2015 REGIONAL SNAPSHOT

SOUTH OKANAGAN REGIONAL GROWTH STRATEGY. VOL. 7, 2015

REGIONAL DISTRICT
RDOS
OKANAGAN-SIMILKAMEEN

Cover photos - Top: RDOS. Bottom-right: Penticton, CC-by, Jeff Turner, flickr.com. Bottom left: Tuc-el-nuit Lake in Oliver, CC-by-nc, Marco Derksen, flickr.com.

Table of Contents

Introduction

The *Local Government Act* requires a regional district to measure its progress on an RGS. Performance indicators selected for the South Okanagan RGS will allow the RDOS to monitor its implementation and progress towards the vision articulated by the community.

An original set of indicators was established in 2008, and a selection of ten key indicators was chosen to start monitoring the RGS once it was adopted in 2010. The selected indicators were based on the seven goals of the RGS. 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 based on how well they suited RGS goals, data availability, and reliability. Since 2010, some indicators have proven to be difficult to track, suffer from data challenges, or poorly represent the goal with which they are associated. These have been updated and replaced as necessary as part of the 2016 revisions.

There are now 16 indicators tracking the performance of the goals of the seven policy areas. Two additional context indicators show population growth trends against which change in other indicators can be made more meaningful. Indicators have been selected to balance fidelity to the goals with pragmatic concerns of data collection and reporting frequency. Data for all the indicators are available freely from trusted sources (including internal regional district processes), at least every two years.

CONTEXT

POPULATION GROWTH

INDICATOR	WHAT'S GOING ON: Change since last period
% annual change in population estimates/ projections	Based on a 2016 projection, the five-year average annual growth rate since 2011 is 1.04%, up since the last five-year period's (2006 to 2011) growth rate of -0.27%.
Total regional population estimate/ projection (for 2016)	A projection of 82,453 will mean a growth of 4,058 people since 2011.

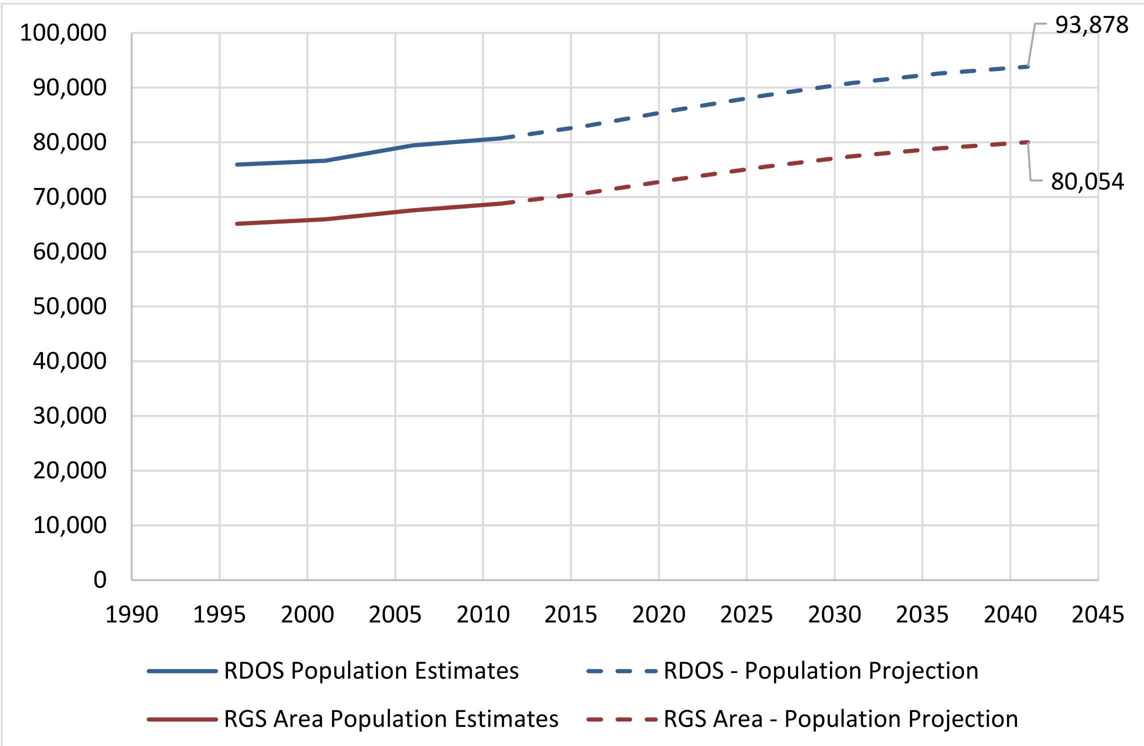
Population growth in the RDOS since 2006 has been much lower than was originally projected when the RGS was developed. The projected growth at the time (for the RDOS as a whole) was based on an expected annual increase of 1.45%, which would result in an additional 29,000 residents by 2031; the projected average annual growth has been revised down considerably to approximately 0.6%.

The figure shows population estimates and projections for the RDOS and the RGS Study Area. The two solid lines illustrate how the South Okanagan's growth tracked fairly consistently with the RDOS as a whole from 1996 to 2011. According to the 2011 census, the RDOS numbered 80,742 and the RGS Study Area numbered 68,852.

The current projections by BC Stats resume assumptions for more robust growth from 2016 to 2041, with an annual rate of 0.84%; the areas are projected to add approximately 12,000 or 13,000 new residents by 2041.[1] These figures do not include population numbers for on-reserve First Nations in the RGS area (Penticton Indian Band, Osoyoos Indian Band).

[1] Population projections from BC Stats P.E.O.P.L.E. are only available at certain scales; projections for the RDOS have been used to develop projections for the RGS study area.

Figure: *RDOS and RGS Area population estimates and projections*



Within the RGS Plan Area the population continues to urbanize. Penticton makes up approximately 48% of the population and 52% of growth from 2001 to 2011 (Figures 5 and 6); the Electoral Area populations have declined during the same period by approximately 700 residents (4.5%).

Figure: *RGS Study Area, population by sub-region, 2016 projections*

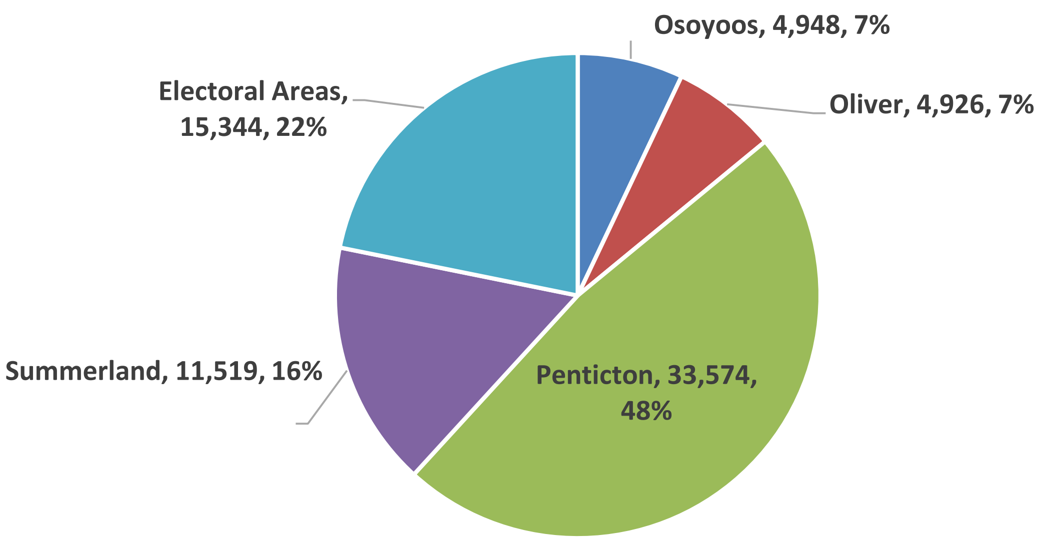
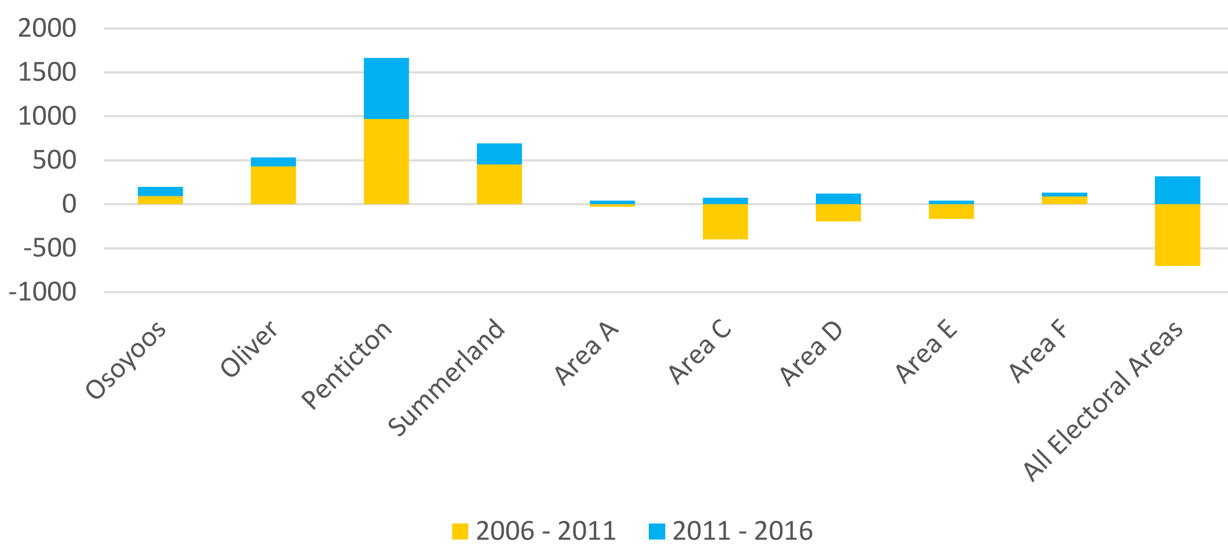


Figure: *10-Year Growth by area, 2006 to 2016*[2]



Source: BC Stats

[2] 2016 population estimates calculated for each location based on projections for RDCO population by BC Stats PEOPLE

SECTION

1

HOUSING AND DEVELOPMENT

GOAL

Focus development in serviced areas in designated Primary Growth Areas and Rural Growth Areas.

INDICATOR	HOW ARE WE DOING: Change since last period
1.1) *Percent of housing starts in primary growth/ rural areas*	**Well:** housing starts in primary growth areas increased by 3%
1.2) *Hectares change (inclusions/exclusions) to ALR*	**Little change**: only 2.4 hectares were excluded from the ALR.
1.3) *Median home prices (CPI adjusted)*	**Well:** Median home price dropped by 6.2%, a benefit for affordability.
1.4) *Affordability ratio (median home price to median household income)*	**Poorly:** While the affordability ratio improved, dropping from to 6.7 to 6.1, it is still well beyond common thresholds of 3.0 or 3.5.
1.5) *Number of housing starts by type*	**Well:** only 58% of new dwellings were single family compared to the historic average of approximately 67%.

1.1) Percent of housing starts in primary areas / rural areas

This indicator measures the number of new housing units built[3] in primary growth areas and all rural areas. This is important as a means of understanding growth within the RDOS, to ensure residential areas can be effectively and efficiently serviced, as well as protecting important areas for agriculture and biodiversity. The RGS strongly encourages the development of compact communities. In 2015,

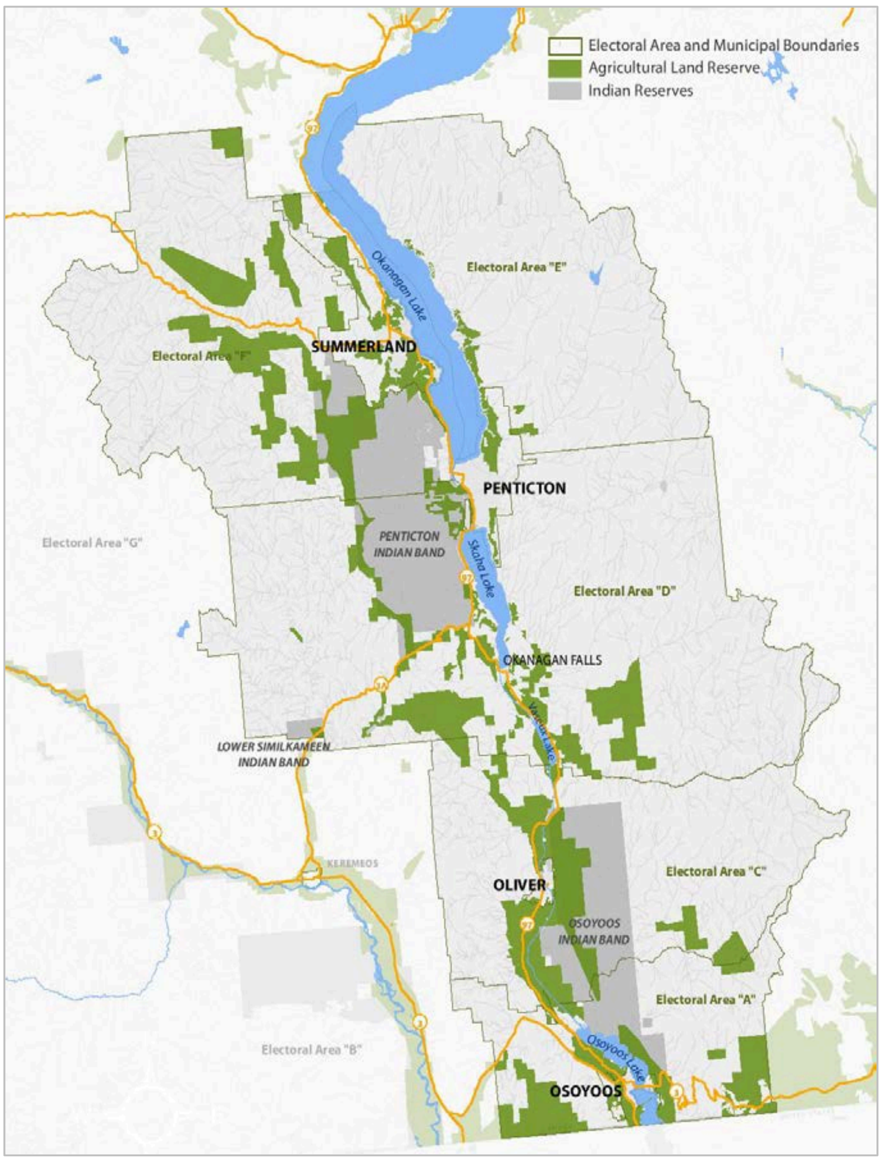
[3] Based on residential building permits issued.

70% of housing starts occurred in the primary growth areas, up from 67% the previous year. This reflects a 3% shift from rural areas.

1.2) Hectares change to ALR

This indicator tracks the success of protecting agricultural land by measuring the amount of land that has been added or removed annually from the Agricultural Land Reserve (ALR), within the RGS study area. This is determined through changes to ALR boundaries in Agricultural Land Commission (ALC) mapping each year.

Figure: *ALR land within the RGS*



Protection of this land is important as only 5% of BC's land is suitable for farming, making farmland a valuable commodity. With the goal of protecting agricultural land, the ALR recognizes the importance of agriculture as an economic driver, and important local food source. Within the south Okanagan, agriculture also forms an integral part of the local and regional history.

One of the key directives in the RGS is the protection of farmland and the agriculture industry in the south Okanagan by promoting retention of farmland and directing development to established growth areas[4].

From 2011 to 2016, approximately 148 hectares of land were removed from the ALR, and 31 hectares were added resulting in a net decrease of 117 hectares. This compares favourably to the nearly 400-hectare net decrease from 2006 to 2010.

[4] Farming activities also occur on agricultural land that is not in the ALR, and land in the ALR may not be actively farmed.

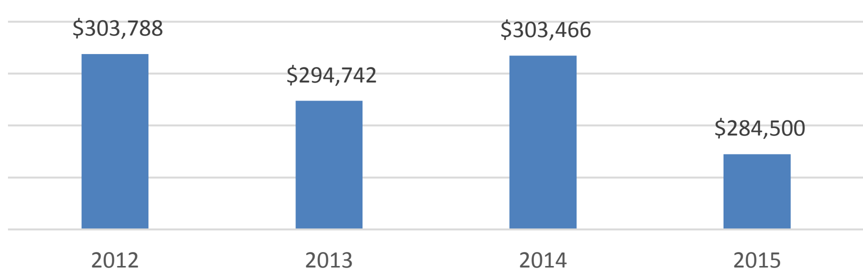
Further, the rate of decrease has slowed in recent years, with only 2.4 hectares of ARL land lost in 2016.

Figure: *Hectares of ALR inclusions and exclusions, annually*

1.3) Median home price (CPI adjusted)

Taken as a general measure of affordability, the decrease in median home prices in the RGS study by nearly $19,000 (6.2%) since 2014 is a positive change. This indicator uses home values from BC Assessment reported in CPI adjusted dollars to ensure comparability with past years.

Figure: *Median home price (CPI adjusted), annually*



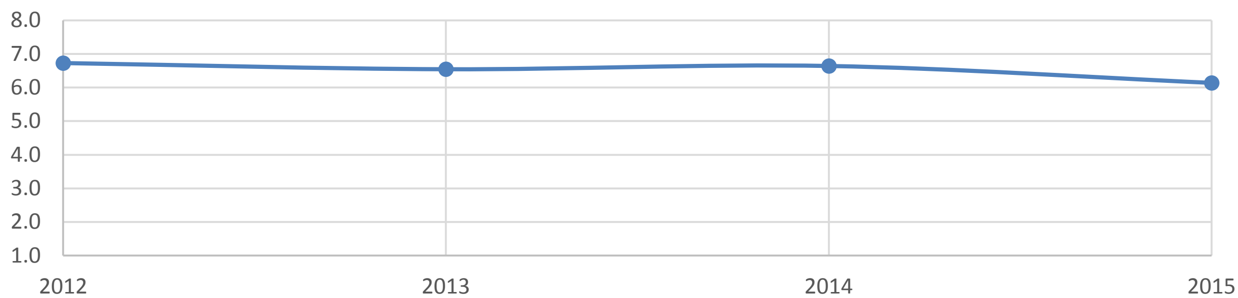
Source: BC Assessment – Assessed value

1.4) Affordability ratio: Median home price to median household income

By comparing home prices to income, this indicator gives an idea as to how accessible housing is to residents of the RGS. Typically, a ratio of approximately 3.0 to 3.5 is considered a threshold for affordability, i.e., three to three and a half times the average household income is needed to purchase an average home (this is the inverse of another common metric – the “shelter-to-income” ratio - which assumes 30% of a household income should be enough to cover housing costs).

In the RGS study area, the affordability ratio has decreased significantly from 6.7 to 6.2 from 2014 to 2015 as the median house price decreased (by 6.2%) while median household income is assumed to increase by the historic annual average (2006 – 2011) of 1.5% . However, a ratio of 6.1 – indicating it will take approximately six times the median household salary to purchase a home – is still well above the threshold for affordability.

Figure: *Affordability ratio: median home price to median household income. 2012 to 2015*



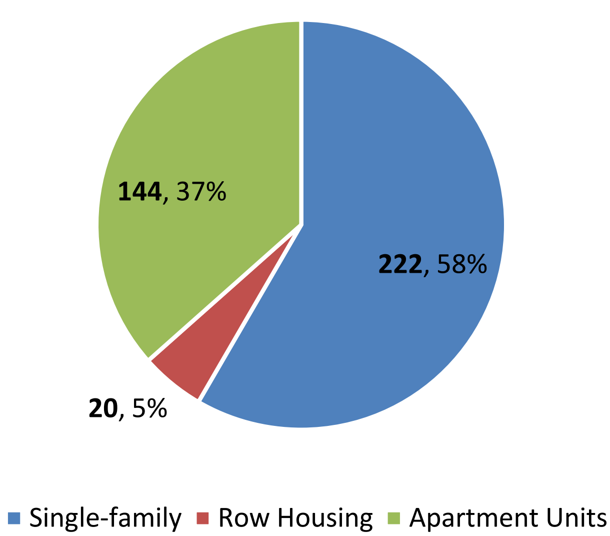
Source: Median home prices, BC Assessment; Median household income projected from 2011 Census data

1.5) Housing Diversity/ Choice: Number of new homes by structural type

This indicator measures the percentage mix of new housing starts by structural type; that is, the number of units that are single family homes, row houses, and apartment units. The range of housing types found within the total number has the potential of indicating overall community sustainability.

The RGS strongly encourages the development of compact, complete communities in the South Okanagan. Specifically, developing complete communities that are accessible to their residents requires a mix of housing types. Generally, multi- unit dwellings are more affordable than single detached dwellings.

Figure: *New homes, 2015*

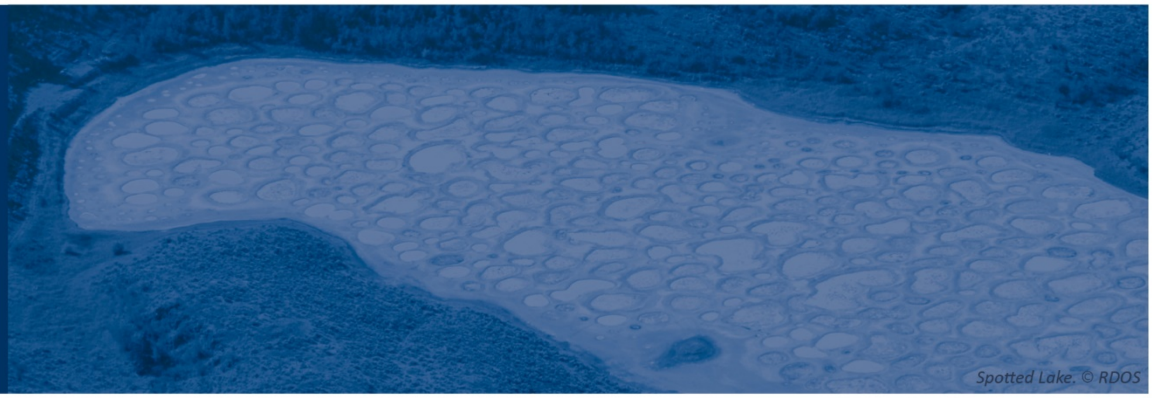


Source: BC Stats – Building Permits

Between 2014-2015, the 222 single-family homes that were built represented about 58% of all new units. This is significantly less than historic average of 68% and indicates new housing is more diversified.

SECTION

2


Spotted Lake. © RDOS

ECOSYSTEMS, NATURAL AREAS AND PARKS

GOAL

Protect the health and biodiversity of ecosystems in the south Okanagan.

INDICATOR	HOW ARE WE DOING: Change since last period
2.1) *Percent of land base that is parkland and protected areas*	**Well** protected land increased by 127 ha between 2014 and 2015, the proportion steady at 11.6%
2.2) *Average daily water consumption per person*	**Poorly:** consumption increased by 24.m^3 per person between 2013 and 2014
2.3) *Average kilograms of daily waste landfilled per person*	**No change:** waste landfilled remained at 1.41 kg between 2014 and 2015

2.1) Percent of land base that is parkland and protected areas

This indicator measures the percentage of total land area of parks and protected natural areas in the South Okanagan. It includes lands zoned as a park and lands owned by The Nature Trust of BC, the Nature Conservancy, Ducks Unlimited and the Land Conservancy.

The Okanagan valley supports some of the rarest flora and fauna in Canada. The policies of the RGS strongly support the conservation, protection and enhancement of ecologically sensitive lands and the retention of open spaces, parks and large rural holdings.

The RGS recognizes the value of all components of the natural environment and policies strongly support the conservation, protection and enhancement of ecologically sensitive lands and the retention of open spaces, parks and large rural holdings.

From 2014 to 2015, a slight increase of 127 ha of protected land was identified in Electoral Areas “A” and “D” when the Land Conservancy of British Columbia (TLC) high priority conservation properties to the Nature Conservancy of Canada.

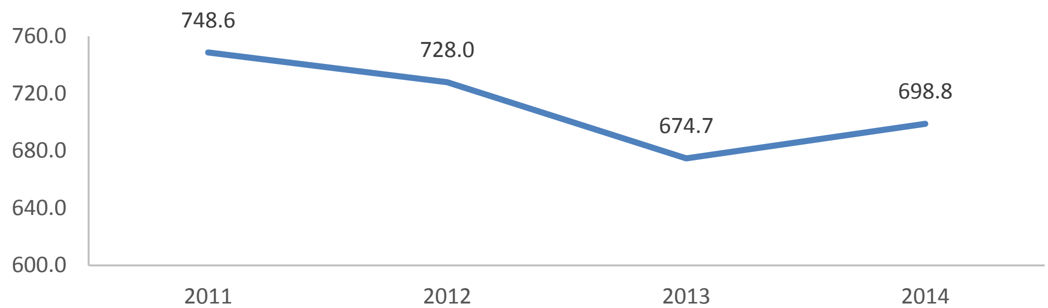
2.2) Average daily water consumption per person

Water availability is a concern in the South Okanagan. As the region grows in population, water supply will continue to be an issue. The RGS includes eight policies for communities, organizations and governments to work together to ensure future water sustainability.

This indicator uses would use combined residential and irrigation usage data collected from eight water utilities of the South Okanagan; however, 2015 water consumption numbers were not available from all utilities at time of printing.

Average water consumption per person in the RGS increased slightly between 2013- 2014, up 24.1m^3.

Figure: *Average daily per-person water consumption (litres)*



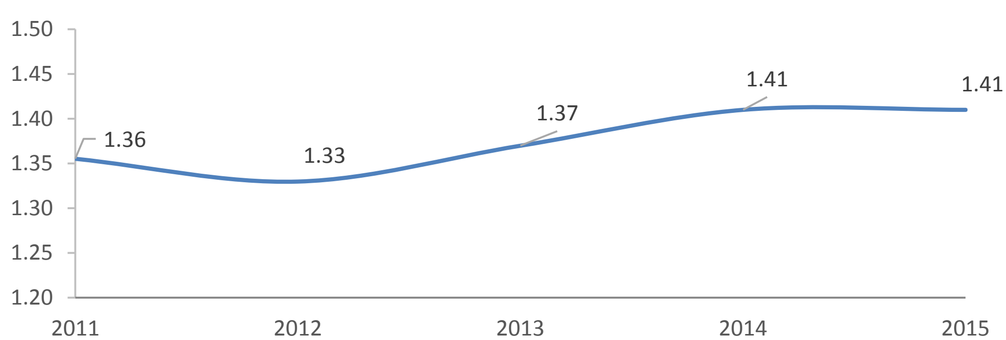
2.3) Average kilograms of daily waste landfilled per person (kg/day/capita)

This indicator consists of measurements taken from the Campbell Mountain landfill, not including diverted waste (i.e., recycled).

The RGS speaks directly to reducing solid waste production by promoting and encouraging waste reduction, through best practices, public awareness and actions.

Between 2012 and 2015, average daily waste landfilled per person increased from 1.33kg to 1.41kg.

Figure: *Average daily waste per year (kg/day/capita): 2011 to 2015*



SECTION

3


New Okanagan Falls Wastewater Treatment Plant. © RDOS

INFRASTRUCTURE AND TRANSPORTATION

GOAL

Support efficient and effective infrastructure services and an accessible multi-modal transportation network.

INDICATOR	HOW ARE WE DOING: Change since last period
3.1) *Total annual regional bus ridership*	**Well:** ridership increased 4% overall.

3.1) Total annual regional bus ridership

This indicator measures the number of trips taken on BC Transit buses within each BC Transit business unit of the RGS area. South Okanagan residents depend on a municipal and provincial transportation network and services for work, recreation and day-to-day travel. While some business units saw decreased ridership, overall, ridership has increased in the Region, up 4.8% between 2014 and 2015.

BC Transit reports data by "business units", areas which can consist of single bus routes or multiple routes. The three business units presented below include the following routes:

- **Osoyoos business unit 747**: Routes 1 Osoyoos ,2 Osoyoos/Penticton, 3 Osoyoos/Kelowna
- **Summerland business unit 764**: Route 1 Summerland to Penticton
- **Okanagan-Similkameen business unit 745:** Routes 10 Naramata/ 20 Ok Fall- Penticton/ 21 Ok Falls Town Local
- **Penticton business unit 847**: 1 Okanagan/Wiltse, 2 West Side / Penticton Ave, 3 Uplands / Skaha Lake, 4 West Side / Duncan East, 5 Main Street, 15 Night Route, 16 Lake to Lake

These data only represent "conventional" routes, and do not include rides taken by specialty services (e.g. handyDART).

Figure: *Annual Ridership, BC Transit Business Units Osoyoos (747) and Summerland (764)*

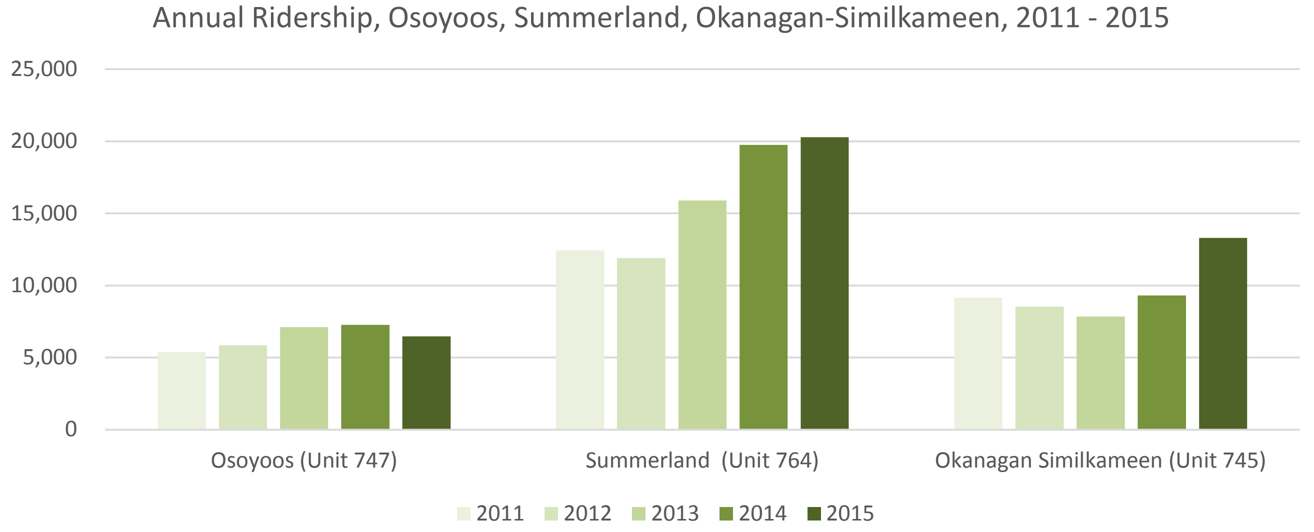
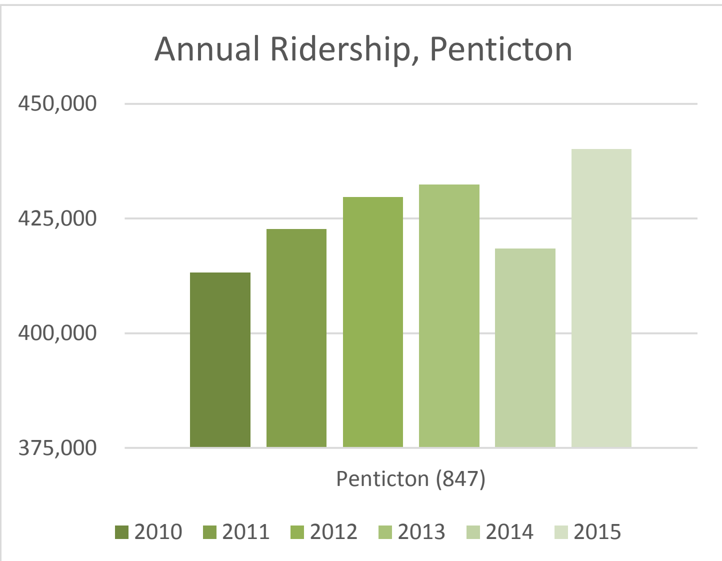


Figure: *Annual Ridership, BC Transit Business Units Penticton (847)*



The Penticton business unit, consisting of seven separate routes, represents approximately 95% of total regional ridership. As such, the data for the Penticton business units has been graphed separately for the sake of better visualizing trends in the other business units. Note the different values (along the y-axis) of the two charts.

SECTION

4

COMMUNITY HEALTH AND WELLBEING

GOAL

Foster healthy, safe communities that provide accessible recreational, educational and cultural opportunities.

INDICATOR	HOW ARE WE DOING: Change since last period
4.1) *Annual crime rates per 1000 residents*	**Poorly:** crime rate increased by 12.3 per 1,000
4.2) *Regional health outcomes*	**NA:** This is a sample of health outcome data from the Provincial Health Services Authority

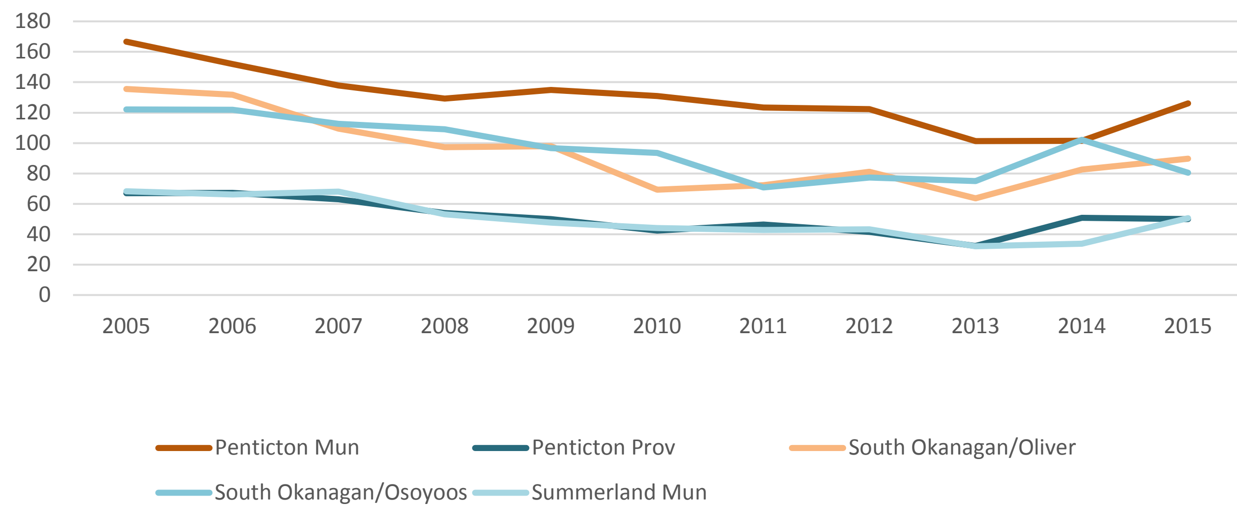
4.1) Annual crime rates per 1000 residents

This indicator measures the number of Criminal Code offences (excluding traffic offences) per 1000 population. Criminal Code offences include property (e.g. break and enter, theft, fraud, mischief), violent (e.g. homicide, sexual and non-sexual assault, abduction, robbery), and other crimes (e.g. gaming and betting, disturbing the peace). Jurisdictions included are Penticton Municipal, Penticton Provincial, South Okanagan Oliver Provincial, South Okanagan Osoyoos Provincial, and Summerland Municipal[5].

South Okanagan crime rate for 2015, 93.2 per 1,000, is an increase from the previous year (81 per 1,000). Crime rates in the RGS remain above the provincial rate of 78.4 for 2015.

[5] Statistics from policing jurisdictions do include several areas outside of the South Okanagan RGS area. Crime rate statistics are obtained from Ministry of Justice Police Services Division that includes a qualifier that crime data from previous years are revised to reflect any updates, therefore crime statistics may vary for year to year.

Figure: *Crime rates per 1,000 population*



4.2) Regional Health Outcomes

The Public Health Services Authority (PHSA) has aggregated a large amount of health-related data for BC communities in an online dashboard called the BC Community Health Database. The RGS area is roughly contiguous with the Local Health Areas (LHA) of Penticton, Summerland, and Southern Okanagan (an area that includes Oliver and Osoyoos). The following are a selection of health outcomes indicators from the BC Health Community Database. Where an LHA outperforms the provincial average, the comparison is highlighted in green; where it underperforms, it is highlighted red.

Life expectancy at birth is the average number of years a newborn can be expected to live based on current mortality rates in the region, and is a reliable indicator of overall health of the population. All three LHAs outperform the provincial average on this indicator.

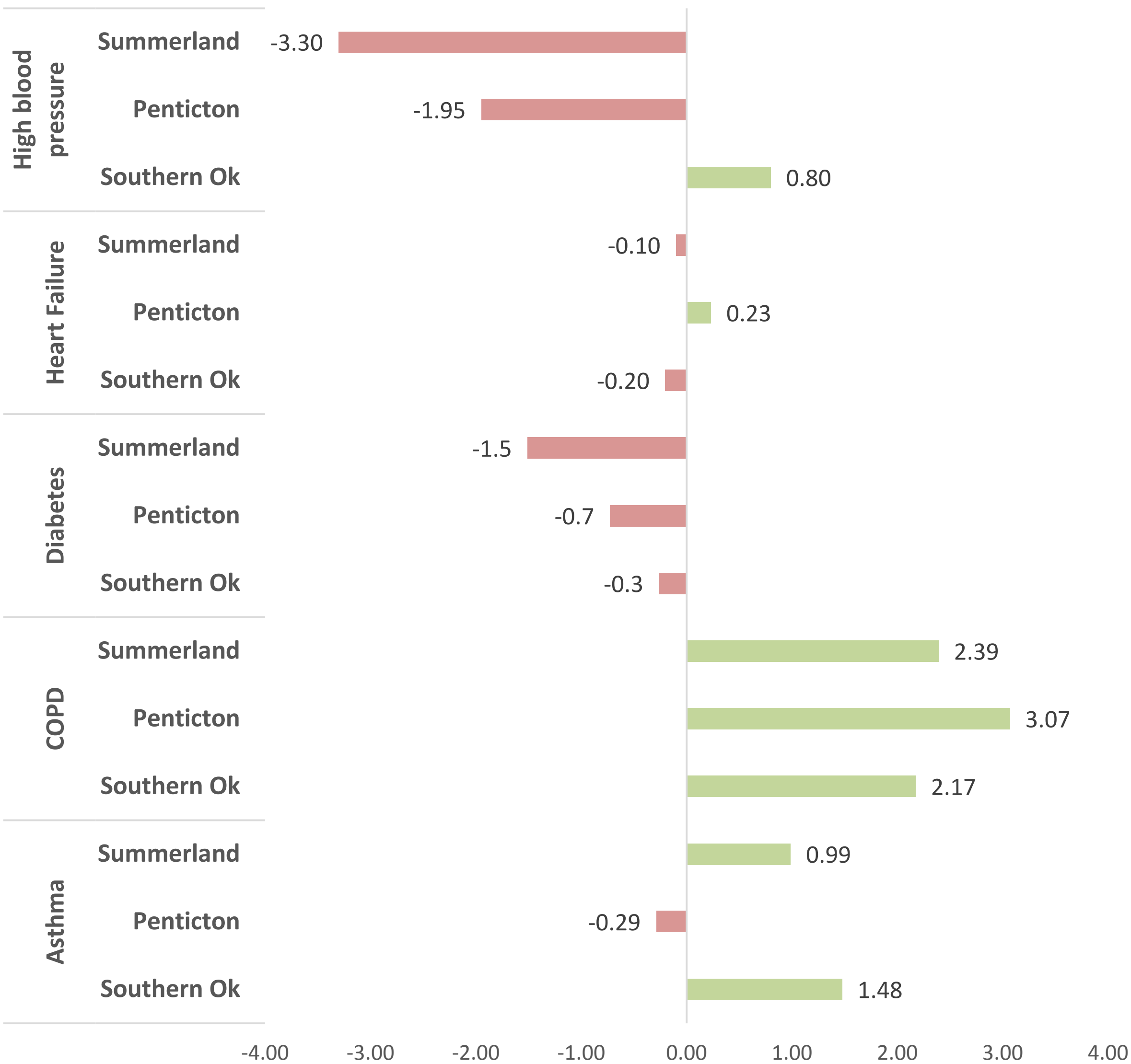
Figure: Average Life Expectancy compared to BC average

	Average Life Expectancy	Compared to BC average (years)
Southern Ok	81.1	+0.9
Penticton	81	+0.8
Summerland	80.7	+0.5
BC	80.2	

The **incidence of chronic diseases** is a count of the number of people (per 1000) newly diagnosed with a chronic condition for the given year. As these numbers typically increased with an older population, the data has been age standardized to allow for comparison of populations with different ages. The diseases included below are high blood pressure (hypertension), heart failure, diabetes, chronic obstructive pulmonary disease (COPD), and asthma.

As the figure below shows, in 2013, the LHAs of the RGS study area generally outperform the province in some areas, and underperform in others. For example, all three areas have fewer cases of diabetes than is the case in the rest of B.C. by as much as 1.5 cases per 1000. However, in the case of COPD, all three regions have 2 to 3 more case per 1000 than the provincial average.

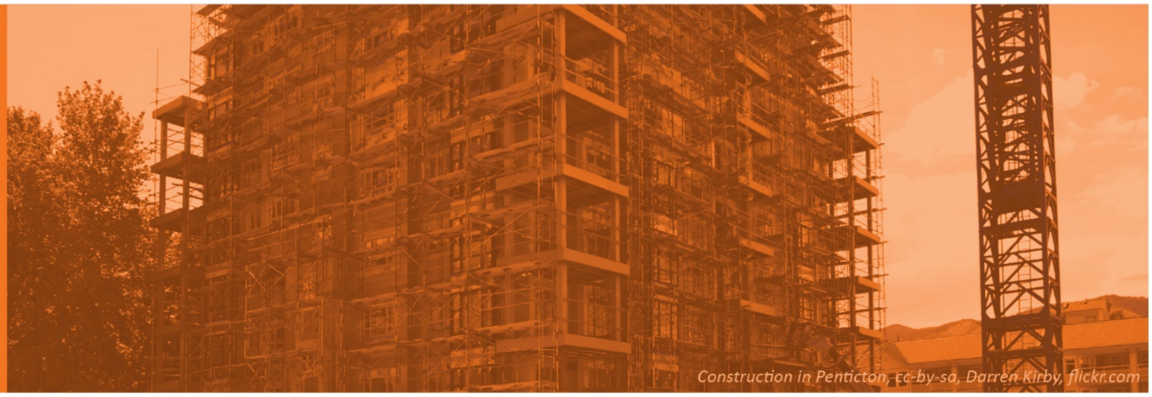
Figure: Incidence of Chronic disease per 1000 (age standardized) compared to the provincial average, 2013



Rate of **physical activity** is an important determinant of health, and can often be impacted by community design, access to recreational amenities, and support for active transportation. Through a survey by the BC Ministry of Education and BC Stats conducted among students of certain grade levels, students identified as “physically active” in 2013 – 2014. As the figure illustrates below, Penticton students across all grades identify as physically active in higher rates than the provincial average; in the Southern Okanagan and Summerland, this is only the case in the first two and last two grade categories, respectively.

Figure: Percent of students that are physically active compared to BC average

	Southern Okanagan	***Penticton***	***Summerland***	***BC***
Grade 3/4	51%	53%	39%	44%
Grade 7	51%	34%	21%	33%
Grade 10	32%	47%	48%	44%
Grade 12	32%	48%	45%	40%



SECTION

5

REGIONAL ECONOMIC DEVELOPMENT

GOAL

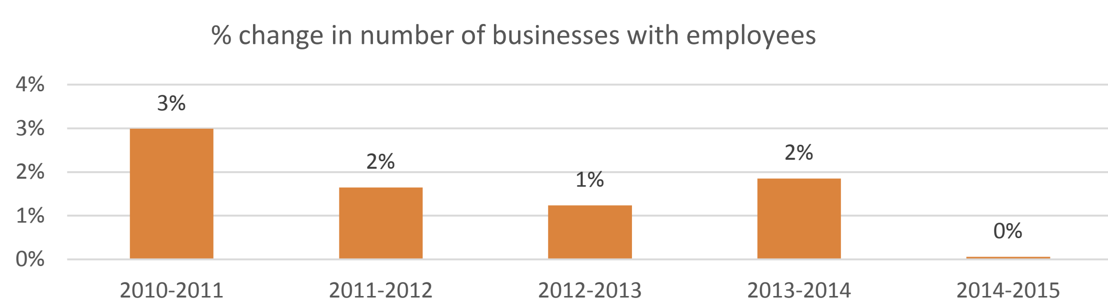
Achieve a sustainable, resilient and prosperous South Okanagan regional economy.

INDICATOR	HOW ARE WE DOING: Change since last period
5.1) *% growth in # of businesses with employees*	**Unchanged:** number of businesses with employees remained the same.
5.2) *Total value of building permits issued for residential, commercial, industrial and institutional*	**Well:** total value of building permits increased 21.5% between 2014-2015

5.1) Percent growth in number of businesses with employees

This indicator measures the number of businesses within the RGS that have employees (i.e.; employ more than just the business owner). A healthy, diverse regional economy is one of the cornerstones of more sustainable, resilient communities. The RGS provides an opportunity to encourage and support the development of a more diverse and healthier regional economy, which in turn will help support the South Okanagan on its journey to become a more sustainable region. Between 2014-2015, the number of businesses with employees remained unchanged at 3,247.

Figure: *% change in number of businesses with employees*



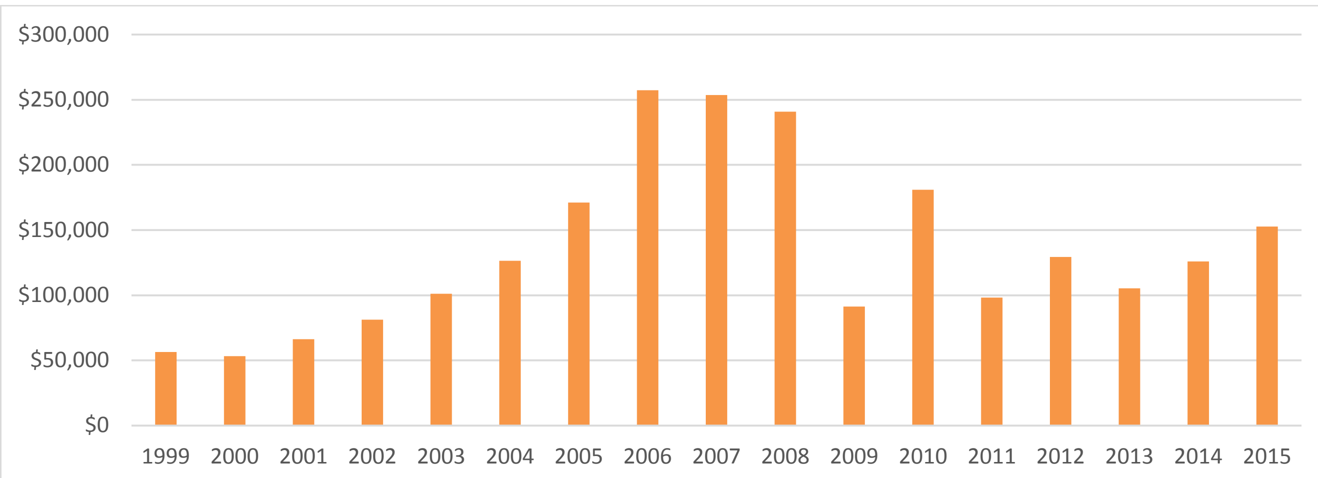
Source: BC Stats Business Counts

5.2) Total value of building permits issued for residential, commercial, industrial, and institutional

As an indicator, the total value of building permits gives some idea as to the amount of development and investment in building within the RGS area. This measure includes permits for residential, commercial, industrial and institutional developments.

In 2015, the total value of building permits issued within the RGS was $152,749,000. This is an increase of 24.1% from the previous year.

Figure: *Total value of building permits (residential, commercial, industrial, and institutional) in thousands of dollars*



Source: BC Stats – Building Permits

SECTION

6

RDOS Open House. © EcoPlan

ENGAGEMENT AND COLLABORATION

GOAL

Foster and support regional cooperation, collaboration and civic engagement.

INDICATOR	HOW ARE WE DOING: Change since last period
6.1) *Regional survey on engagement and collaboration for member communities and Regional Directors.*	**NA:** this is a new indicator (2016) and requires development and distribution of survey to member communities.

6.1) Regional survey on engagement and collaboration

This indicator was not tracked in 2015. It will be tracked and reported on in the 2016 Snapshot.

Ongoing coordination, collaboration, and communication remain critical ingredients to RGS implementation and planning. Inclusive, transparent regional planning and governance also supports and facilitates community engagement and involvement, another critical ingredient to effective, accountable regional planning and development.

This indicator measures regional engagement and collaboration activity through a self-reporting annual survey for member communities and Regional Directors on collaborative planning and projects, including servicing agreements, protocol agreement activities with First Nations, and regional planning initiatives.

SECTION

7

Penticton, cc-by, Jeff Turner, flickr.com

ENERGY EMISSIONS AND CLIMATE CHANGE

GOAL

Reduce energy emissions and ensure the South Okanagan is prepared for a changing climate.

INDICATOR	HOW ARE WE DOING: Change since last period
7.1) *Tonnes of GHGs by source type (residential/ commercial buildings, vehicles)*	**Well:** GHG emissions decreased by 2.88% between 2007- 2010.
7.2) *Average residential energy consumption/home*	**Poorly:** consumption increased by 7.74% between 2007- 2010

7.1) Tons of greenhouse gases (GHGs) by source type (residential/ commercial buildings, vehicles)

This indicator measures the amount of GHGs produced by different sectors in the RGS Area. The global scientific community has reached consensus that the increasing emissions of human caused greenhouse gases (GHGs) are rapidly changing the earth's climate. With more extreme weather conditions, including more intense drought years and heavier rainfalls, the South Okanagan is particularly vulnerable to the anticipated impacts a warming climate will have.

Under the *Greenhouse Gas Reduction Targets Act*, B.C.'s GHG emissions are to be reduced by at least 33% below 2007 levels by 2020. The Regional District of Okanagan-Similkameen, City of Penticton, Town of Oliver, Town of Osoyoos, and District of Summerland are all signatories to the *B.C. Climate Action Charter*, which includes commitments to reducing GHGs and taking actions to prepare for a changing climate. Each community and RDOS electoral area also has its own targets set to reach the overall goal of a 35 percent reduction per person by 2030 across the region.

Data for this indicator is from the Provincial Community Energy & Emissions Inventory (CEEI), and collected roughly every 2 years. At current, the most recent data available is from 2010, and shows a decrease in GHG emissions from the 2007 baseline.

Future CEEI Reports are anticipated to be produced every two years (i.e., 2012, 2014, 2016) with updates to the base year (2007) inventories. The 2012 CEEI Report are scheduled to be released in January 2017 with an expectation that the 2014 Report will be released closer to March 2017.

7.2) Average residential energy consumption/ home

Residential energy consumption shows how much energy residents of the South Okanagan consume, on average. This indicator takes the total amount of consumption of energy (electricity, heating oil, wood, natural gas and propane) and divides that number by the number of dwelling units. In the South Okanagan, the two primary sources for energy are electricity and natural gas. Data is calculated in Giga Joules[6]. Total energy use would include all other activities such as industrial and commercial.

The RGS supports that efficient management of community energy use and carbon emissions is one aspect of building sustainable communities. The generation of energy is associated with environmental impacts to land, air and water resources. However, different sources of energy have different environmental impacts. For instance, natural gas results in significant greenhouse gas (GHG) emissions and other air emissions, while hydroelectric power generation may cause harm to water resources and to habitat. The reliance on non-renewable fossil fuels poses serious challenges to our long-term sustainability.

Between 2007 and 2010, average residential energy use increased by 7.74%, or 7.61 GJ/ dwelling.

This indicator has been adjusted to be consistent with the Provincial Community Energy & Emissions Inventory (CEEI) data collected in each local government across BC. It is anticipated that this data collection methodology will remain consistent in future years. At current, the most recent data available is from 2010, however, future CEEI Reports are anticipated to be produced every two years (i.e., 2012, 2014, 2016) with updates to the base year (2007) inventories.

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[6] One GJ is equal to 277.8 kWh of electricity or 26.1 m3 of natural gas, or 25.8 litres of heating oil. One Gigajoule (GJ) of gas will cook over 2500 burgers, or, keep a 60-watt bulb lit continuously for 6 months.