

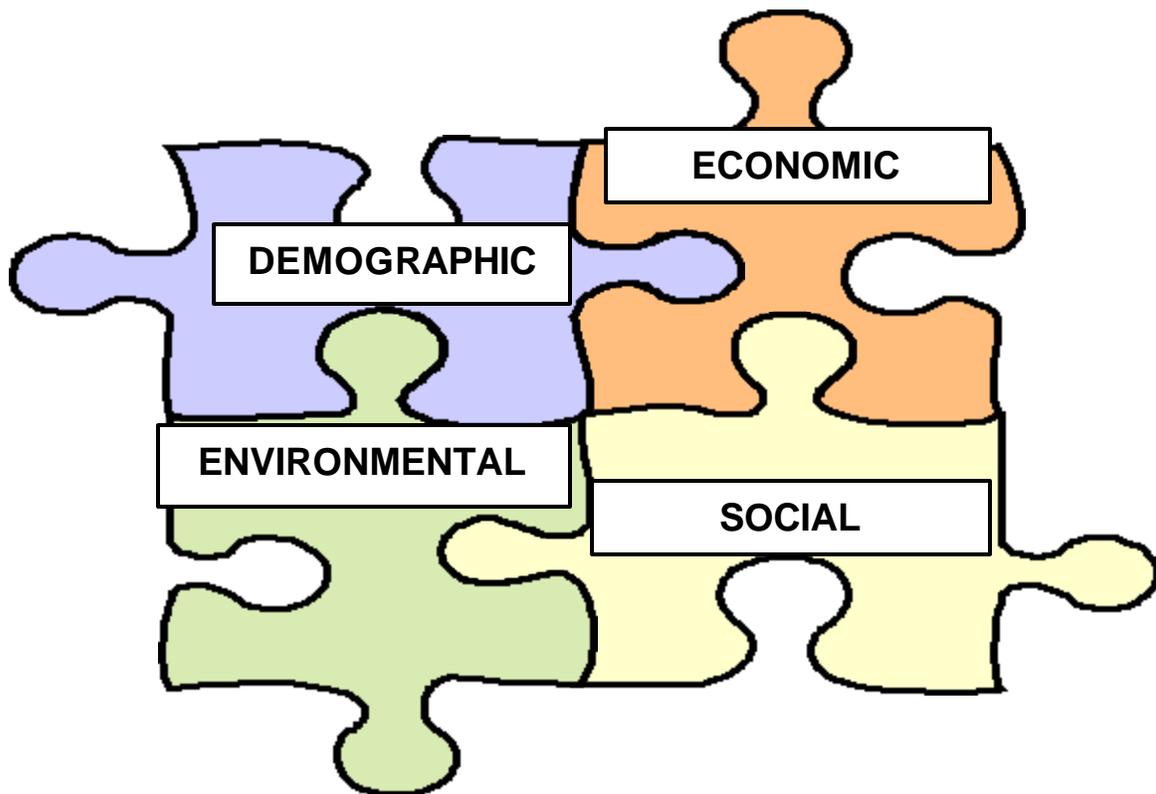


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Canmore Community Monitoring Program

2001 Report



November 15, 2001

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EXECUTIVE SUMMARY

The livability of Canmore is determined by its sense of community, its social and economic well-being and the preservation of its natural environment. A sketch of the community's livability can be drawn from the demographic, social, economic and environmental indicators provided in this report. These indicators provide a picture of Canmore as it is in the present, where it has come from and where it is headed.

Demographic

The demographic indicators depict Canmore as a community that is still retaining its town status with a permanent population of 10,843 and a growth rate of 3.1% between 2000 and 2001. Fifty percent of the population of Canmore is made up of residents new to Canmore in the past five years, and in the past three years there has been a particularly high turnover in the population. Combined with the information that the non-permanent population has grown at a rate of 16.3% between 2000 and 2001, it is apparent that Canmore has been subject to a rapid change in demographics in the areas of 'in-migration', 'out-migration' and increases in the non-permanent population. These have implications for the tax base, use of social and recreational services, and the social integration and stability of the community.

Canmore has a wide mix of ages in its citizenry, with the majority of individuals falling within the 25 to 44-age bracket. The distribution of ages correlates to the programs and services that are offered, from early childhood to the senior years.

The population has seen a decrease in the percentage of single family dwelling units, as well as a decrease to below 50% in homes owned by the permanent population, which may be directly related to affordability. The non-permanent population owns 27% of the dwelling units in Canmore, 31% of which are single-family dwellings. The occupancy rates for dwellings in Canmore have remained relatively constant over the years reported.

Highlighted for Council's attention are the following demographic findings:

1. The lack of availability of affordable housing, with specific attention to staff housing, housing for seniors and for persons of low income.
2. The high population turnover rate. 50% of the people who live in Canmore today did not live here 5 years ago, yet the population increased by only 30% during that time. This has an effect on social, economic and environmental education and intervention.
3. The rapid growth of the non-permanent population. This has implications for an informed, involved, and integrated community.

Social

The community of Canmore can be described as vibrant and self-reliant. While our community has experienced a rapid population increase in the past decade, it has still maintained its commitment to volunteerism and community caring. Canmore's social agencies and volunteer organizations continue to grow and adapt to meet the identified needs of the community. The sense of safety and security within our community has been maintained at a reasonable level relative to the population growth. Our overall community health and education levels are well within provincial standards. Canmore's social agencies, in conjunction with provincial programs and services, are working to enhance their effectiveness through prevention and community partnering.

Economic

The economy of Canmore remains strong, with opportunities for further diversification and improvement. Canmore's economy is dominated by the tourism industry, which is the major employer in Canmore and the industry that has seen the largest growth in employment from 1996 to 2001. Overall, employment is mainly full-time across all industries. However, many of the entry-level jobs do not provide sufficient income to provide for adequate housing. Average housing prices continue to climb, which is partially due to the increased sales in the upper end of the market. While there has been significant development in Canmore (over half a billion dollars in the past decade), including substantial commercial development, little progress has been made towards a more balanced tax base. This is in part due to the high market demand for residential development in Canmore. The increase in home occupation businesses is a desirable trend; however, it does not contribute directly to the commercial tax base.

Environmental

Canmore's rapid growth in human use and settlement continues to put pressure on the surrounding ecosystem. The trend in the past has been for individual agencies to use their own protocols and to work in isolation without control regions or general baseline information. Recently there has been general agreement that ecosystem research in the Bow Valley needs standardized protocols, a landscape approach, coordinating bodies, inclusion of human use research and baseline monitoring. Regional reports that include specific species and population trends and recommendations are identified in the Environmental Section.

As Canmore's population and popularity increases, there is a corresponding increase in the number of vehicle trips in the town. The 2001 Transportation Master Plan addresses immediate traffic concerns and proposes solutions to Canmore's future transportation needs. Additional strategies might include: further incentives to reduce private vehicle use, making shopping areas more pedestrian friendly and encouraging convenience-commercial establishments in residential neighbourhoods.

The Town of Canmore continues to be involved in a number of progressive environmental initiatives. Initiatives include involvement with the Bow Corridor Ecosystem Advisory Group (BCEAG) and with the Biosphere Institute of the Bow Valley; continued involvement in the protection of wildlife movement corridors and habitat patches, and the creation of protective land use districts. There remains a great need for public education on wildlife movement corridors and habitat patches.

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 vision (the Vision of Canmore, 2015). The program was previously known as the Thresholds & Monitoring Program (T&M).

The Monitoring Program involves...

- identifying indicators to be tracked in the demographic, social, economic and environmental sectors;
- developing baseline data for each indicator, including current statistics and historical figures for Canmore, provincial or national averages, and comparative data from similar relevant locations where possible;
- establishing thresholds 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 annually 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 gives you 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 indicator information and data collected by the Canmore Community Monitoring Program is available at the Town of Canmore office in a separate Appendix document.

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 Report

This report is based on the most current data collected to date. For instance, federal statistics are from 1996 and demographic data is from the Town of Canmore 2001 Census. The addition of comparative data will facilitate more comprehensive interpretation in future reports.

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 several indicators. The layout of each indicator consists of a definition, a graph or table, a threshold (if developed), observations, interpretations (usually from the data provider) and the source of the data.

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.

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

Acknowledgements

The Canmore Community Monitoring Program Committee would like to express their appreciation to the agencies, organizations and individuals who provided the information for this report. The Committee has worked together since the fall of 2000 offering their time and expertise in the analysis of the data and in the preparation and writing of this report. They are:

Brenda Caston	Manager of FCSS, Town of Canmore
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Dales Judd	former Director of Community Services, Town of Canmore
Mara King	Coordinator, Canmore Community Monitoring Program
Heather MacFadyen	Chair of the Canmore Community Services Committee, Citizen
Ron Remple	Executive Director, Canmore Economic Development Authority
Simon Vieyra	Citizen
E. Melanie Watt	Executive Director, Biosphere Institute of the Bow Valley
Merrill Wattie	Councillor, Town of Canmore

VISION OF CANMORE, 2015

In creating the 1995 Growth Management Strategy, the participants were guided in their discussions by a series of statements which envisioned the community at its best in the year 2015. In summary, Canmore will be is a Town that prides itself in *sense of community*, described in the following statements.

In 2015, Canmore prides itself on its friendly, caring and neighbourly lifestyle. People are welcomed in our Town - as old friends or new neighbours, as regular visitors or as guests and tourists. Our strong sense of community pride grows from the diversity of people who have chosen to make this community their home and the diversity of interest and skills they bring with them to share with others. We foster participatory democracy at all levels of municipal decision-making and we are providing for the needs and safety of all our citizens through:

- ▶ planning for a mix of housing integrated into the environment, meeting a wide range of individual needs
- ▶ high quality of educational and retraining opportunities for citizens
- ▶ superior levels of vital community support services
- ▶ support for a full range of recreational opportunities

In 2015, the quality and beauty of the Bow Valley is a source of community pride for the citizens of Canmore. While recognizing that the beauty of the surrounding natural environment is the primary source of economic activity for the community, Canmore is a showcase for the world in how we manage a community in an environmentally sensitive and significant area. Canmore's success in attaining this standing is based on the following principles:

- ▶ promotion and development of a strong and enduring respect for our natural surroundings in all of its citizens and visitors
- ▶ the creation of opportunities for citizens and visitors to enjoy and appreciate Canmore's natural environment in all its diversity
- ▶ a system of environmentally sensitive areas including wildlife corridors has been established and is actively preserved and protected

In 2015, Canmore is a vibrant community enjoying a healthy and broad economic well being for its citizens. Canmore's prosperity is derived primarily from a tourism industry based on appreciation of the mountain environment. The Town is also recognized as a centre of expertise in environmental planning, management and public education. Much of the community's business base remains locally owned and operated.

The success of Canmore's economic strategy owes much to the on-going partnership of business, government and community. Through the partnership a harmonization of objectives has been achieved ensuring wise management of the abundant natural, human, and financial resources located within the Canadian Rockies ecosystem. The community's continuing objectives for economic well-being are:

- ▶ to ensure the tax base is sufficient to fund facilities, amenities and activities desired by the citizens of the community
- ▶ to ensure local economic activity produces sufficient and varied employment for residents and youths
- ▶ to ensure values and desires of visitors are harmonized with values and desires of the residents
- ▶ to ensure that the paths chosen to reach our objectives are consistent with community's desire to preserve the natural environment as the key asset of the region.

In 2015, Canmore is a community that nurtures a creative and productive cultural sector. We welcome and provide opportunities for diverse cultural expression by acknowledging and integrating cultural requirements into all aspects of community life. We enjoy:

- ▶ public policy that encourages and celebrates cultural activity which in turn shapes a community identity, nurtures a community spirit and enhances the quality of life for all our citizens and guests
- ▶ planning architecture that provides accessible and innovative public venues and which integrates affordable workshops/studio space into community developments
- ▶ education and celebration opportunities for local and international participants, amateur and professional, young and old, from summer arts festivals to schools, concerts and permanent historical displays.

In 2015, Canmore is recognized as an ideal community which has learned how to manage its own growth in a very wise and strategic way - for the betterment of all who live in and visit our special mountain community.

DEMOGRAPHIC INDICATORS

Trends

Major factors in determining the livability of a community are its size, composition and rate of growth. Although Canmore has reached a population of over 10,000, it has so far maintained its status as a mountain town rather than a small 'city'. This has been a major draw to visitors, permanent and part-time (non-permanent) residents alike. Canmore remains an attractive place to visit or live, with a current growth rate of 3.1% in the permanent population and 16.3% in the non-permanent population (a proportion of 10,843 permanent residents to 2,273 non-permanent residents) in 2001. Canmore has a diverse population, with a majority of individuals in the 25 to 44 year age bracket. The high rate of growth in the non-permanent population has implications for the tax base, the use of community facilities and the social integration of the community. Canmore continues to have very little cultural diversity.

The composition of housing types in Canmore has changed over the years. There has been a decrease in the percentage of single-family styles of homes and a corresponding increase in the percentage of multi-family housing. The proportion of homes owned by the permanent population has decreased. Canmore's occupancy rate per dwelling has remained relatively stable.

Sources of community stress include the lack of availability of affordable housing for members of the permanent population and the availability of community social services for single parents, other individuals and families vulnerable to rising costs on low or fixed incomes.

Introduction

Eight key indicators reflect the size and growth in the population, the mix of permanent and non-permanent residents, the type of accommodation and the occupancy rate, the family composition and the cultural diversity of Canmore.

- **Population**

1. Population, Migration and Length of Residency
2. Non-Permanent Population
3. Age Trends

- **Housing**

4. Dwelling Unit Types
5. Tenancy Status of Dwelling Units
6. Occupancy Rate

- **Household**

7. Family Composition

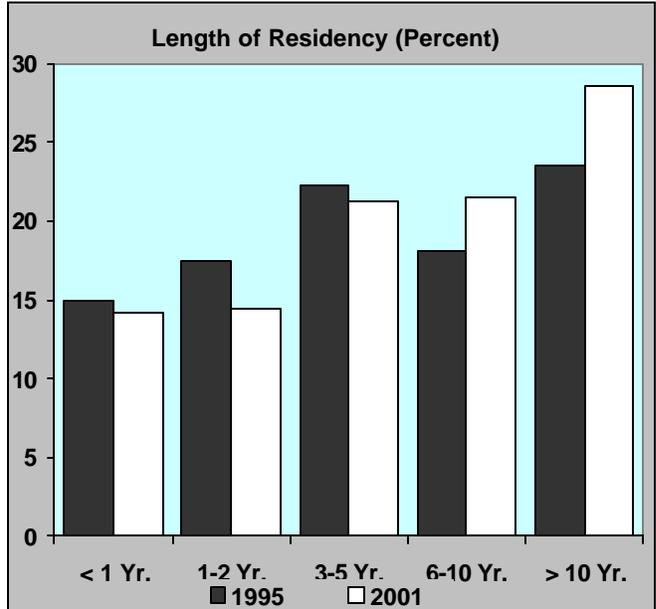
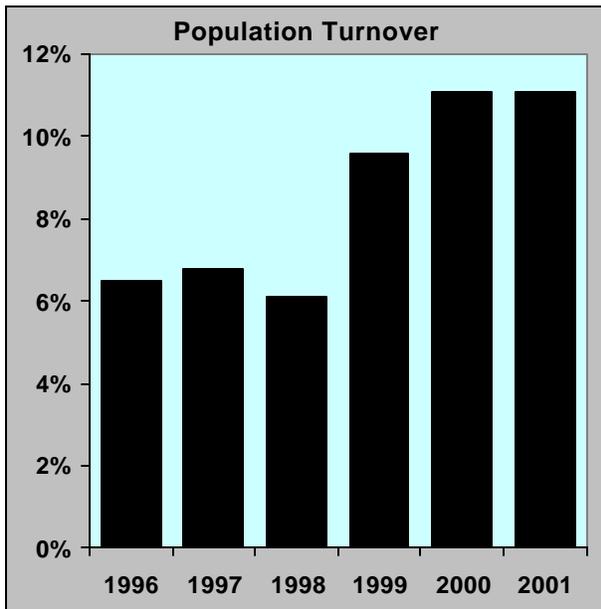
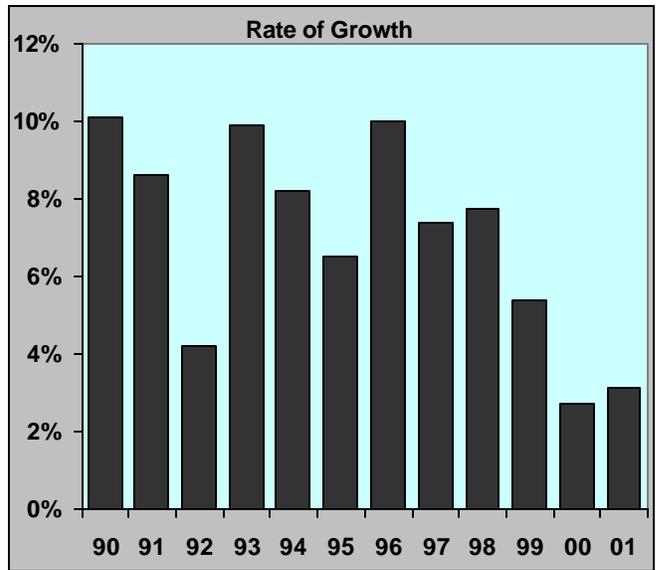
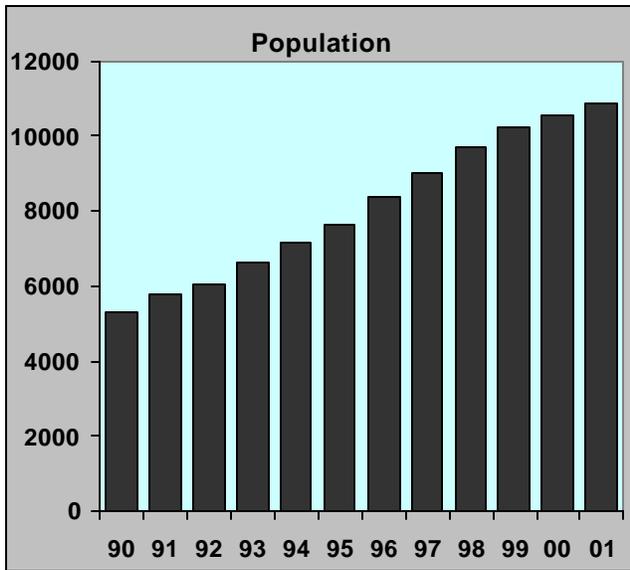
- **Diversity**

8. Mother Tongue, Immigration and Cultural Diversity

Population

1. Population, Migration and Length of Residency

Population growth is an important indicator of change in the community. It signals the need for new services of all kinds, and the degree of pressure on the existing services in the community. The rate of growth is also a sign of health or stress in the community. If the rate of growth and change is too high, the rapid change and extra pressures put populations at risk for health problems. Very low or negative growth may imply declining economic opportunities for residents.



Source: Town of Canmore Census 2001

Threshold

The 1995 GMS report recommends bringing "the net population growth rate to 6% per annum by the year 1999 ... no more than an average of 6% net population increase per annum in the five-year period commencing at the end of 1999".

Observations

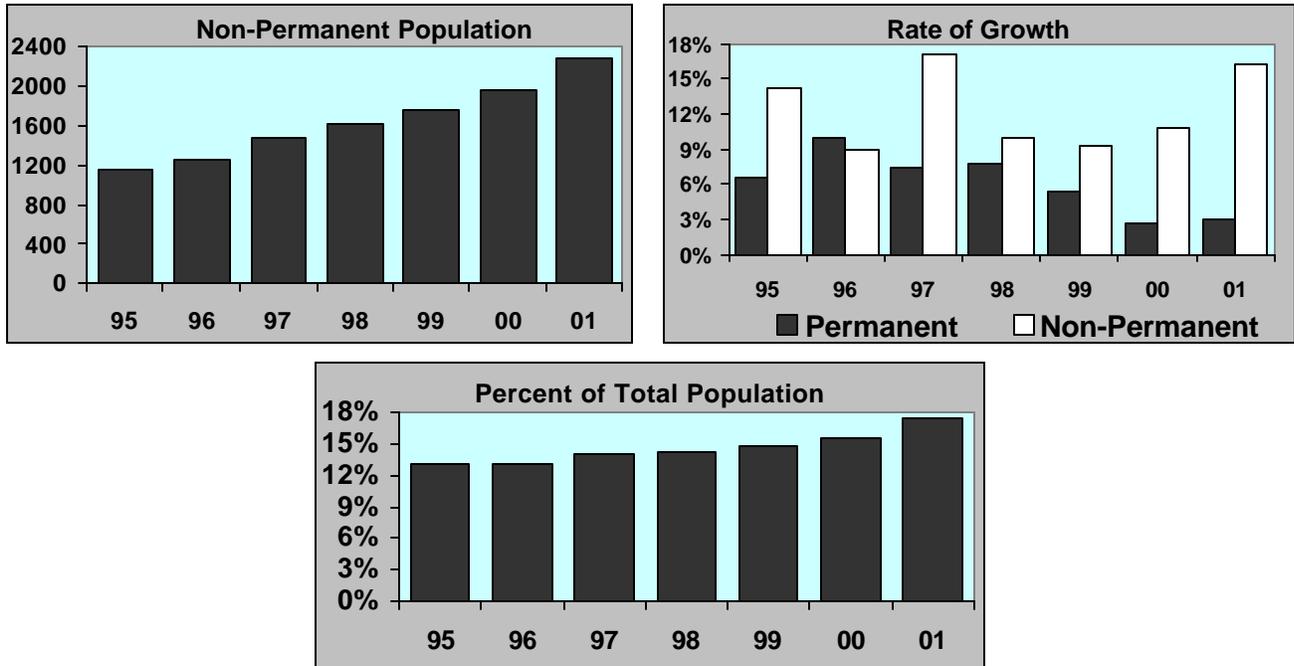
1. The permanent population of Canmore reached 10,843 in 2001, with a growth rate of 3.1%
2. The population growth rate has varied widely between 1993 and 2001, from a high of 10% to the rate of 2.7% in 2000.
3. The 10-year average growth rate is 6.5%.
4. The population of Canmore has grown by 30% over the past 5 years.
5. There has been a significant turnover in population over the past three years. For example, in 2001, 1544 residents (14.2%) have moved to Canmore over the past year, whereas Canmore had only a net population gain of 326 people or (3.1%). This means that 1218 people (11.1%) have left Canmore since last year.

Interpretation

The population growth between 1999 and 2001 has been below the 6% net population growth rate per annum recommended by the 1995 Growth Management Strategy Report as the outside limit for the community to accommodate. At present, the growth rate of Canmore has slowed down; this gives the community more time to integrate all the new residents over the past several years.

2. Non-Permanent Population

Growth in the non-permanent population is an indicator that has implications for the tax base, use of services, availability of housing and the degree to which a community has a stable social integration of its citizenry.



Source: Town of Canmore Census 2001

Observations

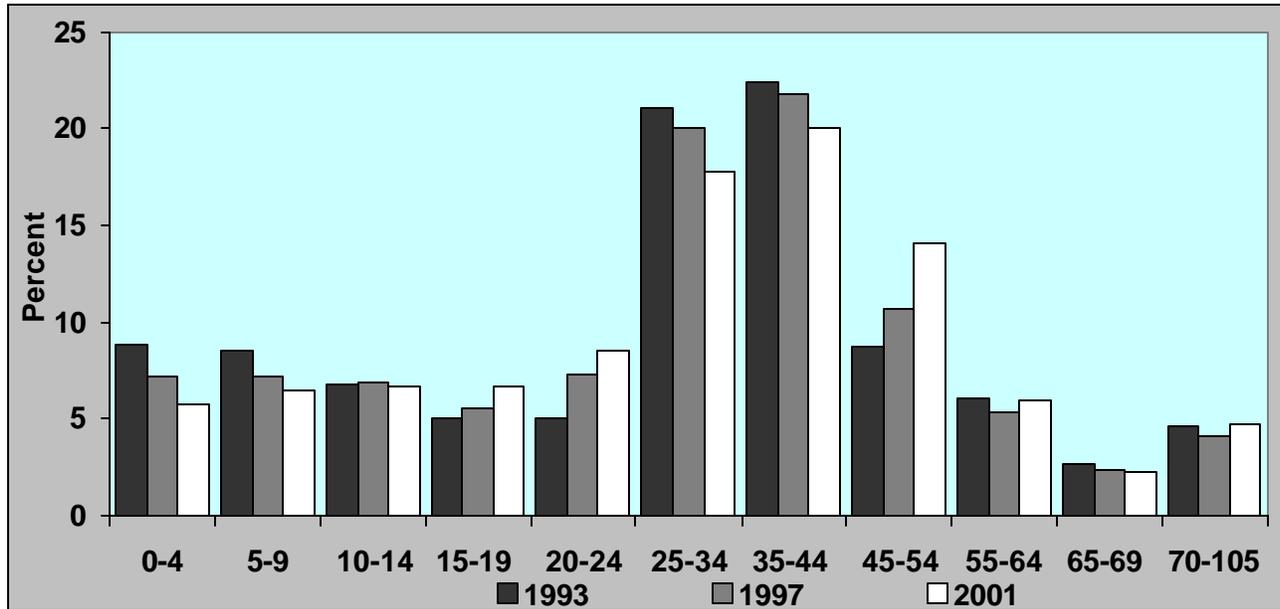
1. In 2001, the 16.3% growth rate in the non-permanent population is over five times that of the 3.1% growth rate in the permanent population. Only the increase in the non-permanent population in 1997 surpassed this growth rate.
2. The proportion of the permanent population (10,843) to the non-permanent population (2,273) is 83 percent to 17 percent in 2001. The total population of Canmore is 13,116.
3. The percent of dwelling units occupied by the non-permanent population has gradually increased from 14.3 % in 1995 to 17.2% in 2001.
4. The non-permanent population owns 27% of the dwelling units in Canmore, 31% of which are single family dwellings.

Interpretation

The current rate of growth in the non-permanent population is compatible with the Growth Management Strategy Report of 1995, which recommended that the proportion of permanent to non-permanent occupants of housing stock should not fall below 80% permanent and 20% non-permanent residents. However, if the rapid growth in the non-permanent population continues at the current rate, the recommended 20% ceiling for the non-permanent population will be exceeded in two years. Although the non-permanent population may increase the tax base while not drawing heavily on public and social services, too rapid growth in the non-permanent population may tend to drive up housing costs for the permanent population.

3. Age Trends

Age trends are a direct indicator of the segments of the population in need of day care and early childhood services; of public schooling; of entry into the work force; of senior citizen facilities; and of health care and other community services.



Source: Town of Canmore Census 2001
Note: Ages are recorded in 10-year spans between 24 and 64.

Observations

1. The age distribution of the Canmore population has remained relatively constant over the years, with the majority of the population falling between 25 and 44 years of age.
2. There has been a slight decrease in the lower age categories from age 0 to 9 years, in the adult 25 to 44 age brackets and the senior 65 to 69 age bracket. There has been an increase in the 15 to 24 age brackets and the 45 to 54 age bracket.

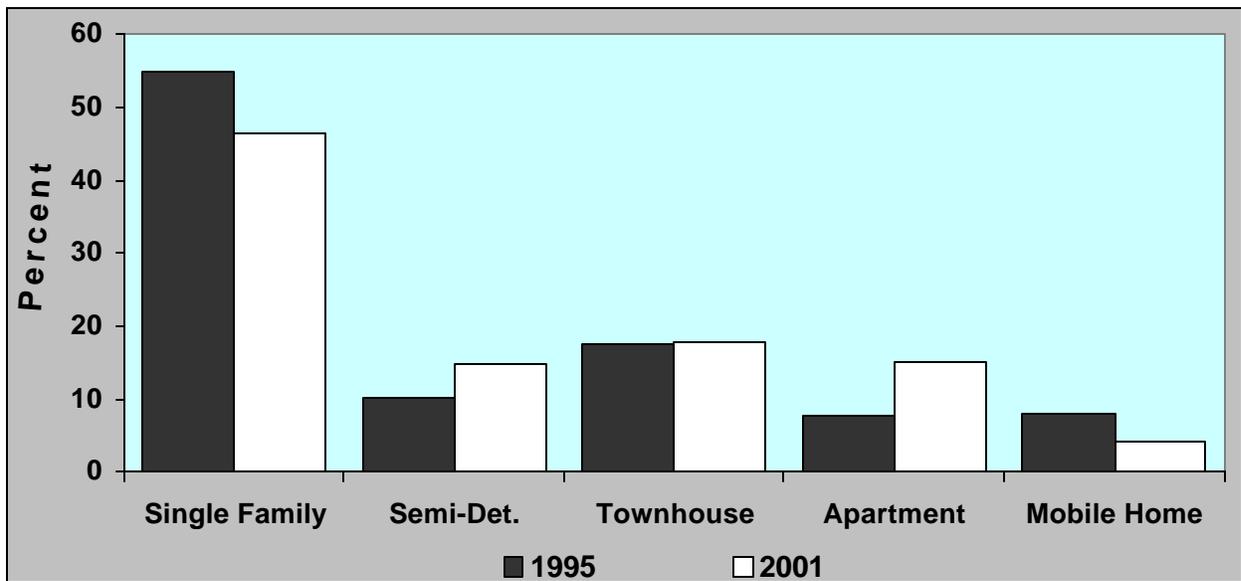
Interpretation

Canmore has a broad mix of age groups, all of which need to be served with good recreation facilities, social and family programs. Canmore's age trends will be better understood with comparative statistics from other towns the same size and provincial norms.

Housing

4. Dwelling Unit Types

The type of dwelling units occupied is a significant socioeconomic variable, which indicates the degree to which the distribution of wealth in a community is equitable. With categories relating to the range of possible dwelling occupancy, including single homes, semi-detached homes, townhouses, apartments, mobile homes and institutions, this indicator is a 'livability' factor. When accommodation is scarce, crowded and expensive it signals a source of pressure on the community, particularly on the permanent population.



Note: This includes permanent and non-permanent population

Source: Town of Canmore Census 2001

Observations

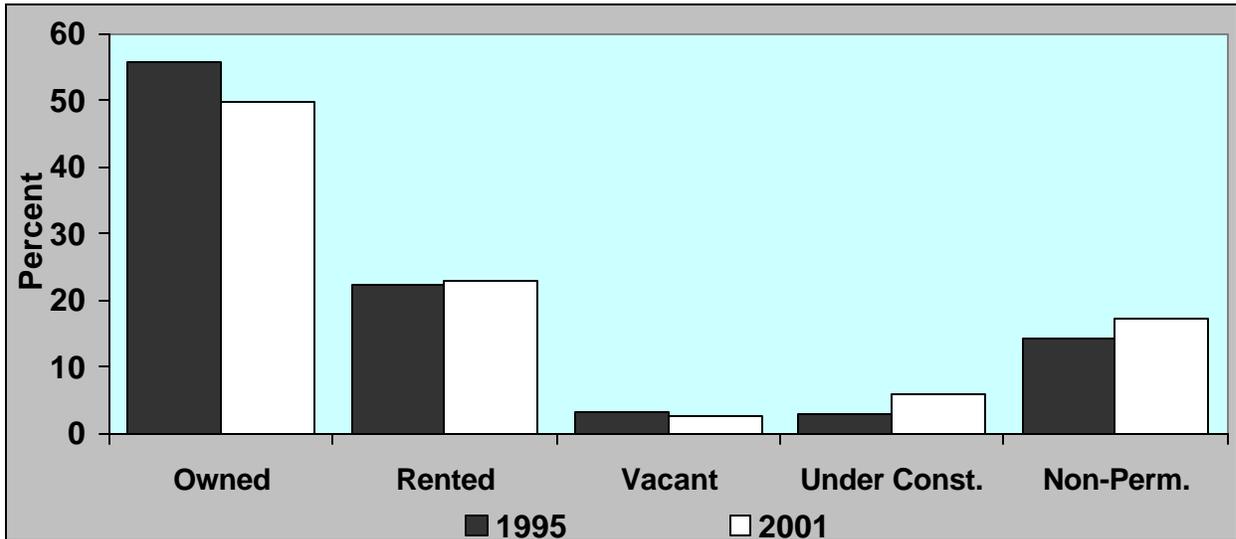
1. There has been a decrease in the proportion of the population residing in single-family types of dwellings since 1995.
2. There has been an increase in the proportion of the population residing in multi-family types of dwelling units since 1995.

Interpretation

With the rapid growth rate of the non-permanent population, the availability of affordable housing is a community stress factor, particularly in light of the current decline in the single family dwelling occupancy for the permanent population.

5. Tenancy Status of Dwelling Units in Canmore

Tenancy status is an important indicator of home ownership, the availability of housing for the permanent and non-permanent population, and of new home construction. The availability of housing is important for individuals to be attracted to move into the community, and to stay as a part of a stable permanent population.



Source: Town of Canmore 2001

Observations

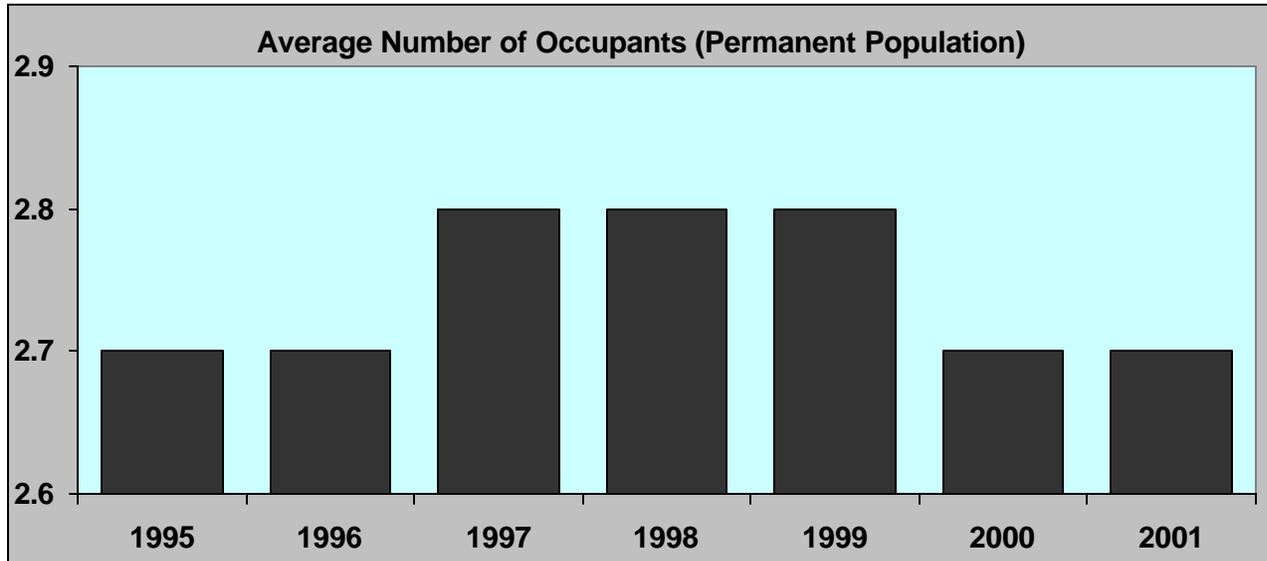
1. Since 1995, the total number of dwellings in Canmore has increased by 55% from 3,604 to 5,583 in 2001 whereas the population has increased by 42%.
2. The number of dwellings under construction has varied over the years reported with an increase in 2001.
3. While the proportion of homes owned by the permanent population was constant at 55 percent between 1993 and 1997, it has fallen to below 50 percent in 2001.
4. There has been an increase in the percentage of residences occupied by the non-permanent population. It is just below the 20% ceiling for the non-permanent occupancy suggested in the 1995 Growth Management Strategy Report.

Interpretation

Tenancy status has been relatively stable over the years reported for accommodations which are rented or vacant with slight increases in houses under construction. However, there has been a noticeable decrease in the percentage of ownership of homes by the permanent population. Combined with the decrease in the occupancy of single-family homes by the permanent population, this indicator must be interpreted within the context of affordability.

6. *Occupancy Rate*

The occupancy rate indicator measures the average number of persons living in a type of household. An increase in the average occupancy rate is strongly related to stresses as a result of crowding.



Source: Town of Canmore Census 2001

Observations

Occupancy rates in Canmore have remained constant over the years reported, with an average of 3 persons per single family unit and between 2.0 to 2.6 persons occupying other dwelling categories.

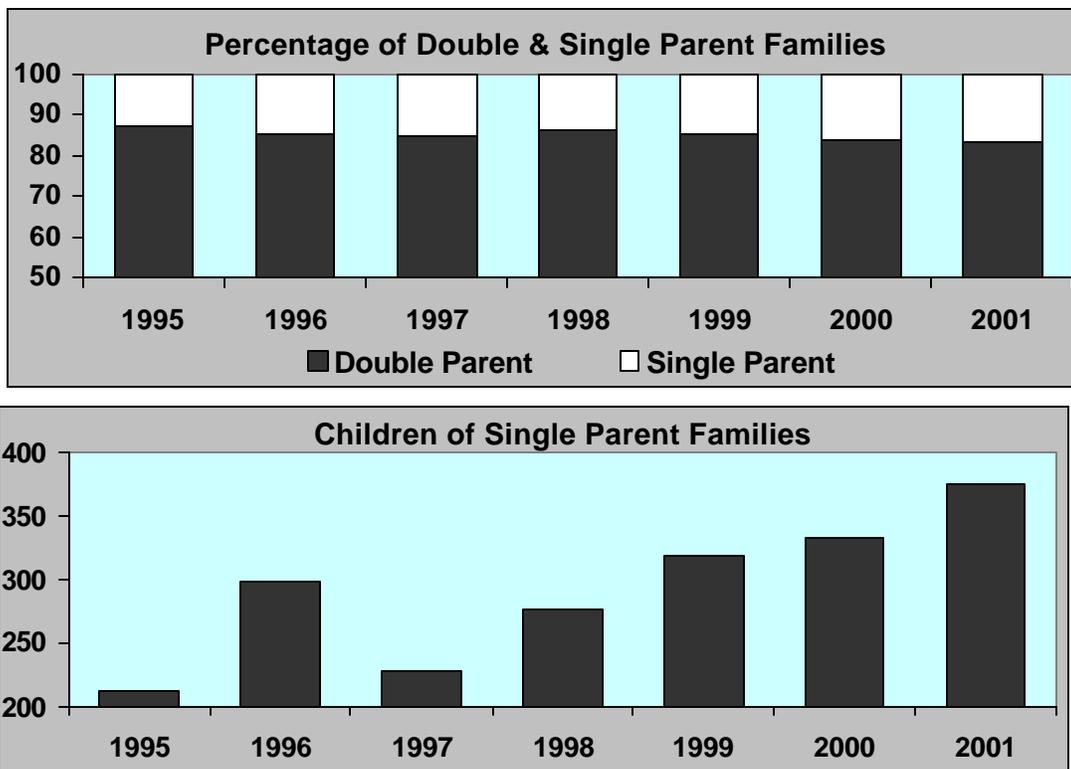
Interpretation

Although the average occupancy rate is stable, it is important to consider the range of this indicator, from single occupancy of a dwelling to the large numbers of individuals occupying the same dwelling, such as is the case with staff housing. This indicator should be interpreted within the context of data from other towns of similar size in Alberta.

Household

7. Family Composition

Family composition is a significant indicator of socioeconomic stress, particularly when it is combined with knowledge of the number of economically dependent children. Two parent families with fewer children are, on average, under less social and economic pressure than single parent families, or families with an above average number of dependent children. Families with a single mother have, on average, been found to be most in need of social and economic support services.



Source: Town of Canmore Census 2001

Observations

1. The percentage of two parent families has fallen slightly between 1995 and 2001, from 87.4% to 83.4%.
2. The proportion of single parent families has increased by 32% over the years reported, from 12.6% in 1995 to 16.6% in 2001.
3. The number of children in single parent families has increased by 74% from 213 in 1995 to 375 in 2001.

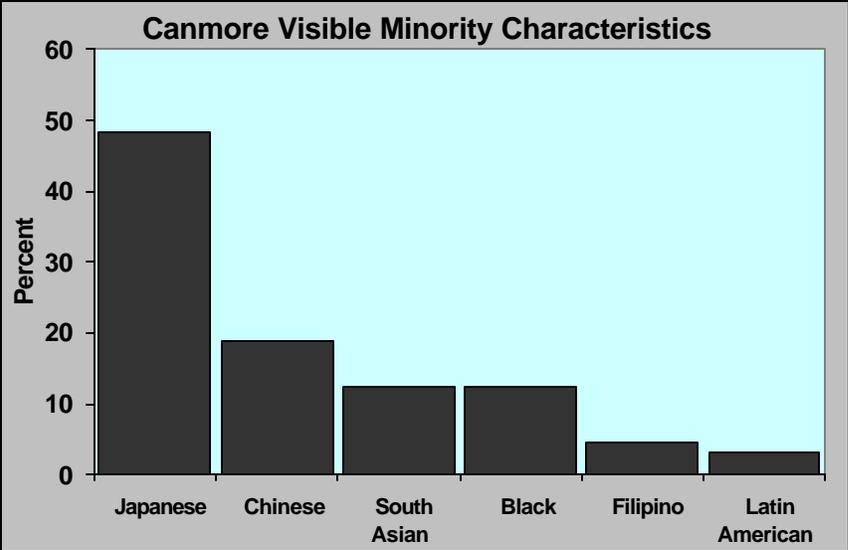
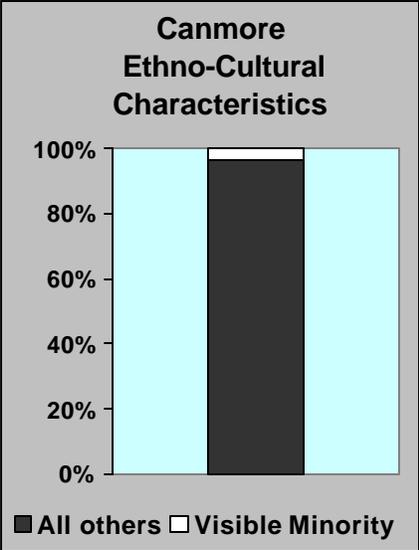
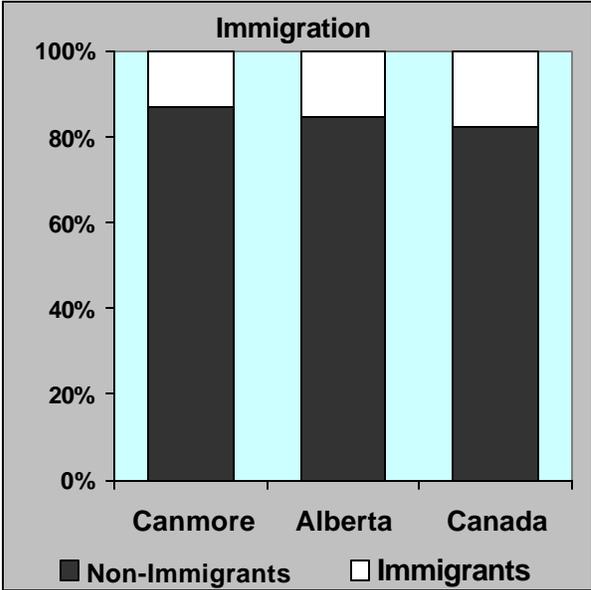
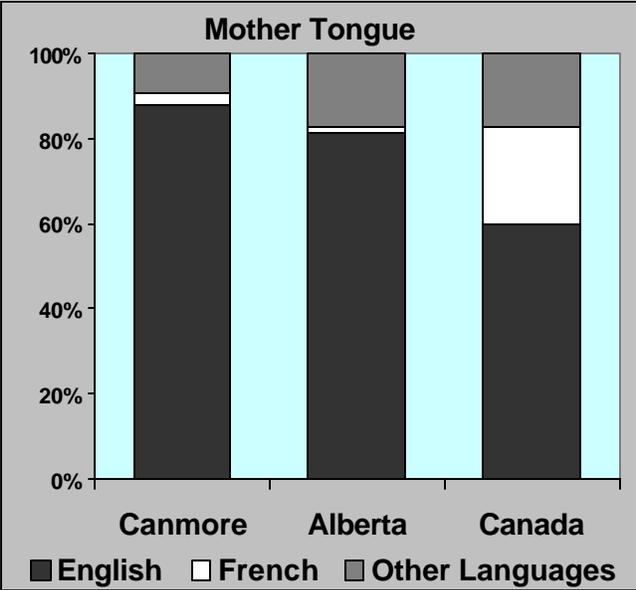
Interpretation

The increase in the number of single parent families and children suggests the continued need for support services both in the community and in the schools.

Cultural Diversity

8. Mother Tongue, Immigration and Cultural Diversity

This indicator measures the degree of cultural diversity in the community, which is one aspect of the cultural resources in a community and may signal the need for programs related to specific languages and cultural backgrounds.



Source: Statistics Canada, 1996

Observations

1. 87.2% of the population of Canmore is English speaking, with a higher proportion of French speaking residents than Alberta as a whole.
2. The population of Canmore has a smaller proportion of immigrants than the rest of Alberta.
3. Almost 80% of the cultural diversity of Canmore draws from South Asia, China and Japan.

Interpretation

The community of Canmore lacks cultural diversity. Canmore has sisterhood status with the town of Hagashikawa in Japan.

SOCIAL INDICATORS

Trends

The Social Environment of Canmore is growing and adapting as the population increases. Canmore continues to demonstrate a strong social resiliency as indicated by the increasing numbers of volunteer organizations establishing services to the community. The need for some crisis support services remains as the Food Bank and Christmas Hamper programs are well utilized and supported by the community. Provincial income support and child welfare data indicate that as Canmore's population increases, the demand for their services is not increasing dramatically.

Data from the Canadian Rockies School Division indicates that the youth are receiving and maintaining an acceptable standard of achievement according to provincial examinations. Pupil teacher ratios are increasing, however, which points to some stress for the school system. Canmore can be described as a relatively safe and secure community with our crime rate remaining stable as the population grows. Personal safety and property security are focuses of community awareness campaigns. Headwaters Health Authority data indicates that Canmore is working toward improved health in the areas of personal injury and preventable disease.

The Town of Canmore will be completing a Social Environment Assessment in 2002. This will establish a set of baseline data and a comprehensive picture of community needs.

Introduction

Measuring the social "health" of a community is difficult because different members of the community perceive social health in many different ways. For the purposes of this report fifteen 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. There are indicators that we are not able to collect locally, but can collect regionally. The most important criteria for inclusion in this report are that the indicators be valid, comparable and reliable over time. Fluctuations occur in all statistics, however, it is important for the data to be collected the same way year after year.

- **Community Spirit**

1. Volunteer Organizations

- **Social Needs**

2. Christmas Hampers Distribution
3. Food Bank Hampers Distribution
4. Employment Insurance Requests
5. Child Welfare Investigations
6. Income Support Caseloads

- **Education**

7. Pupil Teacher Ratios
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- **Public Safety**

11. Crimes against Persons and Property
12. Domestic Violence Complaints

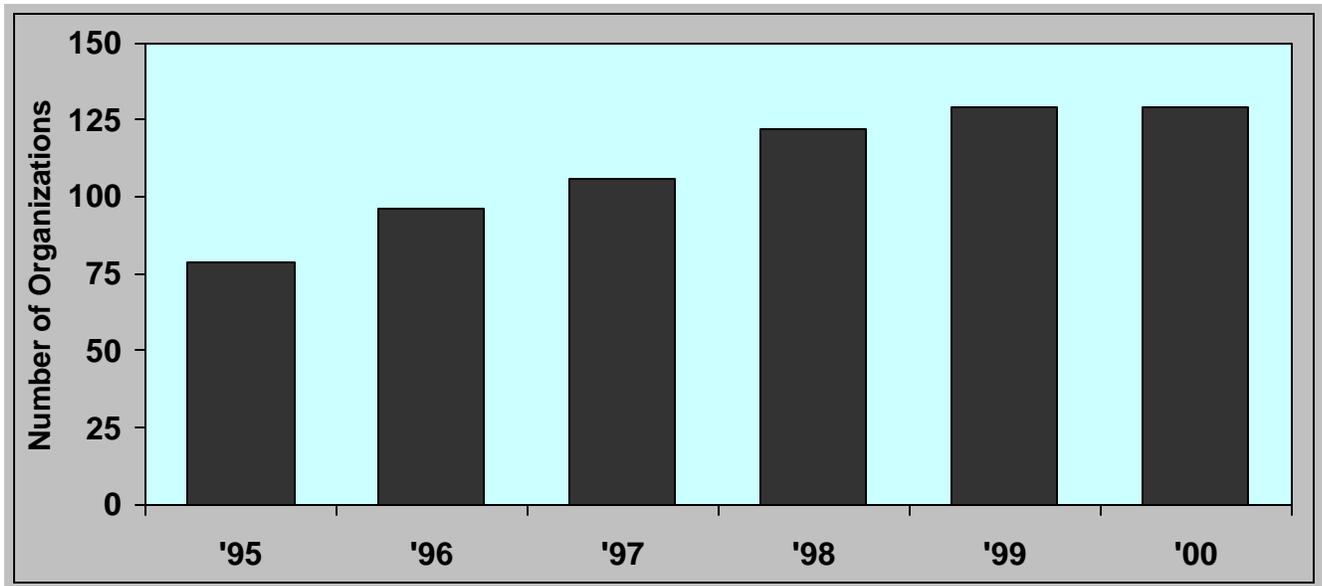
- **Health**

13. Low Birth Weight Babies
14. Mortality Rates and Causes
15. Sexually Transmitted Diseases

Community Spirit

1. Volunteer Organizations

The number of volunteer organizations is one measure of our community's ability to assimilate new members and respond to the needs of all its citizens. It indicates the degree to which the grass roots community has a voice in issues that concern them and their ability to address community needs. Quality of life is enhanced for both current residents and newcomers as support services and recreational opportunities are made available. As residents seek greater involvement in volunteer groups, the leadership ability and skill base in the community also increases.



Note: Organizations were counted once even though they may have appeared several times in the directory. They also had to reside in Canmore. Source: Town of Canmore Community Resources Directory 2000

Observations

The number of organizations has not changed in the past year. There continues to be a well-established variety of organizations addressing a wide range of community needs and opportunities.

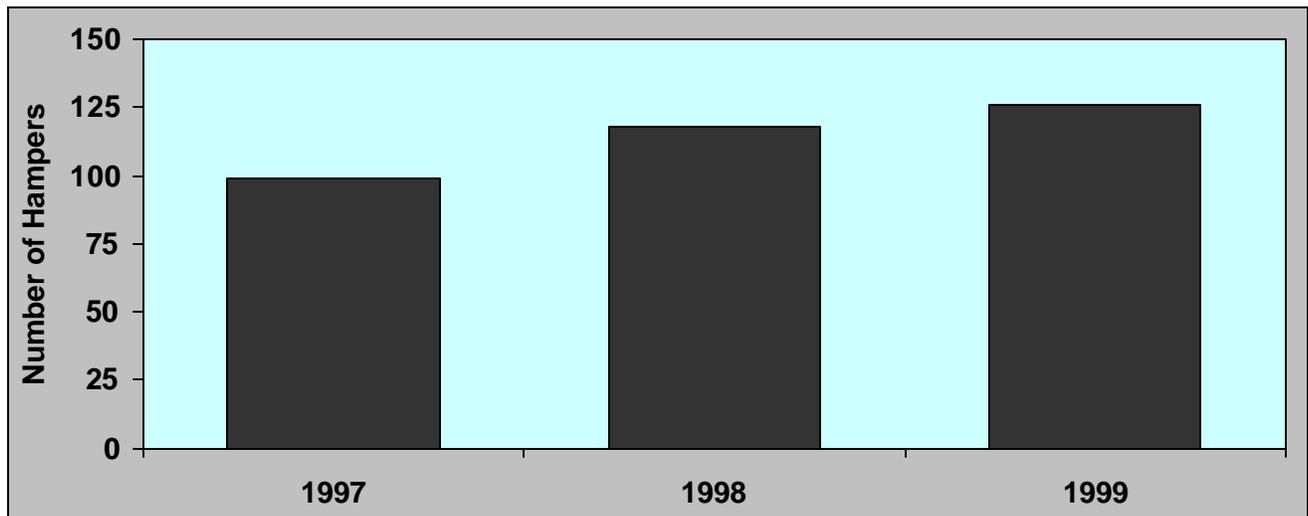
Interpretation

The number of new volunteer organizations has increased with the increase in population over the past 5 years. Not unexpectedly, as our population growth stabilizes, the number of organizations has reached a plateau. The variety of organizations indicates that citizens are getting involved in addressing community issues and developing opportunities within the community. This involvement will ensure that this community's unique needs are heard and addressed thus increasing the citizens' quality of life.

Social Needs

2. Christmas Hampers Distribution

The number of Christmas Hampers distributed each year is an indicator of the demand for benevolence in the community. The hampers are requested by the families themselves or by referral from a neighbour or friend.



Source: Bow Valley Christmas Spirit Campaign (Canmore) - 1999 Report

Observations

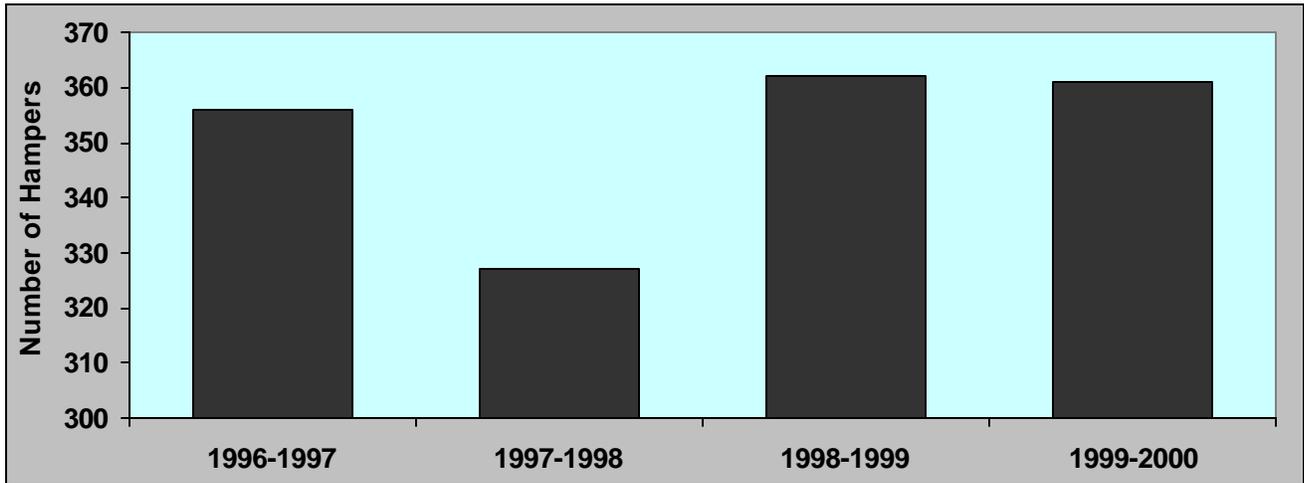
The number of Christmas Hampers is increasing annually.

Interpretation

As Canmore grows, the number of hampers distributed also grows. Increased awareness of the program has led to more residents adopting a family or providing the funds to supply a hamper.

3. Food Bank Hampers Distribution

The number of Food Bank Hampers distributed is an indication of citizens in crisis in our community. The hampers are given out to people who cannot feed themselves or their family. There are many reasons to request a hamper from the Food Bank including unemployment, needs additional to social assistance, emergency circumstances and transience.



Source: Bow Valley Food Bank

Observations

The table above indicates that the number of hampers distributed has increased, however, in 1997 there is a decrease. This could be due to incomplete statistics or fewer seasonal workers that year.

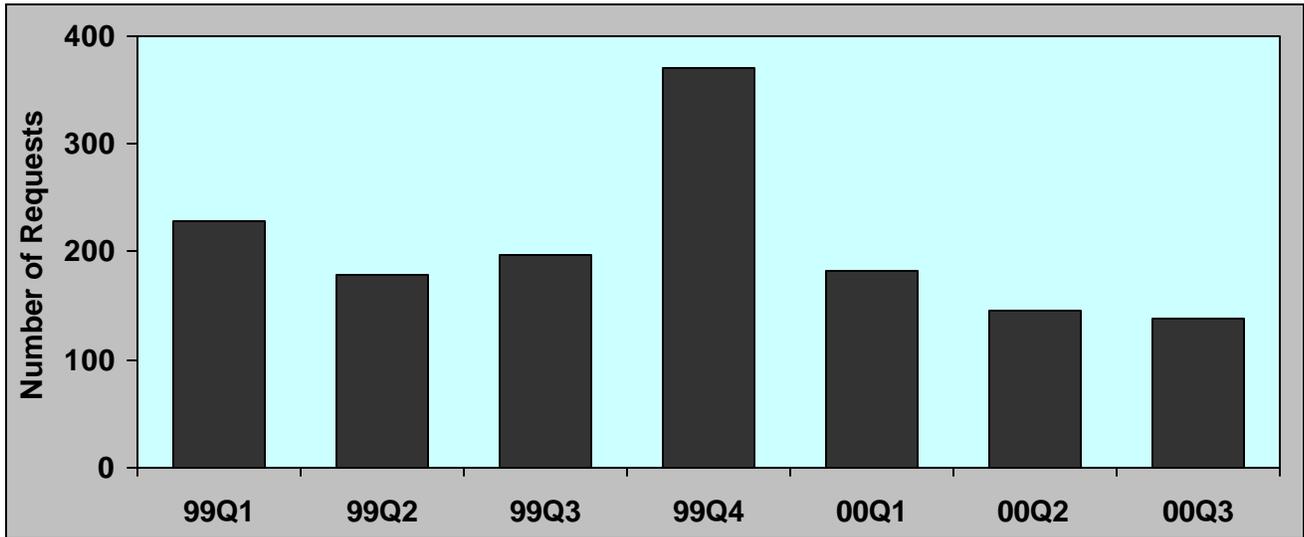
Interpretation

This indicates that the demand for hampers is steadily increasing. Many of the hampers are going to families with children. Unless the family income of these clients increases, their need for food hampers will continue. The fact that the cost of living is much higher than government assistance or many wages is key to the reason for hamper demand.

The clientele of the Food Bank are from all types of families including those with children, singles and seniors. Most clients are considered "working poor" and simply can't make ends meet.

4. Employment Insurance Requests

Employment Insurance (EI) claims are a method of measuring the economic health of a community. Human Resources and Development collect Employment Insurance requests nationally. If EI claims are higher than the national averages, it is an indication of a depressed economy.



Source: Bow Valley Labour Market Review - Spring 2000 and Winter 2000

Observations

The graph illustrates that there are variations in requests for employment insurance over the quarters of a year.

Interpretation

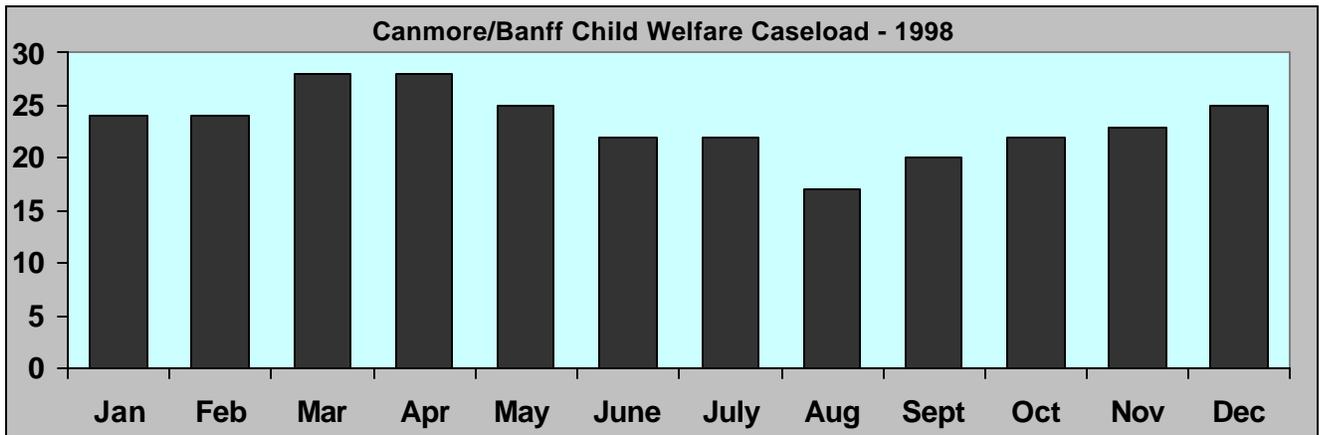
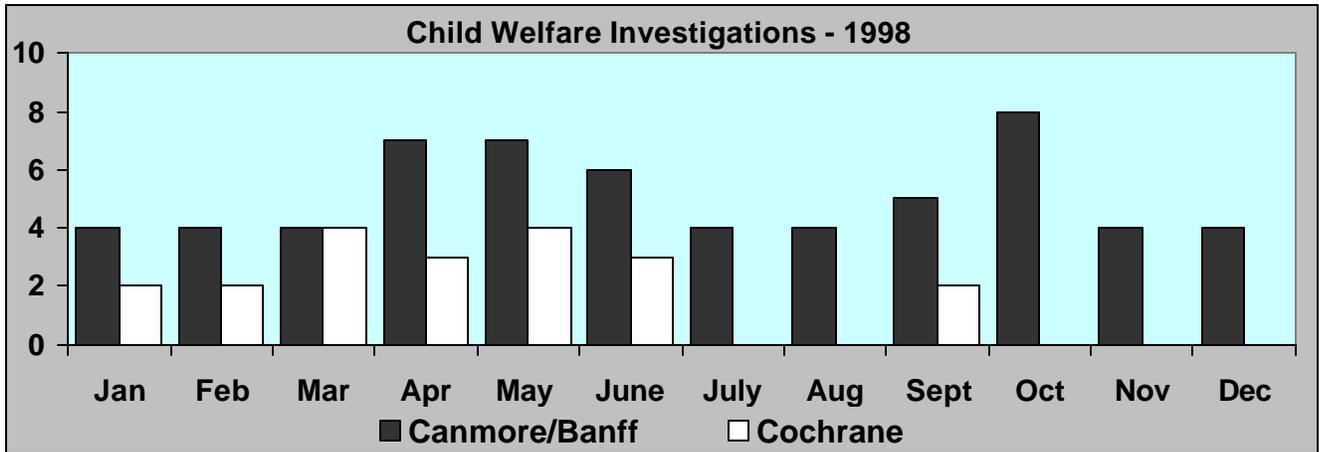
A number of factors can affect the fluctuating amount of EI requests: economy, eligibility requirements, seasonal variations in the labour market and special benefits available to clients. The seasonality of Bow Valley employment is evident in the fluctuations from quarter to quarter.

Overall, the trends in Canmore are in line with Calgary and Alberta information over the last two years. The economy in Calgary and Alberta is generally strong and there are plenty of jobs available which reduces the EI requests. Changes in national eligibility requirements and special benefits did not affect this area.

The addition of comparative data and national averages will improve the interpretation of Canmore's EI trends in the future.

5. Child Welfare Investigations

Child Welfare Investigations are one measure of the health of community families. Child Welfare investigations are the result of a report of child abuse or neglect, where the child's safety has been assessed as high. After the investigation a number of options exist from foster care to in-home support or referrals to other agencies. It does not necessarily mean that the families become clients of Child Welfare. There is a direct correlation between child neglect and poverty.



Source: Alberta Family and Social Services

Observations

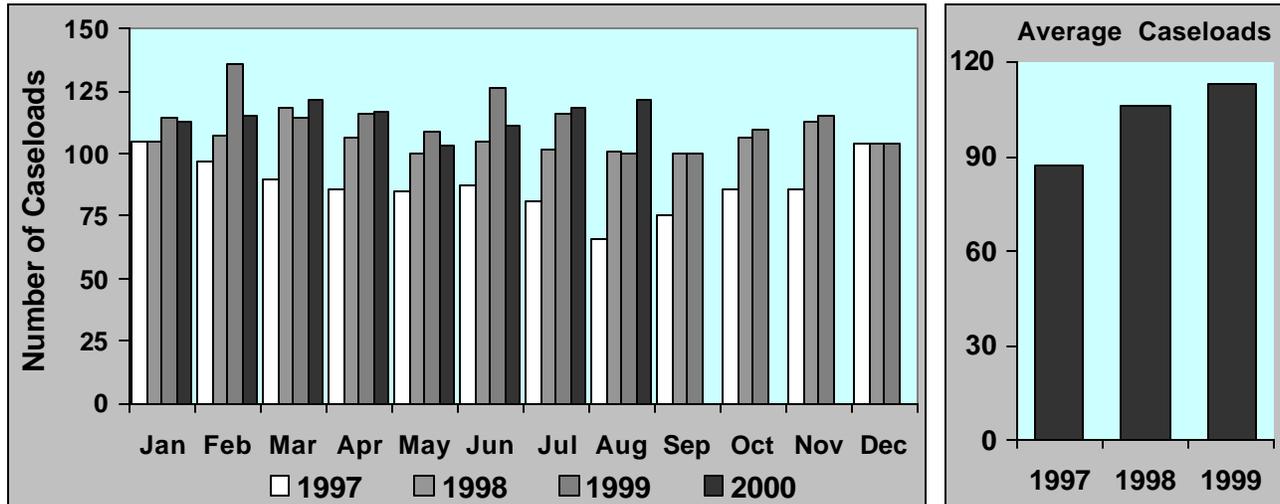
For the year reported, Child Welfare Investigations peaked during the early spring months and rose again throughout the fall. Investigations decreased in the summer months.

Interpretation

Many factors affect the Child Welfare caseload including public awareness of child abuse and neglect and the willingness of individuals to report concerns to the authorities. Provincial and Federal information campaigns, and an increased number of community resources available to help families in need have resulted in an increase in the Child Welfare caseload. This does not necessarily mean there has been an increase in child abuse or neglect over previous years.

6. Income Support Caseloads

Income Support caseloads are one method of tracking the permanent poverty of a community. An adult on income support in Alberta may receive \$168 for shelter and \$229 for a standard allowance (total \$397) per month. If a single person is deemed unemployable they can receive \$303 for shelter and \$229 for a standard allowance (total \$532) per month.



Source: Windsong Child and Family Services

Observations

Income support caseloads fluctuate with the seasons and population growth, however, the average caseload has increased annually over the years reported.

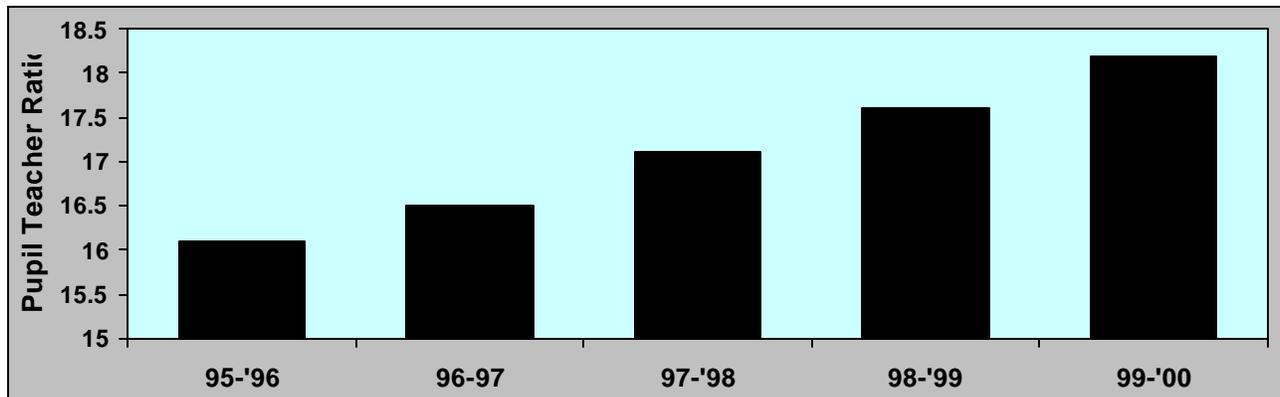
Interpretation

In the Bow Valley, income support is seen as a short-term crisis resource for most clients. The amount of money received would not sustain a family or an individual over a longer period of time. They usually move on to other communities where the cost of housing is more affordable.

Education

7. Pupil Teacher Ratios

Pupil Teacher Ratio (PTR) is a generally accepted measure of the size of classes. It is a province wide indicator that includes all accredited staff, i.e. principals and vice-principals.



Source: Canadian Rockies School Division - Report Card - June 2000, Three Year Education Plan: 2000 - 2003, Board minutes - Sept. 2000

Observations

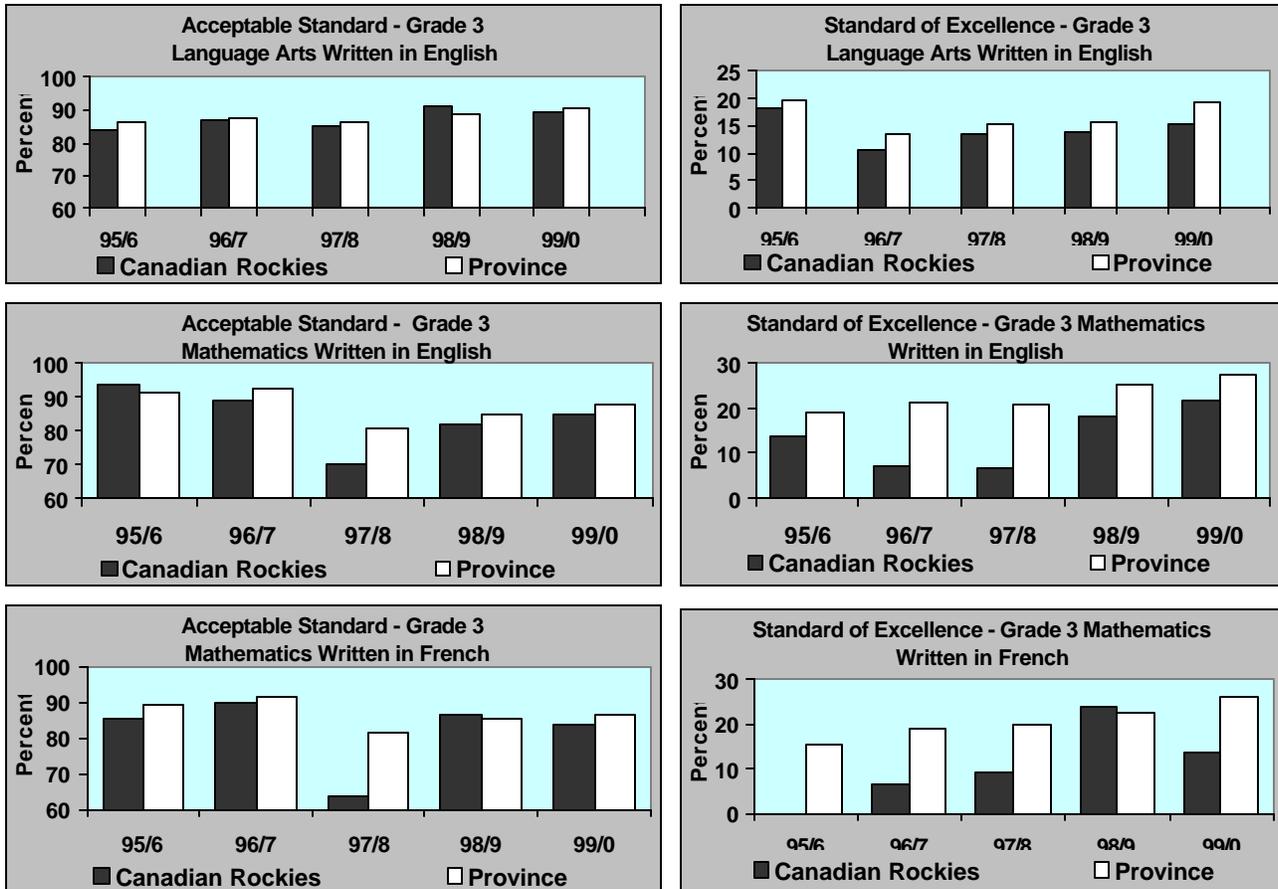
The Pupil Teacher Ratio has increased from 16.1 to 18.2 between 1995 and 1999.

Interpretation

This 13% increase in PTR indicates that class sizes are also on the rise. They range between 22 and 31 students. Increased class sizes can be the result of many factors: an increase in teaching specialists, a decrease in provincial per student spending, an increase in teachers' salaries, or a school approaching maximum capacity.

8. Achievement Tests

Achievement tests are province wide standardized tests that measure how well a school district is doing in comparison to provincial standards and other school districts.



Source: Alberta Learning

Observations

The jurisdiction results for grades 3 are lower than the provincial average. Achievement test results include both regular and special needs students. If the special needs student results are excluded, the results improve considerably.

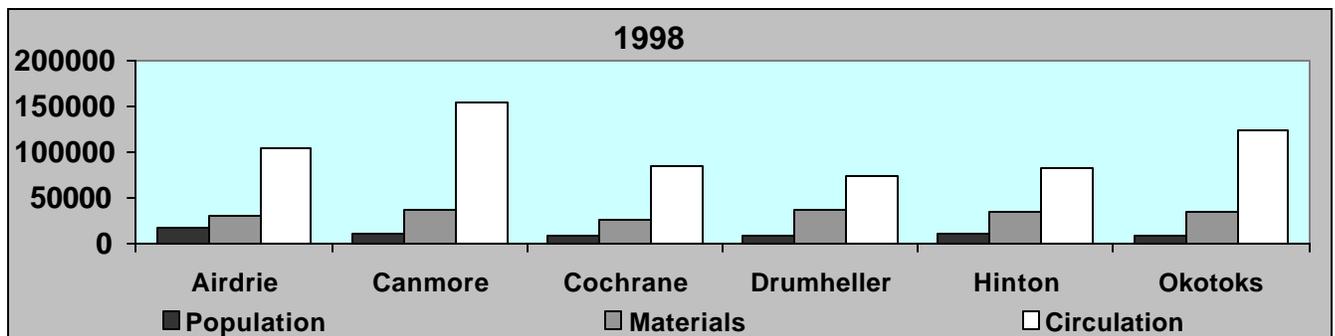
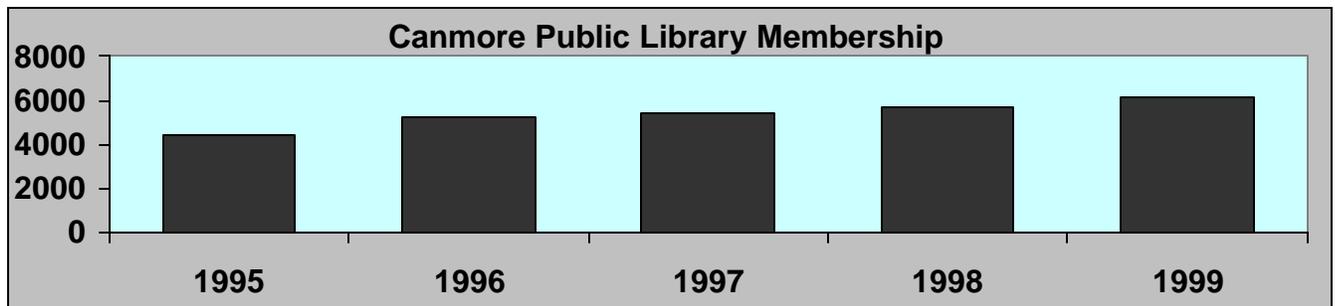
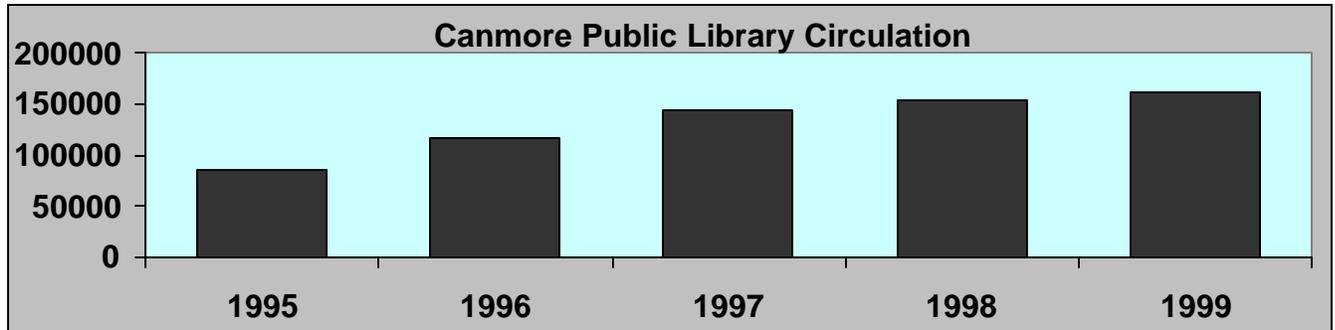
Interpretation

The results of the achievement tests are discussed with the appropriate staff to review the areas of strength and the curriculum areas that require greater emphasis. These results are for the entire Canadian Rockies School Division including Banff and Exshaw. Canmore makes up 70% of the Division's enrollment of students.

The grade 6, 9, and 12 results have not been included in this report. They may be obtained on the internet from: www.learning.gov.ab.ca/k_12/testing/multipublic/ach/default.asp.

9. Library Facilities and Use

Library Membership and Circulation is an indicator of the literacy level in a community. It can be compared to other communities across the province and nationally. It is also an indicator of the tendency to participate in cultural activities in the community.



Source: Canmore Public Library

Observations

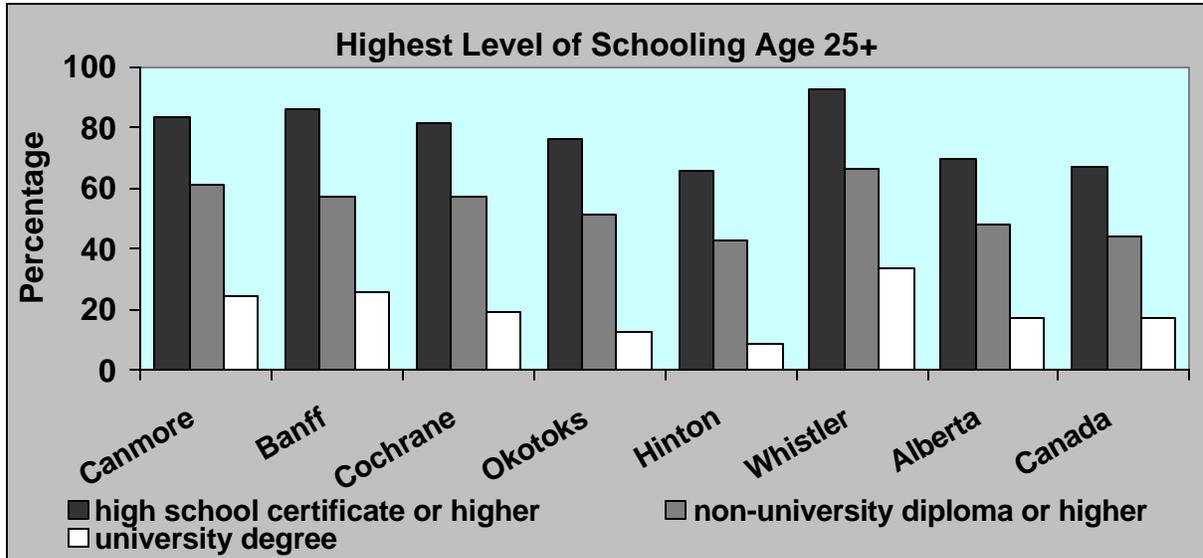
The number of items checked out (circulation) at the Canmore Public Library and the number of patrons (members) has steadily increased since 1995. The average circulation per patron is steady at 4 times per year. Canmore has the largest number of materials and a much higher circulation than that of comparable communities.

Interpretation

Library membership has kept pace with the increase in population. Over 60% of Canmore residents have a library card; this is an extremely strong membership base for a library serving a population of this size. A high circulation rate, nearly double that of some other similarly sized communities, indicates strong usage of and ongoing community support for the Canmore Public Library.

10. Adult Education Level

Life long learning is a goal province wide and in our community. Measuring the education level of the permanent population helps us to offer opportunities for enhanced learning at the appropriate levels for the community.



Source: Statistics Canada 1996

Observations

A higher percentage of adults in Canmore possess a university degree, a non-university diploma or a high school diploma than Alberta or Canada.

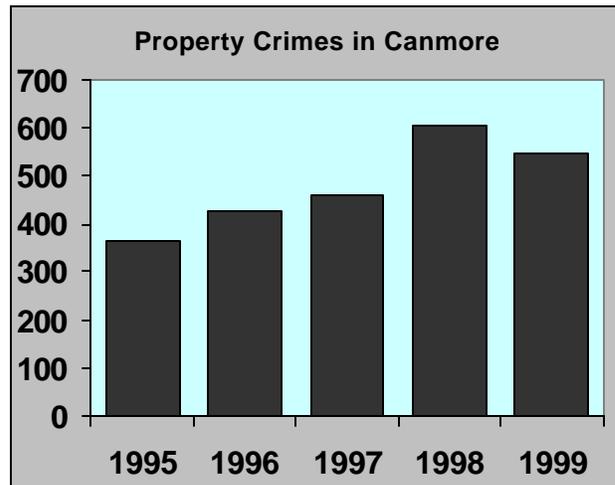
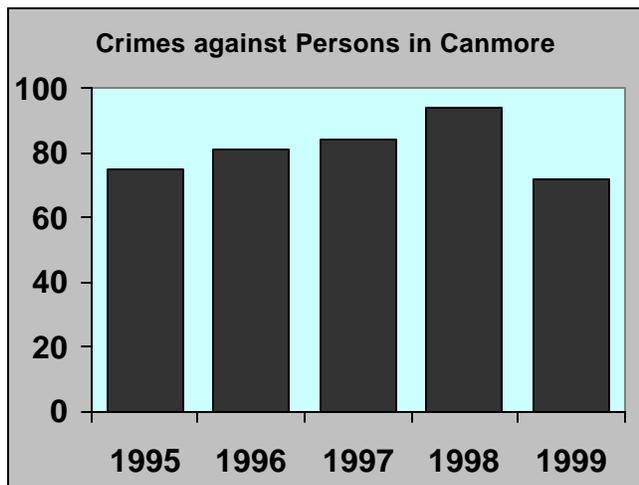
Interpretation

The education level of adults in Canmore is similar to that of the resort community of Banff. Residents with higher levels of education tend to participate more in the democratic decision-making process and in the volunteer sectors of the community. Canmore residents demonstrate a high degree of involvement in community decision-making opportunities, special events and volunteer organizations.

Public Safety

11. 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. These indicators track the trends in crime occurrence. These rates are comparable across the province and nationally.



RCMP Ranking of Canmore						
1993	1994	1995	1996	1997	1998	1999
57/63	54/63	48/64	41/64	42/65	39/65	42/65

Source: Canmore RCMP

Observations

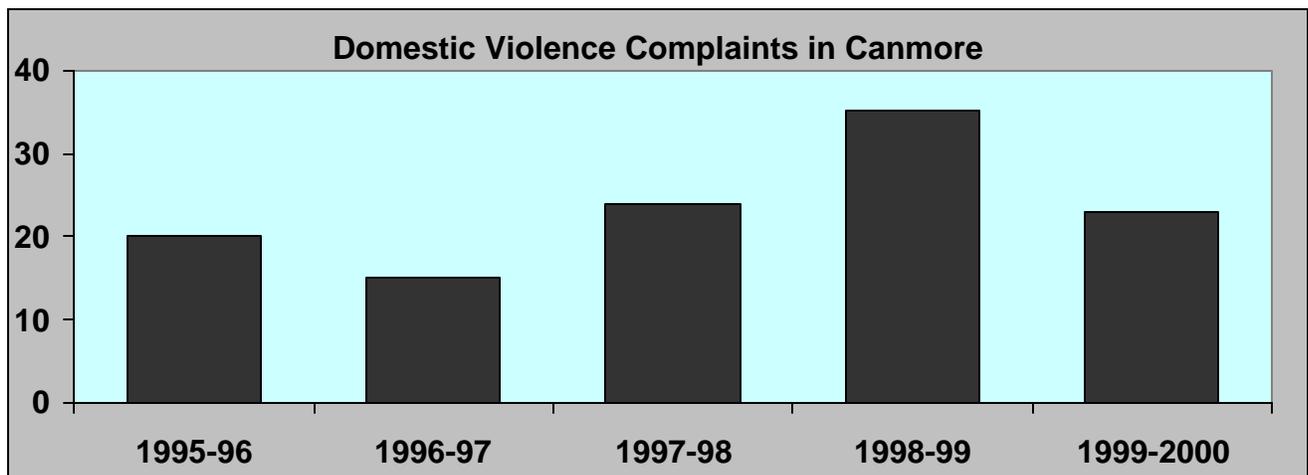
Crimes against Persons and Property have remained relatively constant over the years even though the population of the town has increased. Both person and property crime decreased between 1998 and 1999. Canmore was the 42nd safest community in Alberta (65 is the safest) in 1999, this is a decrease in status from 1993.

Interpretation

The total number of crimes reported in Canmore is average when it is compared to other towns of similar size. Canmore has been able to maintain a relatively high sense of security through its growth in population. Many factors affect crime in this community of 10,000 situated next to the Trans Canada Highway. These include criminals entering the community for a short period of time and vacationing tourists who may become involved in activities not expected of them in their home communities.

12. Domestic Violence Complaints

This indicator records the number of complaints responded to by the Bow Valley Victim Services Association (BVVSA) about harassment, intimidation or violence between couples who are or were involved in a married or cohabiting relationship 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.



Source: BVVSA

Observations

The BVVSA deals with 25 complaints of domestic violence from the Canmore area on average annually. There has been a significant fluctuation in the number of annual complaints received, ranging from 15 in 1996/97 to 35 complaints in 1998/99.

Interpretation

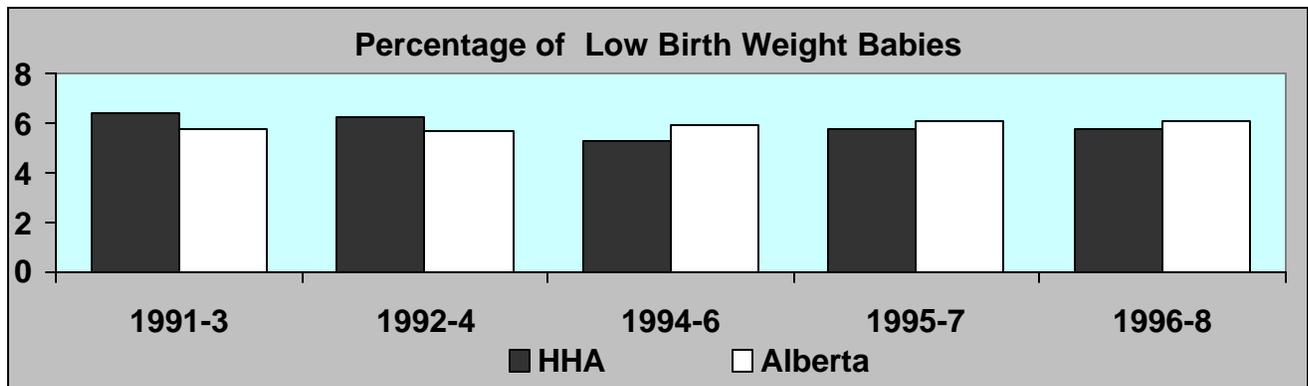
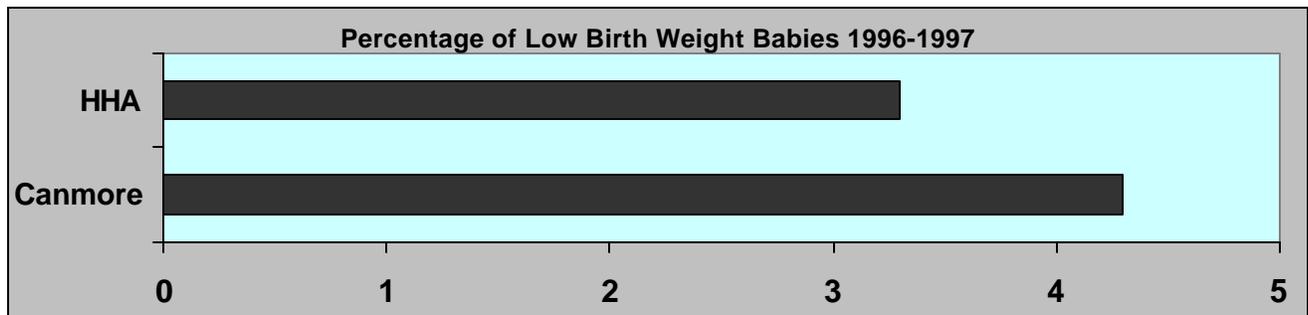
As the reporting rate of incidents of domestic abuse is traditionally low, these statistics do not show the full extent of domestic abuse within our community. The amount of actual abuse involving a criminal act could, in fact, be 3 to 4 times higher than actually indicated in the data shown below. Due to the low number of reports received each year, it is difficult to establish annual trends.

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 by these statistics.

Health

13. Low Birth Weight Babies

The number of Low Birth Weight babies is known internationally as an indicator of the population's health status. It can alert authorities to issues of poverty, malnutrition, disease, or lifestyle. It is comparable with other communities, provinces and nations.



Source: Alberta Health, Alberta Vital Statistics, April 1997, May 1997 & April 1999 Release
Headwaters Health Authority Annual Report 1999-2000 (p.67) , Headwaters Health Authority Annual Report 1998-99 (p.43)
Headwaters Health Status Report Card - Technical Report December 1997 (p.113),
HHA Births Report, 2nd Edition, Headwaters Health Assessment 1998

Threshold

The Alberta threshold is less than or equal to 5.5% low birth weight babies.

Observations

Low birth weight babies weigh less than 2500 grams (5lb. 8oz.) at birth. The Headwaters Health Authority (HHA) Region, to which Canmore belongs, was at the threshold in 1994-6. Both Canmore and the HHA were below the threshold in 1996-7.

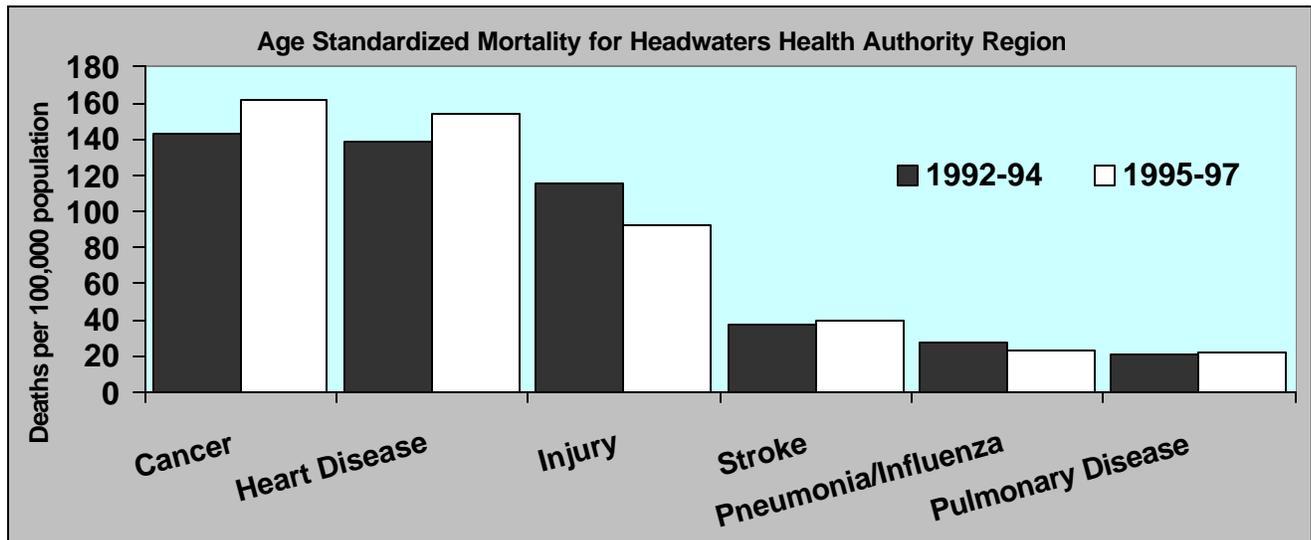
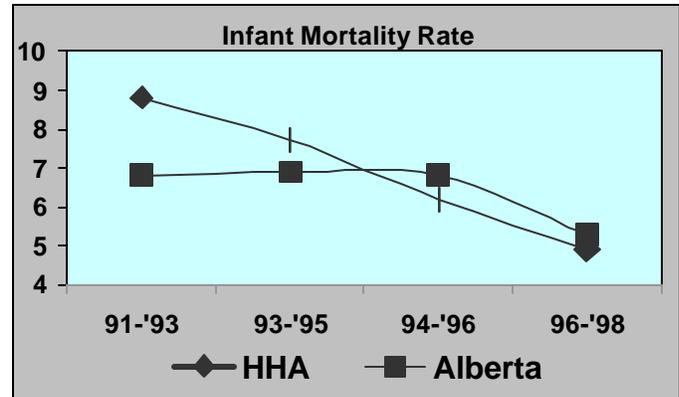
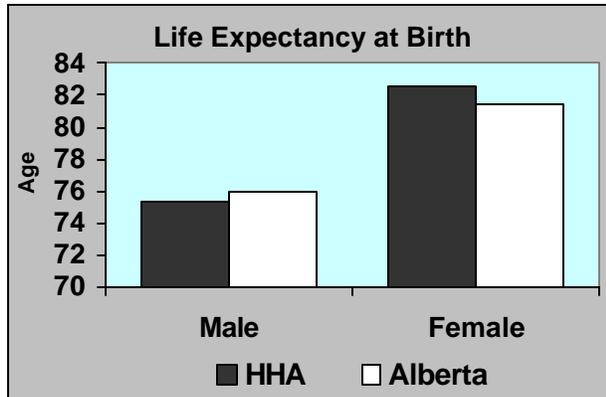
Interpretation

Premature birth and low birth weight have long term consequences on a child's health, quality of life, survival and their use of health services.

The HHA offers many programs to support families of low birth weight babies, including pre and postnatal care, full immunization and the Healthy Moms Healthy Babies Program.

14. Mortality Rates and Causes

The mortality rate tracks the causes of death for a population. Information gathered from these statistics assists with the planning of prevention programs.



Source: Annual Report 1999-2000 Headwaters Health Authority July 2000 (p.68)
 Annual Report 1998-99 Headwaters Health Authority, July 1999 (p.44)
 Headwaters Health Status Report Card - Technical Report December 1997 (pp.112, 113)

Observations

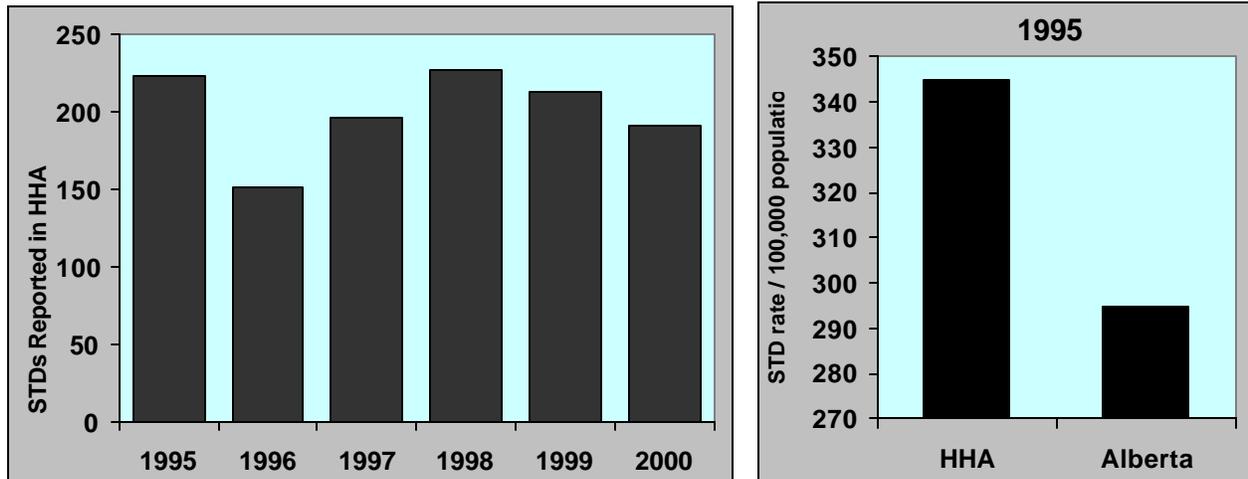
Cancer, heart disease and injury are the leading causes of death in the Headwaters Health Authority (HHA) Region. Deaths due to cancer, heart disease, stroke and pulmonary disease increased between 1995-97 when compared to 1992-94. The infant mortality rate has decreased in the HHA and Alberta since 1991, however, most dramatically in the HHA region.

Interpretation

A regional Injury Prevention Plan has been developed to address the leading causes of intentional and unintentional injuries. The plan identifies injury prevention initiatives at both the service area and regional levels. The HHA has focused on the key risk factor of smoking to address cardiovascular disease and cancer.

15. Sexually Transmitted Diseases

Sexually Transmitted Diseases (STDs) can be indicative of poverty, lack of knowledge or lifestyle choice. STDs continue to exist even though they are preventable. Individuals continue to choose not to practice safe sex, therefore, the transmission of STDs continues to occur.



Source: Annual Report 1998-99 Headwaters Health Authority July 1999 (p.46)
Annual Report 1999-2000 Headwaters Health Authority July 2000 (p.71)
Headwaters Health Status Report Card Summary December 1997 (p.15)

Observations

The number of STDs reported annually in the Headwaters Health Authority (HHA) region has fluctuated over the past 6 years. In 1995, the total incidence rate of STDs per 100,000 population was higher for HHA (345) than for the province (295). The majority were females, aged 15 to 29.

Interpretation

Sexually Transmitted Diseases are reported by region of examination not by region of residence. STDs reported for HHA include visitors and persons from other areas, they exclude residents of HHA who seek testing outside of the region.

The HHA continues to implement several strategies to address sexually transmitted diseases. Examples are: the ASK clinic in Canmore, STD education in schools, supporting the Azimuth Theatre production on Teen Sexuality in Canmore and Updating the Sexual Health Binder.

ECONOMIC INDICATORS

Trends

A review of the Economic Indicators shows the following key trends:

- The majority of employees are full time and the trend is stable;
- There has been an increase in the number of people employed in the tourism and personal services industries over the past decade, and a decrease in the number employed in the government sector;
- Average housing prices continue to climb due to house sales at the higher end of the price scale. The affordability for residents becomes more difficult since wages do not appear to have kept pace with the overall increase in housing costs over the past decade.
- There has not been any significant progress towards a more balanced tax base. Although there is a significant level of development activity in Canmore, the high volume of residential development causes the ratio of residential to commercial tax base to remain constant.

Introduction

There is no single statistic or number that can accurately indicate the overall health of the Canmore 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. It is important to understand the level of business activity in Canmore as we seek to provide a more balanced tax base, which in turn will reduce the reliance on the residential taxpayers to fund the continued growth in Canmore. We need to understand which industries exist in Canmore, as these industries spend money in the Bow Valley and provide employment opportunities directly and indirectly to the residents of Canmore. The level of income that these industries provide to their employees further impacts the Canmore economy, since these employees spend much of their income on products and services in the Bow Valley. The level of income, combined with the cost of housing is important to watch, since this helps to determine the "affordability" for residents of Canmore.

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

- **Employment**

1. Employment Status of Adults
2. Employment by Industry

- **Income**

3. Average Wage of Jobs Advertised at the Job Resource Centre

- **Housing**

4. Average House and Condominium Resale Prices
5. Rental Housing Costs

- **Economic Activity**

6. Municipal Tax Base Ratio
7. Business License Registry
8. Tourism Industry

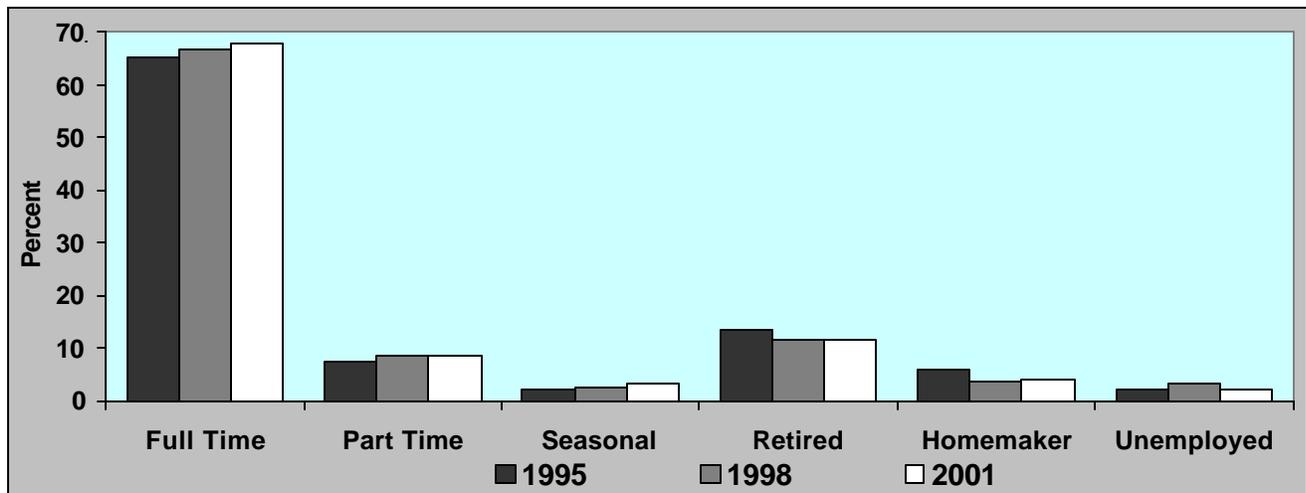
- **Development**

9. Building Permit Summary

Employment

1. Employment Status of Adults

Employment status is useful for assessing the overall health of the local economy. A community with strong employment (full and part-time) improves the social fabric of the community.



Source: Town of Canmore Census 2001

Observations

1. The majority of adults are employed full time. The percentage is constant even though the number of people employed full time has increased.
2. The number of homemakers is relatively constant while the overall population of Canmore has increased substantially.
3. The unemployment rate is between 1% and 3%.

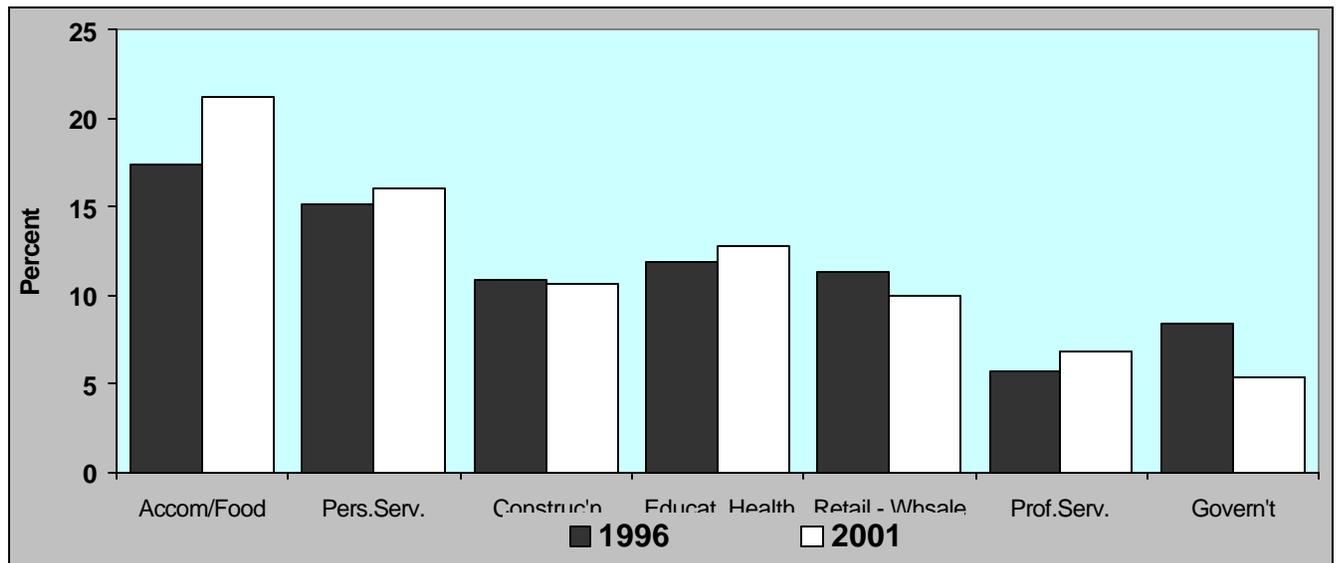
Interpretation

The increase in population coincided with the existing mix of employment status. That is, for every 100 moving to Canmore, approximately 65-66 are employed full time, 7-8 are employed part-time, 11-13 are retired, 4-6 are homemakers, 2-3 are seasonal, 1-3 are unemployed, 1 is a student and 3-5 are unknown.

1. The high cost of housing means that more families must have two income earners to be able to afford to live in Canmore.
2. A low unemployment rate means that employers have difficulty filling positions. This unemployment rate of between 1-3%, although not calculated in the same manner as Statistics Canada, is less than what is generally considered to be "full employment", i.e. 3%. Canmore's unemployment rate would be considered "unhealthy".

2. Employment by Industry

Canmore, like any community, needs a strong, diversified economy. Heavy reliance on any one industry can cause problems if that industry experiences an economic downturn. The measurement of the employment by industry is a means by which a community can measure the movement towards a more diversified economy.



Source: Town of Canmore Census 2001

Observations

Trends indicate that there are an increasing percentage of employees in the Accommodation and Food, Personal and Professional Services sectors. There has been a recent increase in Education, Health, and Social Services after a period of general decline in this category. Employment percentages have decreased in the Government, Retail/Wholesale Trade and Construction sectors.

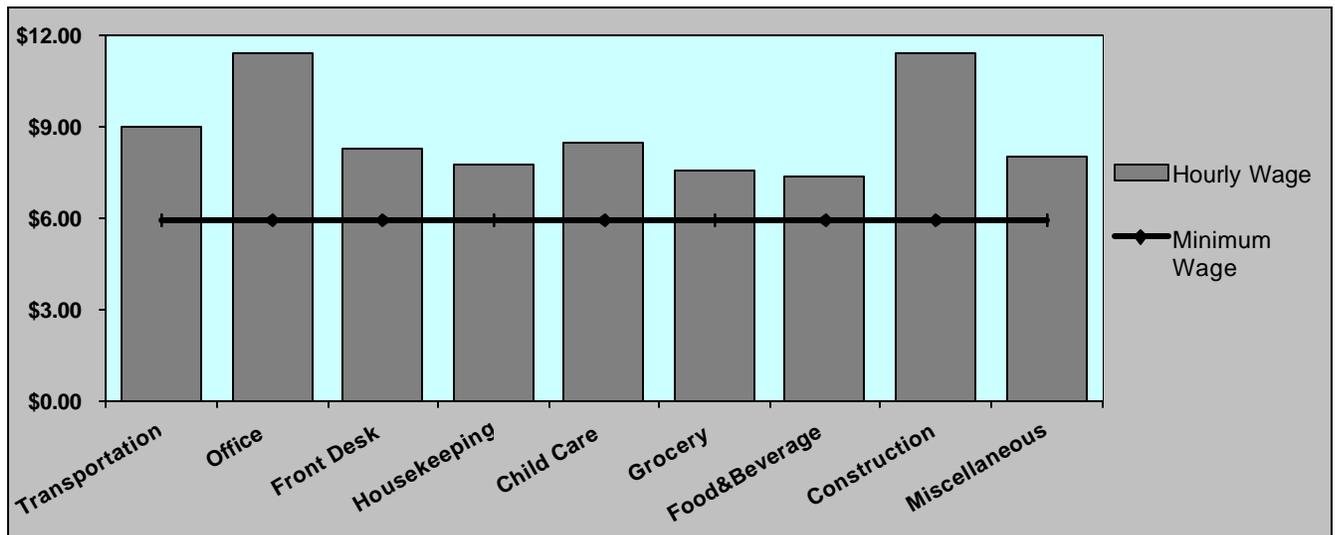
Interpretation

The nature of the employment situation in Canmore has changed significantly over the past decade. With the growth of the tourism industry in the Bow Valley there has been a corresponding growth in the number of employees working in the Tourism (Accommodation and Food) sector, which is generally considered to be a sector with lower wages and lower skill requirements (i.e. many entry level positions) than some other sectors. The growing population and demand for residences, as well as commercial buildings has enabled the construction industry to maintain a strong presence. There has also been a significant increase in the residents employed in Personal and Professional Services, servicing the needs of the growing business and residential population. Government downsizing has most directly caused the decline in employment in the government sector.

Income

3. Average Wage of Jobs Advertised at the Job Resource Centre

Tracking the average wage of jobs advertised at the Job Resource Centre is one way of estimating the ability of residents to afford to live in Canmore. It is limited in its application, however, as these are only some of the jobs available in Canmore and they may be entry level or seasonal.



Source: Bow Valley Labour Market Review - Spring 2000 (Based on 4 months of Job Orders Dec./99-Mar./00)

1999 Alberta Wage Survey

		<u>Rural</u>	<u>Other Urban</u>	<u>Calgary</u>
Hotel Front Desk Clerk high sampling variation	Starting Wage	\$7.20	\$6.90	\$8.70
	Average Wage > 3 years	\$8.60	\$7.90	\$10.30
	Final Wage	\$9.45	\$9.00	\$11.40
Construction, Trades, Labour severe sampling variation	Starting Wage	\$10.15	\$14.45	\$10.75
	Average Wage > 3 years	\$12.80	\$18.45	\$14.95
	Final Wage	\$15.35	\$23.35	\$16.75

Source: www.ab.hrdc-drhc.gc.ca

Note: Canmore is considered "Rural"

Observations

1. All jobs posted at the Job Resource Centre must provide wages at or above minimum wage.
2. The starting wage for a Hotel Front Desk Clerk is less than in Calgary, but more than "Other Urban".
3. The starting wage for a Construction Labourer is less than in "Other Urban" areas, but more than Calgary.

Interpretation

The affordability of living in Canmore cannot be interpreted without considering other factors such as average rent and number of hours worked per week.

Housing

4. Rental Housing Costs

This indicator is a measurement of the cost of rental accommodation in Canmore, with a comparison to the hourly wage required to afford these rental accommodations. "Affordability" is defined as 33% total debt service ratio (TDSR), a Canada Mortgage and Housing Corporation (CMHC) standard. The "Staff Accommodation" measurement demonstrates how one sector of the local economy is assisting its employees to be able to afford to live in Canmore.

Rental Housing Costs	Cost	Hourly Wage	Monthly Wage	Annual Wage
1 Bedroom	\$605	\$13.35	\$2,000	\$24,000
2 Bedroom	\$883	\$9.00	\$1,415	\$16,980
3 Bedroom	\$1,123	\$8.35	\$1,250	\$15,000
Studio/Roommate	\$410	\$9.07	\$1,360	\$16,320

Source: Canmore Housing Needs Assessment and Forecast - Executive Summary - March 31,2000
 Note: 3 bedroom has 3 people sharing

Staff Accommodation	Type	# of Staff/Unit	Total	Cost/Month
Best Western	3 Houses	6 to 8	21	\$180
Chateau Canmore	House	13	13	\$165
Four Points Sheraton	Four-plex	8	32	\$225
Radisson	House/Condo	3 to 6	13	\$240
Rocky Mtn. Ski Lodge	Apt./Houses	2 to 4	15	n/a
Alpine Club of Canada	2 Dorms	2 to 3	6	\$150
			100	Average \$192

Source: Entry Level Staff Housing Guide - 1999

Observations

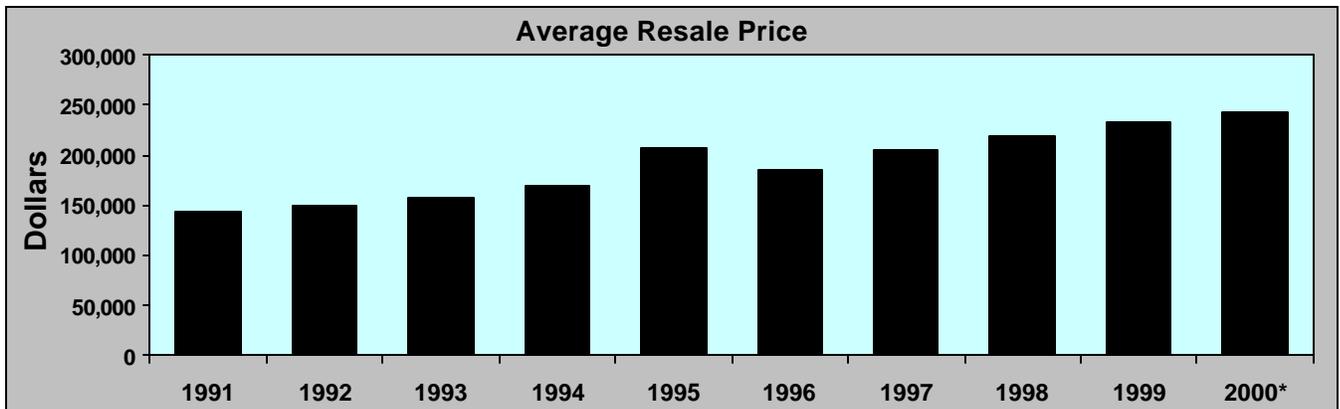
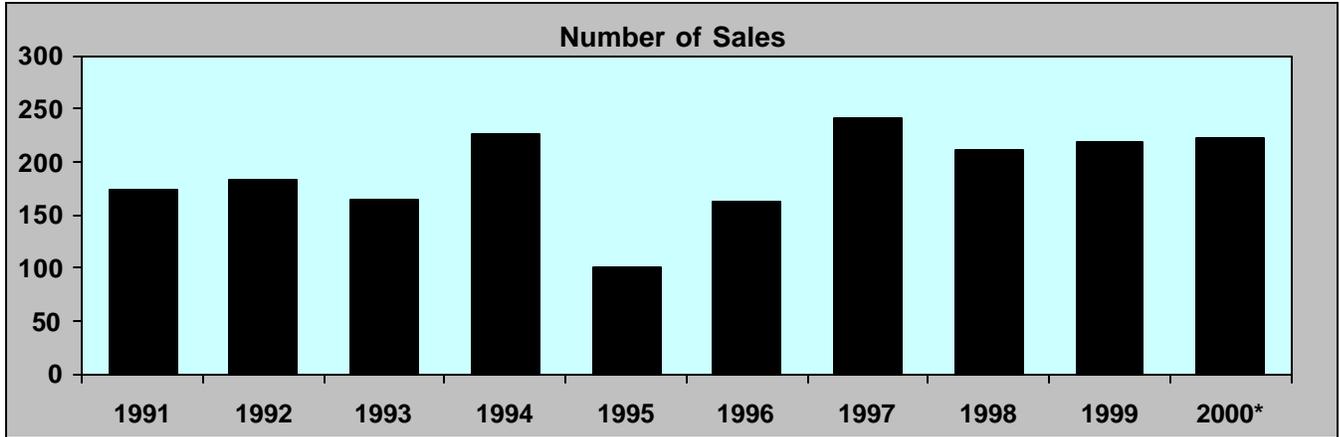
A full time employee must earn between \$8-9 per hour to afford to live with a roommate(s) in Canmore, or more than \$13 per hour to afford to live on their own.

Interpretation

1. Many of the jobs in Canmore do not provide a starting wage sufficient to afford rent. (See Economic Indicator #3 - Average Wage of Jobs Advertised at the Job Resource Centre.)
2. None of the Jobs Posted at the Job Resource Centre provide sufficient wage to afford rent without a roommate.

5. Average House and Condominium Resale Prices

The average resale prices of houses and condominiums indicate the cost of home ownership in Canmore.



Source: CMHC Market at a Glance - Nov. 2000

Observations

1. The number of House and Condo sales has been relatively stable since 1997, after a significant decrease in 1995 and 1996.
2. The average house resale price has been climbing steadily over the last 10 years.
3. Anecdotal comments indicate that housing prices in the lower end of the market have actually fallen which could make housing options more affordable.

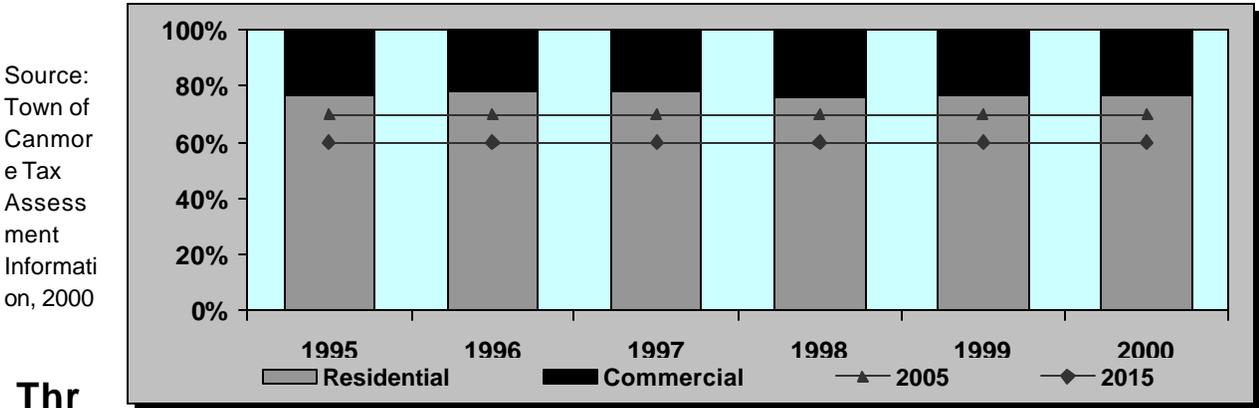
Interpretation

Canmore has a limited supply of developable land. This will lead to continued upward pressure on housing prices.

Economic Activity

6. Municipal Tax Base Ratio

The Municipal Tax Base Assessment Ratio is important to monitor as it helps to 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 are larger users of the community's infrastructure. Since the commercial component of a community uses less of the services of a community, they, in effect, subsidize the residential component. A balanced tax base means the burden of increased taxes are shared on a more balanced basis between residents and businesses, which can help maintain affordability for residents.



Threshold

The 1995 Growth Management Strategy Report "targeted a municipal tax assessment base of 70% residential and 30% commercial by the year 2005, and a split of 60% residential and 40% commercial by the year 2015".

Observations

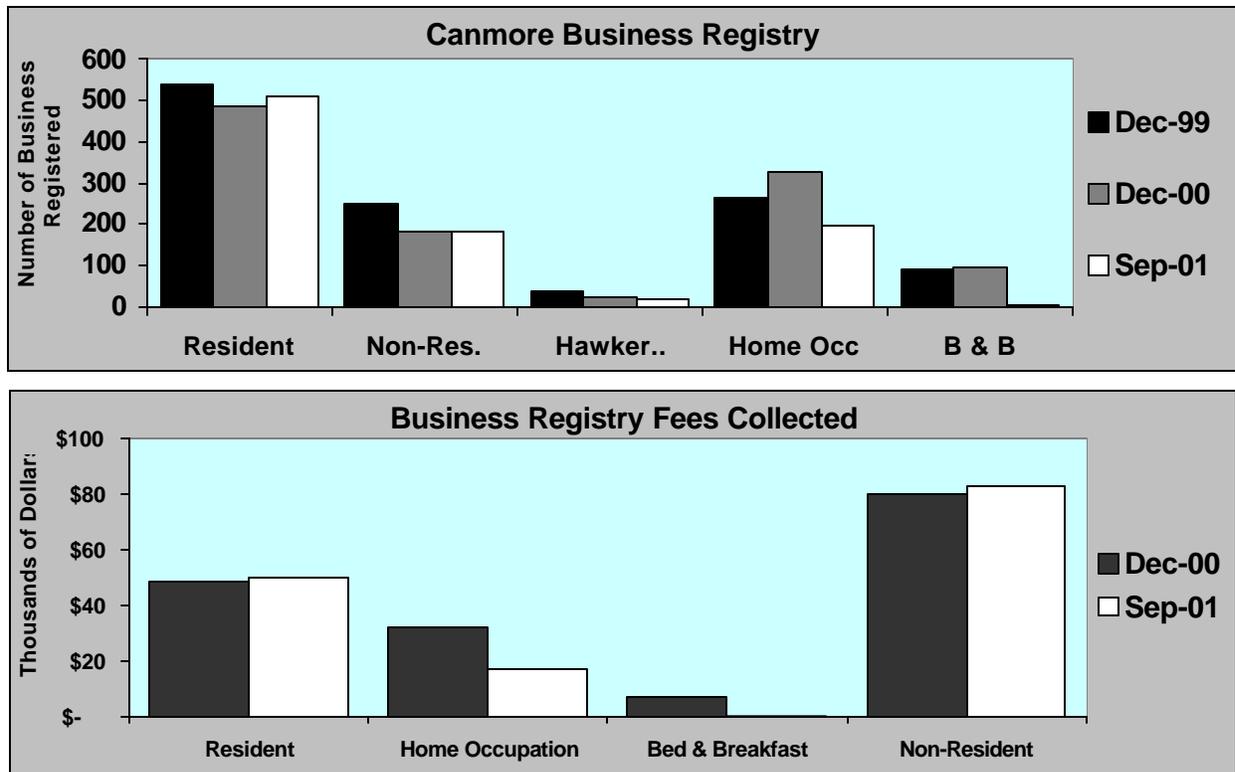
The tax base has not moved significantly towards the goal of 70:30 residential to commercial tax assessment.

Interpretation

As Canmore continues to grow, there will be an increased demand to maintain existing infrastructure and build new infrastructure. Developers generally pay to establish the new infrastructure of a development and they contribute additional funds for upgrading infrastructure through off-site levies. The existing tax base, however, must be able to pay for the upgrades to existing infrastructure. The introduction of a split mill rate in 2000 (the commercial mill rate became higher than the residential mill rate) did not change the tax assessment base.

7. Business License Registry

Tracking the number and type of Business Licenses helps to provide a picture of the composition of Canmore's economy.



Source: Canmore Economic Development Authority

Observations

1. The 2001 figures are for 9 months.
2. The number of Bed and Breakfasts is decreasing slightly.
3. The number of Home Occupation businesses is increasing. Resident business numbers are constant.
4. As of September 2001, 54% of the Business Registry Revenue comes from non-resident businesses (i.e. those businesses that work in Canmore, but do not reside in Canmore).
5. Home Occupation revenue in 2001 is less than 2000, however, it is anticipated to equal or exceed 2000 revenue by the end of 2001.

Interpretation

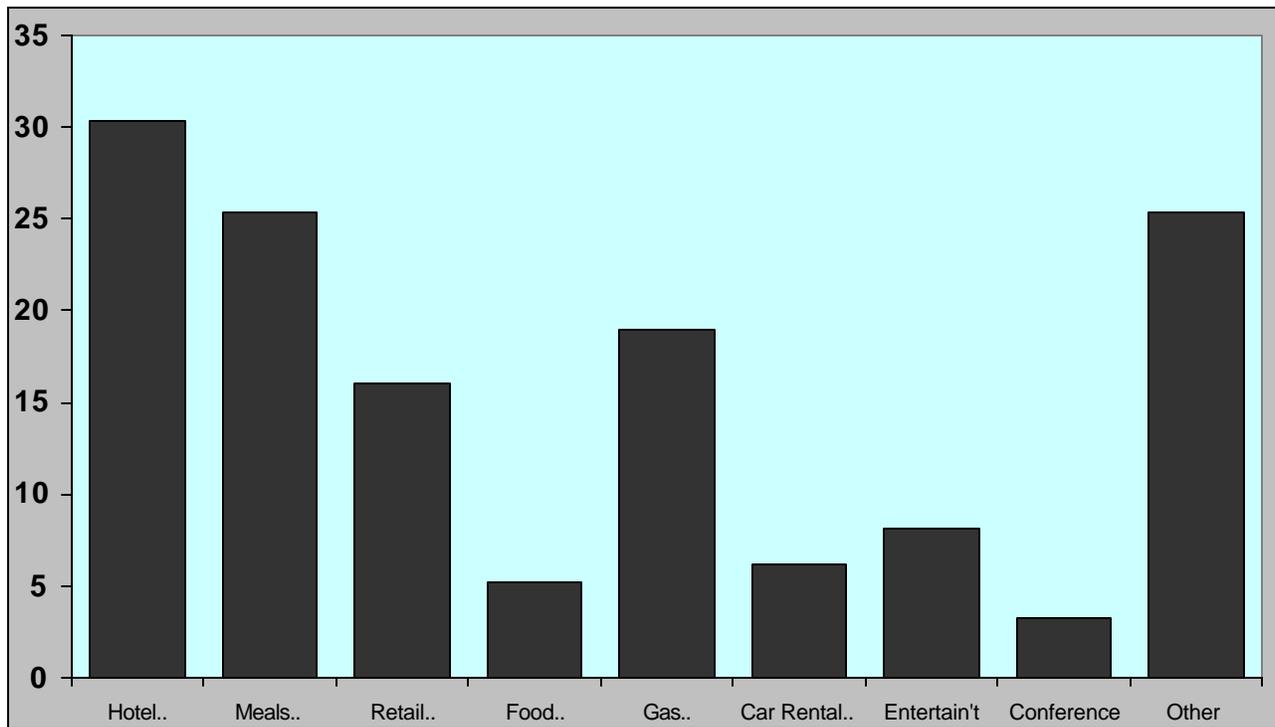
The number of businesses in the Business Registry is relatively constant and the Business Registry revenue fluctuates between \$160,000 and \$180,000 per year.

Home Occupation businesses, which are significant component of the Canmore business community, do not contribute directly to the goal of balancing the tax base. They do, however, support the businesses in Canmore that do contribute directly to the commercial tax base.

8. Tourism Industry

Canmore is becoming a tourist destination and the tourism industry is the dominant industry in Canmore. 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 Canmore economy needs to be diversified, so we are not reliant on only one industry for our economic well being. A recent study completed by Canmore Economic Development Authority indicates that the Canmore tourism industry is very strong and provides a benchmark for measuring further progress.

Economic Impact of Tourism in Canmore - 1999 (\$ Millions)



Source: Western Management Consultants and Econometric Research
 Research Limited Study: "Economic Impact of Tourism to Canmore, Alberta: 1999", dated April 2001

Canmore:	1999
Number of Hotel and B&B Rooms	1686
Occupancy Rate	53.3%
Average Daily Rate (ADR)	\$92.33

Source: HVS International, May 17, 2001 Canmore Economic Outlook conference.

Observations

We do not have the data to fully understand the economic impact of each industry active in Canmore. It is evident that Tourism is a dominant industry.

The Economic Impact of Tourism in Canmore: 1999 Report does not detail the potential negative impacts of an expanding tourism industry, which may be considered to be the following:

- lower wages and lower skill levels for entry level positions;
- lower wages leads to decreased housing affordability; and
- workers are often seasonal, and thus are not always a long-term part of the community.

Interpretation

The tourism industry in Canmore sustains much of the community's employment and income base and contributes significant tax and other revenues to all three levels of government. Its economic impacts are not restricted to the community but permeate throughout the province and make significant contributions to other provinces. Initial direct spending by tourists in the community is estimated to have exceeded \$138 million in 1999. These expenditures are recurrent and expected to be made on average each year. Their economic impacts are typically considered as sustainable impacts.

The income of the community is increased by \$84.7 million as a result of these expenditures. This is the amount that remains in the community and adds value locally annually. Alberta's income (Gross Provincial Income) increased by over \$152 million annually, implying that the tourism impact of Canmore creates strong economic benefits across the province.

Tourism in Canmore means jobs in the community. 2,400 full time equivalent jobs are needed to sustain these tourism impacts in Canmore. Tourism in Canmore means over 3,300 full-time jobs on a province-wide basis.

Furthermore, tourism in Canmore means tax revenue for all three levels of government. Some \$56.7 million was collected by all governments in 1999 based on the province-wide tourism impacts of Canmore tourism. The local Government in Canmore realizes \$4.7 million annually, or about 8.4% of this total tax revenues.

While Tourism in Canmore sustains local jobs and economic benefits in the immediate Canmore area, it also sustains jobs and economic activity in Calgary and all other regions of Alberta. It sustains economic activity outside Alberta, through large imports of supplies and services from the other Canadian provinces

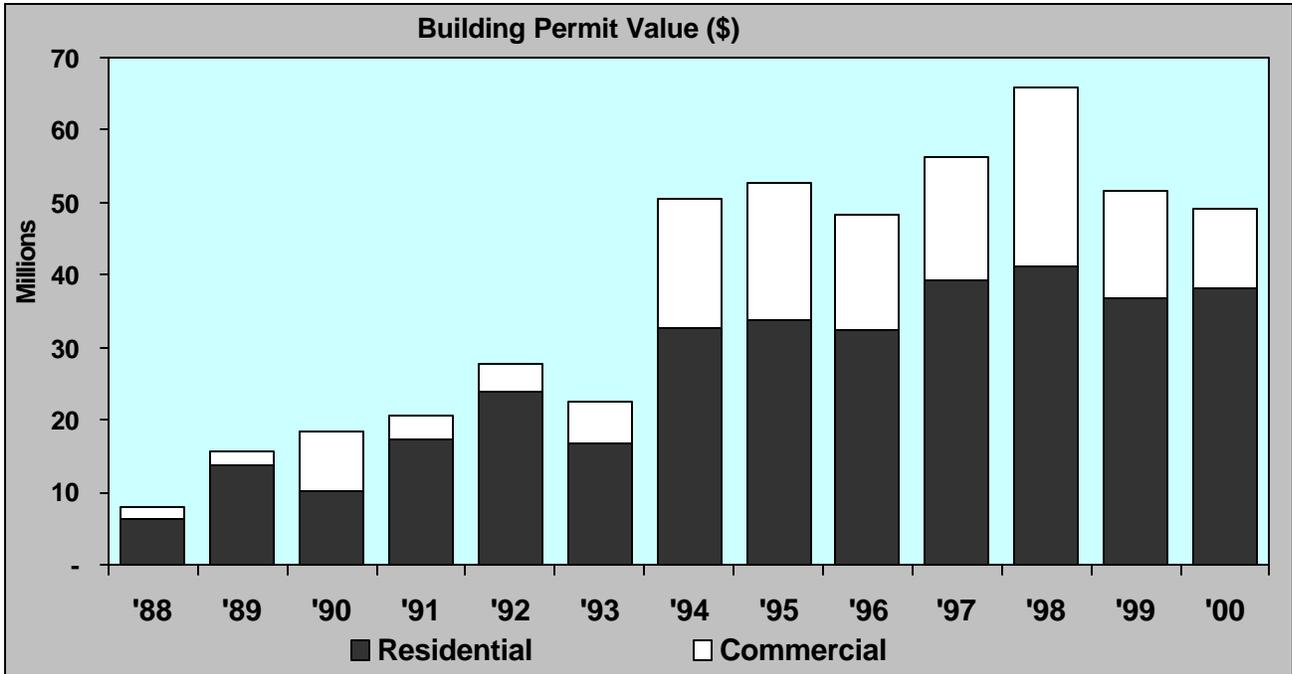
While there are indeed costs that may be incurred by communities that embrace tourism, the significant economic benefits from tourism are clearly documented at both the community and the provincial level.

Source: Western Management Consultants and Econometric Research
Research Limited Study: "Economic Impact of Tourism to Canmore, Alberta: 1999", dated April 2001

Development

9. Building Permit Summary

The building permits issued by the Town of Canmore are a good measurement of the growth of the local economy.



Source: Town of Canmore - Annual Building Permit Report Breakdown Summary

Observations

The value of building permits has remained consistent at or above \$50 million dollars since 1994. The percentage of commercial building permit values has averaged 30% during that time as well.

Interpretation

The Town is continuing to grow and add buildings for both residents and businesses on an annual basis. This continued and consistent growth pattern demonstrates that Canmore has a growing economy. The ratio of residential to commercial building permits indicates that Canmore is making only slight progress towards the goal of a more balanced tax base (that is, a tax base which has a larger percentage of commercial tax assessment, since commercial taxes generally subsidize the residential taxes to maintain and enhance our quality of life).

ENVIRONMENTAL INDICATORS

Trends

The rapid growth in human use and settlement in Canmore has produced associated pressures on the surrounding ecosystem. Decisions are being made on a daily basis that will permanently affect the people, the wildlife and the environment of the Bow Valley. The trend in the past has been for individual agencies to use their own protocols and to work in isolation without control regions or general baseline information. Recently there has been general agreement that ecosystem research in the Bow Valley needs standardized protocols, a landscape approach, coordinating bodies, the inclusion of human use research, control regions where human use is minimal, and baseline monitoring.

In the natural resources section there continues to be a lack of reports from various agencies that allow for consistent comparison to provincial and other standards. Public education is seen as an important factor in helping to decrease consumption, waste and pollution.

In terms of the landscape, wildlife corridors and habitat patches continue to be an important issue in this area. Compliance with the Bow Corridor Ecosystem Advisory Group (BCEAG) criteria for viable wildlife corridors must be proactively encouraged in all areas to help ensure corridor viability in the Canmore region.

With Canmore's growth, traffic continues to increase, as do intersection gridlocks. The Transportation Master Plan addresses many immediate concerns. Progressive solutions may also include encouraging people to decrease the use of their private vehicles, making shopping areas more pedestrian friendly and encouraging convenience-commercial establishments in residential neighbourhoods.

In 1999 the Town of Canmore adopted an Environmental Strategy as one of its six core strategies. The Environmental Strategy is "to protect Canmore's unique environment through innovative initiatives and policies that minimize the negative impacts of human intervention".

The Town of Canmore continues to be involved in a number of progressive environmental initiatives including BCEAG, the Biosphere Institute of the Bow Valley, the protection of wildlife movement corridors and habitat patches, as well as the creation of protective land use districts. The need for public education on wildlife movement corridors and habitat patches remains significant.

Introduction

Monitoring the health of the environment is never simple. The other sections of this report all deal with a single species - humans. This environmental section deals with multiple species and their surrounding environments. 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. They also describe the human use of land as well as land use mitigation throughout the region.

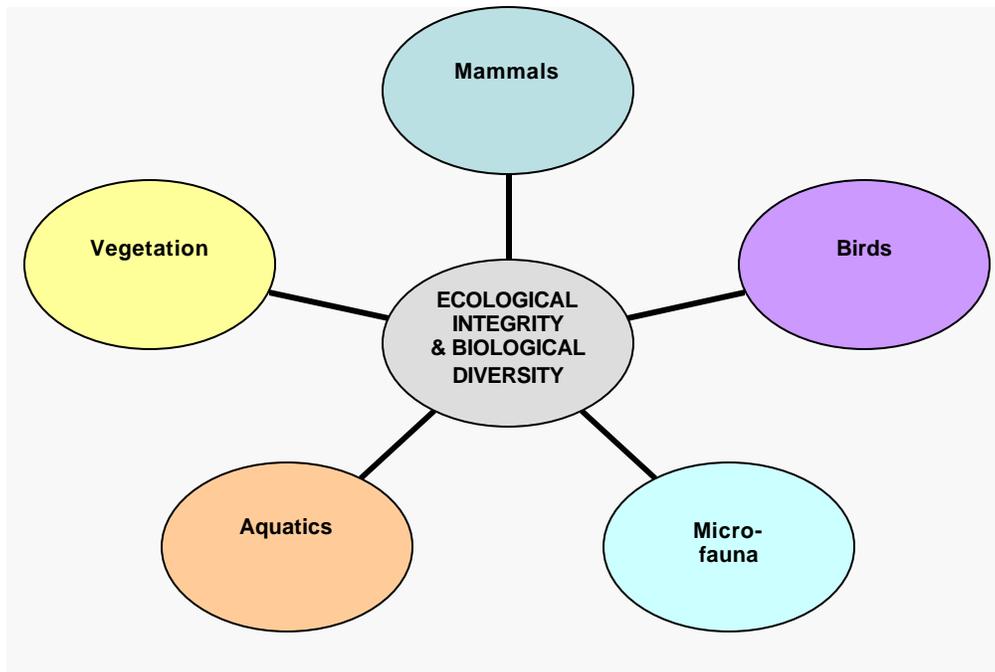
- **Ecological Integrity and Biological Diversity**
 - 1. Mammals, Birds, Microfauna, Aquatics and Vegetation

- **Natural Resources**
 - 2. Air Quality
 - 3. Water Consumption and Quality
 - 4. Sewage
 - 5. Solid Waste
 - 5.1. Human/Wildlife Incidents
 - 6. Recycling
 - 7. Natural Gas Consumption

- **Landscape**
 - 8. Quantitative Land Uses
 - 8.1. Urban Wildland Interface
 - 9. Wildlife Corridors and Habitat Patches
 - 10. Transportation
 - 10.1. Wildlife Highway Mortality

Ecological Integrity & Biological Diversity

1. Mammals, Birds, Microfauna, Aquatics and Vegetation



One of the most fundamental visions for this valley is to protect its ecological integrity and biological diversity. This is of utmost importance to the Canmore community. According to the Vision of Canmore, 2015 in the 1995 Growth Management Strategy Report "...the beauty of the surrounding natural environment is the primary source of economic activity for the community, Canmore is a showcase for the world in how we manage a community in an environmentally sensitive and significant area." Because of the complexity of the ecosystem, there are no single indicators or a simple set of indicators that can accurately assess ecological integrity and/or biological diversity.

Threshold

The goal is the maintenance of the ecological integrity of the Bow River watershed. Ecological integrity is defined as the condition in which all ecosystem structures and functions remain resilient to human-caused and natural stressors and in which all currently existing native species persist in viable populations.

Observations

The Biosphere Institute of the Bow Valley has recently completed its first series of Expert Analysis Workshops. These brought researchers together to identify and prioritize potential research and monitoring projects that are relevant to the ecological integrity of the Bow Valley. Seven productive workshops were held, dividing the ecology of the Bow Valley into the following categories - Vegetation, Mammals, Birds, Microfauna, Aquatics, Quality of Air, Water and Soil, and Socio-economics (as it pertains to ecological integrity). In spite of the differences between workshop topics and participants, the top priorities for each workshop were surprisingly similar. Detailed workshop notes, summaries and conclusions are available at www.biosphereinstitute.org.

Interpretation

The Expert Analysis Workshops suggested the following to improve research and monitoring in this area:

- Standardized protocols should be developed and used valley-wide to improve research quality and to help facilitate comparisons between research projects;
- A landscape approach to research should be employed rather than isolated area research;
- The need for a coordinating body (or coordinating bodies) was also seen as a top priority due to the multi-jurisdictional nature of the resources and the varied research agencies and individuals involved;
- Studies of the direct and indirect effects of human use are an immediate priority;
- Baseline data must be collected in order to determine local trends;
- It is essential to establish control regions where human use is minimal; and
- The establishment of long-term monitoring programs is essential.

Such standardization and coordination would improve the quality of the research and increase research efficiencies.

Along with these general conclusions, specific recommendations were made for each workshop category including many species-specific recommendations.

Source: Biosphere Institute of the Bow Valley

Natural Resources



2. Air Quality

Measuring Air Quality is important because good air quality is essential to good health. Air pollution causes atmospheric changes such as ozone layer depletion and possibly global warming. The major sources of air pollution are industry, automobile emissions, fuel combustion and waste incineration. The most important pollutants are carbon monoxide (CO), sulphur dioxide (SO₂), nitrogen oxides (NO_x), volatile organic compounds (VOC) and particulates (including smoke and dust). There are economic benefits from reducing atmospheric and air emissions such as lower energy costs.

The following includes the latest available reported data on air quality in Canmore. In 2000, passive air quality monitors were set up in Canmore. Monitoring took place between June 2000 and June 2001. A report on these findings will be published later this year.

Survey of Inhalable Particulates in the Town of Canmore March 1 to May 10, 1994

Parameter	Finding
<i>Fine Particulate Loadings</i>	similar to downtown Calgary higher in baseline samples
sulphate, nitrate and calcium ammonium, potassium, sulphate, nitrate	significantly higher in Canmore higher in test samples
<i>Coarse Particulate Loadings</i>	significantly lower than Calgary higher in test samples
ammonium	higher in Canmore
calcium	test samples 13 times higher than baseline
sulphate, nitrate, ammonium, sodium, chloride magnesium, potassium	twice as high in test samples
<i>Median Particulate Loadings</i>	3 times lower than Calgary
fine	test samples were 2/3 of baseline
coarse	test samples were 3 times of baseline
<i>PAHs</i>	generally higher in baseline samples
fluoranthene, phenanthrene	higher than Calgary
fluoranthene	almost 3 times higher in test samples
naphthalene, anthracene	higher in test samples

Note: *Baseline samples* - collected March 1-13 to determine a representative baseline for reference. *Test samples* - collected after March 13 when wind directions from east-southeast, southeast or south-southeast were reported.

Exshaw: Feb. to Oct. 1993

Parameter	Observation
SO ₂ and NO ₂	well below AEP guidelines
Total Suspended Particulates	exceeded AEP guidelines 67% of the time
Particulate Sulphate	relatively high concentrations in TSP samples
Ammonium	average concentration higher than in Calgary
Ratio of NO to NO ₂	greater than other Alberta monitoring stations
Sulphates	average concentrations twice that of other Alberta monitoring stations
Nitrates	average concentrations lower than other Alberta monitoring stations
Chloride	one sample greater than Calgary average

Mobile Monitoring Study of the Bow Corridor March 2 & 12, 1994

Parameter	AEP Guideline	Peak Measurement
Carbon Monoxide	13 ppm	1.9 ppm
Nitrogen Dioxide	0.210 ppm	0.022 ppm
Ozone	0.082 ppm	0.045 ppm
Sulphur Dioxide	0.170 ppm	0.073 ppm
Hydrogen Sulphide	0.010 ppm	0.027 ppm
Total Hydrocarbons		1.75 ppm avg.

Source: Alberta Environment

Threshold

"To ensure no deterioration in levels from 1995 levels".

Source: Growth Management Strategy Report, 1995

Observations

Although Canada's population is 0.5% of the world's population, Canada is responsible for 2% of global greenhouse gas emissions. The Commission for Environmental Cooperation released a report showing that in 1995 Alberta was second worst province for producing air pollution in Canada.

Source: Canadian Geographic May/June 1998.

The Survey of Inhalable Particulates in Canmore found ...

- Concentrations of inhalable particulates in Canmore are less than those in downtown Calgary for most ions.
- Fine sulphate, fine nitrate, fine calcium, and coarse ammonium had significantly higher values in the Canmore samples than Calgary downtown samples.
- Concentrations of many ions, especially those in the coarse fraction, were higher with more frequent winds with a southeast component.
- Fluoranthene, naphthalene and anthracene were the only PAHs that recorded higher median values when winds from the southeast were more frequent.

Interpretation

Higher ion concentrations were found when the winds were from the Southeast. This implies that some of these compounds may originate southeast of Canmore, in the direction of Exshaw.

There are many natural particulate sources in the Bow Corridor. However, there are also sources such as cement manufacturing, magnesium oxide production, vehicle exhaust from highways and smoke from recreational wood burning. In Canmore, sulphate, nitrate, ammonium and potassium in the fine fraction are likely the result of industrial combustion processes, vehicle exhaust or wood smoke. Wind blown dust from natural sources or from industrial sources is the most probable source of calcium, sulphate, nitrate, ammonium, sodium chloride, magnesium, and potassium in the coarse fraction. Wood smoke is also a possible source of some of these ions.

The major sources of Polycyclic Aromatic Hydrocarbons (PAHs) are combustion processes. Recreational wood burning and diesel exhaust emissions are the most common sources of these PAHs. Industrial processes may also contain some of these PAHs

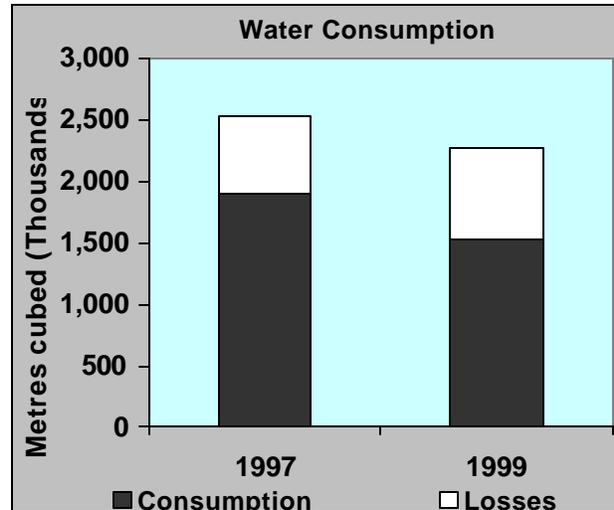
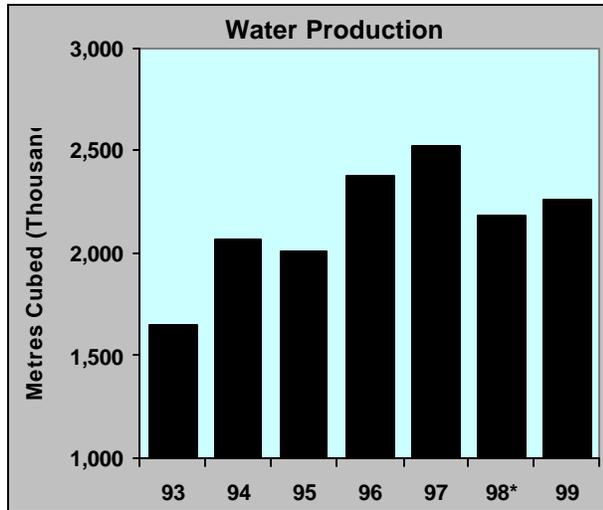
Source: Alberta Environment - Air Quality Survey of Inhalable Particulates in the Town of Canmore, 1995.

Education programs raise public awareness of the personal choices that can improve air quality. Promoting alternate forms of transportation and applying land use planning techniques that increase the greening of the town are some of the ways to reduce air pollution and its impacts. Canmore's population has increased by over 50% since 1994 when this report was done. New data from the studies done in 2000 and 2001 will show if there have been changes in the air quality over time.

3. Water Consumption and Quality

This indicator measures the amount of water produced, used and lost by the community. Since water is a precious natural resource and its production is expensive, monitoring its use, encouraging conservation and minimizing losses are all valuable to the community.

Drinking water quality data reporting is currently under review to facilitate public interpretation and will be included in next year's report.



* = to October Source: Epcor Services

Observations

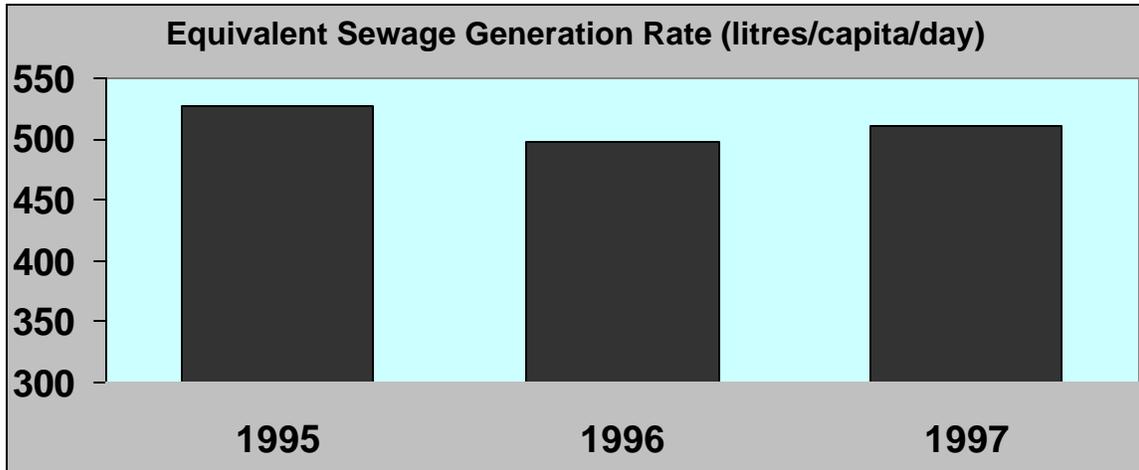
1. In 1999 water losses were 32% of production.
2. Water production increased by 37% between 1993 and 1999. The permanent population increased by 54%.
3. During the peak summer tourist months, areas such as Restwell Trailer Park and Harvie Heights are approaching maximum capacity.

Interpretation

Water losses are caused by leakage, unmetered use and theoretical losses due to metering inaccuracies. A realistic objective for water loss is 15%; further study by Epcor is underway. The adoption of water conservation methods would result in financial benefits to the residents and businesses. Water metering, which began in 1997, is a good incentive to reduce unnecessary water consumption and saves on water production and treatment operations.

4. Sewage

It is important to monitor sewage to ensure that current operations meet provincial standards and that capacity will meet anticipated future needs.



Source: Town of Canmore 1997 Annual Wastewater Report

Observations

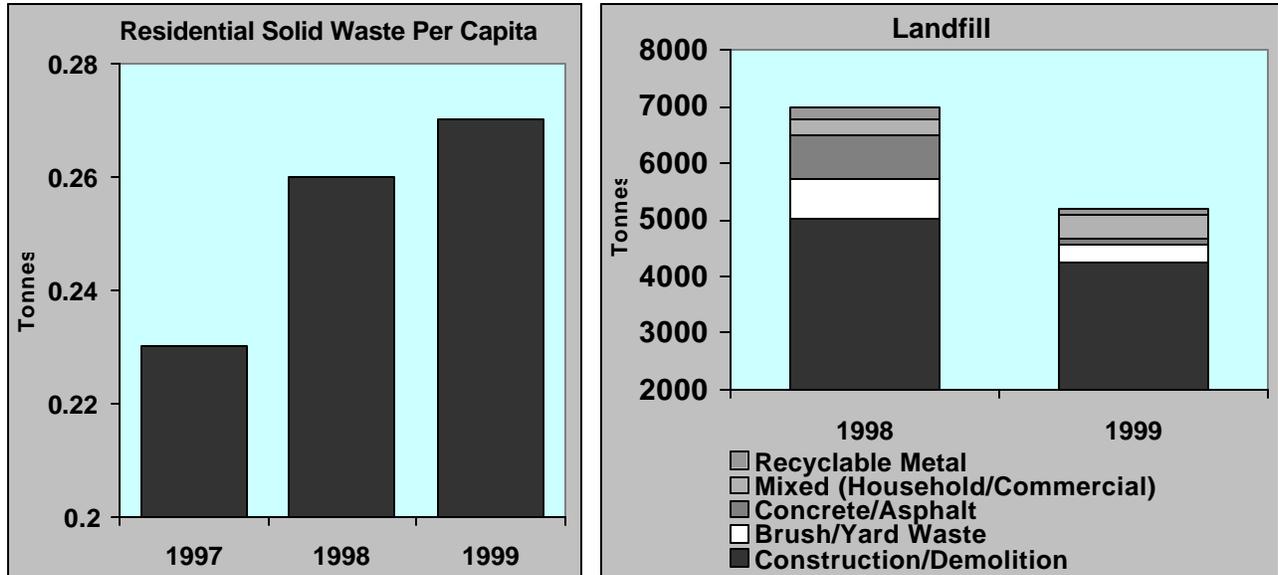
1. Canmore's new sewage treatment plant, one of the most advanced in Canada, has been operational since the fall of 1996.
2. The design meets Provincial standards and guidelines to date.
3. Wastewater flow volumes are much lower than projected.
4. Any operational violations are reported to Alberta Environmental Protection monthly.
5. Biosolids produced in the sewage treatment process are transported to Medicine Hat.

Interpretation

Due to the lower than projected wastewater flow volumes per capita, the plant will likely serve a population of 15,000 (instead of 12,500)

5. Solid Waste

It is important to monitor residential waste to determine trends, set standards and goals, and assess the need for and the effectiveness of waste management and reduction strategies.



Source: Town of Canmore Solid Waste Services

Observations

Residential solid waste per capita increased between 1997 and 1999. The amount of waste going to the landfill decreased between 1998 and 1999.

In 1999, Solid Waste Services experienced the following highlights:

- The implementation of a complete bear proof waste handling system.
- An additional Toxic Round-up event.
- Reinstatement of Large Item Clean-up for Spring and Fall.

For 2000, Solid Waste Services implemented:

- A Leaf and Yard Waste collection (it is estimated this waste comprises 25% of waste by weight or \$20,000).
- Frances Cooke Class III Landfill, operated by the Bow Valley Waste Management Commission.

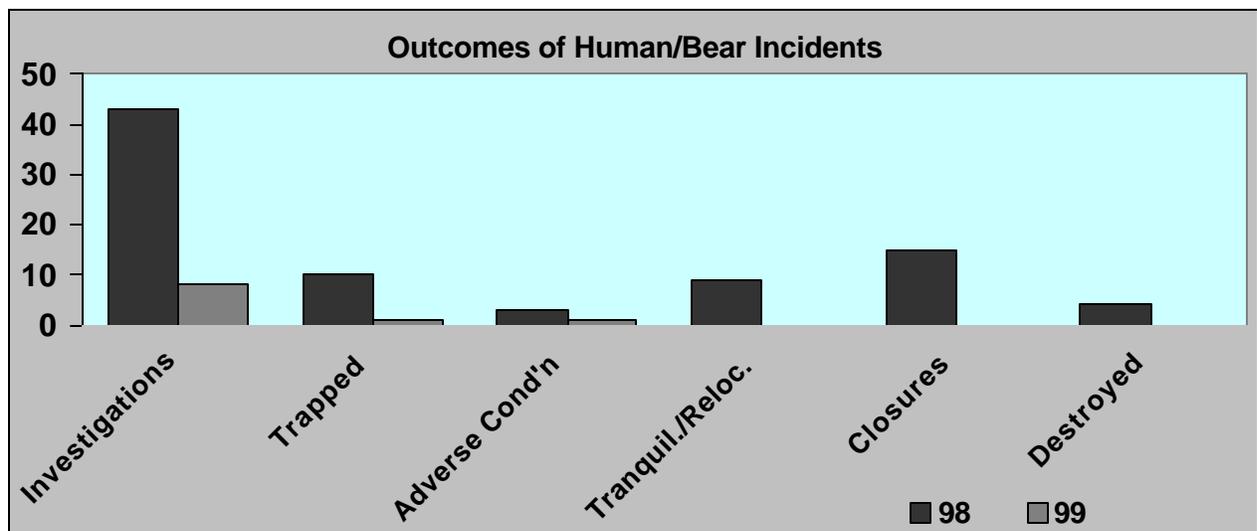
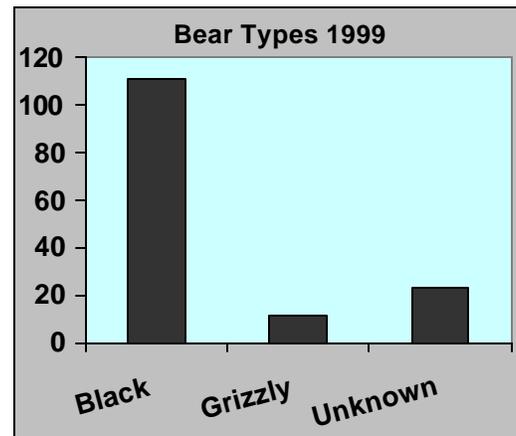
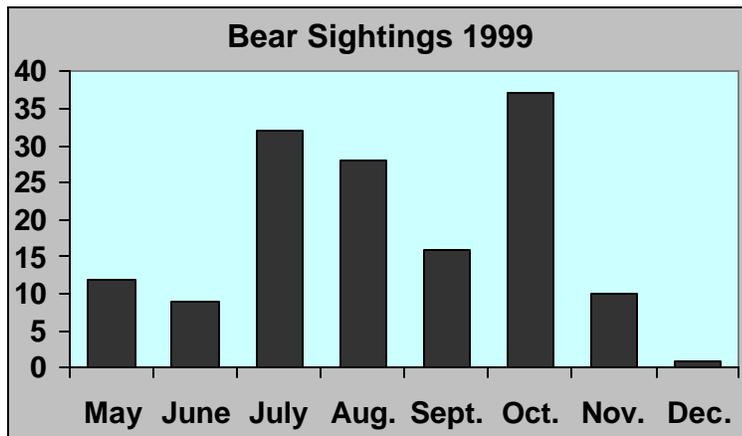
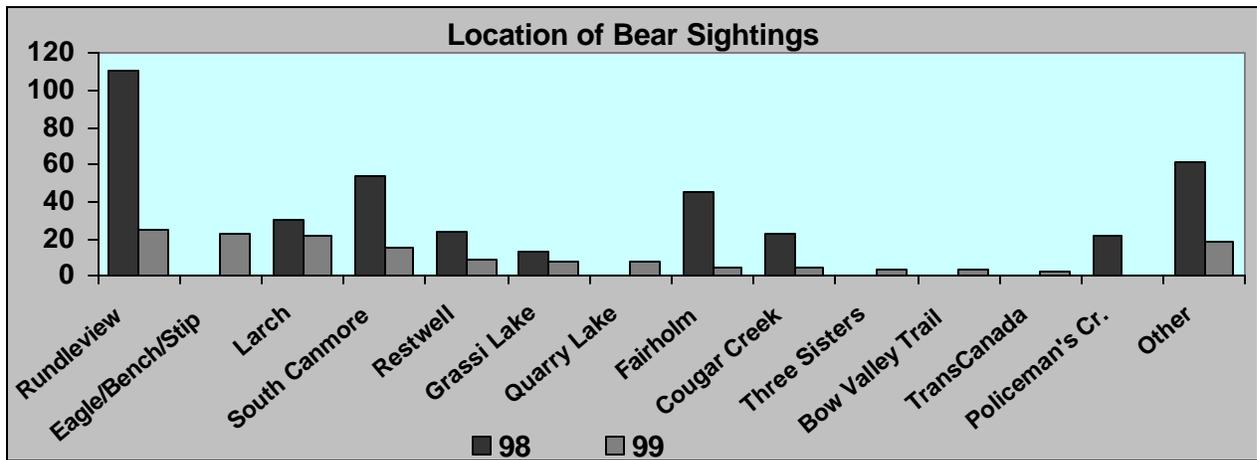
Residential waste per capita calculations do not include the non-permanent population. Commercial waste, excluding construction, is operated privately.

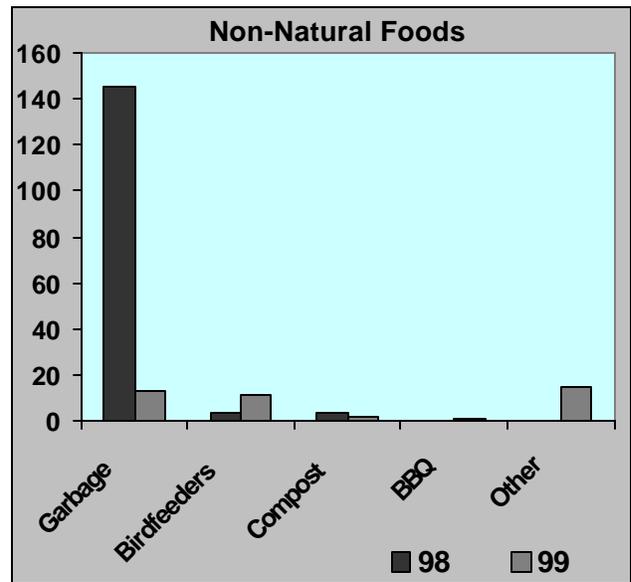
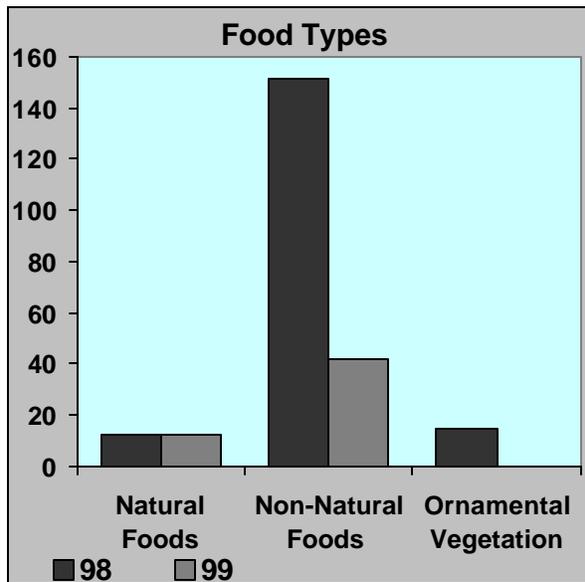
Interpretation

The Town of Canmore has implemented several proactive Solid Waste strategies. The bulk of landfill material is construction/demolition waste, which relates to annual construction industry activity. Increases in per capita residential solid waste warrant further examination. The cost of per household solid waste services increases when cardboard and large items are disposed of in the bear proof bins.

5.1. Human/Wildlife Incidents

By monitoring human/wildlife incidents, we can better determine how to lessen the impacts of development in Canmore.





Source: Alberta Environment

Observations

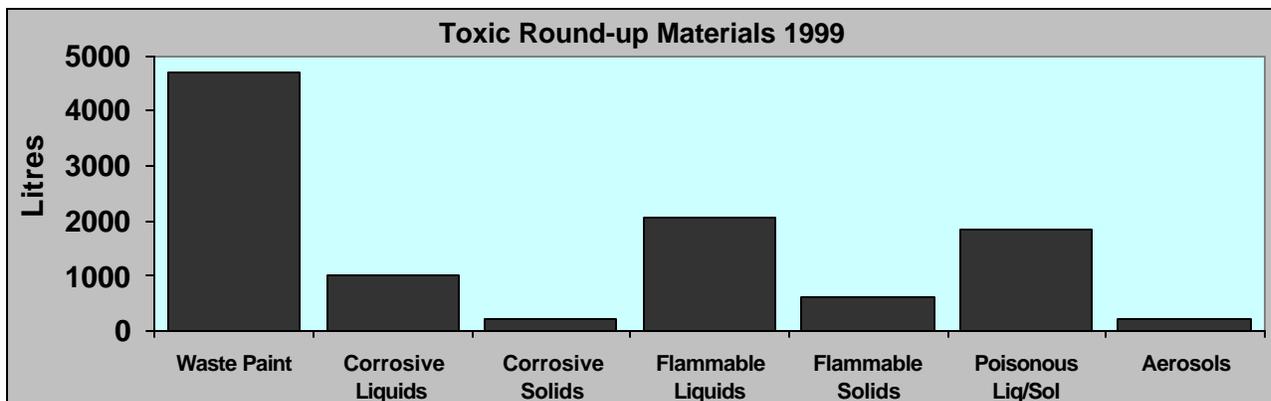
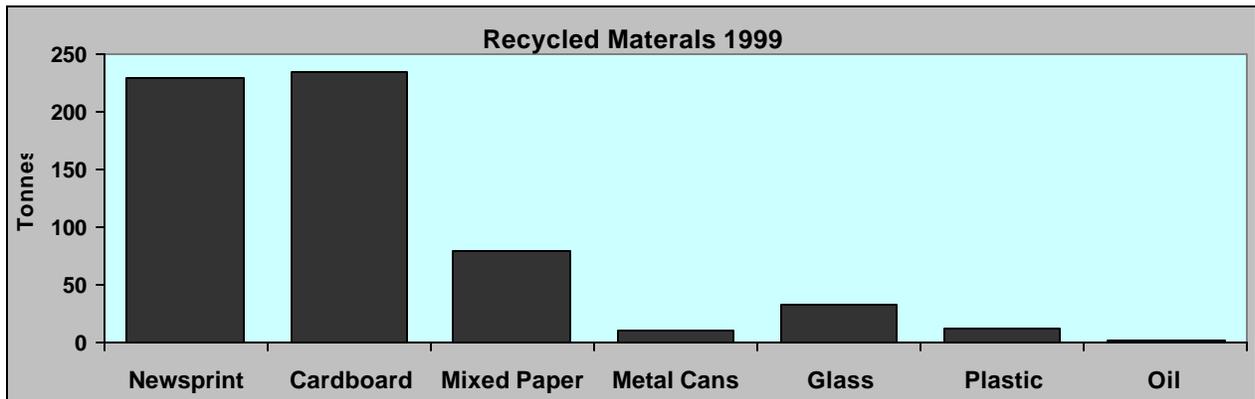
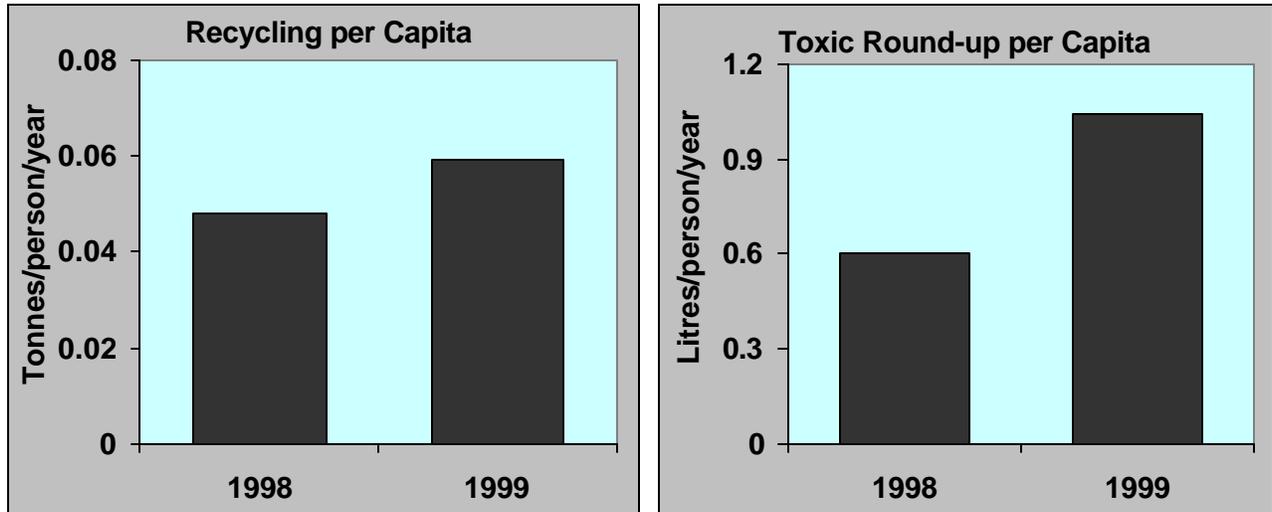
In 1999, the number of bear sightings reported (145) were less than half of what they were in 1998 (382). The majority were in the subdivisions of Rundleview, Larch, South Canmore and on the north side of the Trans Canada Highway in Eagle Terrace, Benchlands, Silvertip and Elk Run. Coinciding with fewer sightings, there were also far fewer investigations in 1999. Four bears were destroyed in 1998; no bears were destroyed in 1999. Of the 151 non-natural foods that were associated with bear incidents in 1998, 145 were garbage, 3 were bird feeders and 3 were compost.

Interpretation

Garbage was by far the largest attractant for bears. In May 1999 Canmore eliminated curbside garbage pickup, replacing it with neighborhood animal proof garbage bins. Since then there has been a significant decrease in bear incidents.

6. Recycling

This indicator monitors the material collected at the Town of Canmore's Recycling Depots and the toxic material collected during the Town of Canmore's Toxic Round-ups. The recycled material collected by private companies is not included in this report.



Source: Town of Canmore Solid Waste Services Report 1999.

Observations

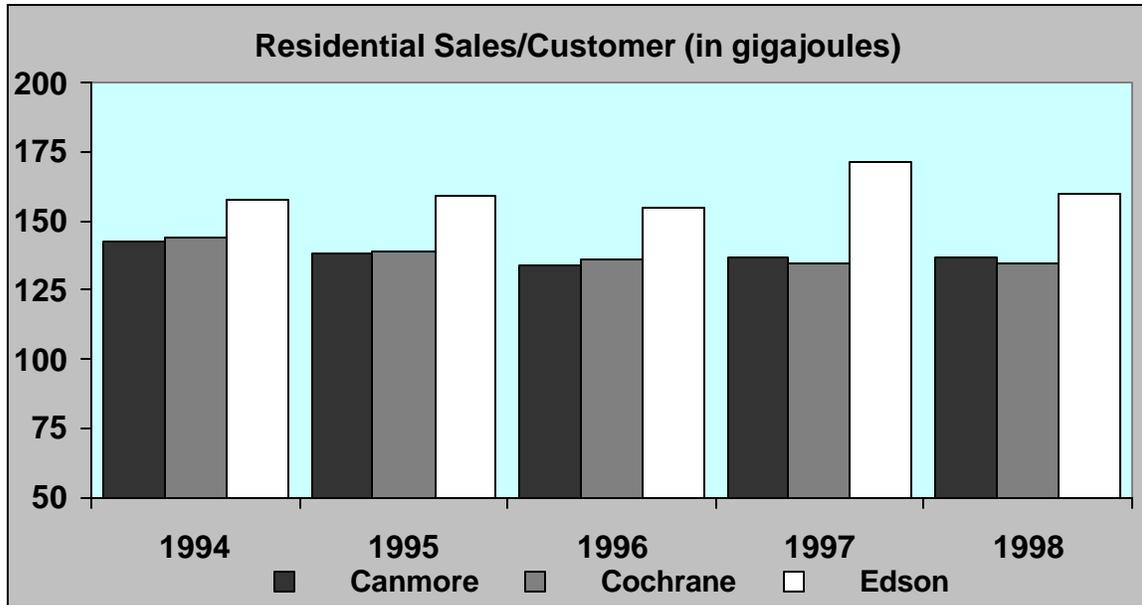
1. Both the materials recycled and the amount of hazardous materials collected increased from 1998 to 1999. In September 2000, all plastics with a recyclable symbol (except plastic bags) became recyclable.
2. There is no information for commercial waste as this is a private contract between the business and the waste hauling company.
3. Canmore's privately run beverage container return depot also helps to reduce waste. Citizens are encouraged to use it through refunds.

Interpretation

1. The price for recyclables varies greatly with the market. Since the market for newsprint and cardboard is better than mixed paper, it is important to separate recyclables.
2. Recycling numbers should relate back to information on waste during this same period. Increased per capita recycling and decreased waste is the preferred trend. Increased per capita recycling and increased waste suggests increased consumption.
3. Toxic Round-ups help to ensure the proper disposal of hazardous materials. Starting in 1999, Canmore began holding a second Toxic Round-up in the fall. This significantly increased the amount of material collected, thus minimizing improper disposal hazards.
4. Setting solid waste and recycling goals, gathering comparative statistics, and including recycling information from private companies would enhance future data gathering.

7. Natural Gas Consumption

Natural gas is a non-renewable energy resource. Monitoring its use is important to the environment and sustainability.



Source: Atco Gas

Observations

There has been a reduction in residential natural gas consumption per customer in Canmore for the years reported. In comparison to other Alberta communities, Canmore's use remains similar to Cochrane's levels and is consistently lower than Edson's use per customer.

Interpretation

Public education on energy conservation can further reduce levels of per capita energy consumption. Pembina Institute's Eco-Efficient Communities Initiative for electricity and gas efficiency is an example of such a program.

Landscape



8. Quantitative Land Uses

Land in the municipality of Canmore is divided into districts (i.e. residential, commercial), each with a particular purpose. Canmore's Land Use Bylaw document provides detailed information on the purpose of all land use districts and their uses. Quantifying the land uses and tracking them over time helps to ensure there is adequate land for the purposes needed.

Public Parks & Playgrounds

As of May 1999 the Town of Canmore has:

24	hectares of parks
34	park areas
5	ball diamonds
2	soccer fields
4	tennis courts
14	playground areas with structures
4	outdoor ice surfaces
3	outdoor washrooms
1	outhouse facility
1	cemetery

Source: Town of Canmore Department of Parks and Recreation

Trail Systems

As of May 1999 there were 34 km of trails including bridges, steps and boardwalks. Public Trails within the residential limits of the Town of Canmore have been mapped as part of the 2001 Master Transportation Plan. Public trails outside the residential areas but within the boundary of the Town of Canmore have been mapped as part of the BCEAG's Guidelines for Human Use within Wildlife Corridors and Habitat Patches since they occur primarily within Wildlife Corridors.

Source: BCEAG Guidelines for Human Use within Wildlife Corridors and Habitat Patches in the Bow Valley, 1999

Non-Developable Lands

During the development of the new Land Use Bylaw, several new Land Use Districts have been created:

- **Wildlands Conservation District (WC)**

The purpose of the Wildlands Conservation District is to designate areas for the protection, conservation and enhancement of the environment including biological diversity, protection, conservation and enhancement of natural scenic or aesthetic values and where consistent with either of the above, for low-impact recreational, open space or environmental educational use or use for research for scientific studies of natural ecosystems. Examples of the Wildlands Conservation District are areas north of the Silvertip Development and south of the Three Sisters Development.

- **Environmental District (ED)**

The purpose of the Environmental District is to identify and protect publicly owned lands to be left in their natural state. The majority of lands in this District are either "Environmental Reserve" or "Municipal Reserve" parcels within or adjacent to relatively undisturbed or park-like lands. Lands designated Environmental District are generally areas too steep or with too high a water table to allow development. Examples of Environmental District are some of the natural areas along Spring Creek and the bluffs along Benchlands Trail.

- **Natural Park District (NP)**

The purpose of the Natural Park District is to protect open spaces, which are primarily in a natural or natural-appearing condition for the purpose of wildlife movement areas and for recreation uses which do not require modifications to existing vegetation or terrain. Uses existing in this district prior to the new bylaw are allowed to continue. Quarry Lake is an example of the Natural Park District.

Source: Town of Canmore Land Use Bylaw 1999

Observations

This information on Parks, Trails and Non-Developable Lands begins the work of quantifying the various land uses in Canmore. BCEAG has produced recommendations including permanent trail closure, seasonal closure and re-routing of trails to accommodate wildlife movement patterns.

Interpretation

It is important to collect quantifiable data for all land uses in order to provide a base of information which can be used to make decisions about land use changes in the future. Maps using the same scale should accompany future reports.

8.1. Urban Wildland Interface

It is important to minimize the risk of a forest fire affecting urban areas in the Bow Valley. The objectives of the Urban Wildlife Interface Project are (1) to identify high fire hazard areas in the Bow Valley and (2) to begin a fuel hazard reduction program in selected areas.

Observations

A pilot wildfire hazard project of 28 hectares was initiated in the fall of 1998 near Harvie Heights. A BCEAG report has been completed and has been presented to the Councils of the Town of Canmore and the M.D. of Bighorn.

Source: Bow Corridor Ecosystem Advisory Group: Project Summary and Updates - Fall 2000

9. Wildlife Movement Corridors and Habitat Patches

Wildlife Movement Corridors and Habitat Patches are essential to reduce the impact of development on wildlife, human/wildlife conflicts and allow for movement through the Bow Valley. The Vision of Canmore, 2015 states: "a system of environmentally sensitive areas including wildlife corridors has been established and is actively preserved and protected".

Source: Growth Management Strategy Report 1995

Land Use Districts related to Wildlife Movement Corridors and Habitat Patches

Wildlife Movement Corridors and Habitat Patches on public undeveloped lands within the Town of Canmore have generally been given the land use designation of Wildlands Conservation (WC), Environmental District (ED) or Natural Park District (NP). Wildlife Movement Corridors and Habitat Patches under review, differing from the above districts or not meeting the guidelines are noted as follows:

1. Wildlife Corridors west of the Silvertip Development to Harvie Heights(Area No. 3) are under further review.
2. The Wildlife Corridor in the Rundle Forebay(Area No. 1) is one of the areas requiring further review since wildlife movement is obstructed by a hydro electric dam.
3. The majority of Wildlife Corridors on Three Sisters Resorts property are designated Special Recreation District (R). This is the designation the lands had been given when they were part of the Municipal District of Bighorn No. 8, prior to their annexation to the Town of Canmore. This Special Recreation District has permitted and discretionary uses, including golf courses, clubhouses, public or quasi-public buildings, accessory uses, utilities and services. The 1992 Natural Resources Conservation Board (NRCB) decision affects any development on the Three Sisters Resorts property.
4. The area north of Wind Valley at Deadman's Flats(Area No.4) is also under further review.

Areas of Wildlife Movement and Habitat in the Bow Valley also occur outside the boundary of the Town of Canmore in the Municipal District of Bighorn No. 8, the Kananaskis Improvement District and Banff National Park.

Threshold

Minimum requirements for functional corridors have been established by the Bow Corridor Ecosystem Advisory Group (BCEAG) in their documents " Wildlife Corridor and Habitat Patch Guidelines for the Bow Valley" and BCEAG "Guidelines for Human Use with Wildlife Corridors and Habitat Patches In the Bow Valley (Banff Park to Seebe)".

Observations

The Canmore Land Use Bylaw designates land uses for the preservation of Wildlife Corridors and Habitat Patches. The BCEAG Wildlife Corridor and Habitat Patch Guidelines provide the framework for Corridors (width, vegetation, etc.), and the Guidelines for Human Use with Wildlife Corridors and Habitat Patches recommend trail changes and public education to protect the Corridors.

Interpretation

Progress has been made with the establishment of land use districts for the preservation of Wildlife Corridors and Habitat Patches. Corridors must be identified on the ground and the process of public education begun. Compliance with the BCEAG criteria must be proactively encouraged in all areas to ensure corridor viability.

Wildlife Movement Corridors and Habitat Patches also affect areas outside the Town of Canmore. It is important that the Bow Corridor Ecosystem Advisory Group (BCEAG), an inter-municipal organization, oversees them.

BCEAG is also producing two other documents: Education and Implementation Recommendations for Managing Human Use within Wildlife Corridors and Habitat Patches, and Wildlife and Human Use Monitoring Recommendations for the Bow Valley.

Source: Town of Canmore Land Use Bylaw 1999, Bow Corridor Ecosystem Advisory Group (BCEAG) "Wildlife Corridor and Habitat Patch Guidelines for the Bow Valley" and BCEAG "Guidelines for Human Use with Wildlife Corridors and Habitat Patches In the Bow Valley (Banff Park to Seebe)".

10. Transportation

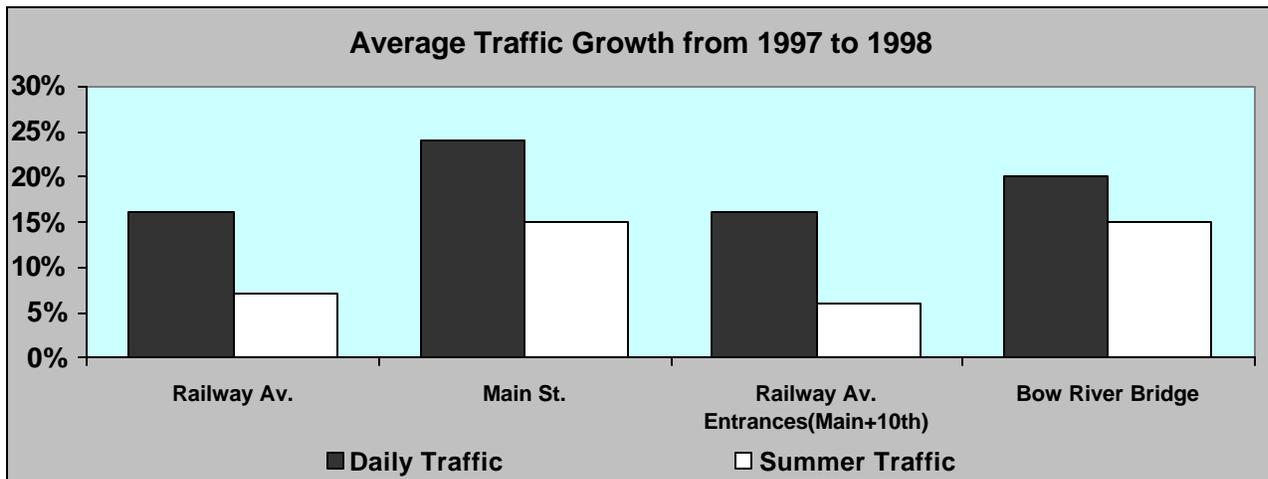
Traffic flows and intensities have an impact on the community's quality of life, noise and pollution levels. It is important to monitor them in order to determine the need and timing for changes such as traffic lights, parking, bicycle paths, public transportation, lane expansion and strategies to minimize emissions.

Level of Service of Major Intersections

Major Intersections	1997	1998	<u>Level of Service (LOS)</u>	
Main St. & 6th Av.	F	F	A	Primarily free-flow conditions
Main St. & 7th Av.	D	F	B	Reasonable free-flow conditions
Main St. & 8th Av.	E	F	C	Stable operating conditions
Bow River Bridge	D	E	D	Bordering on unstable flow --- <i>Design Capacity</i> ---
			E	Unstable flow
			F	Gridlock

Source: Town of Canmore 1998 Transportation Study

Traffic Growth



Source: Town of Canmore 1998 Transportation Study

Threshold

Guideline: The fourth of six core strategies developed and adopted by Canmore Town Council in 1999, reflecting the vision for the Town, reads "Transportation – to create transportation options that encourage alternatives to the private automobile and creatively address the needs of vehicular traffic."

Observations

In August 2001, a new Transportation Master Plan was approved by Canmore Town Council. It makes recommendations under five headings – Traffic and Roads, Parking, Transit, Non-motorized Modes, and Goods Movement.

These recommendations ...

- address traffic congestion mainly through lane dedication and expansion, traffic signals, and bridge widening;
- meet parking needs mostly through adjustments to on-street parking, increased enforcement, and the development of new facilities in the long term;
- suggest the development of a local transit system and provide interim strategies like taxi subsidies for special needs, a Handibus service and structured carpooling;
- deal with the need to encourage non-motorized forms of transport mostly with modifications to railway, bridge and highway crossings, trail improvements, sidewalk construction and increased accommodation of bicycles and pedestrians; and
- improve goods movement largely through truck route modifications, encouraging off-hour deliveries, and reviewing design standards for commercial and industrial land.

Source: Town of Canmore 2001 Transportation Master Plan Executive Summary

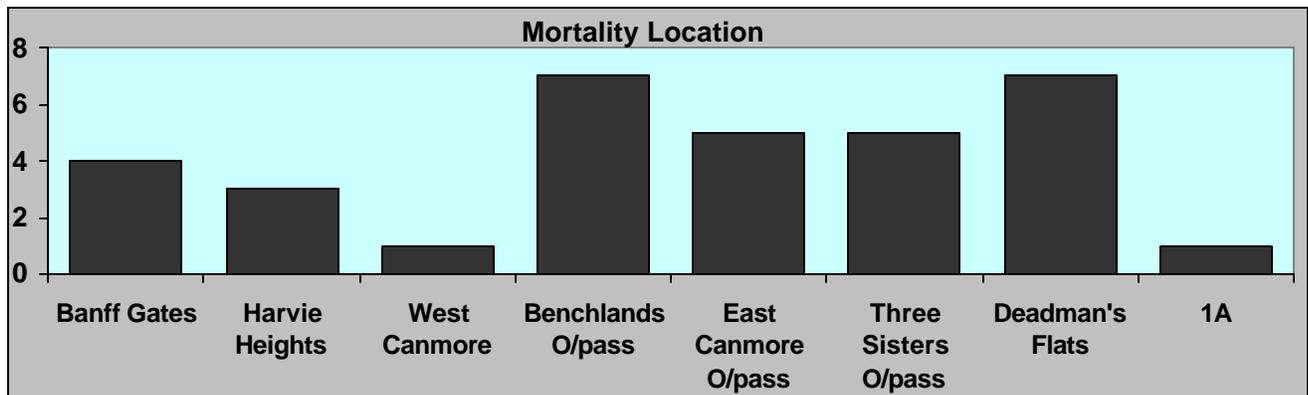
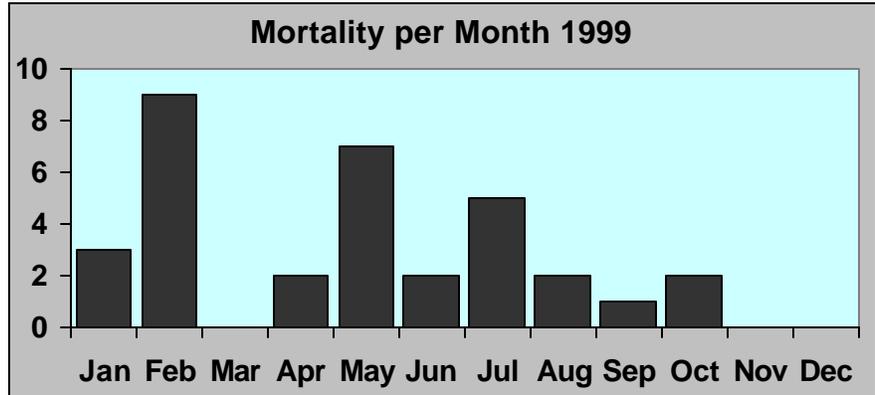
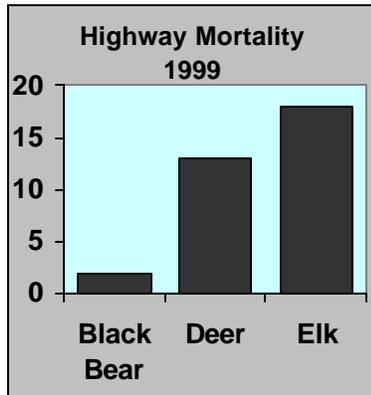
Interpretation

The Transportation Master Plan addresses the immediate concerns of Canmore with respect to growth related issues and improving traffic flows. It also provides transportation options through trail improvements and transit. However, there still appears to be room for more creative initiatives that would encourage and provide incentives for people not to use their private vehicles and make shopping areas more pedestrian friendly (increasing community health, reducing pollution and improving downtown aesthetics). In addition, a key element of the 1995 Growth Management Strategy recommendations to reduce vehicle use was to encourage the development of convenience-commercial establishments in residential neighbourhoods. Despite appropriate zoning, the development of these areas has been slow to materialize (e.g. in Silvertip, Eagle Terrace and Three Sisters).

Vehicles were counted in the 1995 census. Counting them again in 2002 will show whether there has been a per capita increase. This information would assist the planning process.

10.1 Wildlife Highway Mortality

The Trans Canada Highway dissects the valley floor of Canmore. As the number of vehicles on the highways in Canmore grows and changes due to population and commerce, it is possible for more animals to be killed. Monitoring highway mortality allows us to make informed decisions about any changes in speed limits, signage, fencing, and underpasses or overpasses needed in order to safely accommodate animal movement across the valley.



Area: western boundary - Banff Park gates, eastern boundary - Alpine Club and Deadman's Flats
 Source: Alberta Environment

Observations

Of the animals recorded, the majority of those killed were elk. The area with the most mortality was from the Benchlands Trail Overpass in central Canmore to Deadman's Flats. The highest months for highway mortality were February, May and July. Monitoring of animals using the new Stewart Creek Animal Underpass is underway.

Interpretation

It is important to continue to collect this data annually, so that interpretations can be made. It is hoped the fencing of the Trans Canada Highway will decrease the highway mortality in the area east of Canmore. Fencing, however, may also result in increased fragmentation of wildlife populations.

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