

2016

REGIONAL SNAPSHOT



SOUTH OKANAGAN REGIONAL GROWTH STRATEGY. | VOL. 8, 2016



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Introduction

The *Local Government Act* requires a regional district to measure its progress on a Regional Growth Strategy (RGS). Performance indicators have been selected for the South Okanagan RGS to allow the Regional District of Okanagan-Similkameen (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 further 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. As a result, 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.

This is the second volume of indicators produced since the 2016 Snapshot update. This 2016 Snapshot will show any additional data available since Volume 7, 2015 was produced.

CONTEXT



POPULATION GROWTH

INDICATOR

WHAT'S GOING ON: Change since last period

% annual change in population

Based on a 2016 census data, the five-year growth rate for the RDOS since 2011 is 2.75%, up since the last five-year period's (2006 to 2011) growth rate of 1.57%. For the South Okanagan the rate increased to 2.47% up from 1.80%.

Total regional population for 2016

RDOS population of 83,022 (growth of 2280 people since 2011) and for Plan area- 70,595 (growth of 1743 since 2011)

S. Okanagan population for 2016

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 current projections by BC Stats resume assumptions for more robust growth from 2016 to 2041, with an annual rate of 0.84%; the area 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).

Within the RGS Plan Area Penticton makes up approximately 48% of the population (Figures 5 and 6) with an increase of 884 new residents between 2011 and 2016. The Electoral Area populations have shown an increase of 180 new residents during the same time period.

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: RGS Study Area, population by sub-region, 2016 census data

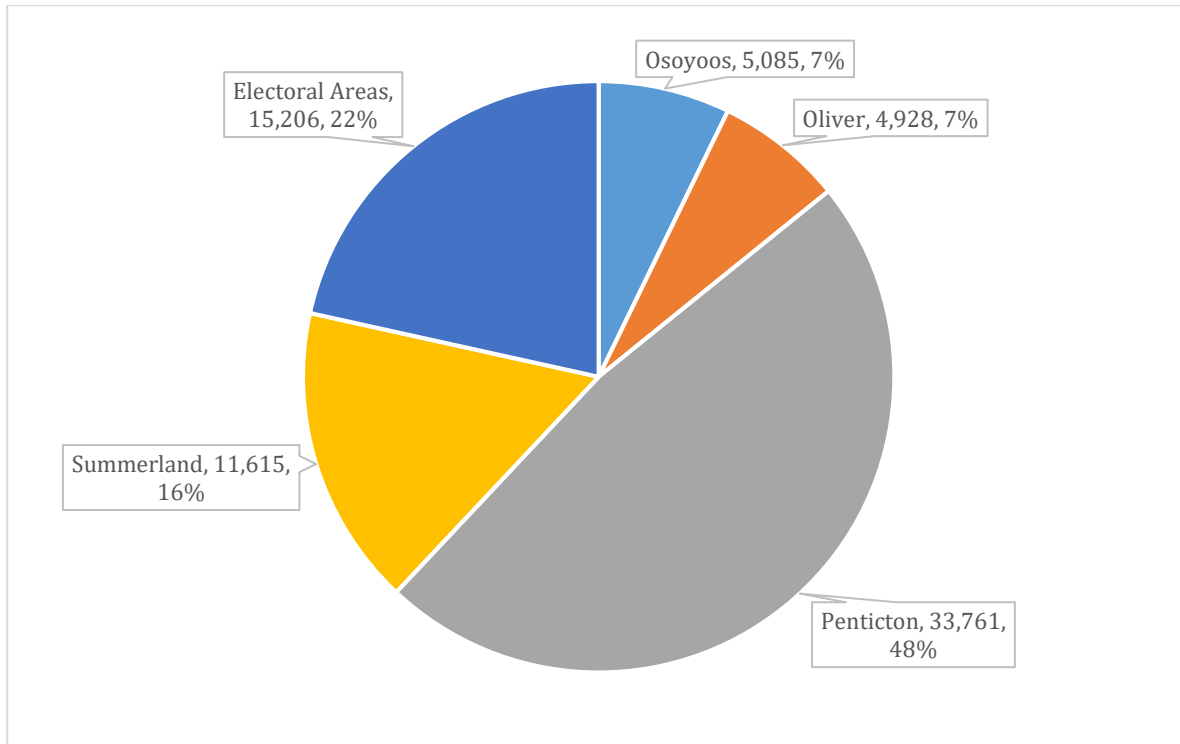
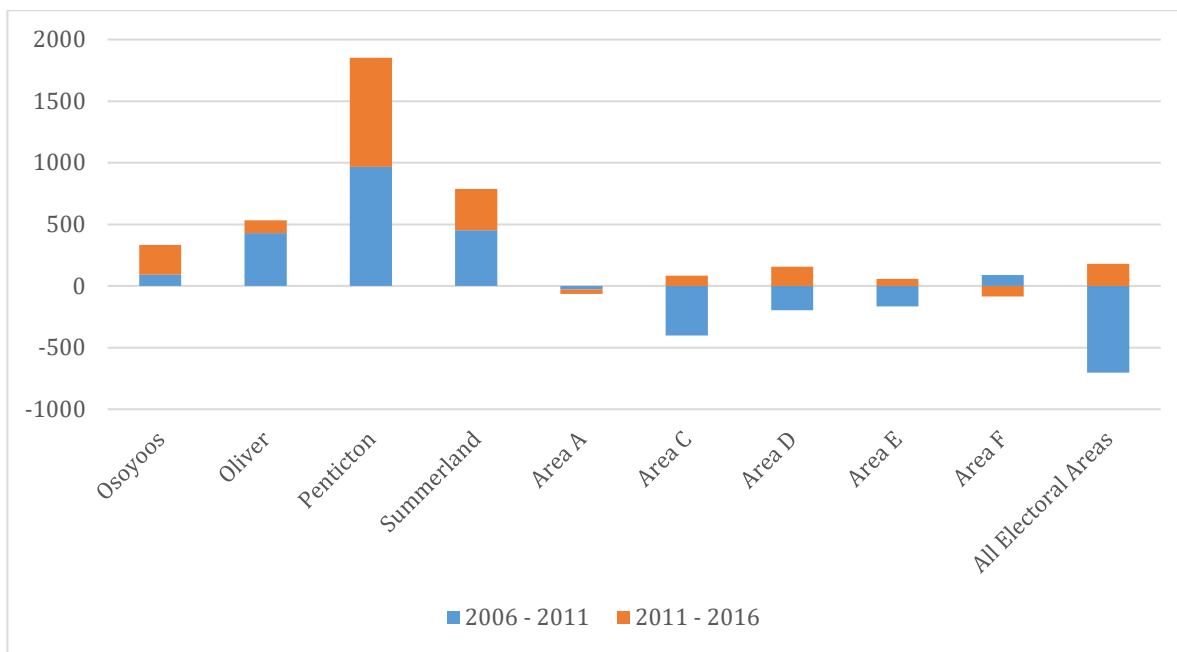


Figure: 10-Year Growth by area, 2006 to 2016



Source: BC Stats

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 6%

1.2) Hectares change (inclusions/exclusions) to ALR



Little change: only 1.3 hectares were excluded from the ALR.

1.3) Median home prices (CPI adjusted)



Poorly: Median home price increased by 32.5%, a detriment for affordability.

1.4) Affordability ratio (median home price to median household income)



Poorly: The affordability ratio worsened, increasing from to 6.7 to 7.8, well beyond common thresholds of 3.0 or 3.5.

1.5) Number of housing starts by type



Well: only 43% of new dwellings were single family units 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 built² 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 2016,

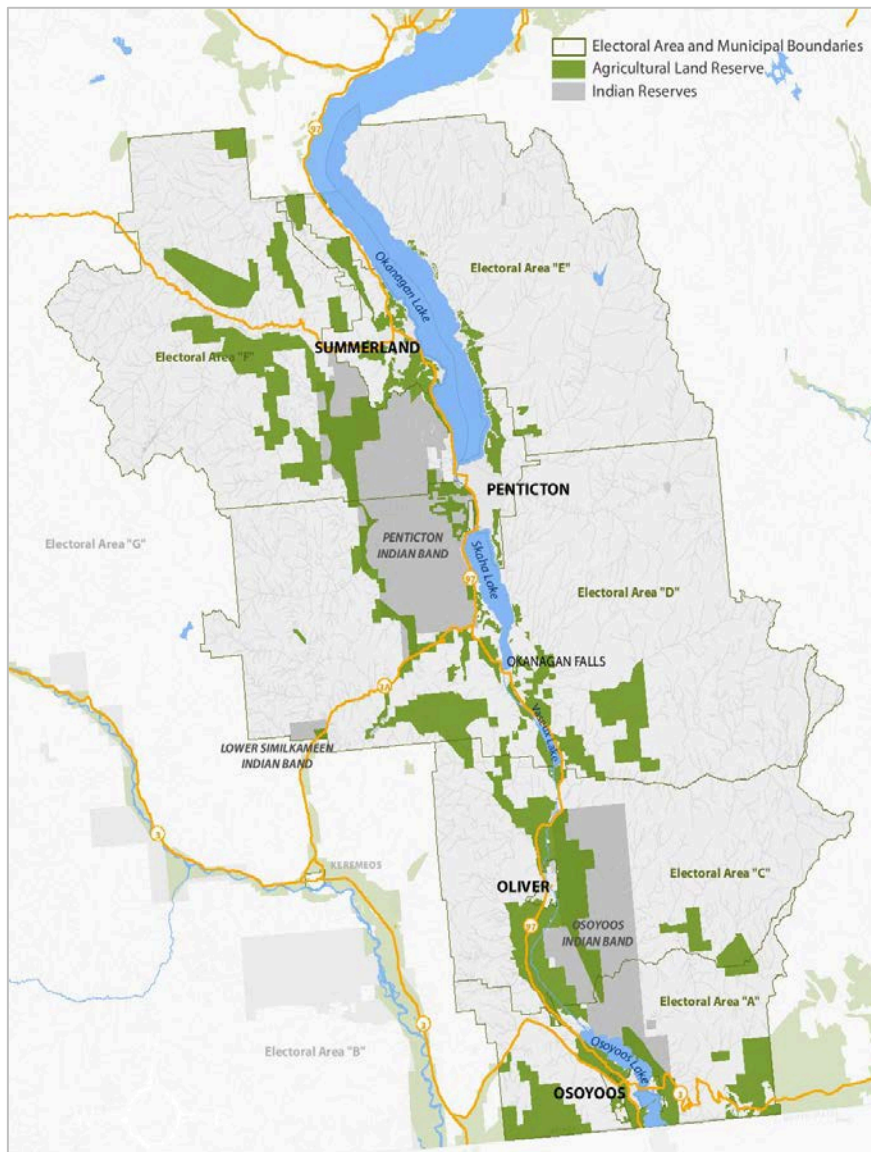
² Based on residential building permits issued.

76% of housing starts occurred in the primary growth areas, up from 70% the previous year. This reflects a 6% 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.

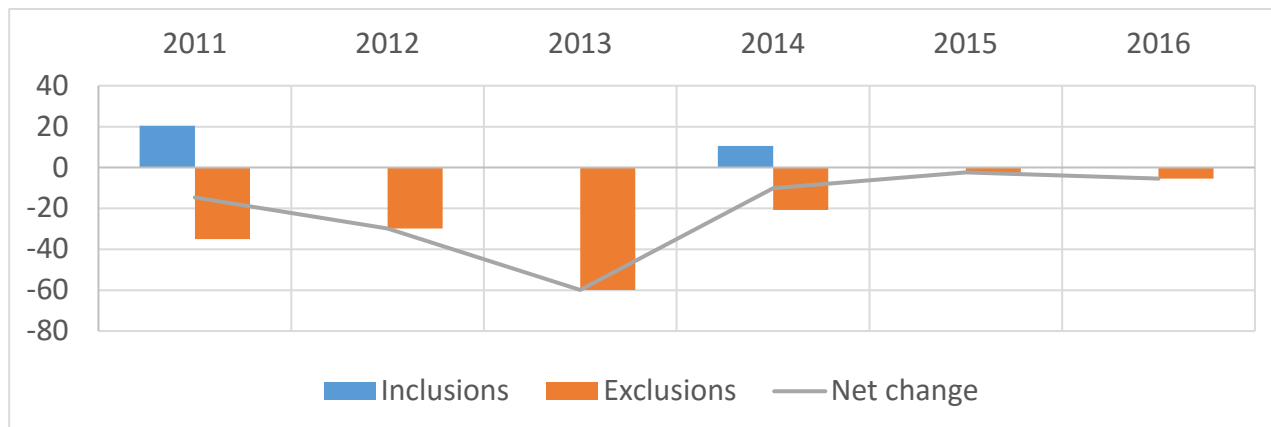
One of the key directives in the RGS is the protection of farmland and the agriculture industry in the south Okanagan by promoting retention of farmland and directing development to established growth areas³.

Between 2015 and 2016 a total of 5.5 hectares were removed from the ALR; however, of this total 4.4 hectares were a result of updating a mapping error.

³ 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 5.5 hectares of ALR land lost in 2016, of that 4.2 hectares is noted as a mapping error.

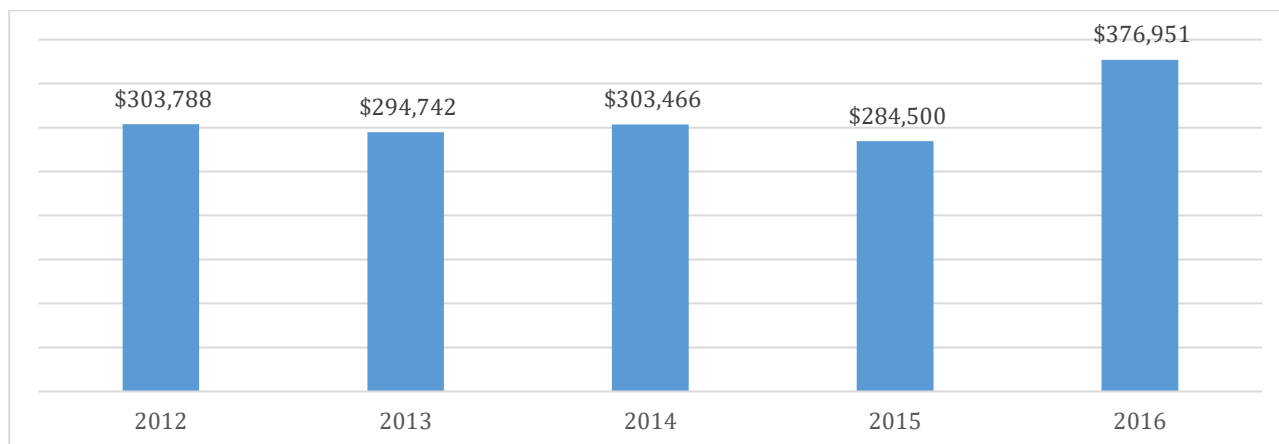
Figure: Hectares of ALR inclusions and exclusions, annually



1.3) Median home price (CPI adjusted)

Taken as a general measure of affordability, the increase of 32.5% in median house price since 2015 is seen as a negative change in terms of affordability. This indicator uses home values from BC Assessment reported in CPI adjusted dollars to ensure comparability with past years. The median house price for 2016 may be reflecting a few expensive multi-million dollar sales (e.g. wineries).

Figure: Median home price (CPI adjusted), annually



Source: BC Assessment – Assessed value

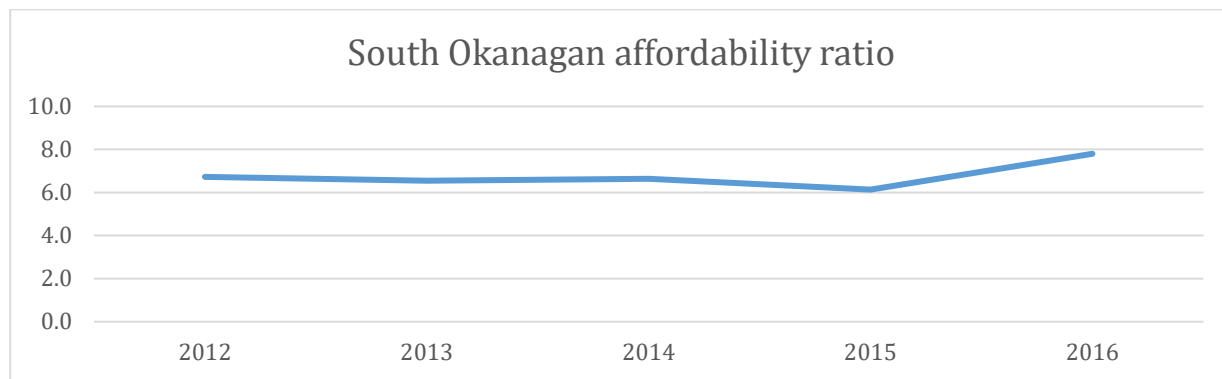
1.4) Affordability ratio: Median home price to median household income

By comparing home prices to income, this indicator gives an idea as to how accessible housing is to residents located within the RGS Plan area. 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 worsened significantly from 6.1 to 7.8 from 2015 to 2016 as the median house price increased while median household income is assumed to increase by the historic annual average (2006 – 2011) of 1.5%. A ratio of 7.8 – indicating it will take approximately eight 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 2016

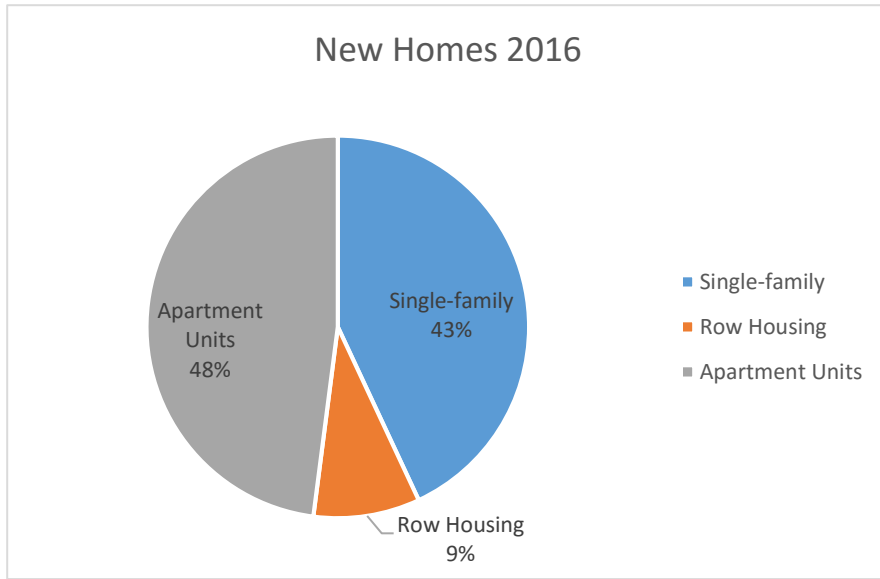


Source: Median home prices, BC Assessment; Median household income projected from 2011 Census data

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.



Between 2015-2016, the 263 single-family homes that were built represented only about 43% of all new units. This is significantly less than historic average of 68% and indicates new housing is more diversified with other dwelling types.

Source: BC Stats – Building Permits

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*



No Change protected land stayed steady at 11.6% between 2015 and 2016.

2.2) *Average daily water consumption per person*



Poorly: consumption appears to have increased by 29 m³ per person between 2015 and 2016

2.3) *Average kilograms of daily waste landfilled per person*



No change: waste landfilled remained at 1.41 kg between 2015 and 2016

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.

From 2015 to 2016, no change was observed to the amount of land protected.

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 combined residential and irrigation usage data collected from eight water utilities of the South Okanagan; however, 2016 water consumption numbers were available from only 7 utilities at time of printing.

Average water consumption per person appears to have increased slightly between 2015- 2016; however, there were also discrepancies between service area populations.

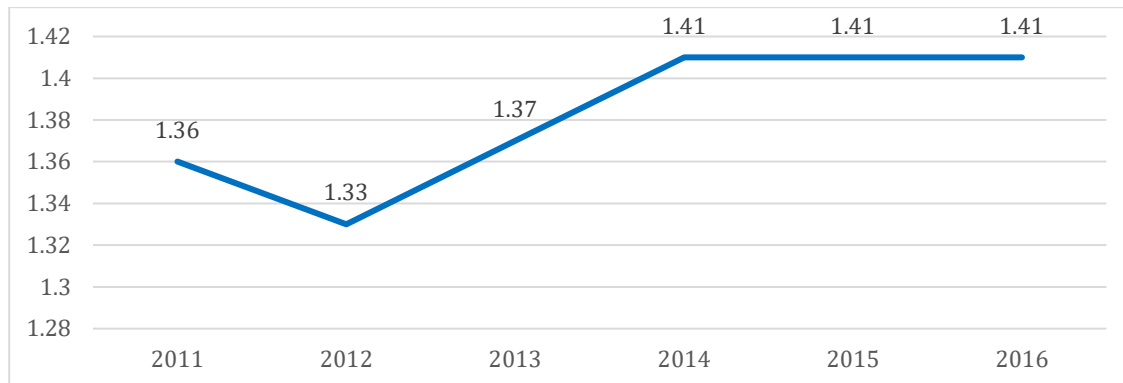
2.3) Average kilograms of daily waste landfilled per person (kg/day/capita)

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 2015 and 2016, the average daily waste per capita remained the same at 1.41 kg.

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

3.1) Total annual regional bus ridership

HOW ARE WE DOING: Change since last period



Poorly: ridership decreased - 2.8% 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 two business units saw increased ridership, overall ridership in the Region decreased by - 2.8% between 2015 and 2016. Ridership increases were seen on the Okanagan Similkameen (Unit 745) and the Osoyoos (Unit 747).

BC Transit reports data by “business units”, areas that 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 Falls- 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)

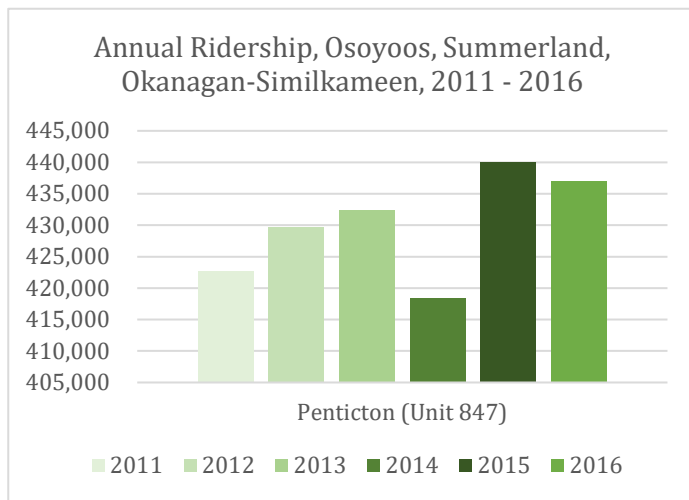
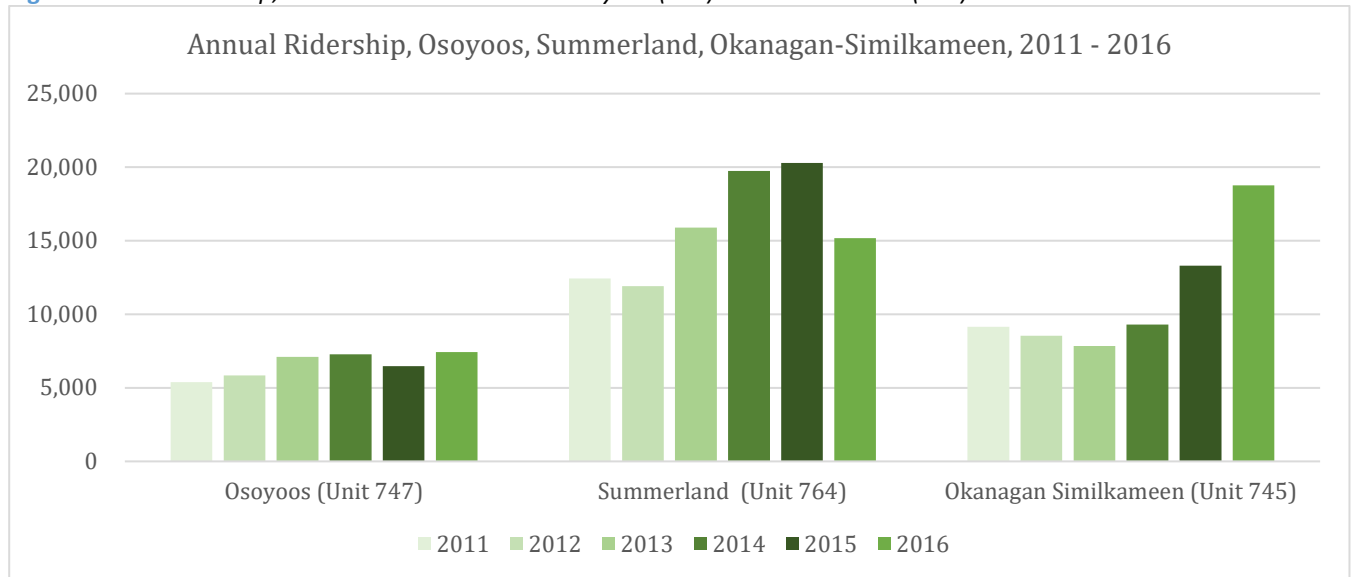


Figure: Annual Ridership, BC Transit Business Units Penticton (847)

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 4.1 per 1,000

4.2) Regional health outcomes



NA: This is a sample of health outcome data from the Provincial Health Services Authority

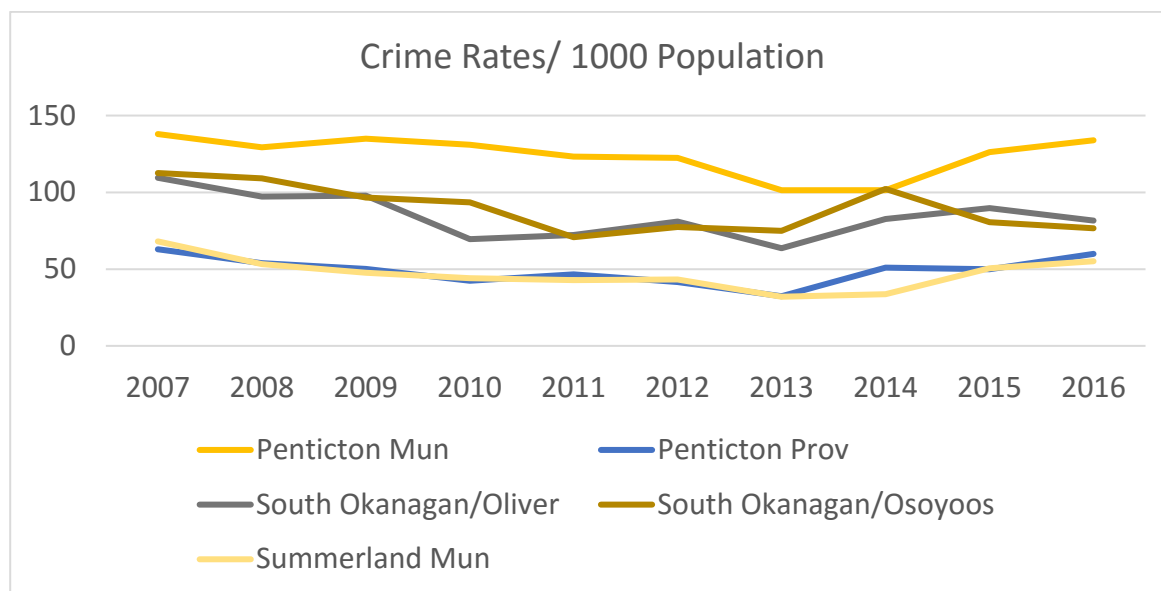
4.1) Annual crime rates per 1000 residents

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 Municipal⁴.

The South Okanagan crime rate for 2016, 97.6 per 1,000, is an increase from the previous year (93.5 per 1,000). Crime rates in the RGS remain above the provincial rate of 77.4 for 2016.

⁴ 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 red; where it underperforms, it is highlighted green.

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.

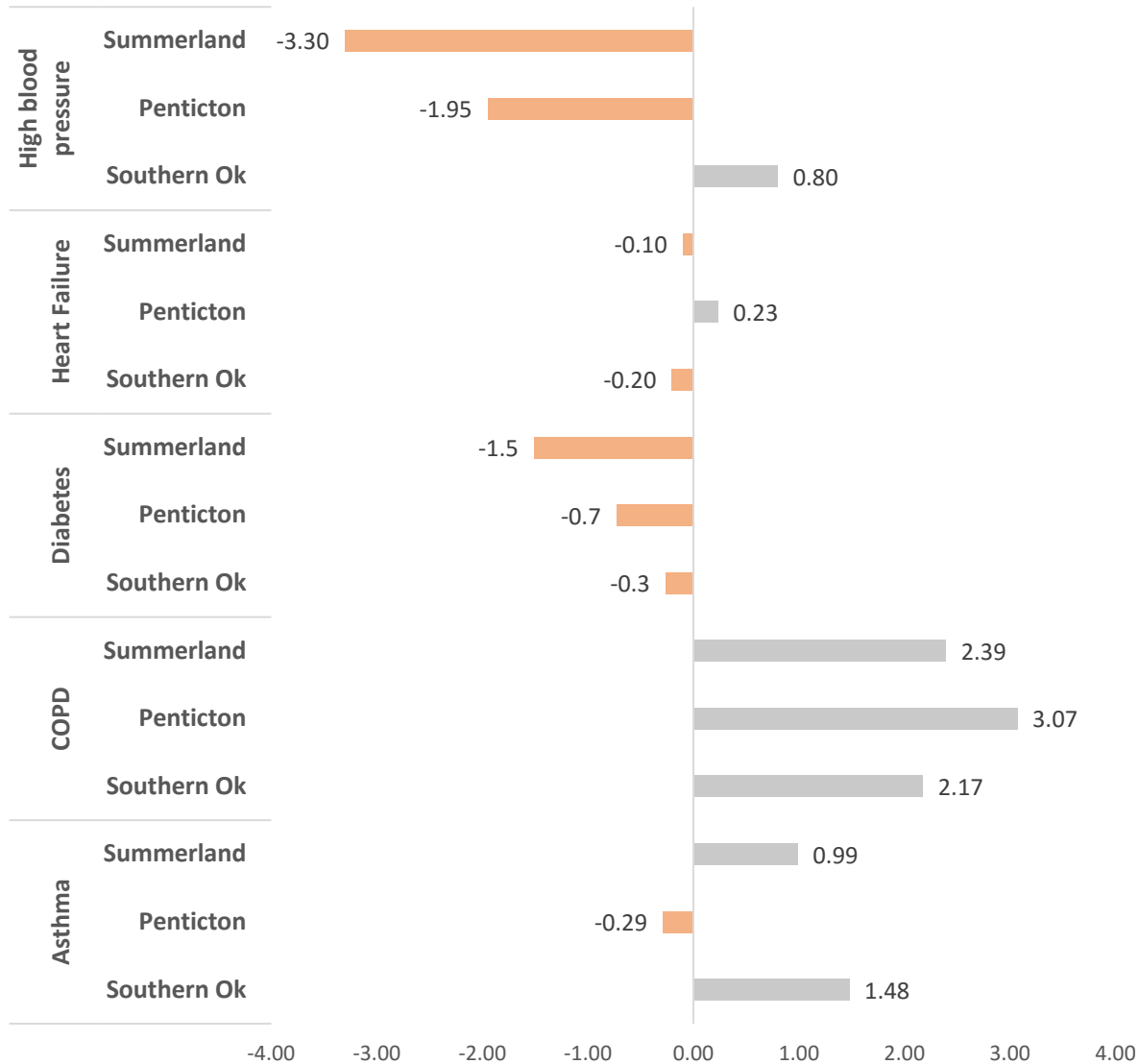
The **incidence of chronic diseases** is a count of the number of people (per 1000) newly diagnosed with a chronic condition for the given year. As these numbers typically increased with an older population, the data has been age standardized to allow for comparison of populations with different ages. 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

SECTION 4: COMMUNITY HEALTH AND WELLBEING

than is the case for 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.

SECTION 4: COMMUNITY HEALTH AND WELLBEING

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



Well: number of businesses with employees increased.

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



Well: total value of building permits increased 98% between 2015-2016

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 2015-2016, the number of businesses with employees increased by 68.

Figure: % change in number of businesses with employees



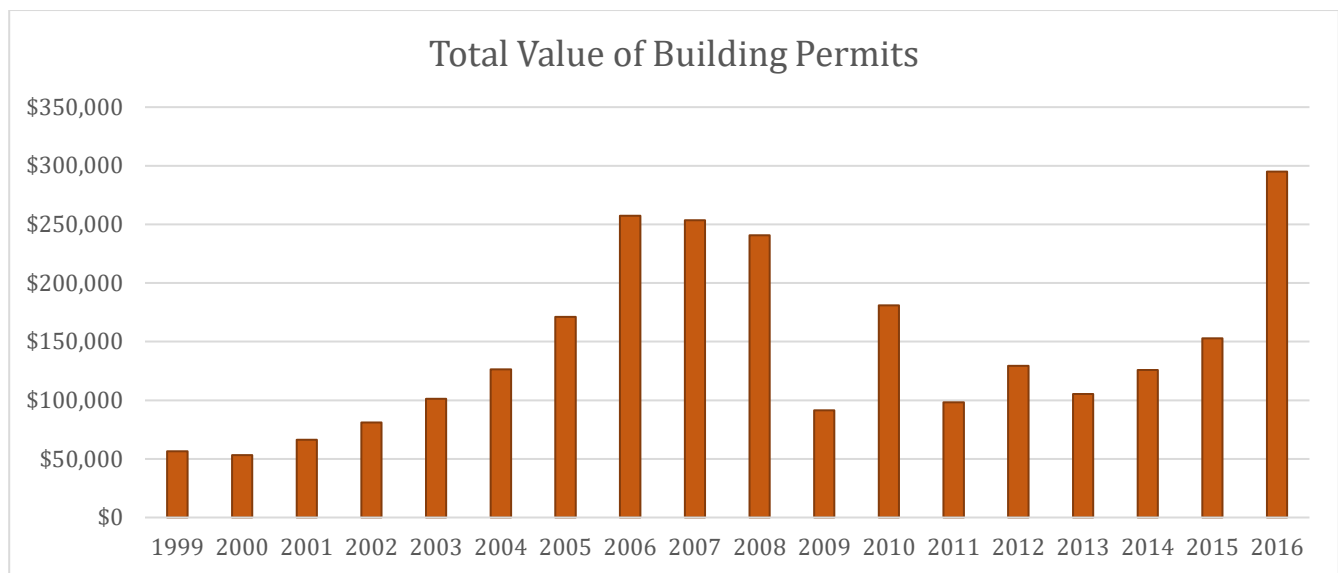
Source: BC Stats Business Counts

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 study area. This measure includes permits for residential, commercial, industrial and institutional developments.

In 2016, the total value of building permits issued within the RGS was \$294,931,000. This is an increase of 98% from the previous year.

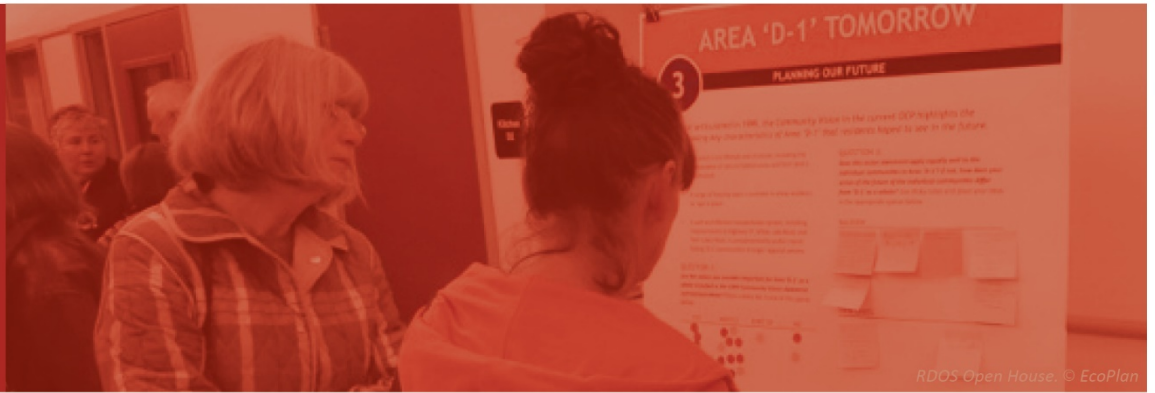
Figure: Total value of building permits (residential, commercial, industrial, and institutional) in thousands of dollars



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 a survey to member communities.

6.1) Regional survey on engagement and collaboration

This indicator was not tracked in 2016.

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.

Ongoing collaborative activities and partnerships includes the Okanagan Basin Water Board, Okanagan Regional Library, Sterile Insect release Program, Starling Control Program, Regional Transit, and the South Okanagan Similkameen Conservation Program.

This indicator will measure 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)

No data available

7.2) Average residential energy consumption/home



Poorly: consumption increased by 9.71 GJ per household between 2007- 2012

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 Study 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.

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 Joules⁵. 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 2012, average residential energy use increased by 9% or 9.71 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 2012, however, future CEEI Reports are anticipated to be produced every two years (i.e., 2014, 2016) with updates to the base year (2007) inventories.

⁵ 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.