

Memo



Date: Mar 10, 2011
File: 0160-20
To: City Manager
From: R. Cleveland, Director, Infrastructure Planning
Subject: 2010 Municipal Infrastructure Scorecard

Recommendation:

THAT Council receives, for information, the Report from the Director, Infrastructure Planning dated March 10, 2011, with respect to the 2010 Sustainable Municipal Infrastructure Scorecard.

Purpose:

To fulfill an obligation under Council Policy 352 (Sustainable Municipal Infrastructure) to “provide Council annual reporting on the actual performance of municipal infrastructure.”

Background:

Council Policy 352 (Sustainable Municipal Infrastructure) recognized that “the City’s municipal infrastructure provides the essential foundation for local economic prosperity and the quality of life for its residents, as well as making a fair and appropriate contribution to global sustainability.” The policy committed to the development, application and balanced achievement of a multiple bottom line framework of performance objectives for municipal infrastructure. Specific targets were established for 16 indicators in environmental, built capital, economic, social, cultural, financial and governance categories.







The 2010 scorecard follows. It measures the performance of municipal infrastructure rather than the performance of the City or the Corporation as a whole. This is the first time that the scorecard has been submitted. Measures were to be developed for about 1/3 of the indicators. In most cases, therefore, the data provides a current status measure only. Multi-year trends and comparisons to comparable cities are not yet possible. The dashboard score reflects trends in some instances, but generally reflects actions taken to improve the indicator, rather than the results of those actions; performance changes will show up only in subsequent years. The dashboard legend is:

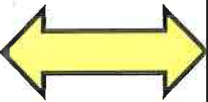

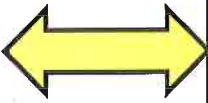


- green for progress toward achieving targeted performance,
- yellow for no change in the base-line performance, and
- red for regress away from achieving targeted performance.



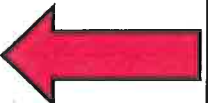

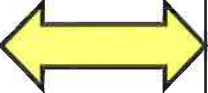
This information will increase in breadth and depth over time.

Performance Goal	2020 Target	Comments	Dashboard
NATURAL/ENVIRONMENTAL CAPITAL			
Climate Change-GHG emission reduction	33% reduction in GHG emissions	A practical plan was presented to Council in December 2010 to reduce corporate infrastructure GHG emissions by 22% by 2017. The	

A handwritten signature in the bottom right corner of the page.

Performance Goal	2020 Target	Comments	Dashboard
		Corporate infrastructure carbon footprint has been measured and is currently approximately 8500 tonnes. A grant application for Federal Gas Tax funding to achieve this goal was approved by Council on March 7, 2011.	
Reduce the ecological footprint to the Global Fair Share	33% reduction in ecological footprint	A measurement protocol is under development for application to the City's infrastructure inventory. The footprint reduction of specific major capital projects, such as the Glenmore Landfill Admin Building, is currently being calculated.	
Protect the watershed	Maintain filtration deferral with IHA	A filtration deferral application is in progress. Indications from IHA are that the water source protection plan is adequate and reflects improved processes & procedures.	
Steward self-organizing habitats to enhance biodiversity	12% of Kelowna's land base to be ecologically self-sustaining land/water habitats	Publically-owned parkland accounts for 7.6% of Kelowna's land-base, not including Okanagan Lake. Riparian restoration projects are regularly included in the annual Capital budget. An application to fund a riparian management plan for Mill Creek is being submitted to the OBWB this year.	
BUILT CAPITAL			
Pass along a stable or increasing value of public infrastructure to future generations	Maintain or improve the per capita value and condition index of municipal infrastructure	The replacement value of Kelowna's municipal infrastructure, excluding parks and parkland, has now been valued at \$3.4 billion with a condition index of 85% (good). Approximately 29% of the 2011 Capital budget (about \$20M) was allocated to asset management. The water utility is being re-calculated to account for asset management in 2011.	
ECONOMIC CAPITAL			
Maintain the Council mandated Level of Service for each infrastructure type	Ensure that infrastructure systems have the capacity to provide mandated service levels to all residents.	The 20-year servicing plan for growth anticipated in the 2030 OCP has been completed to maintain current Levels of Service (LOS) for water, sanitary, transportation and parkland acquisition. A full LOS standard will be developed in conjunction with the 10-year capital plan in 2011-12.	

Performance Goal	2020 Target	Comments	Dashboard
Achieve a positive return on public investments in public infrastructure.	To be determined through further economic research.	The GHG reduction plan proposes a positive return on investment through projected utility savings. Metrics to determine the full impact of public investments is currently under development.	
SOCIAL CAPITAL			
Connecting people and providing universal accessibility for a creative-resilient city	All residents are within a 5-minute walk of transit, public assembly and green space	The proximity to parks and transit facilities has been mapped and the new 20-year servicing plan has been designed to fill all gaps in the urban core. An active transportation arterial system has been introduced.	
Kelowna's public domain will be safe and secure	Crime rates against person and property on public property will be the lowest among similar cities.	Crime rates on public property have not been researched. CPTED principles are, however, used in the design of new streetscapes and the evaluation of existing public outdoor places and buildings. Utility box wraps are expected to decrease graffiti vandalism.	
CULTURAL/CREATIVE CAPITAL			
Create a preserve distinct & meaningful built and natural features to attract creative employees and businesses	Increase the number/capita of natural and built 'landmarks'	A cultural inventory has been mapped and a cultural strategy that acknowledges infrastructure is well advanced. <i>Bear</i> in Stuart Park was installed in 2010 and achieved broad public appreciation. The restoration of the Laurel Packinghouse was completed. Title to a considerable track of land adjacent to Layer Cake Mountain was acquired in the Canyon Creek deal. However, publically accepted criteria are still needed to qualify 'landmarks'.	
Create venues for in physical and cultural pursuits for a healthy community	Achieve or exceed per capita standards for recreational and cultural spaces in similar cities.	No work has been done on benchmarks for this indicator. However in 2010 expansion to the Family "Y" in Rutland began, the Mountain Bike Skills Park in Rutland was completed, over 10 km of multi-use pathway for walking and biking were completed in 7 locations, 7 new neighbourhood parks were constructed and Stuart Park (including the outdoor skating rink) was completed, all of which created new recreational and/or cultural venues.	

Performance Goal	2020 Target	Comments	Dashboard
Achieve recognition for innovation and design quality	Achieve at least 2 awards from professional peer organizations each year	In 2010, the City was named in 4 awards for excellence from recognized third parties ; 2 for the H2O, 1 for the Linear Park Master Plan and 1 for Stuart Park	
FINANCIAL CAPITAL			
Deliver quality infrastructure services at the least life-cycle cost	Costs per service unit will include total capital life-cycle costs and be comparable or less than similar cities.	Cost of service models are in progress or the Glenmore landfill and the water utility for presentation to Council in 2011. Research on comparable benchmarks in other jurisdictions has begun.	
Capital Reserves will keep pace with renewal and replacement needs.	Capital reserves will be maintained at 75% of annual requirements.	A reserve target of 2% of replacement value has been established (currently \$68M). Reserves have declined to around \$20M to pay the City's share of infrastructure stimulus projects. This will reduce long-term cash requirements, but creates a short term reserve deficit.	
Attract external investments to reduce local tax burden	External contributions to be 20% of annual capital budget	Almost 50% of the 2010 capital budget was funded thru external contributions, primarily because of the infrastructure stimulus grants.	
GOVERNANCE CAPITAL AND ORGANIZATIONAL CAPACITY			
Real public engagement is needed to support capital investment decisions	80% of citizens agree with Kelowna's infrastructure investment decisions	Work has not yet begun in measuring the extent of public engagement, although over 30 open houses were conducted on capital projects.	

It is evident that what gets measured gets managed. Since these indicators targets are being considered in the development of capital projects, attention is gradually being directed to building program-wide strategies to improve infrastructure performance across the entire report card. The value of this performance policy will improve as it becomes possible to assess trends and to benchmark Kelowna's performance against other similar-sized cities. Over time, the report card will provide increasingly reliable evidence of measurable progress toward real sustainability and durable prosperity. In future capital planning, the report card will be open to evolution through public engagement.

Internal Circulation:

- Director, Design & Construction
- Director, Civic Operations
- Director, Real Estate & Building Services
- Director, Financial Services

Together with the Director of Infrastructure Planning, this is the Coordinating Committee as set out in the Sustainable Municipal Infrastructure Policy.

Existing Policy:

Council Policy 352 was adopted by Council on March 8, 2010. The Report to Council dated March 2, 2010 indicated that measures for 7 of the 16 proposed indicators in the Multiple Bottom Line Framework of the Policy would be developed in 2010, conditional on hiring a Capital Asset and Investment Manager. This position remains unfilled; however, the commitment has been met. The Policy also requires that this scorecard be coordinated by the Department of Infrastructure Planning and then reviewed and approved by a cross-departmental Coordinating Committee comprised of all Directors directly responsible for municipal infrastructure.

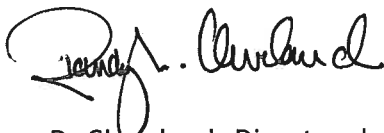
Financial/Budgetary Considerations:

A grant application is being submitted under the Capacity Building component of the 2011 General Strategic Priorities Fund of the Federal Gas Tax program to continue developing meaningful infrastructure performance measures. These indicators will inform the renewal of the 10-year capital plan during 2011-12, and employ a nationally recognized approach to integrated sustainable community planning.

Considerations not applicable to this report:

- Legal/Statutory Authority:
- Legal/Statutory Procedural Requirements:
- Personnel Implications:
- External Agency/Public Comments:
- Community & Media Relations Comments:
- Alternate Recommendation:

Submitted by:



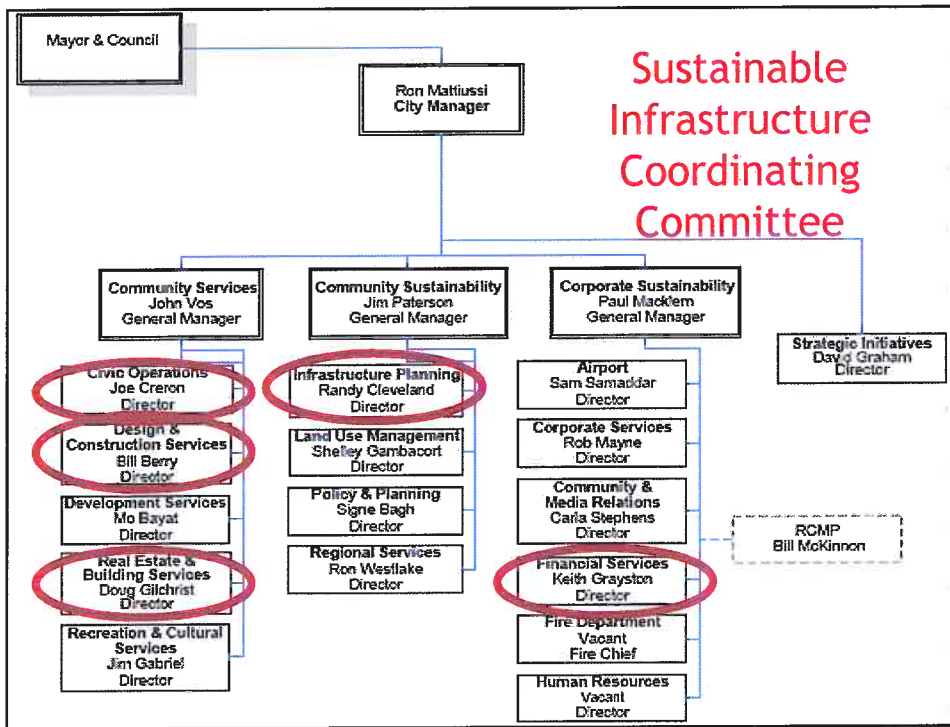
R. Cleveland, Director, Infrastructure Planning

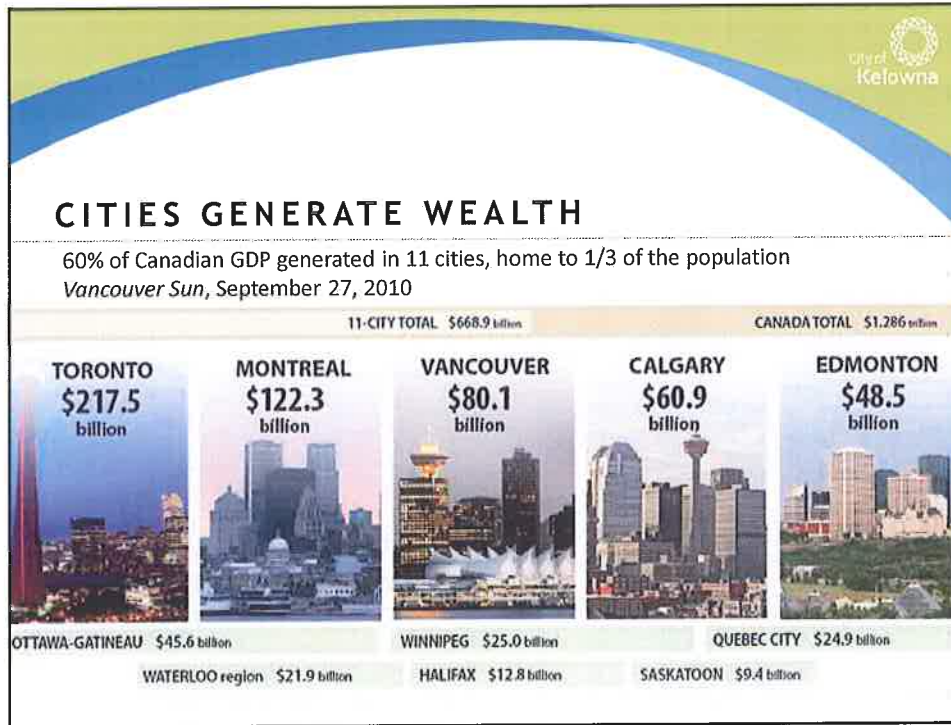
Approved for inclusion:



J. Paterson, General Manager, Community Sustainability

- cc:
- Director, Design & Construction
 - Director, Civic Operations
 - Director, Real Estate & Building Services
 - Director, Community & Media Relations
 - Director, Financial Services

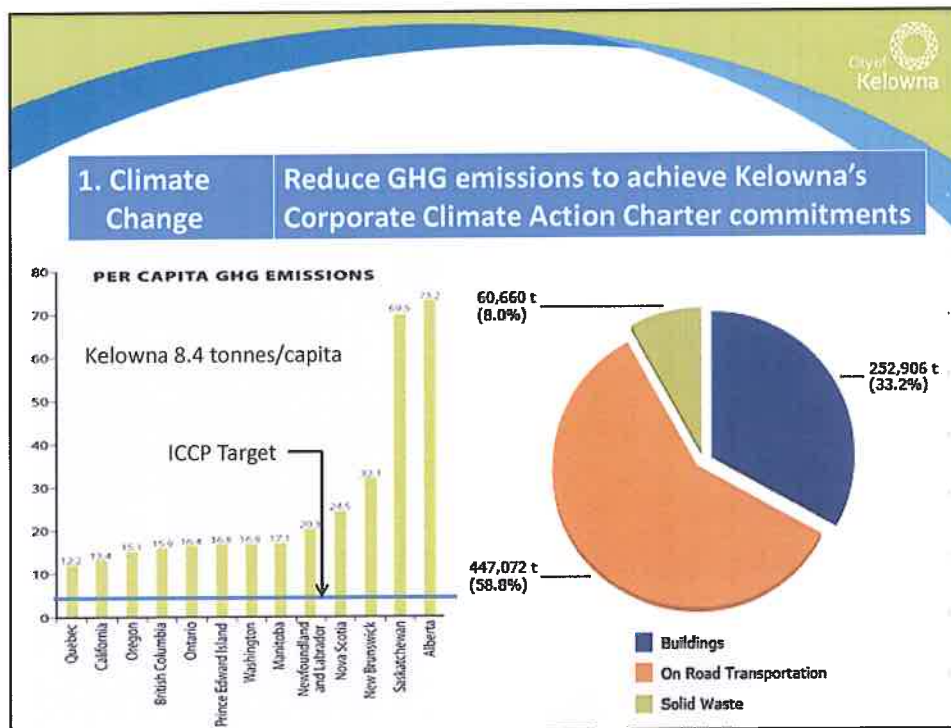
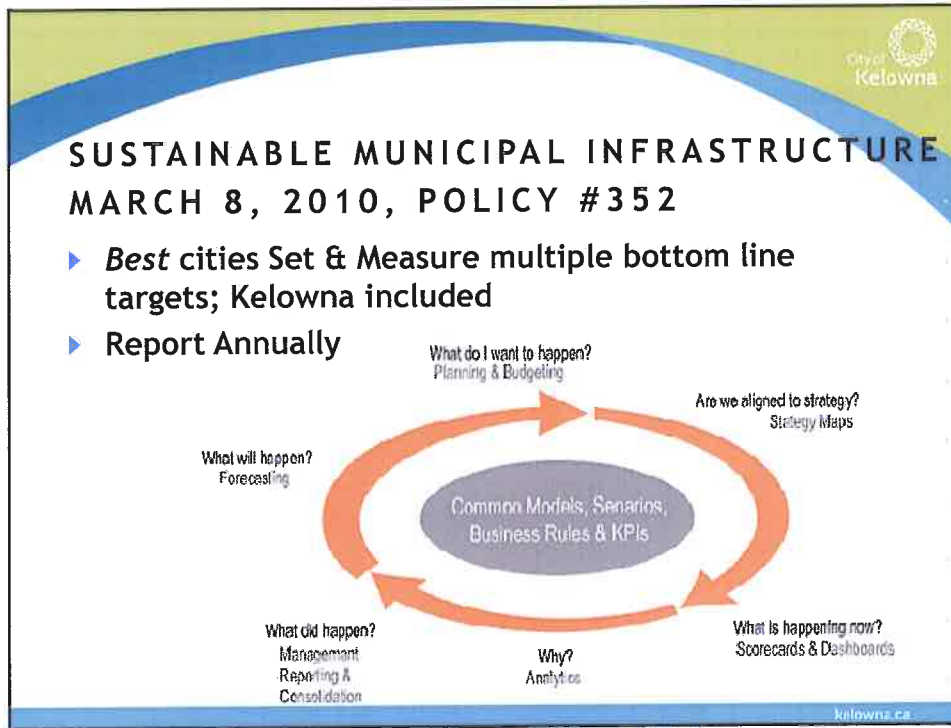


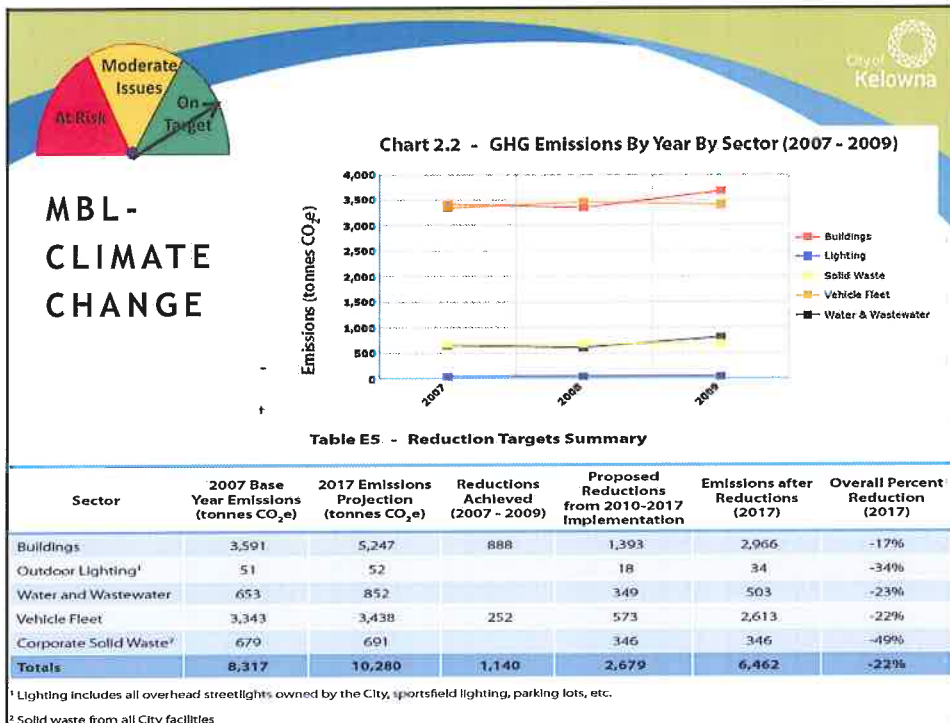
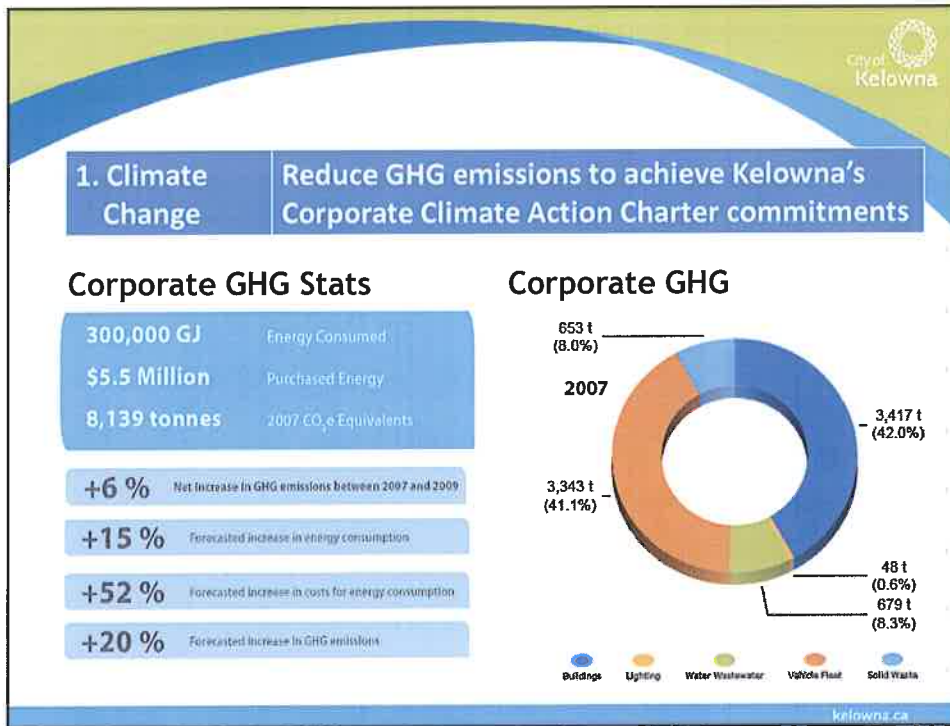


MUNICIPAL INFRASTRUCTURE

- ▶ Real Property Assets
 - ▶ Provide the physical structure of municipal services
 - ▶ Play a critical role:
 - ▶ Achieving **Quality of Life**
 - ▶ Enhancing **competitiveness and prosperity**
 - ▶ Being innovative and adaptable = **resilient**
 - ▶ Protecting the environment
 - ▶ Achieving community goals
 - ▶ Substantial part of taxation and budget

kelowna.ca





City of Kelowna

DISTRICT ENERGY

MOU: Terasen Gas

kelowna.ca

City of Kelowna

2. Water, material & energy consumption and waste production **Reduce resource consumption in infrastructure construction, operation & maintenance to global fair share 'ecological footprint'**

Ecological Footprint:
Measure of the productive land and water "that would be required to support a person's current lifestyle forever."

U.S. Parking Impacts:

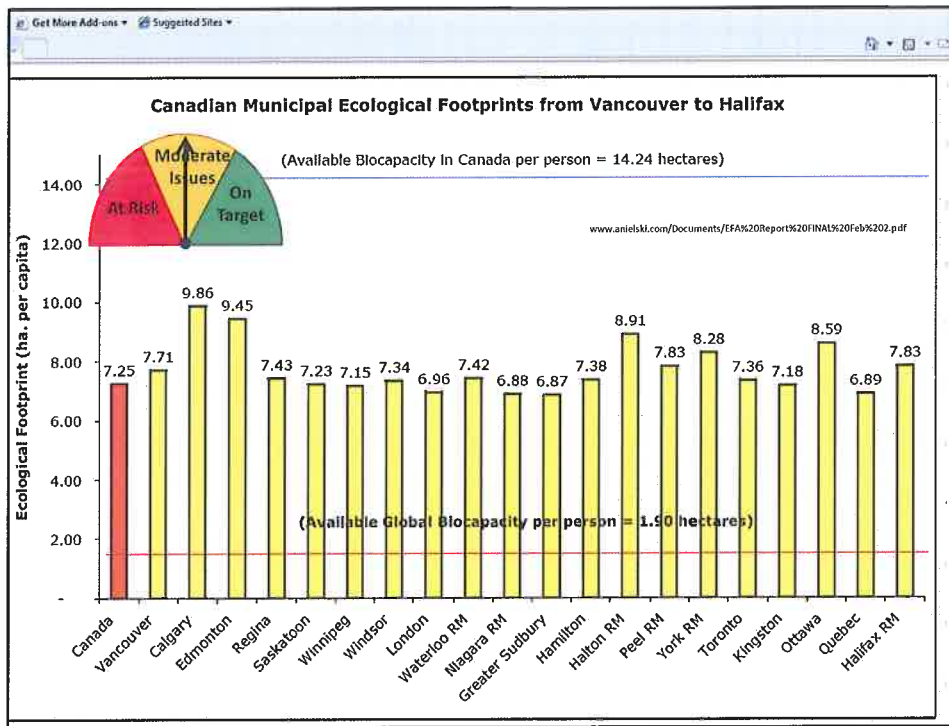
The Ecological Footprint

MEASURES
How fast we consume resources and generate waste

COMPARED TO
How fast nature can absorb or waste and generate new resources

Carbon footprint Building land Forest Cropland & pasture Fisheries

kelowna.ca



3. Water quality

Protect source waters well enough to achieve domestic water filtration deferral.

Clean Water... It Starts With You

Tackling Non-Point Source Water Pollution in BC

The well-being of British Columbians depends on a sustainable supply of clean water for their physical health and for a healthy environment to live and play in. BC's economy also depends on clean water for activities such as fishing, agriculture, and tourism.

Urban Runoff
Petrol, oil, antifreeze, grease, car fluids, and other pollutants are washed into storm drains, eventually reaching lakes, rivers, and streams. These pollutants can harm aquatic life and can be carried by water during rain events and snowmelt. This runoff can flow into streams and rivers, and eventually reach the ocean.

Agriculture
Fertilizers, herbicides, pesticides, and other chemicals used in agriculture can be washed into streams, rivers, and lakes. These pollutants can harm aquatic life and can be carried by water during rain events and snowmelt. This runoff can flow into streams and rivers, and eventually reach the ocean.

Onsite Sewer Systems
Onsite sewage systems, which are primarily used in rural areas, can cause leaks and spills of raw sewage into streams, rivers, and lakes. This runoff can flow into streams and rivers, and eventually reach the ocean.

Our Actions All Add Up!


For more information, contact the Environmental Protection Division at 250-860-8800. Website: www2.gov.bc.ca

City of Kelowna
City of Kelowna, British Columbia

kelowna.ca


City of Kelowna

4. Self-sustaining habitat Achieve UN goals (currently 12% of land area) for the preservation of self-sustaining habitats to promote ecological diversity & resilience.



About 28.5% of Kelowna classified as a sensitive area and somewhat protected.

- 7.6% of land area is publicly owned.
- Mill Creek Restoration Plan Grant for OBWB 2011



kelowna.ca

City of Kelowna

5. Preserve our built capital wealth Pass on the same value/capita of built infrastructure to future generations that underpins our own quality of life, at a fair - high state of repair.


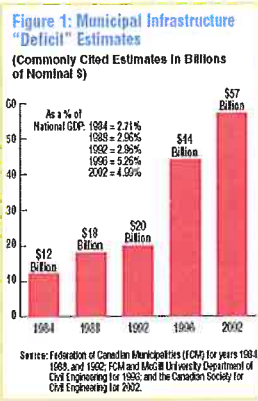


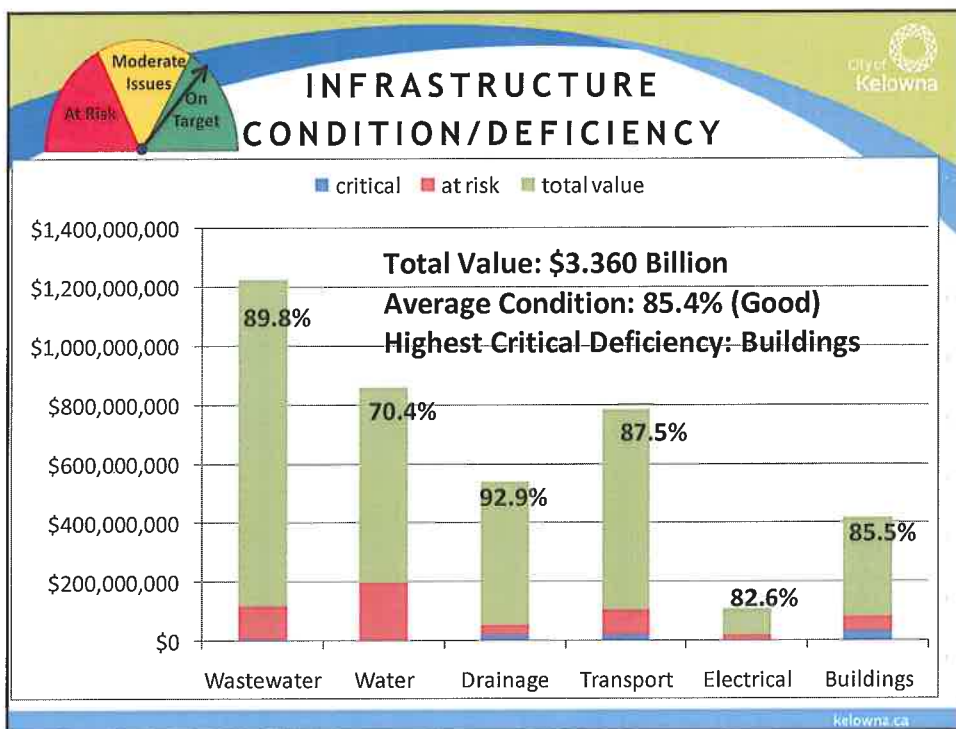
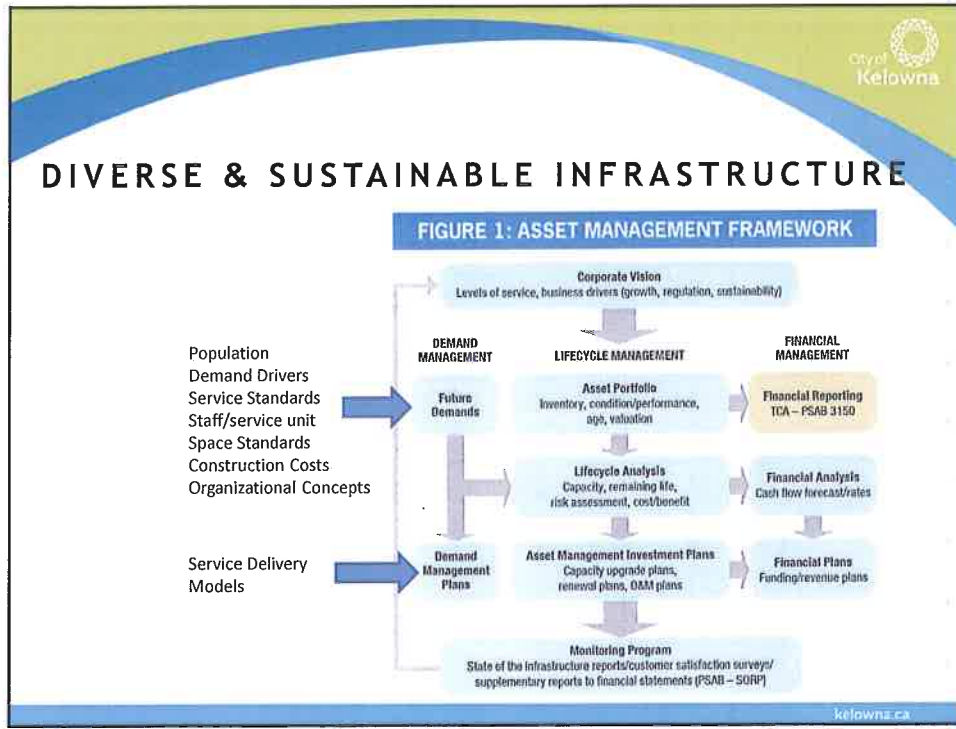
Figure 1: Municipal Infrastructure "Deficit" Estimates
(Commonly Cited Estimates In Billions of Nominal \$)

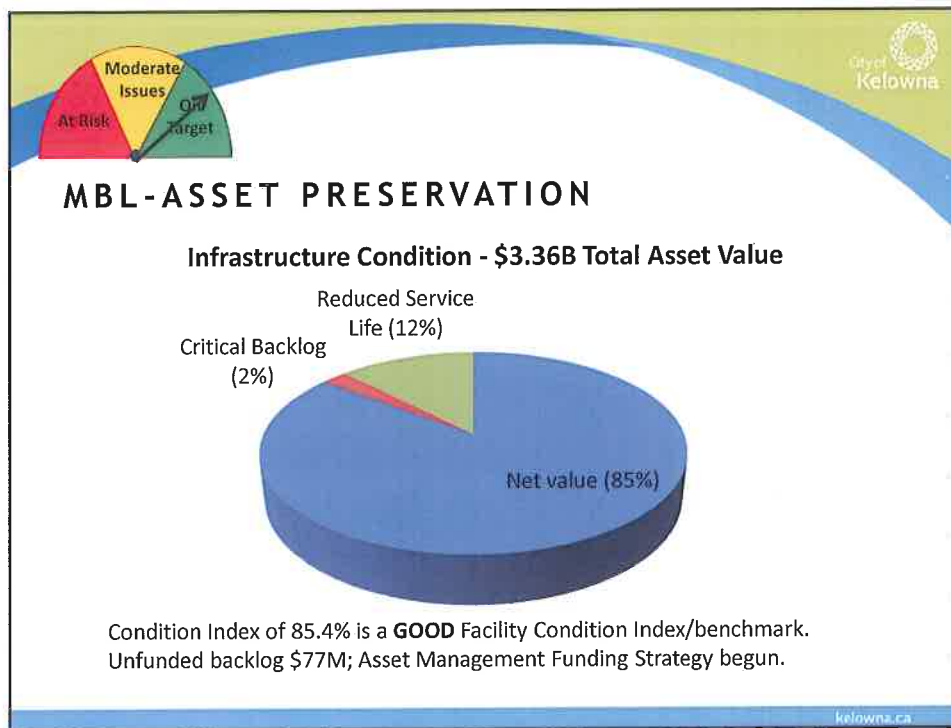


Year	Deficit (Billions of \$)	As a % of National GDP
1984	\$12	2.21%
1988	\$18	2.56%
1992	\$20	2.89%
1996	\$44	3.29%
2002	\$57	4.50%

Source: Federation of Canadian Municipalities (FCM) for years 1984, 1988, and 1992; PCM and McGill University Department of Civil Engineering for 1996; and the Canadian Society for Civil Engineering for 2002.


Prepared by C. G. Vander Ploeg, Canada West Foundation





6. Reliable Infrastructure Service Provide all Council approved "Levels of Service" in all infrastructure systems at lowest life cycle cost per service unit

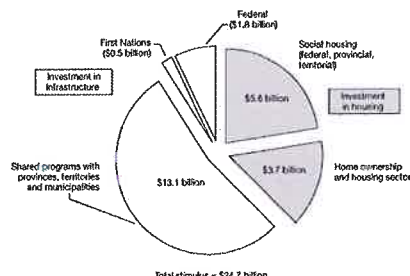
kelowna.ca



7. Return on Investment

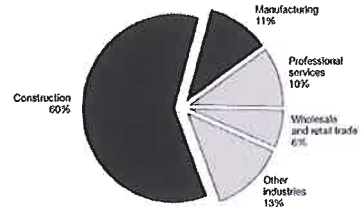
Achieve high return on public investment increasing the value and revenues of land and real property

Chart 1.9
2009–10 and 2010–11 Stimulus Spending on Infrastructure and Housing From All Levels of Government




Category	Amount
Investment in Infrastructure	\$13.1 billion
Social housing (federal, provincial, territorial)	\$5.6 billion
Home ownership and housing sector	\$3.7 billion
Shared programs with provinces, territories and municipalities	\$0.5 billion
Total stimulus	\$24.7 billion


Chart 1.8
Sectoral Distribution of Jobs Created From an Increase in Infrastructure Investment



Sector	Percentage
Construction	60%
Other industries	19%
Professional services	10%
Manufacturing	11%
Wholesale and retail trade	6%

Source: Statistics Canada, Input-output tables.







03


CITY PARKS FORUM BRIEFING PAPERS

How cities use parks for... Economic Development

- #1 - Real property values are positively affected.
- #2 - Municipal revenues are increased.
- #3 - Affluent retirees are attracted and retained.
- #4 - Knowledge workers & talent are attracted to live & work.
- #5 - Homebuyers are attracted to purchase homes.

Source: American Planning Association-City Parks Forum, 2002, www.planning.org/cpf





8. Connectivity

Create a walkable and universally accessible city with decreased automobile dependence. Connect people to jobs, goods, services, people and info/ideas.



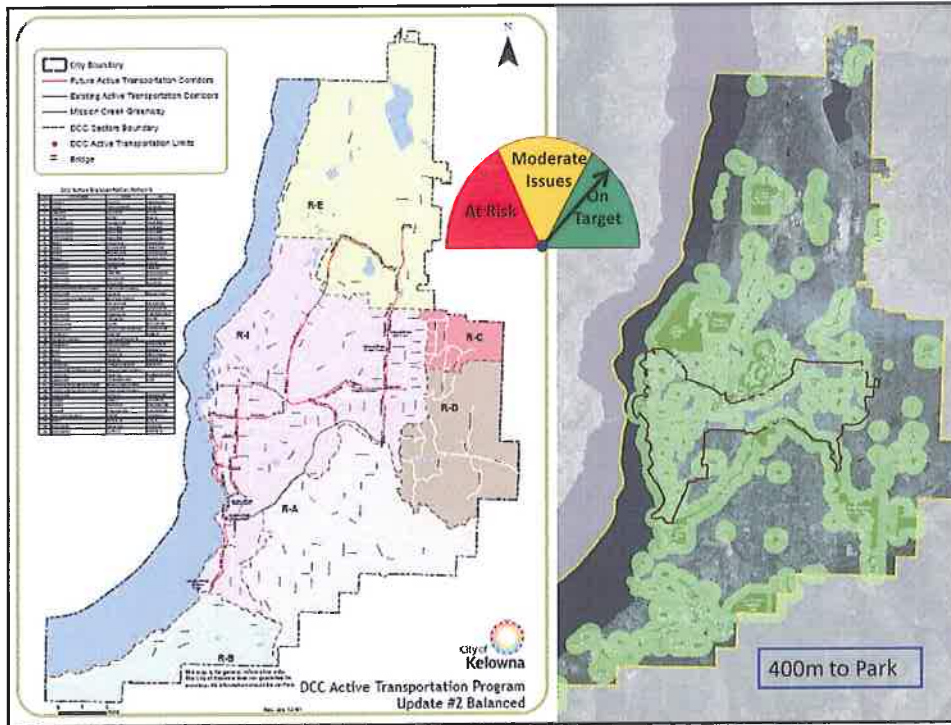
▶ MULTI-MODAL PATHWAYS:

- ▶ Houghton Road, Cawston Avenue, Lakeshore Road, Abbott Street, Gopher Creek, Parkinson including Hwy 97 overpass, Casorso-Barrera
- ▶ 11km
- ▶ \$6.3M in external stimulus funding



DAYTON STREET OVERPASS AT PRC





9. Safety & Security Residents feel safe and secure in the public domain and crime rates there are the lowest of similar size cities in Canada: a function of design and equity.

City of Kelowna logo in the top right corner.



10. Sport, Recreation & Cultural Venues Area/capita of public venues for participation & engagement equal or better than best comparable cities.



New: Family “Y” expansion, Stuart Park outdoor skating rink, 7 neighbourhood parks
Renewed: Elks & King stadiums, Rutland West Arena

kelowna.ca



11. Cultural Significance Create and retain distinct and culturally meaningful infrastructure (landmarks & public places) to promote sense of unique place and community belonging.





Laurel Packinghouse Restoration

Stuart Park “Bear”

Layer Cake Mountain Acquisition


kelowna.ca


12. Creative Infrastructure Leadership | Achieve local & peer recognition for leading edge approaches to sustainable infrastructure



H2O Adventure & Fitness:
BCRPA & OMRB


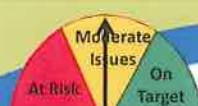


Linear Park Master Plan: CSLA



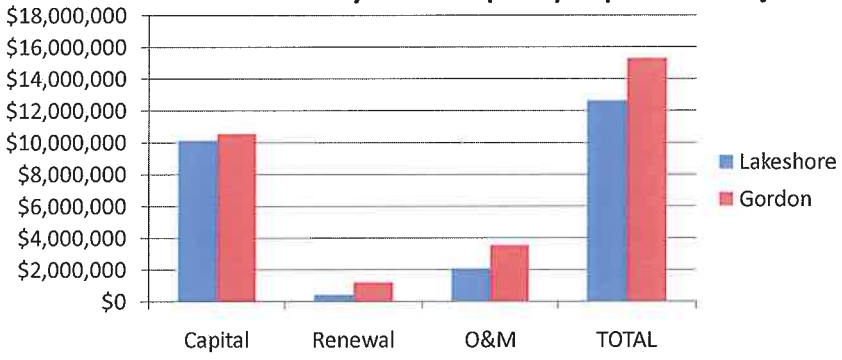
Stuart Park: DE

kelowna.ca

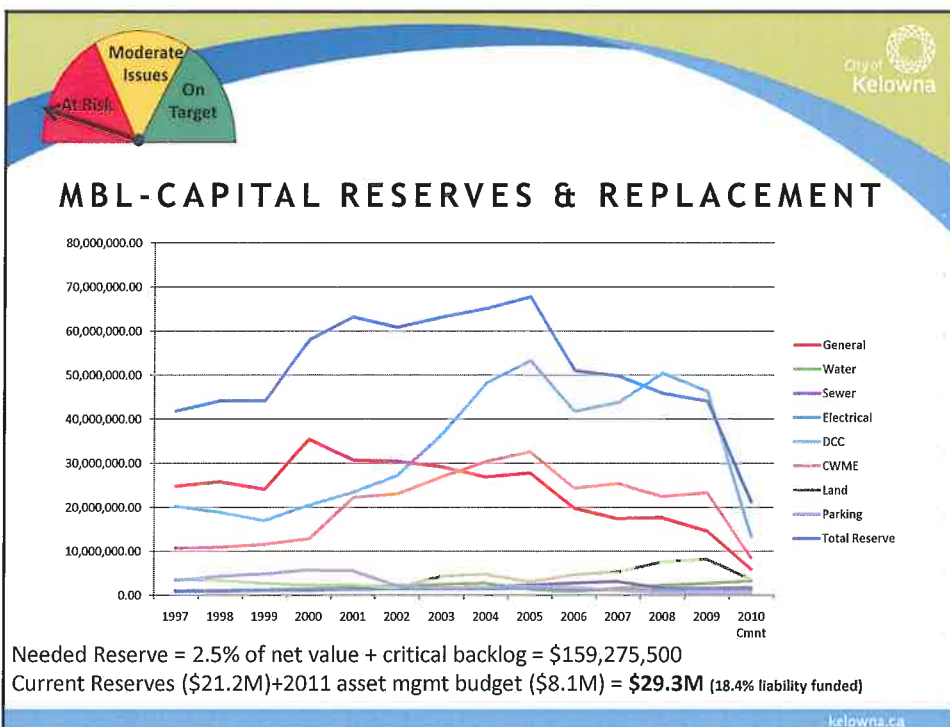
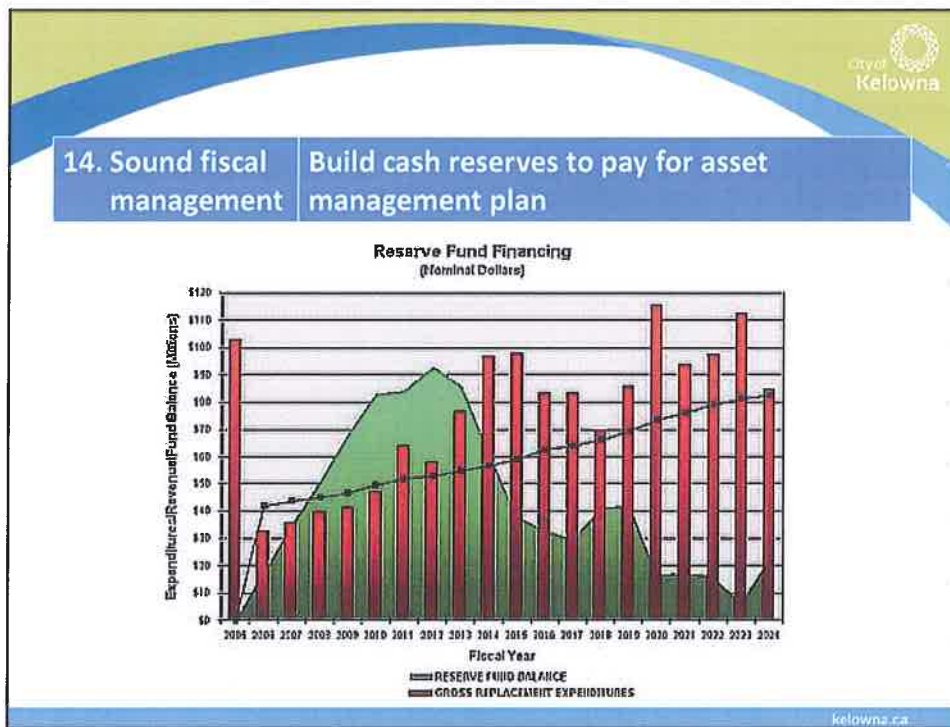
13. Affordability over service life | Achieve all Council-approved levels of service for infrastructure at the lowest "Life-Cycle Cost" per service unit

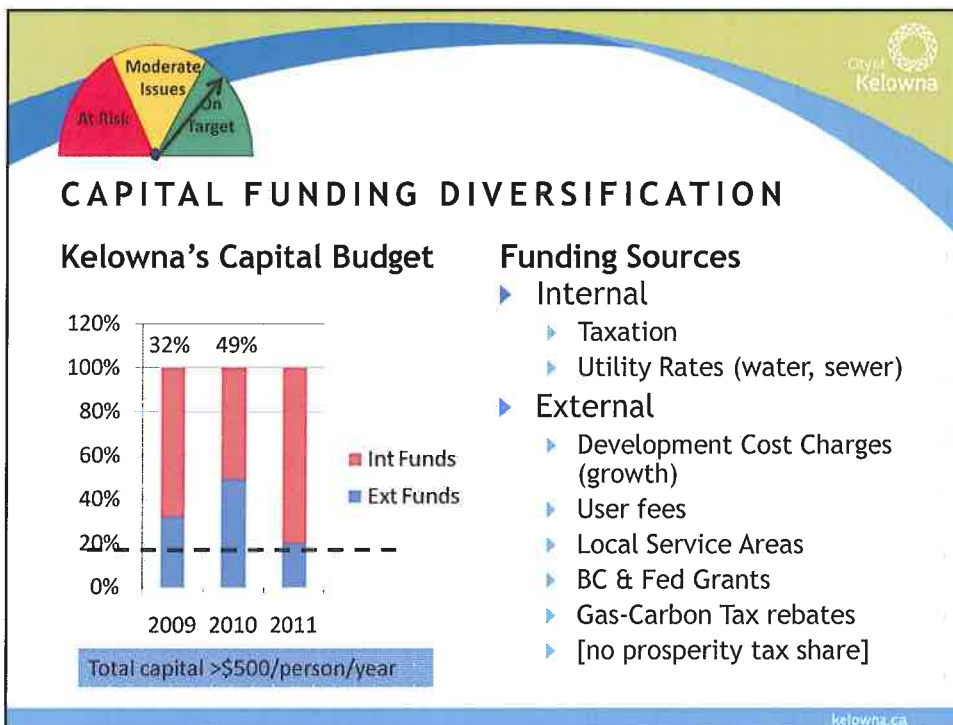
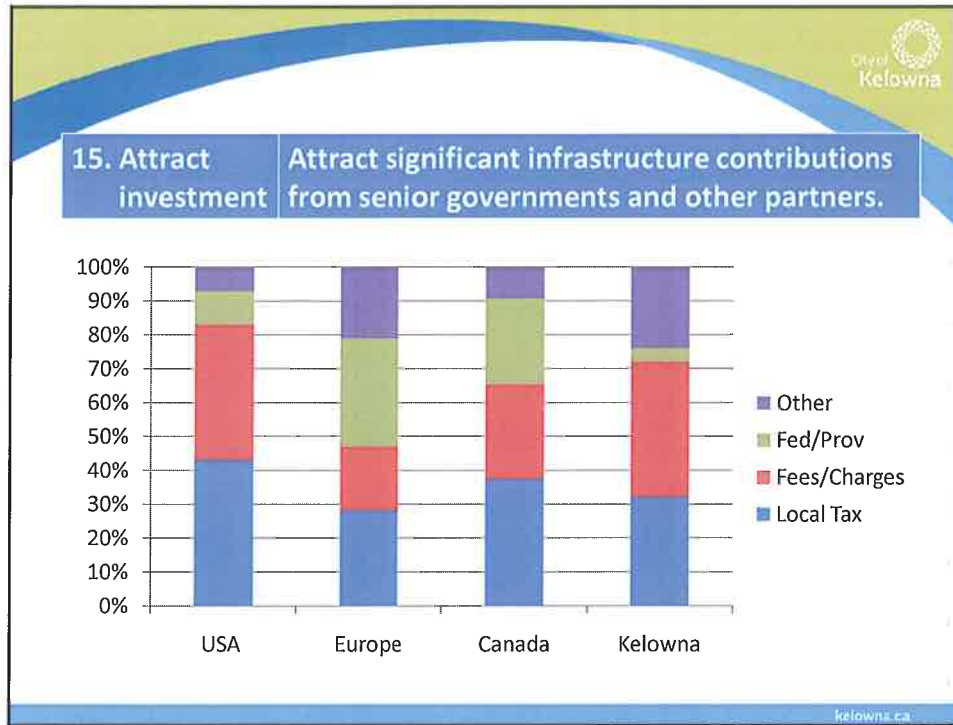
Gordon Sanitary Trunk Capacity Expansion Project



Category	Lakeshore	Gordon
Capital	\$10,000,000	\$10,500,000
Renewal	\$500,000	\$1,500,000
O&M	\$2,000,000	\$3,500,000
TOTAL	\$12,500,000	\$15,500,000

kelowna.ca





PUBLIC PARTICIPATION-GOVERNANCE CAPITAL

16. Public Accountability

The public is informed and engaged, and agrees that investment decisions are appropriate & achieve intended results.

High levels of risk in the situation
e.g. potential for negative social and environmental impacts

↑

Low levels of risk in the situation

Referendum	PARTNER	Commission of Inquiry Deliberative forum Independent advisory committee Citizen Jury Search conference
Deliberative poll	INVOLVE	Community advisory committee Stakeholder consultation Public meetings Consultation workshops
Survey	CONSULT	2-stage survey Seminar Exhibition and comments Charette Consultative workshops
Information night Awareness campaign INFORM Letterboxing		

Simple Information to be understood → Complex Information to be understood

kelowna.ca

FORMAL MBL ANALYSIS GLENMORE LANDFILL ENTRANCE FACILITY

City of Kelowna

MBL TOOLS IN THE 2030 OCP

Regenerative Design

Regenerating System

- ▶ Application of **ecological systems thinking** in the design of built environment.
- ▶ Objective: dynamic and holistic **integration of human and natural systems** to sustain on-going mutual benefit.
- ▶ **Place-making** approach to facilitating healthy, self-healing, energizing urban civilization.

Degenerating System

Integrated Design Process

- ▶ Interdisciplinary, inclusive and **collaborative** process of problem definition, options development, informed decision making and evidence based evaluation
- ▶ **Empowered partnership:** residents as public service consumers and community-building citizens

kelowna.ca

City of Kelowna

INDICATORS GET RESULTS

- ▶ Identify what matters
- ▶ Change awareness
- ▶ Make need for action more visible
- ▶ Inform action strategies
- ▶ Track the impact of actions on performance

“if a city is to learn from its experiences, it must be committed to effective and ongoing evaluation processes” Landry, 2008