and maintenance (at current housing prices).

#### **Recommendations:**

1. This data does not reflect the entire housing market in Canmore as it currently includes resale homes only. Including new units constructed and sold by the developers and builders would better represent the total price range of market housing units in Canmore.

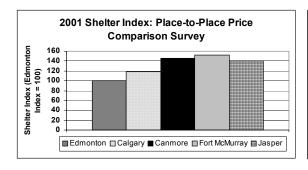
# 16. Housing Affordability

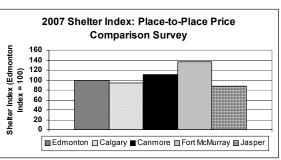
The availability and affordability of housing is one of the primary quality of life issues in a community. With more than a decade of rapid price increases, affordability in Canmore has become an important issue in the community. Affordability can be measured as a ratio of housing costs to income. The Canada Mortgage and Housing Corporation (CMHC) defines a 32% gross debt service ratio (GDS) as a standard affordability threshold for home ownership. Most lenders and financial institutions also use this ratio to determine affordability. The GDS ratio is calculated using housing costs as a percentage of gross monthly income. Housing costs include monthly mortgage principal and interest, taxes and heating expenses (also including 50% of monthly condominium fees, if applicable). A similar GDS ratio of 30% is applied to rental housing.

#### **Observations:**

#### **Spatial Price Survey**

- 1. The Alberta Spatial Price Survey for Selected Alberta Communities (Alberta Finance Statistics, 2001 2007) ranks shelter costs in selected communities relative to an index value of 100.0 in Edmonton.
- 2. From 2001 to 2007 the survey has reported higher than average shelter costs in Canmore. Relative to Edmonton shelter costs were 146.0 in 2001, reaching 169.2 in 2005. In 2007 the shelter index was 110.6. Note: this measure is relative to prices in Edmonton, so a decrease in Canmore's index ranking does not necessarily reflect lower prices in Canmore, but it indicative of rapid price increases in Edmonton from 2005 to 2007. The following shelter costs were included in the analysis: mortgage interest, property taxes, rental costs, replacement costs, and tenant insurance. (Alberta Finance Statistics, 2008)





## **Affordability of Home Ownership**

3. The maximum affordable mortgage is typically defined as 32% of gross income. This 32% threshold includes such things as utilities, taxes, and 50% of condo fees. There are a variety of affordability scenarios that could be constructed due the variability of these factors and mortgage rates terms. The mortgage affordability table (see below) was adapted from a table developed by the Canmore Community Housing Corporation (CCHC) for determining mortgage limited based on income. The

analysis is based on 2006 income and housing data (the most recent year for which income data is available). The median resale housing price in 2006 was \$449,000, which was out of reach for any of the median income categories listed above. A couple family with a median income of \$86,100 and \$76,366 for a 25% down payment would technically qualify for a mortgage on a \$381,830 home, well below the median price of \$449,000. The affordability issue becomes more challenging for most lone parent families and non-family persons as they have significantly lower median incomes than couple families.

Canmore Income / Mortgage Limits	2006 Median Annual	*Total Affordable Mortgage	Assum ye Ho	Median House			
/ Wortgage Limits	Income	Amount	5% DP	10% DP	25% DP	Price 2006	
Couple families	\$86,100	\$305,464	\$320,738	\$336,774	\$381,830	\$449,000	
All Families	\$80,800	\$284,363	\$298,582	\$313,511	\$355,454	\$449,000	
Lone-parent							
families	\$38,400	\$115,557	\$121,335	\$127,401	\$144,446	\$449,000	
Non-family							
persons	\$30,400	\$83,707	\$87,892	\$92,287	\$104,633	\$449,000	

<sup>\*</sup>Based on 2006 CCHC mortgage limit calculations – this data does not indicate current income requirements.

4. The ratio of median resale house price to median family income is one method of tracking affordability trends. A larger ratio (e.g. 1:2) indicates greater affordability, while a smaller ratio (e.g. 1:10) indicates lower



affordability relative to income. Tracking this indicator over time to see if the affordability gap between incomes and housing prices is growing or Ashrinking. For 2006, the median house price was \$449,000 and the median family income was \$80,800, giving a ratio of 5.56 to 1. This means that the median house price was 5.56 times the median family income. In 2003 the ratio was 4.62 (RE/MAX Alpine Realty, 2009 and Statistics Canada).

#### **Affordability of Rental Accommodations**

5. To meet the affordability threshold for the average rental accommodation in Canmore a renter (or renters) would require an hourly wage of \$20.15 for a one bedroom apartment, or \$29.66 for a two-bedroom apartment. The threshold for shared accommodation would be an hourly wage of \$11.87 (affordability is defined by CMHC as 30% of gross income and based on the average rental prices for February to July 2008) (Job Resource Centre, 2008)

6. From 2002 to 2008 the average cost of a one bedroom rental has increased by 104.1%, with the income affordability threshold for renting increasing from \$20,600 to \$42,040. The cost of a two bedroom has risen by 65.5%, with the income threshold increasing from \$37,200 to \$61,560 (Job Resource Centre, 2008).

Rental Housing		Income Required**							
Affordability (February 2008 to July 2008)*	Monthly Rent*	Hourly	Monthly	Annual					
1 Bedroom	\$1,051.00	\$20.21	\$3,503	\$42,040					
2 Bedroom	\$1,539.00	\$29.60	\$5,130	\$61,560					
3 Bedroom	\$1,902.00	\$36.58	\$6,340	\$76,080					
Bachelor/Studio	\$904.00	\$17.38	\$3,013	\$36,160					
Roommate/Shared	\$617.00	\$11.87	\$2,057	\$24,680					
*based on advertised accommodation in the Canmore Leader and									

the Rocky Mountain Outlook

Source: (Job Resource Centre, 2008)

## **Community Initiatives:**

- 1. The Canmore Community Housing Corporation (CCHC) is an arms-length, not-forprofit corporation wholly owned by the Town of Canmore. CCHC has a mission to ensure that housing supply meets the demand of its residents. A major component of CCHC's mission is the development of Perpetually Affordable Housing (PAH). PAH is defined as housing with price and resale or rental rate restrictions. PAH is designed to be affordable not only for the original home buyer, but to subsequent purchasers as well (to ensure continued affordability of the long term). As of 2008 there are now 83 units of PAH in Canmore (12 at Coyote Ridge, 17 at Mineside court, 11 at Spring Creek Mountain Village, and 43 at the Mountain Haven Co-op). An additional 134 units in the Palliser Village are anticipated for the fall of 2009.
- 2. The Town of Canmore adopted a new PAH contribution policy in January 2008. The contribution policy determines the levels of contribution to the PAH reserve fund from residents, businesses, and the municipal budget.
- 3. Bow Valley Regional Housing (BVRH) manages social and seniors housing in the Bow Valley. In Canmore BVRH maintains 57 units of senior's accommodations in the Bow River Lodge and 28 senior's apartments at Bow River Homes. BVRH also provides a total of 54 units of social housing (subsidized for low income households).
- 4. The Town of Canmore's 2008 Comprehensive Housing Action Plan (CHAP) provides a roadmap to produce sufficient quantities of Perpetually Affordable Housing (PAH) and employee housing over the next 10 years. The targets include approximately 1,000 PAH units and 2,000 to 2,500 employee housing beds. The plan was developed by the Town of Canmore and stakeholders from the non-profit sector and development industry. To achieve these goals the plan includes 34 action items (with target timelines) to achieve these goals. These action items and policies include such things as: employee rental linkage programs, development incentives,

<sup>\*\*</sup>Affordability threshold is 30% of gross income

public/private partnerships, zoning changes, mixed use regulations, accessory suites, senior's housing, conversion of visitor units, and a variety of other mechanisms.

## **Interpretation:**

- 1. Purchasing market-priced housing is beyond the average level of wages for most workers in town. This gap between wages and housing prices continues to widen, putting pressure on many residents and employers.
- 2. The gap between the average wages of work advertised at the Job Resource Centre and the affordability thresholds, suggests most of these workers would require shared rental accommodation or would need to work at multiple jobs to allow them to afford private accommodation.
- 3. The Canmore Community Housing Plan identifies those groups that are most likely to be in core housing need (unattached individuals, single-parent families, couples with one income earner, seniors and persons with physical or mental disabilities, service industry employees, and large families with low to moderate incomes).
- 4. Over the past several years many employers have encountered staffing challenges. The high costs of accommodation may preclude potential workers from accepting a job in Canmore or remaining in the community long-term.

#### **Recommendations:**

- 1. Information on the total debt loads and debt per capita of Canmore residents would help determine the impact of high real estate prices on personal and household debt levels.
- 2. The addition of housing needs assessment questions to the Canmore Census could be useful to explore the question of affordability. Potential questions include those addressing housing expenses as a percent of household income, and clarifying the "in core housing need" numbers for ownership housing.
- 3. The community faces a long-standing affordability shortfall, so continued action and implementation of the CHAP is required.
- 4. An annual needs assessment of local employers and their staff housing needs would help better understand trends in the market and the level of demand for employee housing.

## **ENVIRONMENTAL STEWARDSHIP**

The following Goals and Criteria are Foundational Values for Canmore as described in the 2006 document *Mining the Future: A Vision for Canmore*.

## Environmental Stewardship

### Goals

As citizens of Canmore, we believe the following goals must be actively and tirelessly pursued if we are to realize our Vision. As a community, we must:

- 1. Maintain the biodiversity and ecological integrity of the Bow Valley ecosystem
- 2. Encourage and support programs and activities intended to create an educated and engaged public that embraces environmental stewardship
- 3. Define and promote the entire spectrum of cultural and ecological values associated with our mountain landscape
- 4. Acknowledge and respect the needs of both humans and wildlife regarding the use of the natural landscape
- 5. Acknowledge there are geographic and ecological limits in the Bow Valley, and that the reality of limits must be considered in discussions regarding continued use of the landscape by people and other species
- 6. Connect Canmore's role as a gateway community to Provincial and National Parks to the regional ecosystem; maintain regional connectivity of the surrounding landscape
- 7. Exercise leadership in environmental excellence through innovation and creativity.

### <u>Criteria</u>

Decisions consistent with the following criteria will help us move toward achieving our goals. Accordingly, will the decision to be made to:

- 1. Enhance community understanding of the responsibilities and trade-offs involved with living with wildlife in the Bow Valley
- 2. Provide opportunities for individuals to participate responsibly in wilderness recreational activities
- 3. Use the precautionary principle as defined below<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Precautionary Principle: The idea that if the consequences of an action are unknown, but are judged to have some potential for major or irreversible negative consequences, then it is best to avoid taking that action. In practice the principle is most often applied in the context of the impact of human society or new technology on an ecosystem, as the environment is a complex system where the consequences of some kinds of actions can be unpredictable.

- 4. Be made with community collaboration on environmental issues
- 5. Define the environmental and social impacts on an economic endeavour
- 6. Maintain regional wildlife connectivity, ecological integrity and biodiversity (do no harm)

## **Trends**

The Town of Canmore has set goals for reducing water consumption, solid waste, and energy use/greenhouse gas (GHG) emissions. Meeting these targets will require consistent monitoring, continued proactive measures on the part of the municipality, and an effective campaign of public education. Many of these targets are set on a per capita basis and need to be adjusted to take into account the growing proportion of non-permanent residents.

Important air quality issues previously identified in the Bow Corridor were particulate emissions from industrial, natural and domestic sources; and air pollution from traffic along Highway 1 and from communities in the Bow Corridor. More consistent and publically accessible air quality data is needed for the community.

Total water consumption in Canmore increased substantially in 2006 and 2007, driven largely by demand from the industrial, commercial, and institutional sector. A more detailed breakdown of water use within the sector is needed to understand this demand and develop a plan to meet the water conservation goal. Residential water consumption decreased significantly with the introduction of water meters in homes in Canmore (1996-98). Gradual reductions continued through to 2003. Since 2003 consumption has not decreased substantially, suggesting that more emphasis on reducing residential water consumption is required. The Town of Canmore continues to reduce leakages throughout the system.

Reduction in the nutrient levels of effluent from Bow Valley wastewater treatment facilities is helping to return the Bow River to more natural water conditions. However there is still an unnatural species composition in the river due to over-angling, construction of hydroelectric facilities; and introduction of non-native species.

Canmore is a rapidly growing community, and the total quantity of waste materials generated is strongly affected by rate of Construction and Demolition waste. The Waste Management goals should be re-examined and perhaps separated (similar to the Water Management Goals) into different waste reduction goals for Residential waste; Industrial, Commercial, and Institutional, and Construction and Demolition waste. Work should continue on a regional solution for organic waste composting as well as on promotion of the 3 R's in the community. Although bear proof garbage bins have been effective at reducing wildlife attractants, they are often misused as a disposal method for recyclables or material that should be deposited at the Class III landfill. Recycling rates (per capita) have generally trended upwards since 1998. This recycling increase may be partially due to increased convenience and awareness of recycling opportunities in Canmore.

Recalculating the estimates of energy use and GHG emissions will be required to determine if progress has been made towards achieving the Town's Energy Management Goals. The Town of Canmore's many GHG reduction initiatives are critical as examples to the community. However, targeting the residential and commercial/industrial sectors (which account for over 80% of the GHG emissions) will produce the biggest reductions

in overall emissions from Canmore. Several local businesses are taking the lead with their own sustainable planning, building, retrofitting and policies. More reductions are also needed from the residential sector, which produces 50% of the total GHG emissions. Public education, rebates and other initiatives may help expedite this process.

Vehicle use has been identified as a major local source of both GHG emissions and air pollution. The spread-out nature of Canmore and the lack of a public transit system contribute to the fairly high proportion of residents who drive to work. It is important to ensure that there is a clearly marked and interconnected system of commuter routes and trails to facilitate walking and bicycle commuting in Canmore. Developing transportation alternatives, reducing vehicle use, and reducing idling will have the combined benefits of improving air quality and reducing GHG emissions.

Many wildlife corridor issues have been addressed in the last few years, and several processes are underway to resolve the outstanding issues. There is a need for continued monitoring of wildlife and corridor functionality. Continued public education programs and interaction with trail user groups are also essential to help direct and manage human use in the corridors and promote awareness of human-wildlife safety.

Canmore has improved the management of non-natural bear attractants over the past decade. The bear-proof garbage containers and by-laws restricting birdfeeders and prohibiting outdoor composting have significantly reduced bear incidents involving such attractants in the town. Buffaloberry (*Sheperdia canadensis*) bushes are now being removed in residential areas and areas of high human recreational use. While this is a natural food source it is a major bear attractant it proliferates in the valley bringing bears into close contact with humans.

With the low reproductive rate of the local grizzly bear population, further relocations or human-caused bear mortality need to be minimized. Education programs, management of natural and non-natural attractants, and bear aversion programs are all working to reduce negative wildlife/human conflicts in the Bow Valley.

While portions of the Trans Canada Highway are fenced, wildlife-vehicle collisions remain a concern. Most of the collisions involve deer and elk, but other species including bears, wolves, cougar, coyotes, and lynx are also killed. The highway underpasses at Stewart Creek and Dead Man's Flats provide avenues for wildlife movement, while the associated fencing improves safety for both wildlife and drivers.

Canmore continues to grow and change dramatically as development continues. Major projects include the redevelopment of Spring Creek Mountain Village, commercial and residential development at SilverTip, tourist home construction on Kananaskis Way, and further residential, commercial, and golf course development in Three Sisters Mountain Village.

Suppression of forest fire in the lands surrounding Canmore has resulted in local forests with heavy accumulations of fuel and an aging forest structure, raising the risk of

wildfire. Fuel modification and vegetation management programs in and around the Town are targeted at reducing the threat. Town requirements for developers to include FireSmart building strategies will help reduce the spread of fire in developed areas.

The aging forests surrounding Canmore are very susceptible to Mountain Pine Beetle infestation. Local Pine Beetle initiatives include detailed surveys, selective logging, and prescribed burns. Pine Beetle management is done in an integrated fashion, with considerations for mitigating forest fire hazard, improving forest health, and impacts on wildlife and their habitat. The infestation of beetles is symptomatic of the much larger situation of older forests, species distribution, and changing climatic conditions.

## Introduction

Canmore is both "geographically bounded and ecologically significant" and needs to ensure its mountain landscapes remain healthy over time (Mining the Future: A Vision for Canmore 2006). Monitoring the health of the environment is never simple. The other sections of this report all deal with a single species - humans. This section deals with multiple species (including humans) and the surrounding ecosystems. It is impossible to pick one indicator, or even several to accurately measure the state of the environment. The following indicators reflect the health of much of the ecosystem and the quality and level of use of many of its resources.

The Town of Canmore has created an Environmental Care Program to further the sustainability of municipal operations and to promote environmental sustainability in the community. The components of the program will be discussed further in the relevant sections of this report.

Additionally, in 2004 the Town of Canmore began using The Natural Step (http://www.biosphereinstitute.org/?q=p-natural-step) as a guiding framework for moving towards sustainability. Details of the adoption of the Natural Step Framework are found in the section on Civic Engagement and Leadership.

In 2008 the Environmental Advisory and Review Committee (EARC) undertook a review of the Environmental Care Program and its goals (EARC, 2008). Specific observations and recommendations from this review are listed in the relevant sections below. It is also important to note that that the inception of the Environmental Care Program predates the adoption of the Natural Step Framework, the Mining the Future Vision, and the Community Sustainability Plan (currently under development). As such, the goals and proposed actions in the Environmental Care Program may or may not be fully in alignment with the more recently adopted directives.

## Air

1. Air Quality

#### Water

- 2. Water Consumption and Quality
- 3. Wastewater
- 4. Aquatic Health and Fisheries

## Waste Management

5. Solid Waste and Recycling

## **Energy Use and Transportation**

- 6. Energy Use and Greenhouse Gas Emissions
- 7. Transportation

## Wildlife

- 8. Wildlife Movement Corridors and Habitat Patches
- 9. Bear Attractants
- 10. Wildlife Incidents and Outcomes
- 11. Transportation Corridors and Wildlife

# Landscape

- 12. Quantitative Land Uses
- 13. Wildland Urban Interface Wildfire Protection
- 14. Forest Health

# 1. Air Quality

Alberta Environment conducts air quality surveys of Canmore and the Bow Corridor at irregular intervals so consistent information is not available. Ground level and stack data (for industrial emissions) is collected on a regular basis in Exshaw. The most recent data available regarding Canmore's air quality dates from 2004 and therefore may not be indicative of current conditions. This section has strong linkages to the sections on Energy Use and GHG Emissions and Transportation.

**Threshold:** the <u>minimum</u> is to meet the Alberta Ambient Air Quality Objectives

#### **Observations:**

- 1. Current information on air quality parameters is not available at this time, since surveys are performed on an intermittent basis. In 2006, the Bighorn Corridor Environment Committee (BCEC) compiled an extensive summary and analysis of the data available from both government and industry. The report focuses on Exshaw and Lac des Arcs, but also contains a full summary of data available for the greater Bow Valley. (BCEC, 2006) The following is a summary of the most recent survey data that exists for Canmore:
  - a) Ambient levels for all air quality parameters were within Alberta Ambient Air Quality Guidelines as measured by the MAML during the 1999 to 2001 studies (Alberta Environment, 2001).
  - b) Further air quality surveys in 2002 and 2004 showed both median and maximum 1 hour concentrations well below the Alberta guidelines. The full results are presented n Appendix D. These survey results were kindly provided by special request from Alberta Environment; however they lack the detailed observations and interpretations that were included in the 1999-2001 study (Alberta Environment, 2008). Note: air quality data tables are available in Appendix X (due to the large size of the tables)
- 2. Alberta Environment created a draft inventory of emissions in the Bow Corridor for 2003. These estimates are very rough and were presented to BCEAG in 2004 and subsequently published in Bighorn Corridor Air Quality Report (BCEC, 2006). Industrial emissions from the rock industries in the M.D. of Bighorn were estimated to account for 72.4% of the NO<sub>x</sub>, 82.9% of the total suspended particulates, and 97.4% of the SO<sub>x</sub>. Transportation was the primary source of both hydrocarbons (76.5%) and CO (92.1%). Vehicle traffic in Canmore was estimated to be the largest single source of hydrocarbons (31.8%) followed by Highway 1 and 1A traffic (25.5%). One of the largest sources of hydrocarbons was from home heating via wood combustion (22.0%). Nearly half (47.0%) of the CO emissions were from highway traffic, followed by in-town vehicle use in Canmore (27.0%) (Alberta Environment, 2003). See Appendix D
- 3. In 1998 CASA conducted a remote Vehicle Emissions Survey (VET) and a subsequent follow up survey was completed in 2006. The survey covered Edmonton, Calgary, Red Deer and Canmore and identified gross emitters, vehicle occupancy rates and measured the vehicle emissions of PM, CO, CO<sub>2</sub>, HC and NO<sub>3</sub>. In 2006, on-

road emissions per vehicle are lower than in the previous 1998 survey; however the study noted that a small proportion of "high emitter" vehicles are responsible for a disproportionate quantity of emissions. These are typically older model or poorly maintained vehicles. Overall the study concluded that although there are variations, average emissions in each city are similar. The other communities had similar rates of single occupant vehicles during the 1998 and 2006 surveys, however Canmore's rate of single occupancy vehicles dropped from 70% to 43% (ESP and Applied Analysis, 2007)

4. Respondents to the 2008 Sense of Community Report indicated that 32% of them were concerned (very concerned or somewhat concerned about outdoor air quality). (HarGroup, 2008).

## **Community Initiatives:**

- 1. The Calgary Regional Airshed Zone Society (CRAZ) was granted non-profit society status in January 2007. CRAZ is comprised of government agencies (federal, provincial and municipal), non-government organizations, industry and the public. It is based on the Clean Air Strategic Alliance (CASA) model. There are currently seven other existing airshed zones in the province. The boundary for the airshed is the Calgary Health Region (with the exception of those areas already included in the Parkland Airshed). The mission of the society is: "to monitor, analyse and provide information on air quality and develop strategies to manage air quality issues within CRAZ".
- 2. The Bow Valley Clean Air Society (BVCAS) has been actively supporting the development of an air quality management zone (CRAZ) and educating and advocating for air quality in the Bow Valley.
- 3. The development of a new Clean Air Strategy for Alberta is being spearheaded by CASA. The previous Strategy dates from 1990. As of the fall of 2008 public input is being gathered through town hall meetings and surveys. (www.clearairalberta.ca)
- 4. The Biosphere Institute of the Bow Valley is currently (2008/2009) promoting a Bow Valley Mountain Air Campaign. It encourages residents to reduce idling, drive more efficiently, and reduce vehicle use. School programs include a Mountain Air film created by local students, a Mountain Idle contest, and vehicle monitoring by students. Bow Valley wide programs include carpool events, a travelling display booth for community events, and driving school presentations. More anti-idling road signs are being placed throughout Canmore, Town fleet vehicles will display "Idle Free Canmore" licence plates and the garbage truck will display an anti-idle sign.

## **Interpretation:**

- 1. The development of the new regional airshed zone (CRAZ) will hopefully produce more consistent and publically accessible air quality data for the community. The need for an enhanced monitoring and reporting program will only increase as the population and volume of vehicle use in the Bow Valley increases over time.
- 2. Interpreting ambient air quality data is challenging because of the large number of environmental and sampling variables involved. As measured by the 1994 and 1999-2001, 2002, and 2004 surveys, the air quality in Canmore is generally within the

- Alberta Environment standards (based upon the days that were sampled). The delays in providing current air quality monitoring data for this region make the data collected much less relevant.
- 3. Air quality issues are not limited to industrial, urban and vehicular sources. Forest fires and prescribed burns can have a negative impact on air quality, increasing airborne particulate matter, causing difficulties for those with respiratory ailments. In the summer of 2003 nearby prescribed burns and large forest fires throughout western Canada and the northern U.S.A. contributed to a great deal of haze and particulate matter in the Bow Valley.

#### **Recommendation:**

- 1. Local air quality monitoring data for this region should be collected and publically reported on a regular basis.
- 2. Education should continue on actions that improve air quality such as anti-idling, carpooling, alternative fuels and alternative means of transport.
- 3. There is a need to establish if Alberta's air quality guidelines are sufficient for our community. For example, should we have goals for visibility to determine how many days per year we have degraded visibility due to human air quality concerns?

# 2. Water Consumption and Quality

Water conservation is an important practice as water is a finite resource, and water and wastewater treatment requires significant amounts of energy and expense. Canmore draws drinking water from the Spray Lakes Reservoir via the Rundle Forebay, and from a groundwater aquifer beneath the town. Each supplies approximately half of the total water for the town. The Town's aquifer is very productive, however receding glaciers and potential reductions in snow pack and spring run-off highlight the importance of adaptive measures against climate change.

The Town of Canmore has set goals for water conservation and is actively working to reduce water consumption and water losses from the system. The 2004 Water Management Action Plan (WMAP) outlines a series of proposed actions and initiatives to reduce water use in the community (Town of Canmore, 2004a). Water meters were introduced into all homes and businesses between 1996 and 1998 which had resulted in a significant decrease in water consumption.

# Threshold/Goal:

As part of the 2003 Water Management Goal, the Town of Canmore will:

- reduce the water distribution system losses from 22.4% to 10%
- reduce the residential water consumption on a per capita basis by 20%
- reduce the industrial, commercial and institutional consumption by 20% based on an average account usage.

The goal is to be achieved by 2012 using year 2000 as a base year.

(Note: Per capita residential use is calculated on the basis of the permanent population and does not include the non-permanent population)

#### **Observations:**

## Water Quality

- 1. The Town of Canmore's Level II surface water treatment plant is equipped with a 7 mega litre per day (ML/d) direct filtration plant with UV followed by chlorination. The groundwater supply, with a capacity of 13 ML/d, is chlorinated and supplies approximately half of the Town's residents. The surface water treatment plant is a modern facility operated under contract with EPCOR. The treatment plant features an automated SCADA control system (allowing 24 hour monitoring of the plant from Edmonton) and a UV filter providing a treatment standard of 99.9% of all waterborne pathogens.
- 2. Both the aquifer and Rundle Forebay provide high quality input sources of water into the water treatment system. The treated water quality requirements are set by Alberta Environment and are different for both the groundwater and surface water sources (outlined in the table below). These requirements must be met or exceeded under the terms of the license, and violations or exceedances are very infrequent occurrences.

The Town is currently in the process of applying for a new water license from Alberta Environment, which will result in updated (more stringent) water quality requirements. (Town of Canmore, 2008g)

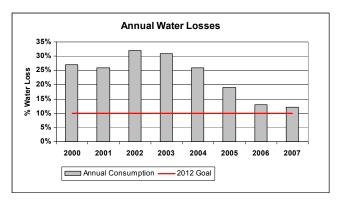
Average Treated Water Quality (2007)							
Water Quality Parameters	Pumphouse #1 (Groundwater Aquifer)	Pumphouse #2 (Rundle Forebay)					
Chlorine Residual	0.72 mg/L	0.65 mg/L					
Turbidity	0.03 NTU	0.03 NTU					
Total Hardness	179 mgCaCO <sub>3</sub> /L	162 mgCaCO <sub>3</sub> /L					
Fluoride	0.14 mg/L	0.06 mg/L					
Aluminum	<0.018 mg/L	0.180 mg/L					
рН	n/a	7.8					
Alberta Environment Approval Requirements	Greater than 0.5 mg/L Chlorine residual entering distribution system	99.9% (3log) reduction for Giardia					
	Greater than 0.1 mg/L Chlorine residual in distribution system	99.99% (4log) reduction for Viruses					
		Less than 5 NTU Turbidity in distribution system					
	Test for Bacteria in distribution system at 9 locations per month	Greater than 0.2 mg/L Chlorine residual entering distribution system					
		Greater than 0.05 mg/L Chlorine residual in distribution system					
		pH of treated water 6.5 - 8.5  Test for Bacteria in distribution system at 12 locations per month					

**Source:** (Town of Canmore, 2008g)

- 3. To ensure an appropriate treatment regime for the ground water source, the Town of Canmore conducts ongoing analysis to determine if there is any conductivity between surface contaminants and the aquifer. To date there is no evidence of this conductivity, which may be due to the horizontal flow in the aquifer which would move contaminants in a horizontal direction and not down to the well inputs. (Town of Canmore, 2008g)
- 4. Detailed summaries of water quality information for the Bow River have recently been compiled and published by the Bow River Basin Council. The nearest long term water quality stations are upstream of Canmore at Harvie Heights and downstream at Cochrane. A summary document of these water quality statistics is available at: <a href="http://www.brbc.ab.ca/">http://www.brbc.ab.ca/</a>. (BRBC, 2008a)
- 5. In the 2008 Sense of Community Survey 28% of respondents indicated that they were concerned about the quality of Canmore's drinking water (HarGroup, 2008).

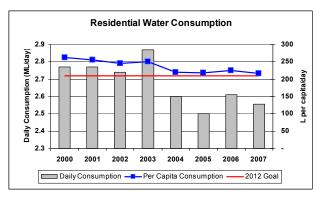
## **Water Consumption**

1. A certain percentage of the in any system water unaccounted for. The Town has conducted water loss audits since the year 2000. Leak detection and repair is conducted twice annually but inevitably, some water is lost through leaks. Other sources of loss include: theft through illegal connections, malfunctioning controls, and



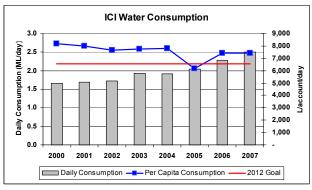
meter inaccuracies. Total water losses reached a high of 32% in 2003, but were reduced to 12% in 2007, within 2% of the goal of no more than 10% loss by 2012). Canmore's geology poses a major challenge in locating water leaks as the water lost from leaking pipes quickly disappears into the granular soils, rather than surfacing where it can be easily discovered.

2 From 2000 to 2007, residential water consumption dropped by 7.8%. This represents a per capita water consumption decrease of 17.7% from 263 litres per day to 217 litres per day (only 3.3% higher than the 2012 target of 210 L/c/d). The growing nonpopulation permanent is captured in this per capita goal; however it is important to note that



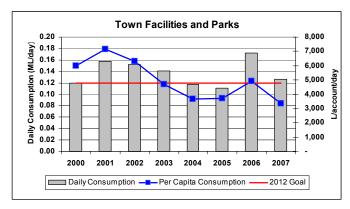
actual consumption has decreased since 2000 even though the total population has increased substantially.

3. On a per account basis total industrial. commercial, institutional (ICI) consumption decreased by 9.4% from 2000 to At 7,406 L/account/d in 2007 it remains 8.7% higher than goal targeted of 6,811 L/account/d (for 2010). There was a substantial drop of 20.8% per account from 2004 to 2005, which then rebounded sharply again in



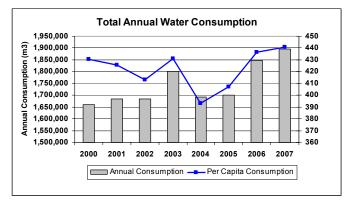
2006 (the cause of this decrease is unclear). Overall actual total consumption by the ICI sector has increased almost annually since 2000.

4. Since 2003, per account town facilities and parks water use has remained below the threshold of 5,002 L/account/d. Total annual consumption in 2007 was only 2,414 m3 (5.5%) higher than in 2000. This is due in part to water saving retrofits and in part to improved conservation practices in park irrigation



systems. In 2006 there was a significant unexplained increase in water consumption, which dropped again in 2007.

- 5. Because of the high percentage of second home owners in Canmore, residential water charges are structured differently than in some other communities. There is a need to provide the infrastructure to support the potential use, even though second home owners use less water. To deal with this, Canmore has a higher base rate, designed to contribute about 50% of revenue from the base rate and 50% based on volume used.
- 6. Overall, total annual water consumption (all uses) increased 14.1% from 2000 to 2007. On a per capita basis (permanent population) water consumption (for all uses) decreased from 430 to 393 LPCD from 2000 to 2004, but since increased to 441 LPCD in 2007 (it was 430 LPCD in 2000). (Note: overall water



consumption for all uses is not a targeted goal of the water management plan, but these numbers are included here to give some insight into overall water consumption). (Town of Canmore, 2008g)

## **Community Initiatives:**

- 1. An upgrade to the surface water treatment facility was completed in 2003. The upgrade included the addition of ultraviolet (UV) disinfection as an added barrier to pathogens including *Giardia* and *Cryptosporidium*.
- 2. The Land Use Bylaw specifies a wellhead protection zone to limit the types of industry and business that can develop in that area. The few facilities that existed prior to the bylaw amendment have been allowed to remain.
- 3. In 2004, the Town completed a Water Demand Management Plan to serve as a map for achieving the goal statement (Town of Canmore, 2004a). Water conservation initiatives from the Town now include:
  - A Water Conservation Rebate Program for low flow fixtures and toilets

- Installing low flow toilets and fixtures in municipal facilities
- Semi-annual leak detection program to reduce unaccounted for water losses
- 4. The Water Conservation Rebate Program offers \$5-\$75 rebates for the installation of water saving fixtures and toilets. In 2007, 181 low flow replacement toilets were installed, and in 2008, 202 were installed. The remaining funds in the rebate program will likely be exhausted in 2009.
- 5. The Town has installed 114 low flow fixtures (such as dual flush toilets, low flow showerheads, and low flow faucets) in its facilities to reduce water use.
- 6. Beginning in 2006 the Town of Canmore provided funding for crews from EPCOR to begin a semi-annual leak detection and repair program using acoustic equipment to check for underground leaks and water losses.
- 7. In August 2006, Alberta Environment approved the South Saskatchewan River Basin Water Management Plan. Due to concerns of over-allocation of water resources and dwindling instream flows, a moratorium was placed on water withdrawal permits from the Bow River. At this point, no additional permits for water use will be approved by the government (Alberta Environment, 2006).
- 8. The Bow River Basin Council (BRBC) released Phase One (Water Quality) of the Bow Basin Watershed Management Plan in 2008. The plan outlines the development implementation of monitoring and proposed actions (scheduled for 2008-14). It is hoped that these proposed monitoring programs will result in a better understanding of both water quality and aquatic ecosystem health for the Bow River as it flows through Canmore (BRBC, 2008b)
- 9. Canmore's Environmental Assessment and Review Committee (EARC) conducted a review of the Environmental Care Programs various goals and plans. Regarding the Water Demand Management Plan the committee review observed that:
  - The Town has achieved or is close to achieving its water conservation goals. New more aggressive goals should be established.
  - The current program is too narrow in scope. It focuses on water demand management and does not address other aspects of water management including sanitary/wastewater treatment, storm water management and other water related issues.
  - Many potential water conservation initiatives are identified in the plan but the majority of these initiatives do not appear to have been implemented. (EARC, 2008)

### **Interpretation:**

- 1. Total water consumption in Canmore increased substantially in 2006 and 2007, driven in part by demand from the ICI sector. A more detailed breakdown of water use within the ICI sector in needed to understand this demand and develop a plan to meet the water conservation goal for this sector.
- 2. Residential water consumption decreased significantly with the introduction of water meters in homes in Canmore (1996-98). Gradual reductions continued through to 2003. Since 2003 consumption has not decreased substantially, suggesting that more emphasis on reducing residential water consumption is required.

3. The water conservation goals are based on industry standards, however a review of these goals should determine if they are reasonable and/or attainable. These goals focus on demand but do not include goals for water quality (other than what is mandated by Alberta Environment). Additionally, the current goals base per capita residential consumption solely on the permanent population. Given that the non-permanent population is the fastest growing segment of the community they should be factored into the per capita calculation.

#### **Recommendations:**

- 1. The Town of Canmore should continue with its efforts to reduce system leakages as well as support public awareness initiatives for water conservation.
- 2. The Water Conservation Rebate Program should continue as an incentive for residents to retrofit their homes with low flow fixtures and toilets.
- 3. A better understanding of ICI water consumption is needed to better target conservation efforts of this sector.
- 4. The rapidly growing non-permanent population should be factored into the per capita water calculations.

# 3. Wastewater

Wastewater collection and treatment are closely monitored to meet provincial standards. The treated effluent from Canmore's wastewater treatment plant (WWTP) is discharged into the Bow River so it is important to ensure that it is reliably treated to the highest standards to maintain the health of the river and water quality for downstream users and aquatic life.

The WWTP was commissioned in 1997, and includes screening and clarification for primary treatment. This is followed by biological aerated filtration for secondary and tertiary treatment. The treated waste water then passes through a UV disinfection unit prior to being discharged to the river.

### **Observations:**

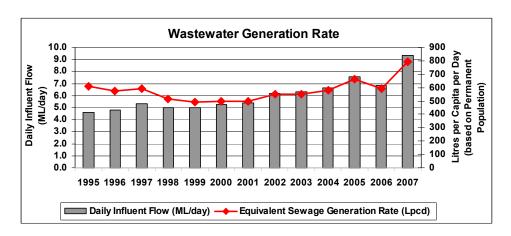
- 1. The WWTP is a level III tertiary treatment plant with a capacity of 22ML/day. Wastewater production increased from 4.6 ML/day in 1995 to 9.3ML/day in 2007
- Per capita wastewater production (LPCD=Litres per capita per day, based on permanent population) decreased from 607 LPCD in 1995 to 499 LPCD in 2001. From 2001 to 2007 wastewater production rose to 792 LPCD.
- 3. The WWTP is required to meet Alberta Environment standards for effluent characteristics. Average fecal coliform levels were above the limits in 2004, but otherwise all average effluent characteristics have been well below the approval limits.

Wastewater treatment plants can remove significant amounts of contaminants from municipal wastewater, which can contain grit, debris, suspended solids, pathogens, oxygen-depleting wastes, nutrients, and about 200 different metals, persistent organic compounds, and other chemicals. There are generally up to three different levels of wastewater treatment:

**Primary**: Removal of debris and suspended solids by screening and settling.

**Secondary**: Use of biological processes to break down organic material and remove additional suspended solids.

**Tertiary**: Advanced cleaning of wastewater that goes beyond the secondary or biological stage, removing nutrients such as phosphorus, nitrogen, and most BOD and suspended solids (Canmore WWTP at present)



Average Annual Wastewater Effluent Characteristics							
Wastewater Characteristics	2003	2004	2005	2006	2007	Effluent Approval Limit	
Total Suspended Solids (TSS) (mg/L)	8.2	13.6	7.5	6.3	4.0	< 20	
Biological Oxygen Demand (BOD <sub>5</sub> ) (mg/L)	13.3	9.8	10.3	7.5	5.0	< 20	
Total Phosphorus (mg/L)	0.5	0.6	0.7	0.7	0.6	< 1.0	
Total Ammonia Nitrogen (mg/L)	5	5.5	3.3	1.5	0.6	<10 (Oct- June) < 5.0 (July-Sept)	
Fecal Coliforms (MPN/100ml)	43	228	99	48	28	< 200	
Total Coliforms (MPN/100ml)	185	1296	581	185	123	< 1000	
Biosolids Produced (Tonnes)		000)	2,527	2,772	2,779	n/a	

**Source:** (Town of Canmore, 2008g)

- 4. Biosolids (organic materials resulting from the treatment of sewage sludge) are dewatered to ~20% solids. Bio-Solids from the WWTP are now shipped to the Bowden Correctional Facility's composting operation. Previously the biosolids were sent to Medicine Hat, this new agreement cuts the hauling distance in half. In 2007, the WWTP produced 2,779 Tonnes of biosolids. Discussions are underway to establish a composting facility to compost Canmore's biosolids and organic food waste. Finding a suitable location for the facility continues to be an issue.
- 5. When water levels rise in the spring, there is inflow and infiltration into the sewers, causing the WWTP to treat a higher volume than would otherwise be needed. This extra volume is difficult to quantify, and currently more effort is being put into finding leaks from the water outflow system than the inflow (wastewater) system. (Town of Canmore, 2008g)
- 6. In 2007 the Town declared a state of local emergency due to high groundwater levels causing sewage backups and necessitating the release of untreated sewage directly into the Bow River.

## **Community Initiatives:**

7. The WWTP is currently undergoing a \$10 million multi-year upgrade. The upgrade should be sufficient for the needs of the population at full build-out. The new upgrade includes an assessment of the plant and future upgrades to reduce phosphorus and nitrogen output into the river. The WWTP will be subject to new (Bow River specific) wastewater guidelines from Alberta Environment.

8. A major upgrade of Three Sisters Drive / MacDonald Place is currently underway. The water and sewer mains will be replaced and new storm water management system is being integrated into the streetscape.

# **Interpretations:**

- 1. With the WWTP efficiency improvements underway, the plant should be able to service the community at full build-out.
- 2. Unlike per capita residential water consumption, which has been decreasing since 2003, per capita wastewater generation has risen during that period. Some decreases in wastewater volume would be achieved through reductions in infiltration into the sewers.

#### **Recommendations:**

The increase in per capita wastewater generation suggests that targeted efforts are needed to help reduce these numbers. These efforts could include actions to reduce infiltration as well as public education initiatives. As noted in the section above on Water Consumption and Quality, a better understanding of the ICI sector's consumption is required to target areas where conservation could be achieved.

# 4. Aquatic Health and Fisheries

A goal of the 2006 Mining the Future document is to maintain the biodiversity and ecological integrity of the Bow Valley ecosystem. This includes maintaining aquatic health in the region. As with the surrounding forest ecosystem, the local aquatic system has been heavily influenced by human activities. These include fishing, the introduction of non-native species, the construction of hydroelectric facilities, and the discharge of wastewater facility effluent and storm water run-off into the system.

### **Observations:**

## Water Quality and Riparian Health

- 1. There are two long term monitoring stations of potential relevance: Environment Canada measures a variety of water quality parameters at the Banff Park Gate (Harvie Heights) while Alberta Environment maintains a monitoring station at Cochrane. The upstream site gives us good information on water quality flowing into Canmore, but there is a very long reach of river downstream to the site at Cochrane (and therefore is hard to isolate the influence of Canmore on the downstream water quality).
- 2. In 2005 the Bow River Basin Council released a revised Report on the State of the Bow River Basin. The report gives an excellent overview of the status and issues along the entire length of the Bow River watershed (BRBC, 2005).
- 3. Overall the water quality from Banff through to downstream of Canmore has been rated "excellent" and not been adversely influenced to a significant extent by any major sources of contaminants. While overall the water quality is rated as excellent, during precipitation events and snowmelt runoff, the water quality can be of reduced quality due to contaminants entering via diffuse runoff (Alberta Environment, 2007).
- 4. Water withdrawals from Banff to upstream of the confluence of the Kananaskis River are minimal and are not impacting riparian health. Neither Banff nor Canmore draw their water supplies directly from the Bow River (Alberta Environment, 2007).
- 5. A 2004 riparian health assessment rated the riparian areas downstream of Canmore as generally healthy, but with problems due to non-native plant species. The report concluded that the minimal water extractions that occur in this reach have no significant impact on overall riparian health (Alberta Riparian Habitat Management Program, 2004).
- 6. A 2008 report from Y2Y examined aquatic ecology issues in the upper Bow River watershed. The report identifies existing information, ecological issues, knowledge gaps, research needs, and recommended mitigation measures for the Bow River from its headwaters to the Kananaskis Dam. (Blank & Clevenger, 2008)

### **Fish Populations**

7. Brown trout were introduced to the region in 1925 and this non-native species is currently the main predator in the river. Brown trout were at high population levels, in part, due to the nutrient rich effluent. It is unclear what impacts the reduction in nutrients (due to improvement in the waste water treatment plants in both Banff and

- Canmore) will have over time on the Brown trout population (Brian Lajuenesse, per.comm).
- 8. Alberta Environment reports that there has been public concern about reduced fish growth rates resulting from improved wastewater treatment at Banff and Canmore that has reduced nutrient discharge into the river (Alberta Environment, 2007).
- 9. Alberta Sustainable Resource Development conducts Brown trout (*Salmo trutta*) redd surveys in Bill Griffith's Creek, one of the major spawning creeks for the Bow River system near Canmore. The surveys showed a significant reduction in redd numbers from 1989 to 2005. The observed reduction in 2004-5 may be partially related to an algae bloom in the Bow River during 2003-4 which resulted in a major reduction of invertebrates, and fish kill due to lack of food (a similar situation recently occurred in Montana) Additionally the river flows were low and temperatures were high during the summer of 2003. The 2005 survey indicates that the younger age classes of Brown trout were showing a generally good condition factor, indicating that the next generation should be healthy. Note: the results of spawning surveys must be treated with caution as fish may shift spawning beds due to other factors such as low water flows, etc. (Alberta Sustainable Resource Development, 2005 and Shelley Humphries, per.comm.).
- 10. Another native species, the Westslope Cutthroat trout, has now almost been extirpated from the Upper Bow river system. One of the largest populations of Westslope Cutthroat trout was in Spray Lakes, but that population was almost totally eliminated by the construction of the hydroelectric facilities that created the Spray reservoir. Cutthroat trout have been negatively impacted by the construction of hydroelectric facilities on all of the upper Bow drainage. One of the biggest hindrances to Cutthroat Trout recovery in the region today is the hydro-generation facilities in the region. The Westslope Cutthroat Trout are listed as threatened by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). As of June 2007 it was under assessment Alberta's Endangered Species Conservation Committee (Brian Lajuenesse, per.comm).

## **Community Initiatives:**

- 1. Upgrades to Bow Valley wastewater treatment facilities have reduced the nutrient levels of the effluent. This is helping to return the river to more natural conditions. Previously, nutrient-rich discharge had resulted in unnaturally high biomass (including fish) in the system. Ongoing monitoring of the Bow River is being done by Alberta Environment to study the effects of this nutrient reduction.
- 2. Brown trout replaced the native Bull trout, which had been heavily angled. The Province now has a Bull trout recovery plan in place.
- 3. Spring Creek Developments has dug over-wintering holes in Policeman Creek to help all fish survive over winter (Brown trout and Mountain whitefish). Most adults spawn and then leave, but most young stay in the creeks for 2 to 3 years. The Spring Creek plan involves revegetating with native vegetation, minimizing trail impacts along riparian areas, and allowing no development within the minimum 6 metre buffers from the creek bed. This will improve the overall health of these creeks.

- 4. The Town of Canmore has guidelines for storm water management. Storm-sceptres are required on all discharge for new developments. These take certain pollutants out before they can enter the water courses. Older developments all have catchment basins to improve surface water quality.
- 5. The Town of Canmore is working towards being cosmetic pesticide free by the year 2014 (however pesticides and herbicides may still be used non-cosmetic purposes as part of its integrated pest management plan) (Town of Canmore, 2004b).
- 6. The Town of Canmore's Snow Removal Policy specifies that the sand/salt mixture will be made up of a maximum of 10% by salt volume (Town of Canmore, 2002). Using a lower salt concentration can reduce the impacts of runoff on the aquatic ecosystem.
- 7. Phase 1 of the Upper Bow Basin Cumulative Effects Study (UBBCES) is scheduled to commence in December 2008. The goal of the study is to develop a scientific understanding of the potential cumulative effects on water quality and quantity of all types of land use within the study area.

# **Interpretation:**

- 1. The aquatic system of the Bow River and native fish species are sensitive to disturbances. Improving and maintaining water quality and riparian health is important to restore ecological integrity to this system. Reduction in the nutrient levels of effluent from Bow Valley waste water treatment facilities is helping to return the Bow River to more natural water conditions.
- 2. There is an unnatural fish species composition due to over-angling (reductions in Bull trout): construction (and lack of mitigation) of hydroelectric facilities (reductions in Cutthroat trout; and introduction of non-native species (i.e. Brown, rainbow, and brook trout).
- 3. Recovery efforts for native species will require cooperation by multiple government departments and the hydroelectric facilities. The Alberta Fisheries Management Branch deals with fish and fish only, the Federal Department of Fisheries and Oceans deals with fish habitat, and Alberta Environment deals with water, while Alberta Sustainable Resource Development department deals with amphibians.

# 4. Solid Waste and Recycling

As a community, an important goal is to encourage and support programs and activities intended to create an educated and engaged public that embraces environmental stewardship (Mining the Future: A Vision for Canmore 2006). Waste management and recycling are key components of the Town of Canmore's Environmental Care Program. In 2003, the Town adopted a new Solid Waste Action Plan (SWAP) with the goal of reducing that quantity of Municipal Solid Waste (MSW) sent to landfill.

MSW is comprised of residential, ICI (Industrial, Commercial, Institutional), and C&D (Construction and Demolition). This waste can be classified as "wet" or "dry". "Wet" waste such as residential garbage is sent to a Calgary area Class II landfill, while "dry" waste such as construction debris is sent to the Francis Cooke Regional Class III Landfill and Regional Recovery Center (east of Exshaw).

The Town of Canmore is a member of the Bow Valley Waste Management Commission (BVWMC). The Commission operates The Francis Cooke Regional Class III Landfill and Regional Recovery Center and works with member municipalities to achieve their waste reduction objectives.

Solid waste management has many important linkages to energy use and greenhouse gas emissions. Direct GHG emissions from the waste sector were 2.9% of the total national GHG emissions in 2006. Methane emissions from the decomposition of organic materials in landfills accounted for 81% of the total GHG emissions from this sector (Environment Canada, 2008). Not captured in these emissions calculations are the energy and emissions created during the original production of these now-waste products in the landfill. Reducing waste and resource recovery through reuse and recycling are key components of any waste or energy management strategy (the 3 R's: Reduce, Reuse, and Recycle).

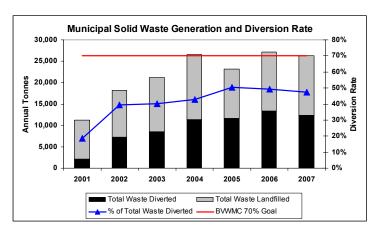
**Threshold/Goal:** In 2002 Town Council approved the following goal: "That the Town of Canmore achieve a reduction in per capita Municipal Solid Waste sent to landfill of 50% by the year 2010, using 2001 as the base generation year." Base generation was determined to be 0.84 T/p/y with a goal of 0.42 T/p/y by 2010. The Solid Waste Action Plan was approved by Council in 2003 (Town of Canmore, 2003b).

The following diversion goals are promoted by the BVWMC to its member communities:

- A landfill annual diversion goal of 70% by weight by 2010 for the overall waste resource stream is promoted to our member communities.
- A Class III annual landfill diversion goal of 80% by weight by 2010 for construction waste resources is mandated." (BVWMC, 2008a)

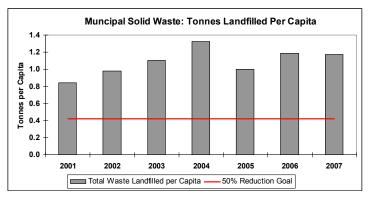
#### **Observations:**

1 The total amount ofmunicipal solid waste generated increased from 11,232 tonnes in 2001 to tonnes in 27,165 2006, decreasing slightly to 26,244 tonnes in 2007 (an overall increase of 133.7%). During this time, the diversion rate has risen from 18.6% in 2001 to a high of 50.4% in 2005; decreasing slightly to 47.4%



in 2007 (The BVWMC encourages its member communities to achieve a waste diversion rate of 70% by 2010 from the total waste stream).

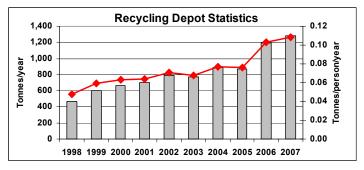
2. The Town of Canmore's Waste Management Goal specifies a 50% per capita decrease in MSW sent to landfill by 2010. This goal is equivalent to 0.42 T per capita. The total MSW landfilled per capita (based on permanent population) increased from 0.84 T in 2001 to a high of 1.32 T in



2004, decreased sharply by in 2005 and rose again to 1.17 T per capita in 2007. The total solid waste landfilled per capita has increased by 39.0% from 2001 to 2007.

- 3. Residential waste is only one component of the total MSW stream. From 2001 to 2007 the quantity of residential solid waste generated has increased from 2,600 T to 3,193 T. On a per capita basis this has remained fairly stable between 0.24 and 0.27 Tonnes per capita (based on permanent population). Overall the total amount of "wet" waste sent to the Calgary Landfill (including residential waste) has increased by 18.4% from 5,400 T in 2001, to 6,393 T in 2007.
- 4. The total amount of dry waste sent to the Francis Cooke Landfill increased from 3,747 T in 2001 to a high of 9,127 T in 2004, dropping sharply in 2005 and rising again to 7,419 T in 2007). From 2001 to 2007 the quantity of dry waste landfilled at the Francis Cooke increased by 98.0%,
- 5. In 2007, the total waste generated from municipal buildings was 167.9 Tonnes, up from 88.1 Tonnes in 2004. (Town of Canmore, 2008h)

6. Total tonnes of recycled materials at the Recycling Depot increased from 468 T in 1998 to 1,282 T in 2007. This represents a per capita increase of 60.6 kg per person. Mixed paper, newsprint, and cardboard represented 77% (by



weight) of the materials recycled in 2007.

- 7. The Canmore Bottle Depot is a private operation that accepts all approved beverage containers. This type of recycling is also increasing. In 2006 the Depot accepted 1,000 tonnes of recyclables, up from 520 tonnes in 2004.
- 8. Approximately 216 households and 80 businesses in Canmore pay additional fees to a private contractor for regular curb-side collection of their recyclable materials. These materials are deposited at the Boulder Recycling Depot and are included in the total materials recycled. (Town of Canmore, 2008h)
- 9. The Francis Cooke Regional Landfill and Resource Recovery centre has increased their waste diversion efforts. In 2006 and 2007 they received more than 27,000 tonnes of "traditional" waste materials, and diverted and recycled 62.0% (2006) and 53.8% (2007) of these materials. (Note: this is a regional facility so it includes materials not just from Canmore, but also from Banff and the M.D. of Bighorn). (BVWMC, 2008b)

### **Community Initiatives:**

- 1. The 2007 Spring Community Clean Up was very successful. During the 5 hour program, 211 volunteers donated their time to clean up along roadways ditches, watercourses, trails, public fields and parks. A Fall Community Clean Up event was also held with a total of 98 volunteers.
- 2. The Town of Canmore offers a variety of additional waste management and diversion programs including a Large Item Clean-up, Leaf and Grass Waste Collection and Composting, Scrub and Brush Waste Collection, a mobile recycling trailer, and a Toxic Round-up to collect Household Hazardous Waste (such as paint or household chemicals).
- 3. The Town of Canmore and BVWMC are currently working in conjunction with the local development industry on the source separation of Construction and Demolition (C&D) waste, to reduce the quantity of material sent to the Class III landfill. To meet this goal the Town developed a Construction and Demolition (C&D) Waste Management Plan in 2007.
- 4. In 2007/8 the Town commissioned an Enhanced Recycling Program Feasibility Study and Implementation Plan (ERP). The study examined ways to improve recycling and materials diversion in the community, including the possibility of curbside recycling programs or placing recycling bins beside the neighbourhood bear-proof garbage containers. The study also explored the options for the construction of a new

- Materials Recovery Facility (MRF) to handle the growing waste stream and recycling sorting requirements (2cg, 2007 & 2008).
- 5. 2008 saw the introduction of the "Zero Waste" concept to several events in Canmore. The Canmore Folk Festival, Cause Canada Half-Marathon, Lawrence Grassi Christmas Concert each significantly reduced the amount of waste generated at their events through "Zero-Waste" principles.
- 6. In 2008 a community-led movement to reduce and eventually eliminate single-use plastic bags from the Bow Valley began. The Bow Valley Waste Management Commission is planning on initiating a valley wide pilot program to reduce plastic bag use. In December 2008, Canmore's Town Council committed funds towards reducing plastic bag use in the community.
- 7. The Town of Canmore's Environmental Advisory and Review Committee (EARC) conducted a review of the Environmental Care Program The committee made the following key observations with respect to the Solid Waste Action Plan:
  - Small gains in the reduction of residential waste going to landfill are being eclipsed by large increases in Industrial Commercial & Institutional (ICI) wastes going to landfill.
  - There is a need to review the appropriateness of using per capita goals for the ICI sector.
  - Little or no progress has been made on several key initiatives identified in the plan (including the regional organics composting program) (EARC, 2008)

# **Interpretation:**

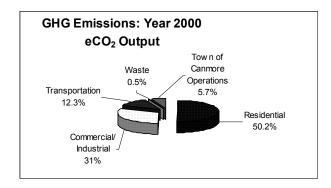
- 1. Canmore is a rapidly growing community, and the total quantity of waste materials generated is strongly affected by rate of C&D waste. The primary factor in the increased waste diversion rate has been the emphasis on separation of C&D waste and increased diversion rates at the Francis Cooke Landfill. Note: residential recycling rates are increasing, but are overshadowed by the sheer volume of material from the C&D sector.
- 2. Significant progress is still required to meet both the Town of Canmore's 50% reduction per capita goal and the BVMWC 70% diversion rate goals by 2010. The recent EARC committee review notes that the waste management goal "will not be achieved without a significant rethink of the program and changes to the solid waste action plan". It is important to note that the Waste Management goal is per capita, based on the permanent population only.
- 3. Developing solutions for organic waste composting and continuing to increase residential recycling will reduce the quantity of commercial and residential waste sent to the Class II landfill and the associated methane emissions.
- 4. Although bear proof garbage bins have been effective at reducing bear/garbage incidents they are also commonly misused for waste disposal. Residential garbage bins often contain lots of recyclables as well as construction or other debris. It is possible that disposing of material in the garbage bin is an easy and anonymous way to get rid of it, instead of recycling materials in the appropriate fashion or delivering materials to the Class III landfill.

#### **Recommendations:**

- 1. The Waste Management goals should be re-examined and perhaps separated into different waste reduction goals for residential waste; ICI, and C&D waste (similar to the Water Management Goals). These are essentially separate streams, with the actions of individual residents having little impact on the actions of the construction industry or commercial sector, and vice versa.
- 2. The Waste Management Goals should also be revised to include the non-permanent population in the per capita calculation.
- 3. Work should continue on a regional solution for organic waste composting as well as on promotion the 3 R's in the community.
- 4. As noted in the EARC review of the Environmental Care Program, there is a need to consider the full life cycle impacts associated with transportation of wastes to distant locations. Additionally, the plan needs to be updated to reflect the outcome of recent work done on the Enhanced Recycling Program.

# 6. Energy Use and Greenhouse Gas Emissions

In Canmore, it is important to exercise leadership in environmental excellence through innovation and creativity (Mining the Future: A Vision for Canmore 2006). In 1999, the Town of Canmore committed to the Federation of Canadian Municipalities (FCM) Partners for Climate Protection Program (PCP). In 2002 the Town Council approved the goals listed in the threshold section below. To achieve these goals an Energy Management Action Plan (EMAP) was developed in 2005 (Sheltair, 2005). The EMAP will assist in developing a series of strategies and initiatives to reduce greenhouse gas emissions and take advantage of the multiple co-benefits of reduced air pollution, improved energy efficiency, and lower energy bills. To date, the Town of Canmore has completed baseline emissions analysis (Milestones 1), established reduction targets (Milestone 2), developed a local action plan (EMAP) (Milestone 3) and is undertaking or planning for a number of initiatives and actions identified in EMAP.



**Note:** eCO<sub>2</sub> refers to the equivalent amount of CO<sub>2</sub> produced and emitted generating power for each sector.

**Source:** Town of Canmore Environmental Advisory Review Committee Energy Management Action Plan (EMAP) Overview

Note: Updated information for GHG Emissions is not available.

## Threshold/Goal:

The Town of Canmore will achieve an 'overall' reduction in greenhouse gas emissions on a community-wide basis of 6% per capita by the year 2012 using 2000 as the base year of comparison. The 6% 'overall' reduction will include a 20% reduction in Town of Canmore operational emissions.

## **Observations:**

1. The residential sector is the largest source of GHG emissions in Canmore, accounting for 50% of the total in 2000. This is followed by the commercial/industrial sector (31%) transportation (12.3%), and municipal operations (5.7%).

## **Community Initiatives:**

1. The Town of Canmore pays a "green power" surcharge to provide 40% green power to town facilities (as part of an AUMA agreement).

- 2. The Town has expanded the use of biofuels in its fleet, and began an ongoing fleet rationalization process in 2007. This involves a "right sizing" rationalization exercise to choose an appropriate-use vehicle based on size, type and fuel in order to reduce GHG emissions. To date the Town now has one hybrid vehicle and 9 diesel vehicles that run on biofuel (B5 in winter and B20 in warmer months). The Town conducted a cradle-to-grave analysis of the biodiesel option to ensure that there was net environmental benefit to using this alternative fuel.
- 3. Energy efficiency retrofits in municipal buildings include: lighting retrofits, and heating ventilation and air conditioning (HVAC) controls. Traffic lights have been changed to energy efficient LED lighting systems. The Canmore Recreation Centre undertook a capital life cycle replacement which involves replacing HVAC systems. Most Town facilities have had lighting retrofits completed.
- 4. The Canmore Civic Centre, completed in 2004, was the first LEED Silver certified building in Alberta. The building was designed and constructed to exceed the energy performance guidelines of the Model National Energy Building Code by 43%.
- 5. The municipal Green Building policy was passed in 2005 and directs all construction and renovation of facilities to be built to the LEED Silver certification standard.
- 6. The Town has developed its Green Procurement Policy and Guidelines, to initiate sustainable purchasing decisions within the Town operations.
- 7. The Biosphere Institute of the Bow Valley has been collaborating with local municipalities to deliver climate change and energy efficiency programs such as the One-Tonne Challenge initiative, and programs targeting home electricity consumption.
- 8. The Town and the Biosphere Institute of the Bow Valley have been working together to provide local anti-idle street signage, fleet vehicle signage and a public anti-idling campaign that includes education and site monitoring. In 2005, the Town introduced an internal anti-idling policy targeted at Town fleet vehicles.
- 9. In 2007 the Town implemented a Green Building policy, requiring all development and/or building permits to meet either 3<sup>rd</sup> party certifications or the Town of Canmore Built Green Checklist. The policy is to ensure that all development will occur in a manner that is consistent with Town objectives to move toward more sustainable development.
- 10. In 2008 the Town of Canmore launched a 1 kW solar panel array on top of the Biosphere Resource Centre. The panels are part of the Alberta Solar Showcase, which is a municipal demonstration project across the Province. The project has yielded significant results in terms of streamlining solar project approvals with both governments and regulatory agencies.
- 11. The Town of Canmore's EARC committee made a number of observations with respect to the EMAP:
  - The baseline information is based on a significant number of unverified assumptions.
  - The goals in the plan are based on reducing emissions intensity. Even if the goals in the plan are achieved, population growth may still result in an increase in the overall emissions for the community.
  - It is not known if actual emission reductions have been achieved in either municipal operation or the community as a whole. (EARC, 2008)

## **Interpretation:**

- 1. The Town of Canmore's many GHG reduction initiatives are critical as examples to the community. However, targeting the residential and commercial/industrial sectors (which account for over 80% of the GHG emissions) will produce the biggest reductions in overall emissions from Canmore. Several local businesses are taking the lead with their own sustainable planning, building, retrofitting and policies. More reductions are also needed from the residential sector, which produces 50% of the total GHG emissions. Public education, rebates and other initiatives may help expedite this process.
- 2. Vehicle use has been identified as a major local source of both GHG emissions and air pollution (see Indicator #2 Air Quality). Developing transportation alternatives, reducing vehicle use, and reducing idling will have the combined benefits of improving air quality and reducing GHG emissions.
- 3. The community wide GHG reduction goals are per capita based on the permanent population; however the rapid growth of the non-permanent population is the main driver increasing Canmore's total population and is a factor in total energy use by the community.

#### **Recommendations:**

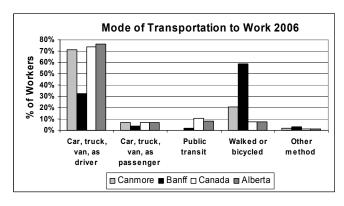
- 1. Recalculating the estimates of energy use and GHG emissions will be required to determine if progress has been made towards achieving the Energy Management Goals.
- 2. The Energy Management goals should be updated to reflect either a) the total population (including the non-permanent component), or b) based on absolute total emissions rather than the current method of per capita intensity based targets.
- 3. The EARC committee recommended that "if Town operations have already met or exceeded their targeted 20% reduction in emission intensity, new goals should be established." (EARC, 2008)
- 4. The residential sector is estimated to produce 50% of the total GHG emissions. Targeting energy efficiency programs and home retrofits at residents could lead to major reductions in community-wide energy consumption and emissions.
- 5. Reducing vehicle use in the Town could have a significant impact both on GHG emissions and improving air quality.

# 7. Transportation

Transportation has an impact on the community's quality of life, noise and pollution levels. Transportation has strong linkages to both Air Quality and GHG Emissions and Energy Use. Transportation options and alternatives are also a major component of the 'liveable community' described in the Mining the Future Vision.

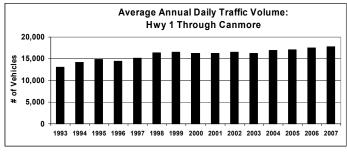
#### **Observations:**

1. Relative to Alberta and Canada a similar proportion of people in Canmore drive a vehicle to work (72.8%). The proportion of carpool people who slightly passenger is lower (6.2% vs. 7.9% in Canada). In 2006 18.4% walked or biked to work, this is much higher than the Canadian average (7.7%) but substantially lower than in Banff



(55.8%). From 2001 to 2006 the proportion of those walking or biking to work in Canmore declined by 2.0% (Statistics Canada, 2006a).

- 2. Respondents to the 2008 Sense of Community Survey indicated that 41% frequently used transportation methods other than driving (31% responded 'sometimes') (HarGroup, 2008).
- 3. From 1993 to 2007 the annual average daily traffic on Highway 1 has increased from 13,080 to 17,740 vehicles per day. The average daily summer traffic was 21,230 vehicles per day in 2007. The average annual growth rate over the past 15



years has been 2.4% per year (Alberta Transportation, 2008). At the current growth rate the Bow Corridor Regional Transportation Study predicts that traffic on the highway will reach the maximum desired Threshold of Service by 2013 (MacLeod Insitute, 2004).

4. There is currently no public transit system in Canmore. The 2006 Transit Feasibility Study explored potential routes and ridership thresholds required for a viable public transit system in Canmore and concluded that the conditions exist to make a "starter" transit system feasible. The threshold for the implementation of a transit service was estimated to be a total population of 18,000 (including both permanent and non-permanent residents) (Bunt & Associates, 2007).

- 5. In 2008, 907 people, or 11.1% of Canmore's labour force was employed in Banff, however there is no public transit for commuters (with the exception of staff buses for the ski industry) (Town of Canmore, 2008a).
- 6. Previously, there were numerous informal pedestrian crossings of the CPR crossings. An at-grade pedestrian crossing was recommended in the 2001 Transportation Master Plan, and has since been installed (including fencing and warning lights) (Town of Canmore, 2001b)
- 7. In an environmental context, the Snow Management Policy sets a goal of achieving a sand/salt mixture made up of a maximum of 10% salt volume. The Town of Canmore is currently using a 7% sand/salt mixture (Town of Canmore, 2002).

## **Community Initiatives:**

- 1. The ongoing Regional Mobility Strategy focuses on transportation issues relating to the Trans Canada Highway and its feeder system between Highway 68 and the B.C. border. Projects currently under investigation include public transit, intelligent transportation systems, and a recreational/commuter trail between Exshaw (through Canmore) and Banff. The Canmore to Harvie Heights portion of this trail was built in 2006.
- 2. A new Transportation Master Plan for Canmore was developed in 2006 and a Trails Master Plan was completed in 2007 (Bunt & Associates, 2007 & Town of Canmore, 2007c).
- 3. The Town of Canmore's Planning and Engineering Departments are working on upgrading the road system to incorporate bicycle traffic, which includes increasing the number of bicycle zones. As part of the Regional Mobility Strategy, commuter transportation strategies and pedestrian bicycle initiatives are being considered. These include pedestrian and bicycle paths and a newly completed paved trail to Harvie Heights.
- 4. To promote the use of bicycle transportation and reduce vehicle use, two bike-share programs have been launched in Canmore: Community Cruisers and Canmore Coop bikes. These programs provide access to "loaner" bikes to members to help facilitate their movement in Town.
- 5. To further reduce vehicle use the Biosphere Institute has been connecting commuters through a carpool program while the Canmore Community Coop launched a new Carshare program in the fall of 2008.

## **Interpretation:**

- 1. The spread-out nature of Canmore and the lack of a public transit system contribute to the fairly high proportion of residents who drive to work. In Banff, a much higher percentage of the population walks or bicycles to work and nearly 40% fewer residents drive cars to work than in Canmore (Banff also has a public transit system and a much smaller urban footprint than Canmore).
- 2. Vehicle use (both highway and in-town) is a major contributor to GHG emissions and air pollution in Canmore.

## **Recommendation:**

It is important to ensure that there is a clearly marked and interconnected system of commuter routes and trails to facilitate walking and bicycle commuting in Canmore.

## 8. Wildlife Movement Corridors and Habitat Patches

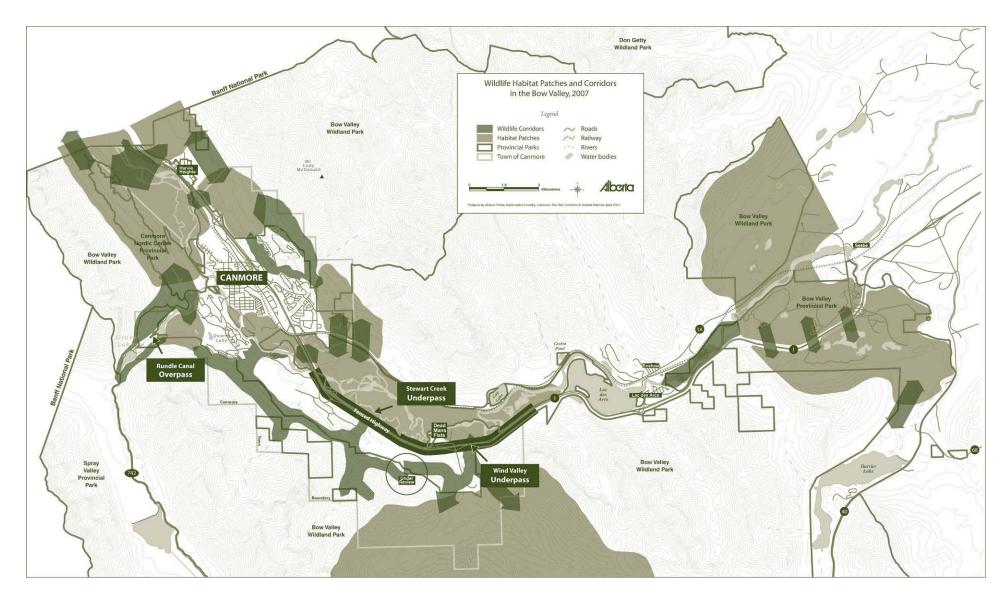
The network of wildlife movement corridors and habitat patches in and around Canmore serve as important connectors for wildlife moving between Banff National Park and Kananaskis Country and for cross-valley movements. Corridors also allow for the optimization of local habitat utilization. The Bow Valley is a key linkage between these regional habitat areas and the entire Yellowstone to Yukon (Y2Y) region. Guidelines for designing and maintaining functional wildlife corridors were outlined by the Bow Corridor Ecosystem Advisory Group (BCEAG), in the documents Wildlife Corridor and Habitat Patch Guidelines for the Bow Valley; and Guidelines for Human Use within Wildlife Corridors and Habitat Patches in the Bow Valley (Banff Park to Seebe). These corridors and patches are important to the citizens of Canmore as the 2006 Vision of Canmore highlights the need to "maintain regional connectivity of the surrounding landscape".

#### Threshold:

That the wildlife corridors and habitat patches remain viable for multiple species of wildlife endemic to the Bow Valley. This threshold can be further defined using these guidelines for corridor functionality:

- 1. There is no long term decline (recognizing annual variation) in target wildlife species use of habitat within the wildlife corridor, provided those species continue to be present in the surrounding habitat patches.
- 2. Target wildlife species are recorded moving through the entire length of the designated along-valley wildlife corridors and through various across-valley corridors
- 3. Direction of wildlife travel generally coincides with wildlife corridor orientation
- 4. There is no evidence that wildlife movement within the designated wildlife corridor is significantly constrained or prevented by biophysical features
- 5. There is no evidence of a "filtering" effect wherein only certain individuals use the corridor but others do not.

(Alberta Sustainable Resource Development, 2008a)



**Source:** (Alberta Community Development, 2007b)

#### **Observations:**

Wildlife movement corridors and habitat patches on public undeveloped lands within the Town of Canmore have generally been given the land use designation of Wildland Conservation (WC), Environmental District (ED) or Natural Park District (NP). The following summarizes recent changes to the wildlife corridor and habitat patch network in and around the Town of Canmore:

### **Corridors and Land Use**

- 1. In 2001, 400 acres west of the Silvertip Development to Harvie Heights was given up by Silvertip, and is now part of Bow Valley Wildland Park. The area serves as a habitat patch and important area for carnivores using the Upper Benchlands corridor.
- 2. As part of the G8 Legacy program, a wildlife corridor crossing structure over a section of the Rundle Forebay was constructed in 2003 and a wildlife highway underpass with associated fencing was completed at Dead Man's Flats in October of 2004 (there is a pre-existing wildlife underpass at Stewart Creek constructed in 1999). Wildlife and human use monitoring is ongoing to determine the effectiveness of these crossing structures (see the Wildlife/Highway Mortality section for further details).
- 3. The wildlife corridors adjacent to the Three Sisters Resort Centre have been redefined as per the 2002 Golder and Associates report (Golder Associates Ltd., 2002). A conservation easement between Three Sisters Mountain Village and the Government of Alberta protecting the portions of these corridors on privately owned land was signed in 2003. In December 2006, Council approved the easement for the protection of the 35m corridor buffer.
- 4. The Wind Valley study resolved the location of cross-valley corridors at Dead Man's Flats and the entrance to Wind Valley. However, portions of these corridors sit on privately owned land and have not yet been legally designated through conservation easements or other measures. The misalignment of the proposed corridor west of Wind Valley as well as the formal designation/protection of the corridor east of the Stewart creek primary corridor is currently under review (as of fall 2008) and must be resolved before development takes place in the area. Note: currently only a portion of the Stewart Creek corridor is protected under a conservation easement.
- 5. The designation of the Wind Valley corridors effectively isolates two parcels of privately-owned land that sit further upslope from the Three Sisters Mountain Village development. Development of these parcels would have implications to the functionality of the corridors.
- 6. Three Sisters Mountain Village is currently undertaking a comprehensive review of wildlife corridors and their lands. As mentioned above in #4 the alignment of the Stewart Creek/Wind Valley corridors are under review. Additionally, the timing of development, phasing in of the resort area, reclamation of the Tipple Site, a conservation easement on an island in the Bow River, and the removal of chain link fence (as per Golder, 2002) are all under review (Per.comm. Steve de Keijzer)
- 7. BCEAG is currently moving forward with a review of the 1999 BCEAG guidelines for wildlife corridors and habitat patches. The intent is to ensure a consistent rationale for the approach to development and guidelines for human use near corridors and habitat patches (Per.comm. Sally Caudill, Steve de Keijzer, Steve Donelon).

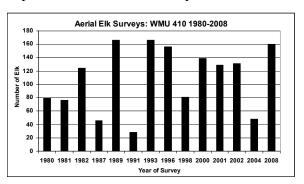
## Trails and Wildlife Corridors

- 8. In June 2005, portions of Bow Valley Wildland Provincial Park and Canmore Nordic Centre Provincial Park that fall within designated wildlife corridors were closed by Ministerial Order to public access except on officially designated trails. These trail restrictions are designed to protect wildlife and their habitat by redirecting human use to other areas. The closure of trails and construction of new trails is largely guided by the BCEAG guidelines (BCEAG, 1998, 1999a,b, 2001) and recommendations of the Recreational Opportunities Working Group (ROWG) (BCEAG, 2002a,b). As a continuation of the ROWG process a Trails Advisory Group (TAG) still meets on a regular basis to discuss trail issues and solutions in the Bow Valley. This is an interjurisdictional group with membership from the public and key stakeholders as well.
- 9. As part of this process, the Upper Benchlands trail was closed and a new alternate, the 2.3 km long Montane Traverse trail, was constructed just upslope of the Silver Tip golf course.
- 10. Construction of the new Highline Trail on the south side of the valley began in 2007 and continues through into 2009. As of the end of 2008 the trail is complete from near Grassi Lakes to Three Sisters Creek. This designated trail provides an alternative to the network of informal trails which are now officially closed.
- 11. In 2008, the Horseshoe Loop (east of Cougar Creek) received additional signage and trail reroutes to avoid perennially wet and badly eroded areas. These trail improvements are to provide an appropriately signed option in preparation for the eventual closure of trails higher up on the slopes of Grotto Mountain as per the recommendations of the ROWG process.
- 12. At the Canmore Nordic Center a new cross-country mountain bike loop has been constructed (designated with orange signs). Two additional loops have been designated, largely using existing trail segments (using purple and yellow signs). There are plans to designate an additional two loops in 2009. Designating these loops helps trail users navigate the notoriously confusing network of trails at the Nordic Center, but also helps to concentrate human use away from critical wildlife habitats.
- 13. To assist the public with navigating the designated trail network, trail signs showing the official trails have been placed at trailheads and major trail junctions (see next page for the official trail map).
- 14. In recent years the construction of illegal trails and mountain bike stunt parks has been an issue in the lands surrounding Canmore. In an effort to provide appropriately designed and safe recreational opportunities three bike skills parks (with jumps and technical features) have been built. The bike park at the Nordic Center was built in 2006, while two additional parks on municipal lands were built in the fall of 2008.

#### **Research and Monitoring**

1. Monitoring of wildlife activity in the corridors east of Canmore was expanded in 2005 as part of the Eastern Bow Valley Wildlife Study (Alberta Community Development, 2006). Since 2007, the study now also includes the extensive use of remote wildlife cameras. This study measures the presence and relative abundance of

- wildlife species from the Stewart Creek underpass east to Bow Valley Provincial Park
- 2. Research since 2001 (post publication of studies by Jevons and Callaghan, 2001) is indicating that there has been an increase in use of the upper Benchlands area by wildlife, particularly carnivores. Since the closure of the Upper Benchlands trail in 2005 there has been an almost 90% reduction in human use on that trail (S. Donelon, per.comm.)
- 3. In the fall of 2008, the Alberta Government and the University of Calgary began an elk ecology study in the Bow Valley. GPS collars are being used to gain a better understanding of elk range and movement patterns in the Bow Valley.
- 4. Alberta Sustainable Resource Development continues to conduct aerial winter surveys for elk on an annual basis when weather and budgets permit in WMU 410 (the Wildlife Management Unit that encompasses the Bow Valley). Elk numbers fluctuate from survey to survey and are subject to movements of elk into and out or the survey area.



This can result in a wide variation in numbers counted. Overall, there is no clear trend of an increasing or decreasing elk population in the region (note: some of the variability in the counts may be due to survey limitations such as visibility of the elk). Numbers appear stable (Alberta Sustainable Resource Development, 2008b).

5. Recent research (from Canmore and Lake Louise) supports previous conclusions that bears and wolves will preferentially select for slopes below 25°. This research is in agreement with the BCEAG guidelines that indicate that steep slopes (>25°) function as a deterrent to carnivore movement (Alberta Parks, 2006).

## **Community Initiatives:**

- 1. In addition to designating and protecting wildlife corridors, managing human use is also important to ensure corridor functionality. The development of a formalized trail network in Bow Valley Wildland Provincial Park is designed to help manage human recreational use and minimize disturbances to wildlife. The Canmore Trails Master Plan was completed in 2007 and is designed to integrate with the network of trails on Provincial land (Town of Canmore, 2007c).
- 2. The Bow Valley WildSmart Community Program was launched in 2006 to develop a coordinated approach to education/outreach programs and help support direct management activities that aid in increasing public safety and enjoyment, as well as contribute towards sustainable wildlife populations. For the last 2 years, WildSmart Ambassadors (in conjunction with Friends of Kananaskis and Alberta Parks) have engaged recreational users on trails and at trailheads. They provide information on wildlife, avoidance of wildlife conflicts, appropriate behaviours should encounters occur, and respect for the designated wildlife corridors. In 2008, Alberta Parks

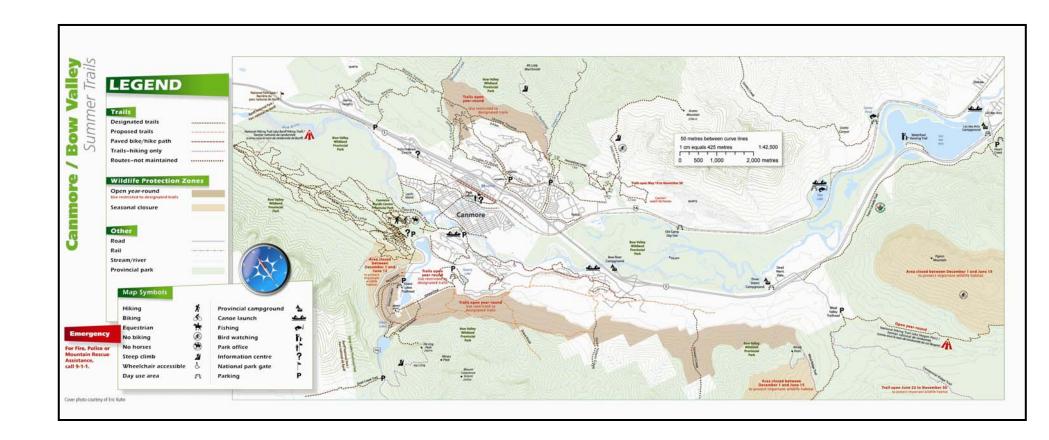
- created a new Outreach Coordinator position to work closely with communities, user groups, and local stakeholders.
- 3. On a regional basis, forest modification such as prescribed burning and forest thinning in the Bow Valley, Kananaskis, and Banff National Park are being actively used as tools to meet FireSmart, mountain pine beetle, ecological restoration, and wildlife habitat enhancement objectives (see the section on Forest Health for more information). Such activities should provide alternate high quality habitats for many species including bears.

# **Interpretation:**

1. Public education programs such as Bow Valley WildSmart are essential for the functionality of corridors and the safety of the public throughout the region. Interaction with trail user groups is also critical for this process as demonstrated by BCEAG's Recreational Opportunities Working Group (ROWG) and the Trail Advisory Group (TAG).

### **Recommendations:**

- 1. Monitoring and assessment of corridor viability and function should continue as development progresses and even beyond once Canmore has achieved build-out. This is important to determine if there is a need for modification of the corridors and human use, and to make adjustments to the corridor system if required. This is a core outcome from an adaptive management philosophy.
- 2. There is a need to develop viable metrics of corridor viability and function to better display and represent the extensive datasets of wildlife movement data that has been collected.
- 3. Continued public education about the effects of human use in wildlife corridors and promotion of human/wildlife safety through programs such as WildSmart should continue.
- 4. Continued management of human use and appropriate trail designation and trail design will be necessary to minimize the impacts of a continually growing human population on local wildlife.
- 5. Given their importance to many species of wildlife, continued emphasis should be placed on preserving low elevation/low angle habitats and corridors with good cover.



# Map of the Canmore / Bow Valley Summer Trails.

Source: (Alberta Government, Kananaskis Country, Undated)

This map shows officially designated trails and permanently/seasonally closed areas.

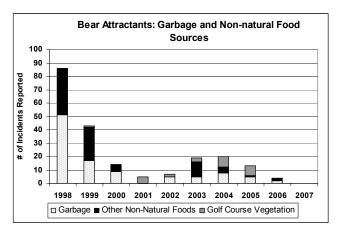
# 9. Bear Attractants

Canmore has recognized that an important goal is to encourage and support programs and activities intended to create an educated and engaged public that embraces environmental stewardship (Mining the Future: A Vision for Canmore 2006). By monitoring bearhuman incidents involving wildlife feeding on non-natural food sources or on natural food sources within the Town, we can better determine the effects of initiatives to lessen the impacts of development and reduce negative bear-human interactions. In May 1999, the Town of Canmore installed bear-proof garbage containers and eliminated roadside garbage pick-up. A by-law introduced in 1999 prohibits outdoor composting of food waste, while another introduced in 2001 prohibits the use of hummingbird or birdseed feeders from April 1<sup>st</sup> to October 31<sup>st</sup> each year. These measures are designed to avoid attracting bears to residential neighbourhoods where they could come into conflict with people or pets. In addition, an active program of removing natural berry producing shrubs in historically high conflict areas is ongoing.

#### **Observations:**

Note: the 2006 and 2007 bear incident data is based on preliminary queries as the database is currently under revision, these represent minimum numbers as there may be additional incidents that are not represented here.

1. Bear incidents associated with non-natural food sources or other attractants (including garbage, vegetation, golf course birdfeeders, compost, etc.) have decreased from a total of 86 in 1998 (bear proof garbage containers were installed in 1999), to a total of 4 in 2006 and 0 in 2007. (Note: Data is specific to the Town of Canmore)



- 2. A by-law was introduced in 2001 prohibiting bird feeders
  - (prohibited period is April 1 to October 31 of each year). Since that time there have been 4 reported bird feeder bear incidents in 2003 and one in 2004. There have been no reported incidents since 2004.
- 3. Bear incidents associated with garbage in Canmore have declined from 51 reported cases in 1998 to only 2 in 2006. No bear/garbage incidents were reported in 2007.
- 4. Following the introduction of a bylaw prohibiting outdoor composting, there were no compost related bear incidents reported from 1999 to 2006. In 2006 there were 2 compost related incidents (no incidents were reported in 2007).

- 5. Between 2001 and 2005 there were between 2 to 8 reported bear incidents relating to golf course vegetation as a non-natural food attractant (not including simple sightings of bears on golf courses). No incidents were reported in 2006 or 2007.
- 6. There have been several incidents over the past decade involving ornamental fruit trees (e.g. crab apples) and bears in Canmore. While this is a bigger problem in other communities in the Bow Valley it is still an occasional problem in Canmore.
- 7. Sheperdia canadensis (Buffaloberry) is a native plant in the region that is an important food source for bears. The berry season lasts from approximately mid-July to early September. Buffaloberry grows especially well where there is light from disturbance in the forest canopy (power lines, trails, thinned areas, meadows, forest edges, etc.). From 1998 to 2005, 66.7% of all "human conflict" occurrences with bears and 63.9% of all sightings were during berry season. This may be due to a combination of factors: 1) there is an abundance of bear activity in the region due to the availability of berries, and 2) July to September is a popular time for outdoor recreation, so many people are in the woods and using the trails. (Honeyman, 2007&2008)

## **Community Initiatives**

- 1. In 2006, there was a concern that many privately owned commercial bins in Canmore did not meet the Town's bear-proofing standards. In 2007 the Town signed an agreement with the commercial haulage companies specifying that the bins are to be maintained to the appropriate standards.
- 2. Since 2006, the WildSmart program has been providing education to residents and visitors on human/wildlife safety including the importance of removing non-natural bear attractants and avoiding habituation of bears to human generated food sources.
- 3. The Bow Valley Bear Hazard Assessment (Honeyman, 2007) noted that while unnatural attractants are a concern, natural foods (e.g. buffaloberry, dogwood, chokecherry) are the predominant attractant involved in bear-human conflicts. To reduce the potential of negative bear-human encounters the Alberta Government, Town of Canmore, nd WildSmart began a program of buffaloberry removal in high conflict areas such as the Rundleview subdivision (excluded private property) and Quarry Lake areas. A total of 28 ha were removed in 2007, and an additional 20 ha in 2008. The Rundleview area has been completed but additional areas around Quarry Lake have yet to be completed. An additional 52 ha are scheduled for removal in future years. Additionally, Alberta Tourism, Parks and Recreation has removed buffaloberry bushes in high conflict areas at the Canmore Nordic Center (including the Grassi Lakes Trail) and at campgrounds in the Bow Valley.

### **Interpretation:**

1. In general, the Town of Canmore has significantly improved the management of non-natural bear attractants in recent years. The bear-proof garbage containers introduced in May 1999, have greatly reduced the number of garbage related bear incidents in Canmore. The bins must be functional and in good condition to be effective, so continued maintenance is necessary. By-laws prohibiting outdoor composting of

- food waste and the use of bird feeders during bear season have also greatly reduced bear activity and habituation in the town.
- 2. Continued monitoring of bears and their activities around golf courses is important to determine if attractant management methods on the golf courses are effective.
- 3. The removal of buffaloberry bushes in residential areas and areas of high human use does reduce the availability of a valuable food source for bears. To mitigate this effect, the Alberta Government has been creating new habitat areas through forest thinning and prescribed burning initiatives. This is integrated into a larger program of ecological restoration that meets mountain pine beetle, forest health, and forest fire reduction objectives.

#### **Recommendations:**

- 1. Continue the WildSmart program to educate the public about the dangers of habituating wildlife to food sources in the town.
- 2. Continue to monitor the number and type of bear incidents associated with attractants including garbage (both residential and commercial), birdfeeders, sports fields, and golf course vegetation.
- 3. Continue to manage natural food attractants (such as berries) in areas where there is a high potential for human-bear conflict. Continued removal of the bushes will be required as cutting them does not kill the plant, which will regenerate and eventually produce berries again in 5-10 years.
- 4. The 2007 Bow Valley Bear Hazard Assessment (Honeyman, 2007) makes a number of recommendations to help manage both natural and non-natural attractants. These recommendations include:
  - Develop a long term plan, and remove natural attractants (such as buffaloberry) from a number of known high conflict areas
  - Strengthen existing education programs to reduce unnatural attractants
  - Improve the compliance rate for functional commercial bear-proof bins
  - Carry out curbside recycling in such a manner as to not attract bears

# 10. Wildlife Incidents and Outcomes

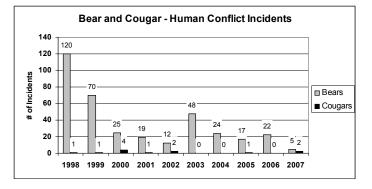
Residents of Canmore live in close proximity to wilderness areas and wild animals. Interactions between potentially dangerous animals and people are inevitable. The Town of Canmore has instituted a number of progressive measures to reduce the habituation of wild animals to urban areas. Animals that are deemed to be a potential hazard to public safety, however, may have to be destroyed or relocated by the appropriate agency. It is critical to enhance community understanding of the responsibilities and trade-offs involved with living with wildlife in the Bow Valley (Mining the Future: A Vision for Canmore 2006).

**Note:** An incident is defined as a circumstance where a Conservation Officer investigates a wildlife report. "Human Conflict" involves an incident whereby the animal had an encounter with a person or domestic animal, was involved with a non-natural food attractant, or property damage was involved. Simple sightings of bears or cougars are not included.

#### **Observations:**

Note: the 2006 and 2007 bear incident data is based on preliminary queries as the database is currently under revision, these represent minimum numbers as there may be additional incidents that are not represented here.

- 1. The number "human conflict" bear incidents have decreased substantially since 1998/9 (following the introduction of bear-proof garbage bins in May of 1999). Most of these incidents do not cause human injury, however a small proportion have resulted in maulings or fatalities:
  - In 2000, a cyclist was mauled by a sow grizzly bear with two offspring in
    - Bow Valley Wildland Provincial Park near the Canmore Nordic Centre. The animal was moved to the Calgary Zoo. The 2 offspring were collared and released nearby. In 2001, these same two grizzly to bears had he



- relocated, but were later killed by First Nation people after they wandered onto the Eden Valley Indian Reserve.
- In 2005, there was a fatal encounter between a grizzly bear and woman on the Benchlands near Stonecutter Creek. The bear was destroyed at the scene.

- In 2006 and 2007 there were no incidents resulting in harm to, or contact with, a person.
- 2. Serious cougar incidents in Canmore are generally uncommon and infrequent. In 2000, 4 incidents were recorded in Canmore and was the highest number of reported incidents during the period: 1994 to 2007. There were no incidents in 2006, and 2 incidents in 2007. Both these incidents involved dogs. There have been no reported attacks on humans by cougars in the Canmore area during this period (1994 2007).

3. In any given year there are typically several bears relocated to outside of the Canmore

- area. From 1998 to 2007 18 black bears and five grizzlies have been relocated. In 2006, a black bear with two cubs had to be relocated from the Common Namic Contractor and the Grant Relocated Bears

  | Destroyed | Relocated Bears | Black |
  - relocated. In 2006, a black bear with two cubs had to be relocated from the Canmore Nordic Centre as a result of this bear suddenly becoming aggressive towards dogs either on or off-leash. Such behaviour may have been precipitated by some negative encounter(s) with off-leash dogs. All 3 of these bears eventually died either directly or indirectly as a result of the
- 4. From 1998 to 2007 a total of seven black bears and one grizzly bear have been destroyed as management actions to ensure public safety. (Honeyman, 2007 & 2008)

relocation.

Destroyed/ Relocated		imal royed	Animal Relocated	
Bears	Black	Grizzly	Black	Grizzly
1998	0	0	5	0
1999	0	0	1	0
2000	0	0	1	1
2001	1	0	0	2
2002	0	0	4	0
2003	1	0	1	1
2004	3	0	2	1
2005	1	1	0	0
2006	0	0	4	0
2007	1	0	0	0
Total	7	1	18	5

**Source:** (Honeyman, 2007 & 2008)

- 5. In 2007 the media reported 3 coyote attacks on children in Canmore. None were seriously injured. Data is not available to indicate whether or not there has been an increase in the number of coyote incidents in the community.
- 6. Elk continue to utilize golf courses, playing fields, and open spaces in the town. This poses a potential habituation problem and public safety hazard if the elk come into direct contact with people, or attract predators into the town site.
- 7. In the 2008 Sense of Community Report 66% of respondents indicated that they were either very or somewhat concerned about being attacked by wildlife. This was one of the highest ratings of concern in the survey (far ahead of being concerned about violent crime or being attacked by a dog) (HarGroup, 2008). Note: this is a measure of community concern and perception, not a measure of the likelihood of having a negative encounter with wildlife.

### **Community Initiatives:**

1. Bow Valley WildSmart's community programs have included public presentations, education/outreach signage, implementation of Wildlife Ambassadors on trails and at trailheads (in conjunction with the Friends of Kananaskis), removal of buffaloberry in high conflict areas, a weekly bear activity report, development of a website, and the

- distribution of brochures, posters, and fridge magnets throughout the community as well as proactive public education programs.
- 2. Since 2001, Karelian bear dogs have been used as part of a bear aversion program in the Bow Valley and other parts of Kananaskis Country. The program is designed to reduce bear/human conflicts specifically targeting collared grizzly bears frequenting developed areas. In most years, about a dozen radio-collared grizzly bears are monitored and followed in Kananaskis Country and the Bow Valley. An unknown number of uncollared bears (both black and grizzly) are also worked with aversive conditioning techniques all designed to teach bears to stay away from area of high human activity.
- 3. The 2007 Bow Valley Bear Hazard Assessment, which reviewed bear/human conflict incidents over the last 20 years, outlined recommendations to reduce the probability of negative bear-human conflict in the Bow Valley. Specific recommendations from the assessment are discussed below in the "Recommendations" sub-section, as well as in the section on Bear Attractants.

## **Interpretation:**

- 1. Avoiding human habituation of bears and the subsequent conflict with wildlife is critical to ensure both public safety and the safety of the wildlife. Habituation to human food, residential neighbourhoods and contact with off-leash dogs can lead to the death or relocation of the bear. Relocating bears is an imperfect solution with a high probability of mortality for the bears (especially if cubs are involved). With the low reproductive rate of the regional bear population, minimizing human-caused bear mortality is essential to the long-term sustainability of grizzly bears in the Rocky Mountains.
- 2. There is a need for continued vigilance and management of attractants, both natural (e.g. buffaloberry), and non-natural (e.g. garbage, birdfeeders, food compost, ornamental fruit trees).
- 3. The number of serious cougar incidents remains low. However, residents indirectly influence cougar use of the Town of Canmore by attracting prey to back yards. Salt blocks, bird seed, oats and carrots are often left out for elk and deer. This, in turn, brings cougars closer to the community.
- 4. The 2008 Sense of Community Survey indicates that a one of the greatest issues of concern to local residents is being attacked by wildlife. This indicates that there is a great need in the community for balanced and informative wildlife safety information.

#### **Recommendations:**

- 1. Continue to enforce compliance with garbage, composting, birdfeeder, and off-leash dog regulations to minimize habituation, negative wildlife-human interactions, and harassment of wildlife. Continuing programs like the Bow Valley WildSmart Community Program and the bear shepherding program will also help reduce the probability of dangerous wildlife/human conflicts in the Bow Valley.
- 2. The Province of Alberta should continue to maintain and refine their wildlife observations and incident reporting system and database (in conjunction with

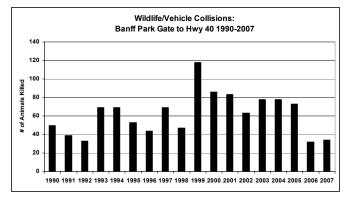
- Kananaskis Emergency Services). This information is invaluable in helping to understand trends in human/wildlife conflict and to monitor the affects of the various conflict reduction programs. The utility of tracking wildlife sightings in addition to actual incident should be examined.
- 3. A better understanding of the urban coyote situation in Canmore is required. Coyotes may be increasing in numbers due to access to non-natural food sources or the feral rabbit population or a combination of these and other factors.

# 11. Transportation Corridors and Wildlife

Wildlife habitat in the Bow Valley is fragmented by urban development and three major transportation routes: the Trans Canada Highway, Highway 1A, and the Canadian Pacific Railway. All three transportation corridors are sources of wildlife mortality. Monitoring highway and railway wildlife mortality allows us to make informed decisions about any changes or needs in speed limits, signage, fencing, and highway crossing structures needed to accommodate safe animal movement across the valley. In October 1999, the installation of highway fencing and the Stewart Creek underpass were completed. The Dead Man's Flats underpass was completed in October 2004 as part of the G8 Summit's Environmental Legacy.

#### **Observations:**

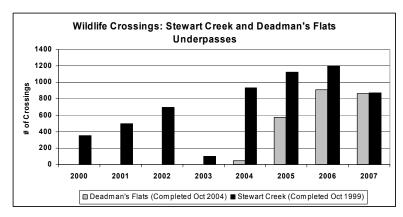
1. On Highway 1 from the Banff Park Gate to Highway 40 a total of 1,118 animals were reported killed from wildlife/vehicle collisions between 1990 to 2007. The annual total ranged from a high of 118 in 2000, to a low of 32 in 2006 (34 in 2007), with a mean of 62 per year. It is important to note that these are



- reported numbers and as such represent a minimum known number of animals killed.
- 2. The majority of animals killed were ungulates: deer (48.5% including both white-tailed, mule, and "unidentified"), and elk (27.4%). On average 30 deer and 17 elk have been killed annually from 1990-2007.
- 3. Carnivores are much less frequently killed on the highway than ungulates. There were a total of 28 black bears, 9 cougars, 8 wolves, 8 lynx, and 1 grizzly bear killed from 1990-2007. (Banff Wildlife Crossings Project, 2008)
- 4. The CPR reports that elk are the most frequently killed species on the section of railway from Exshaw to the Banff National Park east gate. Bears are also killed on the train tracks, as they are particularly attracted to grain spills or other food

attractants on the rail line.

5. Construction of the Stewart Creek underpass was completed in October 1999. A total of 2,400 underpass crossings had been recorded by the end of 2007. Overall



- deer have been the most frequent users of the crossing (31.9%), followed by elk (20.4%) and coyotes (12.8%). While crossings by large carnivores are less frequent, a total of 84 cougars, 73 black bears, and 15 wolf crossings had been recorded.
- 6. Construction of the Dead Man's Flats underpass was completed October 15, 2004. Since construction until 2007 there were 807 recorded crossings. The most frequent were deer (55.5%), followed by coyotes (19.1%), humans (10.2%) and elk (5.6%). There were also 11 recorded crossings by black bears, 8 by sheep, 4 by cougars, and a single wolf crossing (Banff Wildlife Crossings Project, 2008).

## **Interpretation:**

- 1. Wildlife vehicle collisions remain a concern in this region as they pose a threat to both wildlife and humans. On average, 62 wildlife vehicle collisions occur each year on Highway 1 from Banff Park Gate to Highway 40. A portion of the highway is fenced, but a significant section remains unfenced.
- 2. The crossing structures provide avenues for wildlife movement and connectivity in a fragmented landscape. The highway fencing contributes to habitat fragmentation, but improves safety for both wildlife and the driving public thereby reducing highway related mortality for many species. Most of the collisions involve deer and elk, but bears, wolves, cougar and lynx are also killed. The lower number of carnivores killed is likely a reflection of differing population densities in the valley. Human caused mortality is a significant problem for large carnivores, which generally have low population densities and reproductive rates.

#### **Recommendations:**

- 1. There is a need to continue monitoring the effectiveness of highway fencing and the associated crossing structures. Potential locations for additional fencing and crossing structures should be identified to complete a regional system of highway mitigations.
- 2. The potential impact of further development of the Three Sisters property on the Stewart creek crossing structure should be explored and appropriate mitigation measures put in place.
- 3. Public education efforts should continue and enhanced signage is needed to reduce human use of the wildlife crossing structures at the Rundle Forebay, Stewart Creek, and Dead Man's Flats. Human use of these structures negatively impacts wildlife movement patterns.

## 12. Quantitative Land Uses

Quantifying land uses and tracking them over time helps to ensure there is adequate land in the community for desired purposes. This indicator presents a breakdown of land zoning type by area in the Town of Canmore and also a more specific breakdown of its Park Facilities. Canmore's Land Use Bylaw document provides detailed information on the purpose of all land use districts and their uses. The 2006 Mining the Future document acknowledges the importance of respecting the needs of both humans and wildlife regarding the use of the natural landscape.

#### **Observations:**

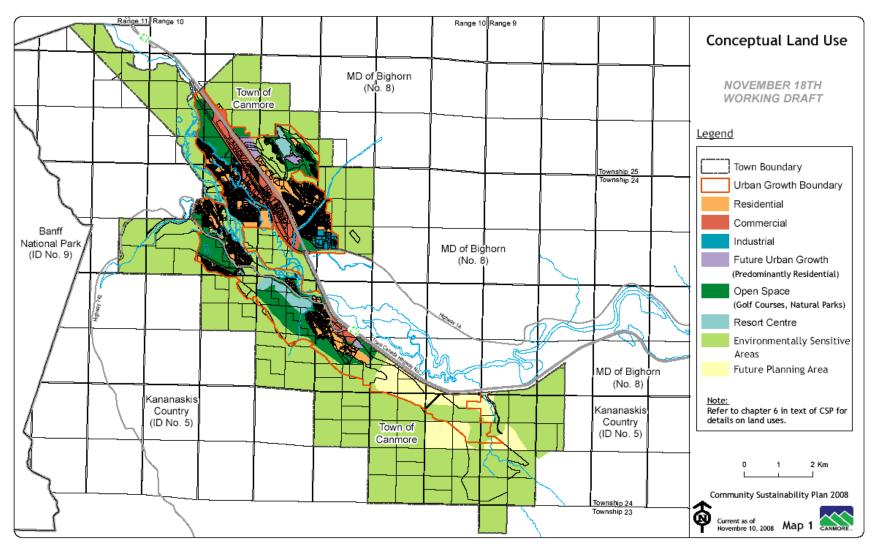
### **Current Zoning and Land Use**

- 1. The municipal boundary of Canmore encompasses a total of 6,737 ha including 3,698 ha of Provincial Parks.
- 2. Fully 68.3% of the total municipal area is zoned for conservation (Wildland Conservation WC or Environmental District ED zoning). The purpose of the
  - Wildland Conservation District zoning is for the protection and conservation of the environment and natural scenic or aesthetic values. This zoning allows lowimpact recreational use where with consistent the conservation goals. (Town of Canmore Land Use Bylaw, 1999). Another 3.5% is zoned as Open Space. This differs from conservation lands in that it includes areas intended for higher density human recreational use such as public parks, Quarry Lake, off-leash dog parks, etc.
- 3. As of 2008, 7.8% lands remain classified as vacant. Some of these lands are empty lots currently zoned for future use as residential or commercial, while the

Land Use in the Town of Canmore 2008			
Land Use	Area (ha)	% of Total Area	
Conservation*	4,604.2	68.30%	
Vacant	526.0	7.80%	
Golf	339.1	5.03%	
Low Density Residential	246.4	3.66%	
Open Space	236.9	3.51%	
Road Municipal	200.2	2.97%	
Road Provincial	126.0	1.87%	
Water	115.0	1.71%	
Utilities	79.1	1.17%	
High Density Residential	62.7	0.93%	
Municipal Reserve	57.9	0.86%	
Commercial	50.4	0.75%	
Institutional	38.1	0.56%	
Unknown	23.0	0.34%	
Industrial	18.2	0.27%	
Mixed Use	11.2	0.17%	
Recreation Facility	3.0	0.04%	
Total Area	6,737.3	99.9%	
*includes 3698 ha of Provincial Parks			

Source: (Town of Canmore, 2008i)

majority are lands in TSMV or Silvertip awaiting zoning approvals and development. While currently classed as "Vacant Undeveloped Lands" it remains to be seen what proportion of these lands will be zoned for residential, conservation, etc.



(Town of Canmore, 2008j)

- 4. Golf courses and their associated lands now occupy fully 5% of the total municipal land base, more than all categories of residential zoning. Currently there are three operational golf courses, with the fourth and final course at Three Sisters expected to come online in 2010.
- 5. Low density residential (zoned R2 or less) totals 3.7%, while high density residential (R3 or greater) total 0.9%.
- 6. The total area of commercial and industrial land uses (excluding mixed use commercial/residential) is 68.6 ha. (Town of Canmore, 2008i)

### **Major Development Plans**

- 7. The continued development of Three Sisters Mountain Village (TSMV) and associated golf courses continues to be one of the primary land use changes in the Town. TSMV is working on developing a single unified Area Structure Plan (ASP) for their remaining undeveloped lands at the eastern end of their property. The completion of this development will result in significant changes in the residential, resort, and commercial land use within the Town. (Note: a portion of the Stewart Creek Golf Course lies within the wildlife corridor and is zoned WC).
- 8. Stone Creek Properties has put forward a concept plan for extensive commercial and resort development on the remaining vacant lands in the Silvertip area.
- 9. In 2004, Council approved the Area Redevelopment Plan for Spring Creek Mountain Village. This 28 ha site was formerly the Restwell Trailer Park and will be redeveloped into residential and some hotel/commercial. Construction is currently underway and is anticipated to result in a total population of 1,800 to 2,200 residents over the next 15 to 20 years.

### **Interpretation:**

- 1. Canmore has continued to grow and change dramatically as development continues. Major projects include the redevelopment of Spring Creek Mountain Village, commercial and residential development at SilverTip, tourist home construction on Kananaskis Way, and further residential, commercial, and golf course development in Three Sisters Mountain Village.
- 2. The current global economic situation could affect the timing and nature of development plans. It is important to remember that future new development will eventually continue even if a slow-down occurs. Good land use planning is will still be required to ensure that the needs of both humans and wildlife can be met.

#### **Recommendation:**

An examination of historical and future land use change in Canmore, and its impact on wildlife and habitat would be an interesting and important study.

### 13. Wildland/Urban Interface – Wildfire Protection

The Wildland/Urban Interface is where human development meets or intermingles with native wildland vegetation. The lands surrounding Canmore are heavily forested, presenting a considerable forest fire risk to the community. Prior to European settlement, fire was a common disturbance in the Bow Valley. The last large fire in the 1880's burned most of the Bow Corridor. Since that time the local forest has developed heavy accumulations of fuel and an aging forest structure. This situation results in a considerable risk of wildfire, with the potential for significant damage to Canmore and the communities of the Bow Valley. The Bow Corridor Wildland/Urban Interface Plan was developed with other communities and agencies in the valley, to minimize the risks of forest fire affecting urban areas (see the 2002 Town of Canmore Wildland/Urban *Interface Plan* for a detailed description of the plan and maps of fire hazard assessments). The objectives of the plan are to reduce the risk of wildfire by: 1) identifying high fire hazard areas in the Bow Valley and 2) beginning a fuel hazard reduction program in selected areas.

Proposed Fuel Modification Projects			
Priority	Project Name	Status	
1	Canmore Nordic Centre East	Planning in	
1	Camillore Nordic Centre East	Process	
2	Bow River Flats	Pending	
3	Alpine Resort Haven	Pending	
4	Rocky Mountain Elk Foundation		
4	lands	2001	
5	Peaks of Grassi	Planning in	
3		Process	
6	Canyon Ridge	Complete	
0	Carryon Riage	2008	
7	Cross Zee	Pending	
8	Canmore Nordic Centre West	Complete	
		2006	
9	Spray Village	Status	
9		Pending	

**Source:** (proposed projects from Walkinshaw, 2002)

#### **Observations:**

- 1. Since 1999 a total of 234.9 ha of vegetation have been modified on provincial, municipal and private land surrounding Canmore.
- 2. In 2001, fuel modification was undertaken on the Rocky Mountain Elk Foundation land. In 2003, a fire break was created at the west end of the Canmore Nordic Centre involving 15.3 ha of land. In 2004 and 2006, there were additional modifications on 149.0 ha of land in part to create a fire break between Canmore and Banff National Park. In 2008 fuel modification (removal of surface and ladder fuels) was completed on 4.6 ha adjacent to the Canyon Ridge/Canyon West developments (Walkinshaw, 2007).

Year	Completed Fuel Modification Projects	Area (ha)
1999	Harvie Heights (municipal land)	2.8
1999	Eagle Terrace	4.0
2000	Harvie Heights (municipal land)	10.0
2000	Rocky Mountain Elk Foundation	9.5
2001	Harvie Heights (crown land)	12.0
2001	Harvie Heights (municipal land)	5.0
2002	Harvie Heights (municipal land)	8.0
2002	Three Sisters Mountain Resort	30.0
2003	Fairholme Bench - Banff National Park - Fuel Modification and Prescribed burn (Direct impact to Canmore from a landscape perspective)	
2004	Canmore Nordic Centre West	104.0
2004	Fairholme Bench - Banff National Park - (Fuel Modification/Maintenance)	
2006	Canmore Nordic Center West	45.0
2008	Carrot Creek Prescribed Fire (200ha on the Fairholme Bench in Banff National Park)	
2008	Canyon Ridge/Canyon West	4.6
2008	Lower Carrot Creek (valley bottom fire break near the east gate of Banff National Park)	
2008/9	Nordic Centre Fuel Reduction/Fire Break (60ha in Banff National Park will be thinned adjacent to the fuel break at the Canmore Nordic Centre)	
	234.9	

**Source:** Alberta Sustainable Resource Development/

Alberta Tourism, Parks, Recreation, and Culture/Town of Canmore

- 3. The Canmore Nordic Centre West was selected as an appropriate location for a firebreak, not only for fire management purposes, but also for wildlife management purposes. Buffaloberries tend to grow prolifically in areas where the forest has been disturbed, so this was deemed as an appropriate location for berry patches as it will assist in attracting bears away from the town. All fuel modification must be integrated with wildlife management to avoid creating wildlife attractants adjacent to populated areas.
- 4. During the period 2002-2004 Parks Canada undertook fuel modification and prescribed burns on the Fairholme Bench (Carrot Creek) in Banff National Park. In spring 2008 Parks Canada undertook their first maintenance burn on 180 ha adjacent to Carrot Creek. This has direct protective impact on Canmore from a landscape perspective.
- 5. Fuel modification and vegetation management is only one of the seven disciplines of an effective wildland/urban interface. All components need to be addressed to produce a FireSmart community: 1) Vegetation Management; 2) Development Options; 3) Public Education; 4) Legislation; 5) Interagency Cooperation; 6) Cross-Training; and 7) Emergency Response Planning.

- 6. The Wildland Urban Interface Plan identifies several developments in Canmore that have a high percent of untreated wood roofing and siding materials in close proximity to forest fuels.
- 7. On a regional basis prescribed burning and landscape restoration in the Bow Valley, Kananaskis, and Banff National Park are being actively used as tools to provide alternative habitats for bears (see the Forest Health section for more information).
- 8. A fire history study of the Bow Valley is currently underway. This study will provide more information about forest stand ages, fire cycles, and historical vegetation conditions in the valley. A similar study was recently completed for sub-alpine areas in Kananaskis Country. This information will be used to guide prescribed burning and habitat restoration efforts (Per comm. Steve Donelon).

## **Community Initiatives:**

- 1. In the updated (June 29, 2005) Land Use Bylaw (Part E), the use of fire resistant roofing materials is required (untreated wood roofing materials are now prohibited). Additionally, adequate separation between vegetation and buildings is required to increase effective fire separation.
- 2. The Town of Canmore's Municipal Development Plan requires developers to complete a wildfire risk assessment and conduct appropriate fuel modification as part of the subdivision approval process.
- 3. Currently the Town is the recipient of a FireSmart Community Grant which is being used for risk management software and wildland/urban interface planning for the Peaks of Grassi and Canyon Ridge areas (the Canyon Ridge fuel modification was completed in 2008).
- 4. All of Canmore's firefighting personnel have received NFPA 1051 Wildland Firefighter training. They have also engaged in cross-training and interagency exercises to improve their capacity to participate in a coordinated response to a wildfire threat. All the local agencies and volunteer fire fighters cooperated on the Carrot Creek burn this spring. Annual staff training for wildfire continues.
- 5. A Wildfire Response Plan is currently (2008) under development for the Town of Canmore.

### **Interpretation:**

- 1. Suppression of forest fire in the lands surrounding Canmore have resulted in local forests with heavy accumulations of fuel and an aging forest structure, making them very susceptible to fire.
- 2. Fuel modification and vegetation management programs in and around the Town are targeted at reducing the threat and impact of a large-scale fire.
- 3. Town requirements for developers include: fire resistant roofing materials, adequate separation between vegetation and buildings, wildfire risk assessments, and fuel modification will help reduce the spread of fire in developed areas.
- 4. Provincial, municipal, and federal agencies in the Bow Valley should continue to work cooperatively on fire management since wildfires are a regional and transboundary concern.

5. Public education is an important part of an effective wildland/urban interface plan. Landscape level fuel modification, legislation, and emergency training are all important; however it is crucial that individuals are educated and aware so that they can make FireSmart decisions regarding landscaping and materials on their own properties.

### **Recommendations:**

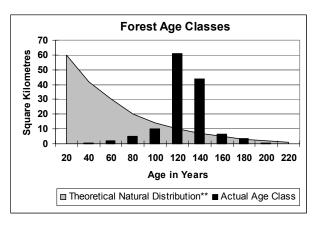
- 1. It is important to continue existing initiatives such as public education and fuel modification programs. There should also be connections with other programs such as those targeting forest health, and wildlife issues.
- 2. Fuel modification and vegetation disturbance can create ideal growing conditions for buffaloberry bushes. Management programs for buffaloberry in high human use areas should be considered when planning fuel modification projects.

## 14. Forest Health

The health of forests around the Town of Canmore is dependent on regional conditions that influence forest susceptibility to fire, insects and diseases. The forest cover is dominated by montane ecoregion communities of Lodgepole Pine, Douglas Fir, and Limber Pine on dry sites, and White Spruce, Balsam Poplar, and Trembling Aspen in moister locations. Historically, these forest stands burned approximately every 50 years, with a higher fire frequency on the valley bottom, and less frequent fires further up the mountainsides. The last massive fire swept through the valley in the 1880's. Fires linked to the railroad and early settlement continued to burn the forests around Canmore after this time. However, during the period that Canmore was part of Banff National Park (1902 to 1930), fire suppression became much more effective. Forest cover has increased dramatically from 1923 to the present time (see photographs of 1923 and 2002) due to lack of burning. The result is an older age distribution of trees that increase susceptibility to insects and disease, and heavy fuel loads which increase the risk of forest fires.

#### **Observations:**

1. Decades of effective forest fire suppression have significantly altered the forest structure in the Bow Valley. Historically, assuming a natural theoretical 50 year fire cycle, it would be expected that nearly 2/3 of the forest area would be younger than 50 years (see graph). The current actual age classes of the forest reflect this lack of disturbance, resulting in an unnaturally high distribution of trees in the 120 to 140+ age brackets (Parks Canada, 2003).



- 2. Alberta Parks is currently conducting a fire history study of the Bow Valley which will provide updated and detailed information about forest stand ages, fire cycles, and historical vegetation conditions. A similar study was recently completed for subalpine areas in Kananaskis Country. This information will be used to guide prescribed burning and habitat restoration efforts (Per.comm. Steve Donelon).
- 3. In the last 10 years, over 20 square km of the Bow Valley montane forest has been treated by fire and thinning) with the objective of improving regional forest health (Parks Canada, 2003). Large fuel breaks have been constructed near Harvey Heights (2001), near Carrot Creek in Banff National Park (2002/03), and west of the Nordic Centre (2003-6). The Carrot Creek break was used to contain a major prescribed burn (1,700 ha) on the Fairholme Bench. In addition, several thousand green-attacked trees have been removed to reduce the impact of Mountain Pine Beetle. Ongoing broad area treatments (burning and thinning), combined with spot removals of diseased or insect-attacked trees should help to maintain montane forest health, and will also enhance the habitat of wildlife species such as elk, bighorn sheep, and bears.

# Forest Cover Change: 1923 to 2002





Source: Parks Canada, 2003

- 4. The number of trees infested with Pine Beetle in the Bow Valley increased from 369 in 2003 to 5,142 in 2007, dropping to 3,489 in 2008. The majority of this forested land base is on provincial lands, where the bulk of infested trees are found. On Canmore's municipal lands infested trees more than doubled from 61 to 141 between 2006 and 2007, reaching 189 trees in 2008. Private developers (Stone Creek Properties and Three Sisters Resorts) also conduct surveys on their lands. The number of infested trees in their lands rose from 37 in 2006 up to 598 in 2008 (Town of Canmore, 2008k and Alberta Sustainable Resource Development, 2008c).
- 5. On municipal and developer's private lands the infested trees are felled and collected for burning to destroy the beetles. On provincial lands, forestry crews have been falling and burning infested trees on site during the winter months to slow the spread of beetles. Larger regionally high risk forest stands in Kananaskis Country and adjoining areas of Banff National Park have been identified, and will be removed using either prescribed burning or logging.

	Mountain Pine Beetle Survey Results: Bow Valley			
	# of Trees Infested			
Year	Provincial Land	Town of Canmore	Private Developers (in the Town of Canmore)	Total Bow Valley
2003	252	55	62	369
2004	346	49	62	457
2005	315	64	98	477
2006	1256	61	37	1354
2007	4819	141	182	5142
2008	2702	189	598	3489

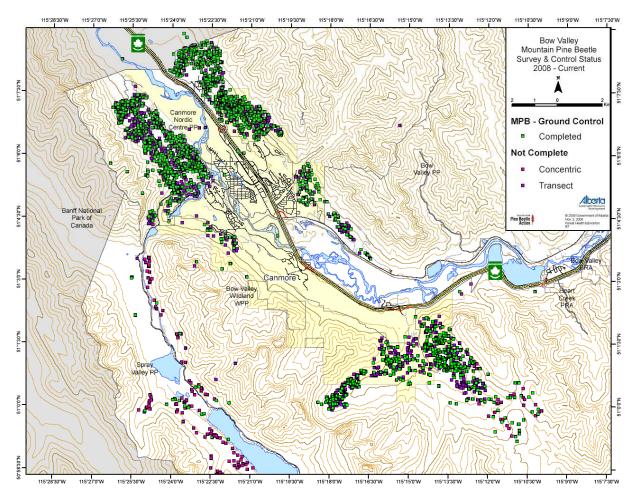
Source: Town of Canmore, 2008 & Alberta Sustainable Resource Development, 2008c

### **Interpretation:**

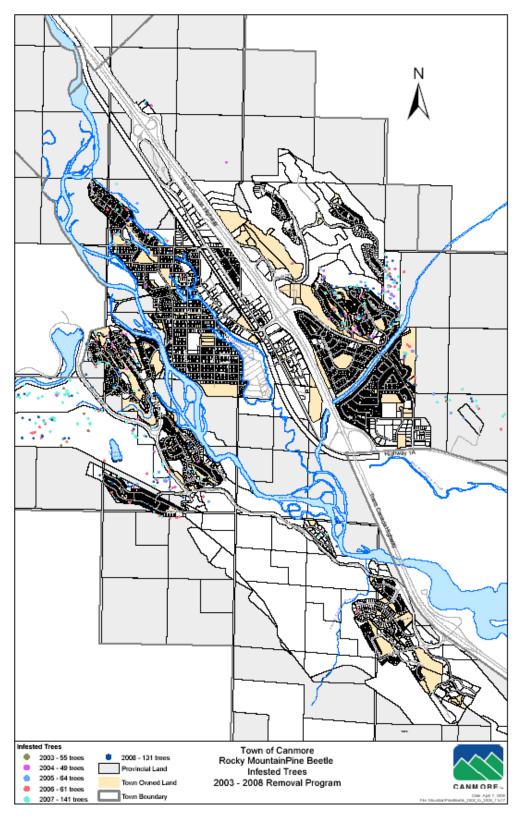
- 1. Forests with long-term fire suppression are generally more susceptible to disease, insects, large-scale fires, and have lower habitat diversity. Frequent fires create broad areas of young forest that are relatively resistant to hot crown fires, and to attack from insects such as mountain pine beetle. However, 80 years of forest fire suppression has created a broad age-class "bulge" of forests around 100 to 140 years old. These forests tend to burn with very high intensity due to high organic matter accumulations over time, and have become increasing susceptible to mountain pine beetle attack.
- 2. Management of Mountain Pine Beetle is done in an integrated fashion, with considerations for mitigating forest fire hazard (see the section on Wildland/Urban Interface), improving forest health, and impacts on wildlife and their habitat (see the section on Wildlife Corridors/Habitat Patches). The infestation of beetles is symptomatic of the much larger situation of older forests and possibly of climatic change.
- 3. Many wildlife species require younger age classes of forest for good habitat. Returning to a system with a more natural range of habitat variability will better support the full range of species.

### Recommendations

- 1. Opportunities for restoring or maintaining biodiversity should be investigated.
- 2. Education of locals and visitors on the importance of fire and biodiversity should be continued.



(Alberta Sustainable Resource Development, 2008c)



(Town of Canmore, 2008k)

# CIVIC ENGAGEMENT AND LEADERSHIP

### **Goals**

As citizens of Canmore, we believe the following goals must be actively and tirelessly pursued if we are to realize our Vision. As a community, we must:

- 1. Develop and refine ways for the citizens of Canmore to engage in public policy processes that move well beyond open houses and public hearings
- 2. Nurture a well informed and broad-based electorate that is empowered to vote, to be involved in community decisions, and to make a positive contribution to the community
- 3. Recognize and utilize the diverse range of talents and perspectives of citizens
- 4. Encourage and support policies, programs, and activities that will increase Canmore's leadership capacity and the capacity of all citizens to exercise civic responsibility
- 5. Revise the Town of Canmore's decision making structures to reflect significantly increased and long-term citizen engagement
- 6. Increase the capacity for, and clarity of, formal community communications
- 7. Monitor and evaluate the Town of Canmore's decisions to ensure the community's long-term vision is upheld over time.

### Criteria

Decisions consistent with the following criteria will help us move toward achieving our goals. Accordingly, will the decision to be made. . .

- 1. Develop pro-active planning that involves citizens and integrates community input into decision making
- 2. Use a variety of ways to ensure citizen engagement
- 3. Clearly communicate to the community at large and by 1 and 2 above foster a sense of trust and ownership in civic engagement processes
- 4. Continue to build capacity for continuing dialogue for formal and informal community leaders

### **Trends**

The Town of Canmore has recently initiated two community engagement significant programs. The 2006 Mining the Future process involved a broad spectrum of the community in helping to set forth a new community vision. Subsequent to the visioning process, the Town has once again engaged the community in developing the Community Sustainability Plan (CSP). This will replace the previous Municipal Development Plan (MDP) as the key planning document for a community. The creation of the CSP is ongoing and nearing completion in the early 2009.

The Town has shown other significant examples of civic leadership in recent years, such as the 1995 Growth Management Strategy and the subsequent Canmore Community Monitoring Program. In 2007 the Town of Canmore developed a Community Engagement and Information Policy. In terms of environmental sustainability the Town of Canmore has crafted a comprehensive Environmental Care Program with a series of goals and associated action plans. The Town of Canmore has adopted the Natural Step framework as a means to better integrate sustainability into the municipality. The Natural Step's principles form part of the backbone of the new CSP and have been integrated throughout the municipal process, from development approvals to sustainable purchasing programs.

In 2007, the Town of Canmore mandated Sustainability Screening Reports (SSR) for all future developments. The process was developed to ensure that development projects will have a net benefit to the community. Through the SSR process, proposed developments must show how they relate to the Mining the Future Vision and how they benefit the social fabric, environment, and economy of Canmore.

## Introduction

These four indicators of civic engagement and leadership appear for the first time in this edition of the Community Monitoring Report. As the indicators and monitoring requirements of the new Community Sustainability Plan (CSP) are developed, these measures can be expanded to better represent how the Town of Canmore is aligning their policies and procedures to fit with the Vision and CSP.

- 1. Civic Engagement
- 2. Voter Participation
- 3. Sustainability Implementation and Initiatives
- 4. Reporting/Monitoring Process

# 1. Civic Engagement

The Vision sets a goal that the Town shall "develop and refine ways for the citizens of Canmore to engage in public policy processes that move well beyond open houses and public hearings". The Town of Canmore has made community engagement a strategic priority with the intent of changing the status quo and improving the ways in which decisions are made and providing information to the public about decisions that impact the community.

Over the past 3 years the Town of Canmore has engaged the community in two significant public processes that will reshape the future of the community: the Mining the Future Vision and the subsequent Community Sustainability Plan (CSP).

## **Observations/Community Initiatives:**

#### **Town Council and Committees**

- 1. While the Vision encourages the participation of the community in the policy process, the Town of Canmore also provides opportunities for citizens to directly contribute in an official capacity through serving on Council or one of the Town's boards or committees.
- 2. Town Council is composed of one mayor and six councillors who hold office for three year terms. Council provides leadership, establishes budget levels, policies, and priorities for the municipal government.
- 3. Opportunities for public membership are also provided on the following Town boards and committees. Council appoints members to the boards or committees for a term of one year:
  - Assessment Review Board
  - Bow Valley Regional Housing
  - Canmore Community Housing Corporation
  - Community Enrichment Advisory Committee
  - Canmore Planning Commission
  - Community Public Art Committee
  - Environmental Advisory Review Committee
  - Police Committee
  - Subdivision, Development and Appeals Board
  - The Public Library
  - Vision Keepers Group

### **Community Engagement and Information Policy**

4. As outlined by the Mining the Future Vision, the citizens of Canmore expressed a need to have greater and more meaningful input into the decision making process of the community. To further that end, a Community Engagement and Information Policy was adopted in December 2007. The policy provides guidance on when and

how to seek input from the public via a formalized structure. It is based on the principle that informed community input will lead to better decisions, and that communities have a right and a responsibility to be involved in decisions that affect them (Town of Canmore, 2007b).

## **Mining the Future Vision**

- 5. In the fall of 2005 the community was asked to create a vision for the future of Canmore. More than 1,000 participants were involved in the year-long process, endeavouring to answer the question: what kind of community will Canmore become in the years ahead? The completed Vision identified the key community values and guiding principles for the community. It was adopted by Council in the fall of 2006 (Town of Canmore, 2006).
- 6. Since that time the Town of Canmore has been working towards incorporating the Vision into municipal processes and realigning working practices to fit with the Vision. Staff reports, the 2008 Town of Canmore Business Plan (Town of Canmore, 2008f) and municipal activities were restructured to align with the Vision.
- 7. To assist Council with the implementation of the Vision, an additional Town committee was created in 2007. The "Vision Keepers" group was formed as an advisory body with public members. Its mission is to help to ensure that the Vision is reflected in the growth and development of the community.

## Mining the Future II (Community Sustainability Plan)

- 8. The 2006 Mining the Future Vision of Canmore outlines foundational values, goals, and principles that the community will aspire to. To incorporate the Vision in municipal planning, the Town further engaged the community in a participatory process (Mining the Future II) to help determine the detailed direction that Canmore will take over the next 10-15 years. This consultation process led to the complete rewrite of the 1998 Municipal Development Plan (MDP) and will be known as the Community Sustainability Plan (CSP). It will replace the MDP under Alberta's Municipal Government Act.
- 9. The CSP will be a comprehensive, strategic planning document that provides clear direction for policy in the areas of land use planning, and social, economic and environmental sustainability. It will put the principles, values and goals outlined in the Mining the Future Vision into practice. The final revisions and consultations are underway and the CSP is expected to be finalized in the winter/spring of 2009.

### **Other Community Engagement Processes**

10. In November 2008 the Town of Canmore invited public input into the proposed use of provincial Municipal Sustainability Initiative (MSI) funding for the construction of a Community Multiplex, Recreation Centre redevelopment, and support for the Lamphouse Centre for the Arts. Two public input sessions and an online survey were used to collect feedback. Community discussions regarding this proposal are ongoing as of February 2009.

### **Interpretation:**

The Town of Canmore is in the midst of a significant realignment of the community's guiding documents and methods of civic engagement. The Mining the Future and CSP processes represent over 3 years of intensive public engagement and community consultation. At this point in time there is limited information available to track the impact of the new Civic Engagement Policy and how public input has changed the municipal decision making process.

### **Recommendation:**

To better understand the impacts of the new Community Engagement Policy it will be important to track the results of the civic engagement process: both the number of items that were brought forward for consultation with the community, but also what role the community input played in the final decision.

# 2. Voter Participation

Voter turnout is the percentage of eligible voters who cast a ballot in an election. High voter turnouts may be indicative of strong interest or public participation in the political system. Low turnout may indicate a variety of problems including lack of interest in the issues, apathy, or disenchantment with the political process. The Mining the Future Vision of Canmore aspires to a "broad-based electorate that is empowered to vote". Tracking voter participation is one indicator of citizen participation in the public process.

#### **Observations:**

- 1. In the 2007 municipal election, 24.6% of the eligible voters in Canmore cast a ballot (vs. 31.6% in Alberta).
- 2. In the 2008 provincial election the voter turnout in Canmore was 32.3% (vs. 40.6% in Alberta). Elections Alberta reports that this was the lowest turnout for any provincial election

Voter Turnout	Canmore	Alberta	Canada
2007 Municipal			
Election	24.6%	31.6%	n/a
2008 Provincial			
Election	32.3%	40.6%	n/a
2008 Federal			
Election	60.5%	61.9%	64.7%

**Source:** (Alberta Municipal Affairs, 2007; Elections Alberta, 2008; Elections Canada, 2008a)

turnout for any provincial election in 50 years.

- 3. In the 2008 federal election the voter turnout in Canmore was only slightly lower than in Alberta (60.5% vs. 61.9%) and a few percentage points lower than Canada overall (64.7%).
- 4. A post-2008 Alberta provincial election survey indicated that of those who did not vote, 43% were "Distracted" (too busy, not available, forgot, etc.) while 26% were "Disassociated" (didn't care, not enough information, wouldn't make any difference, etc.).

#### **Interpretation:**

- 1. Voter participation rates in the most recent municipal and provincial elections in Canmore were 7-8% lower than the average rate for other communities in Alberta. The generally low turnout indicates that while people have the right to vote, they are generally not interested in doing so, or not interested enough to take the time to vote. This could be due to a number of reasons, but likely indicates that they do not feel that the results of the election are important, or that it will make a difference in their lives.
- 2. In general younger persons tend to have lower rates of voter participation. When less than one-third of the eligible voters cast ballots in an election, it is likely that only a very small number of young adults have participated in the election process. Elections Canada reports that Canada's youth often feel that "there is little in politics that relates to them" (Elections Canada, 2008b & Leger Marketing, 2008). The lack of involvement of youth in the political process is a concern, both for current elections and for the future as well.

# 3. Sustainability Implementation and Initiatives

The Town of Canmore has shown leadership by undertaking community sustainability initiatives that engage the residents and take a holistic or "whole community" view of sustainability. This section showcases initiatives that show civic and sustainability leadership specifically: the Sustainability Screening Reports (SSR), which represent a direct implementation of the Vision; and the Natural Step, which provides a framework and definition of sustainability which the Town has built their guiding documents, programs, and initiatives upon.

Detailed information of many of the actions and outcomes of the environmental, social, and economic sustainability initiatives are provided in relevant sections of the document. The Mining the Future Vision and CSP consultation processes are discussed in the section above on Civic Engagement.

## **Observations/Community Initiatives:**

### **Sustainability Screening Reports (SSR)**

1. The Sustainability Screening Report (SSR) was adopted by the Town of Canmore Council on July 3, 2007. The SSR process was developed to ensure that significant development projects will benefit the community. Through this process, proposed developments must show how they relate to the Foundational Values and Guiding Principles of Mining the Future: A Vision for Canmore. Only after an SSR is accepted will further applications for the project be considered. The following chart summarizes some of the commitments made through the SSR process. As the SSR is a new process many of these commitments are underway, or have not yet been realized:

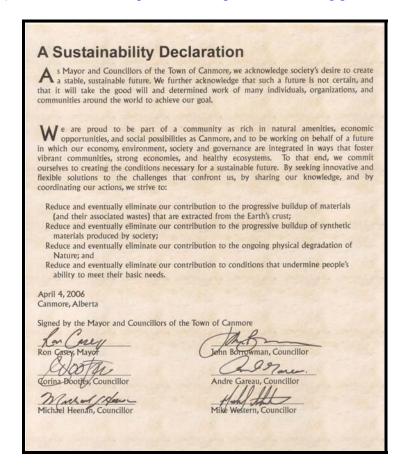
Sustainability	Summary of SSR Commitments Made*		
Screening Reports (SSR)	2007	2008	
	Providing PAH units		
	Cash contributions to PAH	Cash contributions to PAH	
Social Fabric	Providing employee housing	Providing employee housing	
	Financial contribution to community organizations		
Environmental Stewardship	Built Green and/or LEED certification	Built Green and/or LEED certification	
	Solar panels	Stormwater retention for landscaping	
	Xeriscaping	Purchasing "Green" power	
	Natural Step training for staff	On-demand hot water	
	Geothermal	Provision of bicycles for the use of guests	

	Irrigation with non-potable water	
	Providing BearSmart information	
	Providing a "purchaser" environmental information package	
Economic Sustainability		Providing additional tax assessment base

### The Natural Step to a Sustainable Canmore

- 2. In 2002, the Town of Canmore Council unanimously passed a resolution adopting The Natural Step framework. The Natural Step includes a science-based definition of sustainability and, four "system conditions" for sustainability, and a methodology for moving towards sustainability. (See www.naturalstep.ca for more information.)
- 3. The Biosphere Institute of the Bow Valley coordinated the funding and logistics of a The Natural Step to a Sustainable Canmore training program for the Town of Canmore and other Early Adopter organizations. The program participants developed sustainability action plans for their own organizations, and worked together to create an engagement program for the broader community (see <a href="https://www.biosphereinstitute.org">www.biosphereinstitute.org</a> for Early Adopter Case Studies). The results were presented at a community sustainability forum in October 2005 which was attended by almost 1,000 people.
- 4. The Town of Canmore has been integrating the principles of the Natural Step throughout municipal documents and operations. Initiatives include:
  - In April 2006, the Mayor and Councilors signed a Sustainability Declaration (found at the end of this section) which derives from The Natural Step's sustainability principles.
  - Town staff and administration have been trained in The Natural Step framework with the intent that a working knowledge of The Natural Step underpins the Town's day-to-day thinking and practices.
  - The CSP (under development) is being written in alignment with the principles of the Natural Step Framework.
  - The Town has adopted a screening process for all internal capital budget proposals that rates the proposals by their compatibility with The Natural Step principles.
  - The Town has adopted a system of Sustainability Screening Reports (SSR) which provides a screening process for all development applications.
  - Details of the proposed and completed initiatives as part of the Natural Step to a Sustainable Canmore are available at: <a href="http://www.canmore.ca/municipal-sustainability/civic-leadership/the-natural-step.html">http://www.canmore.ca/municipal-sustainability/civic-leadership/the-natural-step.html</a>
- 5. As part of the community engagement portion of The Natural Step to a Sustainable Canmore, the Early Adopters proposed the development of a sustainability centre in Canmore that would "help create and support a culture of sustainability in the Bow Valley." The result, a legacy program of The Natural Step to a Sustainable Canmore, is the Bow Valley Sustainability Hub. Launched in July 2006, with the

help of a number of the Early Adopters, the Hub is run as a program of the Biosphere Institute. The Hub is working closely with the Town, other Early Adopters, and the community at large in a variety of ways to move the community towards greater sustainability. As well, the Early Adopters, through their own actions, are modeling sustainability planning and practices for the community as a whole. Case studies of the Early Adopter organizations (including the Town of Canmore) are available at: http://www.biosphereinstitute.org/p-natural-step-case



#### **Interpretation:**

Details of many of the specific environment and sustainability initiatives are outlined in the Environmental Stewardship section of this report. The Natural Step, Mining the Future Vision, CSP, and initiatives such as the SSR demonstrate sustainability leadership in the larger community context. These provide direct and concrete manifestations of sustainability, moving it from a concept towards a reality.

#### **Recommendation:**

That the Town of Canmore continue to show civic leadership by promoting community sustainability and the implementation of the Vision.

# 4. Reporting/Monitoring Process

Monitoring progress and reporting to the community are important components of civic engagement and leadership. The Mining the Future Vision specifies that we must: "monitor and evaluate the Town of Canmore's decisions to ensure the community's long-term vision is upheld over time". Currently there are two mechanisms to monitor and report on these decisions and changing conditions in the community: the Town of Canmore's Annual Report, and the Canmore Community Monitoring Report.

## **Observations and Community Initiatives:**

- 1. In 2007 the Town of Canmore issued the first in a series of Annual Reports to inform the community of the municipality's activities and progress in each of its Service Areas. The forthcoming CSP specifies that this should continue in the form of an annual State of the Town Report to outline the Town's progress on the achievement of objectives and implementation of the CSP. The 2007 Annual Report is available from the Town's website at <a href="https://www.canmore.ca">www.canmore.ca</a>.
- 2. The Canmore Community Monitoring Program (CCMP) was established to monitor and evaluate trends developing in the community. This was a recommendation in the 1995 Growth Management Strategy Report. The Canmore Community Monitoring Program is designed to assist with municipal and community decision-making; serve as part of an early detection system that assists in identifying risk areas that threaten the health of the community; and present a snapshot of the community's progress towards its current vision. The first document was published in 1999 and was originally known as the "Thresholds & Monitoring Program", and the name was changed to the Canmore Community Monitoring Program for the 2001 report. This edition is the 5<sup>th</sup> iteration of the report. Previous editions of the Community Monitoring Report are available from the Town's website at <a href="https://www.canmore.ca">www.canmore.ca</a>.
  - Town of Canmore Growth Management Strategy Committee 1995 Strategy Report June 1995.
  - Canmore Growth Management Strategy: Thresholds & Monitoring Program 1999 Report September 1999.
  - Canmore Community Monitoring Program 2001 Report November 2001.
  - Canmore Community Monitoring Program 2003 Report January 2004.
  - Canmore Community Monitoring Program 2006 Report December 2006.

#### **Recommendation:**

That the Canmore Community Monitoring Report be more closely aligned with the forthcoming CSP and that indicators are modified or added to track progress towards the goals outlined by the Vision and the CSP.

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# **APPENDIX A: IDENTITY**

2. Permanent Population: Length of Residency, Migration and Growth Rate

Length of Residency in											
Canmore	1995	1996	1997	1998	1999	2000	2001	2003	2005	2006	2008
Less than 1 Year	1,137	1,384	1,287	1,344	1,540	1,452	1,544	1,508	1,361	1,478	1,276
Percent of Total	14.9%	16.5%	14.3%	13.8%	15.0%	13.8%	14.2%	13.2%	11.9%	12.7%	10.6%
1 to 2 Years	1,337	1,423	1,807	1,822	1,763	1,579	1,562	1,633	1,454	1,366	1,806
Percent of Total	17.5%	17.0%	20.0%	18.8%	17.2%	15.0%	14.4%	14.3%	12.7%	11.8%	15.0%
3 to 5 Years	1,699	1,760	1,793	2,012	2,083	2,228	2,309	2,138	2,030	1,957	1,911
Percent of Total	22.3%	21.0%	19.9%	20.7%	20.3%	21.2%	21.3%	18.7%	17.7%	16.9%	15.9%
6 to 10 Years	1,386	1,604	1,665	1,975	2,151	2,215	2,327	2,574	2,458	2,313	2,187
Percent of Total	18.2%	19.1%	18.5%	20.3%	21.0%	21.1%	21.5%	22.5%	21.5%	19.9%	18.2%
More than 10 Years	1,795	2,225	2,023	2,274	2,425	2,542	2,867	3,269	3,643	3,681	4,004
Percent of Total	23.5%	26.5%	22.4%	23.4%	23.7%	24.2%	26.4%	28.5%	31.8%	31.7%	33.4%
Unknown	278	0	440	284	277	501	234	336	496	804	821
Percent of Total	3.6%	0.0%	4.9%	2.9%	2.7%	4.8%	2.2%	2.9%	4.3%	6.9%	6.8%
Total	7,632	8,396	9,015	9,711	10,239	10,517	10,843	11,458	11,442	11,599	12,005

Source: Canmore Census

Migration	1995	1996	1997	1998	1999	2000	2001	2003	2005	2006	2008
Permanent Population	7,632	8,396	9,015	9,711	10,239	10,517	10,843	11,458	11,442	11,599	12,005
In-Migration	1,137	1,384	1,287	1,344	1,540	1,452	1,544	1,508	1,361	1,478	1,276
Net Annual Pop.Change	471	764	619	696	528	278	326	308	-8	157	203
Out-Migration	666	620	668	648	1,012	1,174	1,218	1,201	1,369	1,321	1,073
In-Migration (%)	14.9%	16.5%	14.3%	13.8%	15.0%	13.8%	14.2%	13.2%	11.9%	12.7%	10.6%
Out-Migration (%)	8.7%	7.4%	7.4%	6.7%	9.9%	11.2%	11.2%	10.5%	12.0%	11.4%	8.9%
Net Migration (%)	6.2%	9.1%	6.9%	7.2%	5.2%	2.6%	3.0%	2.7%	-0.1%	1.4%	1.7%
Net Population Growth (%)	6.5%	10.0%	7.4%	7.7%	5.4%	2.7%	3.1%	2.8%	-0.1%	1.4%	1.8%
Population Turnover	23.6%	23.9%	21.7%	20.5%	24.9%	25.0%	25.5%	23.6%	23.9%	24.1%	19.6%
2003, 2005 & 2008 estimated at 50% of 2 year growth rate											

# 3. Permanent Population: Age Structure

Age											
Structure	1995	1996	1997	1998	1999	2000	2001	2003	2005	2006	2008
0 - 4 years	622	650	647	679	630	630	616	632	584	561	614
% of Total	8.1%	7.7%	7.2%	7.0%	6.2%	6.0%	5.7%	5.5%	5.1%	4.8%	5.1%
5 - 9 years	576	638	648	712	740	689	692	668	605	575	556
% of Total	7.5%	7.6%	7.2%	7.3%	7.2%	6.6%	6.4%	5.8%	5.3%	5.0%	4.6%
10 - 14 years	589	611	621	644	637	701	727	742	690	634	583
% of Total	7.7%	7.3%	6.9%	6.6%	6.2%	6.7%	6.7%	6.5%	6.0%	5.5%	4.9%
15 - 19 years	349	427	498	546	601	658	722	720	731	670	713
% of Total	4.6%	5.1%	5.5%	5.6%	5.9%	6.3%	6.7%	6.3%	6.4%	5.8%	5.9%
20 - 24 years	409	470	657	682	801	816	917	891	946	928	880
% of Total	5.4%	5.6%	7.3%	7.0%	7.8%	7.8%	8.5%	7.8%	8.3%	8.0%	7.3%
25 - 34 years	1,509	1,710	1,808	1,939	2,008	1,815	1,928	2,065	1,906	1,953	2,027
% of Total	19.8%	20.4%	20.1%	20.0%	19.6%	17.3%	17.8%	18.0%	16.7%	16.8%	16.9%
35 - 44 years	1,779	1,869	1,966	2,198	2,310	2,150	2,171	2,123	2,036	1,994	1,918
% of Total	23.3%	22.3%	21.8%	22.6%	22.6%	20.4%	20.0%	18.5%	17.8%	17.2%	16.0%
45 - 54 years	722	850	967	1,130	1,243	1,372	1,523	1,804	1,927	1,844	1,987
% of Total	9.5%	10.1%	10.7%	11.6%	12.1%	13.1%	14.1%	15.7%	16.8%	15.9%	16.6%
55 - 64 years	448	487	479	510	548	625	648	832	933	975	1,206
% of Total	5.9%	5.8%	5.3%	5.3%	5.4%	5.9%	6.0%	7.3%	8.2%	8.4%	10.0%
65 - 69 years	214	224	209	226	226	224	234	255	272	286	304
% of Total	2.8%	2.7%	2.3%	2.3%	2.2%	2.1%	2.2%	2.2%	2.4%	2.5%	2.5%
70 - 105											
years	338	389	374	424	447	460	506	553	579	623	620
% of Total	4.4%	4.6%	4.2%	4.4%	4.4%	4.4%	4.7%	4.8%	5.1%	5.4%	5.2%
Unknown	77	71	141	21	48	377	159	173	233	556	597
% of Total	1.0%	0.9%	1.6%	0.2%	0.5%	3.6%	1.5%	1.5%	2.0%	4.8%	5.0%
Total	7,632	8,396	9,015	9,711	10,239	10,517	10,843	11,458	11,442	11,599	12,005

## 4. Non-Permanent Population

Population         1995         1996         1997         1998         1999         2000         2001         2003*         2005*         2006         2008*           Non-Perm. Pop.         1,153         1,257         1,468         1,613         1,763         1,955         2,273         2,763         3,790         4,818         5,567           Census Change         143         104         211         145         150         192         318         490         1,027         1,028         749           Non-Perm. Population Perm. Population Non-Perm. Po	Non- Permanent											
Non-Perm. Prop. 1,153 1,257 1,468 1,613 1,763 1,955 2,273 2,763 3,790 4,818 5,567 of Total Population Non-Perm. Prop. Docupancy of Dwelling Units 513 559 633 741 767 865 960 1,041 1,599 1,823 2,000 Prop.		1995	1996	1997	1998	1999	2000	2001	2003*	2005*	2006	2008*
Ther-Census Change 143 104 211 145 150 192 318 490 1,027 1,028 749 Net Annual Change 143 104 213 145 150 192 318 245 514 1,028 375 Annual Rate of Change 14.2% 9.0% 16.8% 9.9% 9.3% 10.9% 16.3% 10.8% 18.6% 27.1% 7.8% Perm. and Non-Perm. Population 8,785 9,653 10,483 11,324 12,002 12,472 13,116 14,221 15,232 16,417 17,572 % of Total Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 14.2% 14	Non-Perm.											
Thereforensus Change 143 104 211 145 150 192 318 490 1,027 1,028 749 Net Annual Change 143 104 213 145 150 192 318 245 514 1,028 375 Annual Rate of Change 14.2% 9.0% 16.8% 9.9% 9.3% 10.9% 16.3% 10.8% 18.6% 27.1% 7.8% Perm. and Non-Perm. Population 8,785 9,653 10,483 11,324 12,002 12,472 13,116 14,221 15,232 16,417 17,572 % of Total Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Population 13.1% 14.0% 14.2% 14.2% 14.7% 15.6% 17.3% 19.4% 14.2%	Pop.	1,153	1,257	1,468	1,613	1,763	1,955	2,273	2,763	3,790	4,818	5,567
Change	Inter-											
Net Annual Change	Census											
Change 143 104 213 145 150 192 318 245 514 1,028 375 Annual Rate of Change 14.2% 9.0% 16.8% 9.9% 9.3% 10.9% 16.3% 10.8% 18.6% 27.1% 7.8% Perm. and Non-Perm. Population 8,785 9,653 10,483 11,324 12,002 12,472 13,116 14,221 15,232 16,417 17,572 7000 7000 7000 7000 7000 7000 7000 7	Change	143	104	211	145	150	192	318	490	1,027	1,028	749
Annual Rate of Change	Net Annual											
of Change         14.2%         9.0%         16.8%         9.9%         9.3%         10.9%         16.3%         10.8%         18.6%         27.1%         7.8%           Perm. and Non-Perm.         Population         8,785         9,653         10,483         11,324         12,002         12,472         13,116         14,221         15,232         16,417         17,572         17,572         17,3%         19.4%         24.9%         29.3%         31.7%         17,572         17,3%         19.4%         24.9%         29.3%         31.7%         17,572         17,3%         19.4%         24.9%         29.3%         31.7%         17,572         17,3%         19.4%         24.9%         29.3%         31.7%         17,572         17,3%         19.4%         24.9%         29.3%         31.7%         17,572         17,3%         19.4%         24.9%         29.3%         31.7%         17,572         17,3%         19.4%         24.9%         29.3%         31.7%         17,572         17,572         17,572         17,572         17,572         17,572         17,572         17,572         17,572         17,572         17,572         17,572         17,572         17,572         17,572         17,572         17,572         17,572	Change	143	104	213	145	150	192	318	245	514	1,028	375
Perm. and Non-Perm. Population 8,785 9,653 10,483 11,324 12,002 12,472 13,116 14,221 15,232 16,417 17,572 6 of Total Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Pop. Docupancy of Dwelling Units 513 559 633 741 767 865 960 1,041 1,599 1,823 2,000 6 of Docupied	Annual Rate											
Non-Perm. Population 8,785 9,653 10,483 11,324 12,002 12,472 13,116 14,221 15,232 16,417 17,572 % of Total Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Pop. Docupancy of Dwelling Units 513 559 633 741 767 865 960 1,041 1,599 1,823 2,000 % of Docupied	of Change	14.2%	9.0%	16.8%	9.9%	9.3%	10.9%	16.3%	10.8%	18.6%	27.1%	7.8%
Population 8,785 9,653 10,483 11,324 12,002 12,472 13,116 14,221 15,232 16,417 17,572 76 76 76 76 76 76 76 76 76 76 76 76 76	Perm. and											
% of Total Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Pop. Occupancy of Dwelling Units 513 559 633 741 767 865 960 1,041 1,599 1,823 2,000 % of Occupied												
Population 13.1% 13.0% 14.0% 14.2% 14.7% 15.6% 17.3% 19.4% 24.9% 29.3% 31.7% Non-Perm. Pop. Decupancy of Dwelling Units 513 559 633 741 767 865 960 1,041 1,599 1,823 2,000 % of Decupied	Population	8,785	9,653	10,483	11,324	12,002	12,472	13,116	14,221	15,232	16,417	17,572
Non-Perm. Pop. Decupancy of Dwelling Units 513 559 633 741 767 865 960 1,041 1,599 1,823 2,000 % of Decupied	% of Total											
Pop. Decupancy of Dwelling Units 513 559 633 741 767 865 960 1,041 1,599 1,823 2,000 % of Decupied	Population	13.1%	13.0%	14.0%	14.2%	14.7%	15.6%	17.3%	19.4%	24.9%	29.3%	31.7%
Docupancy of Dwelling Units 513 559 633 741 767 865 960 1,041 1,599 1,823 2,000 76 Occupied												
of Dwelling Units 513 559 633 741 767 865 960 1,041 1,599 1,823 2,000 % of Occupied	Pop.											
Units         513         559         633         741         767         865         960         1,041         1,599         1,823         2,000           % of Occupied         Occupied         Image: Control of the control of th	Occupancy											
% of Occupied		= 40		000				000	4 0 4 4	4 = 0.0	4 000	
Dccupied Company Compa		513	559	633	741	767	865	960	1,041	1,599	1,823	2,000
3 U'	•	45 401	45 501	40.007	47 501	47.401	40.401	40.007	40.407	00.007	00.007	00.464
Owellings   15.4%   15.5%   16.3%   17.5%   17.1%   18.4%   19.2%   19.1%   26.2%   28.2%   29.1% restimated at 50% of 2 year growth rate	Dwellings				17.5%	17.1%	18.4%	19.2%	19.1%	26.2%	28.2%	29.1%

# **5. Family Composition**

Families with Children in School	1995	1996	1997	1998	1999	2000	2001	2003	2005	2006	2008
Double											
Parent	932	1,069	1,095	1,167	1,193	1,196	1,210	1,233	1,171	1,118	1,162
% Double	87.4%	85.3%	84.7%	86.4%	85.2%	83.8%	83.4%	81.3%	80.5%	79.0%	83.6%
Single											
Parent	134	185	198	183	208	232	241	284	284	297	228
% Single	12.6%	14.8%	15.3%	13.6%	14.9%	16.3%	16.6%	18.7%	19.5%	21.0%	16.4%
# of											
Children of											
Single											
Parent											
Families	213	299	229	276	319	333	375	426	355	369	397

6. Mother Tongue, Immigration and Cultural Diversity

_		1996	-		2001			2006	
Mother Tongue	Canmore	Alberta	Canada	Canmore	Alberta	Canada	Canmore	Alberta	Canada
English	87.2%	81.0%	59.3%	82.9%	80.9%	58.5%	84.2%	79.1%	57.2%
French	2.6%	1.7%	22.9%	4.6%	2.0%	22.6%	4.6%	1.9%	21.8%
Both English & French	0.8%	0.4%	0.8%	0.6%	0.2%	0.4%	0.3%	0.2%	0.3%
Other Languages	9.5%	16.9%	17.0%	11.9%	16.9%	18.5%	10.9%	18.8%	20.6%
Total	100.1%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Immigration									
Non-immigrants	86.7%	84.4%	82.0%	83.7%	84.5%	80.9%	81.6%	83.0%	79.3%
Immigrants	12.8%	15.2%	17.4%	15.7%	14.9%	18.4%	15.6%	16.2%	19.8%
Non-permanent									
residents	0.4%	0.4%	0.6%	0.6%	0.6%	0.7%	2.7%	0.8%	0.8%

Source: Census of Canada

							% of Visib	le Minority	
	1	Total Number	er	% of Tota	al Population	on	Population	n	
Visible Minorities	1996	2001	2006	1996	2001	2006	1996	2001	2006
Visible Minority	320	435	725	3.8%	4.1%	6.0%	3.8%	4.1%	6.0%
Chinese	60	115	135	0.7%	1.1%	1.1%	18.8%	26.4%	18.6%
South Asian	40	30	65	0.5%	0.3%	0.5%	12.5%	6.9%	9.0%
Black	40	60	35	0.5%	0.6%	0.3%	12.5%	13.8%	4.8%
Filipino	15	10	55	0.2%	0.1%	0.5%	4.7%	2.3%	7.6%
Latin American	10	0	0	0.1%	0.0%	0.0%	3.1%	0.0%	0.0%
Southeast Asian	0	15	10	0.0%	0.1%	0.1%	0.0%	3.4%	1.4%
Arab (1996 & 2001 were grouped as Arab									
& West Asian)	0	10	0	0.0%	0.1%	0.0%	0.0%	2.3%	0.0%
West Asian			0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Korean	0	0	45	0.0%	0.0%	0.4%	0.0%	0.0%	6.2%
Japanese	155	185	380	1.9%	1.7%	3.2%	48.4%	42.5%	52.4%
Minorities not included	0	10	0	0.0%	0.1%	0.0%	0.0%	2.3%	0.0%
Multiple visible minority	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Not a visible minority	8,010	10,290	11,290	96.2%	95.9%	94.0%	_		
Total	8,330	10,725	12,015	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Census of Canada

# **APPENDIX B: ECONOMIC SUSTAINABILITY**

### 1. Employment Status of Adults

Employment											
Status of Adults	1995	1996	1997	1998	1999	2000	2001	2003	2005	2006	2008
Full Time	3,587	4,002	4,545	4,857	5,293	5,382	5,643	5,919	5,993	6,028	6,327
% of Total	65.1%	65.5%	67.4%	66.7%	68.2%	66.3%	67.7%	66.2%	65.3%	64.1%	63.3%
Part Time	399	504	516	633	674	662	695	781	851	830	959
% of Total	7.2%	8.2%	7.6%	8.7%	8.7%	8.2%	8.3%	8.7%	9.3%	8.8%	9.6%
Seasonal	119	165	141	192	157	175	258	203	284	215	186
% of Total	2.2%	2.7%	2.1%	2.6%	2.0%	2.2%	3.1%	2.3%	3.1%	2.3%	1.9%
Retired	733	785	796	830	859	954	970	1,086	1,111	1,184	1,285
% of Total	13.3%	12.8%	11.8%	11.4%	11.1%	11.8%	11.6%	12.1%	12.1%	12.6%	12.9%
Homemaker	335	345	316	277	334	311	335	319	321	259	263
% of Total	6.1%	5.6%	4.7%	3.8%	4.3%	3.8%	4.0%	3.6%	3.5%	2.8%	2.6%
Unemployed	109	107	97	225	153	149	168	208	146	153	179
% of Total	2.0%	1.8%	1.4%	3.1%	2.0%	1.8%	2.0%	2.3%	1.6%	1.6%	1.8%
Other	22	28	31	44	59	38	43	79	79	83	115
% of Total	0.4%	0.5%	0.5%	0.6%	0.8%	0.5%	0.5%	0.9%	0.9%	0.9%	1.2%
Adult											
Student	49	41	76	41	25	61	69	106	91	48	60
% of Total	0.9%	0.7%	1.1%	0.6%	0.3%	0.8%	0.8%	1.2%	1.0%	0.5%	0.6%
Unknown	153	135	230	184	208	380	152	244	304	605	615
% of Total	2.8%	2.2%	3.4%	2.5%	2.7%	4.7%	1.8%	2.7%	3.3%	6.4%	6.2%
Total	5,506	6,112	6,748	7,283	7,762	8,112	8,333	8,945	9,180	9,405	9,989

Unemployment Rate	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005*	2006*	2007*	2008
ER 4840 (Banff, Jasper,														
Rocky Mtn														
House)	4.4%	4.5%	4.9%	5.9%	4.3%	4.7%	3.7%	5.3%	5.0%	3.3%				2.0%
Alberta	7.8%	6.9%	5.8%	5.6%	5.7%	5.0%	4.6%	5.3%	5.1%	4.6%	3.9%	3.4%	3.5%	3.6%
Canada	9.5%	9.5%	9.5%	8.8%	7.9%	6.7%	6.8%	7.6%	7.6%	7.2%	6.8%	6.3%	6.0%	8.6%

<sup>\* -</sup> Suppressed to meet confidentiality restrictions (Source: Statistics Canada 2008a)

	Participation and		Canmor	Э		Alberta	
U	nemployment Rates	Total	Male	Female	Total	Male	Female
	Participation rate	82.2%	86.0%	78.3%	73.1%	79.6%	66.6%
2001	Employment rate	78.6%	82.2%	75.1%	69.3%	75.5%	63.1%
	Unemployment rate	4.3%	4.6%	4.3%	5.2%	5.1%	5.2%
	Participation rate	79.3%	82.9%	75.8%	74.0%	80.3%	67.7%
2006	Employment rate	77.4%	81.7%	73.1%	70.9%	77.0%	64.7%
	Unemployment rate	2.4%	1.3%	3.4%	4.3%	4.1%	4.4%

**Source:** Statistics Canada Community Profiles 2001 and 2006

2. Employment by Industry

	oyment	by muc	isti y								
Employment											
by Industry	1995	1996	1997	1998	1999	2000	2001	2003	2005	2006	2008
Agriculture &											
Forestry	25	24	39	47	35	38	47	41	69	67	78
% of Total	0.6%	0.5%	0.7%	0.8%	0.6%	0.6%	0.7%	0.6%	0.9%	0.9%	1.0%
Mining & Oil	93	87	127	132	113	123	131	168	194	226	219
% of Total	2.2%	1.8%	2.3%	2.2%	1.8%	1.9%	1.9%	2.3%	2.6%	2.9%	2.7%
Manufacturing	201	245	140	172	190	145	195	244	177	158	176
% of Total	4.7%	5.1%	2.5%	2.9%	3.0%	2.2%	2.9%	3.1%	2.4%	2.0%	2.2%
Construction	472	523	661	719	758	706	720	855	851	901	1199
% of Total	11.1%	10.9%	12.0%	12.2%	11.9%	10.7%	10.6%	11.9%	11.4%	11.6%	14.7%
Transportation, Communication, Utilities	233	244	263	298	290	310	328	301	368	387	352
% of Total	5.5%	5.1%	4.8%	5.1%	4.6%	4.7%	4.9%	4.2%	4.9%	5.0%	4.3%
Retail- Wholesale Trade	445	543	560	587	644	637	676	682	702	688	692
% of Total	10.5%	11.3%	10.1%	10.0%	10.1%	9.6%	10.0%	9.5%	9.4%	8.9%	8.5%
Financial, Insurance, Real Estate	148	170	187	232	240	226	248	293	301	318	365
% of Total	3.5%	3.5%	3.4%	3.9%	3.8%	3.4%	3.7%	4.1%	4.0%	4.1%	4.5%
Professional Services	205	272	328	365	420	440	466	494	547	541	473
% of Total	4.8%	5.7%	5.9%	6.2%	6.6%	6.7%	6.9%	6.9%	7.3%	7.0%	5.8%
Government	369	405	342	336	370	377	364	375	383	399	367
% of Total	8.7%	8.4%	6.2%	5.7%	5.8%	5.7%	5.4%	5.2%	5.1%	5.2%	4.5%
Education, Health, Social Services	553	573	578	736	689	700	868	964	958	946	998
% of Total	13.0%	11.9%	10.5%	12.5%	10.9%	10.6%	12.8%	13.4%	12.8%	12.2%	12.2%
Accommodation & Food	729	835	1,139	1,203	1,356	1,371	1,439	1,363	1,433	1,351	1288
% of Total	17.1%	17.4%	20.6%	20.4%	21.4%	20.8%	21.3%	19.0%	19.2%	17.4%	15.8%
Personal Services	608	729	665	804	987	1,095	1,087	1,154	976	924	986
% of Total	14.3%	15.2%	12.0%	13.6%	15.6%	16.6%	16.1%	16.1%	13.1%	11.9%	12.1%
Other	32	19	106	78	45	69	56	39	168	146	155
% of Total	0.8%	0.4%	1.9%	1.3%	0.7%	1.0%	0.8%	0.5%	2.3%	1.9%	1.9%
Unknown	145	139	392	190	211	369	141	221	354	702	816
% of Total	3.4%	2.9%	7.1%	3.2%	3.3%	5.6%	2.1%	3.1%	4.7%	9.1%	10.0%
Total	4,258	4,808	5,527	5,889	6,348	6,606	6,766	7,174	7,481	7,754	8,164

Source: Census of Canmore

#### 3. Income and Wages

	la dividual	Υ	lean Incom	0	М	edian Incom	10
lotai	Individual	IV	lean incom	е	IVI	edian incon	ie
Incom	ie	Males	Females	Total	Males	Females	Total
	Canada	\$41,297	\$25,464	\$33,117	\$30,400	\$18,600	\$23,600
2003	Alberta	\$48,734	\$26,588	\$37,500	\$34,600	\$19,500	\$25,800
	Canmore	\$54,629	\$30,587	\$42,412	\$34,600	\$23,700	\$28,300
	Canada	\$42,834	\$26,452	\$34,366	\$31,300	\$19,300	\$24,400
2004	Alberta	\$51,802	\$27,974	\$39,720	\$36,200	\$20,300	\$26,900
	Canmore	\$58,946	\$33,397	\$45,950	\$36,500	\$24,900	\$29,800
	Canada	\$44,737	\$27,646	\$35,909	\$32,300	\$20,200	\$25,400
2005	Alberta	\$57,312	\$29,829	\$43,419	\$38,800	\$21,500	\$28,800
	Canmore	\$75,648	\$35,151	\$55,066	\$37,900	\$26,500	\$31,200
	Canada	\$47,117	\$29,087	\$37,776	\$33,600	\$21,200	\$26,500
2006	Alberta	\$63,716	\$32,501	\$47,869	\$42,400	\$23,500	\$31,400
	Canmore	\$76,177	\$38,976	\$57,453	\$41,100	\$28,100	\$33,500

Source: Statistics Canada Taxfiler Data

Total	Individual	N	lean Income	9	M	edian Incom	ie
	yment	Males	Females	Total	Males	Females	Total
	Canada	\$40,736	\$25,991	\$33,693	\$30,400	\$19,900	\$24,800
2003	Alberta	\$47,282	\$26,232	\$37,334	\$34,400	\$19,900	\$26,400
	Canmore	\$48,055	\$27,851	\$38,169	\$30,600	\$21,600	\$25,500
	Canada	\$42,225	\$26,929	\$34,910	\$31,200	\$20,500	\$25,400
2004	Alberta	\$50,406	\$27,611	\$39,615	\$36,200	\$20,600	\$27,500
	Canmore	\$51,095	\$29,981	\$40,707	\$32,500	\$22,900	\$27,100
	Canada	\$44,059	\$27,908	\$36,326	\$32,200	\$21,200	\$26,300
2005	Alberta	\$55,878	\$29,327	\$43,334	\$39,000	\$21,800	\$29,500
	Canmore	\$66,042	\$31,592	\$49,153	\$33,700	\$24,000	\$28,300
	Canada	\$46,179	\$29,154	\$38,009	\$33,500	\$22,100	\$27,400
2006	Alberta	\$61,638	\$31,835	\$47,594	\$42,300	\$23,900	\$32,100
	Canmore	\$67,390	\$34,358	\$51,410	\$36,400	\$25,100	\$30,100

Source: Statistics Canada Taxfiler Data

Job Category	Oct 2001- Apr 2002	May- Dec 2002	Jan- Nov 2003	Feb- July 2005	Spring 2007	Spring 2008	Fall 2008	Estimated Annual Wage
Construction &	Api 2002	2002	2003	2003	2001	2000	2000	wage
Landscaping	\$10.75	\$11.91	\$11.02	\$12.30	\$14.10	\$15.01	\$14.54	\$30,243.20
Food & Beverage "front line"	\$7.37	\$7.50	\$7.18	\$8.00	\$8.37	\$9.58	\$9.41	\$19,572.80
Food & Beverage "kitchen"	\$8.93	\$10.31	\$10.31	\$10.12	\$11.27	\$12.14	\$13.76	\$28,620.80
Hotel Guest Services	\$9.00	\$9.07	\$9.13	\$9.75	\$10.72	\$11.16	\$11.79	\$24,523.20
Housekeeping & Cleaning	\$8.62	\$9.24	\$9.30	\$9.84	\$10.76	\$11.42	\$12.00	\$24,960.00
Miscellaneous	\$9.56	\$10.72	\$10.35	\$11.36	\$12.23	\$14.97	\$15.94	\$33,155.20
Office & Administration	\$12.15	\$11.45	\$11.46	\$10.95	\$13.50	\$14.84	\$15.23	\$31,678.40
Sales & Service	\$8.42	\$9.09	\$8.57	\$9.09	\$10.68	\$11.90	\$11.88	\$24,710.40
Trades & Maintenance	\$16.08	\$13.27	\$11.42	\$13.21	\$17.67	\$17.23	\$15.78	\$32,822.40
Travel & Tourism	\$8.75	\$9.24	\$12.05	\$11.22	\$12.36	\$12.14	\$13.38	\$27,830.40

Source: Job Resource Centre, Labour Market Review

## 4. Municipal Tax Base Ratio

	Assessment				
Year	Class	Assessment	Ratio	Mill Rate	Tax Dollars
2008	Residential	\$4,788,278,030	82.2%		
	Commercial	\$1,040,020,880	17.8%		
2007	Residential	\$3,574,613,570	82.8%		
	Commercial	\$741,783,130	17.2%		
2006	Residential	\$2,929,821,790	82.9%	5.64693	
	Commercial	\$606,261,920	17.1%	11.8619	
2005	Residential	\$2,473,968,140	82.1%	6.08665	
	Commercial	\$538,210,760	17.9%	12.63094	
2004	Residential	\$1,947,428,210	79.6%		
	Commercial	\$500,406,920	20.4%		
2003	Residential	\$1,506,840,400	79.4%	8.6258	\$12,997,704
	Commercial	\$390,018,800	20.6%	12.8225	\$5,001,016
2002	Residential	\$1,324,872,930	78.8%	8.7191	\$11,551,699
	Commercial	\$356,488,210	21.2%	13.1475	\$4,686,928
2001	Residential	\$1,222,998,085	76.9%	8.4779	\$10,368,455
	Commercial	\$366,738,835	23.1%	11.6864	\$4,285,856
2000	Residential	\$1,104,174,920	77.1%	9.3198	\$10,290,689
	Commercial	\$328,357,480	22.9%	13.5125	\$4,436,930
1999	Residential	\$968,253,730	77.2%	4.207	\$4,073,447
	Commercial	\$285,223,220	22.8%		\$1,199,934
1998	Residential	\$826,181,800	76.2%	4.443	\$3,670,725
	Commercial	\$258,656,600	23.8%		\$1,149,211
1997	Residential	\$694,148,000	77.9%	4.937	\$3,427,008
	Commercial	\$197,274,350	22.1%		\$973,943
1996	Residential	\$556,004,900	78.1%	5.412	\$3,009,654
	Commercial	\$156,335,800	21.9%		\$846,246
1995	Residential	\$510,842,000	77.5%	5.413	\$2,765,188
	Commercial	\$148,729,400	22.5%		\$805,072

Source: Town of Canmore

### **5. Business License Registry**

Number of Businesses								
Registered:	2000	2001	2002	2003	2004	2005	2007	2008
Resident	498	521	556	598	589	593	581	620
Home Occupations	319	318	388	438	447	545	520	626
B&B	73	72	n/a	64	56	58		
Hawker / Mt. Market	20	17	11	14	12	14	23	16
Micro							68	
Non-Resident	202	229	268	356	297	339	278	315
Regional		17	25	28	24	36	32	33
Total	1,112	1,174	1,248	1,498	1,425	1,585	1,502	1,610
<b>Total Fees Collected</b>	\$158,924	\$1,827	\$1,940	\$2,398	\$285,900	\$282,365	\$333,900	n/a

Source: CEDA, Business License Registry

## 6. Building Permit Summary

# of Permits Issued	Annual Total	Residential	Commercial	Inst/Govt	Industrial
1996	335	270	44	4	17
1997	423	343	41	8	31
1998	413	340	56	12	5
1999	304	238	50	5	11
2000	236	173	47	6	10
2001	238	174	38	9	17
2002	319	231	72	6	10
2003	298	226	47	11	14
2004	322	275	36	3	8
2005	317	244	62	10	1
2006	267	208	45	8	6
2007	227	178	45	4	0
2008	194	142	47	2	1
Total	3,893	3,042	630	88	131

Source: Town of Canmore

Value of Permits Issued	Annual Total	Residential	Commercial	Inst/Govt	Industrial
1996	\$48,365,506	\$32,500,987	\$13,581,457	\$11,000	\$2,272,062
1997	\$56,438,269	\$39,321,619	\$14,024,670	\$1,521,780	\$1,570,200
1998	\$65,997,912	\$41,162,429	\$23,014,062	\$1,685,721	\$135,700
1999	\$51,709,500	\$36,795,095	\$12,097,805	\$1,183,000	\$1,633,600
2000	\$48,998,382	\$38,247,254	\$8,143,828	\$396,300	\$2,211,000
2001	\$48,572,725	\$35,089,181	\$9,578,044	\$915,500	\$2,990,000
2002	\$96,939,802	\$65,476,420	\$30,613,382	\$627,000	\$223,000
2003	\$116,658,000	\$91,707,000	\$17,914,000	\$5,951,000	\$1,086,000
2004	\$113,890,648	\$94,709,818	\$18,907,830	\$99,000	\$174,000
2005	\$127,097,660	\$76,319,300	\$49,777,360	\$996,000	\$5,000
2006	\$200,441,038	\$118,957,331	\$64,423,682	\$15,898,025	\$1,162,000
2007	\$220,612,848	\$139,029,584	\$65,342,264	\$16,241,000	\$0
2008	\$101,281,760	\$85,411,760	\$14,118,000	\$902,000	\$850,000
Total	\$1,297,004,050	\$894,727,778	\$341,536,384	\$46,427,326	\$14,312,562

Source: Town of Canmore

## 8. Tourist Accommodations and Occupancy Rates

Occupancy Rates	2000	2001	2002	2003	2004	2005	2006	2007	2008
Hotel/Motel									
Units	63%	60%	58%	52%	55%	60%	59%	59%	57%
Condo/Suite									
Units	n/a	n/a	n/a	n/a	58%	44%	50%	56%	54%

Source: Canmore Hotel & Lodging Association

# **APPENDIX C: SOCIAL FABRIC**

### 1. Volunteer Organizations

Volur	teer Organizations
Year	# of Groups
1995	79
1996	96
1997	106
1998	122
1999	129
2000	129
2001	134
2002	114
2003	114
2004	99
2005	98
2006	106
2007	116

Source: Canmore Community Resource & Business

Directory

2. Library Facilities and Use

Canmore Public Library	Membership	Circulation	Circulation per Member	Permanent Population
1995	4,413	84,752	11.1	7,632
1996	5,283	116,638	13.9	8,396
1997	5,446	143,580	15.9	9,015
1998	5,690	153,464	15.8	9,711
1999	6,131	161,671	15.8	10,239
2000*	n/a	158,935	15.1	10,517
2001	5,268	168,038	15.5	10,843
2002	5,615	175,021	15.7	11,168
2003	5,973	170,883	14.9	11,458
2004	6,419	167,636	14.4	11,670
2005	6,910	157,481	13.6	11,599
2006	5,898	141,159	12.2	11,599
2007	6,427	148,647	12.6	11,782
*2000 figures no	t available due	to database pr	oblems	

Source: Canmore Public Library

	Public	Library Sta	Per Capita				
2005	Population	Card Holders	Materials	Circulation	Card Holders	Materials	Circulation
Canmore	11,442	6,910	52,540	157,481	60.4%	4.6	13.8
Cochrane	12,688	4,242	38,467	124,483	33.4%	3.0	9.8
Hinton	9,405	2,712	30,256	56,091	28.8%	3.2	6.0
Okotoks	11,664	9,654	53,125	206,504	82.8%	4.6	17.7
Banff	8,352	n/d	38,580	114,891	n/d	4.6	13.8
Alberta	2,924,460	1,262,009	9,758,032	32,726,630	43.2%	3.3	11.2

Source: Public Library Statistics 2005, Alberta Community Development

#### 4. Education Level of Adults

Education Level of Adults									
Total population aged 25 to 64	Canmore	Banff	Whistler	Alberta	Canada				
No certificate; diploma or degree	11.4%	11.8%	6.7%	21.0%	20.2%				
High school certificate or equivalent	25.2%	29.8%	30.7%	27.0%	26.3%				
Apprenticeship or trades certificate or diploma	9.1%	7.6%	8.5%	10.7%	10.8%				
College; CEGEP or other non-university certificate or									
diploma	18.4%	22.9%	18.8%	18.8%	18.5%				
University certificate or diploma below the bachelor									
level	5.4%	6.0%	6.3%	4.0%	4.4%				
University certificate; diploma or degree	30.5%	21.9%	29.0%	18.6%	19.7%				

Source: Census of Canada

### **5. Food Security**

		Bow	Valley Foo	d Bank - C	anmore Ham	per Distribution		
Year	Total Hampers	Adults	Children	Total People	Permanent Population	People Served as a % of Permanent Population	# of Hampers per Permanent Resident	Hampers per 1,000
1994/5	132	171	101	272	7,127	3.8%	0.019	18.5
1995/6	145	190	83	273	7,632	3.6%	0.019	19.0
1996/7	356	287	91	378	8,396	4.5%	0.042	42.4
1997/8	310	220	78	298	9,015	3.3%	0.034	34.4
1998/9	362	301	79	380	9,711	3.9%	0.037	37.3
1999/0	370	278	76	354	10,239	3.5%	0.036	36.1
2000/1	381	445	175	620	10,517	5.9%	0.036	36.2
2001/2	387	479	180	659	10,843	6.1%	0.036	35.7
2002/3	563	719	238	957	11,151	8.6%	0.050	50.5
2003/4	440	557	262	819	11,458	7.1%	0.038	38.4
2004/5	468	586	219	805	11,450	7.0%	0.041	40.9
2005/6	451	544	271	815	11,442	7.1%	0.039	39.4
2006/7	363	585	134	719	11,559	6.2%	0.031	31.4
2007/8	370	496	146	642	11,782	5.4%	0.031	31.4

Source: Bow Valley Food Bank

#### 6. Social Assistance

S	ocial Assistance Payments*	Canmore	Alberta	Canada
	# Receiving	340	192,480	1,377,840
	# Taxfilers	8,650	2,300,500	23,267,830
	\$ Received	\$929,000	\$641,063,000	\$7,851,473,000
2003	% of Taxfilers Receiving	3.9%	8.4%	5.9%
	Mean \$ Received	\$2,732	\$3,331	\$5,698
	Economic Dependency Ratio (EDR)	0.33	0.94	1.37
	# Receiving	360	204,200	1,377,680
	# Taxfilers	8,740	2,381,440	23,624,530
	\$ Received	\$984,000	\$701,784,000	\$8,006,961,000
2004	% of Taxfilers Receiving	4.1%	8.6%	5.8%
	Mean \$ Received	\$2,733	\$3,437	\$5,812
	Economic Dependency Ratio (EDR)	0.32	0.93	1.33
	(LDIV)	0.02	0.55	1.00
	# Receiving	340	200,010	1,356,750
			,	, ,
	# Taxfilers	9,010	2,454,360	23,951,820
2005	\$ Received	\$104,200	\$74,273,500	\$811,622,000
	% of Taxfilers Receiving	3.8%	8.1%	5.7%
	Mean \$ Received	\$3,065	\$3,713	\$5,982
	Economic Dependency Ratio (EDR)	0.28	0.87	1.27
	# Receiving	330	199,030	1,341,270
	# Taxfilers	9,050	2,521,390	24,258,900
	\$ Received	\$1,085,000	\$781,294,000	\$8,221,824,000
2006	% of Taxfilers Receiving	3.6%	7.9%	5.5%
	Mean \$ Received	\$3,288	\$3,926	\$6,130
	Economic Dependency Ratio (EDR)	0.27	0.81	1.21

\*Includes payments made in the year on the basis of a means, needs or income test (whether made by an organized charity or under a government program).

Source: Statistics Canada Taxfiler Data: Neighbourhood Income and Demographics Tables

## 7. Crimes against Persons and Property

Crimes Against Persons and	#	of Offense	S	Offenses per 100,000 Population				
Property	Persons	Property	Total	Persons	Property	Total		
1995	75	362	437	983	4,743	5,726		
1996	81	428	509	965	5,098	6,062		
1997	84	459	543	932	5,092	6,023		
1998	94	605	699	968	6,230	7,198		
1999	72	545	617	703	5,323	6,026		
2000	78	512	590	742	4,868	5,610		
2001	87	516	603	802	4,759	5,561		
2002	108	515	623	958	4,568	5,525		
2003	111	671	782	969	5,856	6,825		
2004	152	583	735	1,303	4,996	6,298		
2005	112	647	759	966	5,578	6,544		
2006	119	520	639	1,026	4,483	5,509		
2007	121	429	550	1,026	3,638	4,664		

Source: Statistics Canada, Canadian Centre for Justice Statistics

### 8. Domestic Violence

Domestic Violence - BVVSA	Number of persons assisted after occurrences of domestic abuse	Permanent Population	Rate per 1,000 Permanent
1995/6	27	7,632	3.5
1996/7	22	8,396	2.6
1997/8	38	9,015	4.2
1998/9	34	9,711	3.5
1999/0	25	10,239	2.4
2000/1	37	10,517	3.5
2001/2	49	10,843	4.5
2002/3	45	11,151	4.0
2003/4	55	11,458	4.8
2004/5	48	11,450	4.2
2005/6	61	11,442	5.3
2006/7	63	11,559	5.5
2007/8	59	11,782	5.0

Source: BVVSA

## 9. Alcohol and Drug Use

	200	)4/5	200	5/6	200	06/7	200	7/8
Treatment Focus	# of Clients	% of Clients						
Alcohol Only	39	37.5%	40	32.5%	50	38.0%	39	31.0%
Other Drugs Only	36	34.6%	36	29.3%	41	31.0%	37	29.0%
Alcohol & Other Drugs	18	17.3%	24	19.5%	28	21.0%	35	28.0%
Alcohol, Other Drugs, & Tobacco	1	1.0%	7	5.7%	4	3.0%	5	4.0%
Alcohol & Tobacco	2	1.9%	4	3.3%	1	1.0%	2	2.0%
Alcohol, Other Drugs, Gambling & Tobacco	0	0.0%	3	2.4%	2	2.0%	1	1.0%
Other Combinations	8	7.7%	9	7.3%	6	5.0%	3	3.0%
Total	104	100.0%	123	100.0%	132	100.0%	122	100.0%

Source: AADAC

#### 10. Health Services

Continuing Care and Home Care Services	2000	2001	2002	2003	2004	2005	2006	2007
Average number of people on active								
waitlist for Continuing Care	6	4	5	9	3	2	3	5
Rate per 1,000	0.6	0.4	0.4	0.8	0.3	0.2		
Average Number of Individuals on								
Caseload for Home Care Services	145	198	211	219	225	237	250	290
Rate per 1,000	13.8	18.3	18.9	19.1	19.7	20.7	21.6	24.2
Permanent Population	10,517	10,843	11,168	11,458	11,450	11,442	11,559	12,005

Source: Calgary Health Region

Continuing Care and Home Care Services	2000	2001	2002	2003	2004	2005	2006	2007
Average number of people or active								
waitlist for Continuing Care	6	4	5	9	3	2	3	5
Average number of individuals on								
caseload for home care Services	145	198	211	219	225	237	250	290
Rate per 1,000	13.8	18.3	18.9	19.1	19.7	20.7	21.6	24.2

Source: Calgary Health Region

# 11. Dwelling Unit Types

Dwelling Units	1995	1996	1997	1998	1999	2000	2001	2003	2005	2006	2008
Single											
Family	1,980	2,044	2,083	2,368	2,435	2,596	2,588	2,593	2,770	2,746	2,801
Net change		64	39	285	67	161	-8	5	177	-24	55
% of Total	54.9%	52.0%	50.0%	51.7%	50.5%	50.4%	46.4%	41.8%	39.2%	36.4%	33.9%
Single											
Family with								000	200	200	205
Suite								236	322	329	395
Net change								0.00/	86	7	66
% of Total								3.8%	4.6%	4.4%	4.8%
Accessory								005	445	0.47	000
Suite								205	115	347	266
Net change								0.00/	-90	232	-81
% of Total								3.3%	1.6%	4.6%	3.2%
Semi-		404	40=	= 4.0	=0.4	=00	0.40		200		=00
Detached	368	421	467	516	594	589	819	457	690	696	798
Net change		53	46	49	78	-5	230	-362	233	6	102
% of Total	10.2%	10.7%	11.2%	11.3%	12.3%	11.4%	14.7%	7.4%	9.8%	9.2%	9.7%
Townhouse	632	654	595	910	1,042	1,069	987	1,553	1,659	1,854	1,802
Net change		22	-59	315	132	27	-82	566	106	195	-52
% of Total	17.5%	16.7%	14.3%	19.9%	21.6%	20.8%	17.7%	25.0%	23.5%	24.6%	21.8%
Apartment	281	490	469	430	422	593	829	777	1,214	1,332	1,832
Net change		209	21	39	-8	171	236	-52	437	118	500
% of Total	7.8%	12.5%	11.2%	9.4%	8.8%	11.5%	14.8%	12.5%	17.2%	17.6%	22.2%
Mobile	004	077	0.40	040	040	0.40	00.4	000	0.40	000	407
Home	291	277	243	216	218	249	224	220	219	208	167
Net Change	0.40/	-14	-34	-27	2	31	-25	-4	-1	-11	-41
% of Total	8.1%	7.1%	5.8%	4.7%	4.5%	4.8%	4.0%	3.5%	3.1%	2.8%	2.0%
Institution	2	2	3	2	2	3	2	3	13	2	3
% of Total	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.2%	0.0%	0.0%
Other	41	33	92	140	103	48	134	157	60	22	142
% of Total	1.1%	0.8%	2.2%	3.1%	2.1%	0.9%	2.4%	2.5%	0.8%	0.3%	1.7%
Unknown	9	6	217	1	4	0	0	0	10	15	46
% of Total	0.2%	0.2%	5.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.2%	0.6%
Total											_
Dwellings	3,604	3,927	4,169	4,583	4,820	5,147	5,583	6,201	7,072	7,551	8,252
Net change		323	242	414	237	327	436	618	871	479	701

## 12. Tenancy Status of Dwelling Units

Tenancy Status	1995	1996	1997	1998	1999	2000	2001	2003	2005	2006	2008
Owned	2,004	2,188	2,294	2,423	2,585	2,671	2,770	2,986	3,019	3,061	3130
Percent of Total	60.3%	60.7%	58.9%	57.2%	57.6%	56.9%	55.4%	54.8%	49.4%	47.4%	45.5%
Rented	805	860	966	1,070	1,132	1,162	1,272	1,424	1,495	1,579	1754
Percent of Total	24.2%	23.8%	24.8%	25.3%	25.2%	24.7%	25.4%	26.1%	24.5%	24.4%	25.5%
Non-Permanent	513	559	633	741	767	865	960	1,041	1,599	1,823	2000
Percent of Total	15.4%	15.5%	16.3%	17.5%	17.1%	18.4%	19.2%	19.1%	26.2%	28.2%	29.1%
Total Dwellings	3322	3607	3893	4234	4484	4698	5002	5451	6113	6463	6884

Source: Canmore Census

13. Occupancy Rates

Occupancy											
Rates	1995	1996	1997	1998	1999	2000	2001	2003	2005	2006	2008
Single Family	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.9	2.8	2.8	2.8
Single Family with Suite								2.9	2.4	2.6	2.4
Accessory Suite								1.8	1.5	1.7	1.6
Semi-detached	2.5	2.6	2.5	2.5	2.5	2.6	2.5	2.6	2.6	2.6	2.5
Townhouse	2.4	2.5	2.4	2.4	2.5	2.4	2.4	2.3	2.2	2.2	2.2
Apartment	1.8	2.1	2.1	2.1	1.9	2.0	2.0	1.6	1.8	1.8	1.9
Mobile Home	2.6	2.6	2.6	2.5	2.4	2.4	2.3	2.3	2.3	2.3	2.3
Institution							33.0	24.7	6.6	41.5	32.7
Other							2.0	2.0	2.0	2.6	2.0
Average	2.7	2.7	2.8	2.8	2.8	2.7	2.7	2.6	2.5	2.5	1.6
Non-Permanent							2.4	2.7	2.4	2.6	2.8

Source: Canmore Census

### 14. Rental Housing Costs and Availability

Rental Housing Costs*	Feb 2002 to Apr 2002	Nov 2002 to Jan 2003	June 2005 to Sept 2005	Feb 2006 to July 2006	Aug 2006 to Jan 2007	Feb 2007 to July 2007	Aug 2007 to Jan 2008	Feb 2008 to July 2008
1 Bedroom	\$515	\$650	\$830	\$835	\$900	\$950	\$1,100	\$1,051
2 Bedroom	\$930	\$1,015	\$1,070	\$1,000	\$1,200	\$1,300	\$1,600	\$1,539
3 Bedroom	\$1,058	\$1,250	\$1,250	\$1,250	\$1,400	\$1,700	\$1,900	\$1,902
Bachelor/Studio	\$425	\$600	\$590	\$750	\$750	\$750	\$825	\$904
Roomate/Shared	\$350	\$450	\$440	\$480	\$500	\$550	\$600	\$617
*Based on advertised	accomoda	tion in the C	Canmore Lead	der and the R	locky Mountair	n Outlook	•	

Source: Bow Valley Labour Market Review

### 15. Average House and Condominium Resale Prices

Average Residential Price (\$)	Canada	Alberta	Calgary	Canmore
1991	\$146,959	\$111,482	\$128,255	\$144,346
1992	\$149,572	\$113,558	\$129,506	\$148,500
1993	\$152,888	\$117,085	\$133,998	\$157,635
1994	\$158,299	\$117,336	\$133,571	\$170,489
1995	\$150,720	\$114,772	\$132,114	\$165,460
1996	\$150,886	\$117,673	\$134,643	\$171,658
1997	\$154,606	\$124,865	\$143,305	\$206,277
1998	\$152,365	\$132,905	\$157,353	\$226,505
1999	\$158,145	\$139,621	\$166,110	\$232,499
2000	\$163,992	\$146,258	\$176,305	\$232,006
2001	\$171,743	\$153,737	\$182,090	\$258,663
2002	\$188,973	\$170,253	\$198,350	\$274,404
2003	\$207,091	\$182,845	\$211,155	\$347,197
2004	\$227,210	\$194,769	\$222,860	\$389,671
2005	\$249,311	\$218,266	\$250,943	\$436,160
2006	\$276,883	\$285,383	\$346,675	\$511,979
2007	\$307,265	\$356,235	\$414,066	\$641,685
2008				\$631,329

Source: CMHC Canadian Housing Observer Table 4, Canmore Alpine Realty (Re/Max)

Average Resale Prices	Single Family	% Change	Multi Family / Condo	% Change	Average (mean all units)	% Change	Median (all units)	% Change
1993	\$178,000	-	\$137,000	-				
1994	\$196,000	10.1%	\$142,000	3.6%				
1995	\$200,000	2.0%	\$146,000	2.8%	\$165,460			
1996	\$210,000	5.0%	\$148,000	1.4%	\$171,658	3.7%		
1997	\$240,000	14.3%	\$165,000	11.5%	\$206,277	20.2%		
1998	\$252,000	5.0%	\$196,000	18.8%	\$226,505	9.8%		
1999	\$259,000	2.8%	\$205,000	4.6%	\$232,499	2.6%		
2000	\$279,000	7.7%	\$205,000	0.0%	\$232,006	-0.2%		
2001	\$319,000	14.3%	\$209,000	2.0%	\$258,663	11.5%		
2002	\$319,999	0.3%	\$241,000	15.3%	\$274,404	6.1%		
2003	\$413,021	29.1%	\$271,069	12.5%	\$347,197	26.5%	\$310,000	
2004	\$516,451	25.0%	\$318,782	17.6%	\$389,671	12.2%	\$342,000	10.3%
2005	\$555,046	7.5%	\$362,466	13.7%	\$436,160	11.9%	\$391,513	14.5%
2006	\$714,803	28.8%	\$420,466	16.0%	\$511,979	17.4%	\$449,000	14.7%
2007	\$915,149	28.0%	\$535,848	27.4%	\$641,685	25.3%	\$530,000	18.0%
2008	\$887,856	-3.0%	\$544,496	1.6%	\$631,329	-1.6%		

Source: Canmore Alpine Realty (Re/Max)

#### 16. Housing Affordability

Price Comparison Survey Shelter Index	2001	2003	2005	2007
Calgary	118.8	117.6	109.2	94.6
Canmore	146.0	155.1	169.2	110.6
Fort McMurray	152.1	129.0	169.7	136.8
Jasper	140.9	136.7	137.7	88.0
Edmonton	100.0	100.0	100.0	100.0

Source: Alberta Finance

				Rental Hous	ing Costs*			
Rental Housing Costs*	Feb 2002 to Apr 2002	Nov 2002 to Jan 2003	June 2005 to Sept 2005	Feb 2006 to July 2006	Aug 2006 to Jan 2007	Feb 2007 to July 2007	Aug 2007 to Jan 2008	Feb 2008 to July 2008
1 Bedroom	\$515.00	\$650.00	\$830.00	\$835.00	\$900.00	\$950.00	\$1,100.00	\$1,051.00
2 Bedroom	\$930.00	\$1,015.00	\$1,070.00	\$1,000.00	\$1,200.00	\$1,300.00	\$1,600.00	\$1,539.00
3 Bedroom	\$1,058.00	\$1,250.00	\$1,250.00	\$1,250.00	\$1,400.00	\$1,700.00	\$1,900.00	\$1,902.00
Bachelor/Studio	\$425.00	\$600.00	\$590.00	\$750.00	\$750.00	\$750.00	\$825.00	\$904.00
Roomate/Shared	\$350.00	\$450.00	\$440.00	\$480.00	\$500.00	\$550.00	\$600.00	\$617.00

				Income Re	quired **			
Rental Housing Affordability	Feb 2002 to Apr 2002	Nov 2002 to Jan 2003	June 2005 to Sept 2005	Feb 2006 to July 2006	Aug 2006 to Jan 2007	Feb 2007 to July 2007	Aug 2007 to Jan 2008	Feb 2008 to July 2008
1 Bedroom	\$20,600	\$26,000	\$33,200	\$33,400	\$36,000	\$38,000	\$44,000	\$42,040
2 Bedroom	\$37,200	\$40,600	\$42,800	\$40,000	\$48,000	\$52,000	\$64,000	\$61,560
3 Bedroom	\$42,320	\$50,000	\$50,000	\$50,000	\$56,000	\$68,000	\$76,000	\$76,080
Bachelor/Studio	\$17,000	\$24,000	\$23,600	\$30,000	\$30,000	\$30,000	\$33,000	\$36,160
Roomate/Shared	\$14,000	\$18,000	\$17,600	\$19,200	\$20,000	\$22,000	\$24,000	\$24,680

<sup>\*</sup>Based on advertised accomodation in the Canmore Leader and the Rocky Mountain Outlook

Source: Bow Valley Labour Market Review

<sup>\*\*</sup>Affordability threshold is 30% of gross income

Affordability: Housing Price to Income Ratio	Median Housing Price	Median Family Income (all families)	Price:Income Ratio
2003	\$310,000	\$67,100	4.62
2004	\$342,000	\$72,300	4.73
2005	\$391,513	\$75,100	5.21
2006	\$449,000	\$80,800	5.56

Source: Statistics Canada, Canmore Alpine Realty (Re/Max).

Canmore Income /	2006 Median	32% of Annual	Available for Monthly	Minus Property Tax + 50%	Mortgage Payment	Total Affordable	ra	Assuming 25 year amort; 3 year rate of 6.5%  House Prices with:		Median House
Mortgage Limits	Annual Income	Income	Payment	of Condo Fees (\$250)	Factor (6.698)	Mortgage Amount	5% DP	10% DP	25% DP	Price 2006
Couple families	\$86,100	\$27,552	\$2,296	\$2,046		\$305,464	\$320,738	\$336,774	\$381,830	\$449,000
All Families	\$80,800	\$25,856	\$2,155	\$1,905		\$284,363	\$298,582	\$313,511	\$355,454	\$449,000
Lone-parent families	\$38,400	\$12,288	\$1,024	\$774		\$115,557	\$121,335	\$127,401	\$144,446	\$449,000
Non-family persons	\$30,400	\$9,728	\$811	\$561		\$83,707	\$87,892	\$92,287	\$104,633	\$449,000

Median Income - is Canmore's median household income

**Source:** Statistics Canada, Small Area and Administrative Data Division, 2006, Annual Estimates for Census Families and Individuals, 13C0016. Mortgage table provided by Canmore Community Housing Corporation. Median house prices from Canmore Alpine Realty (Re/Max).

<sup>\*</sup>CMHC fees - banks do not include in calculation

<sup>\*</sup>Banks use 32% of annual income, which includes utilities

<sup>\*</sup>Total debt service limit is 40% (sometimes 42%); if people have no DP their 5% is included in total debt service ratio

<sup>\*</sup>Note that mortgage regulations may require that people have to be in current job 1 year or longer

# APPENDIX D: ENVIRONMENTAL STEWARDSHIP

### 1. Air Quality

2002 Bow Region Air Quality		Media	an 1-hou	ır concentrat	tion	
Surveys (Spring and Fall)	Unit	Bow Region	Banff	Canmore	Exshaw	AAAQO*
Carbon Monoxide (CO)	ppm	0.2	0.5	0.3	0.1	13
Ozone (O3)	ppm	0.031	0.037	0.034	0.04	0.082
Total Hydrocarbons (THC)	ppm	2.1	2.3	2.1	2.2	
Methane (CH4)	ppm	2.1	1.9	1.8	1.7	
Reactive Hydrocarbons (RHC)	ppm	bd	0.5	0.3	0.4	
Sulphur Dioxide (SO2)	ppm	0.002	0.001	0.001	0.006	0.172
Nitric Oxide (NO)	ppm	0.003	0.003	0.01	0.013	
Nitrogen dioxide (NO2)	ppm	0.005	0.004	0.009	0.009	0.212
Oxides of Nitrogen (NOx)	ppm	0.006	0.006	0.018	0.015	
Ammonia (NH3)	ppm	0.003	0.003	0.002	0.003	2
Total Reduced Sulphurs (TRS)	ppm	0.001	0.001	0.001	0.001	
Hydrogen Sulphide (H2S)	ppm	bd	bd	bd	bd	0.010
Total Suspended Particles (TSP)	μg/m3	24	38	23	56	
Inhaleable particles (PM10)	μg/m3	16	26	15	40	
Respirable particles (PM 2.5)	μg/m3	3	4	3	6	
Polycyclic Aromatic Hydrocarbons						
(PAH)	ng/m3	bd	bd	4	4	
Number of Samples Hours		34	6	12	5	
*AAAQO: Alberta's Ambient Air Quality	Objectives	3				

Source: (Alberta Environment, 2008)

2004 Air Quality Surveys: Monitoring Locations and associated site number

Survey	Site	Description
	1	Agrium Carseland
	2	Orica Carseland
	3	Nexen Balzac
Bow	4	Primewest Crossfield
Region	6	Fish Creek Waste Water Treatment Plant
2002	7	Bonnybrook Waste Water Treatment Plant
	8	Petrocan Wildcat
	9	Greymont
	10	Shell Jumping Pound
	1	Bus parking lot on Caribou and Beaver St.
Banff 2004	2	Corner of Wolf & Beaver St
Barili 2004	3	Intersection and Wolf St & Bow Ave
	5	Springs Cresc on south side of Banff
	2	Parking area on Benchlands Trail near Hwy 1
Canmore	3	Main Street and Railway Ave (Central)
2004	4	Banff Park East Gate on Hwy 1
	5	Corner of 2 ave & 17 St (North)
Finales	1	Bow Valley Provincial Park Trailer dump area
Exshaw 2004	2	Heart Mtn Dr & Mt McGillvary Dr
2004	3	Recycle Depot near school

(see next page for 2004 survey results)

2004 Surveys: Median 1-hour concentrations at the various monitoring sites

Cumurau	Site	Camples barre	CO	O <sub>3</sub>	THC	CH₄	RHC	SO <sub>2</sub>	NO	NO <sub>2</sub>	NO <sub>x</sub>	NH <sub>3</sub>	TRS	H₂S	TSP	PM 10	PM 2.5	PAH
Survey	Site	Samples hours	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	□g/m³	□g/m³	□g/m³	ng/m3
	1	3	0.2	0.018	2.1	2.0	bd	0.001	0.002	0.003	0.003	0.030	bd	bd	7	5	1	bd
	2	2	0.2	0.018	2.1	2.1	0.1	0.002	0.002	0.005	0.007	0.014	0.001	0.001	6	4	1	bd
	3	2	0.2	0.019	2.0	2.0	0.1	0.003	0.010	0.005	0.010	0.002	0.004	0.004	13	9	2	7
	4	2	0.3	0.017	2.0	1.9	bd	0.009	0.003	0.003	0.002	bd	0.002	0.003	4	2	bd	bd
Bow Region 2002	6	7	0.2	0.044	2.2	2.3	bd	0.001	0.002	0.005	0.004	0.002	0.001	bd	21	13	2	bd
	7	4	0.4	0.040	2.3	2.3	0.1	0.002	0.012	0.012	0.020	0.005	0.004	0.002	56	34	5	5
	8	3	0.2	0.033	2.2	2.2	bd	0.012	0.002	0.004	0.007	0.002	bd	bd	26	16	3	bd
	9	8	0.3	0.030	2.1	2.1	bd	0.002	0.009	0.007	0.017	0.003	0.001	bd	41	30	5	bd
	10	3	0.1	0.038	1.7	1.3	0.4	0.005	0.001	0.003	0.005	0.003	0.001	0.001	3	2	1	bd
	1	1	0.6	0.035	2.5	1.8	0.7	0.002	0.040	0.011	0.027	0.015	0.002	0.001	75	53	9	18
Banff 2004	2	2	0.6	0.028	2.2	1.9	0.4	0.001	0.010	0.006	0.015	0.005	0.001	bd	38	26	4	4
Daiiii 2004	3	2	0.3	0.039	2.2	1.9	0.4	0.001	0.001	0.002	0.002	0.003	0.001	bd	39	28	5	bd
	5	1	0.2	0.037	2.2	1.9	0.7	0.001	0.003	0.004	0.007	bd	bd	bd	21	14	3	bd
	2	4	0.2	0.036	2.2	1.9	0.3	0.001	0.004	0.006	0.010	0.001	0.002	bd	58	38	5	bd
Canmore 2004	3	2	0.4	0.019	1.9	1.7	0.3	0.001	0.010	0.008	0.018	0.001	bd	0.001	14	10	2	4
Cariffole 2004	4	3	0.5	0.033	2.5	1.8	0.7	0.001	0.028	0.016	0.040	0.005	0.001	0.001	22	14	2	41
	5	3	0.4	0.035	2.0	1.7	0.3	bd	0.011	0.009	0.021	0.003	bd	bd	38	26	4	10
	1	1	0.1	0.040	2.2	1.8	0.4	bd	0.001	0.004	0.005	bd	0.001	bd	24	15	3	bd
Exshaw 2004	2	3	0.3	0.034	2.0	1.7	0.4	0.021	0.026	0.017	0.041	0.003	0.002	bd	56	40	6	11
	3	1	0.1	0.043	2.2	1.7	0.4	0.006	0.013	0.004	0.012	bd	0.001	bd	74	53	9	bd

2004 Surveys: Maximum 1-hour average concentrations at the various monitoring sites

Curvey	Site	Commiss bours	CO	O <sub>3</sub>	THC	CH₄	RHC	SO <sub>2</sub>	NO	NO <sub>2</sub>	ΝO <sub>x</sub>	NH <sub>3</sub>	TRS	H₂S	TSP	PM10	PM 2.5	PAH
Survey	Site	Samples hours	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	≅g/m³	≅g/m³	≅g/m³	ng/m³
	1	3	0.2	0.018	2.2	2.4	0.1	0.001	0.028	0.010	0.036	0.170	0.001	0.001	226	181	37	9
	2	2	0.2	0.019	2.1	2.1	0.1	0.002	0.002	0.005	0.008	0.027	0.001	0.001	7	5	1	bd
	3	2	0.2	0.021	2.0	2.0	0.1	0.004	0.010	0.005	0.010	0.003	0.004	0.004	16	12	2	13
	4	2	0.3	0.021	2.0	2.0	bd	0.016	0.004	0.004	0.003	bd	0.003	0.006	5	3	bd	bd
Bow Region 2002	6	7	0.3	0.048	2.8	2.9	bd	0.004	0.010	0.005	0.006	0.004	0.001	bd	51	33	4	bd
	7	4	0.4	0.046	2.8	2.7	0.4	0.003	0.016	0.015	0.031	0.008	0.019	0.019	76	47	6	10
	8	3	0.3	0.044	2.2	2.2	bd	0.026	0.003	0.007	0.008	0.003	0.001	0.001	100	60	6	bd
	9	8	0.6	0.033	2.3	2.3	0.1	0.006	0.056	0.023	0.079	0.007	0.001	0.002	157	110	16	5
	10	3	0.2	0.040	1.7	1.5	0.4	0.007	0.002	0.005	0.005	0.003	0.002	0.001	5	4	1	bd
	1	1	0.6	0.035	2.5	1.8	0.7	0.002	0.040	0.011	0.027	0.015	0.002	0.001	75	53	9	18
Banff 2004	2	2	0.6	0.036	2.3	1.9	0.4	0.001	0.016	0.010	0.026	0.009	0.002	bd	51	35	5	6
Dailli 2004	3	2	0.3	0.040	2.4	1.9	0.5	0.001	0.001	0.003	0.004	0.005	0.002	bd	60	42	7	bd
	5	1	0.2	0.037	2.2	1.9	0.7	0.001	0.003	0.004	0.007	bd	bd	bd	21	14	3	bd
	2	4	0.2	0.041	2.3	2.0	0.5	0.002	0.004	0.011	0.012	0.002	0.002	bd	63	44	6	bd
Canmore 2004	3	2	0.4	0.023	1.9	1.7	0.3	0.001	0.011	0.008	0.019	0.002	bd	0.001	14	10	2	5
Callillore 2004	4	3	0.6	0.034	2.5	2.0	0.7	0.002	0.038	0.017	0.056	0.010	0.004	0.001	23	14	2	66
	5	3	0.4	0.038	2.7	1.8	0.9	0.001	0.017	0.011	0.026	0.003	0.002	0.001	52	36	5	18
	1	1	0.1	0.040	2.2	1.8	0.4	bd	0.001	0.004	0.005	bd	0.001	bd	24	15	3	bd
Exshaw 2004	2	3	0.3	0.040	2.2	1.8	0.4	0.021	0.026	0.018	0.042	0.003	0.002	bd	56	40	6	17
	3	1	0.1	0.043	2.2	1.7	0.4	0.006	0.013	0.004	0.012	bd	0.001	bd	74	53	9	bd
Α	AAQO		13	0.082				0.172		0.212		2		0.010				

Full name of pollutants can be found the table above (2002 surveys)

Sample hours – number of sample hours

**AAÂQO** – Alberta's Ambient Âir Quality Objectives (Note: these values are for the 1 hour average concentration which will typically be lower than the 1 hour maximum concentration)

**bd** – below detection limit.**PPM** - parts per million  $ng/m^3$  = nanograms per cubic meter  $\mu g/m^3$  = micrograms per cubic meter **Source:** (Alberta Environment, 2008)

#### Bow Corridor Emission Inventory Draft Version in Tonnes and Percent Per Year

		Hydrocarbo	ns	Particulate		CO		SOx		
	Tonnes	Percent	Tonnes	Percent	Tonnes	Percent	Tonnes	Percent	Tonnes	Percen
Lafarge	3837.0	55.2%	NA	0.0%	411.0	44.5%	606.0	4.5%	2660.0	97.4%
Graymont	620.0	8.9%	NA	0.0%	265.0	28.7%	NA	0.0%	8.1	0.0%
Baymag	579.0	8.3%	NA	0.0%	90.0	9.7%	NA	0.0%	NA	0.0%
Total Industrial	5036.0	72.4%	NA	0.0%	766.0	82.9%	606.0	4.5%	2668.1	97.4%
Highway 1 and 1A	928.0	13.4%	305.0	25.5%	47.4	5.1%	6307.0	47.0%	30.0	1.0%
Banff Vehicle	323.0	4.6%	230.0	19.2%	16.5	1.8%	2188.0	16.3%	10.4	0.4%
Canmore Vehicle	535.0	7.6%	381.0	31.8%	27.3	3.0%	3619.0	27.0%	17.1	0.6%
Railway	36.0	0.0%	12.0	0.0%	NA	0.0%	246.0	1.8%	NA	0.0%
Total Transportation	1822.0	25.6%	928.0	76.5%	91.2	9.9%	12360.0	92.1%	57.5	2.0%
Home Heating	46.0	0.0%	3.7	0.0%	8.5	0.0%	21.0	0.0%	2.3	0.0%
Wood Combustion	7.2	0.0%	264.0	22.0%	55.0	6.0%	429.0	3.2%	0.8	0.0%
Business Heating	40.0	0.0%	1.9	0.0%	3.9	0.0%	7.5	0.0%	2.9	0.0%
Total Residential	93.2	0.0%	269.6	22.0%	67.4	6.0%	457.5	3.2%	6.0	0.0%
Total	6951.2	98.0%	1197.6	98.5%	924.6	98.8%	13423.5	99.8%	2731.6	99.4%

Presented to BCEAG in 2003 by Alberta Environment. (Alberta Environment, 2003)

# 2. Water Consumption and Quality

WATER CONSUMPTION (m <sup>3</sup> )	2000	2001	2002	2003	2004	2005	2006	2007
Residential meter size - 15mm								
Annual Consumption	1,010,989	1,011,776	1,000,376	1,047,491	948,839	913,136	952,901	932,599
Daily Consumption (ML)	2.8	2.8	2.7	2.9	2.6	2.5	2.6	2.6
Permanent Population	10,571	10,843	11,168	11458	11,802	11,442	11,599	11,782
Per Capita Consumption (Litres/capita/day)	262	256	245	250	220	219	225	217
2012 Goal	210	210	210	210	210	210	210	210
% Change in water use		-2.4%	-4.0%	2.1%	-12.1%	-0.7%	2.9%	-3.7%
% Reduction over base year (2000)		-2.4%	-6.3%	-4.4%	-15.9%	-16.6%	-14.1%	-17.2%
Commercial/Industrial meter size - 20mm to 100mm	2000	2001	2002	2003	2004	2005	2006	2007
Annual Consumption	605,596	615,214	628,875	703,485	700,401	746,074	832,218	916,424
Daily Consumption (ML)	1.7	1.7	1.7	1.9	1.9	2.0	2.3	2.5
Number of Accounts	203	211	225	248	246	331	307	339
Per Account Consumption (Litres/account/day)	8,173	7,988	7,658	7,772	7,800	6,175	7,427	7,406
2012 Goal	6,538	6,538	6,538	6,538	6,538	6,538	6,538	6,538
% Change in water use		-2.3%	-4.1%	1.5%	0.4%	-20.8%	20.3%	-0.3%
% Reduction over base year (2000)		-2.3%	-6.3%	-4.9%	-4.6%	-24.4%	-9.1%	-9.4%

Town Facilities and Parks meter size - 20mm to 100mm	2000	2001	2002	2003	2004	2005	2006	2007
Annual Consumption	43,811	57,426	55,326	51,229	42,940	40,448	62,682	46,225
Daily Consumption (ML)	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.1
Number of Accounts	20	22	24	30	32	30	35	38
Per Account Consumption (Litres/account/day)	6,002	7,151	6,316	4,678	3,676	3,694	4,907	3,333
2012 Goal	4,802	4,802	4,802	4,802	4,802	4,802	4,802	4,802
% Change in water use		19.2%	-11.7%	-25.9%	-21.4%	0.5%	32.8%	-32.1%
% Reduction over base year (2000)		19.2%	5.2%	-22.0%	-38.7%	-38.5%	-18.2%	-44.5%
All								
Residential/Commercial/Municipal Uses	2000	2001	2002	2003	2004	2005	2006	2007
•	<b>2000</b> 1,660,396	<b>2001</b> 1,684,416	<b>2002</b> 1,684,577	<b>2003</b> 1,802,205	<b>2004</b> 1,692,180	<b>2005</b> 1,699,658	<b>2006</b> 1,847,801	<b>2007</b> 1,895,248
Uses								
Uses Annual Consumption (m3)	1,660,396	1,684,416	1,684,577	1,802,205	1,692,180	1,699,658	1,847,801	1,895,248
Uses Annual Consumption (m3)  Daily Consumption (ML)  Per Capita Consumption	1,660,396 4.5	1,684,416 4.6	1,684,577 4.6	1,802,205 4.9	1,692,180	1,699,658 4.7	1,847,801 5.1	1,895,248
Uses Annual Consumption (m3)  Daily Consumption (ML)  Per Capita Consumption (Litres/capita/day)	1,660,396 4.5	1,684,416 4.6 426	1,684,577 4.6 413	1,802,205 4.9 431	1,692,180 4.6 393	1,699,658 4.7 407	1,847,801 5.1 436	1,895,248 5.2 441
Uses Annual Consumption (m3)  Daily Consumption (ML)  Per Capita Consumption (Litres/capita/day)  % Change in water use  % Reduction over base year	1,660,396 4.5	1,684,416 4.6 426 -1.1%	1,684,577 4.6 413 -2.9%	1,802,205 4.9 431 4.3%	1,692,180 4.6 393 -8.8%	1,699,658 4.7 407 3.6%	1,847,801 5.1 436 7.2%	1,895,248 5.2 441 1.0%
Uses Annual Consumption (m3)  Daily Consumption (ML)  Per Capita Consumption (Litres/capita/day)  % Change in water use  % Reduction over base year (2000)	1,660,396 4.5 430	1,684,416 4.6 426 -1.1%	1,684,577 4.6 413 -2.9%	1,802,205 4.9 431 4.3%	1,692,180 4.6 393 -8.8%	1,699,658 4.7 407 3.6%	1,847,801 5.1 436 7.2%	1,895,248 5.2 441 1.0%

Source: Town of Canmore Utilities Department Annual Reports

#### 3. Wastewater

	Equivalent Sewage Generation Rates									
Year	Total Influent Flow (m3)	Wastewater Production ML/day	Equivalent Generation Rate (Lpcd)* Total Population	Equivalent Generation Rate (Lpcd)* Permanent Population	Total Population	Permanent Population				
1995	1,691,147	4.6	528	607	8785	7632				
1996	1,758,812	4.8	499	574	9653	8396				
1997	1,956,598	5.4	511	595	10483	9015				
1998	1,820,838	5.0	441	514	11324	9711				
1999	1,832,385	5.0	441	490	12002	10239				
2000	1,919,700	5.3	422	500	12472	10517				
2001	1,975,176	5.4	413	499	13116	10843				
2002	2,251,515	6.2	451	553	13669	11151				
2003	2,307,816	6.3	445	552	14221	11458				
2004	2,434,181	6.7	453	582	14727	11450				
2005	2,759,450	7.6	496	661	15232	11442				
2006	2,495,679	6.8	416	592	16417	11559				
2007	3,407,664	9.3	549	792	16995	11782				
* for Tota	Population (pe	ermanent & shad	ow)							

Source: Town of Canmore, Utilities Department Annual Reports

5. Solid Waste and Recycling

Total Waste	2001	2002	2003	2004	2005	2006	2007	% Change
Total Waste								
Diverted	2,085	7,185	8,529	11,375	11,660	13,420	12,432	496.3%
Total Waste								
Diverted per								
Capita	0.19	0.64	0.74	0.99	1.02	1.16	1.06	455.4%
Landfilled								
Materials								
Wet Waste								
(Calgary Landfill)	5,400	5,617	5,942	6,035	6,049	6,104	6,393	18.4%
Dry Waste								
(Francis Cooke								
Landfill)	3,747	5,346	6,664	9,127	5,431	7,641	7,419	98.0%
Total Waste								
Landfilled	9,147	10,963	12,606	15,162	11,480	13,745	13,812	51.0%
Total Waste								
Landfilled per								
Capita	0.84	0.98	1.10	1.32	1.00	1.19	1.17	39.6%
Total Waste								
Generated	11,232	18,148	21,135	26,537	23,140	27,165	26,244	133.7%
Total Waste								
Generated per								
Capita	1.04	1.62	1.84	2.32	2.02	2.35	2.23	114.2%
50% Reduction								
Goal	0.42	0.42	0.42	0.42	0.42	0.42	0.42	
% of Total								
Waste Diverted	18.6%	39.6%	40.4%	42.9%	50.4%	49.4%	47.4%	155.2%

Source: Town of Canmore, Solid Waste Services Annual Reports

Recycling	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Newsprint	153	230	237	228	238	222	220	127	249	163
Cardboard	169	234	217	205	238	158	227	310	314	410
Mixed Paper	93	80	139	146	142	225	279	262	403	416
Metal Cans	13	11	17	18	18	50	56	66	75	77
Glass	29	33	34	30	34	32	41	41	26	78
Milk Jugs	-	-	-	-	ı	ı	7	9	8	8
Plastic	9.5	12	14	19	16	29	29	31	35	46
eWaste	-	-	-	-	-	-	15	29	78	85
Oil (Plastic)	1.5	2.2		3.2	3.2	3	3	2		
Milk Cartons									3	0
Total Tonnes	468	602	660	696	790	773	885	872	1,190	1,282

Source: Town of Canmore, Solid Waste Services Annual Reports

Toxic Round-up	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Waste Paint	3185	4715	5535	3690	4100	5,740	6,355	7,275	9,290	13,790
Corrosive Liquids	310	1025	570	445	1230	1,025	1,840	1,185	1,435	1,845
Corrosive Solids	0	205	0	80	0	0	410	410	205	410
Flammable Liquids	920	2050	1540	1505	3895	2,050	2,575	1,470	8,200	5,740
Flammable Solids	285	615	205	490	205	410	615	650	1,230	1,025
Poisonous Liquids/Solids	735	1845	1410	1095	2460	3,075	1,845	855	4,715	2,455
PCB Balasts						20	5	ı	205	-
Aerosols	380	230	380	600	1010	1110	920	850	1,025	400
Total Litres	5,815	10,685	9,620	7,905	13,105	13,430	14,565	12,550	26,305	25,665
Litres per Capita	0.6	1.0	0.9	0.7	1.2	1.2	1.3	1.1	2.3	2.2

Source: Town of Canmore Solid Waste Services

### 6. Energy Use and Greenhouse Gas Emissions

GHG Emissions and Targets	2000 (tonnes)	By Sector as %	2000 Tonnes per Capita	2012 Target (tonnes)	% Reduction
Residential eCO <sub>2</sub> output	52,372	50.17%	4.980	4.721	5.20%
Commercial / Industrial eCO <sub>2</sub> output	32,722	31.34%	3.111	2.950	5.20%
Transportation eCO₂ output	12,859	12.32%	1.223	1.159	5.20%
Waste eCO <sub>2</sub> output	521	0.50%	0.050	0.047	5.20%
Town of Canmore Operations eCO₂ output	5,922	5.67%	0.563	0.450	20.00%
Total eCO₂ output	104,396	100.00%	9.926	9.327	6.00%

Note: eCO<sub>2</sub> refers to the equivalent amount of CO<sub>2</sub> produced and emitted generating power for each sector.

Source: Town of Canmore Environmental Advisory Review Committee Energy Management Action Plan (EMAP) Overview

## 7. Transportation

Mode of			2001				2006	
Transportation to Work	Canmore	Banff	Canada	Alberta	Canmore	Banff	Canada	Alberta
Total -All modes	5,975	5,180	13,450,855	1,436,955	6,880	4,755	1,686,540	14,714,260
Car, truck, van, as driver	4,240	1,675	9,929,470	1,095,590	5,010	1,675	1,253,090	10,644,330
Car, truck, van, as passenger	405	190	923,975	99,245	425	160	133,395	1,133,145
Public transit	15	100	1,406,585	113,545	40	165	155,480	1,622,725
Walked or bicycled	1,220	3,055	1,043,995	107,475	1,265	2,655	119,025	1,134,805
Other method	95	160	146,835	21,110	145	105	25,555	179,250
%	Canmore	Banff	Canada	Alberta	Canmore	Banff	Canada	Alberta
Car, truck, van, as driver	71.0%	32.3%	73.8%	76.2%	72.8%	35.2%	74.3%	72.3%
Car, truck, van, as passenger	6.8%	3.7%	6.9%	6.9%	6.2%	3.4%	7.9%	7.7%
Public transit	0.3%	1.9%	10.5%	7.9%	0.6%	3.5%	9.2%	11.0%
Walked or bicycled	20.4%	59.0%	7.8%	7.5%	18.4%	55.8%	7.1%	7.7%
Other method	1.6%	3.1%	1.1%	1.5%	2.1%	2.2%	1.5%	1.2%

Source: Census of Canada

#### 8. Bear Attractants

Non Natural Food											
Incidents	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total
Garbage	51	17	9	0	5	5	8	5	2	0	104
BBQ	2	0	0	0	0	3	0	0	0	0	5
Bird Feeder	4	12	4	0	0	4	1	0	0	0	27
Compost	3	2	0	0	0	0	0	0	2	0	5
Golf Course Vegetation	0	1	0	5	2	3	8	7	0	0	26
Human Food	10	4	1	0	0	0	1	0	0	0	16
Ornamental Fruit	13	6	0	0	0	4	1	1	0	0	25
Pet Food	3	1	0	0	0	0	1	0	0	0	5
Total	86	43	14	5	7	19	20	13	4	0	213

Source: (Honeyman, 2007 & 2008)

### 10. Wildlife Incidents and Outcomes

Human/Wildlife Conflict	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Bears	120	70	25	19	12	48	24	17	22	5
Cougars	1	1	4	1	2	0	0	1	0	2

Source: (Honeyman 2007 & 2008)

Destroyed/ Relocated		imal royed	Animal Relocated		
Bears	Black	Grizzly	Black	Grizzly	
1998	0	0	5	0	
1999	0	0	1	0	
2000	0	0	1	1	
2001	1	0	0	2	
2002	0	0	4	0	
2003	1	0	1	1	
2004	3	0	2	1	
2005	1	1	0	0	
2006	0	0	4	0	
2007	1 0		0	0	
Total	7	1	18	5	

Source: (Honeyman, 2007 & 2008)

### 12. Quantitative Land Uses

Land Use in the To	wn of Car	more 2008
Land Use	Area (ha)	% of Total Area
Conservation*	4,604.2	68.30%
Vacant	526.0	7.80%
Golf	339.1	5.03%
Low Density Residential	246.4	3.66%
Open Space	236.9	3.51%
Road Municipal	200.2	2.97%
Road Provincial	126.0	1.87%
Water	115.0	1.71%
Utilities	79.1	1.17%
High Density Residential	62.7	0.93%
Municipal Reserve	57.9	0.86%
Commercial	50.4	0.75%
Institutional	38.1	0.56%
Unknown	23.0	0.34%
Industrial	18.2	0.27%
Mixed Use	11.2	0.17%
Recreation Facility	3.0	0.04%
Total Area	6,737.3	99.9%
*includes 3698 ha of Provir	ncial Parks	

Source: Town of Canmore, Planning and Development

### 13. Wildland Urban Interface – Wildfire Protection

Year	Fuel Modification	Area (ha)
1999	Harvie Heights (municipal land)	2.8
1999	Eagle Terrace	4.0
2000	Harvie Heights (municipal land)	10.0
2000	Rocky Mountain Elk Foundation	9.5
2001	Harvie Heights (crown land)	12.0
2001	Harvie Heights (municipal land)	5.0
2002	Harvie Heights (municipal land)	8.0
2002	Three Sisters Mountain Resort	30.0
2003	Fairholme Bench - Banff National Park - Fuel Modification and Prescribed burn (Direct impact to Canmore from a landscape perspective)	
2004	Canmore Nordic Centre West	104.0
2004	Fairholme Bench - Banff National Park - (Fuel Modification/Maintenance)	
2006	Canmore Nordic Center West	45.0
2008	Carrot Creek Prescribed Fire (200ha on the Fairholme Bench in Banff National Park)	
2008	Canyon Ridge/Canyon West	4.6
2008	Lower Carrot Creek (valley bottom fire break near the east gate of Banff National Park)	
2008/9	Nordic Centre Fuel Reduction/Fire Break (60ha in Banff National Park wil be thinned adjacent to the fuel break at the Canmore Nordic Centre)	
	Total Area Modified	234.9

### 14. Forest Health

F	Forest Age Class								
Age Classes*	Theoretical Natural Distribution**	Actual Age Class							
20	60	0.00							
40	42	0.32							
60	30	2.19							
80	20	5.11							
100	14	10.27							
120	10	60.89							
140	7	43.72							
160	5	6.49							
180	3	3.60							
200	2	0.64							
220	1	0.00							
*Upper limit of each age class									
**Assumes cycle	a 50 year historica	I fire							

Source: Parks Canada

Mountain Pine Beetle Survey Results: Bow Valley				
	# of Trees Infested			
Year	Provincial Land	Town of Canmore	Private Developers (in the Town of Canmore)	Total Bow Valley
2003	252	55	62	369
2004	346	49	62	457
2005	315	64	98	477
2006	1,256	61	37	1,354
2007	4,819	141	182	5,142
2008	2,702	189	598	3,489

Source: Town of Canmore, Alberta Sustainable Resource Development