



Facts in Focus



2018

FACTS IN FOCUS

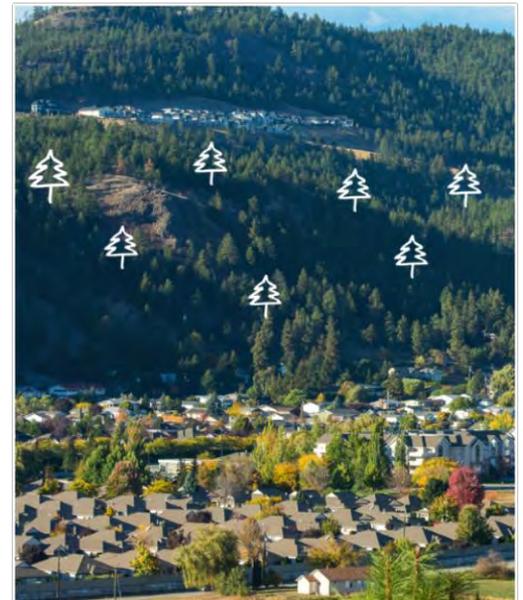
DID YOU KNOW?

Financing the Plan

Over the next 20 years the City of Kelowna is expected to grow by 50,000 people, providing significant benefits to the region, but also putting substantial pressure on the City to finance and build new infrastructure to support this growth. The decisions around where these residents are encouraged to live in Kelowna will determine the infrastructure that will be required and the financial impact to the City and taxpayers.

Funding is needed to support growth be it in the form of parks and public spaces, utilities, transportation systems, and climate change adaptation measures. Financing the growth-related infrastructure requires multiple sources of funding, from property taxes, development cost charges (DCCs) to other funding streams. However, by aligning the City's financial planning with its growth management strategy the City will be able to enhance property values, attract new business, raise investor confidence, and ensure community resiliency.

Network infrastructure such as roads, sewer, water, gas, hydro, fibre-optic, and natural gas are described as linked networks. In the urban core, infill development is able to connect to existing infrastructure, reducing the capital costs for new development. In suburban areas, the same network infrastructure does not exist, requiring major up-front capital costs to extend utilities and roads to the edge of the city. These up-front capital costs are largely borne by the developer; however, the City subsidizes these projects by contributing tax dollars to larger network infrastructure projects and is



Evidence clearly shows that people who live in spread-out car dependent neighbourhoods are likely to walk less, weigh more, and suffer from obesity and high blood pressure and consequent diabetes, cardiovascular and other diseases, compared to people who live in more efficient higher density communities. ⁱⁱ

INFRASTRUCTURE

Green infrastructure such as linear parks like the Mill Creek linear park system delivers on a range of city goals including: improved stormwater management and flood protection, access to green spaces, improved active transportation routes as well as the various nature and wildlife benefits.ⁱⁱⁱ



also responsible for the lifecycle costs (long-term replacement and operating and maintenance costs) of City infrastructure. There are also other indirect costs related to suburban development often shouldered by the public in the form of loss of agricultural and naturalized lands, health impacts, and increased greenhouse gas emissions.ⁱ In contrast, the development of complete communities in urban areas has many public benefits related to supporting sustainable transportation, encouraging healthy communities and attracting economic investment. By optimizing growth, the City of Kelowna can make efficient and effective use of infrastructure, ensuring a better return on investment for taxpayers and supporting the growth of complete communities.

What does the Current OCP Say?

The 2030 Official Community Plan (OCP) introduced a number of policies to support long-term growth management and sound infrastructure planning. The section below describes key OCP themes related to growth management as well as the planning and financing of infrastructure.

Key Policy Themes

- **Housing Mix:** Deliver services and infrastructure and create financial structures that will support the aim of having 57 per cent of new housing units in the form of townhouses and apartments.
- **DCC Framework:** Continue to structure DCC's so as to encourage centrally located, denser forms of housing to be built in complete communities that are well served by green infrastructure (parks and trees), sidewalks, bicycle lanes and transit.
- **Urban Centres and Densifying Neighborhoods:** Allocate resources to ensure civic capital is, as a priority, invested in Urban Core Areas with the purpose of making these areas safe, accessible, high quality living and working environments.
 - Transportation Infrastructure Priority: Transportation infrastructure will be funded, designed, constructed and maintained to meet the needs of users in the following priority:
 - Active Transportation (walking/cycling)
 - Transit
 - Movement of Goods & Services
 - High Occupancy Vehicles
 - Single Occupancy Vehicles

DID YOU KNOW?



It is estimated that a new home built in a sprawl scenario incurs about \$18,000 in infrastructure costs, while one built in a smart growth scenario incurs \$8,000.^{vi}



A Florida study conducted by James Duncan found that when compared to sprawl patterns, compact development reduces capital costs of roads by 60 per cent and utilities by 40 per cent.^v

- **Active Park Standard:** Using DCC revenue to provide 2.2 ha of parks for every 1,000 new residents.
- **Life cycle design analysis for key infrastructure planning:** The introduction of a holistic approach that accounts for the initial capital investment and long-term operation, maintenance and infrastructure replacement costs ensures the City takes a comprehensive view to understand the impacts of infrastructure investments.
- **Invest in infrastructure that supports multiple objectives:** Because the City has limited resources and numerous policy priorities, projects should be prioritized based on their ability to meet a range of City goals (i.e. transportation, sustainability, health, economic).

The OCP provides the baseline direction that informs the corresponding 20 Year Servicing Plan. For the current 2030 OCP, the total cost of the major servicing program was estimated to be \$784.7 million. To summarize, the cost of the program is as follows:

Arterial Roads Program	\$461.4
Water Pumping/Distribution/Reservoir	\$60.0
Sewer Collection/Lift Station System	\$41.1
Sewer Treatment/Disposal System	\$85.7
Parkland Acquisition Program	\$136.4
Total	\$784.7

The above costs do not reflect the cost of capital improvements to water systems by the Water Improvement Districts to accommodate growth which is to occur within their service delivery boundaries.

What's Working

The current OCP establishes many of the tools required for effective growth management and long-term infrastructure planning. The Permanent Growth Boundary has been an effective tool for limiting future development at the edge of the City. At the same time, the City has started to see a shift to development in the urban core where infrastructure and services are already in place. The City has a well-established DCC program that requires different types and location of projects to pay varying rates based on relative costs of servicing. For example, projects at the periphery of the City pay higher transportation DCC rates than projects in the urban core of the city.^{iv}

Areas to Explore

Looking ahead 20 years with a resiliency lens, Kelowna will be challenged to come up with the funding and resources to respond to the many critical issues facing the City. For example, chronic issues such as homelessness and affordable housing will need to be balanced with critical asset renewal needs and emergency response associated with wildfires or floods.

FAST FACTS

35%

The 2030 Infrastructure Plan anticipates that 35 per cent of infrastructure investments will be allocated toward replacement and renewal of existing infrastructure.

\$784.7 million

For the current 2030 OCP, the total cost of the major servicing program was estimated to be \$784.7 million

50%

At the site scale, the use of rain gardens, permeable pavers, bio-retention planters and other features can mitigate the amount of runoff by close to 50 per cent.

Accordingly, the City's ability to take a financial planning approach that supports community resiliency and economic stability will be of critical importance.

Due to the significant infrastructure deficits in the Urban Core, the City will also need to investigate options for new funding tools to augment the DCC program to deliver the necessary infrastructure to ensure a high quality of life.¹ The City will be forced to make tough decisions given as not all areas of the City can be developed to the same standard that was pursued for the Downtown.

Furthermore, as cities prepare for the increasing number of extreme weather events, many are investing in networks of green infrastructure. Green infrastructure describes the various ways a city can manage lands at a city, neighbourhood, and site scale to reduce runoff and limit the amount of water that ends up in the city's stormwater infrastructure. From a neighbourhood perspective, green infrastructure includes development of parks or urban creeks that can improve livability and act as detention ponds during major rain or flood events. At the site scale, the use of rain gardens, permeable pavers, bio-retention planters and other features can mitigate the amount of runoff by close to 50 per cent. Green infrastructure improves water quality and increases groundwater recharge, while providing amenities that contribute to a healthier and more livable community.

Notably, green infrastructure delivers the following features:

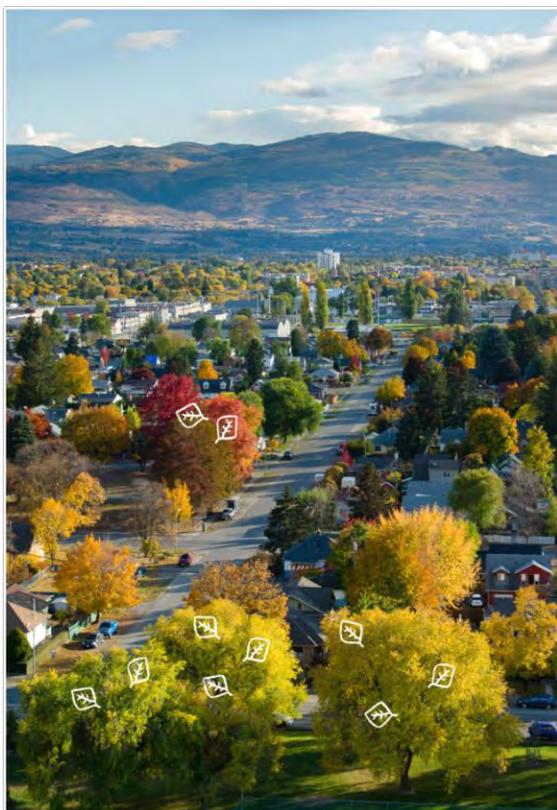
- 1. Multifunctional:** Green infrastructure such as creeks and wetlands provides the advantages of ecosystem functions, improving water and air quality with no cost to the public.
- 2. Adaptive:** In both its natural and engineered forms, green infrastructure can be applied at different scales to improve stormwater management and community resiliency.
- 3. Sustainable:** Green infrastructure provides a range of different benefits including environmental, social, economic and public health benefits. One of the most important benefits is the ability of green infrastructure to reduce the capital, maintenance and replacement costs for utility infrastructure.

In summary, future infrastructure investments must achieve multiple City objectives to ensure each dollar invested provides the greatest possible return to the community.

Imagine Kelowna

The City and community partners recently undertook the most extensive public engagement process to date to create a new community vision for the future. *Imagine Kelowna* is a vision for building a prosperous and sustainable city in the face of an uncertain future. The City will use *Imagine Kelowna* to help shape its short and long-term planning priorities and provide the foundation for future strategies, plans and projects.





Key themes that relate to financing the 2040 OCP:

Principle: Connected

- **Goal:** Embrace diverse transportation options to shift away from our car-centric culture

Principles: Responsible

- **Goal:** Concentrate on growing vibrant urban centres and stop facilitating urban sprawl
- **Goal:** Strengthen the protection of our land, water and air resources

Implications for future action

Imagine Kelowna affirms many of the core ideas of the 2030 OCP, highlighting the urgency of actions to reduce development in car dependent areas, protect the environment and encourage the growth of complete communities. To restrict suburban development, the City's Permanent Growth Boundary should be adhered to and future development must financially pay for its corresponding impacts. By removing subsidies that are indirectly facilitating suburban

development, the City will also be able to make redevelopment in the Urban Core more financially competitive. Additionally, the City can continue to leverage strategic infrastructure investments (ie. streetscape, parks) in the urban centres to attract private sector investment in the Urban Core.

Looking Ahead: Future Trends

The past is no longer a good predictor of the future. As Kelowna looks ahead to a growth pattern that responds to the impacts of a changing climate, demographic shifts, and rapid technological shifts the City will need to ensure its approach to financing growth also continues to evolve.

- **Urban infill vs greenfield:** As more people choose to live in walk-able urban communities in close proximity to services and amenities,^{vii} the City will need to tailor its financing strategies to reflect the trend of urban infill and urban centre re-development.
- **Asset Management:** The 2030 Infrastructure Plan anticipates that 35 per cent of infrastructure investments will be allocated toward replacement and renewal of existing infrastructure.^{viii}
- **Shifting demographics:** Average household sizes are declining nationally alongside rising costs for single-family housing.^{ix} This trend will likely increase the demand for new multi-family housing options in Kelowna.
- **Climate Change:** The increase in global temperature will result in more extreme weather events in Kelowna.^x For this reason, Kelowna needs to explore how to make investments (e.g. green infrastructure) that will prepare the City for increasing extreme weather events (flooding, extreme rain, etc) associated with climate change.
- **Autonomous vehicles:** The roll-out of autonomous vehicles (AVs) in the near future will impact travel behaviour and car ownership.^{xi} The degree to which cities encourage car-sharing in coordination with AVs will affect future vehicle usage rates. It will be important to ensure that AVs do not facilitate sprawl, fueling higher lifecycle infrastructure costs for the City.

Key Directions for 2040

Using the lessons learned through the successes and challenges in delivering previous policies, and the call to action from Imagine Kelowna, the following key directions emerge to help inform our action for the next 20 years:

- **Strengthen the protection of our land, water and air resources**
- **Review land use planning from a fiscal lens:** Ensure the City is examining future land use planning goals from a financial planning perspective to ensure the City's growth management strategy is placing the City on a fiscally sustainable path.
- **Focus development in less car dependent areas:** The City can adjust policies and regulations to reduce transportation subsidies that are facilitating suburban development and contributing to higher lifecycle infrastructure costs.
- **Prioritize investment in Urban Core:** Ensure the DCC program and Capital plan are prioritizing strategic investments (streetscaping, public space, and transportation improvements) to address the infrastructure deficit and attract growth in the Urban Core.
- **Update funding strategies to support urban centre growth:** Review options for new revenue streams to offset costs of much needed urban centre amenities (parks and public space) and transportation infrastructure (sidewalks, streetscaping, transit, & bike lanes).
- **Review DCC program principals:** Investigate options for how to structure the DCC program to ensure all development pays a fair share and indirect subsidies for suburban development are reduced.
- **Integrate green infrastructure:** Integrate green infrastructure into whole-systems infrastructure design.



DCC PROGRAM

The DCC program is often profiled as a program that is largely funded by development, but many “DCC” projects have significant taxation impacts. For example, the infrastructure planned as part of the DCC program is valued at \$785 million with 66 per cent or \$518 million developer funded and the remainder funded from the City through taxation, utility funding or government grants.



Challenges and Opportunities

Ultimately, the servicing plan that will be established to service the 2040 OCP will need to be developed with the goal of balancing the need to maintain and improve City services, while making the right investments to help meet the future needs of a growing and changing City. The City’s current funding tools are limited, and the City will need to explore new revenue options to deliver on the many requirements of a growing City.

To ensure efficient and effective use of infrastructure, the City must prioritize the development of complete communities in urban centres. As the City shifts more growth toward the urban core, the approach to policy and infrastructure investments will need to be recalibrated. For example, the total amount of investment in transportation may be similar, but funding may shift from roads and highways to transit and active transportation routes. To encourage this growth, the City’s key financing tools must be configured in a way that ensures all new development is paying its fair share. The city’s primary funding tool for the OCP is the 2030 DCC / 20 Year Financing strategy and the City’s long-term infrastructure plans must be aligned to support the city’s growth management goal of building vibrant urban centres.

The City’s greatest challenge in planning and budgeting for the future is to optimize our resources to maintain basic services while responding to the expanding needs of our growing population. The City must continually balance the need to provide services, facilities and infrastructure as prioritized by the community and Council with limited fiscal resources. However, the long-term financial capacity of the City is heavily influenced by the growth strategy direction that Council endorses. It will require a commitment to strong financial discipline and strategic capital investments that will achieve the City’s vision and benefit the greatest majority of our residents.

Explore the Story Map: [Financing the Plan](#) or visit kelowna.ca/ImagineNext to see how you can influence *Our Kelowna as we Grow*, the Kelowna 2040 Official Community Plan update.

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- ⁱ Blais, Pamela. 2010. *Perverse Cities: Hidden subsidies, wonky policy and urban sprawl*, UBC Press.
- ⁱⁱ Bray et al. 2005. *Report on Public Health and Urban Sprawl in Ontario*. Environmental Health Committee, Ontario College of Family Physicians.
- ⁱⁱⁱ City of Kelowna, 2017. *A Changing Climate: Special Edition Community Trends Report 2017*.
- ^{iv} City of Kelowna, 2011. *20-year Servicing Plan and Financing Strategy, Development Cost Charge Rates*.
- ^v Burchell R.W., et al, (1998). *The Costs of Sprawl--Revisited*. Transit Cooperative Research Program (TCRP) Report 39, published by Transportation Research Board, Washington.
- ^{vi} Centre for Energy and Environment, 1999. *Minnesotans for an Energy-Efficient Economy, and 1000 friends of America. Two Roads Diverge: Analyzing Growth Scenarios for the Twin Cities Region. Two Roads Diverge: Analyzing Growth Scenarios*.
- ^{vii} Resonance Consultancy, 2017. *Future of BC Housing: A Study of buyer and renter sentiment in British Columbia*
- ^{viii} City of Kelowna, 2016. *2030 Infrastructure Plan*.
- ^{ix} City of Kelowna, 2017. *Our Homes Today and Tomorrow: A Housing Needs Assessment*.
- ^x City of Kelowna, 2017. *A Changing Climate: Special Edition Community Trends Report 2017*.
- ^{xi} Senate of Canada, Standing Senate Committee on Transport and Communications, 2018. *Driving Change: Technology and the Future of the Automated Vehicle*.