

State of Sustainability Baseline Report

First Release October 2013

Acknowledgements

This report was developed by Golder Associates Ltd. (project consultants) and District of Lake Country staff. Golder and the District of Lake Country would like to thank the community, key stakeholders and their organizations and associations for their role in developing this State of Sustainability baseline report. This report highlights the community's foundation of success, and helps to identify the areas where further improvements can be made. The report contributes to the development of the *Our Sustainable Lake Country Integrated Community Sustainability Plan* and provides a basis for future progress reports on sustainability.

The District would also like to extend its gratitude to the Government of Canada for providing grant funding for *Our Sustainable Lake Country* through the Gas Tax Initiative, administered by the Union of BC Municipalities. Notwithstanding the support of the Gas Tax Initiative, the Union of BC Municipalities and the Government of Canada accept no responsibility for the views expressed in this document.









Government of Canada



Table of Contents

Overview	
Social	
1. Diverse and affordable housing options	5
2. A healthy, safe, walkable community	8
3. Close community connections	
4. Inclusiveness and opportunity for all	
Cultural	
5. Pride in our unique identity	20
6. Rich arts and culture	22
7. Strong relationships with adjacent communities	25
8. Thriving local food and agriculture	28
Economic	
9. A thriving, resilient and diverse local economy	32
10. Efficient, effective and affordable infrastructure and services	
11. Reduced dependence on fossil fuels	41
Environmental	
12. Healthy ecosystems	45
13. A long term supply of clean water	49
14. Reduced GHG emissions	52
15. Resilience to natural disasters and climate change	55
Context	
16. Compact development	57
Conclusion	62



Overview

Background

Our Sustainable Lake Country is community-owned action plan that will help Lake Country continue to provide a great quality of life for residents as our population grows and as climate change and other external forces shape our planet, region and community. It considers economic, social, cultural and environmental issues that are important to the community and describes a series of actions that can be taken by the District, community groups, and other institutions to help Lake Country achieve ongoing success in the face of change.

Lake Country's story to date has been that of a rapidly growing community that is transitioning from a rural/agricultural centre to a more mixed economy. Our population has experienced significant growth over the past few years and we have become a community of choice for many retirees, young families, and second-home owners who come to enjoy the natural environment, rural character, proximity to urban services, and thriving arts and cultural scene.

Our next chapter involves creating a more sustainable future. Our aim is to harness the benefits of growth and development and the energy of residents and partner organizations to make positive changes. Our efforts will benefit from established momentum as well as some new initiatives. All of these efforts seek the same outcome: to deliver an exceptional quality of life for current and future residents while living in harmony with the natural environment.

This document serves to establish a baseline for sustainability in Lake Country. It shows where we, as a community, are doing well and where we have more work to do. As such, this document provides the foundation for monitoring and measuring our progress towards our goals over time.

What Do We Want to Sustain in Lake Country?

Through stakeholder and public events, Our Sustainable Lake Country identified a vision statement and a set of goals that describe the sustainable future to which we aspire. The indicators contained in this report are designed to illustrate how the District of Lake Country is performing against each of these goals. A "description of success" for each goal describes how things will be in Lake Country if we fully achieve the goal.



Lake Country is a healthy, sustainable community that attracts and retains residents, businesses and visitors because of its employment opportunities, outstanding outdoor recreation, thriving arts and culture, special agricultural character, natural beauty, and easy access to urban amenities.

ECONOMIC

- A thriving, resilient and diverse local economy
- Efficient, effective and affordable infrastructure and services
- Reduced dependence on fossil fuels

CULTURAL

- Pride in our unique identity
- Rich arts and culture
- Strong relationships with adjacent communities
- Thriving local food and agriculture

OUR SUSTAINABLE LAKE COUNTRY

ENVIRONMENTAL

- Healthy ecosystems
- A long-term supply of clean water
- Reduced GHG emissions
- Resilience to natural disasters and climate change

SOCIAL

- Diverse and affordable housing options
- A healthy, safe, walkable community
- Close community connections
- Inclusiveness and opportunities for all

PEOPLE

- Foster collaboration and partnerships
- Engage and inform citizens
- Create opportunities for marginalized groups
- Build a strong culture and cohesive identity for Lake Country

-UNCTION

- Support local food production
- Develop green buildings and infrastructure
- Create programs and policies to stimulate economic development

PLACE

- Develop a vibrant Town Centre and Main Street
- Develop approaches to improve housing affordability and choice
- Develop Lake Country as a series of compact, connected, complete communities
- Create a network of natural and semi-natural areas for ecosystem health & recreation
- Develop a transportation network that expands travel choices

Purpose of this Report

This report is one of three core reports of the Our Sustainable Lake Country initiative¹:

- 1. Sustainability Framework
- 2. State of Sustainability in Lake Country (this report)
- 3. Sustainability Action Plan

This State of Sustainability report is intended to be the foundation (baseline) report against which the District's progress on sustainability will be measured. Each future report will be based on the same indicators, allowing readers to track progress over time against the key goals of the plan. By measuring and monitoring our progress, we hope to learn from the results and adapt accordingly.

This report is intended to:

- Increase public awareness and understanding of sustainability
- Show where progress against the goals is being made
- Identify issues and challenges
- Inform decisions and influence actions

The report is aimed at a general audience and it is hoped that it will be read by all the citizens and organizations that call Lake Country home as well as others who may be interested in our approach and progress.

The report contains both quantitative and qualitative (including anecdotal) information to build a picture of the state of sustainability in Lake Country. While quantitative measurement is important, it is also important to understand that numbers cannot tell the whole story. Many important aspects of life in Lake Country cannot easily be measured and therefore, we must incorporate qualitative descriptions.

This report also includes sections that highlight Lake Country's "Seeds of Sustainability". These "seeds" are actions and programs that are already in place and contributing towards the achievement of the goals, and it is hoped that they will grow and flourish over time. These sections include work done by volunteers and community organizations, as well as the District.



¹ Other reports in the series will be made available on the project website as they are completed, at <u>oursustainablelakecountry.okanaganway.ca/</u>

Criteria for Selecting Indicators

The quantitative aspect of this report relies on a set of indicators that illustrate how well Lake Country is performing against its goals. While all indicators have their limitations, the indicators were selected based on the following criteria:

- **Available** Data are available and easily accessible.
- **Understandable** Data are easily understood by a diverse range of non-technical audiences.
- **Credible** Data are supported by valid, reliable information and interpreted in a scientifically defensible manner.
- **Temporal** Data have the capacity to measure trends over time.
- Relevant Data/indicator reflects community values and interests (especially those generated through the Our Sustainable Lake Country planning process).
- Responsive the indicator measures an issue that can be influenced by the local government or the local community and partners (i.e., it is responsive to intervention.

The report also contains indicators related to the built environment including patterns of land use, growth and density. While land use is not a goal in itself, it is a fundamental strategy that cuts across most of the goals and therefore is an important part of understanding the District's progress.

Sources of Data

The data draws on a number of sources including:

- District of Lake Country
- Statistics Canada Population Survey (census)
- Statistics Canada National Household Survey
- **BC Stats Community Profiles**
- Census of Agriculture
- Interior Health Authority

- **BC** Assessment
- Ministry of Forest, Lands and Natural Resource
- Ministry of Environment
- Ministry of Education
- Freshwater Fisheries Society of BC





1. Diverse and affordable housing options

Our Description of Future Success:

A mix of housing types including single-family detached homes, semi-detached/duplex homes, townhouses, apartments and accessory dwellings provides a variety of options for residents at different life stages (e.g., students, young families, retirees) in all four Lake Country wards. The mix of housing types throughout the District helps to ensure that all residents have access to their desired amenities. Supportive housing for seniors and people with special needs is available to allow seniors to age in place and remain in the community, and to provide necessary services to those in need. A variety of rental accommodations are available to provide housing options for those who cannot afford or do not want to buy home.

Measuring Our Performance:

Indicator Performance Comments \$1,200 1.1. Average monthly rental Rental payments in the Kelowna CMA Average monthly rent (\$2013) rose steadily from 2004-until a peak payments \$1,000 in 2008. Prices have been declining \$800 Measures the average monthly since then. The average rent for both rental payments for one and two-\$600 1-and 2-bedroom apartments has bedroom units within the Kelowna \$400 increased by about 10% since 2004. Census Metropolitan Area (CMA). \$200 Future iterations of this report may \$0 (Data Source: Canadian Mortgage use average monthly mortgage and Housing Corporation Housing payments, as that data is available Market Outlook: Kelowna CMA, Lake Country specifically. CMHC data Fourth Quarter 2007, Fall 2001, is for the greater Kelowna Area, and Two-bedroom Average Rent — One-bedroom Average Rent Lake Country makes up less than 10% Spring 2013) * Projection of that population.



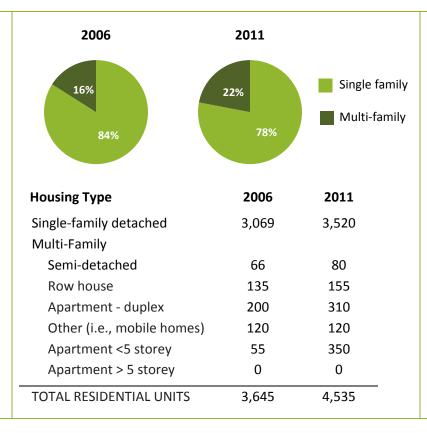




1.2. Mix of housing types

Measures the ratio of single family homes to multi-family homes to provide an overview of housing diversity in Lake Country.

(Data Source: Statistics Canada 2006 and 2011 Census)



Lake Country has steadily improved its housing diversity over recent years with new townhouse and apartment dwellings in new subdivisions such as The Lakes and the Woodsdale neighbourhood. In recent years, the number of new single-family dwellings has been matched almost equally by the number of new multifamily dwellings.



Diverse and Affordable Housing Options Seeds of Sustainability:

- In 2012, the Lake Country Seniors Housing Society, with support from the province, purchased 4 apartments for housing for seniors and people with disabilities. The Society provides resources, support services, and quality affordable housing throughout the region.
- From 2011 2012, the Province invested approximately \$894,000 to fund subsidized housing and rental supplements for over 150 households in Lake Country.
- To increase the availability of rental housing, the District amended its zoning bylaw in 2009 to allow secondary suites in all residential zones and to allow accessory dwelling units on all rural residential properties. The District is the first local government in the region to take this step.







Our Description of Future Success:

Lake Country is a community with low crime rates and a low number of traffic-related accidents. Rates of cardiovascular disease, diabetes and respiratory diseases fall below the BC averages as a result of healthy diets and exercise. Most people live close to amenities to allow walking and cycling, and have easy access to green space and recreational facilities to encourage active pursuits.

Measuring Our Performance:

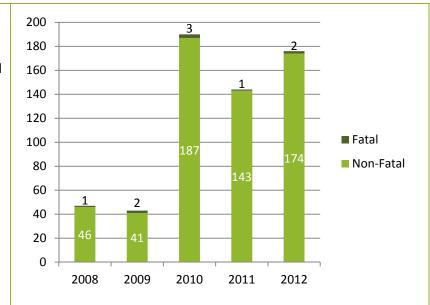
Indicator	Performance	Comments
2.1 Accessibility of services Measures the average distance (km) from dwellings to the nearest school, community centre or other civic institution to assess the "walkability". (Data Source: District of Lake Country)	 33% of current dwellings in Lake Country are within 800m of a government building, recreational & cultural building or a school/educational facility. If new developments include these services or are located close to existing services, this number will increase over time. In future iterations of this report, it may be possible to calculate the actual average distance from each residential parcel to these services. "Walk Score" is a free, web-based service that rates neighbourhoods or municipalities on a scale of 1-100, with 100 meaning that a very wide range of services is available within a very short distance of all dwellings. Lake Country has a score of 52, which is described as "Somewhat Walkable: Some errands can be accomplished on foot". 	The distance people need to travel to basic services is an indicator of how walkable the community is. A walk of less than 400 m is considered highly accessible, while a walk of 800 m is considered manageable for most. The safety, directness and pleasantness of the walk and the importance of the destination also affect people's willingness to walk.



2.2 Number of traffic accidents

Measures the number of trafficrelated accidents including fatal and non-fatal incidents, to assess the safety of Lake Country's roadways.

(Data Source: RCMP Annual Report and DLC Annual Reports)



The total number of traffic accidents rose dramatically in 2010 and has remained at that elevated level since then. The number of fatal accidents is typically 1-2 per year. These typically occurred on the stretch of Highway 97 along Wood Lake, so the opening of the new highway may result in a reduction in these numbers.

2.3 Transportation mode split for commuters

Measures the percentage of daily commuters who use different forms of transportation.

(Data Source: Statistics Canada 2001, 2006 and 2011 Census)

	2001	2006	2011
Single occupancy vehicle	86%	89%	86%
Shared car	6%	6%	6%
Public transit	3%	1%	2%
Walked or biked	3%	2%	4%
Other methods	3%	2%	2%

Mode split has not varied substantially in the past decade, although there has been investment in improving transit service. The majority of commuters drive single occupancy vehicles while the use of other methods of transportation is limited in Lake Country.



2.4 Km of bike lanes/trails

Measures the amount of trails and bike lanes to assess opportunities for active transportation (i.e., walking and cycling).

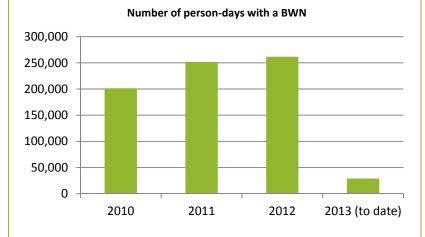
(Data Source: District of Lake Country)

About 25 km of walking trails are included in the District's trail guide. This does not include the trails in Jack Seaton Park or the new Pelmewash Parkway which is currently being designed. Together, these would add about another 6 km. The community group Walk Around Lake Country (WALC) has a vision of adding about 60km of trails to connect all areas of the communities.

2.5 Number of person-days with a Boil Water Notice

Measures the number of people affected by Boil Water Notices (BWN) in Lake Country and the duration of the BWN. This indicator is calculated by multiplying the number of people affected by the number of days they were affected.

(Data Source: DoLC Water Operations Annual Report 2011, 2012, Lake Country Calendar)



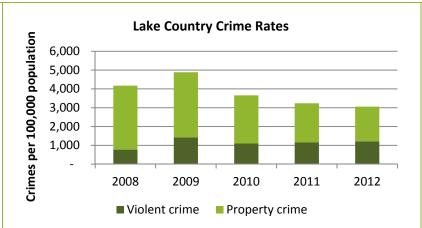
Boil Water Notices (BWN) can be caused by fluctuating turbidity, elevated raw water bacteria counts, adequate chlorine contact time not being met and risk of temporary loss of chlorination due to aging infrastructure or an uncontrolled event such as a line break.

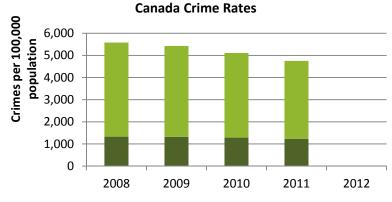
In February of 2013, the Kalamalka Lake Interconnect project was completed to improve water quality and the BWN was downgraded to a water quality advisory. It anticipated that this project should result in a long-term reduction in the number of BWNs.

2.6 Crime statistics

Measures the number of crimes that occur in different categories to assess the overall level of community safety.

(Data Source: RCMP Annual Report, 2012)





* Lake Country 2008 data is for the last 3 quarters only due to a change in record keeping. Canada-wide data for 2012 is not yet available

Lake Country has a relatively low crime rate compared to the national average and the crime rate is dropping more quickly than the national average. From 2009 to 2012, violent crime dropped 35% and property crime dropped 41% in Lake Country. From 2009 to 2011 (2012 data is not available at national scale), Canadian violent crime dropped by 7% and property crime dropped by 14%. The major exception in Lake Country is false or abandoned 911 calls, which doubled between 2011 and 2012, and domestic disputes, which also appear to be rising in frequency.

While RCMP records do not include specific reporting on marijuana grow-ops, anecdotal reports indicate that the District is experiencing an increase in this type of criminal behavior.

A Healthy, Safe, Walkable Community Seeds of Sustainability:

- A wide variety of clubs and organizations such as the Lake Country
 Outdoors Club and Walking Club provide opportunities for residents to
 get outside, get some exercise, and socialize with their neighbours.
- The District has identified several core areas for residential infill and intensification in Oyama and Winfield to concentrate housing near existing shops and services in order to create more compact, walkable, and sustainable neighbourhoods.
- The Regional District of Central Okanagan provides support to create neighbourhood Block Watch programs which encourage neighbours to get to know each other and become familiar with normal activity so that they are better able to recognize suspicious activity in their neighbourhood.
- The Lake Country Citizens Patrol Team and Community Policing Office are comprised of citizen volunteers who help support the RCMP to keep the community safe and secure.







Our Description of Future Success:

People of Lake Country feel connected to their neighbours and residents in other wards. There is a sense of community–people and businesses care about each other and, in return, feel like others care about them. People and the services they need on a daily basis are also well connected physically, allowing for easy, convenient access. Community and neighbourhood associations have helped to build parks, operate community halls and provide input on a variety of plans.

Measuring Our Performance:

Indicator	Performance	Comments
3.1 Rate of volunteerism Measures the number of citizens who volunteer their time for community organizations, committees, or events. (Data Source: Lake Country Citizen Satisfaction Survey)	This topic is not currently measured. It can be measured as part of a regular satisfaction survey. Many organizations and events in Lake Country are strongly supported include the museum, ArtWalk, the Winfield Community Garden, Great various Neighbourhood Associations, minor sports groups and service	by volunteers. These Canadian Shoreline Cleanup,

3.2 Number of active community organizations

Measures the number of active organizations and clubs in the community to assess the general level of community capital (i.e., social networks that support individuals and the community as a whole).

(Data Source: District of Lake Country, various community organizations)

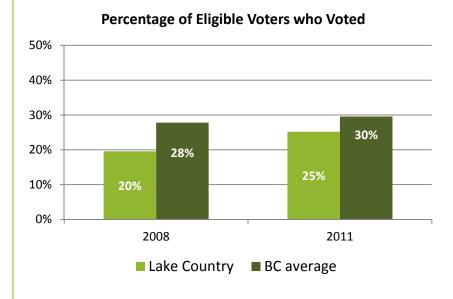
A comprehensive list of community organizations is not available at this time. An approximate count based on the Activity Guide indicates there are about 60 community organizations, including sports, arts and culture, outdoor recreation, youth groups, and faith-based organizations. Some of the organizations include:

- Lake Country Health Planning
- Boys & Girls Club
- The Lakes Community Association
- Lake Country Dog Owners Association
- Oyama Community Club
- "Life After Laundry" Ladies Club

3.3 Voter turnout in municipal elections

The percentage of citizens who voted in municipal elections is a proxy measure for citizen participation in civic life. Stronger citizen participation contributes to stronger governance and a greater sense of community responsibility, pride, and ownership.

(Data Source: District of Lake Country)



In 2008, all seats were acclaimed (i.e. there was no competition) except for Winfield. This likely affected the voter turn-out.

2011 was a full election for all seats.



3.4 % of population who feel connected to the community

Measures the degree to which citizens feel close to their community (i.e., their neighbours and residents of other wards) and the degree to which they can physically access the people and services they need.

(Data Source: Lake Country Citizen Satisfaction Survey)

This topic is not currently measured. It can be measured as part of a regularly scheduled citizen satisfaction survey.

Close Community Connections Seeds of Sustainability:

- A rich volunteer sector and wide variety of active community organizations provide ample opportunities for residents to get together, get to know each other, and give back to the community.
- In addition to the numerous community clubs, sports organizations, and arts and culture organizations, there are 8 active civic committees to help guide economic, environmental, and social sustainability in Lake Country.
- 10 places of worship in the community provide an inclusive network for people of most major faiths.





4. Inclusiveness and opportunity for all

Our Description of Success:

There are opportunities for people of all income brackets, ages and abilities in Lake Country to participate widely in activities and public processes. The community makes a special effort to include marginalized groups and individuals. Public facilities are accessible to everyone.

Measuring Our Performance:

Indicator	Performance	Comments
 4.1 % of new units (built within last five years) that are considered "accessible" Measures the percentage of units that meet the building code guidelines for internal accessibility for persons with disabilities. 	 This indicator is not currently tracked by the District, but will be monitored for future iterations of this report. Lake Country has an active Access and Age-Friendly Advisory Committee that recently developed guidelines to help create a community that is socially and physically accessible for all ages and mobility ranges 	People with disabilities need to be recognized as valuable members of society. They are students, educators, shoppers, employees, employers, spectators, and residents. They participate in community life and the community must be accessible to ensure equal rights and opportunities for all citizens.



4.2 % of citizens who feel that they are included in community events

Measures the degree to which citizens feel there are opportunities for people of all incomes, ages, and abilities in Lake Country to participate in activities and access public facilities, and that the community makes a special effort to include marginalized groups and individuals.

(Data Source: District of Lake Country)

This topic is not currently measured. It can be measured as part of a regularly scheduled citizen satisfaction survey.

4.3 Educational attainment

Measures the percentage of Lake Country residents 15 years and older who have attained an educational diploma, degree, certificate, or trade apprenticeship.

(Data Source: Statistics Canada 2001, 2006 and 2011 Census)

Educational attainment for those 15 and older	2001*	2006	2011
Has completed high school degree or higher education	78%	80%	82%
Has some kind of post- secondary certificate, diploma or degree	51%	50%	55%

Educational attainment in Lake Country has risen gradually over the past decade with a higher percentage of people obtaining some kind of post-secondary accreditation.

* 2001 data is for those 20 – 64 years old

4.4 Sense of community belonging

Measures the percentage of the population aged 12 and over who reported their sense of belonging to their local community as being very strong or somewhat strong.

(Data Source: Canadian Community Health Survey, Statistics Canada, 2009/2010)

Okanagan Health Service Delivery Area*	British Columbia	Canada
70.2%	69.3%	65.4%

st covers the entire Regional District of Central Okanagan

Research shows there is a high correlation between *sense of community-belonging* and physical and mental health.



Inclusiveness and Opportunity for All Seeds of Sustainability:

- The Lake Country Access and Age-Friendly Committee was established in 2012 to enhance District services for people of all ages and with all types of abilities.
- The Age-Friendly Living Guidelines were developed with input from the public and key stakeholders to help create a vibrant community that promotes social and physical accessibility for all ages and mobility ranges, allows residents to age in place, and is inclusive and allows for meaningful social interactions.
- The Lake Country Food Assistance Society supports individuals and families in need through a community food bank and thrift store.
- The Regional Central Okanagan Social Development Program works with community organizations, health providers, and local governments to raise awareness and implement initiatives to support mental health, address homelessness and addictions, and support living wages/quality of life.





5. Pride in our unique identity

Our Description of Future Success:

Lake Country residents, businesses and organizations visibly take care of the community's appearance. Everyone takes pride in and contributes to celebrating the unique character of the community including early settlements, new development, the natural landscape, and the agricultural character of Lake Country. There is a clear sense of investing in the future and a creative flair that permeates the community.

Measuring Our Performance:

Indicator	Performance	Comments
 5.1 % of buildings/sites identified in Heritage report that are preserved/protected Measures the level of heritage preservation in Lake Country. (Data Source: District of Lake Country) 	 Nearly 100 natural areas, buildings, vistas are identified in the Heritage Values Workshop Report. None of these locations are protected or preserved for their cultural values as of yet, although some are existing parks. 	The Heritage Values Workshop Report, completed in 2012, identified a preliminary inventory of heritage sites for later evaluation. This process is still ongoing.
5.2 Number of visitors to the Lake Country Museum Measure the amount of interest in local culture and heritage. (Data Lake Country Heritage and Cultural Society Annual Report, 2012)	# of museum visitors 2000 1000 1533 1849 2011 2012	Visits to the Lake Country Museum have increased since 2011. In addition, the Museum's website has increased in popularity. In 2010 the average daily number of website hits was 772. By March of 2013, the daily average had risen to over 5300!



Pride in Our Unique Identity Seeds of Sustainability:

- As a part of the District's re-branding process, a new municipal website was created (okanaganway.ca) to reflect the region's natural surroundings and community life. The website won the Hermes Creative Award and has received positive feedback from the community.
- Much of Lake Country's identity is based on its rich heritage. A
 Heritage Values Workshop was held in 2012 to identify key
 community values and to create a preliminary inventory of heritage
 sites for preservation.
- The Lake Country Heritage and Cultural Society works closely with the District to preserve and share the community's history. In 2012, volunteers provided over 2200 hours of their time to support the Lake Country Museum which hosts guided tours and programs for retirement home residents, Boys and Girls Clubs, local students, and visitors, and holds public lectures for citizens to learn more about their local heritage.
- Public art throughout the community represents the District's rich arts and culture scene, supports local artists, and incorporates key elements of the community's identity such as its First Nations heritage and agricultural history. The 'Building Communities' sculpture (picture to the right) by Geert Maas is an example that celebrates the diversity of people in the community, their spirit, and their hope for the future which is found in the next generation.
- In 2013, Kalamalka Lake was entered in the Canadian Planner's contest for Best Places in Canada!









Our Description of Future Success:

There is a flourishing and growing arts and culture scene in the District, and events attract large audiences from within Lake Country and around the region. Many diverse artists make a living from their work, and some are nationally recognized. Artistic and cultural facilities provide a base for artists of all mediums and appropriate venues for displaying and performing works. Young artists are encouraged and mentored by more established practitioners giving a sense of investment and hope for youth in the District.

Measuring Our Performance:

Indicator	Performance	Comments
6.1 Number of cultural events held annually Measures the total number of cultural events held in the community to assess the wider community effects of the arts and culture sector. (Data Source: District of Lake Country)	 Approximately 155 arts and cultural events were held in 2012. 	The community and its various organizations host an impressive number of arts and cultural events per year. These events include things like community celebrations, movie nights, concerts, art shows, theatre performances, pow wows, and many more.
6.2 Number of active cultural organizations Measures the number of active cultural organizations in the community to assess general level of community participation related to arts and culture. (Data Source: District of Lake Country)	 A comprehensive list of community organizations is not available at this time. 	Lake Country has a wide variety of arts and cultural organizations that are active in the community and provide opportunities for people to get together, learn, and share their unique knowledge and abilities.



6.3 Total annual attendance at cultural events

Measures total attendance at cultural events to assess community participation in arts and culture events.

(Data Source: District of Lake Country, various community organizations)

A comprehensive count of attendance at all cultural events is not maintained. The following data was available:

- Gatzke's Orchard Concerts: over 575 people attended 5 concerts in 2012
- ArtWalk draws over 7,000 visitors
- Lake Country Heritage and Cultural Society annual community picnic: 500 people attended in 2012.
- Creekside Theatre: almost 23,000 tickets were sold to 80 events in 2012

Lake Country events are well attended by the community and visitors. Attendance numbers are not available for all events so a select few have been highlighted to provide an overview of community participation.

Rich Arts and Culture Seeds of Sustainability:

- Lake Country has a vibrant arts and culture sector that entertains residents and draws tourists to the community. The annual Lake Country Art Walk showcases local artists, photographers, sculptors, musicians, and actors. This popular event continues to grow and draws thousands of people from all over the country.
- The District began participating in the 'Communities in Bloom' program in 2011 and has received several commendations from the program for creative use of public art and community participation.
- The Lake Country Art Gallery Society supports the local arts community with classes, exhibits, events, and workshops. Their ARTSCO Artscape program helps local artists exhibit and sell their work in public venues.
- The non-profit Summer Arts Scene for Youth (SASFY) Society offers programs and workshops for youth to explore a wide variety of arts including drawing, painting, dance, animation, photography, theatre, sculpting, woodworking, native crafts, fashion design, and more. Each year they host the 'Okanagan Arts Alive' event to showcase students' talents and artwork.
- The Lake Country Open Air Performance Society hosts community events and performances in public parks during the summer months.
- Creekside Community Theatre has been running for 14 years and hosts up to 100 programs per year with \$100,000 in ticket sales. Certain events such as dance competitions even result in local hotels running out of vacancy!
- The Lake Country Heritage and Cultural Society hosts an annual community picnic called 'Centrepiece' which is staged as a 1920's garden party and features Devonshire tea, children's games, and musical performances.







Our Description of Success:

Members of the OKIB actively participate in many Lake Country events. There are strong partnerships between the OKIB, the District of Lake Country, other organizations within the community and adjacent communities such as Vernon and Kelowna.

Measuring Our Performance:

Indicator	Performance	Comments
7.1 Community to community forums A qualitative list of the outcomes of community to community forums held with the Okanagan Indian Band. (Various data sources)	 The District is currently involved in organizing a community to community forum with the Okanagan Indian Band. Arising from the Community to Community Forum were a number of commitments and agreements, including the following: Work together on a formal watershed protection protocol; Work together on economic development activities; and Work towards a shared Cultural Centre / Discovery Centre. 	The Okanagan Indian Band has held community to community forums with Vernon, Kelowna, and Lumby and developed a joint venture partnership with the Village of Lumby. The Band works regularly with the City of Vernon on development and servicing and works closely with the City's Geographic Information System (GIS) department to collaborate on mapping that will be used to guide service development for both governments. The opportunity exists for Lake Country to form closer partnerships with the Band and other adjacent communities.
	Discovery centre.	(Source: Aboriginal Affairs and North Development Canada (AANDC) CCP Handbook - Comprehensive Community Planning for First Nations in British Columbia, 2006)



7.2 Shared projects and initiatives

A qualitative list of projects and initiatives with the Okanagan Indian Band and adjacent communities in the region.

(Various data sources)

- In 2013, Lake Country collaborated with the Regional District, industry partners, and government agencies to complete the Silvopasture Pilot Project to manage and protect water quality, agriculture, and sensitive ecosystems in the Vernon Creek watershed. The project was awarded a Regional Premier's Innovation and Excellence Award in the partnership category.
- In 2012, the District of Lake Country entered a formal partnership with Tourism Kelowna to work on collaborative initiatives and marketing.
- The District and the Okanagan Indian Band signed a Protocol Agreement in 2005 to establish a cooperative government to government working relationship. In 2011, this Agreement was reaffirmed with a ceremony.
- Lake Country is working closely with the City of Kelowna on emergency planning, training, and Emergency Operation Centre operations.
- The District of Lake Country supports and promotes regional initiatives related to recycling, waste reduction, and animal control.
- The Sustainable Transportation Partnership of Central Okanagan (SPTCO) supports transportation initiatives and connectivity between communities.

The District's Agreement with the Okanagan Indian Band sets the stage for collaborative projects and initiatives such as joint land use, servicing, communications, cultural resources, and environmental management.

(Source: Protocol Agreement between Okanagan Indian Band and The District of Lake Country, 2005).

Lake Country recently entered into an agreement with Tourism Kelowna that will see Tourism Kelowna perform out-of-valley marketing activities for the District. This will allow Lake Country to take advantage of Tourism Kelowna's \$2.5 million budget.



Strong Relationships with Adjacent Communities Seeds of Sustainability:

- In 2005, the District signed a Protocol Agreement with the Okanagan Indian Band to establish a long term cooperative working relationship between local governments. The Agreement identifies shared objectives for collaboration such as economic development planning, land use and community servicing planning, policy development regarding cultural resource protection, and the protection and management of fisheries, aquatic resources, and terrestrial environments.
- The Regional District of Central Okanagan provides numerous services and overarching programs for the communities of Lake Country, Peachland, Kelowna, and West Kelowna, and the two unincorporated electoral areas (Central Okanagan East and West).
- BC Transit currently provides bus service from Lake Country to Vernon and Kelowna and has identified a potential frequent service route between Lake Country and Kelowna to increase service to key destinations such as the Kelowna airport and University of BC - Okanagan campus.





8. Thriving local food and agriculture

Our Description of Future Success:

Lake Country's farms are successful and supported by local consumers who go out of their way to purchase from local growers. The Farmer's Market is thriving and local food can be found in many restaurants and grocery outlets. Food that is exported from the area is processed locally, allowing the benefits of value-added processing to remain in the community. Farmers and gardeners are finding innovative ways to grow high quality, nutritious food with fewer synthetic inputs. Local farms look for opportunities to hire and train local youth. The current Agricultural Advisory Committee remains active and influential.

Measuring Our Performance:

are 3658 ha of farmland within the District of Lake Country. This was calculated based on ALR maps and a visual survey of the area cted by the Ministry of Agriculture which classified land as being used	Over 40% of the District is within the Agricultural Land
ised. Most, but not all, farmland in Lake Country is within the ALR. country is home to several large fruit producers, including the largest	Reserve (ALR), although not all of the ALR land is farmed (some is still in a natural state).
	Used. Most, but not all, farmland in Lake Country is within the ALR. Country is home to several large fruit producers, including the largest er of cherries in Canada.



8.2 % of farmland in active production (%)

Measures the total percentage of farmland in Lake Country that is in active production to provide an overview of current agricultural production compared to potential agricultural production.

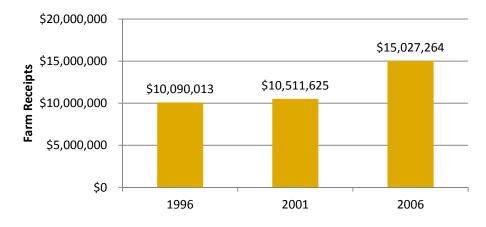
86% of the farmland in the District of Lake Country is in active production.

(Data Source: District of Lake Country aerial maps)

8.3 Total farm receipts

Measures the total amount of income generated by local farms to provide an overview of the local agricultural economy.

(Data Source: 2011 Census of Agriculture for Central Okanagan Consolidated Census Subdivision and Ministry of Agriculture Report: Agriculture in Brief, District of Lake Country)



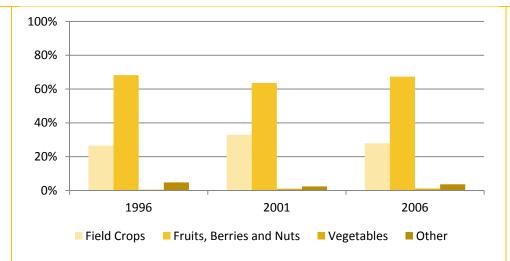
In 2011, farms in the Central Okanagan Consolidated Census Subdivision had total receipts of over \$86 million dollars.

Due to census reporting protocols, 2011 data is not available for the District of Lake Country alone. This indicator may be removed from future iterations of the report if data does not become available.

8.4 Farm type diversity

Measures the diversity of local farms to provide an overview of local food production and food security.

(Data Source: Ministry of Agriculture Report: Agriculture in Brief, District of Lake Country)



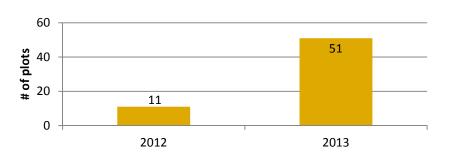
This data illustrates the diversity of crop types grown in Lake Country. The proportion of various crop types has remained fairly stable.

Due to census reporting protocols, 2011 data is not available for the District of Lake Country alone. This indicator may be removed from future iterations of the report if data does not become available.

8.5 Number of community garden plots

Measures the number of garden plots available to community members.

(Data Source: Lake Country Communities in Bloom 2013 Community Profile)



A new community garden is being installed in Oyama at the Oyama Community Club. It is part of the Central Okanagan Community Garden Association. As the garden was not complete at the time of writing, those plots have not been include in the count.

In addition to an increase in the number of community garden plots in the District, the community gardens are also the site of other projects. At the Winfield Community Garden public art by local artist Ed Goodon has been installed, a gazebo has been built, and food for the local food bank is being cultivated by a group of staff volunteers from TD Canada Trust bank.



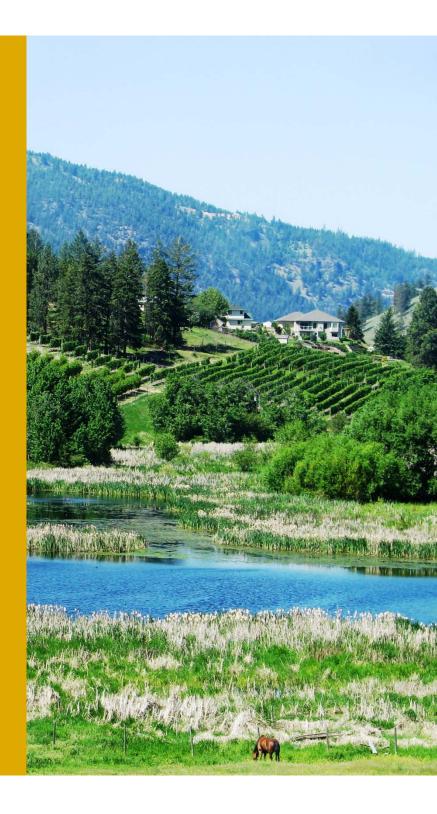






Thriving Local Food and Agriculture Seeds of Sustainability:

- The Lake Country Farmers' Market (open June to Sept) supports local farmers and artisans and provides a venue for the community to purchase healthy, locally produced foods and goods.
- In 2012 Lake Country hosted the 4th annual Okanagan Feast of Fields harvest festival to celebrate local food and raise money for Farm Folk City Folk (a non-profit society that supports local sustainable food systems).
- In 2012, 6 local wineries hosted the 'Taste Lake Country' event which included wine tastings, multi-cultural food, and tours at Ancient Hill Winery, Arrow Leaf Cellars, Ex Nihilo Winery, Gray Monk Estate, Intrigue Estate Winery, and 50th Parallel Estate.
- The Winfield Community Garden provides over 50 plots for community members to garden and grow food using sustainable methods.
 Community activities and public art are incorporated to provide opportunities for fun and community building.
- The District's Community Agriculture Plan (2008) provides direction for the protection of farmlands and identifies approaches to help the community and agricultural sector realize the greatest economic benefit from their productive agricultural lands.







Our Description of Future Success:

Lake Country businesses prosper and the local economy diversifies to provide a more stable and secure tax base. Lake Country incubates, supports, retains and expands local businesses and entrepreneurs, and manages to attract some outside companies to locate their Okanagan operations in the District.

Measuring Our Performance:

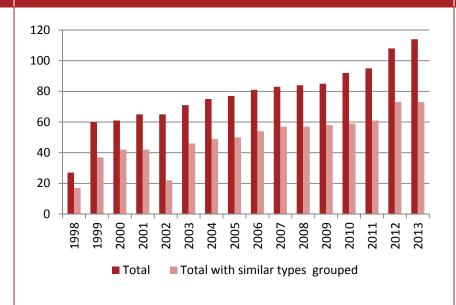
Indicator

9.1 Number of business types registered in Lake Country

Measures the number of different business types to provide an overview of local economic diversity.

(Data Source: District of Lake Country Business License Master List)

Performance



Comments

Communities with a wide range of business types are more self-reliant. They are also better able to withstand fluctuations in the economy than those that are depending on a single sector or resource. In order to provide a more accurate perspective, similar business types (e.g. auto repair and auto service), have been grouped.

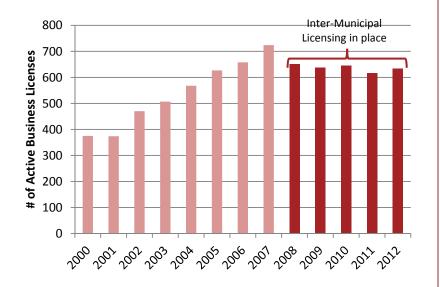
The number of business types registered has more than quadrupled since 1998.



9.2 Number of active business licenses

Measures the number of active businesses to provide an overview of local economic activity.

(Data Source: District of Lake Country)



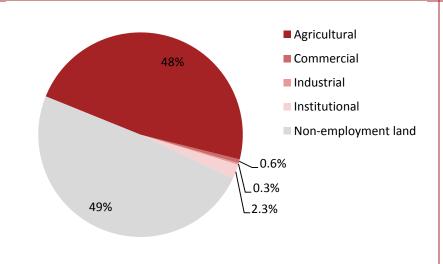
The total number of active businesses is an indicator of economic activity.

The number of business licenses appears to decline starting in 2008, but this marks the start of the inter-municipal license program, which meant that businesses operating in Lake Country and other local municipalities only needed to purchase a license (and intermunicipal upgrade) in their home community.

9.3 Amount of Land Zoned for Employment Uses

Measures the proportion of employment lands zoned for commercial and industrial activities.

(Data Source: District of Lake Country GIS data)



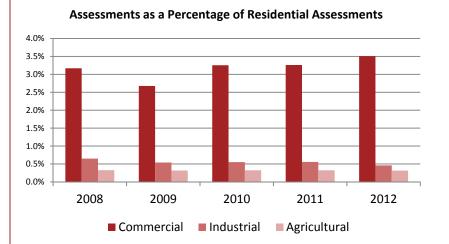
Just over 50% of Lake Country's land base is zoned for employment uses, such as agriculture, commercial, industrial and institutional activities. The industrial land base is particularly small, at 0.3% of the District's land base (and 1% of employment lands).



9.4 Relative Value of land/property assessed for commercial, industrial and agricultural uses

Measure the relative value of nonresidential lands compared to residential lands in the community.

(Data Source: District of Lake 2012 **Annual Report)**



Reporting the commercial, industrial and agricultural assessments as a percentage of residential assessment provides some insight regarding shifting land base values. The data indicates that the relative value of commercial land is increasing, while the relative value of industrial land is declining. The relative value of agricultural land is remaining constant.

While agricultural and industrial lands have fairly even assessment values, agricultural land has a much larger area.

9.5 Value of building permits

Measures the value and number of new building permits issued per vear.

(Data Source: District of Lake Country Business License Master List)



The value of building permits peaked in 2006 and declined sharply until 2010. It has fluctuated since then, hovering around 2005 levels. The number of building permits has remained fairly constant since about 2005, with a large spike in 2011 due to 342 building permits issued for secondary suite legalization.





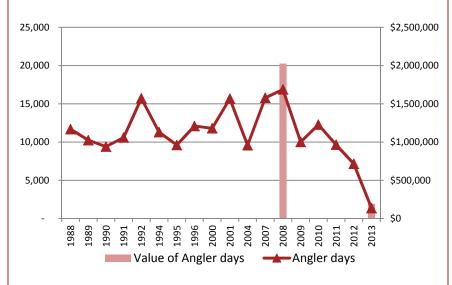




9.6 Angler Activity on Wood Lake

Considers both the total number of angler days per year and the total dollar value of angler fishing to the Lake Country economy. Wood Lake was selected because it is located entirely within the District of Lake Country.

(Data Source: Freshwater Fisheries Society of BC)



The District's numerous lakes provide many opportunities for outdoor recreation for residents and visitors such as fishing which contribute to the local economy.

The number of angler days per year on Wood Lake has declined sharply in recent years due to declining health of the fish stocks. This has resulted in angling contributions to the local economy being reduced to less than 10% of the recent maximum (2008 compared to 2013).

A Thriving, Resilient and Diverse Local Economy Seeds of Sustainability:

- In 2012, the District formed a partnership with Tourism Kelowna for marketing and funding support. In March of 2013, the District hosted a Community Tourism Forum with local businesses and public stakeholders to start brainstorming ideas to assist in the development of a tourism strategy for Lake Country.
- The Central Okanagan Economic Development Commission provides support and resources for new and existing businesses with a variety of programs, seminars, pilot projects, and mentorship and strategic partnership opportunities.
- The District is currently involved in a variety of initiatives to support local economic development such as undertaking a business land inventory and assessment study, promoting business development along the Main Street corridor and in the Town Centre, supporting the development of agri-tourism and other agriculture focused enterprises, supporting home based businesses, and designating land for commercial and industrial use.
- Future District initiatives and strategies include expanding outdoor recreation areas, supporting value-added industries, increasing tourism/investor exposure, providing affordable rents for small businesses, creating business incubators, creating a visitor centre, and creating a formal partnership with the Okanagan Indian Band.





10. Efficient, effective and affordable infrastructure and services

Our Description of Future Success:

Lake Country provides high quality infrastructure to support a high level of service and community and environmental health. The infrastructure funding gap is closed through a combination of service efficiency improvements, strategic investment decisions, increased revenues (from a more diverse tax base) and increased grant funding from senior governments.

Measuring Our Performance:

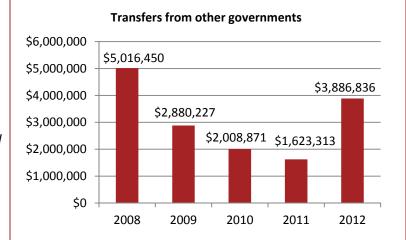
Indicator	Performance	Comments
10.1 Number of parcels serviced by municipal water supply	 As of 2012, the municipal water supply included 3,236 connections. A single connection may service more than 	The District's long term goal is to provide municipal water
Measures the number of residents who are serviced by municipal water supply.	one dwelling, as in the case of multi-family dwellings or single family dwellings with secondary suites.	service to all urban areas and to acquire all privately
(Data Source: District of Lake Country Water Master Plan)		operated water systems as they become available.
10.2 Number of parcels serviced by municipal or private subdivision sewer	 As of 2013, 2,377 homes (single family equivalent) were serviced by sewer connections. This represents 53% of the dwellings in Lake Country. 	The District's long term goal is to provide sanitary sewer service to all urban areas.
Measures the number of residents who are serviced by municipal or private sanitary sewer systems as opposed to private septic systems.	 This number has not changed significantly in the past several years. 	
(Data Source: District of Lake Country Stage 1 Liquid Waste Management Plan)		



10.3 Value of grant funding for infrastructure

Measures the amount of funding from senior governments for infrastructure. This affects the overall capacity of the District to provide infrastructure improvements and maintenance for the community.

(Data Source: District of Lake Country Annual Report, 2012)

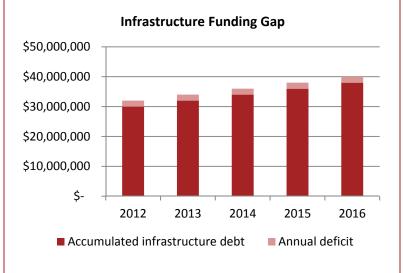


Grants from the provincial and federal governments can be received for a wide range of projects including highway improvements, wastewater treatment plant upgrades, and support for green infrastructure.

10.4 Infrastructure funding gap

Measures the amount of funding that is needed for infrastructure projects in terms of the amount of money and number of years it will take to obtain it.

(Data Source: District of Lake Country)



Aging infrastructure and infrastructure that does not meet today's needs (such as roads without sidewalks) is costly to maintain, upgrade or replace.

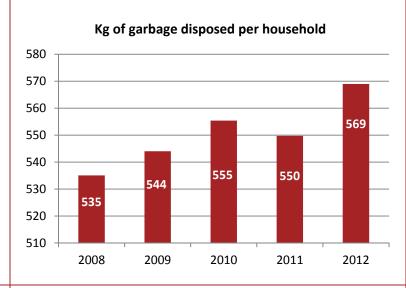
The District has identified an annual funding gap of \$2 million for road renewal, in addition to an existing debt of \$30 million. This does not account for additional improvements that many residents desire, such as sidewalks and bike routes.



10.5 Kilograms of solid waste disposed per single family household

Measures the amount of garbage that single family households Lake Country dispose of each year. Multi-family households are serviced privately and data is not readily available.

(Data Source: Regional District Waste Reduction Office)

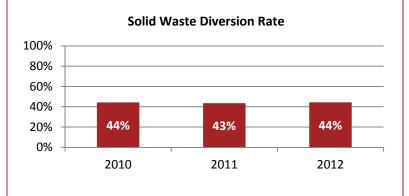


The amount of garbage that Lake Country residents dispose of is trending upwards. This will need to change if the District is to meet the region's goal of zero waste. The Regional Solid Waste Management Plan has set a target of 39% reduction (below 2004 levels) within 6 – 15 years of the plan's adoption in 2006.

10.6 Single family household waste diversion rate

Measures the amount of garbage per household that is diverted from the garbage (via recycling or yard waste collection).

(Data Source: Regional District Waste Reduction Office)



Waste diversion rates have remained steady over the past few years, since the introduction of the automated, cart-based collection system.



Efficient, Effective and Affordable Infrastructure and Services Seeds of Sustainability:

- The District has outlined a number of capital projects to improve infrastructure and municipal services. Long term goals are to acquire all privately operated water systems as they become available and provide water and sanitary sewer service to all urban areas.
- Lake Country has over 200 km of roadways that require continual repair and maintenance. Pothole patching takes place November through April, street sweeping in spring, snow removal in winter, and ditching, grading, and dust control occurs annually.
- The Regional District's Waste Reduction Office has a number of programs to reduce waste and increase recycling and composting such as its 'paper free home' program, annual composter sale, 'Make Memories – Not Garbage' campaign, furniture deconstruction program, and annual 'trunk sale' events.
- In 2012, there were over 50,000 visits to the Westside Recycling Centre and over 12,000 tonnes of recyclables collected.





11. Reduced dependence on fossil fuels

Our Description of Future Success:

Lake Country reduces the energy intensity of each dollar of local production. Individuals, businesses and other organizations transition to renewable energy sources and improve their energy efficiency.

Measuring Our Performance:

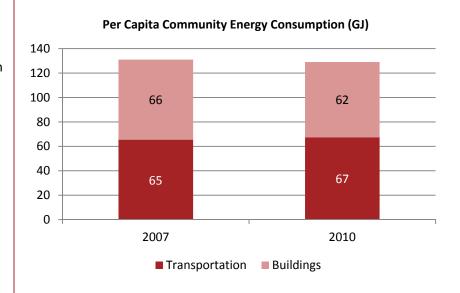
Indicator	Performance			Comments	
11.1 Total annual energy consumption (GJ) Measures the total amount of community energy consumption in	2,000,000	Community Energy Con		Community energy consumption has risen in recent years. However, this growth can be attributed in part to growth of the District	
Lake Country from buildings and transportation.	1,000,000	669,899	708,505	and its population. The percentage of energy	
(Data Source: 2010 Community	500,000	669,146	776,897	consumption is split fairly evenly between buildings and	
Energy and Emissions Inventory, Province of BC)	0 1	2007 ■ Transportation	2010 ■ Buildings	transportation.	



11.2 Per capita average energy consumption

Measures the total amount of energy consumption per person in Lake Country from buildings and transportation.

(Data Source: 2010 Community Energy and Emissions Inventory, Province of BC)

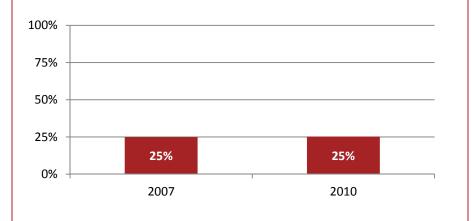


Per capita energy consumption has improved slightly in recent years. This verifies the fact that rising community energy consumption (indicator 11.1) can be attributed to population growth, rather than increased energy usage per person.

11.3 % of total energy from renewable energy sources

Measures the amount of energy that comes from renewable energy sources (e.g., solar, wind, hydro-electric), versus nonrenewable (e.g., petroleum, natural gas produced electricity).

(Data Source: 2010 Community Energy and Emissions Inventory).



The proportion of renewable energy has remained steady. This is largely because the energy mix in the region is unchanged. This also includes the locally generated hydroelectric power (see indicator 11.4 for more details).









11.4 % of total energy from local (regional) sources

Measures the total amount of locally produced energy.

(Data Source: District of Lake Country)

• Local renewable energy is produced by the hydroelectric generating station on the Eldorado Reservoir. The facility generates 1.1 MW (4,023 MWh per year). This is equivalent to about 14,500 GJ, which is about 1% of the total energy consumed.

Reduced Dependence on Fossil Fuels Seeds of Sustainability:

- In 2009 the District completed the Hydroelectric Generating Station in the Eldorado Reservoir which takes advantage of existing water infrastructure to generate approximately \$250,000 in revenue for the District and produce enough emission-free renewable energy to power 400 homes per year.
- In 2012, the District installed solar powered bus shelters throughout the community, LED street lights and LED lights in District facilities and the Lake Country Museum.
- When completed, the District's Community Energy and Emissions Plan will help identify community actions to reduce the need for fossil fuel use.
- The District is currently completing its Integrated Transportation Framework to guide the District towards a safer, more effective and efficient transportation system that will include infrastructure for pedestrians, cyclists, public transit, and vehicles.





12. Healthy ecosystems

Our Description of Future Success:

Ecosystems in Lake County are healthy, robust and continue to support the full diversity of flora and fauna that historically existed in the area. Degraded habitats are restored and species at risk are brought back from the brink of localized extinction.

Measuring Our Performance:

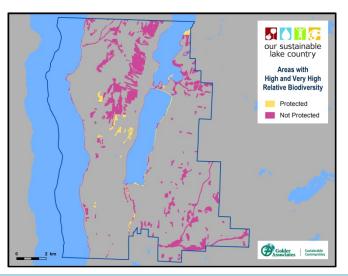
Indicator	Performance	Comments
12.1 Total area of protected natural areas and parks Measures the total amount of green space that is protected from development. (Data Source: District of Lake Country)	 In 2012 about 560ha of land was zoned as "Natural Areas and Parks". The official community plan designates 740 ha as "Parkland – Conservation". About 48.5 ha are protected as DLC parks. About 21 ha of that area was added since 2006 as a result of parkland dedication required by subdivisions (16 ha from The Lakes alone). 	Green space (whether natural areas or public parks) contributes to ecological health by filtering pollution and improving air quality, providing habitat and food sources for local wildlife, and enhancing the mental and physical well-being of Lake Country residents. Protecting green space as parks or by designating it as an ecologically sensitive area helps to ensure that ecological health is maintained.

12.2 Total % of land designated as having a very high or high relative biodiversity that is protected

Measures the portion of the land area that is rated as having very high or high relative biodiversity and that is also protected by its land status.

(Data Source: A Biodiversity Conservation Analysis for the North and Central Okanagan Region, Caslys Consulting Ltd.)

- A study completed in January 2013 classified land throughout the Central and North Okanagan according to its relative biodiversity. 26 ha in Lake Country is classified as having very high biodiversity and 1,122 ha is classified as having high biodiversity.
- 74.59 ha (6.5%) of the high or very high biodiversity land is protected as a park or natural area, as illustrated in the figure below.



The greater the diversity of an ecosystem, the more productive, sustainable, and resilient it will be, allowing it to perform its many functions such as breaking down and absorbing pollution, recover from unpredictable events, provide habitat and food sources, and improve the quality of air, water, and soil in the community.

Land with high or very high biodiversity that is not protected can be considered a biodiversity 'hot spots'. The hot spots and other significant habitats can be targeted for appropriate biodiversity conservation efforts (e.g., restoration, park acquisition) and will be used to guide the development of a conservation strategy for the region.

12.3 # of trees/ trees planted in urban areas

Measures the number of trees planted in urban areas to provide an overview of urban ecosystems.

(Data Source: District of Lake Country)

- From 2009 2012, the District planted approximately 400 trees per year on public property (roads, parks).
- In 2009, approximately 1,500 seedlings were planted by the District on Spion Kop Mountain.

Privately planted trees were not included in this indicator although future iterations may include privately planted trees that are planted in new developments.





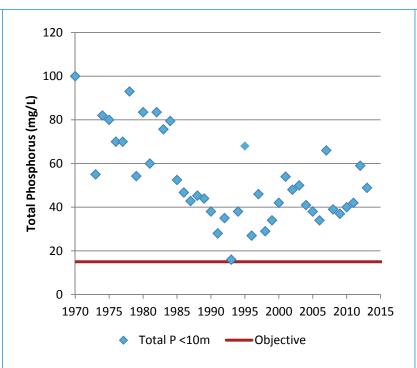




12.4 Water quality of Wood Lake

Measures the quality of water in Wood Lake with a focus on ecosystem health (i.e., aquatic habitat, natural filtering capacity).

(Data Source: Ministry of Environment)



The nutrients (phosphorus and nitrogen), clarity, and chlorophyll-a levels of Wood Lake are measured twice a year by the Ministry of Environment. These parameters provide an indication of the lake's health and ability to sustain aquatic life. Phosphorus was chosen as a representative parameter because it substantially affected by anthropogenic sources, such as agricultural runoff, leaky/failing septic fields and wastewater treatment plant effluent disposal. It is also affected by natural causes such as heavy spring runoff). In Wood Lake, nitrogen is not as critical a parameter, because there is so much phosphorous. Clarity and chlorophyll-a are both affected by the amount of algae growing, which is a function of the amount of phosphorous. The objective is set by the MoE and is considered an attainable/realistic objective. When the objective is consistently met, the MoE will consider making the objective lower.

The phosphorous levels have declined since the 1970s, but appear to be leveling off above the objective.

Healthy Ecosystems Seeds of Sustainability:

- April is Community Clean-up Month in Lake Country and volunteers get together to gather garbage and clean up urban areas, forests, creeks, and lake shores. The Regional District's Waste Reduction Office provides gear and supplies to any interested individuals or groups.
- The Oyama Community Club coordinates a community spring clean-up every year in May.
- In 2012, volunteers and the Regional Waste Reduction Office cleaned-up over 40 illegal dump sites.
- In September 2012, a group of volunteers helped to clear debris and clean up garbage from Middle Vernon Creek to allow spawning Kokanee to swim upstream.
- The Oceola Fish and Game Club promotes environmental stewardship and has supported habitat restoration and conservation projects in Lake Country for almost 40 years.
- In June of 2013, the 1st Lake Country Girl Guides won a grant to help beautify the community and sustain the environment with useful vegetation. 40 people took part and planted 180 milkweed plants in Jack Seaton Park to support critical habitat for monarch butterflies.







Our Description of Future Success:

Lake Country supplies and uses water within the capacity of the natural environment. Water is treated as a precious resource, conserved and never wasted. Wastewater does not exceed the assimilative capacity of the receiving environment.

Measuring Our Performance:

Indicator **Performance** Comments 13.1 Non-agricultural potable water Non-agricultural uses make up 46% of Non-agricultural water use (2011) 2%. total water consumption in Lake Country. consumption Outdoor residential Measures the total amount of The majority of non-agricultural water is 7% Indoor residential drinkable water that is consumed in used for outdoor residential uses such as 15% Lake Country for non-agricultural uses watering lawns. 50% Industrial, Commercial, (litres per person per day). Institutional When only residential water use is 26% Unaccounted accounted for, the rate is 823 litres per person per day. This is still substantially (Data Sources: 2012 Water Master Parks higher than the provincial and national Plan; Statistics Canada 2011 Census; averages of 426 litres per person in BC Environmental Reporting BC, Water and 329 litres, per person in Canada Total water use in Lake Country 10,000 million litres Use Per Capita indicator) (2004 data). Note that BC has among the Total non-agricultural water use 4,630 million litres highest rates of water consumption in 11,708 Population (2011) Canada, and Lake Country residents Total non-agricultural water used 1,083 consume nearly twice as much as BC on per person per day average.

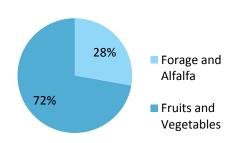


13.2 Total annual agricultural water consumption (litres)

Measures the total amount of water used for agriculture in Lake Country.

(Data Source: 2012 Water Master Plan)

Agricultural water use (2011)



Total water use in Lake Country 10,000 million litres

Total agricultural water use 5,400 million litres

Agricultural uses makes up 54% of total water consumption in Lake Country.

The majority of agricultural water use is used for growing fruits and vegetables.

13.3 Estimate the size of total existing water supply and % utilization

Measures the total water supply that is licensed for withdrawal from the various sources in Lake Country and the ratio of annual water consumption to the total amount licensed for withdrawal.

(Data Source: 2012 Water Master Plan)

Total % utilization	40%
Total licensed withdrawal	25,267 million litres
consumption	= 5,2 5 2 6
Total annual water	10,000 million litres
Total water supply licensed for withdrawal	25,267 million litres
Oyama Lake	3,891 million litres
Kalamalka Lake	1,718 million litres
Okanagan Lake	10,997 million litres
Swalwell (Beaver) Lake	8,661 million litres

Lake Country utilizes 40% of the total licensed withdrawal amount per year. The remainder provides a supply for emergencies and to balance the reservoirs.



A Long Term Supply of Clean Water Seeds of Sustainability:

- In 2013, volunteers participated in the Great Canadian Shoreline Clean-up to clean the shores of Okanagan Lake. Over 300 students from George Elliot Senior Secondary participated and challenged other students from the school district to do the same. The students collected an impressive 150 bags of garbage during the clean-up.
- The District's Official Community Plan has set targets to reduce water consumption by 15% (below 2009 levels) by 2014.
- In February, the long standing boil water advisory for Oyama Lake was lifted. The advisory, in place since 2010, was downgraded to a water quality advisory after the Kalamalka Lake Interconnect project was completed to improve water quality.
- Numerous other capital projects will be completed in coming years including:
 - Universal water metering (2015)
 - Lower Lakes Quality Improvement Projects (2015)
 - Eldorado Treated Water Reservoir (2017)
 - Beaver Lake/Oyama Lake Water System (2027)
 - Filtration Plant at Eldorado Reservoir Site (2030)





14. Reduced GHG emissions

Our Description of Future Success:

Despite a growing population, Lake Country reduces its corporate and community based GHG emissions year over year through pragmatic energy efficiency, integrated land use/transportation planning and renewable energy projects.

Measuring Our Performance:

Indicator	Performance	Comments
 14.1 Total annual community GHG emissions (CO₂e t) Measures total annual community emissions of greenhouse gases in tonnes of equivalent carbon dioxide (Data Source: 2010 Community Energy and Emissions Inventory) 	100,000 80,000 4,414 19,376 40,000 20,000 45,872 53,123 2007 2010 Transportation Buildings Solid waste	Total community GHG emissions rose by 11% from 2007 to 2010. This increase can be attributed to growth of the District and its population.



14.2 Per capita community GHG emissions

Measures total annual community emissions per person.

(Data Source: 2010 Community Energy and Emissions Inventory)

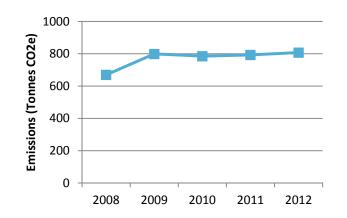
	2007	2010
Community emissions		
$(CO_2e(t))$	69,662	77,341
Population	10,220	11,512
TOTAL per capita community emissions	6.8 CO₂e(t)	6.7 CO ₂ e(t)

Per capita emissions have declined slightly in recent years. This verifies the fact that rising community emissions (indicator 14.1) can be attributed to population growth, rather than increased emissions per person.

14.3 Total annual corporate GHG emissions (CO₂e t)

Measures total annual corporate emissions generated by municipal buildings and operations.

(Data Source: Climate Action Revenue Incentive Public Report for 2012, District of Lake Country, Bylaw 734)



As a part of the provincial Climate Action Charter, the District committed to making their municipal operations carbon neutral by the end of 2012. Carbon neutrality can be achieved through a combination of actual emission reductions and the purchase of carbon credits (i.e., for emission reduction projects elsewhere) to offset remaining emissions. Instead of purchasing offset credits elsewhere, the District established a Climate Action Reserve Fund to set aside money for future emission reduction projects in Lake Country.



Reduced GHG Emissions Seeds of Sustainability:

- The District's municipal operations have been carbon neutral since 2012. Other positive actions include, investigating green building standards for new District buildings, offering Green Building Rebates to residents/developers to incentivize energy efficient development in the private sector, and promoting the regional 'Living Greener' initiative to encourage residents to live more sustainably.
- In 2007, Lake Country signed the provincial Climate Action Charter which commits local governments to measure, reduce, and report on their climate action progress. To honour this commitment, the District is completed its Community Energy and Emissions Plan to inventory/measure community GHG emissions and identify ways to reach its goals of reducing emissions by 33% (below 2007 levels) by 2020 and by 80% by 2050.
- The District is currently completing an air quality assessment and inventory to participate in the Regional Air Quality Management Program.
- The District is currently upgrading its Wastewater Treatment Plant which will double the plant's capacity, reduce its energy requirements by 50% (equating to 550,000 kWh annually), and significantly reduce the amount of hydrogen sulfide and methane that is released into the environment.







Our Description of Future Success:

Lake Country carefully assesses the risks associated with climate change and natural disasters such as wild fires and drought, and takes the appropriate steps to manage, mitigate and adapt to such risks.

Measuring Our Performance:

Indicator	Performance	Comments
15.1 Number of dwellings in wildfire risk zone Measures the number of dwellings that lie within wildfire risk zones to assess the	 387 dwellings lie within the wildfire risk zone, as outlined in the official community plan. This is 8.6% of all dwellings. 	The District can manage risk in wildfire zones with communication and education, emergency response planning and training/equipment, structure protection, and vegetation (fuel) management.
community's resilience to wildfires. (Data Source: District of Lake Country)		The District also completed forestry prescription/mitigation work on about 40 Ha on Spion Kop to reduce the risk of wildfire.

Resilience to Natural Disasters and Climate Change Seeds of Sustainability:

- The District's 2010 Community Wildfire Protection Plan identifies areas at risk and makes recommendations for communication and education, structure protection, emergency response, training/equipment, and vegetation (fuel) management.
- The Regional Emergency Program and Emergency Operation Centre plans for emergency events such as earthquakes, forest fires, flooding, airplane crashes, and other major disasters in the region.
- In 2012, the program coordinated the largest full-scale disaster exercise in the region that involved over 40 organizations and 300 participants, responded to the needs of over 1,500 residents evacuated during the Trepanier wildfire, acquired Provincial Disaster Assistance funding to assist property owners in Kelowna and West Kelowna affected by flooding, and launched its new information website (www.cordemergency.ca).
- In October 2013, the Regional Emergency Program and Emergency
 Operation Centre will launch the 'ShakeOUT BC' Earthquake Preparedness
 Program and continue their efforts to raise awareness and educate the
 public about emergency preparedness.





16. Compact development

Our Description of Future Success:

Shops, services, entertainment, and multi-family housing are located in a compact and walkable area. The Town Centre and Main Street represent the 'heart' of the community and provide a safe, vibrant area for residents and visitors to enjoy. Development is concentrated in identified growth areas and farmlands are preserved to protect the long-term sustainability and rural character of Lake Country.

Measuring Our Performance:

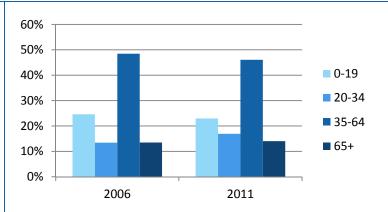
Indicator Performance Comments 16.1 Population Lake Country has experienced significant **Population** increase/growth rate growth since 2006. This can be attributed 15000 to a variety of factors such as new housing Measures the increase in the developments and regional growth. number of people living in Lake 10000 Country and the percentage of Lake Country has become a popular growth the community has location due to its relative affordability, 5000 accessibility of services and transportation, experienced. abundant recreational amenities, and 0 proximity to key destinations such as the 1996 2001 2006 2011 (Data Source: Statistics Canada, Kelowna airport and University of BC 1996, 2001, 2006, 2011 Census) Okanagan campus. 1996 2001 2006 2011 9,606 11,708 Population 9,007 9,267 22% 5 year Growth 3% 4% rate



16.2 Demographic changes

Measure changes in population composition by the number and percentage of people in different age categories.

(Data Source: Statistics Canada, 1996, 2001, 2006, 2011 Census)



Age	e Category	2006	2011	
0-1	9	25%	23%	
20-	34	13%	17%	
35-	64	48%	46%	
65+	+	13%	14%	
44 -				
42 -				
38 -				
36 -		1	ı	
	2001	2006	2011	_
	Laka Carrata	y median age	BC Median	200

The proportion of children in the population has remained fairly steady at about 25% over the past 10 years, while the number of young adults (age 20-34) has increased by over 50% (from 1290 in 2001 to 1970 in 2011). Lake Country's median age dropped very slightly from 2006 to 2011, while the median age in the province has been rising. This indicates that Lake Country is experiencing growth that is different from the province as a whole.



16.3 Premature mortality

Measures premature deaths that could potentially have been prevented through primary prevention efforts (such as immunization, education, road safety, etc.).

(Data Source: Statistics Canada CANSIM tables, 2000 – 2009)

Premature mortality*	2006/2008	2007/2009
Total premature deaths	3,273	3,325
Potentially avoidable		
premature deaths	1,498	1,608
% of total premature deaths		
that were preventable	46%	48%

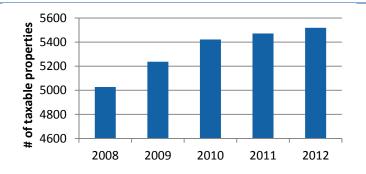
^{*} all data for the Okanagan Health Service Delivery Area (Central Okanagan Regional District).

Nearly half of all premature deaths were preventable by primary prevention efforts, which prevent a condition before it develops by addressing its risk or protective factors. Local governments can play a role in primary prevention by creating built environments that promote increased physical activity and access to healthy foods and discourage or limit opportunities for behaviours that negatively impact health, such as smoking and engine idling.

16.4 Number of taxable properties

Over time, this indicator measures the amount of development to provide an overview of growth.

(Data Source: District of Lake Country Annual reports)



The number of taxable properties in Lake Country has been increasing rapidly. The number of properties includes lots, strata lots, condo units and townhomes.

16.5 Amount of undeveloped land remaining (Ha)

Measures the amount of land that is undeveloped to provide an overview of growth and development potential.

(Data Source: District of Lake Country)

As of 2012, about 1,200 hectares are undeveloped. These are parcels with the following actual use descriptions:

- 'Commercial Vacant',
- 'Vacant Residential < 2 ac',
- 'Multi-Family Vacant', or
- '2 ac Or More Vacant'

Understanding which areas can be developed within the community provides oversight for land use planning and development and allows the District to plan for and manage growth in a sustainable way. As part of this project the District conducted a land supply analysis that compared the supply of zoned and designated land to the historic rate of growth to determine if the supply is adequate.

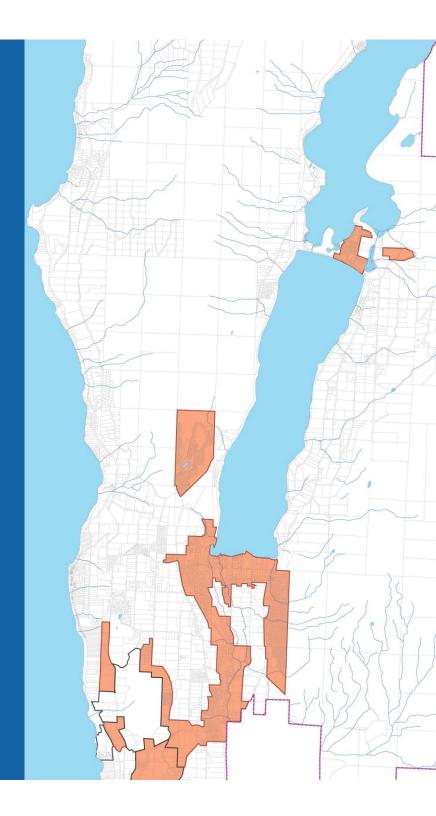


16.6 Amount of land redeveloped (Ha) or # of infill units Measures the amount of land that is re-developed or intensified through infill development to provide an overview of compact growth. (Data Source: District of Lake Country)	 The area of infill is not currently tracked by the Planning Department, but will be going forward in order to provide data for this indicator. Infill projects to date includes duplexes, townhouses, and accessory dwellings units. 	Redevelopment of existing areas and infill development contributes to a more compact and walkable area, reduces urban sprawl, and revitalizes the community. Current development in Lake Country is occurring primarily on greenfield sites, rather than redevelopment or infill.
16.7 Ratio of greenfield units developed to infill/redevelopment units Measures the amount of new lands that are developed compared to redevelopment/infill. (Data Source: District of Lake Country)	 The number of infill units built each year is not currently tracked by the Planning Department, but will be going forward in order to provide data for this indicator. Infill projects to date includes duplexes, townhouses, and accessory dwellings units 	Redeveloping or intensifying land uses in existing areas through infill development is more sustainable than developing greenfields (areas that were previously undeveloped).
16.8 Average lot size created Measure the average density of developments by units per hectare. (Data Source: District of Lake Country)	Based on parcels with 1 or more units, divided by the total area of those parcels, the average density of development in Lake Country is 1.85 units per hectare.	If greenfields are to be developed, it is important that they are well utilized and developed with high enough density to avoid the issues associated with urban sprawl. Over time, it is desirable for the value of this indicator to increase.



Compact Development Seeds of Sustainability:

- The District's Official Community Plan identifies specific areas for growth (map opposite) and establishes an urban containment boundary to guide growth and development in a way that will protect natural open spaces, sensitive ecosystems, and farmlands.
- The District has identified the Town Centre and Main Street as the 'heart' of the community and is currently looking for opportunities to create a vibrant and safe urban core with a variety of shops, services, housing options, and entertainment for residents and visitors to enjoy.



Conclusion

This report paints a partial picture of the current State of Sustainability in Lake Country.

Lake Country is a growing community that is retaining its agricultural roots while gradually expanding the diversity of its economic base. Lake Country is urbanizing in selected locations to offer more diversity and choice in housing types. Crime rates are low, and overall community health has the potential to improve with the completion of new walking trails and increased support for active modes of transportation.

The community has a history of strong volunteerism and many arts and culture events, which creates social cohesion and draws visitors to the area. Lake Country is working to strengthen its identity as a single community, and to further welcome residents and visitors of all abilities and ages.

Lake Country has taken steps to inventory its ecosystems, and it is now time to follow up by implementing restoration plans and enforcing protection of sensitive areas. Ongoing efforts to encourage alternatives to single-occupancy vehicles and to increase the energy efficiency of buildings will allow Lake Country to continue to reduce per capita emissions of greenhouse gases and meet its obligations under the Climate Action Charter. While food and agriculture have shaped Lake Country's history, care must be taken to keep value-added processing local. Finally, Lake Country must continue to diversify and strengthen its economy and tax base, which will assist with closing the existing infrastructure financing gap.