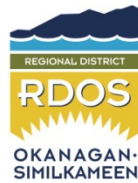


South Okanagan Regional Growth Strategy

2006 Baseline Report - FINAL

Prepared for:
Regional District of Okanagan-Similkameen



Prepared by:



October 2008

Indicator Highlights

The Regional District of Okanagan has designed a monitoring program to track the implementation of the South Okanagan Regional Growth Strategy (RGS). The monitoring program also provides useful information to take stock of how the region is performing for any subsequent updates or amendments to the RGS.

This is the first monitoring report on the RGS. It establishes the baseline for monitoring various aspects of the RGS. The baseline reporting year is 2006.

The 2006 RGS baseline report contains 30 indicators that are organized into the following eleven categories, representing economic, environmental, governance, human settlement, infrastructure and social health theme areas:

1. Context Indicators - Population Size and Growth
2. Biodiversity and Natural Spaces
3. Agriculture
4. Human Settlement
5. Affordable Housing
6. Transportation
7. Energy Use And Air Quality
8. Water Management
9. Municipal Solid Waste
10. Social, Cultural, Recreational
11. Economic Development

Context: Population Size and Growth

Population drives demand for housing, public services, land, water, energy, and other resources and places pressure on green space and transportation systems.

How are we doing?

Population Size & Growth

- The population in the RGS study area was 66,689 in 2006. The population in the study area has decreased slightly by 0.3% over the last five years from 2001 to 2006. There was however, significant growth in Osoyoos (10.6%) during this period.

The challenge for the RDOS and member municipalities will be to promote complete communities, as the population in the area grows so that the population is well serviced.

Biodiversity and Natural Spaces: Encourage and promote the retention of large rural holdings, open spaces, parks and viewscapes

Greenspace contributes both aesthetic value and environmental services to a community and it is critical for providing wildlife habitat. Parks retained in a natural state and protected areas provide the highest level of protection for wildlife.

How are we doing?

Parks and Protected Areas

- Approximately 16.5% of the RGS land base, or 55,378 ha was located in a park or protected area in 2008.¹

Terrestrial Environmentally Sensitive Areas

- Approximately 12.2% of the RGS study area's designated terrestrial Environmentally Sensitive Areas were protected as parks or other protected areas as of 2005.

In the future, an emphasis should be placed on designating parks or protected areas with high biodiversity.

Agriculture: Protect the agricultural land base and encourage agricultural enterprise

Preservation of land for agriculture is the first and most important step in ensuring the viability of agriculture in the south Okanagan. The provincial government recognizes the importance of agricultural land for food and economic security, and in 1973 established the BC Agricultural Land Reserve (ALR) to protect and maintain the province's agricultural land base.

How are we doing?

Lands in the Agricultural Land Reserve

- Approximately 13% of the land base in RGS study area, or 43,987 ha, was located in the ALR in 2008.²
- Approximately 95% of the RDOS's original Agricultural Land Reserve remains intact. 4,664 hectares of land area have been excluded from the ALR since 1974.³
- In 2006, approximately 25.6 hectares (0.03% of the ALR) were excluded from the RDOS's ALR.

RDOS has been largely successful in protecting the Agricultural Land Reserve but population growth and development will increase pressure to exclude land from the ALR.

Human Settlement & Land Use: Develop a compact urban form and build complete communities

Directing growth to areas which have established services and infrastructure will protect fragile ecosystems and agricultural lands in the south Okanagan. This will contribute to the preservation of rural character and the continuing development of municipalities and primary growth areas. This will add to the long-term sustainability of the region by protecting and enhancing both the natural and the built environments and creating a balance between the two.

¹ GIS data from the RDOS was only available for 2008. Inventories are not currently date stamped.

² Same as above.

³ ALR exclusion data is not currently available for the RGS study area specifically. RDOS data is presented instead until the data for the RGS area is provided by the Agricultural Land Commission.

How are we doing?

Housing unit growth and density

- 76% of dwellings are in municipal boundaries.
- In Summerland, which has established an Urban Growth Area boundary, 52% of dwellings are within the boundary, and 48% of dwellings are outside the boundary.
- Housing density is 3.3 dwelling units per hectare in Penticton, 0.6 in Summerland, 3.8 in Oliver, 2.8 in Osoyoos, and 0.02 in the electoral areas.

Amenity Accessibility

- 69% of dwellings are located within 2km of a community centre and 40% of dwellings in four communities are within one km of a community centre.
- 31% of dwellings are within 400m of parks and playing fields and 13% of dwellings are within 400m of shopping.

The Regional District of Okanagan Similkameen's Regional Growth Strategy for the south Okanagan identifies policies for developing a compact urban form and building complete communities, including concentrating growth in primary (existing urban) areas. By building complete communities – places where we can live, work, shop, and play – we can meet our daily needs closer to home thereby reducing trip distances and reducing overall reliance on the automobile.

Affordable Housing: Improve accessible housing options in the region

It is considered desirable to have a balanced mix of dwellings in a community. From a social perspective, a diversity of housing types suggests greater choice for a variety of lifestyles and budgets and supports improved housing affordability. From an environmental perspective, fostering a greater share of multi-unit dwellings has many advantages over single-family dwellings including energy emissions reduction and maximizing the utility of current and future amenities.

How are we doing?

Residential Housing Mix

- Over 65% of dwelling units are single family dwellings in eight of the nine RGS communities. The exception is the largest urban area in the region; Penticton has 48% of its existing housing stock as single-family dwellings.

Spending on housing

- More than 15% of owner households spent more than 30% of their gross income on housing in 2006.
- More than 30% of renter households spent more than 30% of their gross income on housing in 2006.

The vision developed by South Okanagan residents for the Regional Growth Strategy includes a statement about how “new development is predominantly mixed-use higher density.” In addition, the RGS outlines strategic actions that include increasing accessibility to housing, policy development for non-market housing, the creation of a Regional Housing Society, and encouraging accessible housing development in areas with other supportive services.

Transportation: Increase transportation options, improve transportation efficiency and reduce automobile dependency

Our travel choices have a tremendous impact on the environment. The vast majority of motor vehicles burn non-renewable fossil fuels, producing air emissions and greenhouse gases. A shift towards more sustainable modes of transportation – notably walking, cycling, and public transit – will result in a reduction in fuel consumption, and hence fewer air and greenhouse gas emissions.

How are we doing?

Labour Force Living and Working within the RGS study area

- 50% of the labour force living in municipalities in the RGS study area worked within their community in 2006. Over 15% of the population in the electoral areas worked within their community in 2006.

Commuter Trip Distance

- A shorter median trip distance is supportive of walking and cycling for journey-to-work trips and results in reduced transportation fuel consumption for commuting.
- The median commuter trip distance in Oliver, Osoyoos and Penticton was less than 3 km. Other communities had between a 5-14km median commuter trip distance.

Choice of Transportation Mode for Journey-to-Work Trips

- Residents of the South Okanagan are automobile dependent as approximately 80% of journey-to-work trips were made by drivers or passengers of private vehicles in 2006.

Cycling Infrastructure

- There is currently 405 kilometres of trail that allow cycling as a use in the south Okanagan. These are all multi-user trails.

Several policies in the RGS have been identified to increase transportation options, improve transportation efficiency and reduce automobile dependency.

Energy Use and Air Quality: Reduce contribution to and increase adaptation to climate change and protect regional air quality

Residential building energy consumption shows how much energy residents consume (or conserve). The generation of electricity is associated with environmental impacts to land, air and water. In addition, natural gas is a non-renewable resource and will likely become scarce in the future in continental North America. The generation of hydro-electricity is not generally considered to be a contributor to GHG emissions; however, hydro power projects may be associated with other environmental impacts, such as the physical degradation of land and water resources and wildlife habitat.

Air pollution has been shown to have detrimental effects on human health – particularly to persons with respiratory ailments. Measuring long-term ambient air quality especially ozone and particulate matter helps evaluate the overall exposure of the population to contaminants.

How are we doing?

Residential Building Energy Use

- On average, each person in the the RGS uses 53 GJ/person of energy in their home. This is 50% higher than the BC average (35 GJ/per).

Long-term Air Quality Exceedances

- Long term exceedances of particulate matter standards were 16.08ug/m³, which does not exceed the Canada-wide Standard (CWS) or the proposed provincial objective for BC. The value for ozone was 58 parts per billion (ppb), which also does not exceed the CWS for ground level ozone.

Water Management: Promote water sustainability through conservation and related best practices

In the south Okanagan, water availability is a concern. The RGS indicates that the available water in the Okanagan Basin will be fully allocated in 10 to 15 years, with some streams already fully allocated. With population growth and associated development in the Okanagan, increases in water demand for agriculture, and the potential impacts from climate change there is a potential shortfall in supply relative to demand in the next few decades.

How are we doing?

Water Consumption

- In 2006, municipal water consumption (excluding agriculture) ranged from 231-1,810 litres per capita per day. Water consumption in five out of the eight distribution systems reported was above the average consumption for the rest of the province which is 426 litres per capita per day.

Water Quality

- Water quality in the RGS study area is within established guidelines and standards for drinking water.⁴

Water conservation is one of the easiest and cheapest ways to reduce the volume of wastewater, improve water quality and ensure sufficient water for other uses. Approximately 65% of domestic indoor water use occurs in the bathroom with toilets being the single greatest water user in the home.

Municipal Waste Management: Minimize waste production through education, regulations that promote reduction and recycling programs in the region

Landfilling (or incineration) of waste represents a lost resource. Landfills can also pose an environmental risk through leachate and air emissions if not properly maintained. As more waste is recycled, reused or composted, per capita waste disposed will decrease.

How are we doing?

Residential Solid Waste Disposal

- Per capita garbage disposal at the Campbell Mountain landfill was 767 kg per person in 2006. This landfill accounts for 65% of the population in the RGS study area.
- Waste disposal at the Campbell Mountain landfill is 16%

⁴ Although guidelines and standards are being met, water systems do detect bacteria on occasion but are always normal after resampling.

higher than the BC average.

The promotion of waste reduction and recycling programs will help reduce garbage in landfills.

Social, Cultural and Recreational: Create safe, culturally diverse and healthy communities

Supporting arts, culture, diversity, heritage, and recreation indicates commitment to building community and fostering civic pride. These are important factors for a local government to consider as it contemplates its long-term growth and development.

How are we doing?

Trail Network

- There is a 566-kilometre trail network in the south Okanagan.
- On average throughout the south Okanagan, 27% of the trails are for walking only, while 42% of the trails are for walking and biking.

Crime

- Between 1998 and 2006, crime rates increased in all four policing jurisdictions of the South Okanagan, with slight fluctuations from year to year. Increases ranged from 7-27%.

Government Spending of arts, culture and recreation

- Arts, recreation and culture budgets vary across municipalities. Budget allocations often vary from year to year depending on the capital spending priorities. It is important for municipalities to set aside spending on arts, culture and recreation.

Economic Development: Promote sustainable economic diversification

Communities should be designed for a wide range of ages and income brackets. In addition, establishing a diverse economy is seen as means to increase stability and resilience to economic downturns.

How are we doing?

Labour Force

- In 2006, the labour force had a large proportion of middle-aged people – over 60% of the labour force was over 45 years in the south Okanagan.

Income

- Over 50% of the households in Oliver have incomes less than \$40,000. Forty-eight % of the household incomes in Penticton and 47% of the incomes in Osoyoos were less than \$40,000.
- Income from earnings ranges between 46-76% of resident's income in the study area. Government transfer income ranges from 8-24% and income from other sources, such as retirement investments ranges from 15-30%.

Employment Sectors

- In 2006 the labour force was fairly widely distributed across all employment sectors for most of the municipalities. However, all areas in the study area have a relatively high proportion of employment in the agricultural and other

resources sector, in Electoral Areas A (29%) and C (32%).
dominated by this sector.

A goal of the RGS is to promote economic diversification. Communities in the south Okanagan will need to develop strategies for succession planning such as developing economic strategies that will attract younger people to the area, and focusing on developing particular business sectors that will integrate with the existing economic infrastructure and enhance it.

Future Updates

The next Regional Growth Strategy Performance Indicator report will be prepared and released in 2009. This first Annual Report will present 13 indicators. In 2013 a Five-year report will be released and will incorporate data from the 2011 Census of Canada. This five-year report will contain the full suite of indicators that is presented in this baseline report.

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1 INTRODUCTION

1.1 Background

In 2004, the Regional District Okanagan-Similkameen (RDOS) launched The South Okanagan Regional Growth Strategy (RGS). This a long term commitment to manage growth in the South Okanagan of RDOS.

The RGS applies to the southern most reaches of the Okanagan Valley (see Figure 1 for South Okanagan Regional Growth Study Area) and includes the municipalities of Oliver, Osoyoos, Penticton and Summerland, and rural electoral areas 'A', 'C', 'D', 'E' and 'F'.

As outline in the RGS, the key themes of the long term commitment of the south Okanagan RGS are:

1. **Economy:** promote sustainable economic diversification
2. **Environment:** ensure the health of ecosystems
3. **Governance:** foster inclusive and accountable governance
4. **Human Settlement:** strengthen rural and urban community identity
5. **Infrastructure:** maximize the efficient use of infrastructure
6. **Social Health:** create safe, culturally diverse and healthy communities

In October 2006, the Regional District of Okanagan Similkameen retained The Sheltair Group to select performance measurement indicators and develop a framework to monitor and report on the South Okanagan Regional Growth Strategy. The monitoring program was designed to meet the requirements of the provincial legislation, and allow the Board of Directors, member municipal councils, and federal and provincial partners to track the implementation of the RGS. The monitoring program also provides useful information to take stock of how the region is performing for any subsequent updates or amendments to the RGS.

The selected indicators are based on the RGS themes. A long list of indicators, derived from a literature review of existing or proposed regional growth strategy monitoring programs from regional districts in British Columbia and other indicator programs, was refined by RGS advisory committees, adjusted following public review, and endorsed by the RGS Steering Committee. The indicators are intended to answer these and other questions:

- How fast or slow is the population increasing in the region?
- Where is the population growth and new development going?
- How much of the new growth is located in urban areas vs. rural areas?
- How efficiently is land being used for accommodating growth?
- Is the agricultural resource base being adequately protected?
- How intensely are agricultural areas used?
- How well are sensitive habitats being protected?
- How efficiently are we consuming resources, such as potable water and energy?
- How effective is the region in reducing waste going to the landfills?

- Is drinking water and ambient air quality in the region within levels set by provincial or federal guidelines?
- How diverse is the housing stock in the community?
- Is housing affordability an issue in the region?
- How are we doing in supporting alternative transportation modes and reducing automobile dependence?
- Where do people work in relation to where they live?
- How liveable is the region?
- Do we have enough younger people in the labour force to support a healthy level of economic growth and an aging population?
- How is the economy changing amongst employment in different sectors of the economy?

The development of performance indicators was derived through consultation with the general public, RGS advisory committees and the Inter-governmental Advisory Committee. A total of 80 performance indicators were examined and it was determined that 30 indicators would be used as the primary measure to monitor the effectiveness of the RGS.⁵ The reporting process on these indicators includes:

- Annual RGS Reports that will report and track 13 indicators, and
- 5-Year RGS Reports that will report on all 30 indicators.

This report is the first monitoring report for the South Okanagan RGS and establishes the baseline for monitoring changes in all of the indicators of the strategy.

1.2 Baseline Report Structure

This report is structured into five sections following this introduction.

Section 2 describes indicators in general and their strengths and limitations.

Section 3 presents the monitoring program framework for the RDOS RGS monitoring program and selected set of indicators.

Section 4 presents the baseline for each performance indicators.

Section 5 outlines some of the key findings in the baseline and explains the next steps.

Appendix A contains the Key Facts that accompany the set of performance indicators.

⁵ Three additional indicators were selected during the development of the RGS but were not included in this baseline report. These indicators are: 1) BNS-4: % of urban or agricultural development in land identified as sensitive habitat as identified in Official Community Plans; 2) MSW-2: Municipal liquid waste - wastewater generation rates per year, and 3) ED-5: Trends in tourism i) visits ii) money spent by trend. These indicators will be included in the future performance indicator report updates.

2 PERFORMANCE INDICATORS AND REPORTING GEOGRAPHIES

2.1 Performance Indicator and their Importance in Monitoring

An indicator is a measure that reveals a condition, a trend, or an emerging issue. Its purpose is to reveal the direction the region is moving in. More specifically, indicators can show if the South Okanagan is moving towards meeting the articulated RGS vision and objectives or away from it. Indicators are tools that help track changes over time and are a yardstick for measuring future change relative to a baseline.

Indicators also provide an opportunity to identify and address policy gaps, shortfalls in implementation, or trends that may affect RGS implementation. The communication of indicators and trends help decision makers and residents to see where changes are needed and desired.

Monitoring is a critical activity as it shows changes over time and identifies things that are working (what we should celebrate and protect), and areas where we are not making progress (where we need to direct more resources). Indicators provide feedback on how the community is doing through ongoing monitoring and feedback. Feedback in itself does not facilitate change as it merely indicates past performance. Learning from the feedback is required to allow the community to “correct its course” by modifying and adjusting its actions as it goes forward.

“What gets measured tends to get done. If you don’t measure results, you can’t tell success from failure. If you can’t recognize success, you can’t reward it. If you can’t recognize failure, you can’t learn from it.”

David Osborne and Ted Gaebler (Reinventing Government, 1992) suggesting why indicators are important for making progress.

2.2 What are the Limitations of Indicators?

There are limitations to the use of indicators. A region comprises many subsystems with complex relationships and interdependencies. Indicators can only show one thing within an individual system and therefore are simplified. They do not explain the workings of a system, causality or the reasons for a particular condition or trend. Many of the indicators are too crude to capture any type of site-specific condition or qualitative condition. They also rely on “after-the-fact” information. As such, they are useful for basic information provision, but should be supplemented by observation, studies, survey research, and more detailed assessment and analysis.

Where an indicator is showing a perceived problem, or unintended effect associated with some aspect of the RGS, a more in-depth review or analysis may be warranted to determine why the indicator is responding in a particular direction.

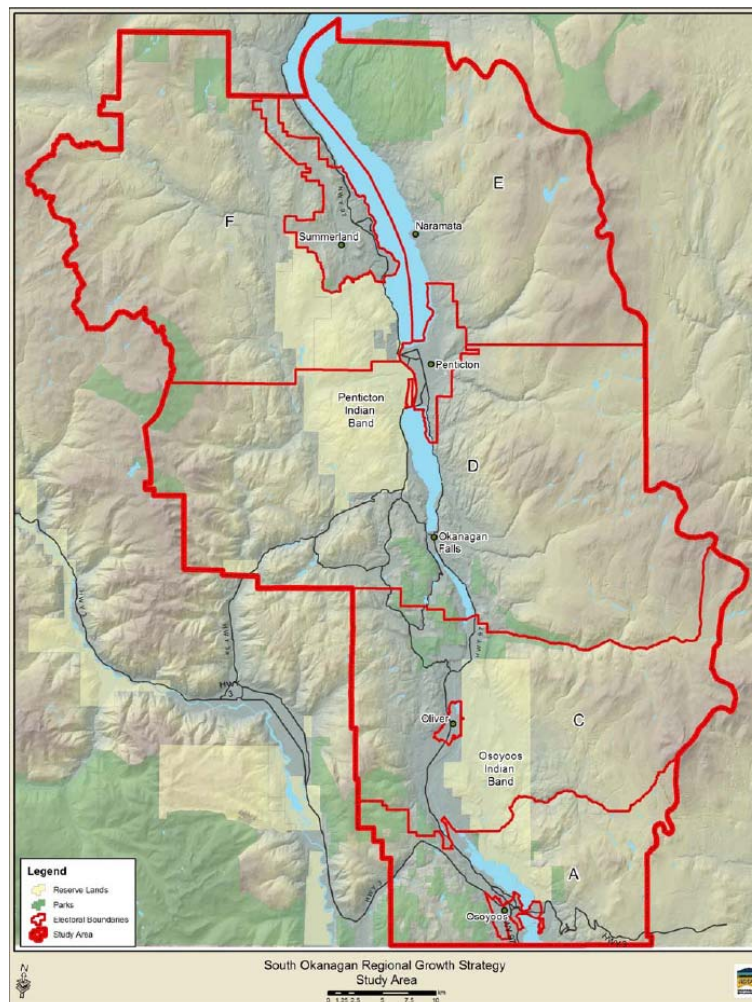
2.3 Reporting Geographies

There are various reporting geographies that are used in the proposed monitoring program. The specific geographic area to use for reporting the indicator results depends on the nature of the indicator and data sources.

Regional District of Okanagan Similkameen – The Regional Growth Strategy only covers the South Okanagan. However, the data for RDOS are included in the Key Facts section for comparison purposes.

South Okanagan - The Regional Growth Strategy covers only a portion of the Regional District of Okanagan-Similkameen. The following areas are included in the definition of the South Okanagan: the municipalities of the City of Penticton, District of Summerland, Town of Oliver, and Town of Osoyoos, and the RDOS electoral areas A, C, D, E, and F (see Figure 1). RDOS Electoral Areas B, G, and H are outside the scope of the RGS as is the Town of Princeton.

Figure 1. Map of the South Okanagan Regional Growth Strategy Area



Source: RDOS

Member Municipalities and Electoral Areas – Where available, the data for many of the indicators are to also be reported at the level of the individual member municipalities and RDOS Electoral Areas.

Census Consolidated Subdivisions - A Census Consolidated Subdivision (CCS) is a grouping of adjacent census subdivisions. The census dictionary indicates that, in general, the smaller, more urban census subdivisions (towns, villages, etc.) are combined with the surrounding, larger, more rural census subdivision, in order to create a geographic level between the census subdivision and the census division. Consolidated Census Subdivisions are to be used for reporting data from the Census of Agriculture in the South Okanagan Regional Growth Strategy Monitoring Program.

Policing Jurisdictions – A policing jurisdiction are the areas where RCMP detachments and municipal police serve. In the study area there are four policing jurisdictions:

- Penticton Municipal, which serves the municipal area,
- Penticton Prov, which serves Kaleden, Naramata, Faulder, Okanagan Falls, Twin Lakes, the Apex Ski Resort and the Penticton Indian Band.
- Summerland Municipal, which serves the municipal area, and
- South Okanagan Prov, which serves Oliver, Osoyoos and the Osoyoos Indian Band and also includes the community of Keremeos, which is outside the RGS area.

3 RGS MONITORING FRAMEWORK AND INDICATORS

3.1 Indicators Selected

Following the indicator selection process, a set of 30 indicators was selected for monitoring the performance of the Regional Growth Strategy.⁶ The indicators are organized by topic areas. These topic areas were derived from the mandatory elements of a regional growth strategy from the *Local Government Act* (i.e. Housing, Transportation, Regional District Services, Parks and Natural Areas, and Economic Development), and the South Okanagan RGS policies and policy areas. The topic areas are based on those in the Regional Growth Strategy but the names have been generalized and have also been disaggregated into a larger number of categories to facilitate presenting the indicators.

The Topic Areas for organizing the indicators are:

- Context
- Biodiversity and Natural Spaces
- Agriculture
- Human Settlement and Land Use
- Affordable Housing
- Transportation
- Energy Use and Air Quality
- Water Management
- Municipal Solid Waste Management
- Social, Cultural, and Recreation
- Economic Development

Each indicator was assigned a code for easy reference. For example, the Municipal Water Consumption indicator is assigned the indicator code W-1. The full list of indicators is presented in Section 4.

3.2 Benchmarks

A benchmark compares an indicator from one community to similar communities, or to other reference points, such as provincial and national comparisons. For many of the indicators selected, benchmark comparisons were researched. Benchmarks provide a powerful context for making future comparisons with the performance of the Regional growth Strategy. Suitable benchmarks for the Regional Growth Strategy include:

⁶ Three additional indicators were selected during the development of the RGS but were not included in this baseline report. These indicators are: 1) BNS-4: % of urban or agricultural development in land identified as sensitive habitat as identified in Official Community Plans; 2) MSW-2: Municipal liquid waste - wastewater generation rates per year, and 3) ED-5: Trends in tourism i) visits ii) money spent by trend. These indicators will be included in the future performance indicator report updates.

- Regional District of the Central Okanagan
- North Okanagan Regional District
- Thompson-Nicola Regional District
- Capital Regional District
- Fraser Valley Regional District
- Greater Vancouver Regional District
- Kelowna CMA
- Victoria CA
- Vernon CA
- Nanaimo CA
- BC average
- Canadian average
- Other comparisons on an indicator by indicator basis

3.3 Key Facts

In addition to the indicators, a Key Facts sheet was prepared. The Key Facts are basic statistics about the South Okanagan Regional Growth Strategy area and provides information that is simpler in nature than an indicator (or may be static and not change over time). The Key Facts are listed in Appendix A.

3.4 Monitoring Program

There are two reporting formats proposed for the RGS Monitoring Program: an Indicator Appendix for the RGS Annual Report, and more detailed 5-year reports.

Table 1 presents the 30 Performance Indicators reported in this Baseline Report. The indicators are organized by topic area and the table outlines which indicators will be tracked annually and which indicators will be reported on every 5 years along with the indicator codes.

This baseline report is the first 5-year report, and includes the full suite of indicators.

Table 1. South Okanagan Regional Growth Strategy Performance Indicators⁷

Topic Area	Indicator	Review Frequency
Population growth	CTX-1: Total Population and annual population growth rate (i) within RGS study area, (ii) by municipality and iii) by rural area	Annual
Biodiversity & Natural Spaces	BNS-1: Annual and cumulative area of parkland and protected areas	Annual
	BNS-2: Percentage of sensitive ecosystems protected or stewarded by general habitat type	5-year
	BNS-3: Percentage of riparian areas protected	5-year
Agriculture	AG-1: Amount of land excluded from Agricultural Land Reserve (a) annually and (b) cumulatively since 1974	Annual
	AG-2: Agricultural Intensity using Gross Farm Receipts Per Ha of Land Farmed	5-year
Human Settlement & Land Use	HS-1: a) Dwelling growth inside and outside municipalities and b) Dwelling growth inside and outside Urban Growth Area boundaries	5-year
	HS-2: Dwelling unit density in urban areas vs. rural areas	5-year
	HS-3: Proximity to services	5-year
Affordable Housing	AH-1: Housing starts by structural type	Annual
	AH-2: Mix of total dwelling units by structural type	5-year
	AH-3: % of owner households spending 30% or more of gross income on housing	5-year
	AH-4: % of renter households spending 30% or more of gross income on housing	5-year
Transportation	T-1: % of labour force living and working in the same municipality	5-year
	T-2: Median commuter trip distance (km)	5-year
	T-3: (i) Region-wide and (ii) municipal Modal Share for Journey-to-Work Trips	5-year
	T-4: Length of cycling infrastructure by facility type (multi-user path, bike lane, signed bike route)	5-year
Energy Use and Air Quality	EE-1: a) Total and per capita energy consumption for residential buildings	5-year
	EE-2: Air Quality Exceedances of Canada-Wide Standards (for PM 2.5 & Ground -level Ozone)	Annual
Water Management	W-1: Municipal Water Consumption	Annual
	W-2: Percentage of water distribution system samples with a positive bacterial detection (total coliforms)	Annual
	W-3: Percentage of water distribution system sample test results exceeding selected Drinking Water Quality Guidelines	Annual
Municipal Solid Waste	MSW-1: Municipal solid waste disposed per capita	Annual
Social, Cultural, and Recreational	SCR-1: Length of trails	Annual
	SCR-2: Crime rates	Annual
	SCR-3: Percentage of total budget committed by municipalities to arts, culture, diversity, heritage, and recreation	Annual
Economic	ED-1: Percentage breakdown of labour force by age cohort	5-year

⁷ The three additional indicators not included in this baseline report (BNS-4, MSW-2 and ED-5) will be reported in the 5-year reports.

Topic Area	Indicator	Review Frequency
Development	ED-2: Percentage household income distribution	5-year
	ED-3: Percentage breakdown of total income by source	Annual
	ED-4: Total employment by sector	5-year

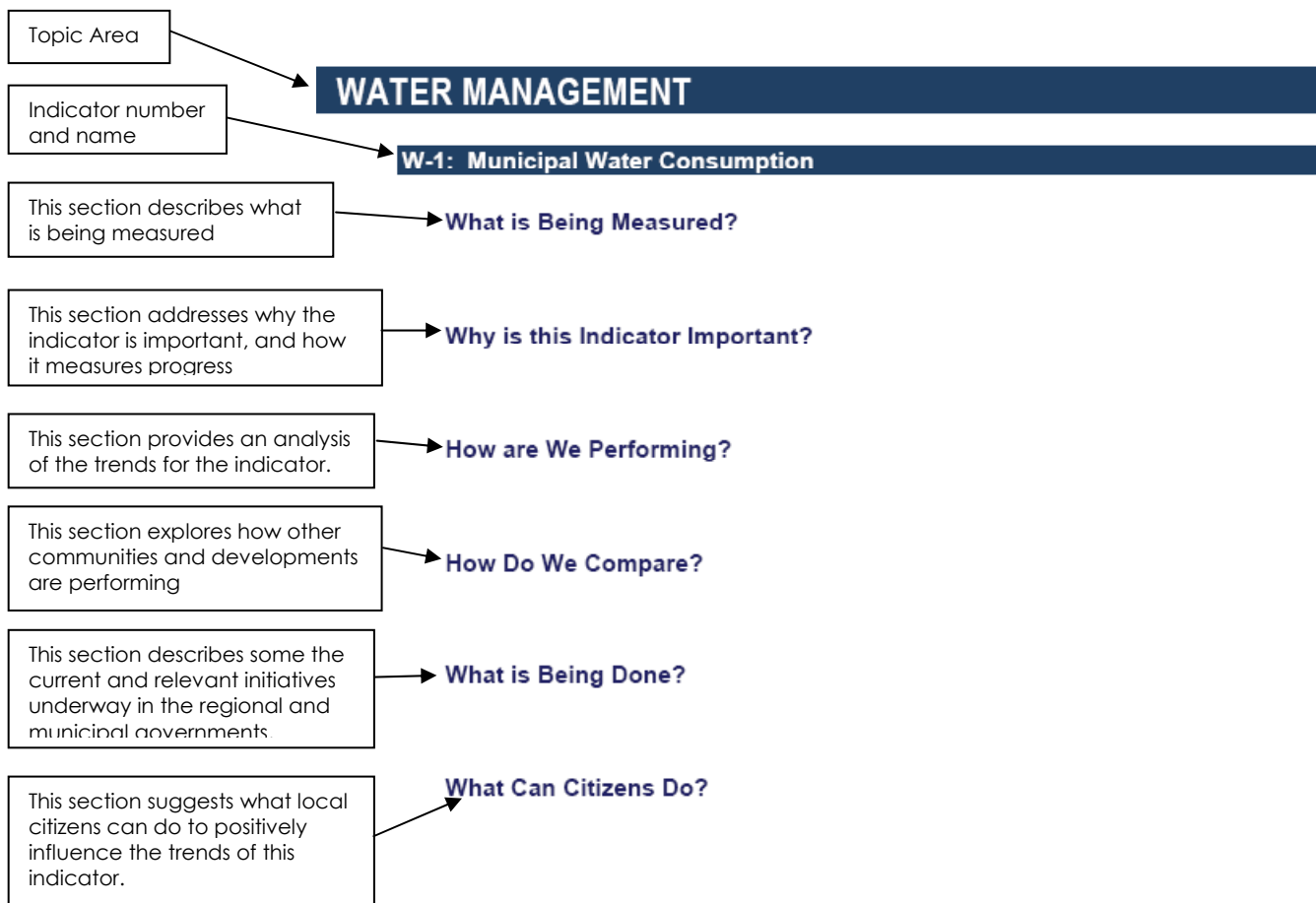
By reporting back on the progress in implementing the regional growth strategy and trends in key indicators, the RDOS, its member municipalities and partner agencies will be able to determine how well the RGS is being implemented and to identify steps to refine the implementation of the RGS based on this feedback.

4 RGS PERFORMANCE INDICATORS

4.1 Guide to the Indicator Sheets

Each indicator is documented on two to four pages in an easy to read format and covers basic information for the indicator including summary information. They include summary information and benchmark comparison for how other regions and communities performing. The diagram below shows how the performance indicators sheets are organized (Figure 2).

Figure 2. Guide to the Indicator Performance Measure Sheets



4.2 Indicator Sheets by Theme and Sub-Theme

This section presents the 30 South Okanagan Regional Growth Strategy Performance Indicators organized by topic areas.

CONTEXT

CTX-1: Population Growth

What is Being Measured?

This indicator measures populations of member municipalities, and the Regional District Electoral Areas that fall within the RGS study area and the total population of the RDOS. Additionally, it measures the population growth rate over the five-year period between Census years.

Why is this Indicator Important?

Population growth brings both benefits and challenges to a community. A growing population is integral to building a strong local economy. As the population grows more jobs are created to meet the demand for housing, retail goods and services. The challenge of a growing population is managing the growth in such a way that the values and character of the community remain strong. This indicator provides context for the rest of the RGS performance indicators.

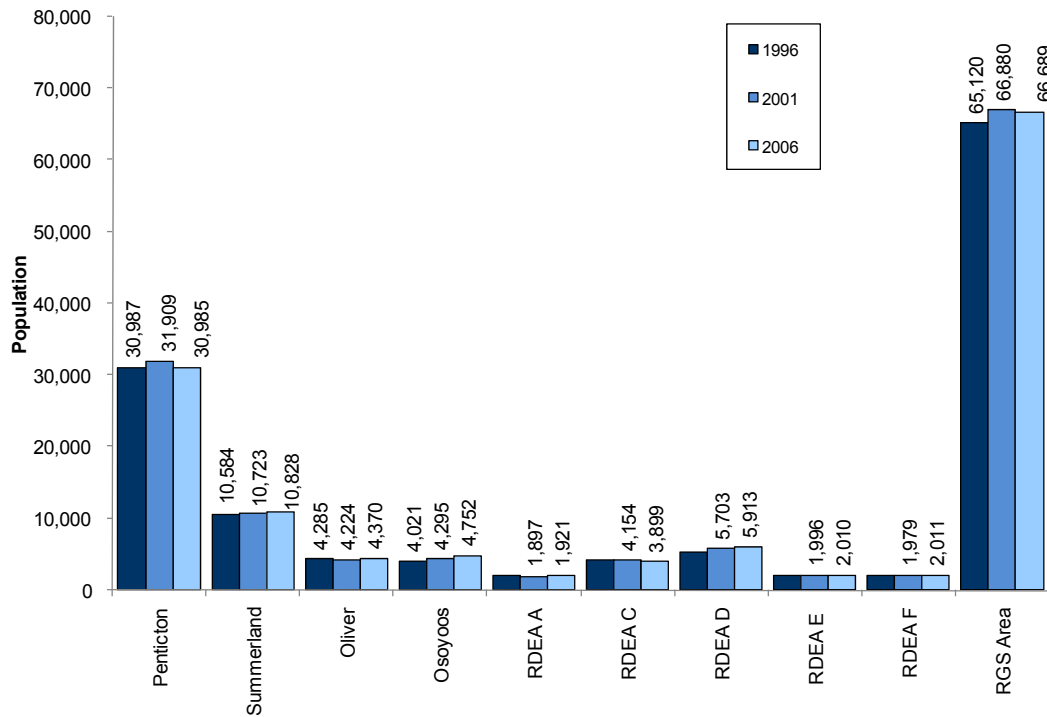
How are We Performing?

Populations in the RGS study area have remained relatively constant between 1996 and 2006. Minor fluctuations in population have occurred over this time with the overall result being slight population increases in almost all areas; the exceptions being the City of Penticton, and Regional District Electoral Area C.

The City of Penticton saw its population grow 3% from 30,987 in 1996 to 31,909 in 2001. However, the population then declined by 2.9% to 30,985 in 2006. The net result being a stable population over the period from 1996 to 2006. The municipalities of Summerland and Oliver have both experienced steady growth of approximately 2% over the same ten-year period, with 2006 populations reported at 10,828 and 4,370 respectively. The Town of Osoyoos has experienced higher growth rates than other municipalities in the South Okanagan. In 2001, the population was reported at 4,295, which represented an increase of 6.2% over 1996 Census data. In 2006, the population of Osoyoos increased by 10.6% over 2001 and was reported as 4,752. Overall, the population of Osoyoos increased by 18.2% during the period from 1996 to 2006.

With the exception of Electoral Area C, populations in the Okanagan Similkameen Regional District Electoral Areas grew over the period from 2001 to 2006. In 2006, populations for Regional District Electoral Areas A, C, D, E and F were reported at 1,921, 3,899, 5,913, 2,010, 2,011 respectively. Growth rates over the period from 2001 to 2006 were reported as 1.3%, -6.1%, 3.7%, 0.7% and 1.6% respectively.

Figure 3. Population in the RGS Study Area, 1996-2006



Source: Statistics Canada, Census Data, 1996, 2001, 2006

Table 2. Population Growth Rates in the RGS Study Area, 1996-2006

		1996-2001	2001-2006
Municipalities	Penticton	3.0%	-2.9%
	Summerland	1.3%	1.0%
	Oliver	-1.4%	3.5%
	Osoyoos	6.8%	10.6%
Okanagan-Similkameen Regional District Electoral Areas	RDEA A	-2.8%	1.3%
	RDEA C	1.9%	-6.1%
	RDEA D	7.3%	3.7%
	RDEA E	-0.1%	0.7%
	RDEA F	4.0%	1.6%
	RGS Area	2.6%	-0.3%

Source: Statistics Canada, Census Data, 1996, 2001, 2006

How Do We Compare?

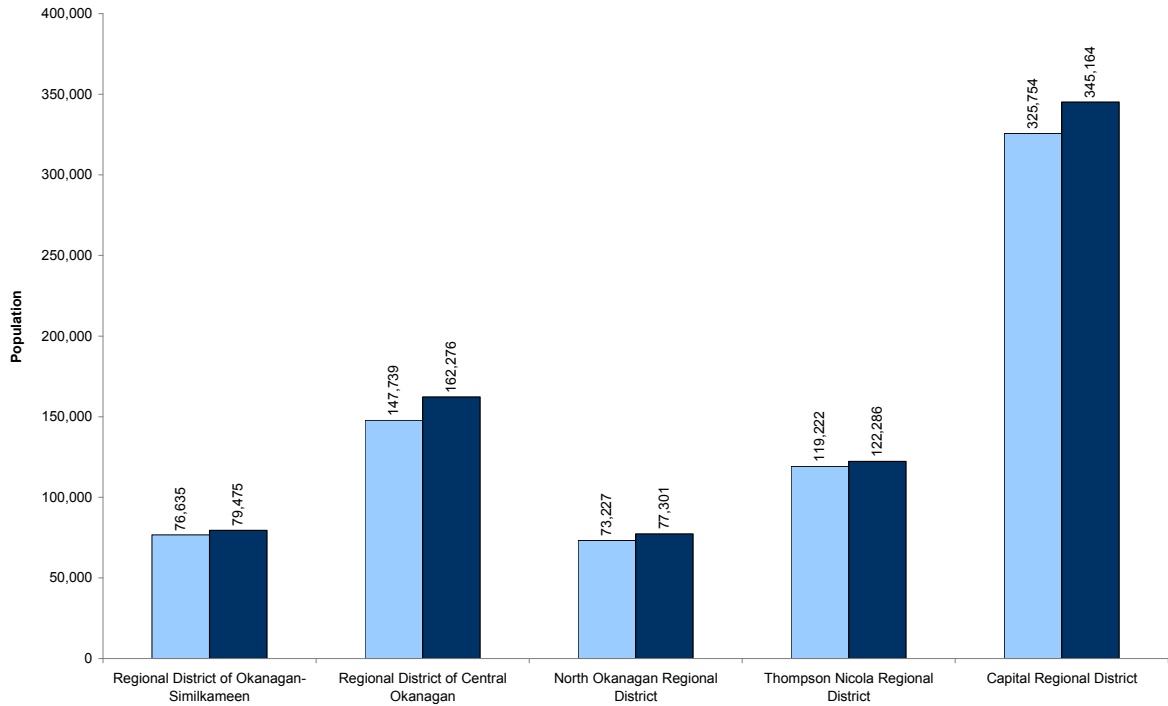
The population of the RDOS increased by 3.7% from 76,635 in 2001 to 79,475 in 2006.

Populations and population growth rates in jurisdictions comparable to the RDOS – the Regional District of Central Okanagan, North Okanagan Regional District, Thompson Nicola Regional District and Capital Regional District – have also increased over the

period from 2001 to 2006. The highest population rate was found in the Regional District of Central Okanagan (9.8%), followed by the Capital Regional District (6%), North Okanagan Regional District (5.6%), and finally the Thompson Nicola Regional District (2.6%). The population growth rate of the RDOS falls between the latter two jurisdictions at 3.7% between 2001 and 2006.

These growth rates are comparable to the average population growth rate in the Province of British Columbia, which was 5.3% during the period from 2001 to 2006.

Figure 4. Populations in Comparable Jurisdictions, 2001-2006



Source: Statistics Canada, Census Data, 1996, 2001, 2006

Table 3. Population Growth Rates in Comparable Jurisdictions, 2001-2006

	2001-2006
Okanagan-Similkameen Regional District Electoral Areas	3.7%
Regional District of Central Okanagan	9.8%
North Okanagan Regional District	5.6%
Thompson Nicola Regional District	2.6%
Capital Regional District	6.0%
BC	5.3%

Source: Statistics Canada, Census Data, 2001, 2006

What is Being Done?

The rate of population growth is largely outside the sphere of influence of the RDOS. However, with the development of the Regional Growth Strategy, the RDOS has put various policies and mechanisms in place to help manage its population growth.

BIODIVERSITY & NATURAL AREAS

The RGS recognizes that the south Okanagan is a unique ecosystem and one of the top four endangered ecosystems in Canada (South Okanagan Naturalists' Club & Wilderness Committee, 2006). Sound environmental planning will ensure that ecosystem services, including habitat and biodiversity are the basis for the quality of life in the south Okanagan.

BNS-1: Annual and cumulative area of parkland and protected areas

What is Being Measured?

This indicator measures the total amount and percentage of total land area of parks and protected natural areas in the South Okanagan Regional Growth Strategy area. It includes parks (federal, provincial, regional, and municipal parks with a nature focus) and protected areas managed by all levels of government and areas that are managed for ecological protection - federal conservation areas, provincial wildlife management areas, and lands owned by land trusts.

Since this is the baseline year, annual and cumulative land area is the same number. In future reports, the changes in parkland and protected areas will begin to emerge.

A limitation of this indicator is that it does not measure connectivity between areas of parks and greenspace. Connectivity is important to facilitate wildlife movement and migration. Connectivity is not measured due to the complexity of calculating this information.

Why is this Indicator Important?

Protecting parkland and protected areas is important from environmental, social and economic perspectives:

From an environmental perspective parks and protected areas provide habitat and support biological diversity. Generally, the larger a park or protected area, the greater the habitat value. Conversely, in smaller parks or protected areas, there is generally less habitat value. The greater the amount of area, and the connectivity of these areas, provides more opportunities to preserve habitat and wildlife values. Research shows that larger areas and areas close to each other can sustain more complex plant communities, as well as provide additional opportunities for wildlife if one area becomes compromised. In addition, trees help to mitigate climate change through carbon sequestration by absorbing carbon dioxide as they grow.

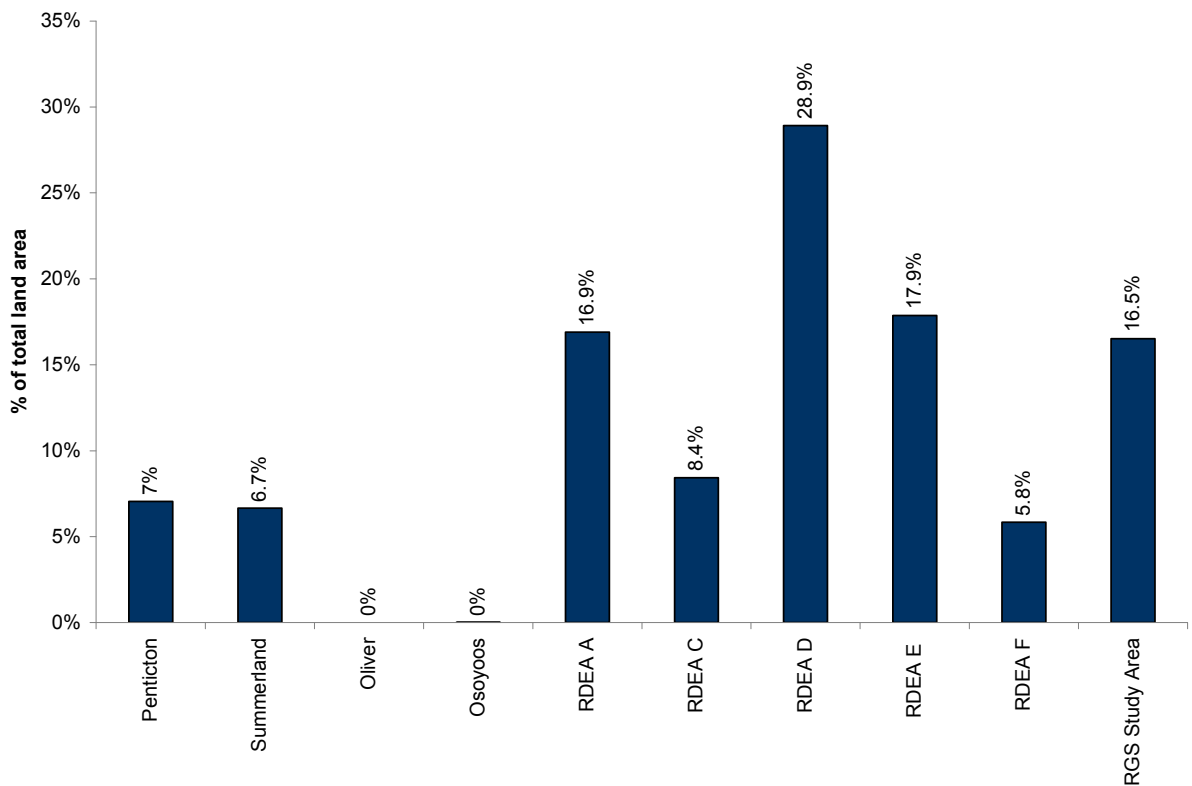
From a social perspective, parks and protected areas provide focal points for community recreation, enhance aesthetic values, foster civic pride and encourage outdoor activities that contribute to personal health and vitality.

From an economic perspective, parks can increase the value of properties adjacent to them. In addition streams, wetlands and riparian vegetation can dramatically reduce the need for expensive storm sewer infrastructure. Johnson County in Kansas saved an estimated US\$120 million on engineered stormwater controls by setting aside US\$600,000 worth of riparian greenways (Sandborn 1996). Shade trees could also increase energy savings.

How are We Performing?

RDOS has eight parks in the study area: Rock Ovens, Manitou, Naramata Wharf, Kaleden Hotel, Lions, Kenyon, McIntyre Canyon, and Osoyoos Lake. Other protected areas not managed by the Regional District are provincial parks, ecological reserves, and recreation areas. (note: there are also protected area designations that are also under provincial jurisdiction and managed by BC Parks, e.g. Brent Mountain Protected Area.) In addition, there are conservation lands and range lease holdings that are overseen by non-governmental organizations such as the Nature Conservancy of Canada BC region, the Nature Trust of BC, Ducks Unlimited, and the Land Conservancy. Overall, the RGS study area has 17% of its land protected by these various jurisdiction and organizations. By area, the electoral areas tend to have more land protected than the municipalities. The electoral areas have between 8 to 29% protected, as compared to the municipalities, which protect between zero and 7% of their land areas. *

Figure 5. Percentage of Parkland and Protected Area in the RGS Study Area, 2008



Source: Regional District of Okanagan Similkameen

Note: GIS data was only available for 2008.

*Data for the amount of area for municipal parks for the Town of Oliver and Osoyoos was not available at the time of writing of this report. The Town of Oliver has eight areas within the municipality that offer recreation opportunities. The Town of Osoyoos has six parks that offer recreation opportunities.

What is Being Done?

There are two policies in the Regional Growth Strategy providing direction on parkland and protected areas:

1. RGS Ec2 policy articulates the following: [to] “Encourage and promote the retention of large rural holdings, open spaces, parks and viewsapes that contribute to the region’s rural ambience.”
2. Policy S2 states that : “Support the coordination of regional parks and recreation services and trail networks to improve accessibility of recreational opportunities.”

These policies provide the Regional District with the tools to increase recreation opportunities and protect biodiversity values as development increases.

What Can Citizens Do?

Citizens can help protect lands and maintain existing parks and protected areas by volunteering for programs and events sponsored by the RDOS. These programs help support the maintenance of parks in the region. Several of the regional parks in the south Okanagan have been maintained over the years by volunteer organizations. This is ongoing, and will hopefully continue into the future.

BNS-2: Percentage of sensitive ecosystems protected or stewarded by general habitat type

What is Being Measured?

This indicator measures the amount of terrestrial environmentally sensitive areas (from the Sensitive Ecosystem Inventory led by the provincial Ministry of Environment) in the South Okanagan that has been protected as a park or is a protected area.

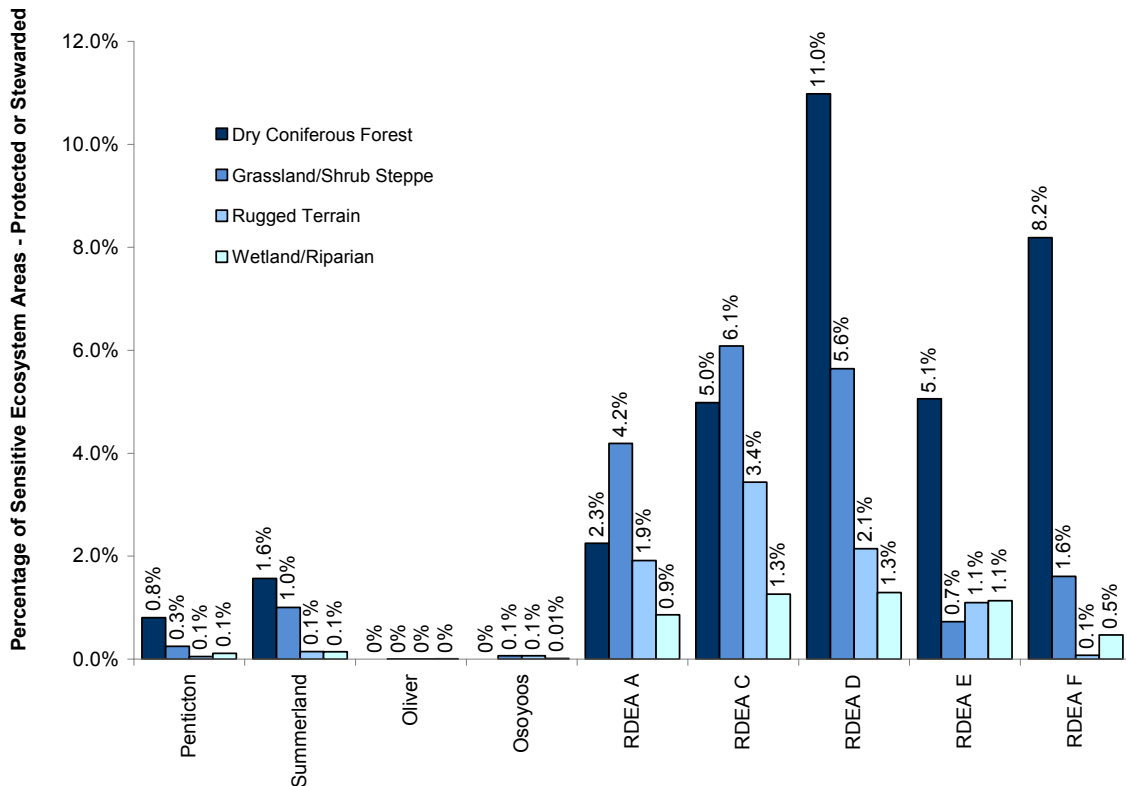
Why is this Indicator Important?

The South Okanagan is the location of some of the greatest concentrations of species at risk in Canada. It is recognized as one of the four most endangered natural ecosystems in Canada and has a high concentration of species diversity. A sensitive ecosystem inventory was conducted for the South Okanagan and completed in 2006. These areas can be disturbed or destroyed by human activity and development. Parkland (or other form of protection) provides critical habitat for species and/or ecosystems that are at risk and are vulnerable to disturbance. In addition, habitat protection supports biodiversity. Other forms of protection include conservation covenants, development permit areas, and land use designations. These other tools are important, as many sensitive ecosystems are located on private lands.

How are We Performing?

The percentage of sensitive areas that are protected tend to be higher in the electoral areas as opposed to the municipalities in the south Okanagan. The percentages of dry coniferous forest ranges from 2.3% in Electoral Area A to 11% in Electoral Area D. In the municipalities, the highest amount of dry coniferous forest protected is 1.6%, Oliver, Osoyoos and Penticton all protect less than one percent of the land base. Grassland/Shrub steppe ranges from 0.7% (Electoral Area A) to 6.1% (Electoral Area C). In the municipalities, the level of protection is one percent (Summerland) or less for Grassland/shrub and the same with Rugged Terrain and Riparian/Wetlands. Rugged Terrain has two percent or less protected in the electoral areas, and 1.3% or less for wetland/riparian areas.

Figure 6. Percentage of Sensitive Ecosystem Inventory Protected, 2006



Source: Digital data provided by RDOS, which was originally received from the Ministry of Environment's Sensitive Ecosystem Inventory project.

What is Being Done?

There are two policies in the RGS that address sensitive ecosystems:

1. Policy EN1 of the Regional Growth Strategy by-law states: Coordinate management of regional biodiversity conservation. Key actions identified in the RGS Policy EN1 are to:
 - Meet with environment partners to develop a regional approach to biodiversity conservation and work with the RDOS Board toward coordinated biodiversity conservation and ecosystems protection.
 - Support the development of an inter-regional Biodiversity Conservation Strategy by collaborating with ecosystems experts, including those with traditional ecological knowledge, and balance ecosystems interests with economic and social sustainability.
 - Work with Aboriginal leaders to develop partnerships for regional ecosystems health.
 - Monitor the effectiveness of RGS ecosystems actions, including annual indicators for key ecosystem measures.

One action that is currently ongoing is the Invasive Plant Program, which serves to identify and minimize the spread of invasive plants and species that can threaten existing native vegetation and sensitive areas.

2. Policy EN2 of the RGS by-law states: Support environmental stewardship strategies. Key actions of this policy are to:
- Collaborate to direct land use and resource-based decisions away from ecologically sensitive areas and encourage land development practices and methods of environmental enhancement that maintain ecosystem health and the ability of natural systems to sustain life.
 - Promote conservation and sustainability of watersheds, wetlands and riparian areas and a green space network to serve as a wildlife corridor.
 - Support the right to farm in balance with best environmental management practices.
 - Support restoring and managing key habitats.

There are a number of non-profit organizations such as the Nature Trust of BC, the Land Conservancy of Canada, and Ducks Unlimited that are actively acquiring and leasing lands for conservation, and working with volunteers on education and outreach programs throughout the south Okanagan.

What Can Citizens Do?

There are a number of ways to help maintain natural areas in the South Okanagan:

- Plant native vegetation in your garden to provide habitat for wildlife. For more information contact Naturescape BC (<http://www.hctf.ca/nature.htm>)
- If there are ESAs on your land, consider placing conservation covenants on that portion or donate that land to a land trust organization. There may be tax incentives at different levels of government for doing so.
- Volunteer with conservation organizations that are involved in the identification and monitoring of ESAs. The Federation of BC Naturalists provides information about joining local natural history societies (www.naturalists.bc.ca), or the Evergreen Foundation (www.evergreen.ca).
- Respect natural areas.
- Report illegal dumping or other activities, which damage natural areas.
- South Okanagan Similkameen Conservation Program: <http://www.soscp.org/>
- South Okanagan Similkameen Stewardship Program: <http://www.conservancy.bc.ca/content.asp?pageid=675>

What is Being Measured?

This indicator measures the percentage of streamside riparian areas that is protected as a park or other protected area.

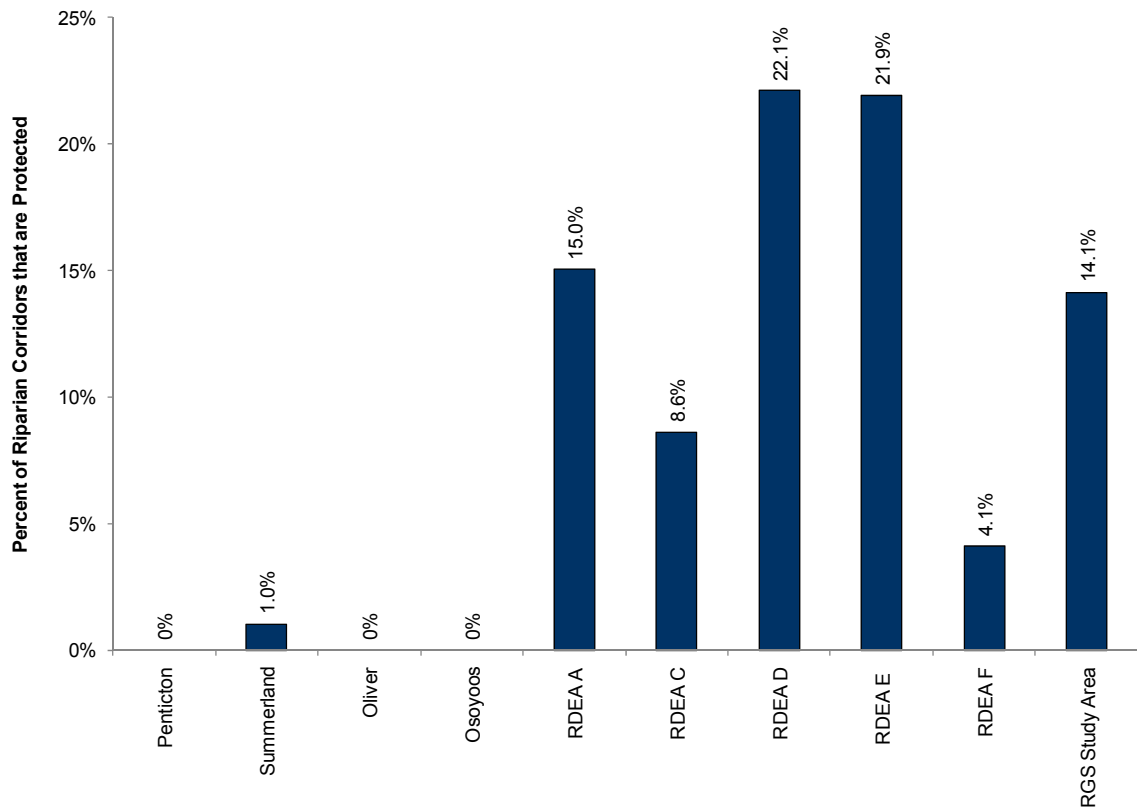
Why is this Indicator Important?

The protection of riparian areas is important for slowing stormwater runoff, protecting water quality, and providing habitat for aquatic and terrestrial organisms. Retaining vegetation in a natural state along riparian corridors helps ensure that these and other important ecosystem functions continue.

How are We Performing?

A riparian area is a streamside protection and enhancement area (Riparian Areas Regulation, 2004, Province of British Columbia). The Okanagan-Similkameen Regional District is governed by the provincial Riparian Areas Regulation, which requires a 30-metre riparian assessment area on each side of a stream from the high water mark. Local governments may not decrease the level of streamside protection, but can increase it if it sees fit. For this indicator, a buffer of 30 metres was generated on all of the streams in the RDOS study area. On average, 14% of riparian areas are protected in a park or a protected area in the RGS study area. The municipalities generally had very low levels of protection, ranging from zero to one percent in the municipalities, and from four to 22% in the electoral areas.

Figure 7. Percentage of Protected Riparian Areas, 2006



Source: Regional District of Okanagan Similkameen

What is Being Done?

The province has set its legal minimum for streamside protection at 30 metres on each side of the high water mark, which provides some protection from development. The assessment is site specific and can reduce the setback to less than 30 metres. In the RDOS there are development permit areas adjacent to watercourses that require a Qualified Environmental Profession to determine what setbacks from the watercourse should be if there are fish habitat values that require protection.

What Can Citizens Do?

There is information on the landscapes and waterways which provide tips on living near different sensitive areas and wildlife:

- Stewardship Series Guides on various topics http://dev.stewardshipcanada.ca/sc_bc/stew_series/NSCbc_stewseries.asp?sProv=bc&siteLoc=scnBC&lang=en
- South Okanagan Similkameen Stewardship Program Fact Sheets <http://www.conservancy.bc.ca/content.asp?pageid=675>
- Home Tips for Healthy Streams <http://livingbywater.ca/main.html>
- Living By Water <http://livingbywater.ca/main.html>

- Provincial Species and Ecosystems at Risk Brochures
<http://www.env.gov.bc.ca/wld/list.htm>
- Habitat Atlas for Species at Risk in the South Okanagan and Lower Similkameen Hinterland Who's Who – Wildlife in Canada
http://wlapwww.gov.bc.ca/sir/fwh/wld/atlas/species/species_index.html
- Aquatic Species at Risk in Canada
http://wlapwww.gov.bc.ca/sir/fwh/wld/atlas/species/species_index.html
- Canada - British Columbia Environmental Farm Plan Program
http://www.bcac.bc.ca/efp_programs.htm
- Agriculture Environment Initiatives
http://www.bcac.bc.ca/agriculture_enviro_programs.htm
- Farm Practices in BC - Reference Guide
<http://www.agf.gov.bc.ca/resmgmt/fppa/refguide/intro.htm>
- Farmland - Riparian Interface Stewardship Program
<http://www.cattlemen.bc.ca/FRISP.htm>
- Cows and Fish <http://www.cowsandfish.org/>
- Wetkit - Agriculture http://www.wetkit.net/modules/3/showtool.php?tool_id=982

BNS-4: Percent of urban or agricultural development in land identified as sensitive habitat as identified in Official Community Plans

TO BE COMPLETED IN THE 5-YEAR REPORT IN 2013

What is Being Measured?

Why is this Indicator Important?

How are We Performing?

How Do We Compare?

What is Being Done?

What Can Citizens Do?

AG-1: Area of land excluded from the ALR annually and cumulatively (since 1974)

What is Being Measured?

This indicator tracks the success of the protection of agricultural land by measuring the amount of land that has been added or removed annually from the Agricultural Land Reserve within the RGS study area.

This measure generally provides a good indication of the potential for agriculture in a community, however farming activities also occur on agricultural land that is not currently in the ALR; conversely, land that is located in the ALR may not be farmed. For example, non-agricultural activities, such as golf courses, recreation facilities, rights-of-ways, military uses and residential properties, also occur on ALR land.

Why is this Indicator Important?

Preservation of land for agriculture is the first and most important step in ensuring agricultural viability in the South Okanagan. The establishment of the Agricultural Land Reserve has afforded agricultural lands across BC a level of protection from urban development. This indicator helps to understand if agricultural land in the South Okanagan is being preserved or converted to non-agricultural uses. Only 5% of BC's land is suitable for farming. The South Okanagan contains fertile land and an ideal climate for agriculture, particularly for berries, grapes and other fruits which have limited growing potential elsewhere in BC and Canada. Protecting agricultural land from the pressures of urban development, the ALR recognizes the importance of agriculture as a contributor to the economy, a source of food, an environmental resource, and a heritage asset.

How are We Performing?

For the RGS study area, the cumulative area of land in the ALR between 1974 and 2008 is 43,987 hectares and 86,478 hectares in the RDOS.

In 2006, 4,664 hectares of land area were excluded from the RDOS as a whole or 5.4% of the cumulative ALR. 25.6 hectares (0.03%) of that land area were excluded in 2006. The area of land excluded from the ALR in the RGS study area during 2006 was 12.1 hectares, which accounts for almost 50% of the exclusions in RDOS.⁸ Annual tabulation of this indicator in future will allow for year over year comparisons on the status of ALR land in the study area.

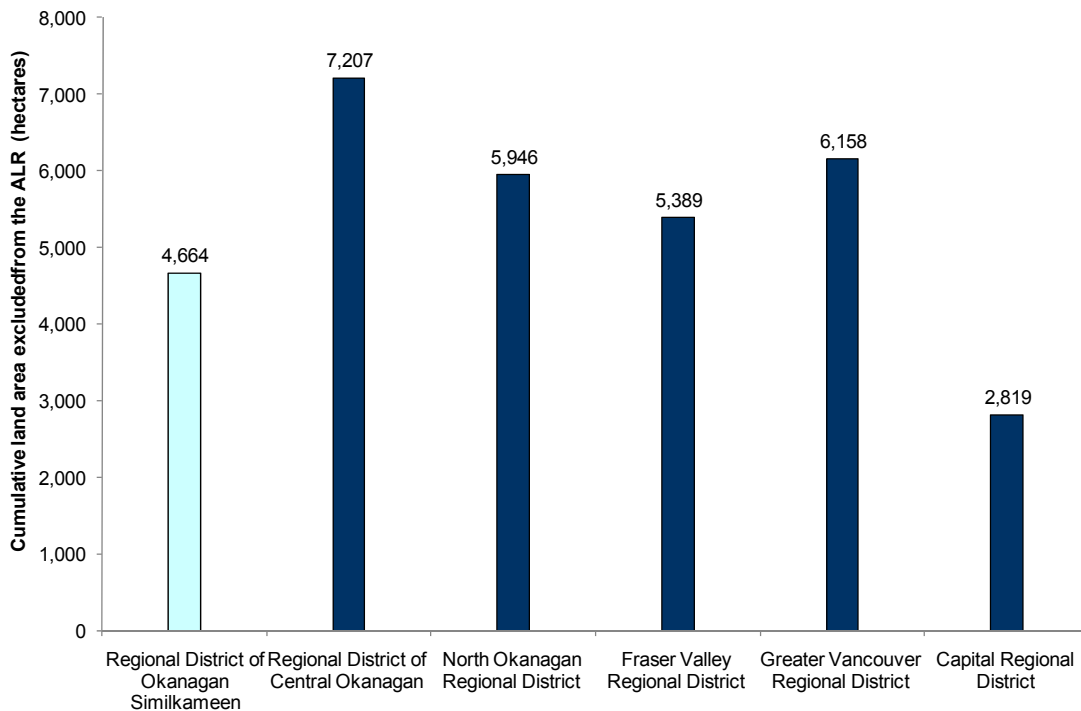
How Do We Compare?

As shown in Figure 8, there were fewer ALR exclusions in the RDOS than in comparable jurisdictions from 1974 to 2008 (cumulative). The Regional District of Central Okanagan excluded 7,207 hectares of land from the ALR in the same time period. The Greater

⁸ Tabulated based on ALR applications archived on the Agricultural Land Commission website: http://www.alc.gov.bc.ca/application_status/app_status_main.htm

Vancouver Regional District (or Metro Vancouver) excluded 6,158 hectares of land from the ALR, while the North Okanagan Regional District and the Fraser Valley Regional District excluded 5,946 hectares and 5,389 hectares, respectively. The Capital Regional District excluded 2,918 hectares of land from the ALR over the same time period, which represented the smallest area of land excluded from the ALR of the benchmark data that was collected from Regional Districts.

Figure 8. Area of Land Excluded from the ALR in Comparable Jurisdictions, 1974 to 2008



Source: BC Provincial Agricultural Land Commission

What is Being Done?

The provincial government has enacted farm practices protection and planning for agriculture legislation and programs as part of the Strengthening Farming Program. This program is intended to foster strong working relationships between local and provincial governments and the farming community. The legislative context for the program rests in the Farm Practices Protection (Right to Farm) Act, the Agricultural Land Commission Act and portions of the Local Government Act and the Land Title Act.

Policies found within the RDOS Regional Growth Strategy demonstrate strong support for maintaining the agricultural land base in the South Okanagan. In particular, RGOS Policy H4 (protect the agricultural land base and encourage agricultural enterprise) states:

The south Okanagan municipalities and electoral areas and Ministry of Agriculture and Lands agree to:

1. Support the establishment of a South Okanagan Agricultural Advisory Committee.
2. Work collaboratively to develop, set priorities and implement a regional approach to agriculture to strengthen farming and encourage agriculture.

3. Discourage further subdivision of farm parcels.
4. Encourage value-added agricultural activities and agri-tourism which improve farm economic viability while maintaining farming as the primary farming activity.
5. Undertake edge planning to plan for and mitigate the impacts of non-farm uses on farming activities when considering development adjacent to the Agricultural Land Reserve boundary.
6. Support urban growth boundaries that are co-incident with the Agricultural Reserve boundary, and not growth boundaries that encompass land within the ALR.

What Can Citizens Do?

- Buy local. Agricultural products grown and sold in the region, support the local economy;
- Learn more about the issues in Smart Growth BC's "Protecting Agricultural Land in British Columbia: A Citizen's Guide" (www.smartgrowth.bc.ca);
- Respect farming activities and needs.

What is Being Measured?

This indicator measures the total value of gross farm receipts (in dollars) by Census Consolidated Subdivision normalized by the land area that is farmed (in hectares).

Why is this Indicator Important?

This indicator provides a measure of the economic health of the agricultural sector based on financial returns to farm operators and the area of land farmed. Together, these factors indicate the intensity (dollars earned per hectare of land farmed) with which land is farmed in a given region. From an economic standpoint, the RDOS will want to see agricultural intensities maintained or increased over time.

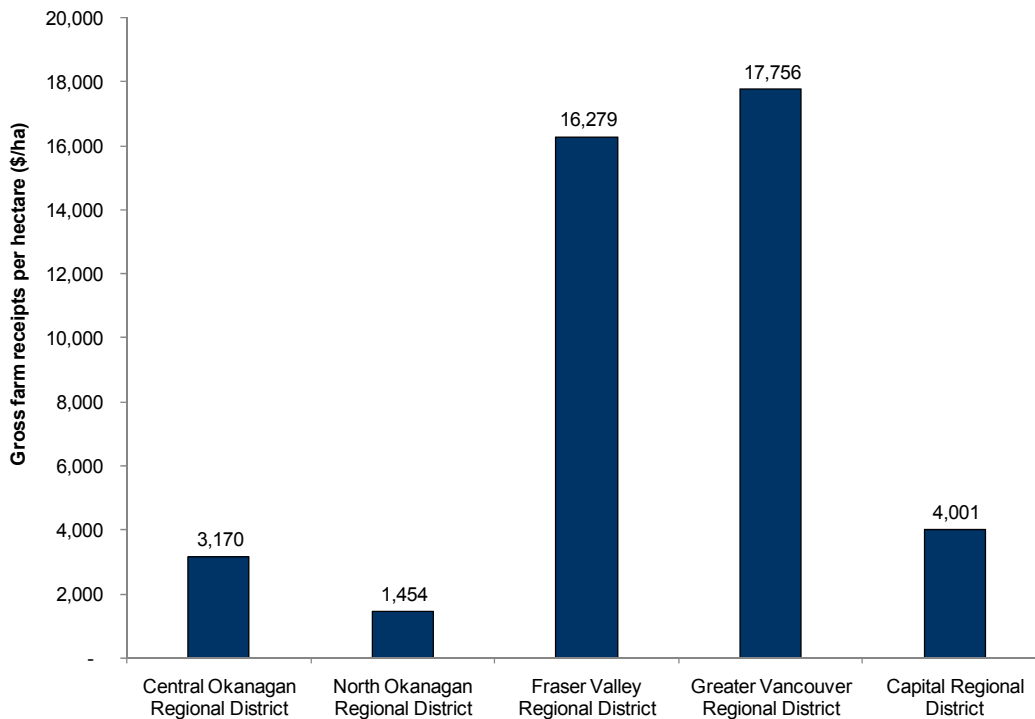
How are We Performing?

From 2001 to 2006, agricultural intensity increased in all Census Consolidated Subdivisions in the South Okanagan.

In Okanagan-Similkameen Census Subdivisions A, C and F, agricultural intensity increased from 2001 to 2006 as a result of an increase in the value of gross farm receipts and an increase in the number of hectares (ha) of land farmed. For these three areas, the agricultural intensity in 2006 was \$2,494, \$4,839 and \$1,672 respectively.

For Census Subdivisions D and E, the agricultural intensity also increased between 2001 and 2006. However, Census Subdivision D experienced an increase in the value of gross farm receipts (from \$11,963,738 in 2001 to \$13,767,082 in 2006) and a decrease in the area of land farmed (from 6,884 ha in 2001 to 4,615 ha in 2006). This resulted in an increase in agricultural intensity from \$1,738 in 2001 to \$2,983 in 2006. For Census Subdivision E, the value of gross farm receipts decreased from \$6,938,816 in 2001 to \$6,721,914 in 2006, though the decrease in the area of land farmed was minimal (from 928 ha to 884 ha). This resulted in a slight increase in agricultural intensity for this area (from \$7,477 to \$7,604) during the period from 2001 to 2006.

Figure 9. Agricultural Intensity in the RGS Study Area, 2006



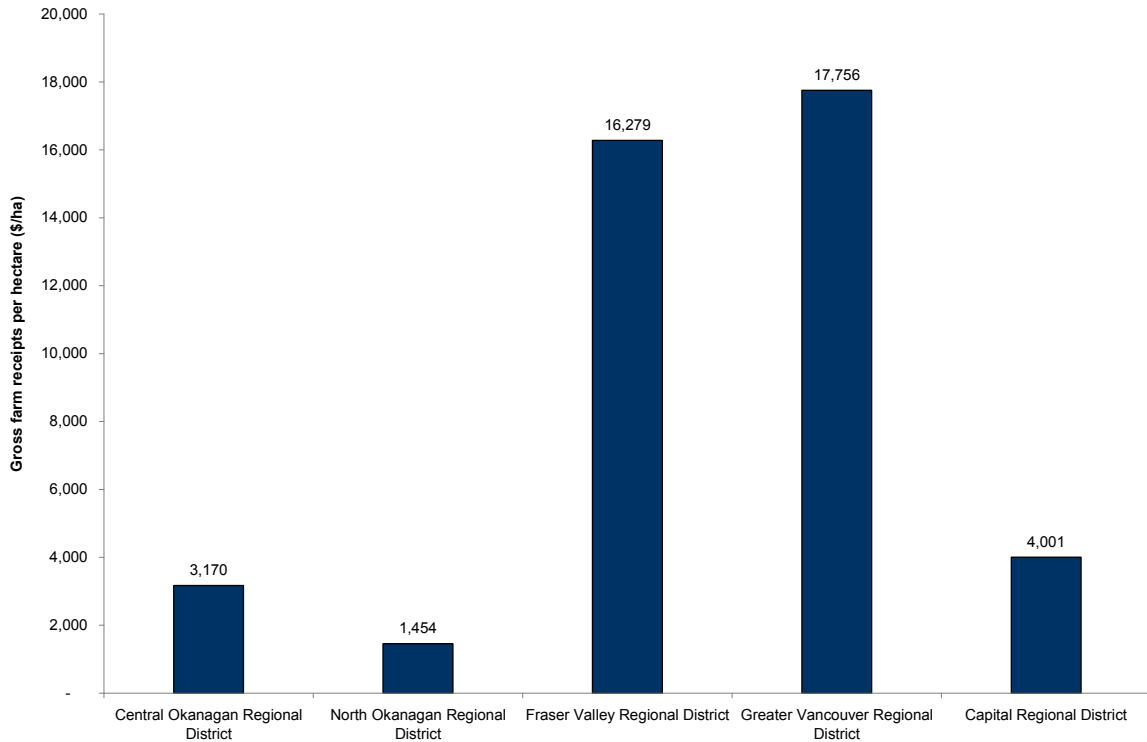
Source: Statistics Canada Census of Agriculture, 2006

How Do We Compare?

Agricultural intensities in other Census Divisions in British Columbia's Okanagan Valley (Central Okanagan and North Okanagan) are comparable to that of the Census Subdivisions in the RGS study area. In 2006, agricultural intensity in the Central Okanagan Census Division was \$3,170 and in the North Okanagan Census Division, it was \$1,454. Agricultural intensity in the Capital Census Division (on Vancouver Island) was also comparable at \$4,001 in 2006.

In Census Divisions in the Lower Mainland (Fraser Valley and Greater Vancouver), agricultural intensities were much higher than those found in the Capital Census Divisions and in the Census Divisions of the Okanagan Valley. In 2006, agricultural intensity in the Fraser Valley was \$16,279 and in Greater Vancouver it was \$17,756. In both of these Census Divisions, total gross farm receipts and the area of land farmed are substantially greater than in the Census Subdivisions in the RGS study area (in the hundreds of millions of dollars and the tens of thousands of hectares).

Figure 10. Agricultural Intensity in Comparable Jurisdictions, 2006



Source: Statistics Canada Census of Agriculture. 2006

What is Being Done?

The purpose of the Agricultural Land Commission (ALC) is to preserve agricultural land and encourage farming on agricultural lands in the province. This is done through provincial zoning – the Agricultural Land Reserve (ALR). By preserving land for agricultural purposes, the ALR protects land from the pressures of urban development. In so doing, the ALR strives to maintain the number of hectares of land available for farming, which may minimize the need to farm land in a more intensive manner. If the ALR did not exist, agricultural lands would be more susceptible to the pressures of urbanization, which would likely decrease the area of land available for farming, resulting in the need to farm land more intensively in order to produce the same or greater output (in the form of gross farm receipts).

The South Okanagan is a fertile and agriculturally productive area with a strong reputation as a premier fruit-growing and wine-producing region. Opportunities such as agri-tourism help to diversify the farm business, broadening the economic possibilities for growers/producers and stimulating economic development in the region. To enhance these opportunities and develop the region in a sustainable manner over the long term, agricultural land use must be balanced with other competing land uses. The RDOS Regional Growth Strategy recognizes this and supports the local agricultural industry through policies such as Ec5 (support agriculture that contributes to the local economy) which states:

The south Okanagan municipalities and electoral areas and Ministry of Agriculture and Lands agree to:

1. Endorse, in principle, a South Okanagan Agricultural Area Plan which promotes the right to farm and protects the agriculture industry, including its water allocation.
2. Support the enhancement of a sustainable, local agricultural industry, inclusive of value-added industry.
3. Consider policy and regulation with area farmers and communities to preserve the agricultural land base.

What Can Citizens Do?

Buy local. Citizens can show their support for the preservation of agricultural land and for the local farming community by purchasing locally or regionally-produced agricultural products. In doing so, citizens are not only demonstrating support for local agricultural production, but contributing to broader regional sustainability through their participation in the local economy and by lessening their impact on climate change (as a result of the greenhouse gas emissions associated with the manufacture and distribution of imported agricultural products).

HS-1: a) Dwelling Growth Inside and Outside Municipal Boundaries and b) Dwelling Growth Inside and Outside Urban Growth Area Boundaries

What is Being Measured?

HS-1 a) This indicator measures the number and share of new dwelling units located inside and outside of Municipal boundaries.

HS-1 b) This indicator measures the number and share of new dwelling units located inside and outside of Urban Growth Area (UGA) boundaries.

- The Corporation of the District of Summerland has established an Urban Growth Area boundary within its municipal boundary, which will direct growth and redevelopment to areas where there is existing infrastructure and services. The other municipalities are currently in the process of establishing Urban Growth Area boundaries. This indicator can expand to include other municipalities as they establish their UGA boundaries.

Why are these Indicators Important?

The fourth key theme of the Regional Growth Strategy is to “carefully direct human settlement”⁹. Directing growth to areas which have established services and infrastructure will protect fragile ecosystems and agricultural lands in the South Okanagan. This will contribute to the preservation of rural character and the continuing development of municipalities and primary growth areas. This will add to the long-term sustainability of the region by protecting and enhancing both the natural and the built environments and creating a balance between the two.

A higher share of growth located within Municipal or Urban Growth Areas indicates growth is occurring in a compact manner. A compact urban form supports more efficient servicing, public transit, and fosters protection of agricultural land and greenspace.

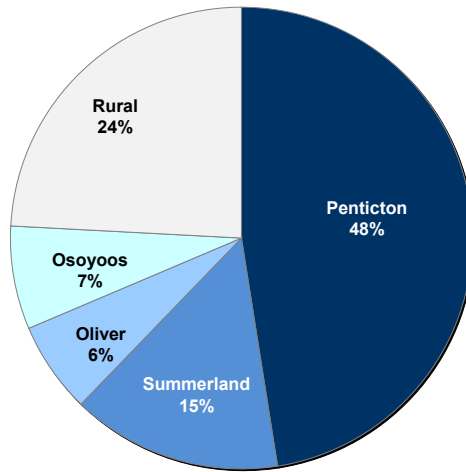
What is happening?

HS-1a: Dwelling growth inside and outside municipal boundaries

In 2006, 24% of dwellings of the South Okanagan were in the rural areas, and 76% of dwellings in the urban areas. Broken down by municipality, Penticton has 48% of that share, Summerland has 15% of dwellings, Osoyoos 7% and Oliver 6%. Over time, this indicator will track the number of new dwellings that will be constructed in primary and secondary growth areas as identified in the Regional Growth Strategy.

⁹ Regional District of Okanagan-Similkameen. (January 2008). South Okanagan Regional Growth Strategy, Amended

Figure 11: Percentage of Dwelling Units Inside and Outside Municipal Boundaries, 2006

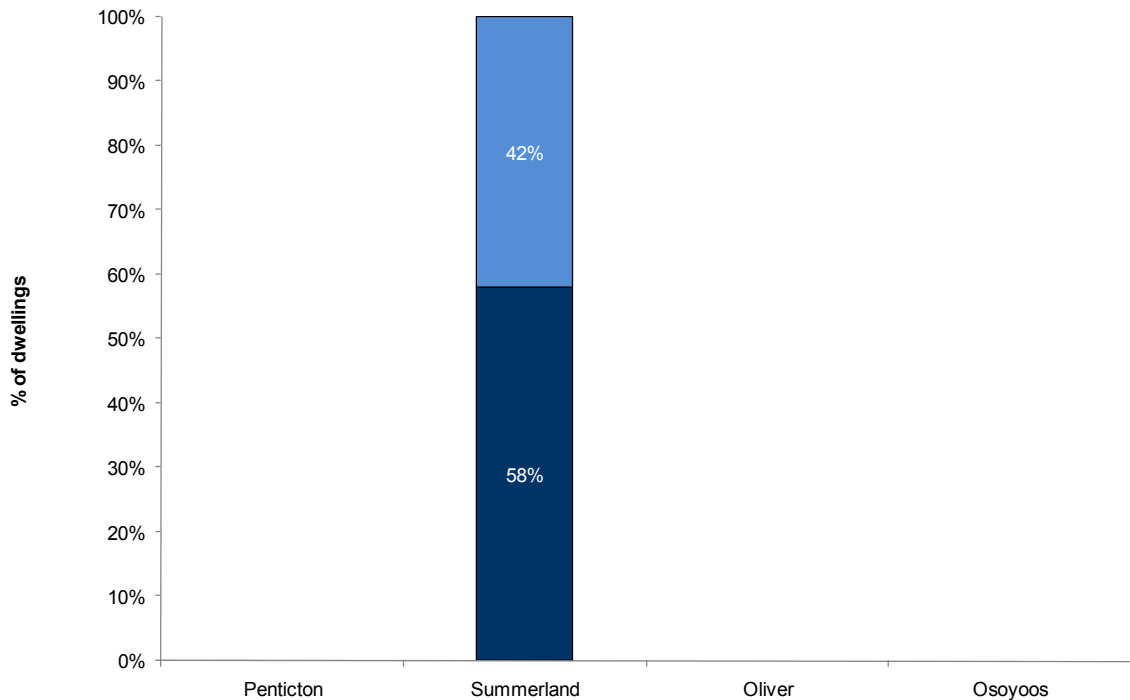


Source: Statistics Canada Census of Population, 2006

HS-1b: Dwelling growth inside and outside urban growth area boundaries

Summerland has six areas identified as Urban Growth Areas. In 2006, of the 4,530 dwellings in the municipality, 2,648 or 58% of dwellings were within the Urban Growth Area boundaries, and the remaining 1,882 or 42% were outside of the Urban Growth Area boundaries.

Figure 12. Percentage of Dwelling Units Inside and Outside Urban Growth Boundaries, 2006



What is Being Done?

The RGS theme of carefully directing human settlement (theme four) has the goal to “Direct development to serviced areas and strengthen the distinct identity of each south Okanagan community.” The policy that articulates that goal is H2 *Promote compact urban form*.

There are a variety of initiatives that are ongoing in several of the South Okanagan municipalities:

Design

The municipality of Oliver worked with Smart Growth on the Ground in 2005/6 to develop the Greater Oliver Concept Plan which was; a collaborative process to plan for sustainable development in the Town of Oliver and Area C of the Regional District of Okanagan-Similkameen. The vision for the Oliver region strives to:

- emphasize the value of an integrated planning and management strategy for the town and regional district,
- reinforce the role of the Town as the primary focus for development,
- maintain the primacy of agriculture in the rural area, and
- retain the small town and rural character of the region.

Policy and Regulation

In Summerland, the District updated their Official Community Plan (OCP) in 2008 and has included policy about new construction which calls for a series of “urban villages” surrounding existing shopping centres or emerging commercial nodes. Higher density will be considered in these “villages”. In addition, the OCP has adopted principles of Smart Growth, which among other things support the development of compact communities and encourage growth in existing communities.¹⁰

In the Town of Osoyoos, their Official Community Plan was updated in 2007. The vision that is articulated at the beginning of the document describes the vision of the community as wanting to “excel as a SmartGrowth community which meets current and future population needs in a socially, economically and environmentally sustainable manner.”¹¹

In the Penticton Official Community Plan dated 2002, it also supports the principles of Smart Growth.¹²

What Can Citizens Do?

- Attend public meetings on planning initiatives including applications for rezoning, subdivisions and land development activities.
- View the Area Plan for where you live and participate in planning processes when the plan for your area is being updated.

¹⁰ http://www.summerland.ca/docs/docs_forms/bylaws/Official%20Community%20Plan-Schedule%20A.pdf

¹¹ Town of Osoyoos, Official Community Plan, 2007, p. 14.

¹² City of Penticton, Official Community Plan, 2002. p.13.

- Consider your reasons for living where you do, and if you are living a more urban lifestyle in a rural area, whether that is important over the long-term to remain there if you are interested in preserving rural character.

What is Being Measured?

This indicator measures the changes in housing density in rural and urban areas of the south Okanagan. The measure is gross density, which includes streets, parks, rights-of-way and non-residential land uses in the area.

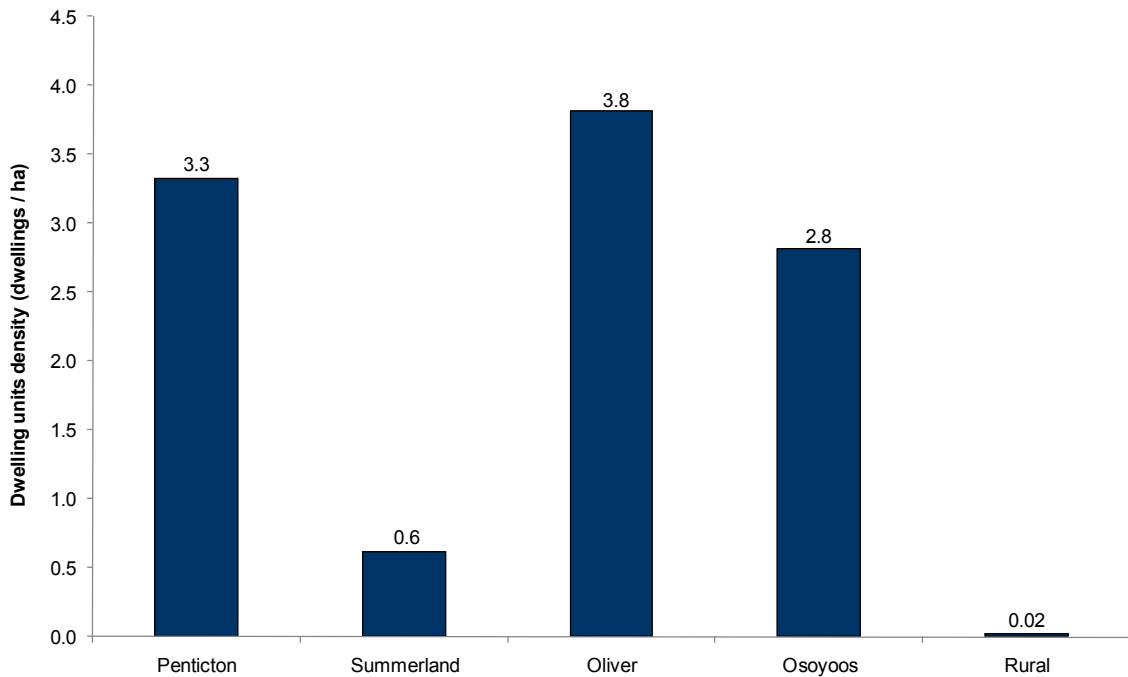
Why is this Indicator Important?

This indicator measures how efficiently land is being utilized for residential uses in urban areas within the region as well as in rural areas. Benefits of keeping the urban areas compact and increasing densities there are: development can be more efficiently serviced, public transit can better be provided, walking and cycling become more viable transportation options and agricultural land and green spaces are better protected.

What is happening?

Dwelling unit density in the South Okanagan is 0.02 units per hectare in the rural areas (Electoral Areas A, C, D, E and F). Broken down by municipality, Penticton's density is 3.3 persons per hectare, Summerland is 0.6, Oliver is 3.8 and Osoyoos is 2.8. Over time this indicator will track the density changes in these areas, reporting on urban area density, whether it is increasing in order to better provide more services to more residents or providing services to people over larger areas, while at the same time protecting rural and agricultural values.

Figure 13. Dwelling unit density in urban and rural areas, 2006



Source: Statistics Canada Census of Population, 2006

What is Being Done?

More and more communities are embracing sustainability goals and principles and integrating them into their policy documents as a first step toward a more sustainable future. One of the main tenets of these kinds of principles and which are reflected in the RDOS Regional Growth Strategy is to increase residential density in areas that have been identified as primary growth, while at the same time preserving important ecological values in both urban and rural areas.

The Regional Growth Strategy has several policies that support development in areas where there is existing infrastructure and services and policy that recognizes the critical link between infrastructure and human settlement:

1. Policy H1 directs member municipalities and electoral areas to "Dialogue to direct development to potential growth areas and to coordinate and collaborate on human settlement.
2. Policy H2 directs member municipalities and electoral areas to "Promote compact urban form"
3. Policy H5 directs the District, the member municipalities and electoral areas to "Recognize the critical link between infrastructure, environment, social conditions and human settlement for effective growth management".

All of these policies are linked to strategic actions such as setting growth boundaries, supporting infill, collaboration on urban/fringe planning, determining a process for

boundary extensions, directing growth to primary growth areas, and discourage growth outside of secondary growth areas."¹³

What Can Citizens Do?

- Consider moving into a townhouse or condominium if your living situation has changed (e.g., fewer people living in your household) and you no longer need all the space provided by a single-family home.
- View the Area Plan for where you live and participate in planning processes when the plan for your area is being updated.
- Consider buying or building a smaller house rather than one that is too large.

¹³ RDOS Regional Growth Strategy, 2008, p. 38.

What is Being Measured?

This indicator measures the proximity of residential units to three commonly used amenities: shopping, parks or playing fields, and community centres. A 400 m distance threshold (as the “crow flies”) is used for proximity to shopping and schools or parks, which roughly corresponds to a 10-minute walk. For proximity to community centres, both a 1 km and a 2 km threshold is used.

The measurement unit used is the % of dwellings that are located within proximity to key services or facilities.

Why is this Indicator Important?

Convenient access to key services and facilities allows residents to meet more of their daily needs closer to home. It can indicate the degree of “completeness” of a community and how well distributed services are throughout the community. It also supports increased use of walking and cycling to access these destinations because residents who live within walking distance of everyday destinations are much less car-dependent. This in turn results in less fuel consumption and fewer greenhouse gases and air emissions being generated by vehicles. It can be an early indicator of opportunities to create more integrated, complete communities through new planning and design.

How are We Performing?

Proximity to services in the municipalities tends to be significantly higher than in the electoral areas, as higher densities of people and services are concentrated in these areas.

Within 1km of a community centre

For people living within one kilometre of community centres, the range is from 35% in Penticton, 50% in Summerland, 55% in Osoyoos, to 87% of people in the municipalities. In contrast, in the rural areas the highest number of people living within a kilometre of a community centre is in Electoral Area F at 52%, then 31% in Electoral Area D, 30% in Electoral Area E, 13% in Electoral Area C and 4% in Electoral Area A.

Within 2km of a community centre

Proximity to community centres within two kilometres is similar, with the same pattern emerging between the more urban municipalities and the rural municipalities: between 73% (Penticton) and 100% (Oliver) of people in the municipalities live within two kilometres of a community centre, whereas in the electoral areas the range is from 13% (Electoral Area C) to 64% (Electoral Area F).

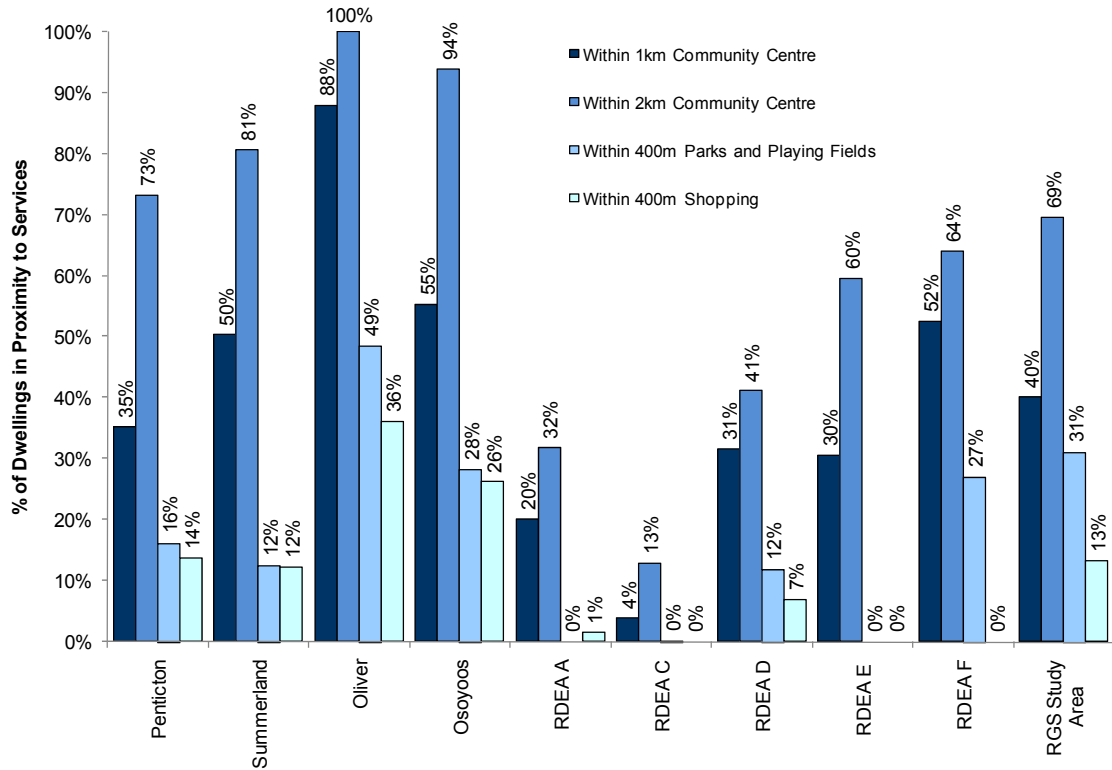
Within 400m of shopping

Proximity to shopping, the percentages of people being within 400m is much lower, with the highest number of people being in Oliver with 36%, Osoyoos with 26%, Summerland and Penticton mid-range with 12 and 14% respectively, dwindling off to zero in Electoral Areas A, C, E and F.

Within 400m of parks or playing fields

No dwellings in electoral areas A, C, and E are within 400m of parks and playing fields, and only 7% in Electoral Area D. In the municipalities, proximity to parks and playing fields ranged from 49% in Oliver, 28% in Osoyoos, 16% in Penticton, to 12% in Summerland.

Figure 14. Proximity of Dwelling Units to Key Services, 2006.

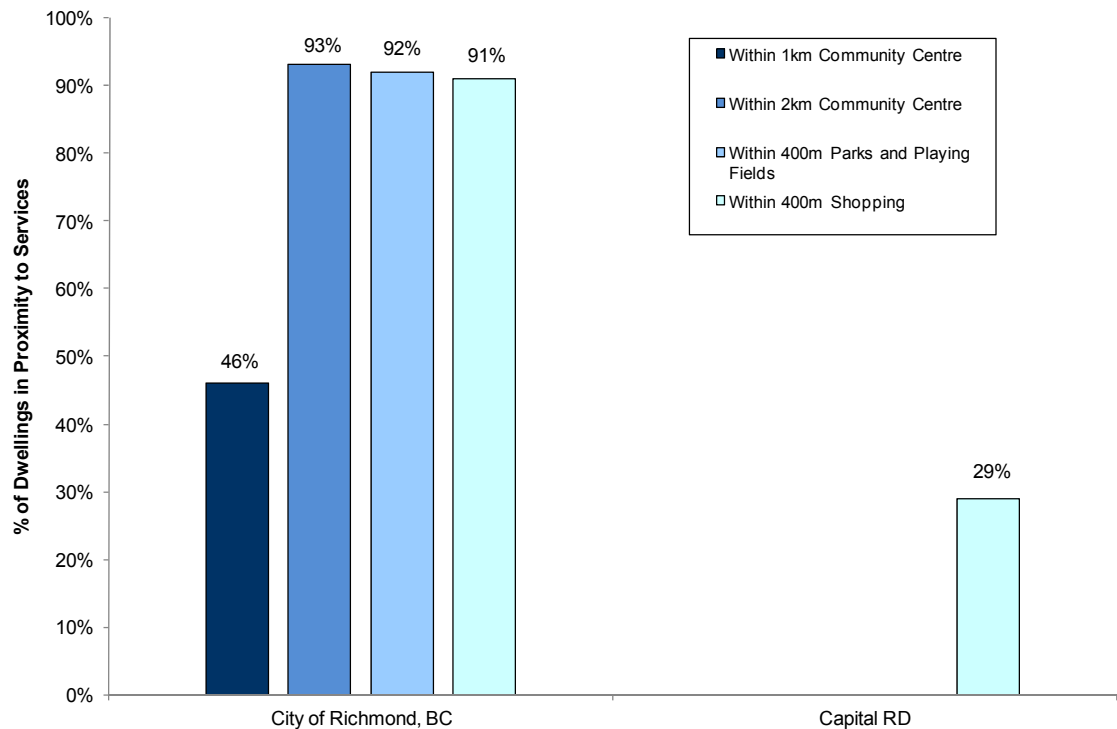


Source: Statistics Canada Census of Population, 2006. Regional District of Okanagan Similkameen GIS data.

How Do We Compare?

Compared to the lower Mainland community of Richmond, which is a higher density population and is able to accommodate 46% of residents within 1m of where they live to a community centre, communities in the south Okanagan range from 35% to 88% in the municipalities, and 0 to 52% for living within 1km of a community centre. The difference for people living within 2km of a community centre is significantly greater, with Richmond accommodating 93% of its population, compared with south Okanagan communities which range from 13 to 64% in the rural areas, and 73 to 100% in the urban areas. For parks and playing fields, 93% of Richmond's population is within 400m, while 16 to 35% of people in the urban areas are and 0 to 27% of electoral area residents have access to parks and playing fields within 400m of where they live. This is a similar difference for access to shopping, with Richmond having 91% of people within 400m for that service, compared to 12 to 36% of residents in urban areas, and 0 to 7% in the electoral areas. However, in the Capital Regional District on Vancouver Island, 29% of the population is within 500m of shopping, which is a slightly larger measure that was selected for proximity, but is still a useful benchmark.

Figure 15. Proximity to Key Services in Comparable Jurisdictions, 2001



Source: Statistics Canada Census of Population, 2006

What is Being Done?

The South Okanagan Regional Growth Strategy theme number four is to “Carefully Direct Human Settlement”. Its goal is to “Direct development to serviced areas and strengthen the distinct identity of each south Okanagan community”.¹⁴ To realize this goal, the RGS has identified Primary and Secondary Growth Areas as a way to prioritize where and how future growth should occur.

- Primary Growth Areas (i.e. the larger south Okanagan communities) will provide: essential services and amenities that are in place to accommodate growth, and where the necessary infrastructure is in place.
- Secondary Growth Areas (the smaller south Okanagan communities) will be close to essential services and amenities and where there is some infrastructure in place.

These characteristics contribute to the make up of complete communities, where people who live closer to services tend to utilize a wider range of transportation choices to access services, thereby having greater opportunity to reduce emissions, increase the opportunity for interaction with others, and be more active. Many regional districts and municipalities across the province have articulated similar objectives in their regional growth strategies and Official Community Plans.

¹⁴ Regional District of Okanagan-Similkameen. (January 2008). South Okanagan Regional Growth Strategy, Amended. p. 17.

What Can Citizens Do?

- Choose to live in communities that offer a variety of services and amenities close to home, pedestrian-friendly design so that personal auto use can be reduced.
- Support neighbourhood businesses by shopping locally.

AH-1: Housing starts by structural type

What is Being Measured?

This indicator measures the number of new units by structural type as well as the percentage mix of new housing starts by structure type.

In future RGS Performance Indicator reports, the data will be measured annually and cumulatively however since this is the baseline year report only the annual housing starts are reported.

Why is this Indicator Important?

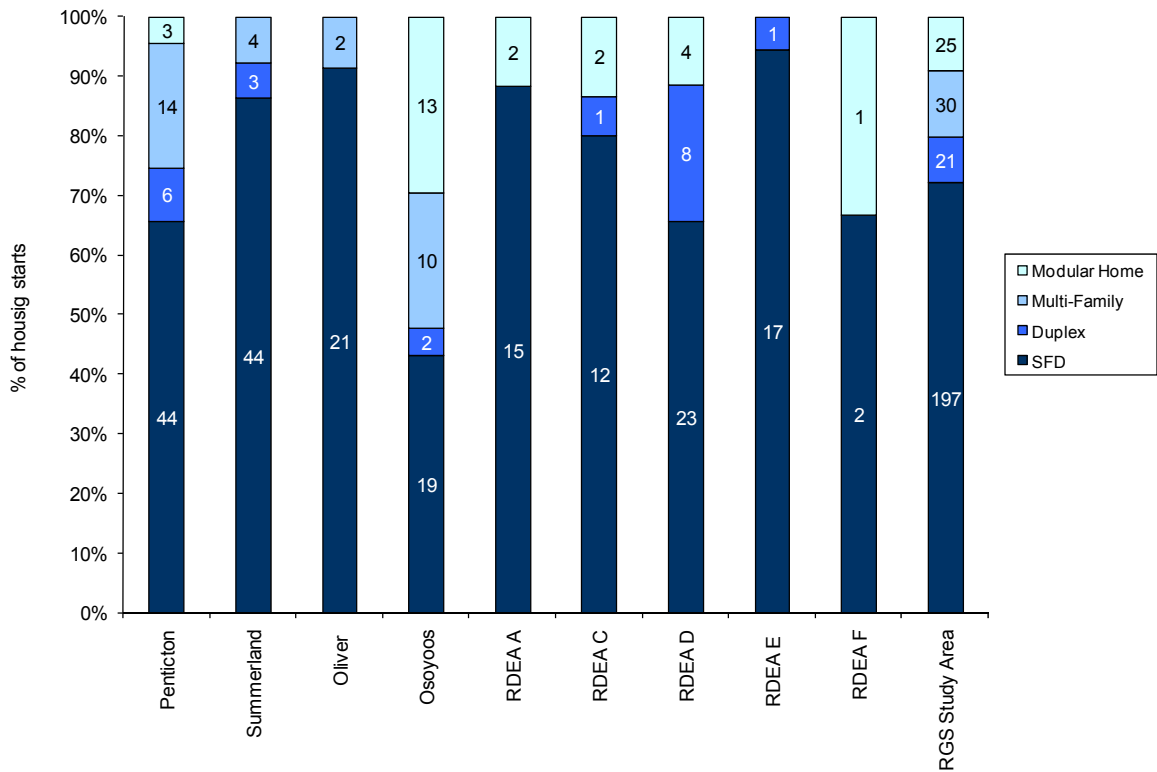
Housing starts are an indicator of economic health. This indicator illustrates economic health, as well as shows the range of housing types being supported in the marketplace. In order to develop a complete community and have an efficient use of the land base and to develop a compact urban form, it is desirable to have a balance between single-detached and multi-unit housing starts. An increased share of multi-unit dwellings fosters housing affordability.

How are We Performing?

The dominant type of housing start in the South Okanagan is the single-family dwelling, which ranges from 43% of all structural types in Osoyoos to 94% in Electoral Area E. There is no consistency between the urban and rural areas in terms of which areas have a more balanced mix of housing starts; each group has a wide range of distribution. In Penticton, the largest urban centre in the region, single family dwellings account for 66% of new housing starts, Summerland is 86%, Oliver is 91%, Electoral Area A is 88%, Electoral Area C is 80%, Electoral Area D is 66%, Electoral Area E is 94%, and Electoral Area F is 67%.

Figure 16 shows the number of housing starts by structural type in the bar area of the graph, and the percent distribution on the vertical (Y) axis.

Figure 16: Housing Starts by Structural Type, 2006



Source: Data was provided by the municipalities of Summerland, Oliver, Osoyoos, Penticton and the RDOS.

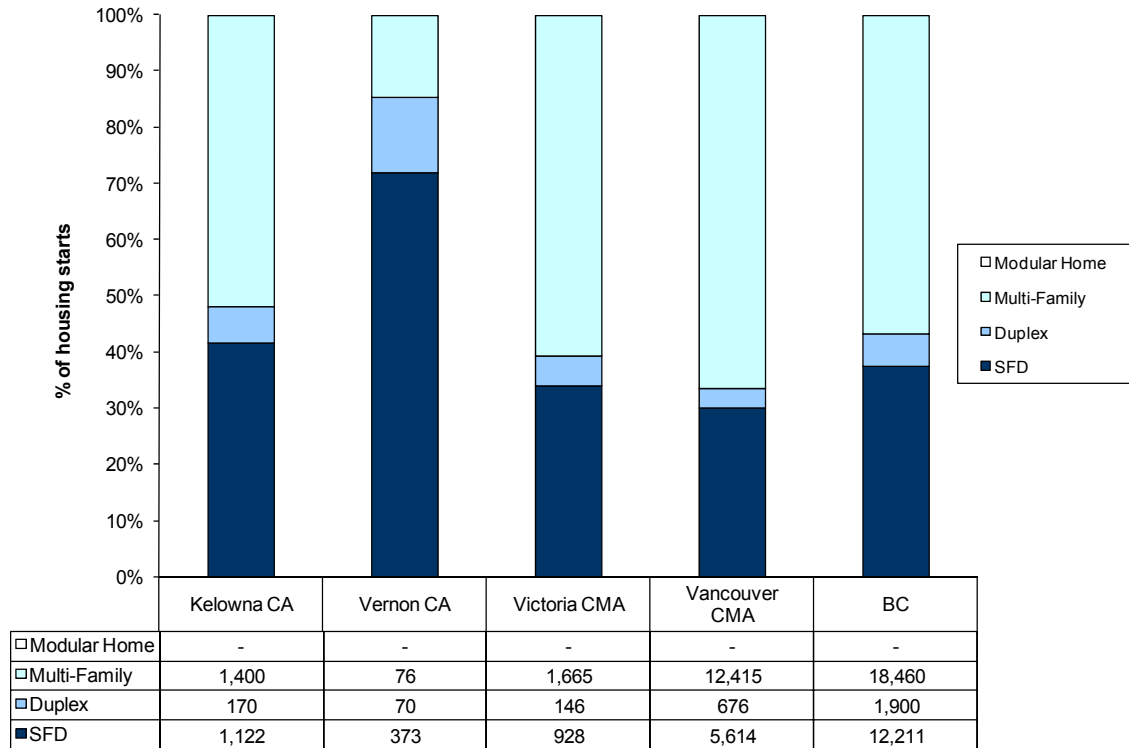
Note: Data in each jurisdiction was provided differently: for Oliver, there was no breakdown for duplex or modular/mobile home. In Osoyoos, multi-units and condo units were combined, and data provided by the RDOS for Electoral Areas A,C,D, E and F combined semi-detached, duplex and multi for the multi-family category.

The number of housing starts by structural type are noted in the bar area of the graph, and the percent distribution on the vertical (Y) axis.

How Do We Compare?

Housing starts are significantly lower in the south Okanagan in comparison to other areas in the province. The distribution of housing starts, by structural type is most similar to those in Vernon, where 72% of its housing starts are single family dwellings. Single family dwellings account for 37% of the housing starts across BC, 42% in Kelowna, 34% in Victoria and 30% in Vancouver.

Figure 17: Housing Starts by Structural Type in Comparable Jurisdictions, 2006



Source: Canada Mortgage and Housing Corporation

Note: The number of housing starts by structural type are listed in the data table, and the percent distribution on the vertical (Y) axis.

What is Being Done?

The South Okanagan Regional Growth Strategy's sixth theme area is to "Create safe, culturally diverse and healthy communities." Policy S4 of the RGS is to "Encourage greater demographic diversity to enhance the social health of the community."

According to the new housing start data shown in Figure 16, single family dwellings housing starts were dominant in 2006. This indicates that there is a need to create more demographic and housing diversity in the marketplace in the south Okanagan.

What Can Citizens Do?

- Attend public meetings on planning issues such as zoning applications or land development activities.
- Consider moving into a townhouse or a condo if your living situation has changed (e.g. fewer people living in your household) and you no longer need all the space provided by a single-family home.
- View the Area Plan for where you live and participate in planning processes when the plan for your area is being updated.

What is Being Measured?

This indicator reports on the housing mix in the South Okanagan area by structural type.

Why is this Indicator Important?

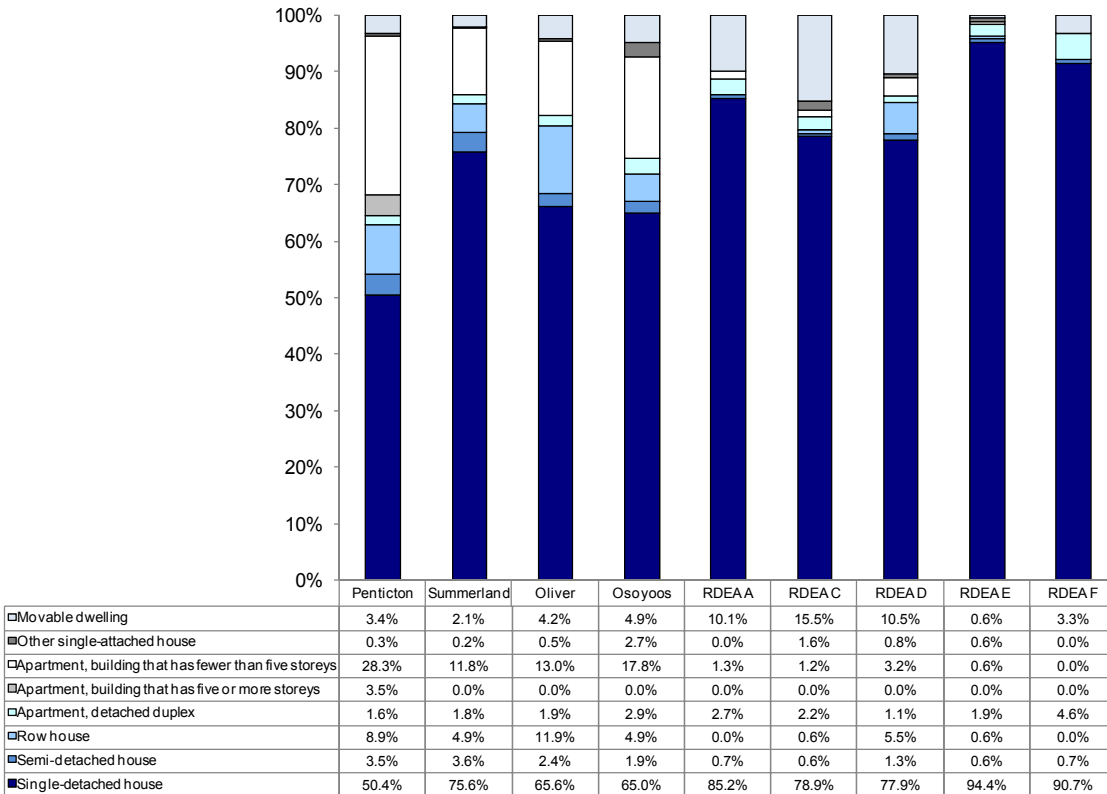
It is considered desirable to have a balanced mix of dwellings in a community. From a social perspective, a diversity of housing types suggests greater choice for a variety of lifestyles and budgets and supports improved housing affordability. From an environmental perspective, fostering a greater share of multi-unit dwellings has many advantages over single-family dwellings. They use land more efficiently and promote population densities that are better able to support walking, cycling, and transit. Energy, materials, and water consumption also tend to be lower on a per capita basis.

How are We Performing?

Figure 18 shows the dominant housing type in 2001 was single detached homes, ranging from 50% in Penticton to 94% in Electoral Area E. The percentage of apartment that were less than five stories ranged from 28% in Penticton to 12, 13 and 18% in Summerland, Oliver and Osoyoos. In the electoral areas, apartments that were less than five stories ranged from 0 to 3%. Movable dwellings in the municipalities ranged from 2 in Summerland to 5% in Osoyoos. In the electoral areas, the range was much greater, from almost 0% in Electoral Area E to 15% in Electoral Area C.

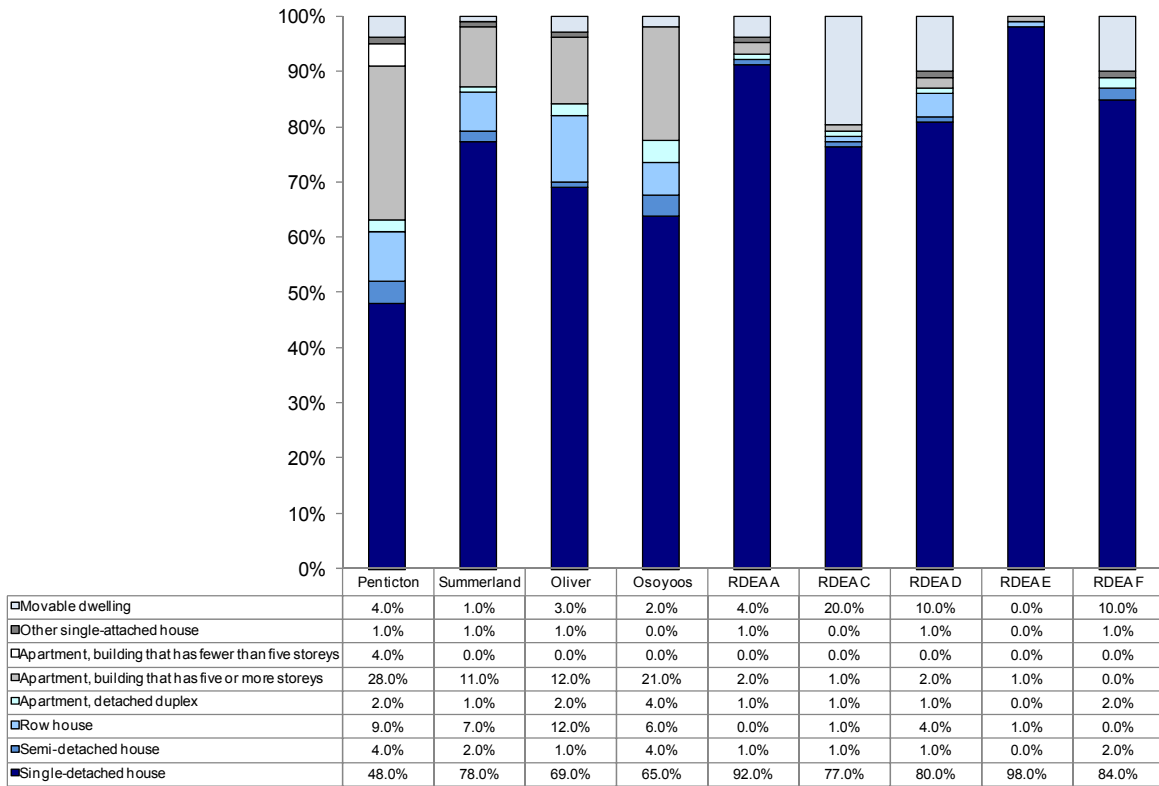
Five years later in 2006, Figure 19 shows the dominant housing type is still single detached homes, ranging from 48% (down 2% since 2001) in Penticton to 98% in Electoral Area E (up 4% since 2001). The percentage of apartments that are less than five stories are 28% in Penticton, and 11, 12 and 21% in Summerland, Oliver and Osoyoos respectively. These numbers are similar to the 2001 Census, with the exception of Osoyoos which increased by 3% to 21 percent. Movable dwellings, range from 1 to 4% in the municipalities, and 0 to 20% in the electoral areas, with the highest being Electoral Area C with an increase of five percent, which was the highest of all the municipal and electoral areas in both 2001 and 2006.

Figure 18. Dwelling Units in the South Okanagan by structural type, 2001



Source: Statistics Canada, Census of Canada, 2001.

Figure 19. Dwelling Units in the South Okanagan by structural type, 2006

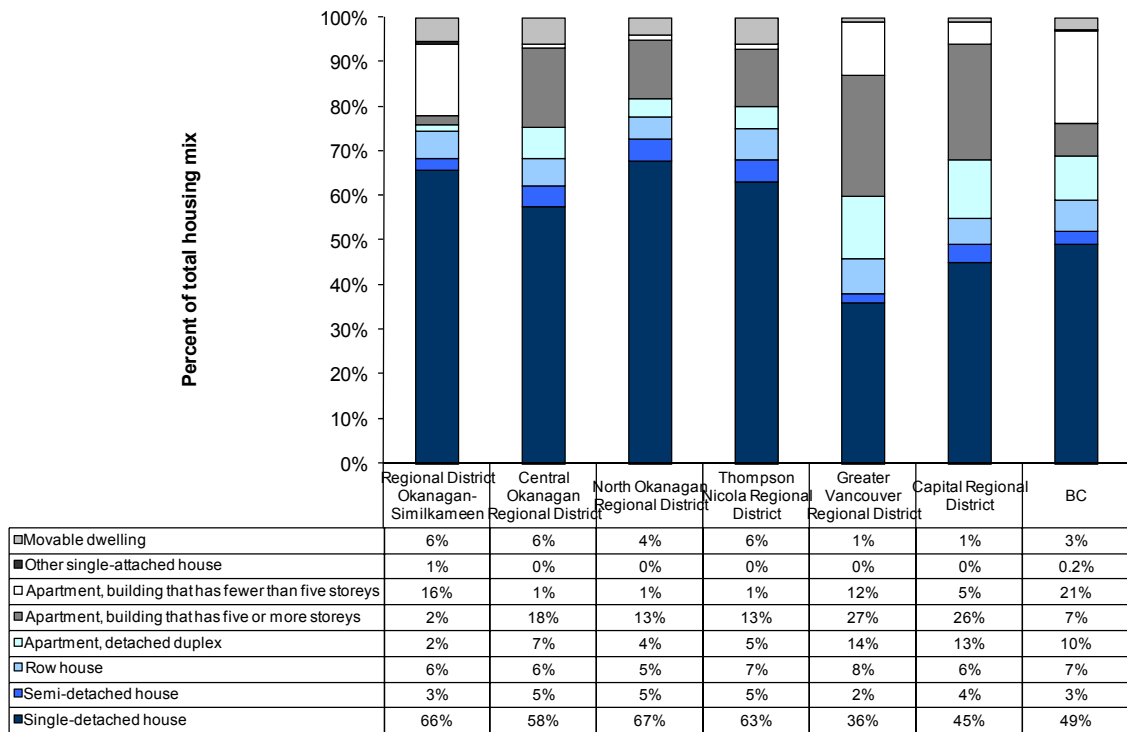


Source: Statistics Canada, Census of Canada, 2006.

How Do We Compare?

The south Okanagan is consistent with other interior Regional Districts of British Columbia that have the single family dwelling as the dominant structural type such as the Central Okanagan (58%) , the North Okanagan (67%), and Thompson Nicola Regional District (63%). It is much higher than other areas of the province with high populations such as Greater Vancouver (36%) and the Capital Regional District (45%).

Figure 20. Dwelling units by structural type in comparable jurisdictions, 2006



Source: Statistics Canada, Census of Canada, 2006.

What is Being Done?

The vision developed by South Okanagan residents for the Regional Growth Strategy includes a statement about how “new development is predominantly mixed-use higher density where parking requirements are reduced”. These values were expressed as a long-term vision for controlled growth of the region, which is quite different from the built form that is currently on the ground. This indicator will be important in showing how the built environment evolves over time toward that vision.

What Can Citizens Do?

See AH-1.

What is Being Measured?

This indicator measures the percentage of owner households spending 30% or more of their gross income on housing.

Why is this Indicator Important?

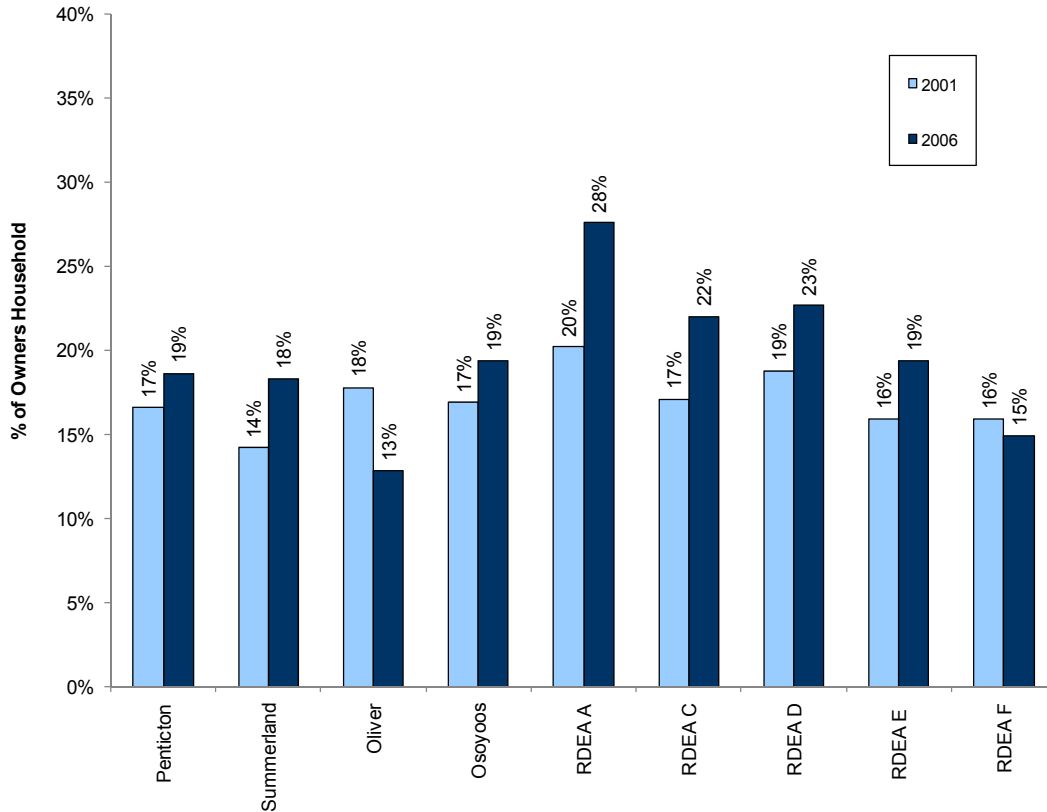
The 30% of household spending indicator is a comparable and common affordable housing indicator. Having to pay more than 30% of gross household income often places strain on both individuals and families. Spending more than 30% of gross income limits the amount of disposable income for other purposes such as food, clothing, educational expenses, recreation etc. Thirty percent is also the measure that banks commonly use to determine a household's gross debt servicing ratio. Households spending 50% or more of their before-tax income on shelter is used as a measure of core housing need.

How are We Performing?

From 2001 to 2006 there was an increase in the number of owner households spending over 30% of their gross income in all communities except for the Town of Oliver and Electoral Area F. Oliver experienced a 5% decline and Electoral Area F experienced a slight decrease of one percent. This indicates that overall, more people are spending more of their gross income on housing costs.

The average price of a home in the Regional District of Okanagan-Similkameen is \$322,499, which is significantly lower than the higher provincial average of \$418,703, making it an attractive alternative to other parts of the province to live. The south Okanagan is especially attractive as a place to relocate for people at the retirement age of the life-cycle. Housing prices are significantly lower compared to southern Vancouver Island and the Lower Mainland but, external market pressures from Alberta residents purchasing vacation homes has increased housing prices in the last five years. In the current climate, with housing now poised for a downturn projected to last five or six years, it may be that housing prices will stabilize in the Okanagan, keeping it more affordable than other parts of British Columbia.

Figure 21. Owner households spending more than 30% of gross income on housing, 2001-2006

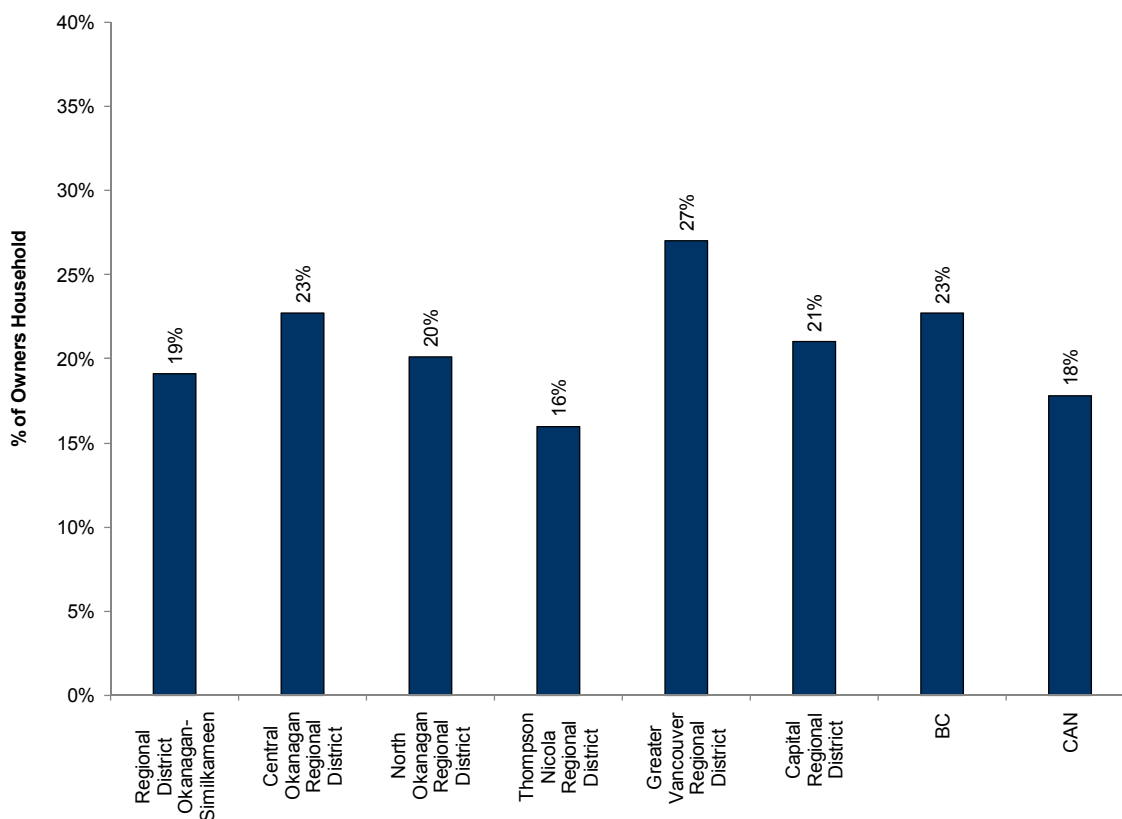


Source: Statistics Canada, Census of Canada, 2001 & 2006.

How Do We Compare?

Home owners in the south Okanagan communities spent between 14 and 20% of their income on housing in 2001. In 2006, the range widened: home owners in the south Okanagan spent between 13 and 28% of their gross income on housing. The range tends to be a lower percentage of gross income in the municipalities, from 13 to 19% in 2006; to between 15 and 28% in the electoral areas. In the entire Regional District, 19% of owners spend 30% or more of their gross income on housing. Owner households in the South Okanagan tend to be about mid range in terms of this indicator, with some areas of the province such as the Thompson-Nicola Regional District having 16% of owner households paying more than 30%, to 27% in Greater Vancouver. Across Canada, 18% of owner households are paying more than 30% of gross income for housing.

Figure 22. Owner households spending more than 30% of gross income on housing in Comparable Jurisdictions, 2006



Source: Statistics Canada, Census of Canada, 2006.

What is Being Done?

In Oliver, the Smart Growth on the Ground initiative produced a Concept Plan developed by community members that if implemented, could direct future development in the Oliver region in a sustainable way. Recommendations included:

- the development of a housing strategy,
- establishing a non-profit organization that develops affordable housing, and
- develop regulations and policies that promote a wide range of housing types and prices to suit all incomes and stages of the life-cycle.

In Summerland with its recently updated Official Community Plan, it also calls for the development of a reserve fund to be held by the District for the development of affordable housing and the development of a Housing Strategy. The community has expressed a need for more affordable housing options such as increasing density and decreasing lot sizes.

The Town of Osoyoos updated its Official Community Plan in 2007 and has many references to increasing opportunities to create affordable housing, including using tools like density bonusing to provide additional dwelling units on site or contributing to a reserve fund to develop housing.

In 2007, the City of Penticton administered a Housing Survey to the public to get feedback on secondary suites, funding and land for affordable housing.

The Implementation Section of the RGS has one of four components devoted to housing. It has committed to strategic actions that include increasing accessibility to housing, policy development for non-market housing, the creation of a Regional Housing Society, and encouraging accessible housing development in areas with other supportive services.

What Can Citizens Do?

- Review the housing Toolkit on page 52, 53 and 54 of the Regional Growth Strategy which provides information on affordable housing from a range of sources in order to increase awareness about housing issues

AH-4: Renters spending 30% or more of income on housing

What is Being Measured?

This indicator is similar to AH-3 but focuses on renters rather than home owner households. It measures the percentage of renter households that spend 30% or more of their gross income on housing

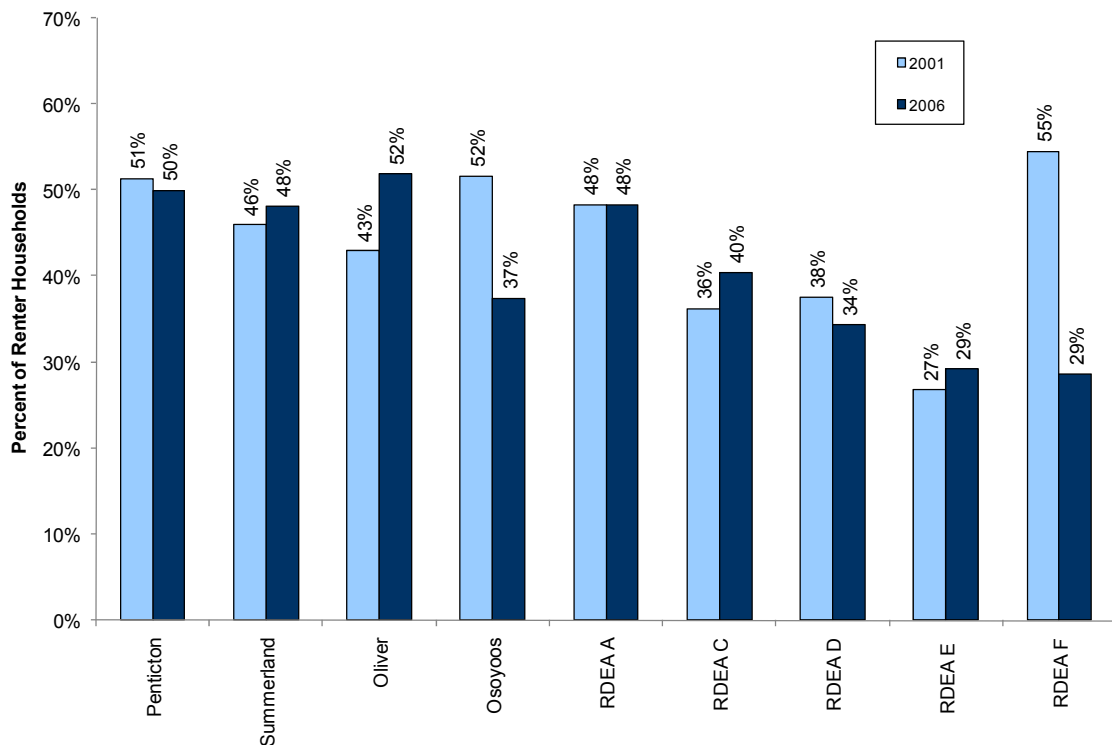
Why is this Indicator Important?

Like indicator AH-3, the 30% of household spending indicator is a comparable and common affordable housing indicator. 30% of gross income is also the measure that banks commonly use to determine households gross debt servicing ratio. Households spending 50% or more of their before-tax income on shelter is used as a measure of core housing need.

How are We Performing?

In both 2001 and 2006, the percentage of renter households varied, with 29% of renter households in Electoral Areas E and F versus almost 50% or greater number of renter households in Oliver, Summerland and Penticton paying over 30% of their gross income on housing.

Figure 23. Percentage of Renters spending 30% or more of income on housing, 2001 & 2006

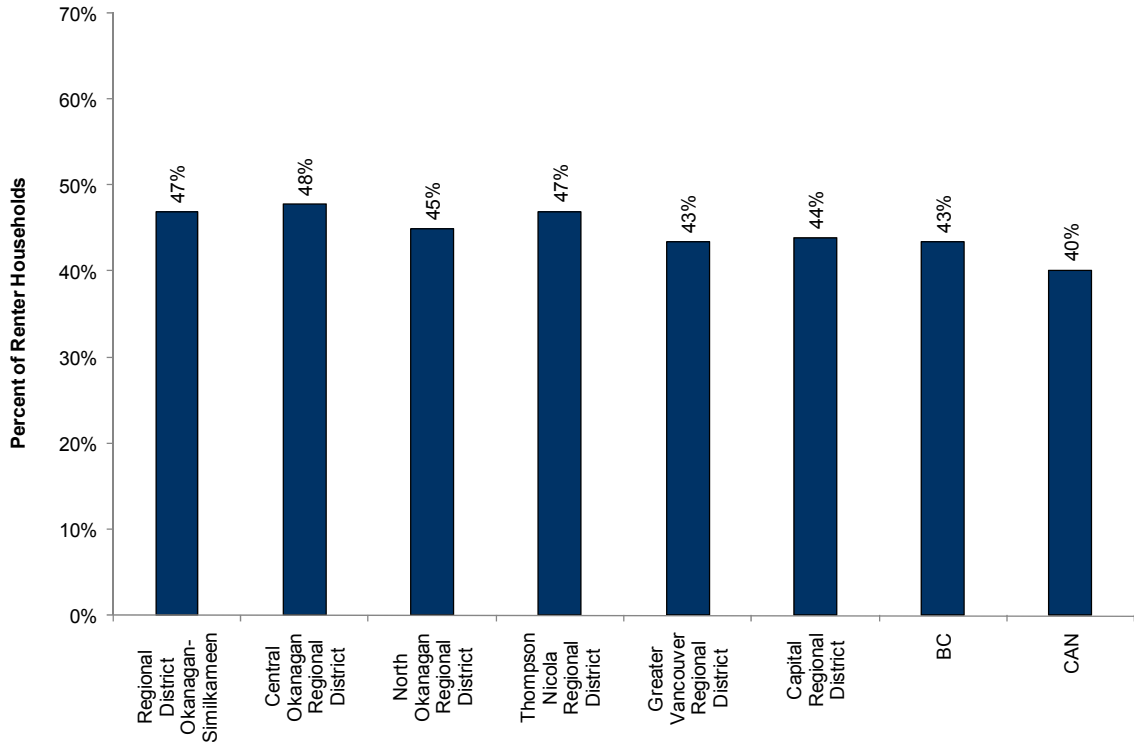


Source: Statistics Canada, Census of Canada, 2001 & 2006.

How Do We Compare?

South Okanagan renters spent between 27 and 55% of their gross income on housing in 2001. In 2006, the range shortened to between 29% and 52% of renters spending more than 30% of gross income on housing. In the RDOS as a whole, the average percentage of income spent by renters on housing is 47%. The provincial average is slightly lower at 43%; the national average is 40%. Other interior regional districts tend to be similar to the RDOS, such as the Central Okanagan (48%), the North Okanagan (45%) and the Thompson Nicola Regional District (47%). Greater Vancouver is the same as the provincial average of 43%.

Figure 24. Percentage of Renters spending 30% or more of income on housing, 2001 & 2006



Source: Statistics Canada, Census of Canada, 2001 & 2006.

What is Being Done?

See AH-3

What Can Citizens Do?

See AH-3

T-1: Percentage of Labour Force Living and Working in the Same Municipality

What is Being Measured?

This indicator estimates the percentage of the employed labour forces that live and work within the same municipality or electoral area.

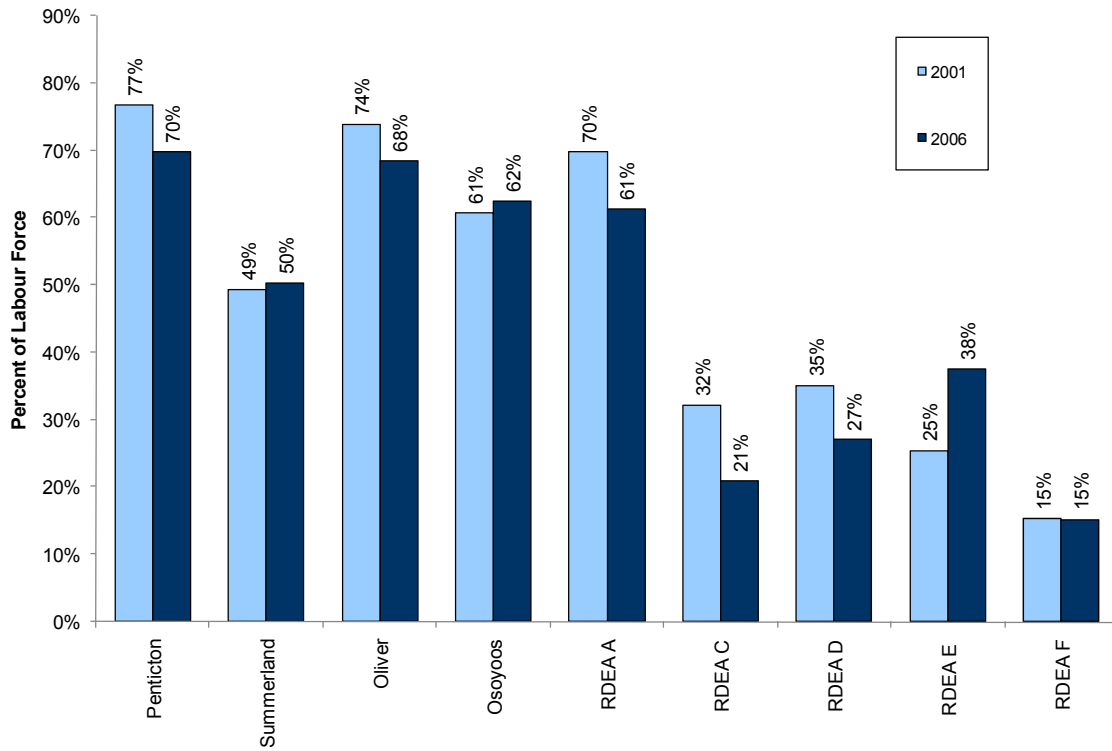
Why is this Indicator Important?

The relationship between where people live and work is a central theme in building complete communities. The degree to which people live in proximity to their place of employment directly influences the length of trips, transportation mode choice and transportation demand patterns. People who live in close proximity to their work will spend less time in their vehicles. They will also be more likely to choose active forms of transportation, like walking and cycling.

How are We Performing?

In the primary growth areas of the south Okanagan, which include the municipalities of Penticton, Summerland, Oliver and Osoyoos, the percentages of people living and working in the same area is between 50 and 76%, which is much higher than in the electoral areas which range from 15 to 32%. This is due to the concentration of services that are found in areas with higher population numbers and provide more employment opportunities. In 2001, more people were living and working in Penticton, Oliver, Electoral Areas A, C, D and F than in 2006. Conversely, in 2006, more people were living and working in Summerland, Osoyoos, and Electoral Area E than in 2001.

Figure 25. Percentage of labour force living and working in the same municipality, 2001 & 2006

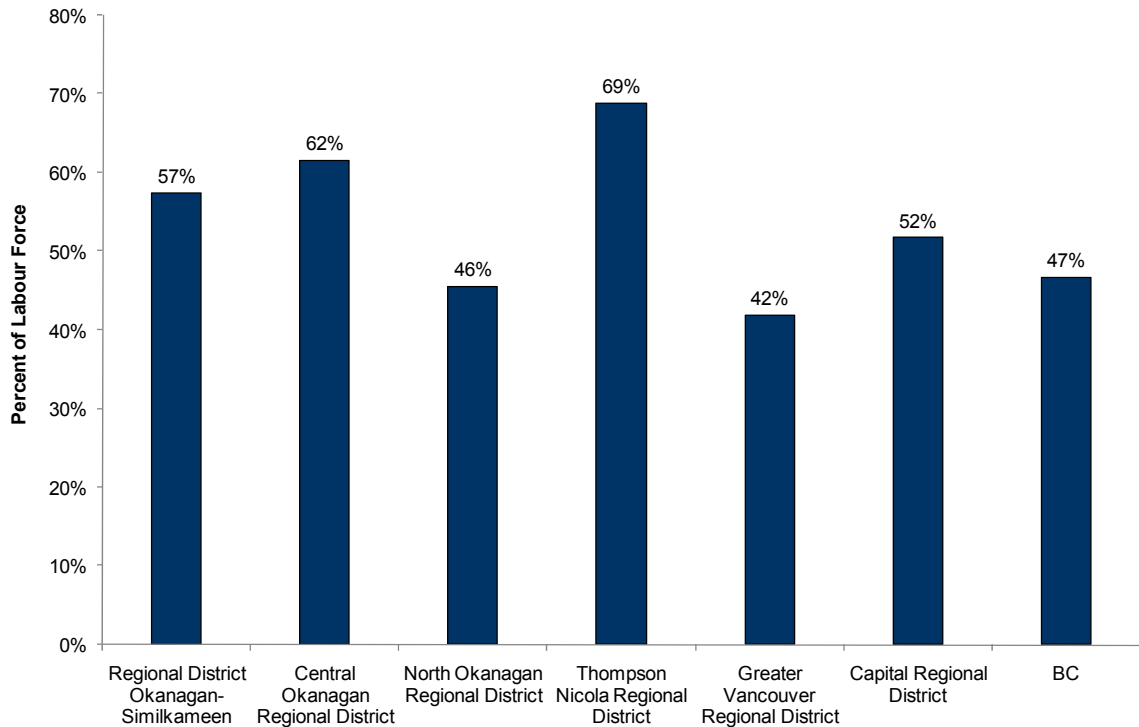


Source: Statistics Canada Census of Population, 2001, 2006

How Do We Compare?

In 2006, the range of people living and working in the municipalities ranged from 50 to 70%, whereas the electoral areas ranged from 15 to 61%. The Regional District of Okanagan Similkameen has 57% of residents living and working in the district. The provincial average is 47%, and the North Okanagan Regional District has 46% of its population living and working in the same municipality.

Figure 26. Percentage of labour force living and working in the same municipality in comparable jurisdictions, 2006



Source: Statistics Canada Census of Population, 2001, 2006

What is Being Done?

The RGS's policy H2 to "Promote compact urban form", has identifies several actions that the member municipalities and electoral area have agreed to. One of the relevant recommended actions is to "create walkable, livable, mixed-use neighborhoods and communities." This policy will direct the RDOS and its member municipalities and electoral areas to encourage land use development in a way that increases this number over time, giving people more opportunities for alternative transportation choices, and reducing emissions.

What Can Citizens Do?

- Live closer to where you work to minimize your commuting distance and travel time to work.
- Work from home for one or more days per week if your employer allows that flexibility.

T-2: Median Commuter Trip Distance (km)

What is Being Measured?

This indicator measures the median daily commuter distance traveled between home and work in kilometres of the employed labour force for each of the communities in the RGS study area. Commuting distance is calculated as the straight-line distance between the resident's home and his or her usual workplace location based on estimates by Statistics Canada.

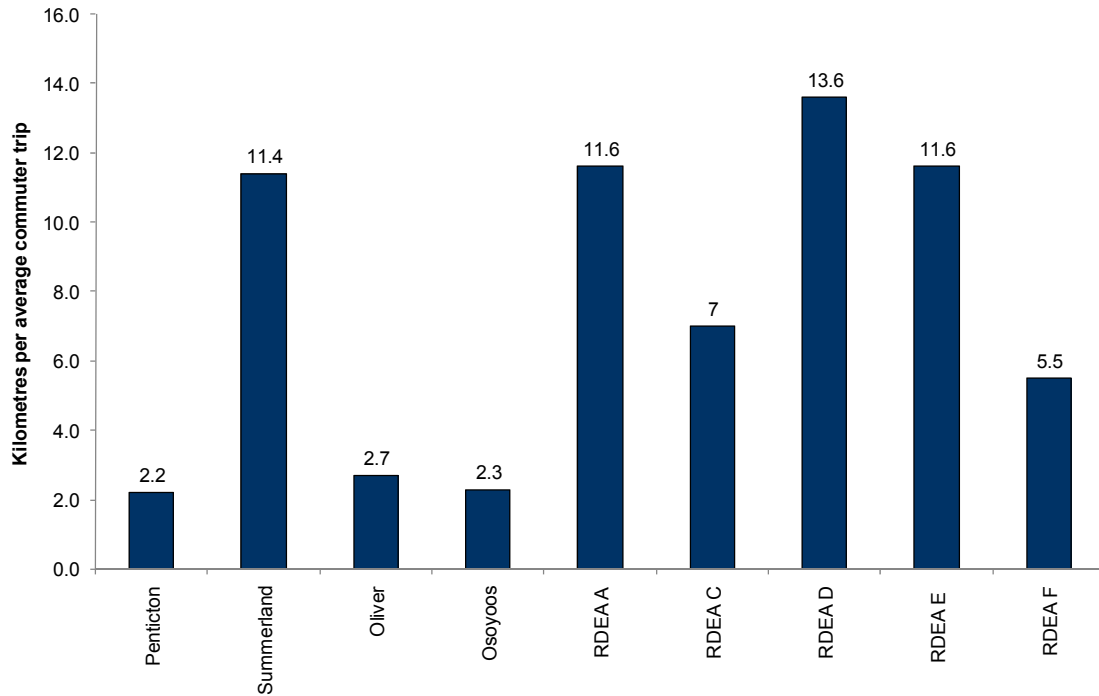
Why is this Indicator Important?

Commuter trip distance is related to the choice of transportation mode. Shorter trips tend to be well-served by walking and cycling, and to some degree by public transit. These modes are more energy efficient than the private automobile, which results in less fuel consumption, and hence fewer air and greenhouse gas emissions.

How are We Performing?

Median commuter trip distances tend to be very low in the communities of Oliver (2.7km), Osoyoos (2.3km), and Penticton (2.2km). These short commuting distances enable a greater range of transportation choices for commuters. Mid-range commuter distances are present in Electoral Area F is 5.5km, and 7km in Electoral Area C. Longer commuter distances are in Summerland (11.4km), Electoral Area A and E (both 11.6km), and Electoral Area D (13.6km).

Figure 27: Median Commuter Trip Distance, 2006

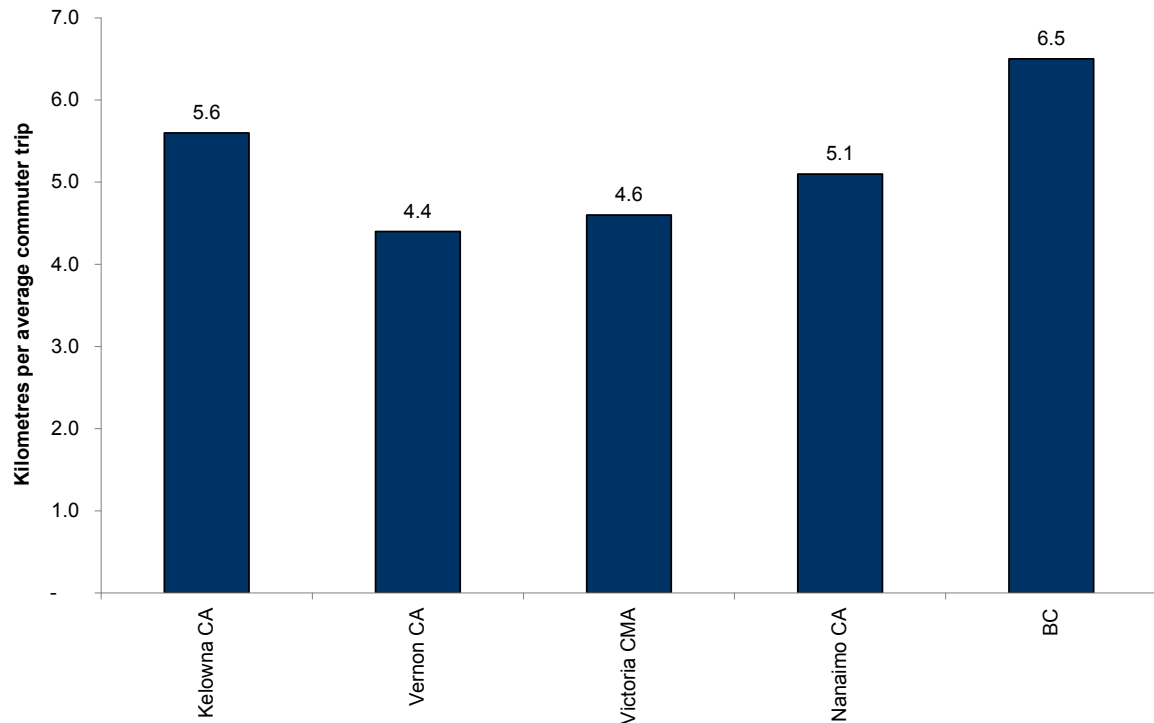


Source: Statistics Canada, 2006, semi-Custom Tabulation: Commuting Distance (km) (9), Age Groups (9) and Sex (3) for the Employed Labour Force 15 Years and Over Having a Usual Place of Work for Selected CSDs in the Okanagan-Similkameen Census District, 2006 Census - 20% Sample Data

How Do We Compare?

Most of the south Okanagan municipalities, with the exception of Summerland, tend to have lower commuter trip distances than cities such as Kelowna (5.6km), Vernon (4.4km), Victoria (4.6km) and Nanaimo (5.1km). Penticton, Oliver and Osoyoos residents all have commuter trip distances under 3km, indicating that many residents live close by to where they work. In the electoral areas, the commuter trip distances are much higher than these averages, indicating that people in these areas must travel longer distances (between 5 and 14km) to travel to work

Figure 28. Median Commuter Trip Distance in Comparable Jurisdictions, 2006



Source: Statistics Canada Census of Population, 2006

What is Being Done?

There are many policies and strategic actions in the Regional Growth Strategy that have implications for transportation, particularly the human settlement, infrastructure and social theme areas. The policy that focuses specifically on transportation can be found under the “Maximize the Efficient Use of Infrastructure”, which has a goal to “Coordinate efforts throughout the south Okanagan that maximize efficient and effective delivery of infrastructure and services, reduce environmental impact and recognize the scarcity of resources.” Policy 16 of this goal is to “Increase transportation options, improve transportation efficiency and reduce automobile dependency”, which has the following five actions which the south Okanagan municipalities and electoral areas and Ministry of Transportation agree to:

1. Support the creation of an inter-regional Transportation Plan from the regional transportation study, to include comprehensive transportation demand management, innovative transportation options and funding strategies.
2. Support the creation of walkable neighbourhoods and pedestrian / cycle / transit networks that offer both alternative transportation and recreational opportunities, and work with the Province to further develop the pedestrian / cycle network in conjunction with highway improvements.
3. Expand formal agreements with transportation providers for public transportation options beyond current service boundaries.
4. Encourage the identification of land in community cores appropriate for transit hubs.
5. Consider Light Rapid Transit (LRT) as an option to improve community linkages and mitigate the effects of transportation on air quality and climate change.

What Can Citizens Do?

- See T-1

T-3: Region-wide and municipal modal share for Journey-to-Work trips

What is Being Measured?

This indicator measures mode share, which means the percentage of journey-to-work trips taken by car, truck or van as a driver or passenger, walking, cycling, public transit, and other modes.

Why is this Indicator Important?

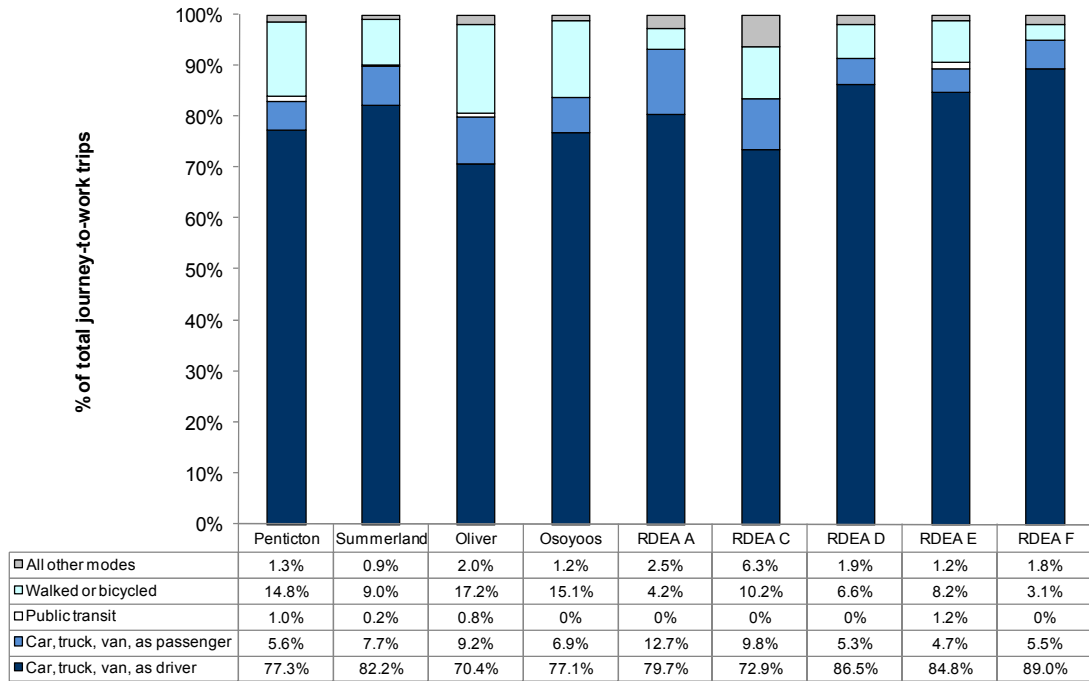
Mode share for journey-to-work trips represents the diversity of the transportation system and transportation choices. A large mode share of walking and cycling is desirable as these modes are energy and resource efficient, non-polluting, quiet, and have low or no cost associated with them. Both of these modes of transportation have health benefits through fitness. A high mode share is desirable for public transit for providing an alternative mode of transportation, particularly for longer trip distances. Public transit serves several niche markets for journey-to-work trips and is energy efficient and reduces traffic congestion.

How are We Performing?

In both 2001 and 2006 the dominant mode of transportation was single occupancy vehicles (SOVs). In 2006, SOVs accounted for 82% of commuter travel in Summerland, 71% in Penticton, 71% in Oliver, 80% in Osoyoos, 79.7% in electoral area A, 77% in electoral area C, 87% in electoral area D, 74% in electoral area E and 84% in electoral area F. The mode split in the electoral areas tended to be higher, due to lower density and lack of transit service to rural areas.

There was also an increase in the number of commuter trips using single occupancy vehicles in Oliver (1%), Osoyoos (2.6%), Electoral Area C (4.2%) and D (0.7%).

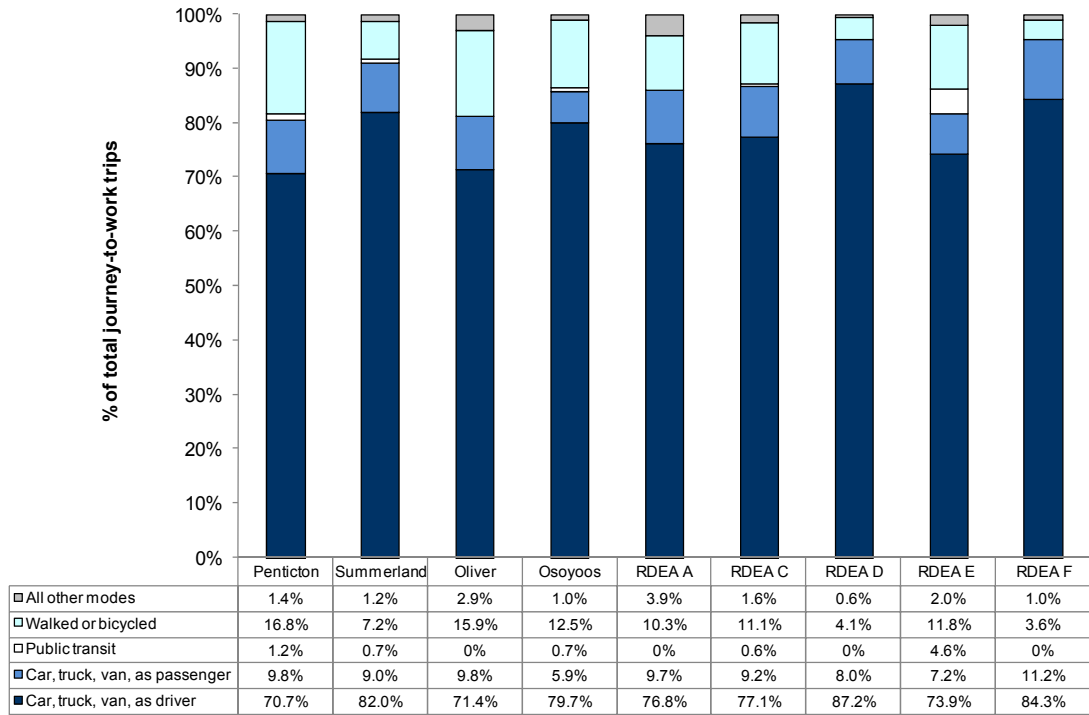
Figure 29: Journey to work trips, 2001



Source: Statistics Canada Census of Population, 2001

Five years later, six percent of Penticton residents changed their mode choice from an SOV, either to be a passenger, take more transit, or walk and cycle. The other big decreases by area were in Electoral Area E, which dropped almost 10%, and Electoral Area F, which dropped almost 5%.

Figure 30. Journey to work trips, 2006

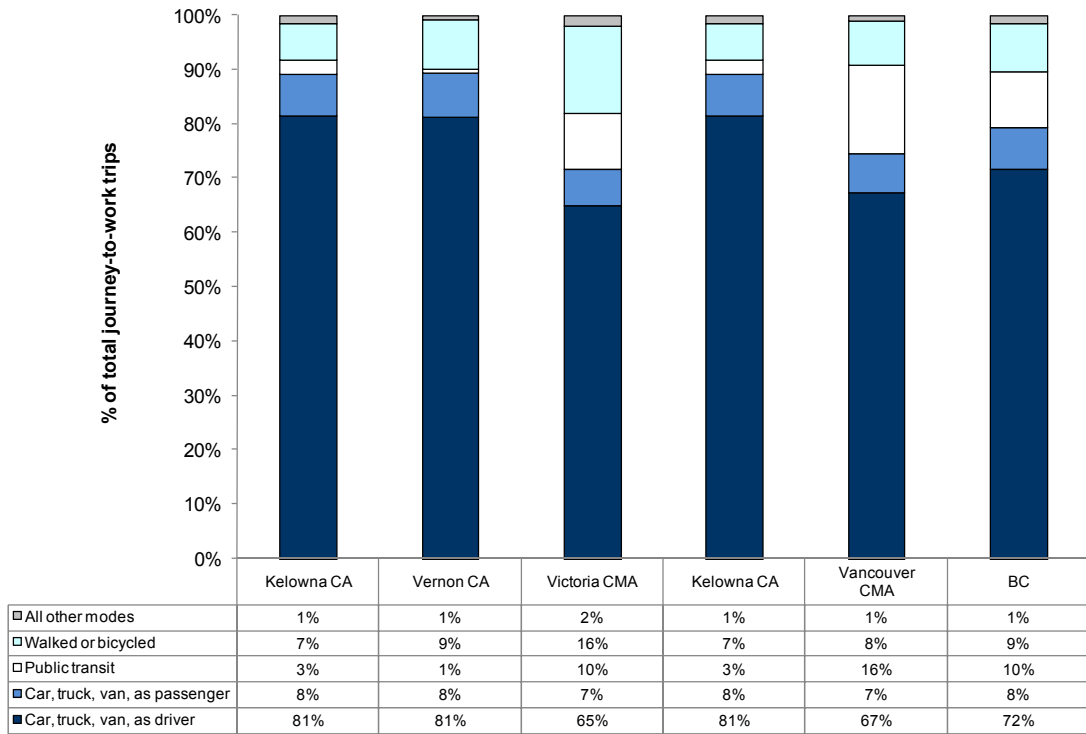


Source: Statistics Canada Census of Population, 2006

How Do We Compare?

South Okanagan resident's modal choice for journey to work trips is similar to other areas of the Okanagan. Average SOV use in Summerland (82%), Osoyoos (79.7%) and Electoral Area A (77%) is similar to the Kelowna Census Agglomeration (81%) and Vernon Census Agglomeration (81%), which reflects the similar existing land use pattern. Larger urban areas such as Vancouver (67%) and Victoria (65%), have a more even distribution of modal choice because they are able to support transportation infrastructure that offers more opportunities for public transit, walking and cycling, which are more similar to the City of Penticton (71%), and Oliver (71%).

Figure 31. Journey to work trips in Comparable Jurisdictions, 2006



Source: Statistics Canada Census of Population, 2006

What is Being Done?

See T-1.

What Can Citizens Do?

See T-1.

T-4: Length of Cycling Infrastructure

What is Being Measured?

This indicator measures the length of cycling infrastructure in the South Okanagan, including multi-user pathways, bike lanes, and signed bike routes.

Note: The current data for cycling infrastructure only includes trail data, it does not include designated bike lanes or signed bike routes.

Why is this Indicator Important?

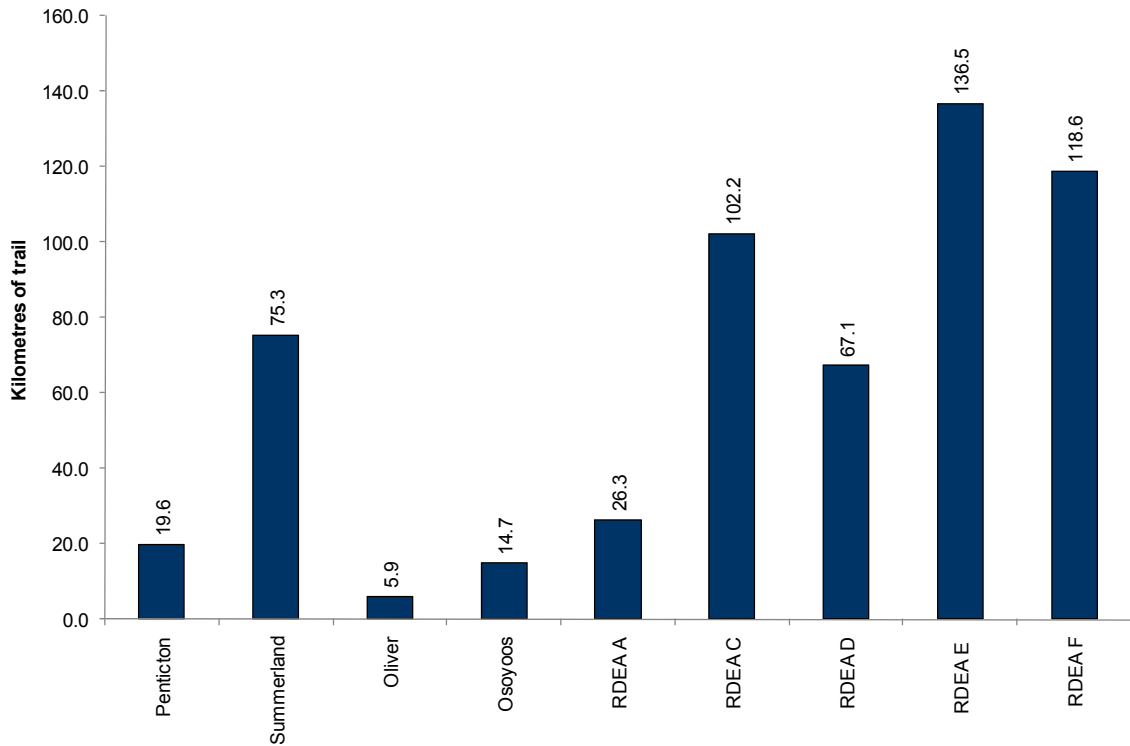
Cycling infrastructure can foster increased use of cycling through increasing the perceived and actual safety of cycling, comfort levels of cyclists, and convenience of cycling in the region. By improving and expanding cycling facilities, healthier lifestyles can be fostered while reducing air pollution, greenhouse gas emissions, and traffic congestion.

What is happening?

The length of cycling infrastructure in the south Okanagan is a component of the trail network. However, there are no trails that are designated as bicycle only; all cyclists must share the trails with other users. The trail network in the south Okanagan has five activity categories indicating the number of uses each trail has: walking, wheelchair, cycling, horseback riding and cross country. Two trails list bicycles as the primary use, 61 trails for secondary use, and 7 trails for tertiary use. There is currently 405 kilometres of trails that allow cycling as a use in the south Okanagan, either as the primary activity (1 kilometre), secondary activity (344 kilometres) and 60 kilometres for tertiary activity .

By community, trail length tends to be higher in the electoral areas, particularly Electoral Area E (136.5 km), Electoral Area F (118.6km) and Electoral Area C (102.2). One municipality that has a notably high length of trails is Summerland, with 75.3km. (Please refer to Figure 40 Total Length of Trails by Use for additional information.)

Figure 32: Length of Cycling Infrastructure, 2006



Source: Regional District of Okanagan Similkameen and member municipalities

What is Being Done?

The South Okanagan Regional Growth Strategy's Policy I6 is to "Increase transportation options, improve transportation efficiency and reduce automobile dependency", which has the following specific action which the south Okanagan municipalities and electoral areas and Ministry of Transportation agree to:

Action 5: Support the creation of walkable neighbourhoods and pedestrian / cycle / transit networks that offer both alternative transportation and recreational opportunities, and work with the Province to further develop the pedestrian / cycle network in conjunction with highway improvements.

The Summerland OCP states that, "The District is currently working with regional partners to expand regional transit opportunities along the Highway 97 corridor. The District has a network of trails and sidewalks, however, greater efforts are needed to connect and continue these pedestrian and cycling routes with all neighbourhoods."¹⁵

The Penticton OCP identifies the need for infrastructure to accommodate all modes of transportation, including cycling, as non-motorized modes of transportation are increasing.¹⁶

In Oliver, the Oliver and Area Hiking and Bicycling Society has been instrumental in planning and fund-raising and constructing walking/cycling trail that extends from the

¹⁵ Corporation of the District of Summerland Official Community Plan, p.15.

¹⁶ City of Penticton, Official Community Plan, p.113.

McAlpine Bridge to the head of Osoyoos Lake. The trail is utilized by recreationalists for exercise, wildlife interpretation and as a medium for non-motorized transportation.¹⁷

What Can Citizens Do?

- Get out and cycle on the cycling network!
- Use your bike to get around when making trips to work or for errands instead of driving.

¹⁷ Town of Oliver, Official Community Plan, p.76.

EE-1: Residential Building Energy Consumption

What is Being Measured?

In our homes we use energy – primarily electricity and natural gas – for space heating, water heating, cooking, appliances and lighting. This indicator measures total and per capita residential energy consumption, or the amount of energy used in residential buildings in the South Okanagan. It includes both electricity and natural gas use over the course of a year and is normalized by population. For electricity, the units are kilowatt hours (kWh) per person per year, and for natural gas, the units are gigajoules (GJ) per person per year. The residential building energy consumption indicator was calculated using energy modeled data for 2005. Data from AH-2 (total dwelling units by structural type) was used in conjunction with estimates for energy use by structural type and fuel share (electricity versus natural gas).

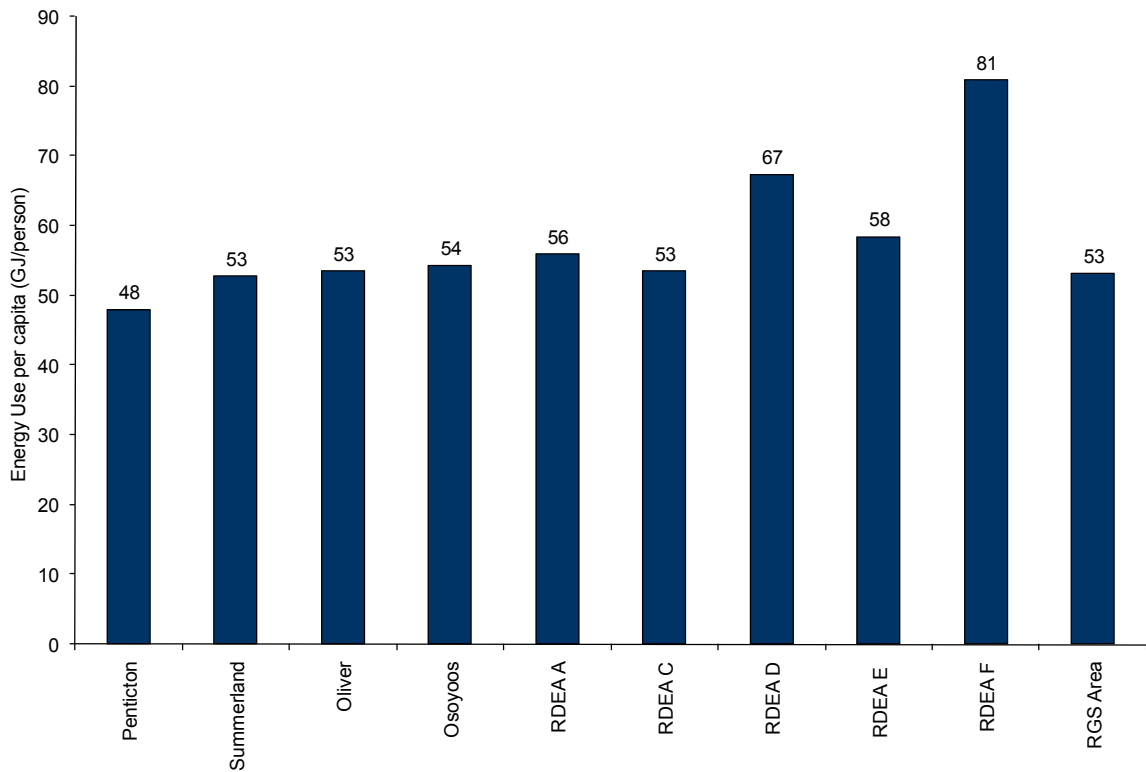
Why is this Indicator Important?

Residential building energy consumption shows how much energy residents consume. The generation of electricity is associated with environmental impacts to land, air and water. The level of impact is a function of the source of the electricity. For natural gas, its consumption results in greenhouse gas (GHG) and other air emissions. In addition, natural gas is a non-renewable resource and will likely become scarce in the future in continental North America. The generation of hydro-electricity is not generally considered to be a contributor to GHG emissions; however, hydro power projects may be associated with other environmental impacts, such as the physical degradation of land and water resources and wildlife habitat.

How are We Performing?

Per capita residential building energy consumption is slightly higher in the Regional District Electoral Areas, than in the municipalities within the RGS study area. The City of Penticton had the lowest per capita residential building energy consumption at 48 GJ/person/year. This was followed by the District of Summerland and the Town of Oliver at 53 GJ/person/year, and the Town of Osoyoos at 54 GJ/person/year. Per capita residential building energy consumption figures in Regional District Electoral Areas A, C, D, E and F were 56, 53, 67, 58 and 81 GJ/person/year, respectively. Overall, per capita residential building energy consumption in the RGS study area was 53 GJ/person/year. For the most part, per capita residential building energy consumption figures fall within the 50 – 55 GJ/person/year range in the South Okanagan. The exceptions being Regional District Electoral Areas D, E and F, where single detached homes make up a higher proportion of the dwelling units, apartments account for a very small percentage of the total dwelling units and populations are less than in other parts of the South Okanagan.

Figure 33. Per Capita Residential Building Energy Use, 2006

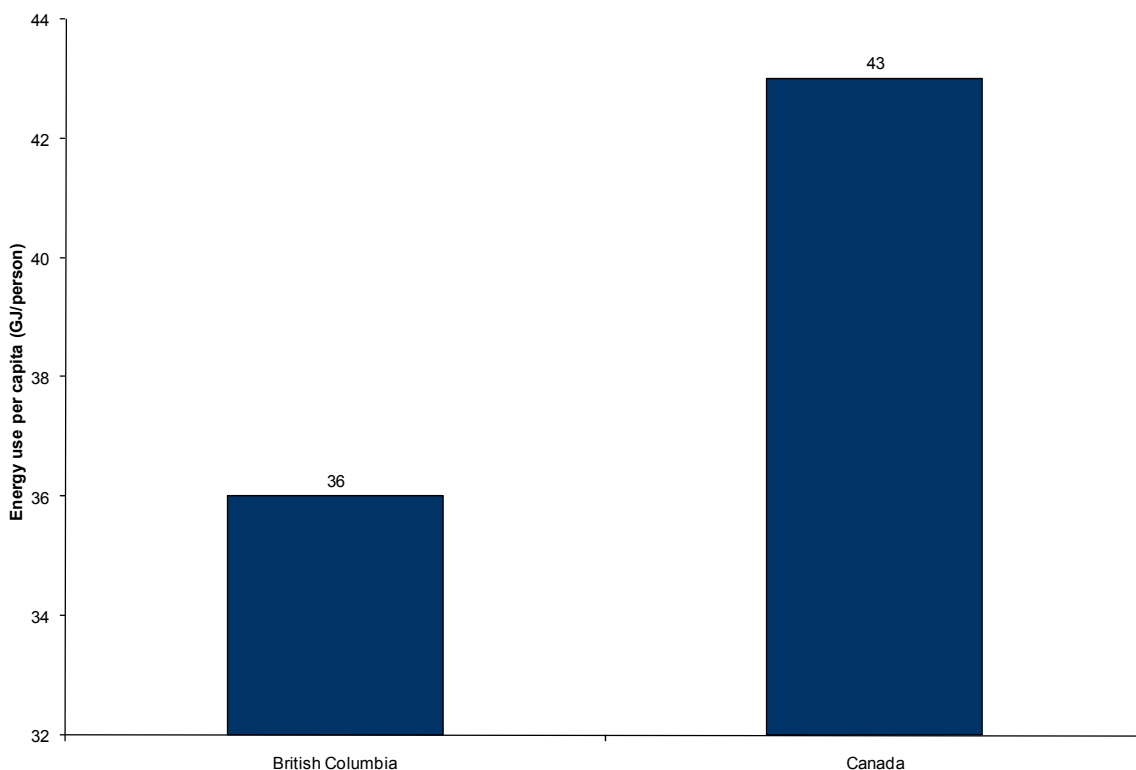


Source: Statistics Canada, 2006 Census, Terasen Gas and BC Hydro.

How Do We Compare?

Figure 34 shows benchmarks calculated for the Province of British Columbia and for Canada as a whole. Per capita residential building energy consumption in BC was found to be 36 GJ/person/year and in Canada it was found to be 43 GJ/person/year. In comparison, figures for the RGS study area are higher than the provincial and Canadian averages.

Figure 34. Energy Use in Comparable Jurisdictions



Source: Statistics Canada, 2006 Census, Terasen Gas and BC Hydro.

What is Being Done?

In general, energy conservation is the responsibility of the individual and residents need to take the initiative to reduce their electricity and gas consumption. However, utilities and energy providers in the South Okanagan do offer information and resources to customers looking to implement more energy efficient measures in their home.

FortisBC has developed energy efficiency programs for residents, such as the Home Improvement Program and the New Home Program (for residential developers, builders and homeowners). Through these programs, FortisBC offers expert advice, as well as valuable rebates on energy efficient windows, insulation and lighting, and technologies like air and ground source heat pumps. These programs are part of a broad conservation strategy called PowerSense that aims to reduce consumption by all electricity users.

Terasen does not have energy conservation programs targeted at the residential level but works with large users through Terasen Energy Services to encourage the use of high-efficiency, natural gas hydronic (i.e., circulating water) space-heating systems in new construction and retrofit applications.

Summerland Power provides a link to the FortisBC PowerSense website for customers looking for more information on energy efficiency.

The BC Ministry of Environment has undertaken the Community Energy and Emissions Inventory (CEEI) initiative to provide community energy consumption and GHG emissions inventory reports to all local governments in BC. This provincially sponsored data

collection, analysis and reporting system will provide local governments with inventory baselines, ongoing monitoring and periodic reports to help inform community decision making and support provincial objectives. The inventories will represent energy consumption and GHG emissions from community activities in land use, on-road transportation, buildings and solid waste. Other sectors will be explored in subsequent years. To generate the inventories, the province is gathering data from sources such as utilities, the Insurance Corporation of British Columbia (ICBC) and the Recycling Council of BC. The first CEEI reports will be generated for all local governments across British Columbia in late 2008.

What Can Citizens Do?

- Buy energy efficient appliances and computer systems (e.g., Energy Star rated).
- Replace your incandescent light bulbs with compact fluorescents.
- Have an energy audit conducted for your home to assess how your current home performs and identify how you can reduce energy consumption and save money at the same time.
- Check for and seal any cracks and gaps in your home.
- Add insulation to your hot water tank and lower your hot water tank to 120°C; drain any sediment from your tank a few times a year.

What is Being Measured?

Particulate matter with a diameter of 2.5 micrometres or smaller (called PM_{2.5}) and smog or ground-level ozone (O₃) are measured at a monitoring station in Osoyoos; the only monitoring location in the RGS study area. This particular indicator measures exceedance of the Canada Wide Standard (CWS) and the proposed provincial standard (where applicable) for both PM_{2.5} and ground level ozone (O₃).

For the CWS, PM_{2.5} must not exceed 30ug/m³ in a 24-hour period; on annual 98th percentile value, averaged over 3 consecutive years (by 2010). For the proposed provincial objective, PM_{2.5} must not exceed 25ug/m³ in a 24-hour period; on annual 98th percentile value, averaged over 3 consecutive years. For the CWS, O₃ must not exceed 65ppb based on 8-hour moving averages; on the 4th highest annual ambient measurement, averaged over 3 consecutive years (by 2010). There is currently no provincial objective for O₃.

Hourly data for 2005, 2006 and 2007 was obtained from the Osoyoos monitoring station and calculations were performed to determine exceedance of the CWS for the 2006 baseline year.

Why is this Indicator Important?

Air pollution has been shown to have detrimental effects on human health – particularly to persons with respiratory ailments.

The primary pollutants of concern are:

- Ozone which can cause decreased lung function and inflammation in the lungs. People affected with asthma may experience difficulty breathing. 'Ground level' ozone (i.e. smog) is formed when NO_x and VOCs react in the atmosphere. Ozone concentrations are typically higher during the summer months.
- Particulate matter which can impair respiratory function. Natural processes contribute to increases in particulate matter (e.g., forest fires, volcanic ash and dust storms), but a particular concern arises from combustion-based particulate which is composed of extremely small particles which can travel deep into the lung.

Measuring long-term ambient air quality especially ozone and particulate matter helps evaluate the overall exposure of the population to contaminants.

How are We Performing?

The value for PM_{2.5} was 16.08ug/m³, which does not exceed the CWS or the proposed provincial objective for BC. The value for O₃ was 58ppb, which also does not exceed the CWS for ground level ozone.

Future long-term ambient air quality calculations for PM_{2.5} and O₃ will assist the RDOS in determining performance of this indicator and evaluating the exposure of South Okanagan residents to these air contaminants.

How Do We Compare?

Calculations for other jurisdictions were not performed as part of this study. However, air quality objectives and guidelines for PM_{2.5} and O₃ in other jurisdictions provide a point of comparison for the data presented above. Other regional districts in the province have developed their own guidelines for air quality. For PM_{2.5}, these regional guidelines often fall in line with the proposed provincial objective (25ug/m³), such as in the Capital Regional District and the Greater Vancouver Regional District (Metro Vancouver). The Central Okanagan Regional District has suggested a stricter guideline of 15ug/m³ (based on 24-hour averages) for PM_{2.5}. As with the CWS, other some jurisdictions provide objectives for PM_{2.5} based on annual averages; such as Metro Vancouver, which has suggested an objective of 12ug/m³. Based on the research, the only objective that currently exists for ground level ozone or O₃ is the CWS (65ppb).

What is Being Done?

The RDOS Air Quality Management Plan sets out goals and objectives for air quality in the region. The Plan identifies a number of pollutant sources as those that need to be addressed through a combination of Public Education and Pollution Reduction Programs: Garbage, Wood, and Yard Waste Burning, Engine Emissions and Dust. The RDOS has identified PM_{2.5} as an important pollutant to monitor due to it being a local level emission. To manage PM_{2.5} and ground-level ozone, the RDOS has put in place programs such as: the Wood Stove Exchange, the Burn it Smart program," and the Let's Drive Green vehicle emissions testing clinics.

Further action on air pollution has been taken through the RDOS Regional Growth Strategy. Policy En4 (protect regional air quality) states that:

The south Okanagan municipalities and electoral areas agree to:

1. Further support a coordinated inter-regional approach with the Regional Air Quality Management Plan and supplement the plan to identify best management practices.
2. Implement policies and support best management practices, such as reducing or eliminating residential and industrial burning, chemical spraying, and controlling air emissions, or other practices that protect the environment.
3. Support public awareness and education to foster best air quality management practices and stewardship.

What Can Citizens Do?

- Get involved in a variety of RDOS programs aimed at reducing pollution and improving air quality: <http://www.rdos.bc.ca/index.php?id=13>
- Be aware of air pollution levels in the South Okanagan by noting the air quality index recorded at the Osoyoos monitoring station: <http://www.airhealthbc.ca/osoyoos.htm>. Avoid excessive activity on days when the air quality index is high.
- Use non-vehicular modes of travel (walk, bicycle) for short trips.
- Use transit or carpool to work.
- Maintain your vehicle in good condition.
- Do not burn material in a backyard burner or an inefficient fireplace.

W-1: Municipal Water Consumption

What is Being Measured?

This indicator measures potable water consumption from the municipal distribution systems (litres/capita/day). The data is normalized per capita (within the serviced areas).

Per capita water consumption is a measure of our individual behaviour towards water consumption. Total water consumption includes the effects of both our individual consumption rates and the effect of our growing population. Comparing per capita consumption allows for comparisons to other areas within the RDOS.

Why is this Indicator Important?

In the South Okanagan, water availability is a concern. The RGS indicates that the available water in the Okanagan Basin will be fully allocated in 10 to 15 years. With population growth and associated development in the Okanagan and increases in water demand for agriculture, there is a potential shortfall in supply relative to demand in the next few decades. Agricultural irrigation accounts for 75% of consumptive water use in the entire Okanagan Basin and is likely higher in the RDOS. In recent decades, there has been a shift in crop types to predominantly include orchards and viticulture. This has resulted in a heavier reliance on water supplies in the area, particularly in the early fall, a time when supplies are at their lowest levels.¹⁸

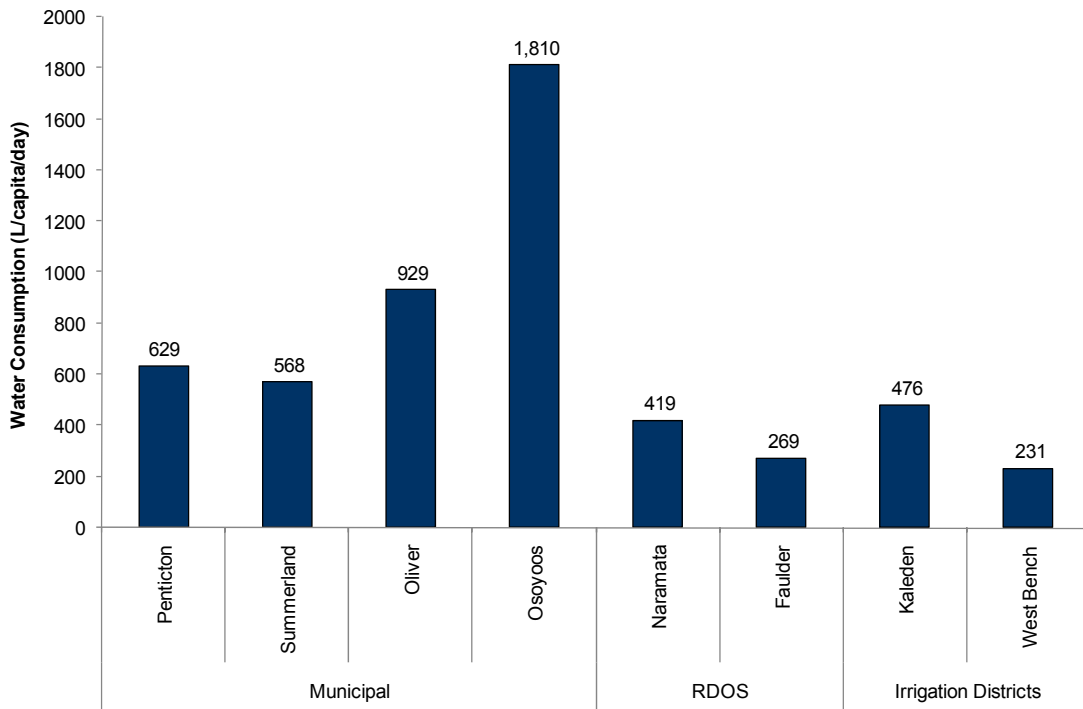
The clear implication is that there is a looming shortfall between supply and demand, and current sources of supply may even be in jeopardy in the future due to climate change. The challenge is to implement early actions that will position the RDOS for the future. Tracking water consumption helps us to understand whether efforts to conserve this resource are successful.

How are We Performing?

Potable water consumption data was collected from eight municipal distribution systems and is shown below in Figure 35. Most communities do not meter municipal and agricultural consumption separately, including: Oliver, Summerland, Naramata, Faulder, Kaleden and West Bench. For these areas, non-agricultural water consumption rates were determined using an average of winter consumption data (November-March) for. For these areas, non-agricultural water consumption rates would likely be even higher given that winter water consumption does not include water use for lawns and gardens. Osoyoos had the highest per capita water (1,810 l/capita/day) amongst the eight distribution systems. West Bench had the lowest per capita water use (231 l/capita/day).

¹⁸ South Okanagan Regional Growth Strategy, January 2008

Figure 35. Water Consumption in Municipal Water and Irrigation Systems, 2006



Source: Regional District of Okanagan Similkameen, member municipalities and irrigation district operators

Notes: Pentiction - the data provided is for residential and commercial use from the domestic system (no agriculture).

Summerland - the data does not include the Garnet Valley system (85-90 homes + agriculture).

Oliver - only municipal groundwater is included.

Osoyoos - the data provided is for Town water only (wells) and does not include irrigation.

Naramata - the community of Naramata accounts for the majority of the population of Electoral District E. 2006 Census population for Electoral Area E was used.

Faulder - the population was estimated based on 85 homes, and the average Canadian household size of 2.5 (Statistics Canada, 2006).

How Do We Compare?

The Okanagan is one of highest users of water on a per capita basis in a Province that is one of the highest users in Canada. Approximately half of the water used by the urban sector is for outdoor lawn and garden irrigation. Therefore, there is considerable potential for making do with less.¹⁹

In 2004, British Columbians used on average 426 litres per person per day. British Columbia's per capital water consumption is higher than the Canadian average (329 litres/day).

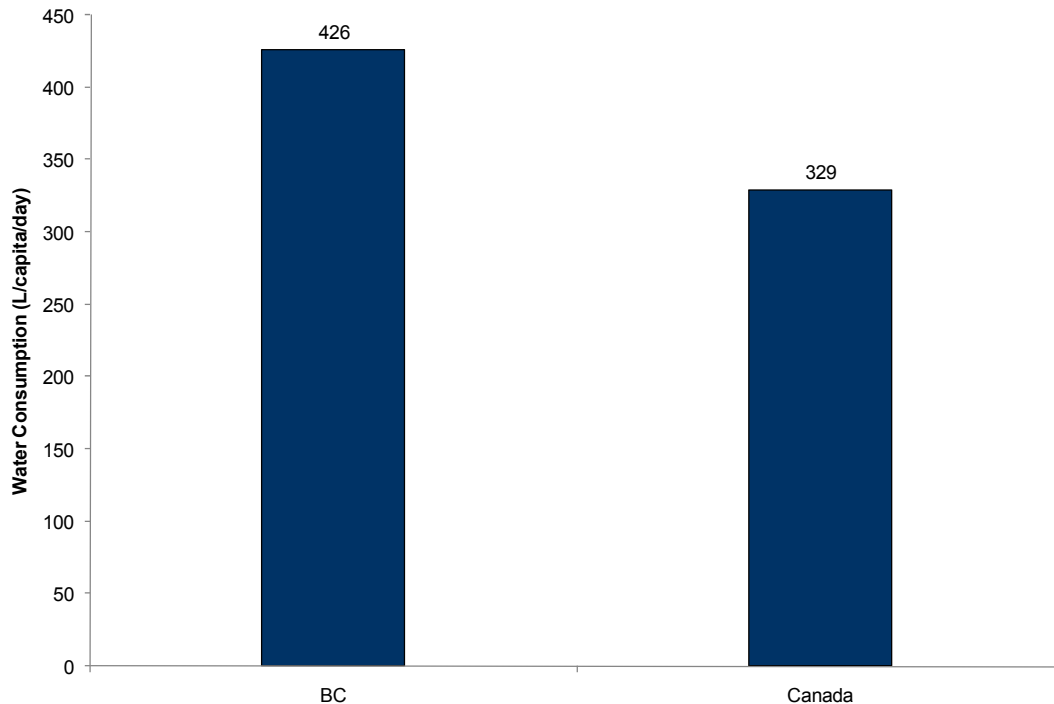
Six out of the eight regions reported on in this study exceeded the 2004 Canadian average for water consumption. Five of the eight regions also exceeded the 2004 British Columbia average.

The Town of Osoyoos' water consumption was five times higher than the Canadian average (1,810 L/day versus 329 L/day) and the Town of Oliver was almost three times

¹⁹ South Okanagan Regional Growth Strategy, January 2008

higher (929 L/day versus 329 L/day). Faulder (269 L/day) and West Bench (231 L/day) were below both the British Columbia and Canadian averages.

Figure 36. Water Consumption in Comparable Jurisdictions, 2004



Source: Environment Canada, Municipal Water Use, 2004 Statistics

What is Being Done?

The RDOS has implemented a program to promote the installation of low flow toilets for homes in the rural areas of the Okanagan Valley. Property owners that properly dispose of an old toilet and replace it with a certified low flow (6 litre flush or dual flush) model will be eligible for a \$50 dollar rebate. Residences or businesses in the municipalities of Penticton, Summerland, Oliver or Osoyoos or outside the Okanagan Valley are not eligible.

The intent of adopting the use of low water use toilets is aligned with the Regional Growth Strategy direction to reduce demands on this “renewable” resource and upon existing and future infrastructure and aquifers. Toilets account for approximately 30 percent of a households water demands. Therefore, the replacement of conventional high consumption toilets throughout the RDOS is expected to reduce household water demand and reduce the volume of waste water going to our sewers.

The RDOS also implemented new Building regulations, as of January 1st, 2007 which requires low flow toilets be installed in all new homes and all new renovations where a toilet will need to be replaced.

Areas within the RDOS have residential water restrictions during the irrigation season effective April 1st of each year. Restrictions may include watering on an odd/even system according to street addresses and/or watering times (i.e., before 9:00am and after 6:00pm).

What Can Citizens Do?

Water conservation is one of the easiest and cheapest ways to reduce the volume of wastewater, improve water quality and ensure sufficient water for other uses.

Approximately 65% of domestic indoor water use occurs in the bathroom with toilets being the single greatest water user in the home. Only 10% is used in kitchen and for drinking. Citizens can conserve water by:

- Installing water conserving fixtures and appliances.
- Obeying summertime lawn watering regulations. Water your lawn in the morning rather than in the evening to reduce the amount of water lost to evaporation.
- Getting in the habit of turning off running faucets when brushing teeth or washing dishes.
- Doing full, rather than partial, loads of laundry or dishes.
- Checking toilets regularly for leaks.
- Replacing your conventional toilet with a low-flush one.
- Taking short showers—five minutes or less.
- Keeping a bottle of drinking water in the refrigerator rather than running the tap to get cold water.
- Finding out how much water your lawn really needs. Most require little more than two to three cm (one inch) of water per week.
- Watering early in the morning.
- When washing a car, using a bucket and sponge. This can save about 300 litres of water.

What is Being Measured?

To ensure that distribution water is safe for consumption, Operators routinely sample the water at selected locations in the distribution system and analyse it for a variety of parameters. Water samples are periodically analyzed to see if they contain viable bacteria, total coliforms or fecal coliforms.

This indicator measures the % of test results showing a detection of total coliforms in potable distribution water. The number of samples with a positive detection is presented as a percentage of the total samples analyzed.

Why is this Indicator Important?

Bacterial testing determines whether there are viable bacteria in the water. Total coliforms are a group of closely related, mostly harmless bacteria that live in soil and water as well as the gut of animals. The extent to which total coliforms are present in the source water can indicate the general quality of that water and the likelihood that the water is fecally contaminated.

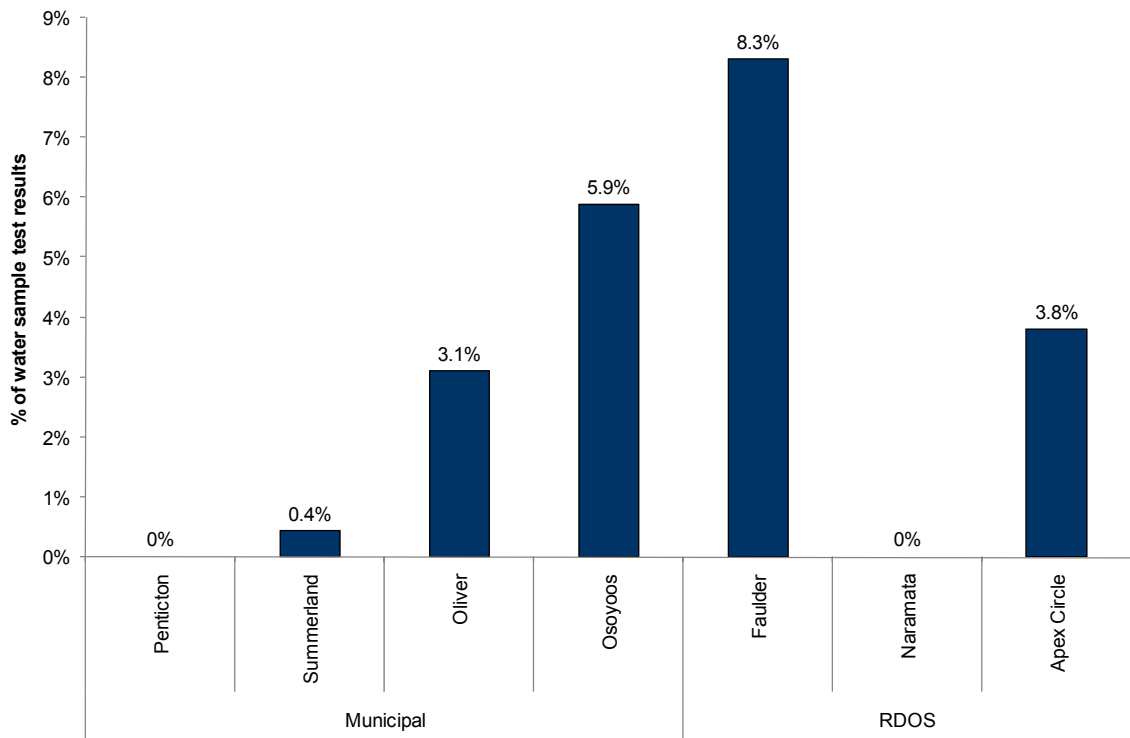
Total coliform do not necessarily indicate recent water contamination by fecal waste, however the presence or absence of these bacteria in treated water is often used to determine whether water disinfection is working properly.

How are We Performing?

It is important to note that the presence of total coliform does not necessarily indicate fecal contamination. If total coliforms are present, water is re-sampled and analyzed for fecal coliforms. None of the water samples analyzed had a positive detection of fecal coliforms.

The highest detection of total coliform bacteria was in the Faulder water system (8.3%, 9 out of 108 samples analyzed). Between 3.1% and 3.8% of the water samples analyzed from the Osoyoos, Oliver and Apex Circle facilities detected total coliform. Only 0.5% of Summerland's water samples analyzed had total coliforms. Penticton and Naramata did not have any positive detections of total coliform in 2006.

Figure 37. Percentage of Water Samples with Positive Total Coliform Detection, 2006



Source: Regional District of Okanagan Similkameen, member municipalities and irrigation district operators

How Do We Compare?

Benchmarking can help the water utilities achieve continuous performance improvement. By monitoring annual trends in presence of total coliforms, managers can improve their operational efficiency and effectiveness.

The challenge in comparing analytical results from system to system is to ensure a true comparison between utilities. The water supply to the system (groundwater vs. surface water), size of the systems, treatment methods and geographic locations may result in a higher or lesser detection of coliform bacteria.

For this indicator, it is recommended that comparison be made annually for the individual water distributions, rather than from system to system.

What is Being Done?

No sample should contain fecal coliform or E. coli, and ideally there should be no total coliform. If any coliform bacteria are detected in drinking water, the source should be immediately investigated. If known or suspected to be fecal coliform or E. coli, the water should not be consumed without treatment such as boiling for one minute.

The sampling frequency and location of sampling points should be decided upon by the responsible authority after due consideration of local conditions — for example, variations in raw water quality and a history of treated water quality. Health Canada states that as a minimum, water leaving a treatment plant should be tested daily for

disinfectant residual and turbidity and tested at least weekly for total coliforms.²⁰ For supplies where weekly total coliform testing is impractical (e.g., in small supplies), residual disinfectant determinations should be relied upon to verify microbiological safety.

Indicator bacteria, such as total coliforms, are essentially eliminated before filtration (i.e., during pre-disinfection, clarification, and coagulation). Filtration removes most of the bacteria that had survived the earlier treatments. Post-disinfection eliminates the residual indicator bacteria. The commonly used drinking water disinfectants are chlorine, chloramine, UV light, ozone, and chlorine dioxide. Currently, chlorine is the most widely used disinfectant in the drinking water industry.

What Can Citizens Do?

The best way to make sure that source water is kept clean and that the treatment processes make water safe to drink is to ensure that everyone recognizes the principles of sustainability and integrated management and accepts the fact that each person is responsible for maintaining and protecting the environment.

Water system owners can be contacted for information about water quality testing for municipal water systems.

Community Wells

For community well systems, preventive methods such as proper well site selection and construction are the best way to safeguard water supplies against contamination by fecal material. Shallow wells in intensive agricultural areas serviced by septic field are at the greatest risk of contamination.

Private Wells

For private wells, it is recommended that water be tested a minimum of once per year for total and fecal coliform bacteria or total coliforms and E. coli. Water containing total or fecal coliform above the drinking water guidelines should not be used for drinking or food preparation (including making ice cubes or brushing teeth) without disinfection. Boil water for one minute or use bottled water or obtain water from an alternate source, such as a municipal system, or a nearby well that has been tested and found to be safe.

The best long term solution is to fix the well to prevent on-going contamination, if possible, or to install a permanent water treatment device. Wells contaminated with feces should be disinfected with liquid bleach, thoroughly flushed to remove bleach residue and retested.

²⁰ <http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/coliforms-coliformes/sampling-echantillonnage-eng.php>
- tphp

W-3: Percentage of Water Distribution Sample Test Results Exceeding Selected Drinking Water Quality Guideline

What is Being Measured?

The Guidelines for Canadian Drinking Water Quality (CDWQ) help to protect the health of Canadians by establishing maximum acceptable concentrations for substances found in water used for drinking. To date, guidelines have been established for more than 85 physical, chemical, and biological attributes of water quality. The guidelines apply to all public and private drinking water supplies and to treated or finished water as it emerges from the tap.

This indicator measures the number of water samples that do not meet the CDWQ guidelines for turbidity, total dissolved solids, copper and lead. The number of samples exceeding CDWQ guidelines is presented as a percentage of the total samples analyzed.

Why is this Indicator Important?

In order to know whether their drinking water management program is working, drinking water authorities need to have benchmarks for water quality. These benchmarks come in the form of drinking water guidelines. Guidelines make it possible for drinking water to be tested at various points along its journey and analysed to determine whether it is safe to drink.

This indicator measures the percentage of water sample test results that exceed the CDWQ guidelines for turbidity, total dissolved solids, copper and lead. Additional parameters may have exceeded CDWQ guidelines in 2006, however, only the above-mentioned parameters are discussed in this study.

Lead and Copper

Trace metals are elements that exist naturally in the environment at low concentrations. They may also be pollutants resulting from human activities—urban runoff, sewage system discharge, seepage from waste disposal sites, burning fossil fuels or mining and smelting. Some trace metals, like copper and zinc, are essential micronutrients for aquatic ecosystems to function well. However at higher concentrations, they can become toxic. Other trace metals such as mercury, lead and cadmium have no known essential function.

Copper in our diet is necessary for good health. If present in drinking water above the CDWQ guidelines, there can be immediate effects including vomiting, diarrhea, stomach cramps and nausea. Children under one year of age and people with damaged livers are more sensitive to copper. Canadian drinking water standards have established an action level of <1.0 mg/L for copper in drinking water.

Lead is a toxic metal which has been used in the construction of older household plumbing systems. Canadian drinking water standards have established an action level of 0.01 mg/L for lead in drinking water. Lead has no beneficial effects and should be avoided as much as possible.

Total Dissolved Solids

Sediments (soil particles) enter water bodies through runoff and by natural or human-induced erosion of shorelines and streambanks. Sediments can also be stirred up and suspended in watercourses at times of increased flow or following a disturbance.

Other human activities also act as sources of sediment, including urban development, agriculture, construction, roads and some forestry practices. Sediments and increased turbidity can transport attached microorganisms and reduce the effectiveness of disinfection and water treatment.

Canadian drinking water standards have established an action level of 500 mg/L for TDS in drinking water.

Note: Total suspended solids (TSS) was not reported on. Analytical reports provided for this study did not include TSS data.

Turbidity

Turbidity is a measure of fine suspended matter in water, caused mostly by clay, silt, and organics. A high turbidity level in water is most often directly related to levels at the source where winter rainfall events in the watersheds can cause sediment to runoff. Localized turbidity events can also occur from watermain flushing or hydrant works within the distribution system. Turbidity can provide food and shelter for pathogens. If not removed, turbidity can promote microbial regrowth in the distribution system. Although turbidity is not a direct indicator of health risk, studies show a strong relationship between removal of turbidity and removal of protozoa and other pathogens.

Canadian drinking water standards have established an action level of 1 Nephelometric Turbidity Units (NTU) for turbidity in drinking water.

Note: some water distribution systems reported on have in-line turbidity monitors which record on a continuous basis. These turbidity results were not included in this study. Only formal laboratory analysis was reported on.

How are We Performing?

There were seven water distribution systems included in this performance measure:

- The municipal water systems of - Penticton, Oliver, Osoyoos, and Summerland
- The water systems run by the RDOS that fall in the RGS study area - Faulder, Naramata and Apex Circle.

None of the water distribution systems exceeded the Canadian Drinking Water Quality guidelines in 2006 for turbidity, copper, lead or total dissolved solids in 2006.²¹

How Do We Compare?

Benchmarking can help the water utilities achieve continuous performance improvement. By monitoring annual trends in exceedances of the Guidelines for Canadian Drinking Water Quality, managers can improve their operational efficiency and effectiveness.

²¹ No water samples were submitted for analysis from the Naramata system in 2006.

The challenge in comparing analytical results from system to system is to ensure a true comparison between utilities. The water supply to the system (groundwater vs. surface water), size of the systems, treatment methods and geographic locations may result in greater exceedances of CDWQ guidelines.

For this indicator, it is recommended that comparisons be made annually for the individual water distributions, rather than from system to system.

What is Being Done?

The owners of water distribution systems must continue to:

- regulate activities such as drinking water treatment and sewage treatment and disposal to ensure source water protection.
- assist citizens who are not connected to a central sewage system to understand how septic system operations can affect water quality.
- implement treatment methods that best deal with the quality and the characteristics of their source water;
- ensure their operators are trained;
- use the correct testing and monitoring systems;
- make the best use of existing resources;
- upgrade their facilities when water quality standards are not being met; and
- recognize the value of clean, safe drinking water.

The Province of British Columbia must continue to:

- continue to take part in developing and updating national drinking water standards and guidelines;
- require waterworks owners to take the steps necessary to protect riparian areas and watersheds;
- encourage municipalities to have bylaws and protection plans in place to protect their water supply; (Aviva, is there a provincial requirement for this?)
- make information available to the public on the status of water systems, individually and provincially; and
- help people understand their roles and responsibilities to conserve and protect water and to recognize that safe drinking water is not an inherent right and that water is a valuable, limited resource.

What Can Citizens Do?

Avoid Hazardous Household Products

- Check product labels for hazard warnings. Follow the label's instructions on how to use the product safely.
- Only buy the hazardous products really needed, in an amount that can be completely used up.
- Use "environmentally friendly" products. Look for the Environmental Choice EcoLogo. That means the product has been tested and certified by the Canadian

Standards Association as minimizing the use of environmentally hazardous substances and maximizing energy efficiency and the use of recycled or recyclable materials.

Don't Misuse the Sewage System

- Toss items such as dental floss, hair, disposable diapers and plastic tampon holders into the wastebasket, not the toilet.
- Completely use up cleaning products, polishes, bleaches, solvents, paints, etc.
- Save food scraps and compost them; don't dump them down the drain.
- Choose latex paint instead of oil-based.
- Ensure septic fields are regularly cleaned and maintained so it doesn't leach untreated sewage into surface or ground water.
- Return excess pharmaceuticals to pharmacy. Do not dump them down the toilet or drain.

Don't Use Pesticides in Your Garden

- Whenever possible, use alternatives to pesticides and other hazardous materials.
- Fertilize with natural materials such as bone meal or compost.
- Apply the appropriate nutrients in the appropriate amount at the appropriate time.

Don't Dump Hazardous Products into Storm Drains

- Storm drains empty directly into nearby streams in many areas.
- Don't pour oils, paints, detergents, solvents and other products into storm drains, or on your driveway or street. Do take them to local recycling or disposal facilities.

MUNICIPAL SOLID WASTE

MSW-1: Municipal solid waste disposed per capita

What is Being Measured?

Solid waste is measured by the weight of the material. This is typically reported as tonnes or kilograms (kg). This indicator provides data on the annual amount of municipal solid waste (MSW) disposed in landfills or incinerated by residential, commercial, institutional, demolition, land clearing or construction source. Total MSW includes amounts disposed within the regional district as well as any amount incinerated or exported via transfer stations. The definition of municipal solid waste excludes sewage sludge, agricultural waste and industrial wood waste.

This indicator is measured as kg of solid waste per person per year and shows the waste produced at the Penticton landfill, which accounts for 65% of the waste in the south Okanagan study area.

Why is this Indicator Important?

This indicator is used to demonstrate how well the region is doing at reducing waste and the impact on the environment. As more waste is recycled, reused or composted, per capita waste disposed will decrease. Landfilling (or incineration) of waste represents a lost resource. Landfills can also pose an environmental risk through leachate and air emissions if not properly maintained.

How are We Performing?

There are six sanitary landfills within the RDOS. The RDOS administers four waste management facilities located near Penticton (Campbell Mountain), Oliver, Okanagan Falls and Keremeos. The other two facilities, Summerland and Osoyoos are operated by the individual municipalities. Oliver, Okanagan Falls and Keremeos were not included in the baseline because they do not exclusively service populations inside the study area.

The Campbell Mountain landfill in Penticton reported 767 kg/cap in 2006²². Municipal solid waste disposed of at the Campbell Mountain landfill reportedly accounts for 65% of the waste in the south Okanagan study area. Quantities of solid waste disposal for the Summerland and Osoyoos landfills were not made available for inclusion in this report.

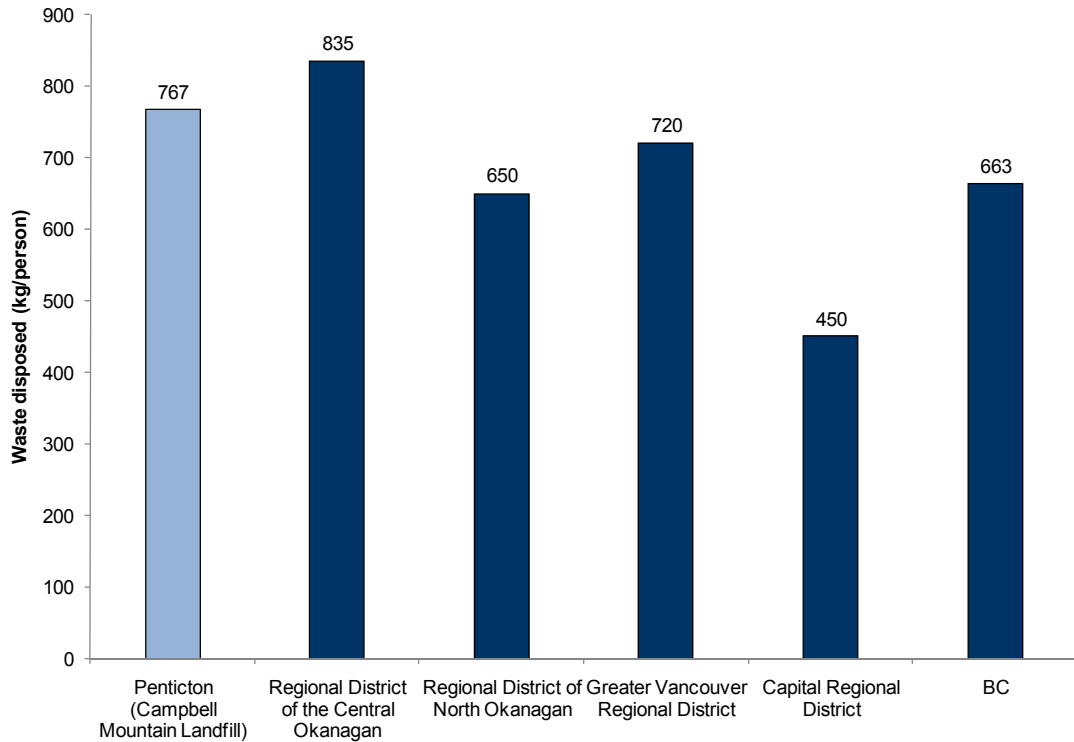
How Do We Compare?

As shown below in Figure 38, the quantity of municipal solid waste disposed of at the Campbell Mountain landfill is greater than the disposal rates in the North Okanagan Regional District, the Greater Vancouver Regional District and the Capital Regional District. The value for the Regional District of the Central Okanagan factors in the waste from surrounding ski resorts that is disposed of within the region, but not their respective

²² Solid waste disposal per capita for the Campbell Mountain landfill was based on an estimated population of 54,513 (RDOS, 2008) in the site service area.

populations. In 2005, solid waste sent to landfills in British Columbia averaged 664 kilograms per person.

Figure 38. Annual Municipal Waste Disposal (kg/capita) in Comparable Jurisdictions, 2006



Source: Regional District Municipalities and BC Ministry of Environment B.C. Municipal Solid Waste Tracking Report

What is Being Done?

RDOS Landfills accept all wood and yard waste (commercial, residential, and industrial with the exception of lumber and pulp mills). The RDOS offers a variety of Solid Waste Management services. These include Rural Curbside Garbage and Recycling Collection, Classroom based Environmental Education programs and free drop off depots at local landfills.

- The Rural Curbside Garbage and Recycling Collection program includes weekly garbage pickups, blue bag recycling pickups, separate container glass collection, seasonal yard waste pickups and annual large and bulky item pickups.
- Two major Environmental Education Programs offered by the RDOS are class based waste reduction programs for various grade levels (ECO studies) and the Environmental Mind Grind (school team quiz show-style contests).
- Yard waste can be dropped for free at local RDOS landfills. Yard waste includes tree and hedge prunings, garden plants, pine needles and cones, windfall fruit, grass clippings and leaves. This organic material is chipped into fine pieces and added to local composting operations.
- To safely and effectively dispose of these products, the Regional District of Okanagan-Similkameen has set up a Household Hazardous Waste Facility at the the Campbell Mountain Landfill. This facility takes Household Hazardous Waste free of

charge from residents living in Penticton, rural Penticton, Okanagan Falls and the Lower Similkameen.

- The RDOS encourages and supports community clean-ups where possible. The Regional District supplies bags, vehicles, support staff and waive all tipping fees at local landfills.

In 2006, all plastics other than milk jugs were successfully diverted from RDOS landfills through various programs. In January, the blue bag program in most southern areas of the Regional District, the Village of Keremeos, and the Town of Oliver was expanded to include all clean plastics except Styrofoam. There was overwhelming support from the public for this improvement, and at the beginning of July plastics recycling was subsequently introduced to the Electoral Areas adjacent to Penticton, as well as the City of Penticton. Prior to their acceptance in local blue bag and blue box programs, plastics took up about 35% of the waste remaining at the curb after the recycling truck had been by. Including plastics in the recycling program has made a significant reduction in the amount of garbage going to the landfill.

What Can Citizens Do?

- Reduce consumption and disposal of unnecessary goods.
- Recycle materials and reduce waste.
- Composting can reduce household waste by more than 30%. Composting not only helps to reduce the amount of waste going to local landfills, but by adding compost to your garden, flower beds, and lawn improves soil fertility and reduces the need for watering.
- Make a conscious effort to reduce the purchase of excess packaging, disposable products and single use items.

TO BE COMPLETED IN THE 5-YEAR REPORT IN 2013

What is Being Measured?

Why is this Indicator Important?

How are We Performing?

How Do We Compare?

What is Being Done?

SOCIAL, CULTURAL, & RECREATIONAL

SCR-1: Length of Trails

What is Being Measured?

This indicator measures the length of trails in kilometres by trail surface and trail type

This indicator provides an indication of the availability of a trail network in the RDOS Regional Growth Strategy Area. There is some overlap between the trails indicator and the cycling facilities indicator (Indicator T-4). The length of cycling infrastructure and trails is currently the same information. In the future, as bike lanes are created on existing roadways, and there are designated bicycle routes, these indicators will diverge and present different information.

Why is this Indicator Important?

Well planned trails and greenways system contributes to a livable community by connecting people to nature and providing connections between neighbourhoods and to key destinations. Connected trails provide a diversity of experiences from wooded areas to the foreshore and contribute to the community's recreation amenities by allowing places for people to walk, jog, and cycle. Trails promote a healthy lifestyle and encourage alternative transportation choices that decrease reliance on automobiles. From a wildlife perspective, trails and greenway corridors can provide habitat value and facilitate movement by wildlife and connect core habitat areas. Trails can also provide an economic benefit by attracting visitors to the area and can strengthen awareness of the heritage and natural history in the area by providing access and interpretive information.

What is happening?

The Regional District of Okanagan Similkameen has over 150 trails in the South Okanagan and Lower Similkameen Valley area. The trails in the region are popular with local residents, and are attractive to a wide range of tourists; from birders to mountain bikes, wine lovers to hikers.

Trail length

Table 4 below shows the trail length by each community. Trail length tends to be longer in the electoral areas, due to their more rural nature and large area such as Electoral Areas E (136km) and F (118km), but Summerland is notably high for a municipality with 75km of trails.

Table 4. Trail length by community

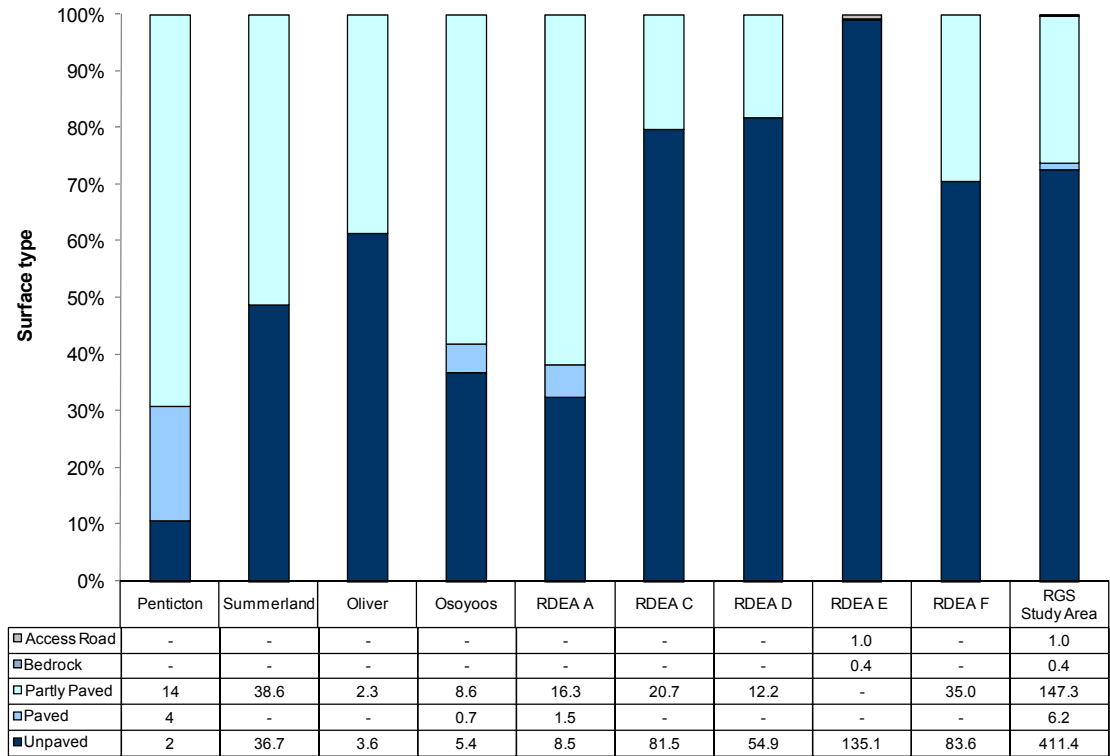
		2008 (km)
Municipalities	Penticton	19.7
	Summerland	75.3
	Oliver	5.9
	Osoyoos	14.7
RDEA	A	26.3
	C	102.2
	D	67.1
	E	136.5
	F	118.5
Total		566.3

Source: GIS data from RDOS, 2008

Surface type of trails

As shown in Figure 39, there are a total of 566 kilometres of trails in the South Okanagan, approximately 73% of which are unpaved, and 26% are partly paved. Less than one per cent of trails are made of paved or bedrock surfaces, and an access road.

Figure 39: Length of Trails by Surface Type

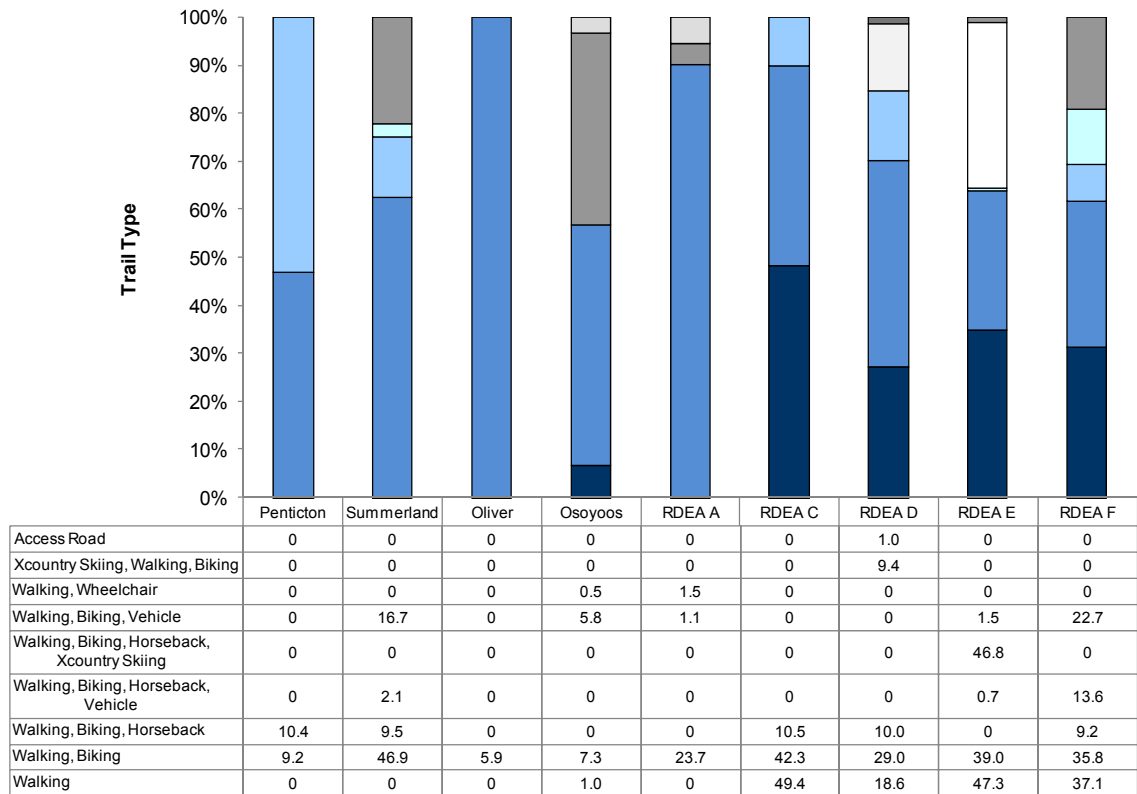


Source: Regional District of Okanagan Similkameen Trails Inventory, 2008

Types of trail uses

Figure 40 shows the types of use that the South Okanagan offers to residents and users. Approximately 72% are classified as multi-use, which can include walking, biking, horseback riding and cross country skiing.

Figure 40: Total length of Trails by Use



Source: Regional District of Okanagan Similkameen Trails Inventory, 2008

On average throughout the south Okanagan, 27% of the trails are walking only, while 42% of the trails are for walking and biking. The remainder of the trails accommodates more than one use, including cross-country skiing, horseback riding and some motorized access. In the municipalities, trails tend to be evenly distributed between trails for walking and biking, and trails that are multi-use. There are virtually no trails that area designated for walking, likely due to the availability of sidewalks and paved surfaces. In the electoral areas, walking only trails are one of three components for trail uses, including walking and biking, and multi-use. The distribution in most electoral areas is generally a third for each in Electoral Area C, E and F, no walking only in Electoral Area A, and less than 20% of trails are for walking only in Electoral Area D.

What is Being Done?

See Indicator T-4.

What Can Citizens Do?

- Organize social walks or runs and enjoy the trail network that the city has to offer.
- Obey trail etiquette and be considerate to other trail users.
- Keep nature greenway links as places for wildlife. Respect their priority in these areas and enjoy one of the city's trails that are established for public use.

- Volunteer to help construct or maintain trails.
- Consider providing pedestrian short cuts where acceptable and appropriate through your property before fencing in a large parcel of land.

What is Being Measured?

This indicator measures the number of Criminal Code offences (excluding traffic offences) per 1,000 population. Crime rates are reported by policing jurisdiction. For the South Okanagan, there are four policing jurisdictions, including: Summerland, Penticton, Penticton Prov, and South Okanagan Prov. Penticton Prov covers the communities of Kaleen, Naramata, Faulder, Okanagan Falls, Twin Lakes, Apex Ski Resort and the Penticton Indian Band. South Okanagan Prov includes Oliver, Osoyoos, but also the Osoyoos Indian Band and Keremeos, which are outside of the Regional Growth Strategy study area.

Why is this Indicator Important?

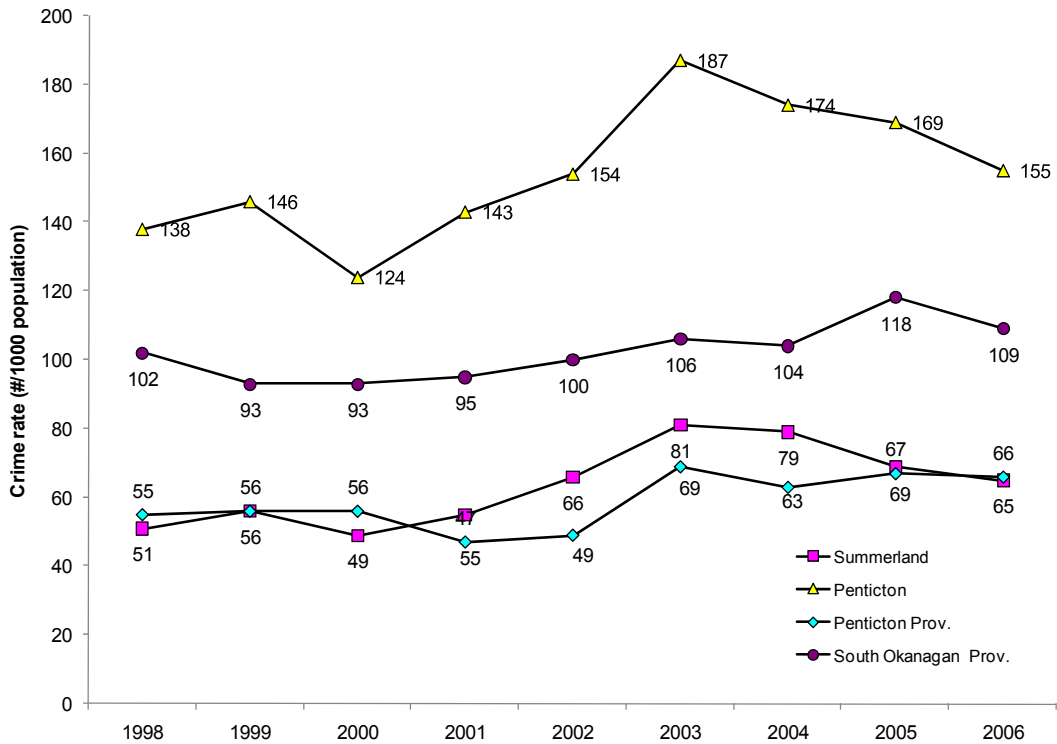
Crime statistics in the form of actual crime rates serve as an indicator of safety in a community. Crime rates are tracked annually and provide information that is comparable to other communities in the region, throughout the province or across the country.

How are We Performing?

Between 1998 and 2006, crime rates increased in all four policing jurisdictions of the South Okanagan, with slight fluctuations from year to year. Penticton Prov and Summerland reported the lowest crime rates over the period. Penticton had the highest crime rates of the four policing jurisdictions, while crime rates in the South Okanagan Prov fell somewhere in the middle of the spectrum.

Crime rates in Penticton Prov reached a low of 47 (criminal code offences per 1,000 population) in 2001, peaked at 69 in 2003 and leveled off to 66 by 2006. Summerland's crime rate reached its lowest (49) in 2000, peaked at 81 in 2003 and was at 65 in 2006. South Okanagan Prov was at its lowest in 1999 and 2000, when the crime rate was reported at 93. It then reached a peak of 118 in 2005 and was reported as 109 in the 2006 baseline year. Penticton crime rates reached a low of 124 in 2000, peaked at 187 in 2003 and landed in the middle (at 155) in 2006.

Figure 41. Crime rates from 1998-2006

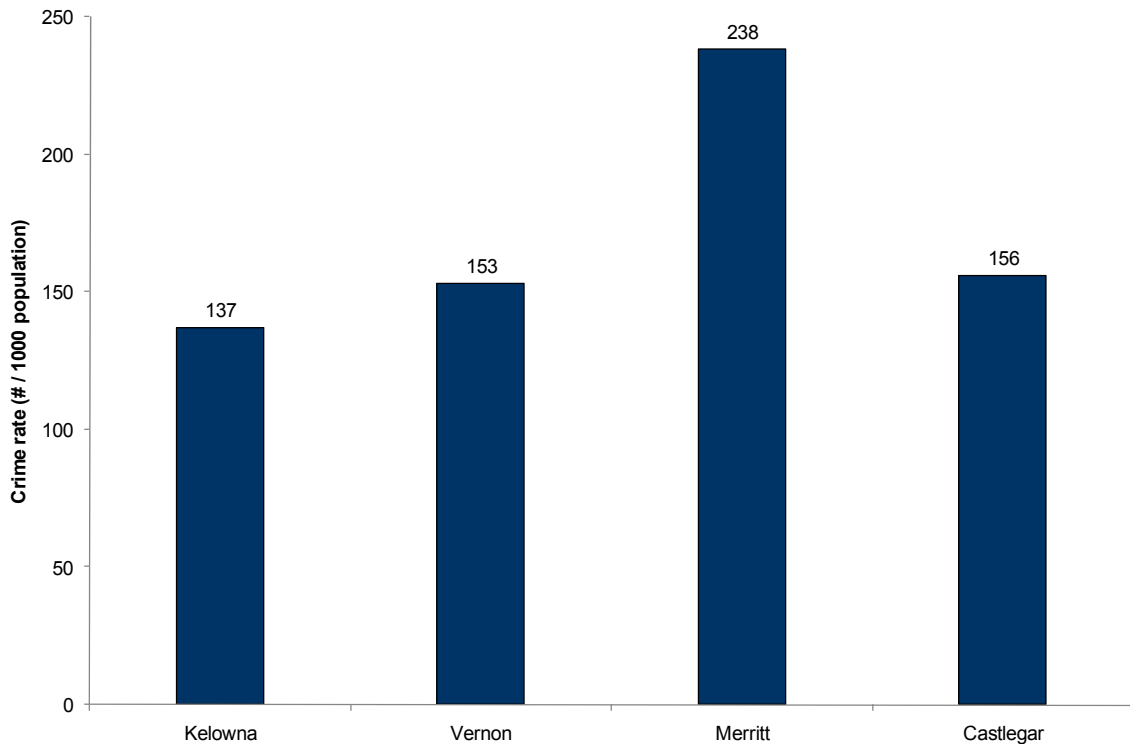


Source: BC Ministry of Public Safety and Solicitor General

How Do We Compare?

Crime rates in the South Okanagan are comparable to those in municipal jurisdictions elsewhere in the Okanagan and lower than those in municipal jurisdictions in other parts of British Columbia. For example, crime rates reported for 2006 in Kelowna and Vernon were 137 and 153, respectively. The 2006 crime rate for the City of Castlegar (in the Kootenays) was reported at 156, which was just slightly higher than the Penticton crime rate in 2006. The 2006 crime rate reported for the City of Merritt (in the Interior) was 238, which was substantially higher than the crime rates reported for the South Okanagan in the same year.

Figure 42. Crime rates in Comparable Jurisdictions, 2006



Source: Source: BC Ministry of Public Safety and Solicitor General

What is Being Done?

The RDOS Regional Growth Strategy identifies policies to support safe, culturally diverse and healthy communities. In particular, Policy S2 – work in partnership to create healthy and safe communities – articulates the need to (among other activities):

- Maintain safe and vibrant urban centres by supporting downtown revitalization and neighbourhood planning efforts which foster a sense of public ownership.
- Support emergency planning and networking of response services both regionally and inter-regionally.
- Support the local police authority in its awareness programs for crime reduction and watch programs.

Local detachments of the Royal Canadian Mounted Police (RCMP) across the South Okanagan work to implement policing programs and initiatives at the local level, such as the RCMP Crime Reduction Initiative. The RCMP also works in partnership with programs such as Crime Stoppers to increase public awareness around local crime prevention.

What Can Citizens Do?

- Get involved in local Crime Stoppers and other volunteer patrol groups (e.g., Similkameen Citizens on Patrol, Penticton Citizens on Patrol, Oliver Crime Watch Patrol, etc) as a volunteer or a donor.

- Visit the Public Safety Portal for information on crime prevention (and much more) tailored to a variety of audiences (e.g. Aboriginal peoples, kids, parents, seniors, teachers, youth): http://www.safecanada.ca/menu_e.asp

What is Being Measured?

The percentage of a local government's total capital budget allocated for arts, culture, diversity, heritage, and recreation. In most cases, these figures come from the budget for Recreation and Cultural Services within the local government, as obtained through annual reports and financial statements.

Why is this Indicator Important?

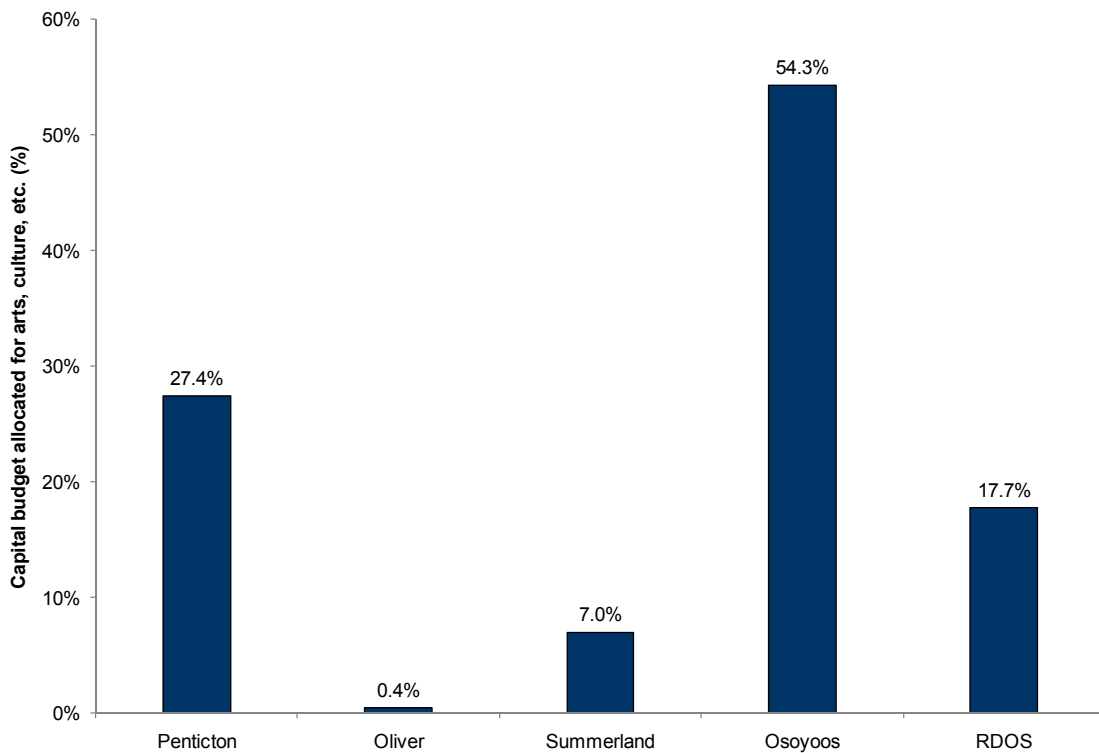
Financial support for arts, culture, diversity, heritage, and recreation indicates commitment to building community and fostering civic pride. These are important factors for a local government to consider as it contemplates its long-term growth and development. A local government that shows strong support for these activities may be better positioned to retain business and residents in the community or realize new economic development opportunities as a result of their openness to these important aspects of community life.

How are We Performing?

Support for the arts, culture, diversity, heritage and recreation, expressed as a percentage of a local government's total capital budget, ranges broadly amongst local governments in the South Okanagan.

According to figures obtained from annual reports and financial statements, the Town of Osoyoos contributes the greatest (and a significant) percentage of its total capital budget to the arts (54%) in 2006. This figure is well above the figures reported by other municipalities in the South Okanagan; however, staff at the Town of Osoyoos indicated that there was a substantial amount of capital expenditures related to recreation and culture in 2006. The City of Penticton contributed approximately 27% of its 2006 total capital budget to support arts, culture, diversity, heritage and recreation, while the RDOS allocated 18% of its budget. The District of Summerland contributed a lesser percentage (7%) of their total capital budget to support the arts, while the Town of Oliver indicated that 0.4% of the capital budget went to support the arts in 2006. Staff at the Town of Oliver, however, did note that while the Town does not directly budget for capital expenditures for heritage, recreation and cultural on an annual basis, it does however provide funding through other societies such as the Oliver & District Parks & Recreation Society and the Oliver & District Heritage Society (which in turn provides funding to the Arts Council). These contributions are not accounted for in this baseline.

Figure 43. Percent of capital budget allocated to arts and culture, 2006



Source: Regional District of Okanagan Similkameen, member municipalities

Notes: The Town of Osoyoos indicated that there was a substantial amount of capital expenditures related to recreation and culture in 2006.

Town of Oliver does not directly budget for capital expenditures for heritage, recreation and cultural on an annual basis, it does however provide funding through other societies. These contributions are not accounted for in this baseline.

What is Being Done?

The RDOS Regional Growth Strategy provides support for the arts, culture, diversity, heritage and recreation through a number of policies:

1. Policy S2 speaks to the commitment of South Okanagan municipalities to support:
 - The coordination of regional parks and recreation services and trail networks to improve accessibility of recreational opportunities.
2. Policy S6 – support the education and lifelong learning, diversity of culture, heritage and a strong arts community – articulates support for arts, cultural diversity and heritage:
 - Support the location and collaboration of education institutions in urban areas.
 - Encourage the creation of affordable education opportunities and foster education and business collaboration between agencies and institutions.
 - Work with providers of local heritage and cultural education programs to preserve and respect different cultural values.

- Work cooperatively with agencies to create an arts and cultural vision for the region.
- Encourage development that meets the needs for accessible arts and cultural facilities.
- Identify and protect important cultural places and structures through policies and other mechanisms.

What Can Citizens Do?

Citizens in the South Okanagan can show their support for arts and culture by participating in the local arts scene; attending events in their community, purchasing works by local artists, volunteering, becoming members of or giving donations to, local arts organizations and societies. Citizens should take advantage of access to local parks, outdoor recreation areas, civic centres and trail networks and make efforts to use more active forms of transportation (i.e., walk, bike, etc) that will lead them to make better use of these recreational facilities.

ED-1: Age Distribution of Labour Force

What is Being Measured?

This indicator measures the percentage of the labour force, by age group.

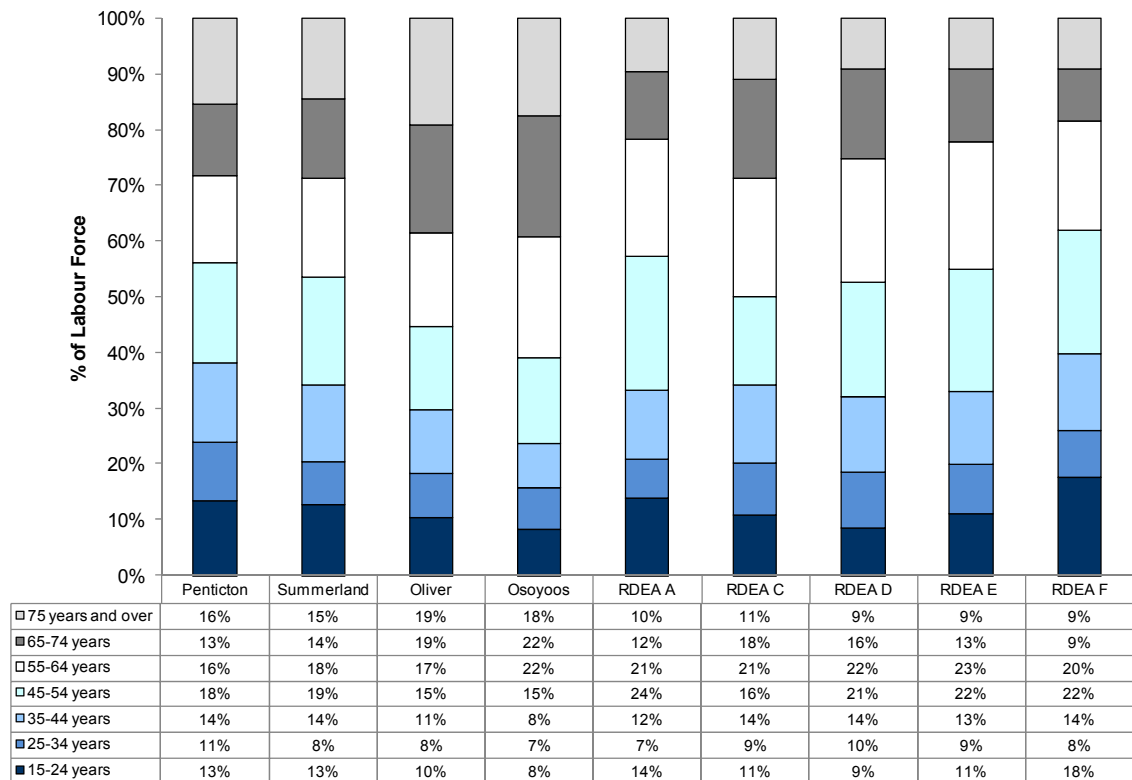
Why is this Indicator Important?

This indicator shows the distribution of the labour force by particular age groups. This is an important consideration as Canada, BC, and the Okanagan are all experiencing a maturation of the population and labour force. Most regions including the South Okanagan will need to develop strategies for succession planning such as developing economic strategies that will attract younger people to the area, and focusing on developing particular business sectors that will integrate with the existing economic infrastructure and enhance it.

How are We Performing?

The break-down of age distribution by labour force is shown in Figure 44 below by percentage per age cohort. Age groups 15-24 years range from 8% in Osoyoos to 18% in Electoral Area F. The 25-34 years age cohort ranges from 7% in Osoyoos to 11% in Penticton. The 35-44 years ranges from 8% in Oliver, Summerland, and Electoral Area F to 14% in Penticton, Summerland, and Electoral Areas C, D, and F. For the 45-55 year age cohort, the range is from 15% in Oliver and Osoyoos to 24% in Electoral Area A. In the 55-64% age cohort, the range is from 16% in Penticton to 23% in Electoral Area E. In the 65-74 year cohort, the range is from 9% in Electoral Area F to 22% in Osoyoos. And in the 75 years and older cohort, the percentage ranges from 9% in Electoral Areas D, E, and F to 19% in Oliver.

Figure 44. Percent of labour force, by age group, 2006

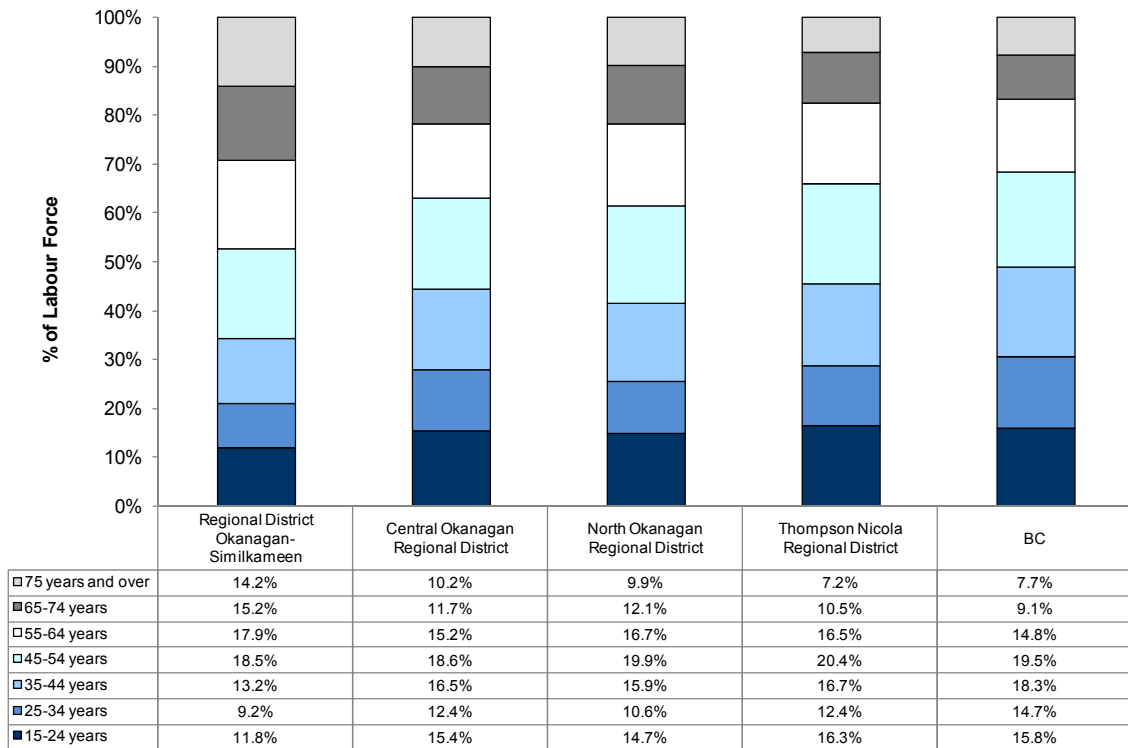


Source: Statistics Canada Census of Population, 2006

How Do We Compare?

The age distribution in south Okanagan has higher percentages of the population in the older age cohorts. For example the 75 and over age cohort for BC is 7.7%, whereas communities in the RGS study area range from 9% to 19%. In the 65-74 age range in BC, the average is 9.1% of the population; communities in the south Okanagan from 9% to 22% in Osoyoos. Conversely, the youngest age groups (15-24 years) the average population percentage for BC is 15.8%. In the south Okanagan all communities except Electoral Area F have percentages that range from 8 to 14%. Electoral Area F is much higher, with 18%.

Figure 45. . Percent of labour force, by age group in comparable jurisdictions, 2006



Source: Statistics Canada Census of Population, 2006

What is Being Done?

The first theme area of the Regional Growth Strategy is to promote economic diversification. Through the RGS consultation process, residents identified providing jobs for local residents was of critical concern. The process also identified the aging population and less opportunities for youth employment in the region. The RGS has been designed to promote the development of industry and attract young people and families to the south Okanagan while balancing social and ecological concerns. All of the economic strategic actions do not have explicit references to aging, however, each strategic action has this element implied in the descriptions which include wording such as 'retention', 'diversification', and 'monitoring'.²³

²³ RDOS Regional Growth Strategy, p. 10.

What is Being Measured?

This indicator represents the distribution of household income in the region for a given year. The number of households that fall within each income category are reported as a percentage of the total number of private households in the region. The information is reported from Statistics Canada Census data and includes all income earned, before taxes, for all members of the household aged 15 or over.

Why is this Indicator Important?

Household income is an indicator of a household's ability to meet its needs. The distribution of household income is used to measure the income range of residents. These trends determine whether there is a suitable range in household incomes to foster a diverse community.

A limitation of this measurement is that it does not account for the number of people living in a household, and a household may include more than one family. Therefore regions that have a higher proportion of secondary suites or multiple families sharing a dwelling may appear to have higher incomes per household, while not necessarily representing the ability of each family to meet its needs.

How are We Performing?

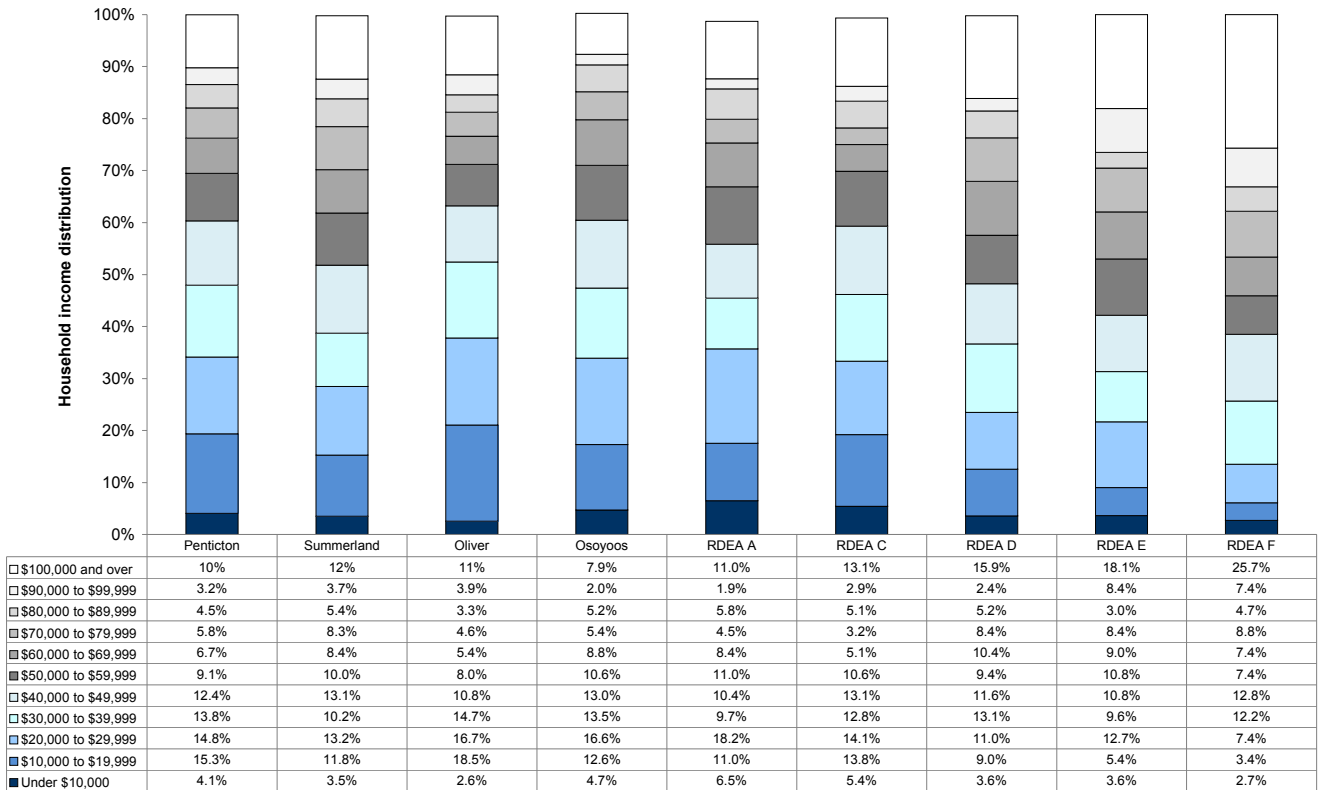
There is generally a higher proportion of population in the lower income brackets (\$50,000 and lower), and a lower proportion in the very high income brackets across the RGS study area except in Electoral Areas D, E, F.

Over 50% of the households in Oliver have incomes less than \$40,000. 48% of the household incomes in Penticton and 47% of the incomes in Osoyoos were less than \$40,000.

Less than 40% of the incomes in Summerland have household income below \$40,000.

The average of households with income over \$100,000 is 14%. Electoral Areas D, E, F are higher than the average (approx 15%, 18%, 26%, respectively).

Figure 46. Household Income Distribution, 2006



Source: Statistics Canada Census of Population, 2006

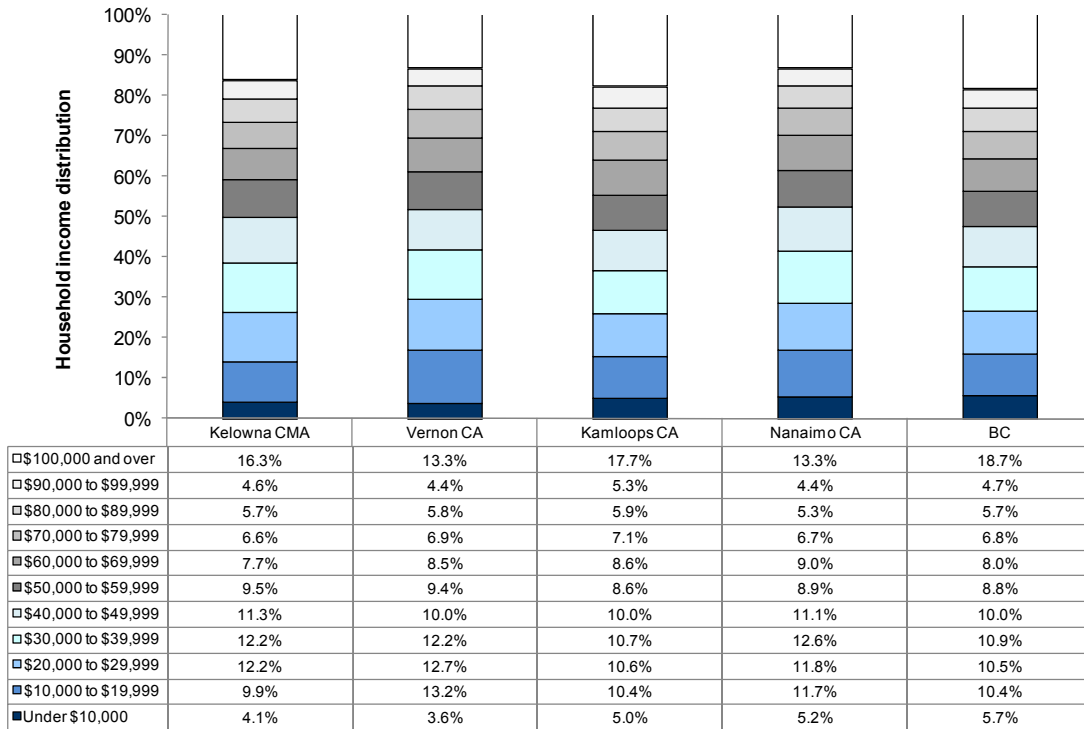
How Do We Compare?

Municipalities in the south Okanagan generally have a higher proportion of households in lower income brackets than other regions in British Columbia. Similarly, a lower proportion of households in the region are in very high income brackets, except in Electoral Areas D, E and F.

The household income distribution in the RGS study area in comparison to the province indicates the relative strength of the local economy. In 2006, 16.1% of households in BC had incomes less than \$20,000 and in Kelowna 14% of households. Penticton (19%), Oliver (21%), Osoyoos (17%), Electoral Areas A (18%) and C (19%) all have a higher portion of households with incomes less than \$20,000.

All except Electoral Area A have smaller portion of household incomes less than \$10,000 compared to British Columbia (5.7%)

Figure 47. Household Income Distribution in Comparable Jurisdictions, 2006



Source: Statistics Canada Census of Population, 2006

What is Being Done?

The income range of residents determines whether there is a suitable range in household incomes to foster a diverse community. Communities should be designed for a wide range of ages and income brackets. In order to achieve this, the RGS recognizes the need to provide a range of housing options for different incomes, ages and family needs.

Also see AH-3 and AH-4

What is Being Measured?

This indicator measures the percentage of total income that comes from three categories of income sources: earnings, government transfers and other money. Earnings include employment and self-employment income; government transfers include benefits from all levels of government such as Employment Insurance and Old Age Security pension; and other money includes all other income such as retirement allowances, child support, income from abroad and bursaries.

All income sources for this indicator are reported on an individual basis.

Why is this Indicator Important?

This indicator shows the sources of the RDOS resident population's income. A disproportionate amount of income from government sources or investments could leave the economy open to vulnerability.

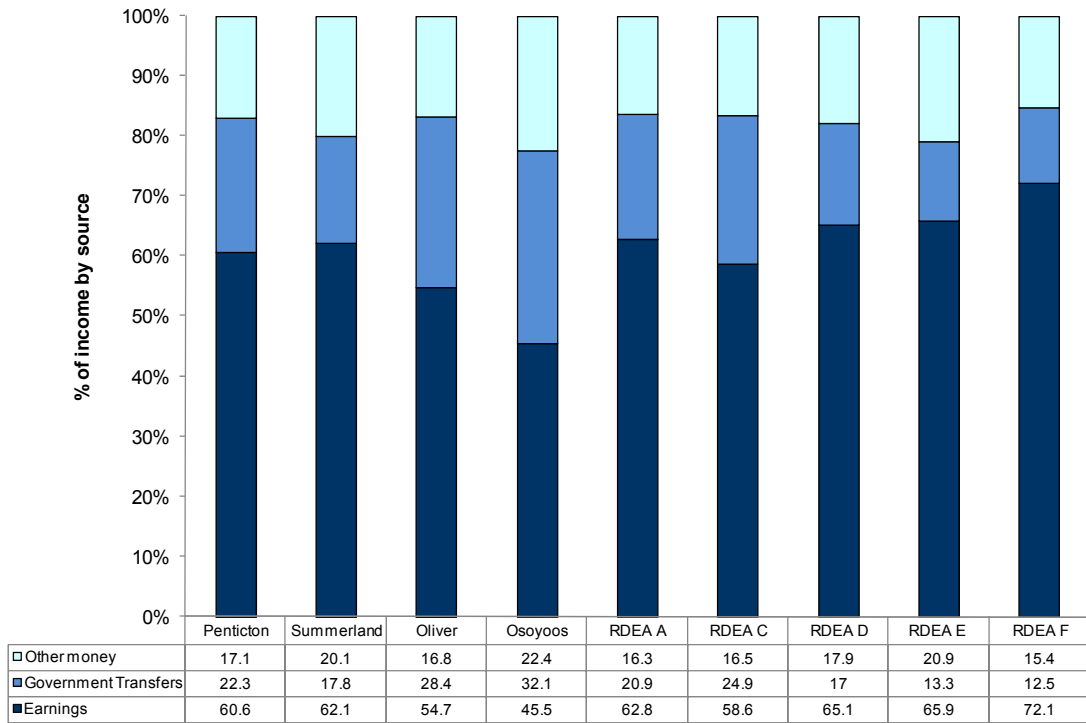
How are We Performing?

In 2006, Osoyoos had the lowest proportion of income from earnings (46%) and electoral area F had the highest proportion (76%). Government transfer income were the highest in Oliver (24%) and Osoyoos (23%) and electoral area F had the lowest proportion (8%). Income from other sources, such as retirement investments ranged from 15-30%.

Overall, the proportion of income from earnings is quite low for most of the municipalities in the region. This indicates that substantial portions of the economy are reliant on assistance or other income. This is likely a reflection of the aging population.

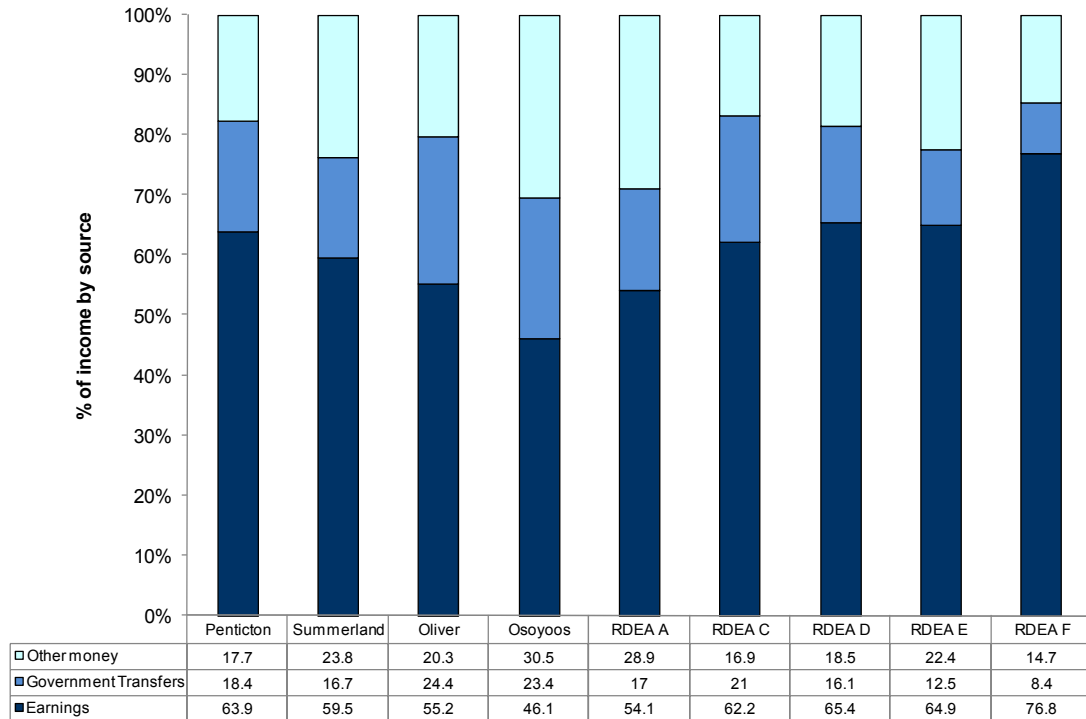
There was little change in the distribution income by source between 2001 and 2006 in the RGS study area.

Figure 48. Percentage of Total Income by source, 2001



Source: Statistics Canada Census of Population, 2001

Figure 49. Percentage of Total Income by source, 2006

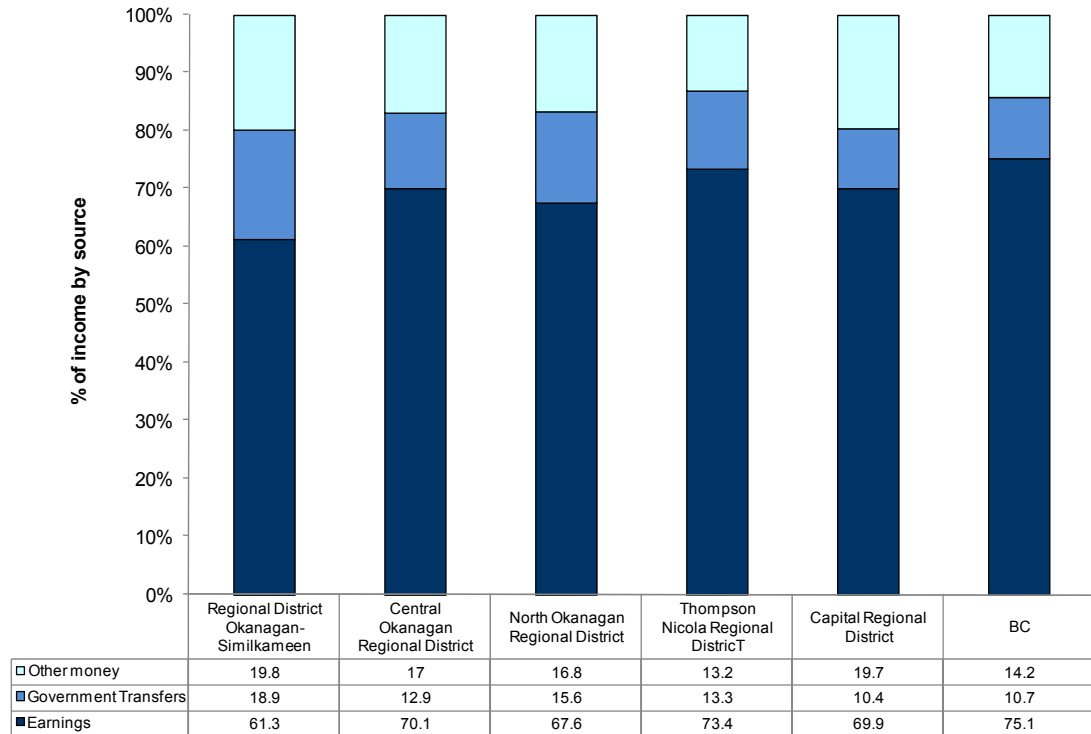


Source: Statistics Canada Census of Population, 2006

How Do We Compare?

The average amount of income from earnings in BC is 75%, which is substantially higher than all of the regions in the south Okanagan, except for Electoral Area F (76%), as shown in Figure 50.

Figure 50. Percentage of Total Income by source for Comparable Jurisdictions, 2006



Source: Statistics Canada Census of Population, 2006

What is Being Done?

In the Regional Growth Strategy the following has been identified as the key Economic Goal for the region:

Promote the creation of economic opportunities that foster diversification in a sustainable manner for a resilient and prosperous economy in the South Okanagan²⁴

Given this goal, the region is aiming to ensure its population does not depend heavily on income from any one source. In particular, an aging and retiring population base may increase the proportion of income coming from government sources or investments. Therefore, there may need to be a focus on increasing employment opportunities for younger workers in order to maintain a well-balanced source of incomes that includes significant income from earnings.

²⁴ South Okanagan Regional Growth Strategy, January 2008. p.10.

What is Being Measured?

This indicator measures the percentage of employed people that are working in each sector as an indication of the employment diversity in the region. The sectors are defined using the North American Industry Classification System (1997) and include the following:

- Agriculture and other resource-based industries
- Construction and manufacturing
- Wholesale and retail trade
- Finance and real estate
- Health and education
- Business services
- Other services

Why is this Indicator Important?

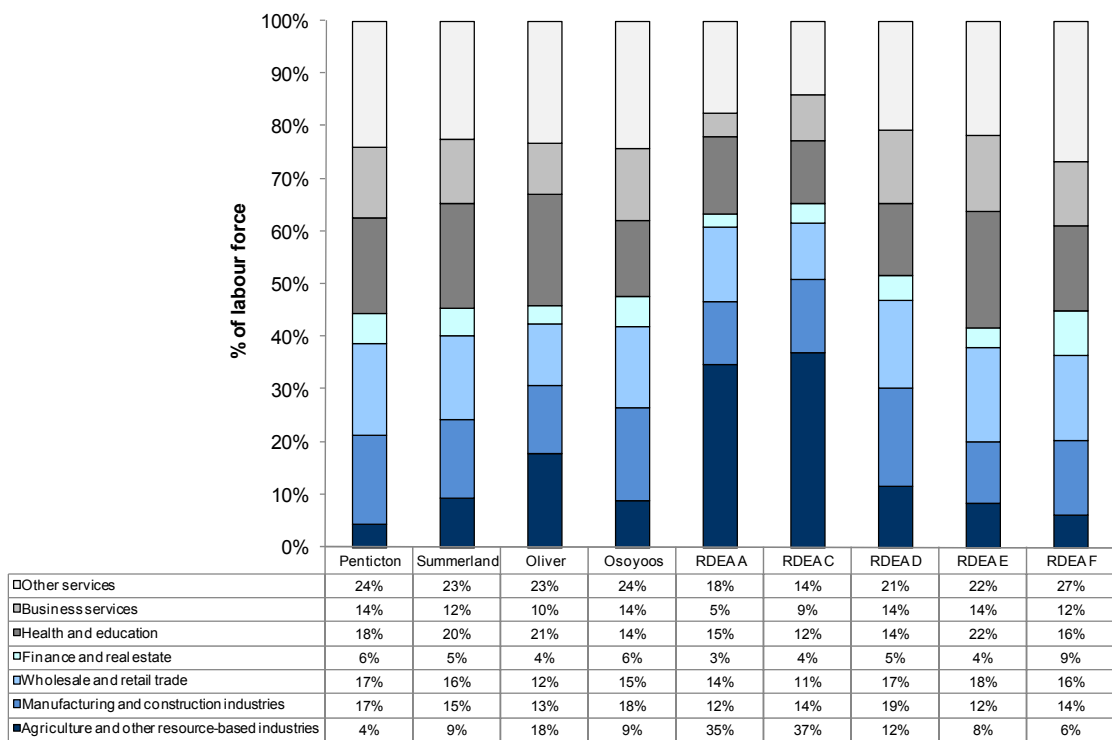
This indicator shows the concentration of the labour force in various employment sectors. A predominance of people working in one sector could mean the region is more economically vulnerable. Alternatively, employment diversification increases resilience to economic downturns. By looking at the changing proportions of employment in each sector, this indicator can reveal how the underlying economic health of the region is changing.

The Regional Growth Strategy for the South Okanagan has identified the need to enhance the diversity of the labour force as a key economic policy. When tracked over time, this indicator will measure whether the region is increasing the diversity of its labour force.

How are We Performing?

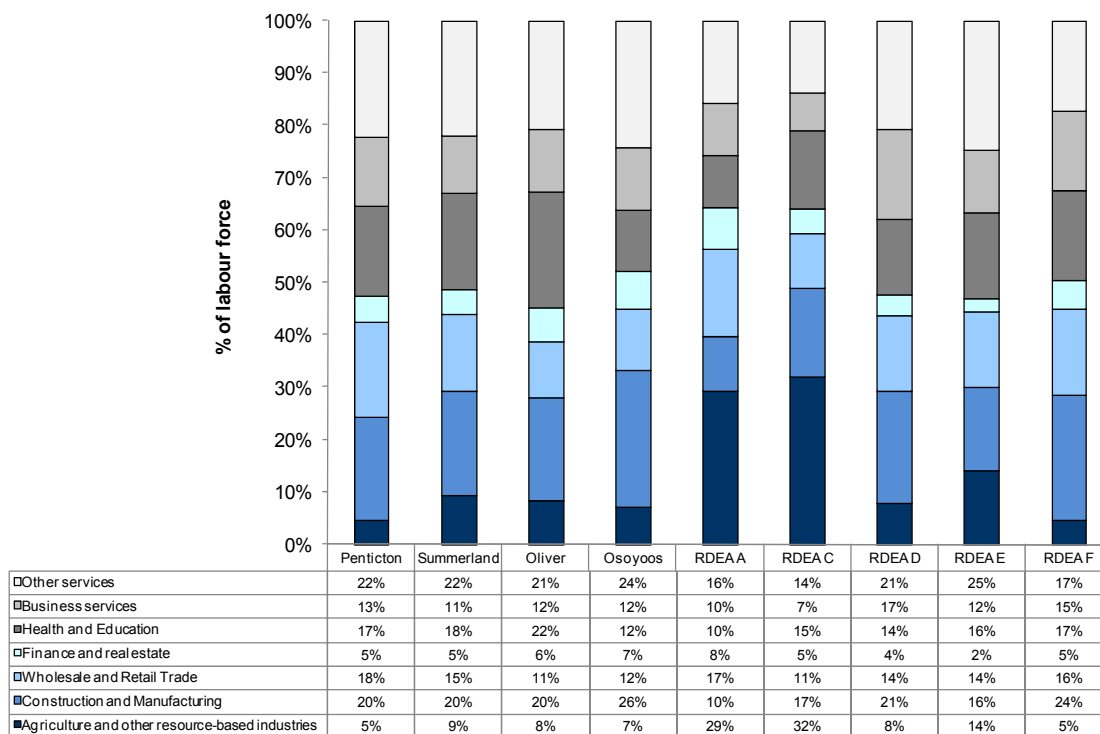
In 2006 the labour force was fairly widely distributed across the sectors for most of the municipalities. However, as shown in Figure 52, all areas have a relatively high proportion of employment in the agricultural and other resources sector, with Electoral Areas A (29%) and C (32%) dominated by this sector. The employment in Osoyoos and Electoral Area F is most heavily focused in Construction and Manufacturing, with 26% and 24% of the total employment represented by this sector respectively. Similarly, approximately 20% of the labour force in Penticton, Oliver, Summerland and Electoral Area D are employed in Construction and Manufacturing.

Figure 51. Total Employment by Sector, 2001



Source: Statistics Canada Census of Population, 2001

Figure 52. Total Employment by Sector, 2006



Source: Statistics Canada Census of Population, 2006

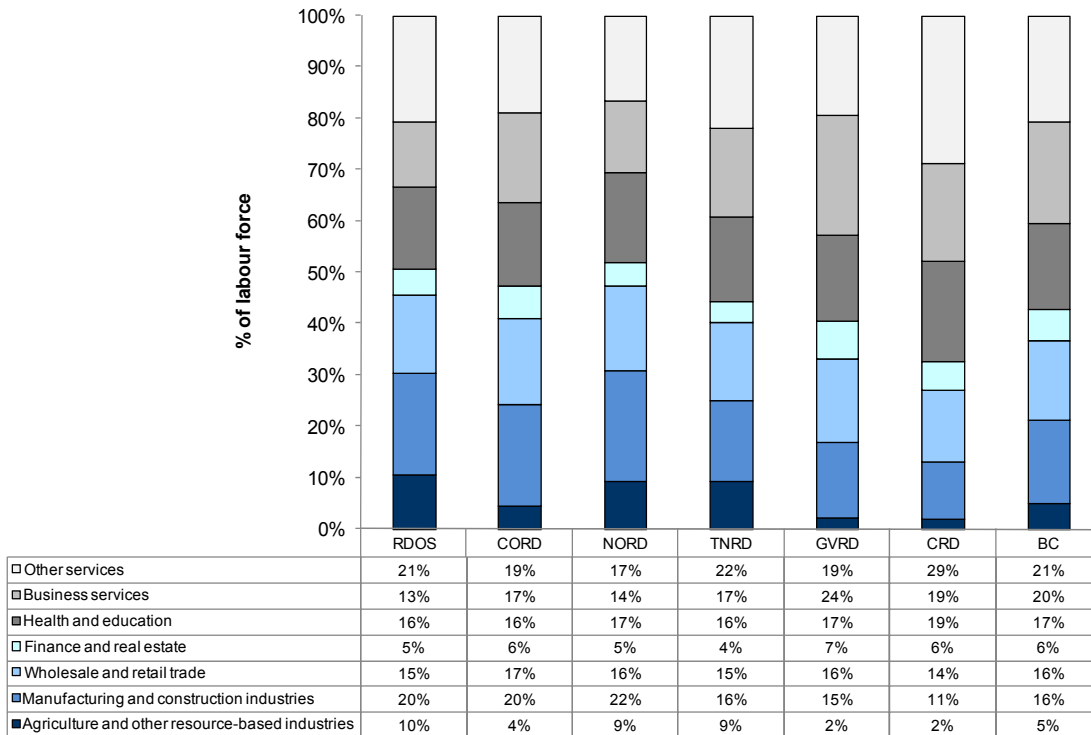
The manufacturing sector is closely linked to the agriculture and resources sector in this region. Processing and packaging of fruit, wine and other agricultural products in the region contribute to the higher proportion of employment in this sector, particularly evident in Osoyoos.

Between 2001 and 2006, the region has seen a strong shift of employment from the primary agriculture and resource sector to the secondary value-added manufacturing sector. This indicates an increase in economic diversity as the region retains ancillary employment rather than shipping away all of its raw products to be processed and packaged in other regions.

How Do We Compare?

As shown in Figure 53, compared to other regions in BC, RDOS has the largest proportion of employment in the agriculture and resources sector than any other area, while also having the smallest proportion of employment in the business services sector,.

Figure 53. Total Employment by Sector in Comparable Jurisdictions, 2006



Source: Statistics Canada Census of Population, 2006

This indicates that the region is more heavily reliant on an agricultural and resource base compared to other regions in BC. This is particularly the case when the employment in the value-added industry is considered, as this employment depends on the success of the agricultural industry in the region.

What is Being Done?

To attain more employment diversity in its labour force, the RDOS intends to encourage diverse business opportunities, support a regional work-force attraction program, support opportunities for private / public partnerships, and encourage labour skill development through policy.

To maintain the vitality of the agricultural industry in particular, the Regional Growth Strategy for South Okanagan identifies the agriculture sector as a priority in the RGS policies and provides a toolkit for its preservation. The regional district is working with the provincial Ministry of Agriculture and Lands (MAL) to understand planning tools that will minimize conflicts between agricultural and other land uses. The RGS also emphasizes the need to support agriculture and the related value-added industry that contributes to the local economy.

TO BE COMPLETED IN THE 5-YEAR REPORT IN 2013

What is Being Measured?

Why is this Indicator Important?

How are We Performing?

How Do We Compare?

What is Being Done?

5 CONCLUSIONS AND NEXT STEPS

How Are We Doing Overall?

The 30 indicators included in the 2006 Baseline Report provide the baseline status for the performance measures selected to monitor the progress of the south Okanagan Regional Growth Strategy (RGS) over time. This baseline will be used to identify what is working and where improvements can be made during the implementation of the RGS. Over time, as future monitoring reports are compiled, trends in these performance measures will begin to emerge that will demonstrate the impact and effects of the RGS. Key findings from the 2006 Baseline Report include:

- | | |
|--|---|
| <i>Population Size & Growth</i> | <ul style="list-style-type: none">• Populations in the RGS study area have remained relatively constant between 1996 and 2006. Minor fluctuations in population have occurred over this time with the overall result being slight population increases in almost all areas; the exceptions being the City of Penticton, and Regional District of Okanagan-Similkameen Electoral Area C. |
| <i>Biodiversity & Natural Spaces</i> | <ul style="list-style-type: none">• A higher proportion of parks and protected areas lie in the rural areas of the RGS study area. The RGS has outlined policies that will encourage and promote the retention of large rural holdings, open spaces, parks and viewsapes. |
| <i>Agriculture</i> | <ul style="list-style-type: none">• The RDOS and member municipalities have been largely successful in protecting the Agricultural Land Reserve but population growth and development may increase pressure to exclude land from the ALR in the future. |
| <i>Human Settlement & Land Use</i> | <ul style="list-style-type: none">• Currently, housing density is quite low in most areas of the study area. The RGS identifies policies for developing a compact urban form and building complete communities, including concentrating growth in primary (existing urban) areas. |
| <i>Affordable Housing</i> | <ul style="list-style-type: none">• The vision for the RGS outlines that new development is predominantly mixed-use higher density. Currently, well over the majority of the housing mix in the study area is single family dwellings; this will likely change in order to create this vision. |
| <i>Transportation</i> | <ul style="list-style-type: none">• Communities in the RGS study area are automobile dependent, with a high proportion of trips being made by single-occupancy vehicles. However, several policies in the RGS have been identified to increase transportation options, improve transportation efficiency and reduce automobile dependency. |
| <i>Energy Use & Air Quality</i> | <ul style="list-style-type: none">• Per capita residential building energy consumption is slightly higher in the Regional District Electoral Areas, than in the municipalities within the RGS study area. Energy conservation is the responsibility of the individual and residents need to take the initiative to reduce their electricity and gas consumption. However, utilities and energy providers in the South Okanagan do offer information and resources to customers looking to implement more energy efficient measures in their home.• Air quality in the region falls within the Canadian Wide Standard for air quality. There are several policies and plans already |

Water Management	<p>established for the RGS study area to uphold best management practices.</p> <ul style="list-style-type: none"> • Water consumption is quite high in the RGS study area. The promotion of water conservation programs will help reduce water consumption. • Water quality in the RGS study area is within established guidelines and standards for drinking water.
Municipal Solid Waste	<ul style="list-style-type: none"> • Per capita garbage disposal is relatively high in the RGS study area in comparison to other jurisdictions in the province. The promotion of waste reduction and recycling programs will help reduce garbage in landfills.
Social, Cultural, Recreational	<ul style="list-style-type: none"> • The Regional Growth Strategy identifies policies to support safe, culturally diverse and healthy communities. Currently, crime rates in the south Okanagan are low in comparison to other jurisdictions; arts, recreation and culture budgets vary across municipalities.
Economic Development	<ul style="list-style-type: none"> • The labour force in the south Okanagan has a large proportion of middle-aged people – over 60% of the labour force is over 45 years. • A goal of the RGS is to promote economic diversification. Currently, there is a larger dependence on agriculture and other resource-based industries than on other industries. • The RGS has been designed to promote the development of industry and attract young people and families to the south Okanagan.

Future Updates

The next Regional Growth Strategy Performance Indicator report will be prepared and released in 2009. This first Annual Report will present 14 indicators. In 2013 a five-year report will be released and will incorporate data from the 2011 Census of Canada. This five-year report will contain the full suite of indicators that is presented in this baseline report.

APPENDIX A – 2006 KEY FACTS

Land Area (including lakes)

	South Okanagan RGS Study Area	Agricultural Land Reserve	Municipal Parks	Regional Parks	Provincial Parks
South Okanagan RGS Study Area Land area (including lakes) in hectares (ha)	330,824	43,987	734*	130	12,150

Note: * This includes municipal parks in Penticton and Summerland only. Data was not available for Oliver or Osoyoos.

Population & Demographics

	Municipality				Okanagan Similkameen Regional District Electoral Area					RGS Study Area
	Oliver	Osoyoos	Summerland	Penticton	A	C	D	E	F	
Total population estimate	4370	4752	31909	10828	1921	3899	5913	2010	2011	67,613
% of population aged 65 years and older	35.1%	37.0%	25.8%	25.7%	21.4	23.3%	21.8%	17.9%	14.4%	24.7%
Median age	54.6	58.8	47.3	49.5	50.4	49.3	49.9	48	46.3	50.5
Average household size (persons / household)	2.2	2	2.1	2.3	2.4	2.5	2.3	2.4	2.7	2.3

Occupied Private Dwellings, by structure type

Number of dwelling units

	Municipality				Okanagan Similkameen Regional District Electoral Area					RGS Study Area
	Oliver	Osoyoos	Summerland	Penticton	A	C	D	E	F	
Total Dwellings	1,955	2,223	4,530	14,586	772	1,570	3,010	834	1,201	30,681
Single-detached house	1,340	1,445	3,520	7,046	710	1,205	2,410	814	1,013	19,503
Semi-detached house	25	80	90	550	5	10	44	0	22	827
Row house	235	125	300	1,285	0	10	128	5	0	2,088
Apartment, duplex	35	80	50	325	10	15	33	0	30	578
Apartment, five or more storeys	0	0	0	645	0	0	0	0	0	645
Apartment, fewer than five storeys	240	463	520	4,095	17	20	71	10	0	5,436
Other single-attached house	15	10	25	100	5	0	33	0	10	198
Movable dwelling	50	40	35	565	30	310	292	0	121	1,443

Percent of total dwelling units

	Municipality				Okanagan Similkameen Regional District Electoral Area					RGS Study Area
	Oliver	Osoyoos	Summerland	Penticton	A	C	D	E	F	
Single-detached house	69%	65%	78%	48%	92%	77%	80%	98%	84%	64%
Semi-detached house	1%	4%	2%	4%	1%	1%	1%	0%	2%	3%
Row house	12%	6%	7%	9%	0%	1%	4%	1%	0%	7%
Apartment, duplex	2%	4%	1%	2%	1%	1%	1%	0%	2%	2%
Apartment, five or more storeys	0%	0%	0%	4%	0%	0%	0%	0%	0%	2%

	Municipality				Okanagan Similkameen Regional District Electoral Area					RGS Study Area
	Oliver	Osoyoos	Summerland	Penticton	A	C	D	E	F	
more storeys										
Apartment, fewer than five storeys	12%	21%	11%	28%	2%	1%	2%	1%	0%	18%
Other single-attached house	1%	0%	1%	1%	1%	0%	1%	0%	1%	1%
Movable dwelling	3%	2%	1%	4%	4%	20%	10%	0%	10%	5%

Labour Force & Employment

	Municipality				Okanagan Similkameen Regional District Electoral Area					Study Area
	Oliver	Osoyoos	Summerland	Penticton	A	C	D	E	F	South Okanagan
Population 15 years and over in labour force	1630	1845	15480	5150	1115	2105	3030	1060	1200	32,615
Labour force participation rate	44.5	43.8	57.2	56.3	67	63.4	59.4	62.5	69.4	58.2
Unemployment rate	5.5	6.2	6.8	5.8	4	5.2	4.6	5.7	3.8	55.2
Average household income (\$)	50,478	49,882	52,702	59,853	55,326	52,985	60,272	70,267	86,853	59,846

Agriculture

Okanagan Similkameen Consolidated Census Subdivision

	A (Osoyoos)	C (Oliver)	D (Okanagan Falls)	E (Naramata)	F (Summerland)
Number of farms	184	394	257	104	303
Total area of farms (ha)	5,884	9,554	4,615	884	8,768
Total number of operators	295	585	395	150	455
Average age of operators (years)	52.3	52.8	56.7	54.2	55.1

Tourism

Penticton (2006)

	Jan - Mar	Apr - Jun	Jul - Sep	Oct - Dec	Annual
Seasonal occupancy rates	34.5%	56.0%	79.0%	34.2%	50.9%
Conference centre delegate days	43,400	51,525	49,835	51,150	195,910
Conference centre non-resident delegate days	10,275	30,250	21,000	12,900	74,425

Development Activity

	<i>Municipality</i>				<i>Regional District</i>
	<i>Oliver (2007)</i>	<i>Osoyoos (2007)</i>	<i>Summerland (2006)</i>	<i>Penticton (2006)</i>	<i>Okanagan Similkameen (2006)</i>
Value of residential building permits (new construction only)	10,785,000	21,025,744	16,833,200	105,917,305	25,086,220
Value of non-residential building permits (new construction only)	320,250	44,482,000	7,710,000	14,169,124	3,653,940

Note: Only 2007 data was available for the communities of Oliver and Osoyoos