20-Year Servicing Plan & Financing Strategy

Development Cost Charge Rates

Effective June 13, 2011

City of Kelowna
Infrastructure Planning

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I. INTRODUCTION

The purpose of the 20 Year Servicing Plan and Financing Strategy document is to provide a detailed analysis of the major servicing needs required to service growth projections as outlined in the 2030 Official Community Plan. The 2030 plan reflects the impact of the new 2030 OCP on the City's municipal infrastructure through:

- Updated project costs to reflect more recent construction costs
- Removing projects in the previous plan that have been completed
- Removing, revising the scope and adding projects that respond to the locations and magnitude of projected growth in the 2030 OCP
- Recalculating the DCC charges based on the planned projects divided by the anticipated units of residential and Industrial, Commercial and Institutional (ICI) construction in each sector.

In addition to measuring the financial impact of the major services a 10 year Capital Plan has been developed for infrastructure that will be required to satisfy operational, recreational, and cultural and safety demands of a growing community. A further element of a long term financial strategy is the measurement of the general taxation and utility rate impacts of the growth plan and formulating policies and direction for Council and the Community to effectively deal with future service level alternatives. This element is covered in the annual Financial Plan document for a five year period.

1. Purpose of a Servicing Plan and Financing Strategy

In order to accommodate continuing growth in Kelowna, construction of new services or expansion of existing services will be required.

Integration of a servicing plan and financing strategy with the growth plan, developed as a part of the Official Community Plan, is necessary to ensure that the plan is affordable in the form that the City Council and the community is being asked to support and adopt as a blueprint for future development.

The purpose of the Financing section of the Community Plan is to provide an overview of the general principles and methodologies which have been applied when apportioning costs of new growth between different lands uses in future development areas. Different land uses place a different level of demand on new infrastructure needs and cost-sharing methodologies must reflect the different levels of demand to the extent possible and practical.

There is a general recognition that the cost of provision of new infrastructure, to accommodate new growth, should primarily be the responsibility of new growth. However, there must also be some recognition given to the fact that some portion of new infrastructure will also be of benefit to present taxpayers and cost-sharing methodologies should reflect this principle.

A municipality's ability to finance new infrastructure, to accommodate new growth, is limited to powers granted by the Local Government Act. The Provincial Government, through legislation, has empowered municipalities with the right to impose

Development Cost Charges for major services such as arterial and collector roads, water systems, sanitary sewer systems, drainage systems, parkland acquisition and development.

Development Cost Charges, although a useful mechanism for financing new infrastructure, do have some limitations and do require that Council give consideration to whether the charges:

(a) are excessive in relation to the capital cost of prevailing standards of service
(b) will deter development, or
(c) will discourage the construction of reasonably priced housing or the provision of reasonably priced serviced land

Development of a 20 year capital improvement plan to match infrastructure needs with a projected growth plan is based on the best information available at the time of formulation of the plan.

It should be recognized that the plan is dynamic and the assumptions which drive the plan are subject to ongoing change.

If growth develops in a different form from that which was assumed to occur, and formed the basis for developing a servicing plan and financing strategy, there will be a need to re-examine the servicing requirements and measure the financial impacts of these changes.

2. Other Capital Expenditure Requirements

Although major services such as arterial roads, water systems, sewage systems, and park acquisition and development form the framework within which the city ultimately develops, there are many other infrastructure needs such as linear park and natural open space acquisition, park and playing field development, recreational/cultural facilities, or operational facilities and capital equipment that will be required in order to satisfy operational, recreational, cultural and safety demand within a growing community. All of these are financed through user fees and property taxes:

As servicing standards have evolved over the years, there is a significant part of the city which has developed at a service standard which is less than that which exists today and there is a need to put together a strategy and cost-sharing plan to bring those service standards to current standards.

Not only must the municipality ensure that future growth is adequately serviced in accordance with prevailing service standards, there is a need to ensure that existing infrastructure is maintained to a standard which will extend the useful life in a cost-effective manner. Infrastructure preservation is critical for existing and future buildings as well as the transportation and utility networks.

Although the Province has not provided municipalities with the authority to assess new growth directly with this type of required infrastructure, there are a variety of

other financing mechanisms which are specifically provided in other sections of the Local Government Act.
A combination of these financing mechanisms will be necessary in order to achieve the objectives outlined in the Official Community Plan:

- Long Term Borrowing authorized by a counter petition process or a Community referendum
- Grants or cost sharing programs provided by Senior levels of Government
- Developer Construct - Latecomer Agreements - recovery from benefiting property owners
- Formation of Benefiting (Specified) Areas - a form of direct user pay
- Short Term Borrowing - Five year maximum term/Statutory limits
- Public/Private partnerships
- Reserve Funds - funds put away in prior years for specific future purposes (parking, equipment replacement, landfill improvements)
- Pay-as-you-go (Taxation and Utility user rates)

Any of the funding mechanisms identified above which do not recover costs directly from the user will be recovered in the form of taxation or utility user rates from property owners in existence at the time the expenditure is incurred.

The major focus of this document is to provide an overall financing strategy for major infrastructure needs for which the municipality can assess a Development Cost Charge.

II. FINANCING STRATEGIES - COST SHARING PRINCIPLES

The purpose of this section of the 20 Year Servicing Plan and Financing Strategy is to provide an overview of the financing options available to the City to support the objectives of the Official Community Plan and to outline the general overall principles which were applied in the development of the financing strategies for the 2030 plan.

A detailed explanation Development Cost Charge concept has been included in this section including the purpose of a DCC Bylaw and the process which has been applied to the development of development cost charge rates.

1. Financing Options/Mechanisms

A municipality is empowered, by authorization of the Local Government Act, with a number of funding mechanisms to finance capital expenditure needs resulting from a combination of new growth demands and the provision of facilities to existing taxpayers.

Property Taxes/Utility Rates

Revenue from increased property taxes is a method used to raise general funding for capital and operating needs which will be of general benefit to the entire community.

This type of funding might be used for capital expenditures such as roads overlay programs, sidewalk network programs, civic facilities, recreation facilities and cultural facilities for which funds cannot be directly imposed on new development.

Property taxes can also be used as a means to raise additional operating funds and debt financing to fund new or expanded programs resulting from an increase in population or a desire from the community for new and improved levels of service.

Property taxes, based on the assessed value of a property, are a very general levy for services provided and do not bear a direct relationship to the services actually received or used by property owners.

Debt Financing

Debt Financing is available to each municipality as a means of financing major capital expenditures such as land purchases, water and sewer facilities, recreation facilities, civic buildings and cultural buildings which cannot normally be financed on a pay-as-you-go funding basis.

In some cases, it may be necessary to borrow funds to pay for major infrastructure improvements such as roadways and trunk mains which cannot be financed on a pay-as-you-go basis or where inflow of revenue from Development Cost Charges does not match the capital improvement program.

There are three (3) forms of debt financing available to the municipality:

(a) *Long Term Debenture Borrowing*

Generally requires an alternative approval process, assent of benefiting property owners or a referendum to incur a liability for the borrowing. A loan authorization bylaw is required and the borrowing can be for any purpose of a capital nature.

The City currently has a policy of limiting the debt repayment period to 15 years unless the borrowing is on behalf of directly benefiting property owners, in which case the repayment period can be extended to 20 years.

(b) *Agreements*

Council may incur a liability, under an agreement, if the liability is not a debenture debt and the liability period is not longer than the reasonable life expectancy of the service. An alternative approval opportunity must be provided if the agreement is for more than 5 years (including rights of renewal that could exceed 5 years).

(c) *Short Term Borrowing*

Can be used to finance almost any type of capital expenditure; however, a municipality is limited to a gross borrowing of $50 per capita. The term of repayment cannot exceed 5 years and simply requires a short-term borrowing bylaw.

Provincial Grants/Federal Grants

A municipality may apply to the Province for unconditional or one-time grants to assist in the financing of specific capital projects. The funding available is almost always based on a percentage of the estimated cost of the project with a fixed maximum grant.

Provincial Grants, for growth-related expenditures, have been steadily declining over the past five to ten years. The major grants received in recent years have been to assist with construction of sewer related facilities.

Specified Area Levies/Local Improvements/Developer Construct

Property owners, by petition of Council, are able to request that the city consider upgrading services on their local street such as roads, sidewalks, curb & gutter and drainage. Property owners can also request that new services be provided such as water and sanitary sewer service, again by petition to Council or by Council initiative.

In return for these services, benefiting property owners must contribute their proportional share of the cost of these services either in the form of an “up-front” payment or by making annual debt repayment payments on their property taxes.

Services which are required for a specific new development must be paid for directly by the developer and would include services such as water, sewer, subdivision roads and drainage works within a subdivision as well as other improvements to roadways

abutting the subdivision. In many cases these major services must be extended from their existing termination point to the subdivision to be serviced.

When a developer extends services which are of benefit to other "fronting" property owners, the Local Government Act makes provision for a recovery mechanism to the developer extending services.

Public-Private Partnerships

Public-Private Partnerships are relatively new in Canada and provide an alternative to the traditional manner in which major projects are funded and operated.

Public-Private partnerships offer a new approach to the delivery of public services; however, they also require new forms of evaluation.

Public-Private partnerships, as well as offering a vehicle for substituting private for public investment, may also encourage innovative, more comprehensive solutions, as well as long term and more complex benefits, especially risk transfer.

Reserves-on-Hand

Reserves that a municipality may have available for capital project financing are generally levied on an annual basis and have been set aside for a specific future purpose. Reserves may also be set aside on a one-time basis if unexpected funds become available such as year-end surplus.

Examples of reserve funding set aside on a regular basis to fund future capital expenditures are the public works and fire equipment replacement fund, landfill reserve fund and the parking reserve.

Development Cost Charges

Development Cost Charges are those levies, adopted by bylaw, which are required to be paid by new development to assist with the financing of major off-site services required to accommodate new growth.

Development Cost Charges are currently limited to arterial/collector roads, water and sewer systems, parks acquisition and development, and storm drainage facilities.

A more detailed explanation of the Development Cost Charge methodology and process is provided in the next section of this document.

2. General Principles Applied to the Proposed Financing Plan

The 2030 - 20 Year Servicing Plan was developed by the City's Infrastructure Planning department in response to the land use plan and growth projections provided by the City's Planning department.

Each major service was analyzed in detail to determine the new infrastructure requirements and the costs of providing this infrastructure was developed from the best engineering information available. In some cases this information was readily available from previous engineering work and studies and in other cases it was necessary to estimate costs based on a conceptual level of engineering work.

In terms of process, it was necessary to develop cost sharing methodologies which properly allocated program costs between existing taxpayers and new growth based on general overall financing principles. The following are some of the general principles applied in developing a financing strategy for this plan:

- Quantification of the level of funding assistance from senior levels of government which for the most part is limited to funding already approved. An exception to this general principle is in the roads program and details of projected funding assistance are included in Section V - Analysis of Cost Sharing.

- Existing deficiencies, as identified through analysis, will be paid for through the general taxation process or from utility revenues and not recovered from new growth.

- Some infrastructure improvements which provide capacity beyond the 20 year planning horizon will be financed from general taxation or utility rates until such time as a new growth plan is developed which utilizes the capacity.

- Secondary Suites are charged a reduced DCC rate of $2,500 per suite; the cost differential between that rate and the Residential 3 category normally applied is borne by taxation/utilities.

- Infrastructure improvements which provide a city-wide benefit and are of benefit to both existing taxpayers (known as existing benefit; paid by taxation) and new growth have been cost-shared on the ratio of existing to projected total population at the end of the planning horizon at year 2030. The ratio for this plan is 73.4%. This principle has specifically been applied to:

    - All Active Transportation projects
    - One half of bridge costs where there is no existing bridge in place
    - Sidewalks on arterial roads
    - Bicycle paths on arterial roads
    - John Hindle Dr. 1, 2, 3, & 4 (Glenmore Rd – Station 12+750)

- Other infrastructure improvements which provide a city-wide benefit and are of benefit to both existing taxpayers and new growth have been cost-shared on an individual basis. This principle has been specifically applied to the following roads:

    - Clement 2 (Spall - Hwy 33) – 33.3%
    - Clement 3 (Hwy 33 – McCurdy) – 33.3%
    - Highway 33(1) (Clement 2 – Enterprise) – 33.3%

- Guisachan 2 (Gordon – Nelson) -33.3%
- Guisachan 3 (Ethel – Gordon) – 33.3%
- Hollywood 3, 4, 5 & 6 (McCurdy Rd – Sexsmith) – 33.3%
- Pandosy 1 (Raymer – Rose) – 33.3%
- Sexsmith 3 (Glenmore Bypass – Valley Road) – 33.3%
- Lakeshore Bridge (Mission Creek) – 50%
- Lakeshore 1 - $0.66 million
- Lakeshore 2 - $1.6 million

For infrastructure costs which are primarily growth related, and are to be borne by new growth over the 20 year planning horizon, it was necessary to establish new cost sharing methodologies where appropriate or to affirm the cost sharing methodologies which had previously been adopted by Council.

- Retain the sector approach to allocation of individual service costs to the extent practical and defensible. Utilizing the sector approach for cost sharing simply recognizes that off-site servicing costs, on a per unit basis, may be more costly in outlying areas than in the inner urban areas of the city.

- Retain differential rates which reflect a different level of demand on certain types of services by different land uses. The application of this cost sharing principle will result in a lower Development Cost Charge rate for apartments than for a single family residential lot.

It is important to ensure that the rates for commercial, industrial and institutional development are proportional to the Single Family rate to reflect demand.

- The cost sharing methodology is different for each service and is reflective of how the demand on the service is measured. Using the same unit to measure impact for roads as sewer trunks would result in a totally inequitable sharing of costs.

- Establishing a level of assist on new growth projects which is reflective of the benefit of new growth infrastructure to existing taxpayers. The established assist factor must be financed from general taxation or from utility rates.

The following is an identification of the major overall methodology and cost sharing changes which are incorporated into the 2030 Plan:

- Provision of a 5 step density gradient to provide differential rates for residential units. This is to reflect the lower level of demand for most services as density of development increases.

- Retain a flat rate charge for all secondary suites (including carriage houses and suites in accessory buildings) constructed throughout the city.

- Amalgamation of Roads Sector D and Sector F into 1 sector (D) to include both sides of Highway 33.

- Funding for road enhancements (stamped asphalt, median treatment, boulevard trees and irrigation) has been changed from taxation to new growth for all roads sectors.

- No local improvement funding is anticipated in the cost sharing strategy.

3. The Development Cost Charge Concept

Development Costs Recovery is legislative authority provided by Section 932 of the Local Government Act as a means of assisting local government to pay the capital cost of providing, constructing, altering or expanding sewage, water and highway facilities and providing park land to service, directly or indirectly, the development for which the charge is being imposed.

(a) Purpose of a Development Cost Charge Bylaw

The purpose of a Development Cost Charge Bylaw is to set forth the general conditions under which D.C.C. levies would apply, generally in concert with the municipality's zoning bylaw.

In addition, the bylaw would provide detailed schedules of the rates which would apply for different services, different land uses and in different areas of the city.

Where different sectors attract a different levy, a map which provides specific boundaries in which different rates apply must be approved as a part of the bylaw.

(b) Approach to Preparation of a Development Cost Charge Bylaw_

- Develop growth projections identifying factors such as population growth by year, housing mix (single family vs. apartments) and estimate commercial, industrial and institutional growth.

- Identify growth areas, project housing mix within those growth areas and project the level of growth on an annual basis.

- Develop major servicing needs to match the growth plan including the arterial road network, sewage collection/treatment/disposal systems, water supply/distribution/storage systems and park land requirements.

- Develop costs for major servicing needs

- Develop cost sharing methodologies that reflect level of benefit to existing taxpayers and new growth.

- Develop cost sharing methodologies that reflect the level of benefit for different new growth land uses.

4. Development Cost Charges - Enabling Legislation

Sections (932 - 937) of the Municipal Act along with Regulations regarding terms of payment have been paraphrased for clarity. The purpose of this section is to provide the legal framework for the imposition of Development Cost Charges:

- The capital costs to which Development Cost Charges apply
- When Development Cost Charges are payable
- When Development Cost Charges are not payable
- Conditions for Installment Payments
- How Development Cost Charges may vary by land use and area of the city
- Council's obligations when considering a Development Cost Charge Bylaw
- How Development Cost Charges reserves are handled

Development Cost Charges may be imposed, by bylaw, to assist the local government to pay the capital costs of:

- Sewage Facilities
- Water Facilities
- Drainage Facilities
- Highway Facilities (Except Off-Street Parking Facilities)
- Providing & Developing Park Land

to service, directly or indirectly, the development for which the charge is imposed.

Development Cost Charges are payable by every person who obtains:

- approval of a subdivision, or
- a building permit

but no charge is payable where:

- the building permit is for a church, or
- the value of the work authorized by the permit does not exceed $50,000.

DCC's may be paid by installment if the charge exceeds $50,000, on the basis of 1/3 down, 1/3 at the end of one year, and the balance at the end of the second year. No interest is charged on the outstanding balance if payments are made on time; however, the developer must deposit security in the form of a letter of credit to guarantee payment.

A DCC is not payable where:

- the development does not impose new capital cost burdens on the municipality, or
- A DCC has been previously paid, unless further development will impose new capital cost burdens on the municipality.

If a developer is required to construct off-site services for which a DCC is payable, the DCC will be reduced by an amount equal to the cost of the off-site works constructed, up to the amount of the DCC for each type of service.

DCC's may vary with respect to:

- different zones or different defined or specified areas,
- different uses,
- different capital costs as they relate to different classes of development,
- and different sizes or different numbers of lots or units in a development.

but the charges in the schedule shall be similar for all developments that impose similar capital cost burdens.

Council, in fixing Development Cost Charges, shall take into consideration future land use patterns and development, the phasing of works and services and the provision of park land in an Official Community Plan and whether the charges:

- are excessive in relation to the capital cost of prevailing standards of service,
- will deter development, or
- will discourage the construction of reasonably priced housing or the provision of reasonably priced serviced land.

Council shall make available, to the public, on request, the considerations, information and calculations used to determine the Development Cost Charges.

Revenues from DCC's must be deposited in a reserve fund established for each purpose, and the funds, together with earned interest, can only be spent for:

- the provision or construction of facilities, or
- principal and interest on debt incurred for facilities, or
- in the case of Parks DCC's, interest earned on funds in the reserve may be used to provide fencing, landscaping, drainage, irrigation, buildings, etc.

III. GROWTH PROJECTIONS - OFFICIAL COMMUNITY PLAN

The purpose of this section of the 2030 - 20 Year Servicing Plan and Financing Strategy is to detail growth projections which have been used as a basis for developing the servicing plan and subsequent financing strategy.

Details of the settlement plan, including increasing density to reduce urban sprawl and to increase the efficiency of the city's infrastructure, are included in the Official Community Plan document and it is, therefore, not necessary to repeat all of that information again in this document.

1. Residential Growth Assumptions - Land Use Plan

The development of a comprehensive servicing plan and financing strategy is directly linked to the growth assumptions contained within the Official Community Plan.

Population is projected to increase, from the January 1, 2010 estimate of 118,657, by just over 36% during this current 20 year planning horizon resulting in a population of 161,701 by the end of the year 2030.

In order to adequately address the impact of this level of growth on existing infrastructure it is also necessary to project the annual growth rate over that same planning horizon as well as the areas of the city in which this growth will occur.

The development of this plan is based on an annual percentage increase in population of 1.88% for the first 5 years of the plan, 1.58% for the next 5 years, 1.38% for the third 5 years and reducing to 1.22% over the last 5 years of the plan. This is equivalent to a 1.52% growth rate assumption over the full 20 year period.

The number of housing units required to service the projected population over the 20 year planning horizon is directly impacted by the estimated population per household.

The average population per household for this plan has been estimated at 2.2 persons per household. Single family households have been estimated to contain an average of 2.8 persons per household while high density households have an estimated household population of 1.5 persons per household.

The annual percentage population growth, the estimated number of persons per household and the housing mix of single family versus multi-family dwelling units are used to determine the number of residential units that will be required over the 20 year planning horizon and will share in the costs of new infrastructure requirements.

Based on all of the factors provided within the growth plan, the estimated number of residential dwelling units required over the 20 year planning horizon is 19,952, a 22% decrease from the 2020 program of 25,539 household units.

2. Residential Growth Assumptions – Density Gradient

The 2030 - 20 Year Servicing Plan & Financing Strategy has six categories of residential density and is based on the density of development rather than on the type of dwelling unit. Density gradient based residential DCC's are established based on the relative impact of the dwelling unit on municipal services. The six categories were developed based on engineering data and planning analysis to reflect local considerations. The six categories, including a typical building form, are:

- Residential 1 – developments with a density of not more than 15 units per net hectare (single family, secondary suite, duplex)
- Residential 2 - developments with a density greater than 15 and less than or equal 35 units per net hectare (small lot single family, row housing)
- Residential 3 - developments with a density greater than 35 and less than or equal to 85 units per net hectare (row housing and up to four storey apartment buildings)
- Residential 4 - developments with a density greater than 85 units per net hectare (apartments greater than four storey's)
- Residential 5 - multi-family residential units of 55.8 square meters or less
- Secondary Suites – a self-contained accessory dwelling unit located within a single detached building or in an accessory building.

Equivalency factors are established to reflect the relative impact on infrastructure for each service. The land use category, Residential 1, serves as the baseline for the assessment of impacts on infrastructure of the other five residential land uses.

	Roads	Water	Sewer
Residential 1	100%	100%	100%
Residential 2	94%	67%	83%
Residential 3	67%	48%	56%
Residential 4	63%	34%	54%
Residential 5	49%	28%	44%
Secondary Suites	67%	48%	56%

Secondary Suites are normally considered as Residential 3; however, a Council Bylaw changed the charge to a flat fee of $2,500, with the revenue difference borne by taxation.

The impact for parkland requirements is considered to be the same for each residential category. Although there could be an argument to use a different parkland rate for the different residential categories based on density it is also true that parkland requirements in multi-family areas is more expensive than in single family areas.

3. Commercial/Industrial/Institutional Growth Assumptions

The servicing plan and financing strategy must also consider the demand that will be placed on services by commercial, industrial and institutional growth over the 20 year planning horizon. The additional non-residential growth is required to service the additional population which will take up residence in the city over that same 20 year horizon. All measures are in metric.

Estimated Commercial Growth	300,308 sq. meters
Estimated Institutional Growth	60,732 sq. meters
Estimated Industrial Growth	20 hectares

For the development of a cost-sharing model which reflects the relative demand on services of one type of land use to another, it is necessary to convert commercial, industrial and institutional growth to an equivalent residential unit for each service.

Commercial - Roads	302 sq. mtrs. = 1 residential unit
- Water	242 sq. mtrs. = 1 residential unit
- Sewer	242 sq. mtrs. = 1 residential unit
Institutional - Roads	302 sq. mtrs. = 1 residential unit
- Water	242 sq. mtrs. = 1 residential unit
- Sewer	242 sq. mtrs. = 1 residential unit
Industrial - Roads	.405 hctrs. = 1 residential unit
- Water	.145 hctrs. = 1 residential unit
- Sewer	.145 hctrs. = 1 residential unit

High School developments to Grade 12 and residential student housing units on college and university campus would be exempt from a Roads charge.

4. Unit Equivalent Considerations - Explanation of the D.C.C. Unit Calculation

The purpose of a Development Cost Charge is to recover some of the investment the City must make in extending and upgrading a service to accommodate population growth and the development which accompanies it. There is a relatively direct correlation between population growth and the impacts to water, sanitary sewer, roads and parks services.

Since it is not feasible to charge a DCC directly on population, the City has adopted a system based on equivalent units.

Equivalent units are an indirect but effective way of representing population. To facilitate DCC calculations, Planning staff project population growth in terms of both residential and non-residential development. Since the unit of development for each

land use category differs (units for residential, hectares for industrial and floor area for commercial and institutional), each Development Unit is converted to a common reference unit called an Equivalent Unit.

Currently, the impact of one (1) Equivalent Unit on a service is defined to be equivalent to the impact of one (1) single family residence. That is:

One (1) Equivalent Unit = 1 S.F. Residential Unit

Development Units for land use categories other than Single Family Residential are converted to Equivalent Units according to the overall average impact of each different type of Development Unit.

Expressing projected population growth in terms of Development Units, and then converting these to Equivalent Units has worked reasonably well for the water, sanitary sewer, roads and parks services.

5. Table of Growth by Development Area - By Service Type

The number of growth units, when converted to the single family residential equivalent, differs for different services for the following reasons:

- Not all of the growth units as projected by the Planning Department will be serviced by sanitary sewer services. Sanitary sewer services are based on the assumption that growth in the South East Kelowna sector will be serviced by septic disposal or by a batch treatment plant (Gallaghers Canyon) with field disposal of effluent.

- Not all growth units will be serviced by the City's water system. This plan assumes that Irrigation Districts will service all growth units within their service boundaries. Irrigation Districts which will provide water service to support the growth plan are South East Kelowna Irrigation District, Black Mountain Irrigation District, Rutland Water Works and the Glenmore-Ellison Irrigation District.

- As previously detailed, the demand on services as equated to a single family residential unit is different for each service. This will result in a different number of equivalent residential units for purposes of cost-sharing of program costs for each service.

The following is a table detailing the number of equivalent single family residential units for each service which have been used to calculate the Development Cost Charge unit cost for program costs which are attributable to new growth:

Land Use	Arterial Roads	Water	Sewer Trunks	Sewer Treatment	Parks
Residential 1	7,140	3,498	7,114	7,114	7,140
Residential 2	637	621	569	569	678
Residential 3	5,420	2,428	4,574	4,574	8,089
Residential 4	1,682	775	1,393	1,393	2,670
Residential 5	235	135	211	211	480
Secondary Suites	600	255	492	492	895
Commercial	993	935	1,242	1,242	n/a
Institutional	202	195	282	282	n/a
Industrial	48	4	136	136	n/a
Total Equiv. Units	16,957	8,846	16,013	16,013	19,952

The following tables provide growth details by service type and sector:

CITY OF KELOWNA
GROWTH RECONCILIATION BY SERVICE
ROADS

SECTOR 'A' - S.E. KELOWNA

LAND USE	BASE UNITS	GROWTH	EQUIVALENCY PER UNIT	EQUIVALENT UNITS
RESIDENTIAL 1	UNIT	27	1.00	27
RESIDENTIAL 2	UNIT	0	0.94	0
RESIDENTIAL 3	UNIT	0	0.67	0
RESIDENTIAL 4	UNIT	0	0.63	0
RESIDENTIAL 5	UNIT	0	0.49	0
SECONDARY SUITE	UNIT	40	0.67	27
SUB-TOTAL RESIDENTIAL		67		54
COMMERCIAL	SQ.MTRS.	0	302	0
TOTAL INSTITUTIONAL	SQ.MTRS.	0	302	0
LESS: INST. TO GRADE 12	SQ.MTRS.	0	302	0
NET INSTITUTIONAL	SQ.MTRS.	0	302	0
INDUSTRIAL	HCTRS	0	2.47	0
TOTAL EQUIVALENT POPULATION				**54**

SECTOR 'B' - SOUTH MISSION

LAND USE	BASE UNITS	GROWTH	EQUIVALENCY PER UNIT	EQUIVALENT UNITS
RESIDENTIAL 1	UNIT	1,906	1.00	1,906
RESIDENTIAL 2	UNIT	20	0.94	19
RESIDENTIAL 3	UNIT	230	0.67	154
RESIDENTIAL 4	UNIT	0	0.63	0
RESIDENTIAL 5	UNIT	0	0.49	0
SECONDARY SUITE	UNIT	40	0.67	27
SUB-TOTAL RESIDENTIAL		2,196		2,106
COMMERCIAL	SQ.MTRS.	10,811	302	36
TOTAL INSTITUTIONAL	SQ.MTRS.	9,500	302	31
LESS: INST. TO GRADE 12	SQ.MTRS.	-9,500	302	-31
NET INSTITUTIONAL	SQ.MTRS.	0	302	0
INDUSTRIAL	HCTRS	0	2.47	0
TOTAL EQUIVALENT POPULATION				**2,141**

SECTOR 'C' - N.E. RUTLAND

LAND USE	BASE UNITS	GROWTH	EQUIVALENCY PER UNIT	EQUIVALENT UNITS
RESIDENTIAL 1	UNIT	635	1.00	635
RESIDENTIAL 2	UNIT	20	0.94	19
RESIDENTIAL 3	UNIT	40	0.67	27
RESIDENTIAL 4	UNIT	0	0.63	0
RESIDENTIAL 5	UNIT	0	0.49	0
SECONDARY SUITE	UNIT	3	0.67	2
SUB-TOTAL RESIDENTIAL		698		683
COMMERCIAL	SQ.MTRS.	2,500	302	8
TOTAL INSTITUTIONAL	SQ.MTRS.	0	302	0
LESS: INST. TO GRADE 12	SQ.MTRS.	0	302	0
NET INSTITUTIONAL	SQ.MTRS.	0	302	0
INDUSTRIAL	HCTRS	0	2.47	0
TOTAL EQUIVALENT POPULATION				**691**

SECTOR 'D' - E. OF INNER CITY (NE HWY 33)

LAND USE	BASE UNITS	GROWTH	EQUIVALENCY PER UNIT	EQUIVALENT UNITS
RESIDENTIAL 1	UNIT	1,428	1.00	1,428
RESIDENTIAL 2	UNIT	80	0.94	75
RESIDENTIAL 3	UNIT	180	0.67	121
RESIDENTIAL 4	UNIT	0	0.63	0
RESIDENTIAL 5	UNIT	0	0.49	0
SECONDARY SUITE	UNIT	20	0.67	13
SUB-TOTAL RESIDENTIAL		1,708		1,637
COMMERCIAL	SQ.MTRS.	8,244	302	27
TOTAL INSTITUTIONAL	SQ.MTRS.	0	302	0
LESS: INST. TO GRADE 12	SQ.MTRS.	0	302	0
NET INSTITUTIONAL	SQ.MTRS.	0	302	0
INDUSTRIAL	HCTRS	0	2.47	0
TOTAL EQUIVALENT POPULATION				**1,664**

SECTOR 'E' - N. OF INNER CITY

LAND USE	BASE UNITS	GROWTH	EQUIVALENCY PER UNIT	EQUIVALENT UNITS
RESIDENTIAL 1	UNIT	1,360	1.00	1,360
RESIDENTIAL 2	UNIT	0	0.94	0
RESIDENTIAL 3	UNIT	970	0.67	650
RESIDENTIAL 4	UNIT	0	0.63	0
RESIDENTIAL 5	UNIT	0	0.49	0
SECONDARY SUITE	UNIT	24	0.67	16
SUB-TOTAL RESIDENTIAL		2,354		2,026
COMMERCIAL	SQ.MTRS.	20,620	302	68
TOTAL INSTITUTIONAL	SQ.MTRS.	11,000	302	36
LESS: INST. TO GRADE 12	SQ.MTRS.	-3,000	302	-10
NET INSTITUTIONAL	SQ.MTRS.	8,000	302	26
INDUSTRIAL	HCTRS	13	2.47	33
TOTAL EQUIVALENT POPULATION				**2,153**

SECTOR 'I' - INNER CITY

LAND USE	BASE UNITS	GROWTH	EQUIVALENCY PER UNIT	EQUIVALENT UNITS
RESIDENTIAL 1	UNIT	1,784	1.00	1,784
RESIDENTIAL 2	UNIT	558	0.94	525
RESIDENTIAL 3	UNIT	6,669	0.67	4,468
RESIDENTIAL 4	UNIT	2,670	0.63	1,682
RESIDENTIAL 5	UNIT	480	0.49	235
SECONDARY SUITE	UNIT	768	0.67	515
SUB-TOTAL RESIDENTIAL		12,929		9,209
COMMERCIAL	SQ.MTRS.	258,133	302	854
TOTAL INSTITUTIONAL	SQ.MTRS.	55,732	302	184
LESS: INST. TO GRADE 12	SQ.MTRS.	-3,000	302	-10
NET INSTITUTIONAL	SQ.MTRS.	52,732	302	174
INDUSTRIAL	HCTRS	6	2.47	16
TOTAL EQUIVALENT POPULATION				**10,253**

TOTAL ROADS - ALL SECTORS

LAND USE	BASE UNITS	GROWTH	EQUIVALENCY PER UNIT	EQUIVALENT UNITS
RESIDENTIAL 1	UNIT	7,140	1.00	7,140
RESIDENTIAL 2	UNIT	678	0.94	637
RESIDENTIAL 3	UNIT	8,089	0.67	5,420
RESIDENTIAL 4	UNIT	2,670	0.63	1,682
RESIDENTIAL 5	UNIT	480	0.49	235
SECONDARY SUITE	UNIT	895	0.67	600
SUB-TOTAL RESIDENTIAL		19,952		15,714
COMMERCIAL	SQ.MTRS.	300,308	302	993
TOTAL INSTITUTIONAL	SQ.MTRS.	76,232	302	252
LESS: INST. TO GRADE 12	SQ.MTRS.	-15,500	302	-51
NET INSTITUTIONAL	SQ.MTRS.	60,732	302	201
INDUSTRIAL	HCTRS	20	2.47	48
TOTAL EQUIVALENT POPULATION				**16,957**

CITY OF KELOWNA
GROWTH RECONCILIATION BY SERVICE
WATER

SECTOR 'A' - CENTRAL

LAND USE	BASE UNITS	GROWTH	EQUIVALENCY PER UNIT	EQUIVALENT UNITS
RESIDENTIAL 1	UNIT	81	1.00	81
RESIDENTIAL 2	UNIT	507	0.67	340
RESIDENTIAL 3	UNIT	4,778	0.48	2,293
RESIDENTIAL 4	UNIT	2,279	0.34	775
RESIDENTIAL 5	UNIT	480	0.28	134
SECONDARY SUITE	UNIT	443	0.48	213
SUB-TOTAL RESIDENTIAL		7,645		3,836
COMMERCIAL	SQ.MTRS.	214,608	242	887
INSTITUTIONAL	SQ.MTRS.	34,732	242	144
INDUSTRIAL	HCTRS	0.4	6.92	3.0
TOTAL EQUIVALENT POPULATION				4,870

SECTOR 'B' - SOUTH MISSION

LAND USE	BASE UNITS	GROWTH	EQUIVALENCY PER UNIT	EQUIVALENT UNITS
RESIDENTIAL 1		1,907	1.00	1,907
RESIDENTIAL 2		20	0.67	13
RESIDENTIAL 3	UNIT	230	0.48	110
RESIDENTIAL 4	UNIT	0	0.34	0
RESIDENTIAL 5	UNIT		0.28	0
SECONDARY SUITE	UNIT	39	0.48	19
SUB-TOTAL RESIDENTIAL		2,157		2,050
COMMERCIAL	SQ.MTRS.	10,811	242	45
INSTITUTIONAL	SQ.MTRS.	9,500	242	39
INDUSTRIAL	HCTRS	0	6.92	0.0
TOTAL EQUIVALENT POPULATION				2,133

SECTOR 'D' - CLIFTON

LAND USE	BASE UNITS	GROWTH	EQUIVALENCY PER UNIT	EQUIVALENT UNITS
RESIDENTIAL 1	UNIT	1,510	1.00	1,510
RESIDENTIAL 2	UNIT	400	0.67	268
RESIDENTIAL 3	UNIT	50	0.48	24
RESIDENTIAL 4	UNIT	0	0.34	0
RESIDENTIAL 5	UNIT	0	0.28	0
SECONDARY SUITE	UNIT	50	0.48	24
SUB-TOTAL RESIDENTIAL		1,960		1,826
COMMERCIAL	SQ.MTRS.	694	242	3
INSTITUTIONAL	SQ.MTRS.	3,000	242	12
INDUSTRIAL	HCTRS	0.1	6.92	0.9
TOTAL EQUIVALENT POPULATION				1,842

TOTAL WATER - ALL SECTORS

LAND USE	BASE UNITS	GROWTH	EQUIVALENCY PER UNIT	EQUIVALENT UNITS
RESIDENTIAL 1	UNIT	3,498	1.00	3,498
RESIDENTIAL 2	UNIT	927	0.67	621
RESIDENTIAL 3	UNIT	5,058	0.48	2,428
RESIDENTIAL 4	UNIT	2,279	0.34	775
RESIDENTIAL 5	UNIT	480	0.28	134
SECONDARY SUITE	UNIT	532	0.48	255
SUB-TOTAL RESIDENTIAL		11,762		7,712
COMMERCIAL	SQ.MTRS.	226,113	242	935
INSTITUTIONAL	SQ.MTRS.	47,232	242	195
INDUSTRIAL	HCTRS	0.6	6.92	3.9
TOTAL EQUIVALENT POPULATION				**8,846**

CITY OF KELOWNA
GROWTH RECONCILIATION BY SERVICE
SEWER TRUNKS

SECTOR 'A' - CENTRAL

LAND USE	BASE UNITS	GROWTH	EQUIVALENCY PER UNIT	EQUIVALENT UNITS
RESIDENTIAL 1	UNIT	5,207	1.00	5,207
RESIDENTIAL 2	UNIT	666	0.83	553
RESIDENTIAL 3	UNIT	7,938	0.56	4,445
RESIDENTIAL 4	UNIT	2,579	0.54	1,393
RESIDENTIAL 5	UNIT	480	0.44	211
SECONDARY SUITE	UNIT	840	0.56	470
SUB-TOTAL RESIDENTIAL		17,710		12,279
COMMERCIAL	SQ.MTRS.	289,497	242	1,197
INSTITUTIONAL	SQ.MTRS.	58,732	242	243
INDUSTRIAL	HCTRS	20	6.92	136
TOTAL EQUIVALENT POPULATION				**13,855**

SECTOR B - SOUTH MISSION

LAND USE	BASE UNITS	GROWTH	EQUIVALENCY PER UNIT	EQUIVALENT UNITS
RESIDENTIAL 1	UNIT	1,907	1.00	1,907
RESIDENTIAL 2	UNIT	20	0.83	17
RESIDENTIAL 3	UNIT	230	0.56	129
RESIDENTIAL 4	UNIT	0	0.54	0
RESIDENTIAL 5	UNIT	0	0.44	0
SECONDARY SUITE	UNIT	39	0.56	22
SUB-TOTAL RESIDENTIAL		2,196		2,074
COMMERCIAL	SQ.MTRS.	10,811	242	45
INSTITUTIONAL	SQ.MTRS.	9,500	242	39
INDUSTRIAL	HCTRS	0	6.92	0
TOTAL EQUIVALENT POPULATION				**2,158**

TOTAL SEWER TRUNKS - ALL SECTORS

LAND USE	BASE UNITS	GROWTH	EQUIVALENCY PER UNIT	EQUIVALENT UNITS
RESIDENTIAL 1	UNIT	7,114	1.00	7,114
RESIDENTIAL 2	UNIT	686	0.83	569
RESIDENTIAL 3	UNIT	8,168	0.56	4,574
RESIDENTIAL 4	UNIT	2,579	0.54	1,393
RESIDENTIAL 5	UNIT	480	0.44	211
SECONDARY SUITE	UNIT	879	0.56	492
SUB-TOTAL RESIDENTIAL		19,906		14,354
COMMERCIAL	SQ.MTRS.	300,308	242	1,242
INSTITUTIONAL	SQ.MTRS.	68,232	242	282
INDUSTRIAL	HCTRS	20	6.92	136
TOTAL EQUIVALENT POPULATION				**16,013**

CITY OF KELOWNA
GROWTH RECONCILIATION BY SERVICE
TREATMENT

SECTOR 'A' - CENTRAL

LAND USE	BASE UNITS	GROWTH	EQUIVALENCY PER UNIT	EQUIVALENT UNITS
RESIDENTIAL 1	UNIT	7,114	1.00	7,114
RESIDENTIAL 2	UNIT	686	0.83	569
RESIDENTIAL 3	UNIT	8,168	0.56	4,574
RESIDENTIAL 4	UNIT	2,579	0.54	1,393
RESIDENTIAL 5	UNIT	480	0.44	211
SECONDARY SUITE	UNIT	879	0.56	492
SUB-TOTAL RESIDENTIAL		19,906		14,354
COMMERCIAL	SQ.MTRS.	300,308	242	1,242
INSTITUTIONAL	SQ.MTRS.	68,232	242	282
INDUSTRIAL	HCTRS	20	6.92	136
TOTAL EQUIVALENT POPULATION				**16,013**

CITY OF KELOWNA
GROWTH RECONCILIATION BY SERVICE
PARKS

SECTOR 'A' - CITY-WIDE

LAND USE	BASE UNITS	GROWTH	EQUIVALENCY PER UNIT	EQUIVALENT UNITS
RESIDENTIAL 1	UNIT	7,140	1.00	7,140
RESIDENTIAL 2	UNIT	678	1.00	678
RESIDENTIAL 3	UNIT	8,089	1.00	8,089
RESIDENTIAL 4	UNIT	2,670	1.00	2,670
RESIDENTIAL 5	UNIT	480	1.00	480
SECONDARY SUITE	UNIT	895	1.00	895
TOTAL EQUIVALENT POPULATION				19,952

IV. MAJOR SERVICING REQUIREMENTS - BY SERVICE TYPE

The purpose of this section of the Review of the 20 Year Servicing Plan and Financing Strategy is to provide a brief overview of each major service providing summary information such as a general description of physical works, general area of the city serviced by the capital works, overall cost of the program along with an overall summary of the cost of all services.

This section also includes a map which details the infrastructure to be added during the 20 year planning horizon.

1. Transportation Network

The total cost of the Transportation Network program is estimated to be $400.4 Million, representing an average annual expenditure of $20.0 Million over the 20 year planning horizon.

The arterial roads program as developed represents the required infrastructure needs to service the new population growth over the next 20 years.

Key OCP policies guiding the direction of the Transportation Network:

- Place increased emphasis on sustainable modes of transportation (walking, cycling, transit) while maintaining automobile, commercial goods and emergency vehicle mobility.
- Reduce peak hour trips and the percentage of trips undertaken by single occupant vehicles, particularly in Urban Centres, in order to reduce or eliminate the expansion of the transportation network and capacity.
- Provide more active transportation infrastructure to: increase resilience in the face of higher energy prices; improve community health; and reduce greenhouse gas emissions.
- Ensure efficient and effective transit infrastructure and facilities.
- Ensure roadway planning supports sustainability goals.
- Implement parking management programs that promote reduced car ownership, reduced car trips and increased use of active modes of transportation.

Key strategies used to develop the plan:

- To optimize the use of existing infrastructure and road right of way through traffic redistribution.
- To increase user choice by supporting transit and providing active transportation corridors that provide safe, convenient, connected corridors for walking and biking.
- To provide new roads to relieve excessive congestion on existing infrastructure.
- To work within the revenues available from Development Cost Charges.

Criteria used to determine the inclusion and scope of a transportation project:

- Forecasted traffic volumes based on future (2030) land use.
- Network connectivity.
- Accessibility, safety and mobility of all road users (pedestrians, cyclists, transit users and motor vehicles) including goods & services and community protection.
- Community severance and other community impacts.
- Transit speeds relative to single occupancy vehicles (SOV).
- Environmental impacts
- Impact on agricultural land

Major changes from the previous Plan include:

- Inclusion of active transportation, corridors for walking, cycling and other forms of non-motorized transportation with the focus on moving people, as well as motor vehicles.
- Addressing climate issues such as GHG emissions related to Kelowna having the highest automobile dependence in Canada.

- Elimination of projects not meeting key strategies and criteria:
  - Beaver Lake Rd – City Limits to East Connector
  - Bernard 2 – Richmond St to Burtch Rd
  - Burtch 1 – Benvoulin Rd to KLO Rd
  - Burtch 5 – Harvey Ave to Kelglen Cr
  - Gulley 2 – Spiers Rd to Hart Rd
  - Hollywood 2 – Springfield Rd to East Kelowna Rd
  - Hollywood 2b – Bridge over Mission Creek
  - Hwy 97 2 – Hwy 33 W to Sexsmith Rd
  - McCurdy 2b – Mill Creek Crossing
  - McCurdy 3 – Hwy 97 N to Hollywood Rd N
  - McKinley 1 – Glenmore Rd to Hwy 97 N
  - Old Meadows – Lakeshore Rd to Gordon Dr
  - Pandosy 2 – Royal Ave to Sutherland Ave
  - Sexsmith 4 – Valley Rd to Longhill Rd
  - Springfield 1 – Richter St to Ethel St
  - Springfield 3 – Hollywood Rd S to Rutland Rd S
  - Rutland 1 – Leathead Rd to Cornish Rd

- Reducing the scope of projects:
  - Barnaby 1 (Lakeshore Rd to Gordon Dr): reduced to sidewalk improvements
  - Clement 3 (Hwy 33 W to McCurdy Rd): land acquisition only; construction eliminated.
  - Dehart 2 (Lakeshore Rd to Gordon Dr): reduced to three lanes (two lanes plus middle turning lane) from four.
  -
  - Ethel 2 (Springfield Rd to Lawson Ave): will no longer be widened to four lanes but will be an active transportation corridor.

  - Lakeshore Rd (Barnaby Rd to Richter St): will be constructed as a two lane road with a centre turning lane (where necessary) and an active transportation corridor. Was previously planned as a four lane road.
  - McCulloch (Mission Creek Bridge to Hall Rd): limited to improvements between Mission Creek Bridge & Hall Rd.
  - McCurdy 1 (Clement 3 to Dilworth Dr): only the road right of way included.

- New Active Transportation projects:
  - Abbott 1 – Rose Ave to Lakeshore Rd
  - Casorso 3 & 4 – Barrera Rd to Ethel St
  - Ethel 1, 2, 3 & 4 – Raymer Ave to Clement Ave
  - Glenmore 3, 4 & 5 – Clement Ave to E-W Connector
  - Hollywood 9, 10, 11 – Mission Creek Greenway to McCurdy Rd
  - Houghton 1, 2 & Overpass – Rutland Rd N to COMC 3
  - KLO 1 & 2 – Abbott St to Okanagan College
  - Lake 1 – Abbott St to Pandosy St
  - Leckie 1, 2 & 3 – COMC 2 to Mission Creek Greenway
  - Rails with Trails – Spall Rd to Houghton 1
  - Sutherland 1 & 2 – Harvey Ave to Pandosy St

- New Road Projects:
  - Casorso Bridge – Mission Creek Crossing
  - E-W Connector 1, 2, 3 & 4 – Glenmore Rd N to Academy Way
  - Guisachan 3 – Ethel St to Gordon Dr
  - Richter 1 – KLO Rd to Sutherland Ave
  - Rose 1 – Pandosy St to Ethel St

- Road Projects that include Active Transportation:
  - Airport – Hollywood Rd N to Hwy 97 N
  - E-W Connector 1, 2, 3 & 4 – Glenmore Rd N to Academy Way
  - Hollywood 3, 4, Francis Creek Bridge, 5, Mill Creek Bridge, 6, 7 & 8 – McCurdy Rd Quail Ridge Blvd
  - Lakeshore 1, Bellevue Creek Bridge, 2, 3, Mission Creek Bridge, Wilson Creek Bridge & 4 - Barnaby Rd to Lanfranco Rd
  - Rose 1 – Pandosy St to Ethel St

The following servicing assumptions have been incorporated into the transportation plan:

- Target quarters have been provided for arterial roads construction and upgrading, although the actual year of construction will be determined by a combination of growth, service levels, availability of funds from development and the availability of Provincial funding where identified in the plan.

- Development driven roads identified in the plan will only be constructed if development proceeds and costs are “front-ended” by development within the area. If, for purposes of overall traffic management, it is necessary to construct

key roads prior to development occurring it will be necessary to revise the plan accordingly.

New developments will provide the funding, or undertake the following works, without D.C.C. credits:

- If the development flanks an existing arterial, dedicate up to a 20 meter right-of-way and complete road upgrading to the standard indicated in the arterial roads program
- If a new arterial road is required through the development, dedicate a 20 meter right-of-way and construct a two lane road to the standard indicated in the arterial roads program

- Construction costs have been estimated on the basis of costs experienced on similar projects undertaken over the past several years and construction contingency of 25% has been added to projects to reflect the level of engineering effort ('Class C' estimate) incorporated into the plan. The contingency on projects which have had preliminary engineering design completed ('Class B' estimate) will be reduced to 15%. It should be noted that lower levels of contingency do not translate into lower construction cost estimates, but do reflect a higher level of confidence in the cost estimates calculated.

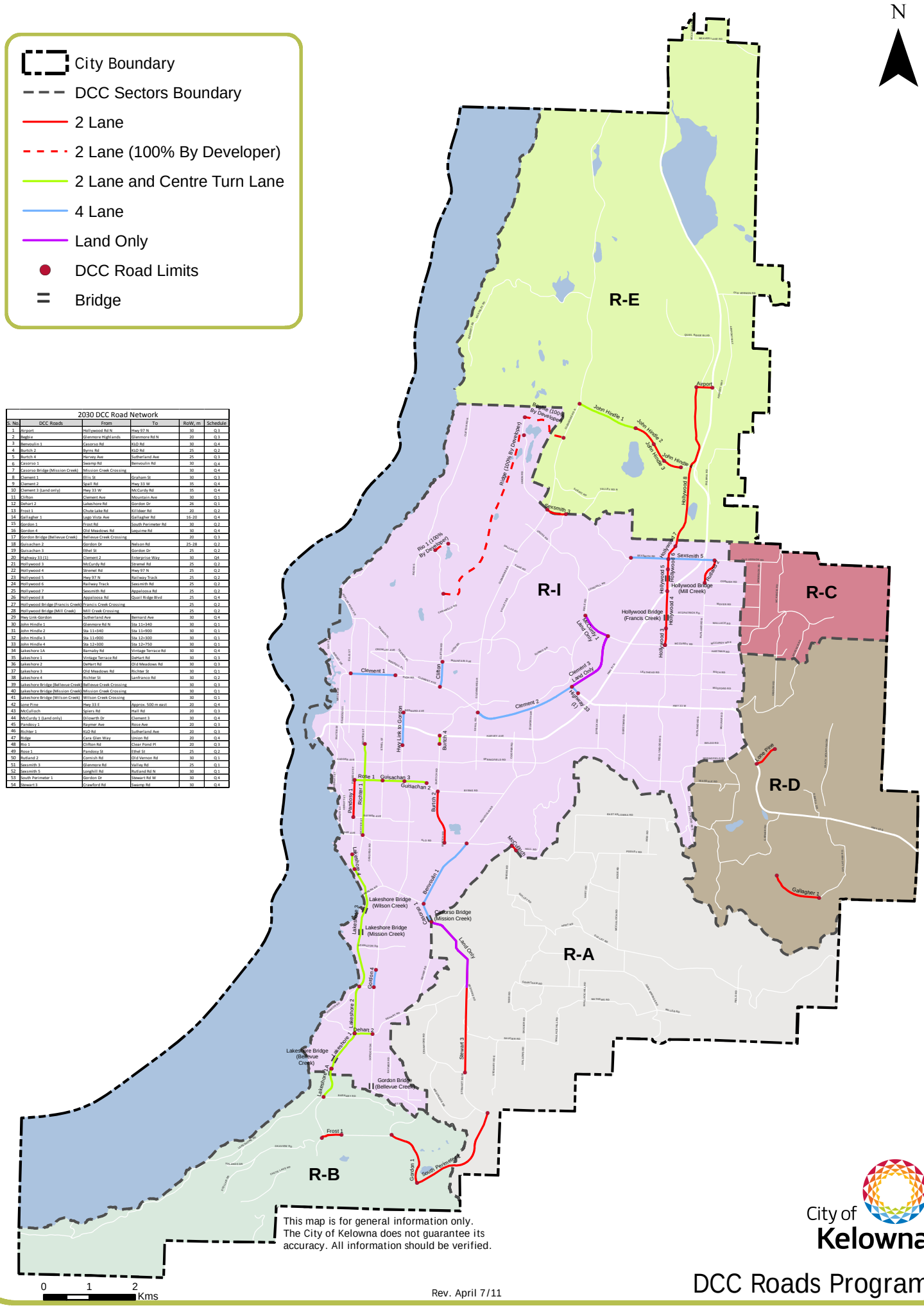
This program primarily covers the Arterial Network improvements and thus is only one element of the City's roads infrastructure needs. Examples of other programs which must be undertaken over the 20 year planning horizon are:

- Road Rehabilitation/Overlay program
- Local Improvement programs
- Sidewalk network program
- Safety and Operation improvements
- Bike Lane/Shoulder improvement program
- Bridge Rehabilitation not related to new growth
- Street Light/Traffic Signal Upgrades

Details of these programs will be included in the City's 10 year capital improvement plan along with an appropriate financing strategy.

Two maps have been attached, providing the following information:

- Map R-1 - Roads projects to be completed over the next 20 years
- Map R-2 – Active Transportation projects to be completed over the next 20 years



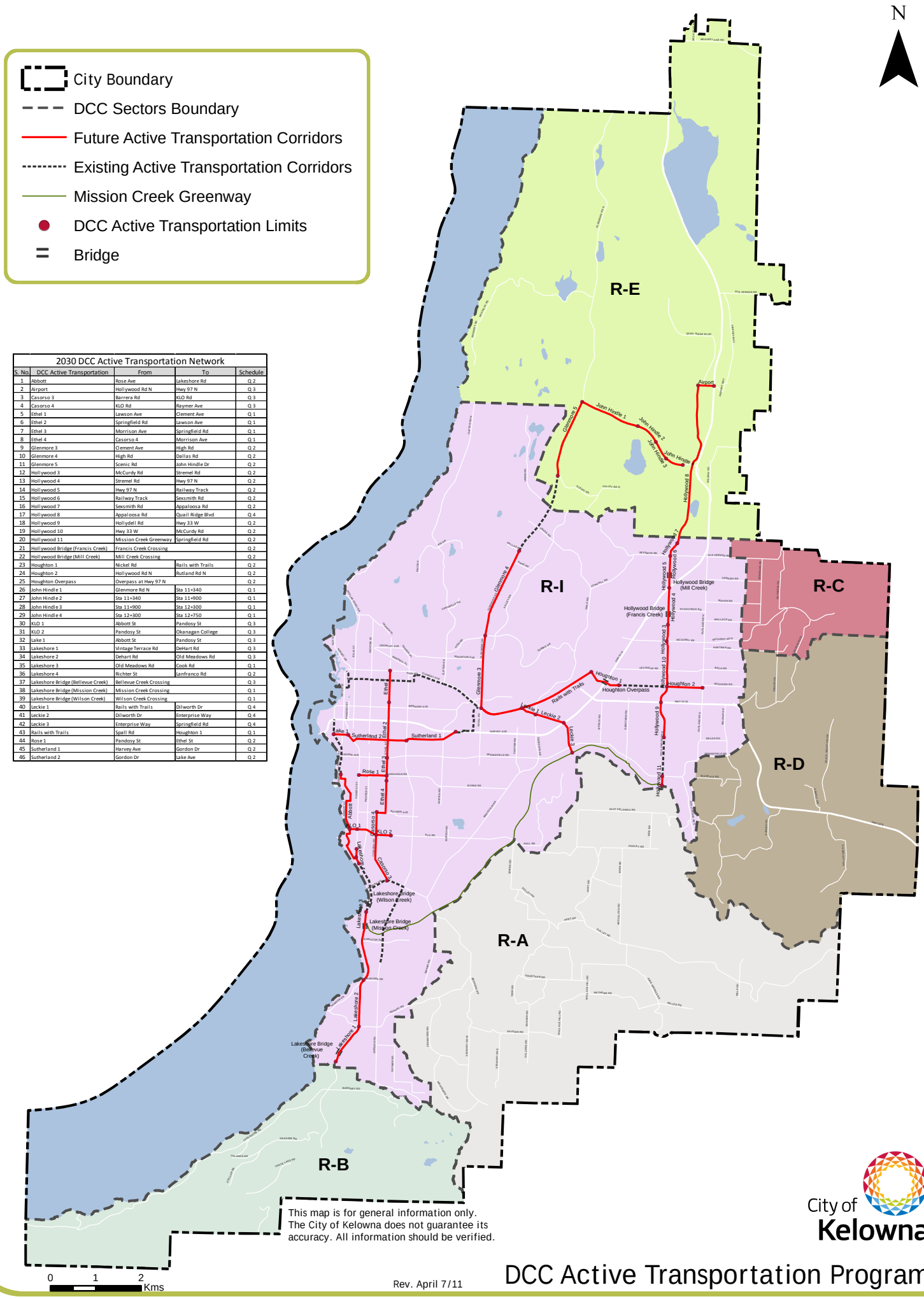
2030 DCC Road Network					
S. No.	DCC Roads	From	To	RoW, m	Schedule
1	Airport	Hollywood Rd N	Hwy 97 N	30	Q 3
2	Beglie	Glenmore Highlands	Glenmore Rd N	20	Q 3
3	Benvoulin 1	Casorso Rd	KLO Rd	30	Q 4
4	Burtch 2	Byrns Rd	KLO Rd	25	Q 2
5	Burtch 4	Harvey Ave	Sutherland Ave	25	Q 3
6	Casorso 1	Swamp Rd	Benvoulin Rd	30	Q 4
7	Casorso Bridge (Mission Creek)	Mission Creek Crossing		30	Q 4
8	Clement 1	Ellis St	Graham St	30	Q 3
9	Clement 2	Spall Rd	Hwy 33 W	35	Q 4
10	Clement 3 (Land only)	Hwy 33 W	McCurdy Rd	35	Q 4
11	Clifton	Clement Ave	Mountain Ave	30	Q 1
12	Dehart 2	Lakeshore Rd	Gordon Dr	26	Q 1
13	Frost 1	Chute Lake Rd	Killdeer Rd	20	Q 2
14	Gallagher 1	Lago Vista Ave	Gallagher Rd	16-20	Q 4
15	Gordon 1	Frost Rd	South Perimeter Rd	30	Q 2
16	Gordon 4	Old Meadows Rd	Lequime Rd	30	Q 4
17	Gordon Bridge (Bellevue Creek)	Bellevue Creek Crossing		20	Q 3
18	Guisachan 2	Gordon Dr	Nelson Rd	25-28	Q 2
19	Guisachan 3	Ithel St	Gordon Dr	25	Q 2
20	Highway 33 (1)	Clement 2	Enterprise Way	30	Q4
21	Hollywood 3	McCurdy Rd	Stremel Rd	25	Q 2
22	Hollywood 4	Stremel Rd	Hwy 97 N	25	Q 2
23	Hollywood 5	Hwy 97 N	Railway Track	25	Q 2
24	Hollywood 6	Railway Track	Sexsmith Rd	25	Q 2
25	Hollywood 7	Sexsmith Rd	Appaloosa Rd	25	Q 2
26	Hollywood 8	Appaloosa Rd	Quail Ridge Blvd	25	Q 4
27	Hollywood Bridge (Francis Creek)	Francis Creek Crossing		25	Q 2
28	Hollywood Bridge (Mill Creek)	Mill Creek Crossing		25	Q 2
29	Hwy Link-Gordon	Sutherland Ave	Bernard Ave	30	Q 4
30	John Hindle 1	Glenmore Rd N	Sta 11+340	30	Q 1
31	John Hindle 2	Sta 11+340	Sta 11+900	30	Q 1
32	John Hindle 3	Sta 11+900	Sta 12+300	30	Q 1
33	John Hindle 4	Sta 12+300	Sta 12+750	30	Q 1
34	Lakeshore 1A	Barnaby Rd	Vintage Terrace Rd	30	Q 4
35	Lakeshore 1	Vintage Terrace Rd	DeHart Rd	30	Q 3
36	Lakeshore 2	DeHart Rd	Old Meadows Rd	30	Q 3
37	Lakeshore 3	Old Meadows Rd	Richter St	30	Q 1
38	Lakeshore 4	Richter St	Lanfranco Rd	30	Q 2
39	Lakeshore Bridge (Bellevue Creek)	Bellevue Creek Crossing		30	Q 3
40	Lakeshore Bridge (Mission Creek)	Mission Creek Crossing		30	Q 1
41	Lakeshore Bridge (Wilson Creek)	Wilson Creek Crossing		30	Q 1
42	Long Pine	Hwy 33 E	Approx. 500 m east	20	Q 4
43	McCulloch	Spiers Rd	Hall Rd	20	Q 3
44	McCurdy 1 (Land only)	Dilworth Dr	Clement 3	30	Q 4
45	Pandosy 1	Raymar Ave	Rose Ave	20	Q 3
46	Richter 1	KLO Rd	Sutherland Ave	20	Q 3
47	Ridge	Cara Glen Way	Union Rd	20	Q 4
48	Rio 1	Clifton Rd	Clear Pond Pl	20	Q 3
49	Rose 1	Pandosy St	Ethel St	25	Q 2
50	Rutland 2	Comish Rd	Old Vernon Rd	30	Q 1
51	Sexsmith 3	Glenmore Rd	Valley Rd	25	Q 1
52	Sexsmith 5	Longhill Rd	Rutland Rd N	30	Q 1
53	South Perimeter 1	Gordon Dr	Stewart Rd W	30	Q 4
54	Stewart 3	Crawford Rd	Swamp Rd	30	Q 4

This map is for general information only. The City of Kelowna does not guarantee its accuracy. All information should be verified.

Rev. April 7/11

City of Kelowna

DCC Roads Program



2030 DCC Active Transportation Network

S. No.	DCC Active Transportation	From	To	Schedule
1	Abbott	Rose Ave	Lakeshore Rd	Q 2
2	Airport	Hollywood Rd N	Hwy 97 N	Q 3
3	Casorso 3	Barrera Rd	KLO Rd	Q 3
4	Casorso 4	KLO Rd	Raymer Ave	Q 3
5	Ethel 1	Lawson Ave	Clement Ave	Q 1
6	Ethel 2	Springfield Rd	Lawson Ave	Q 1
7	Ethel 3	Morrison Ave	Springfield Rd	Q 1
8	Ethel 4	Casorso 4	Morrison Ave	Q 1
9	Glenmore 3	Clement Ave	High Rd	Q 2
10	Glenmore 4	High Rd	Dallas Rd	Q 2
11	Glenmore 5	Scenic Rd	John Hindle Dr	Q 2
12	Hollywood 3	McCurdy Rd	Stremel Rd	Q 2
13	Hollywood 4	Stremel Rd	Hwy 97 N	Q 2
14	Hollywood 5	Hwy 97 N	Railway Track	Q 2
15	Hollywood 6	Railway Track	Sexsmith Rd	Q 2
16	Hollywood 7	Sexsmith Rd	Appaloosa Rd	Q 2
17	Hollywood 8	Appaloosa Rd	Quail Ridge Blvd	Q 4
18	Hollywood 9	Hollydell Rd	Hwy 33 W	Q 2
19	Hollywood 10	Hwy 33 W	McCurdy Rd	Q 2
20	Hollywood 11	Mission Creek Greenway	Springfield Rd	Q 2
21	Hollywood Bridge (Francis Creek)	Francis Creek Crossing		Q 2
22	Hollywood Bridge (Mill Creek)	Mill Creek Crossing		Q 2
23	Houghton 1	Nickel Rd	Rails with Trails	Q 2
24	Houghton 2	Hollywood Rd N	Rutland Rd N	Q 2
25	Houghton Overpass	Overpass at Hwy 97 N		Q 2
26	John Hindle 1	Glenmore Rd N	Sta 11+340	Q 1
27	John Hindle 2	Sta 11+340	Sta 11+900	Q 1
28	John Hindle 3	Sta 11+900	Sta 12+300	Q 1
29	John Hindle 4	Sta 12+300	Sta 12+750	Q 1
30	KLO 1	Abbott St	Pandosy St	Q 3
31	KLO 2	Pandosy St	Okanagan College	Q 3
32	Lake 1	Abbott St	Pandosy St	Q 3
33	Lakeshore 1	Vintage Terrace Rd	DeHart Rd	Q 3
34	Lakeshore 2	Dehart Rd	Old Meadows Rd	Q 3
35	Lakeshore 3	Old Meadows Rd	Cook Rd	Q 1
36	Lakeshore 4	Richter St	Lanfranco Rd	Q 2
37	Lakeshore Bridge (Bellevue Creek)	Bellevue Creek Crossing		Q 3
38	Lakeshore Bridge (Mission Creek)	Mission Creek Crossing		Q 1
39	Lakeshore Bridge (Wilson Creek)	Wilson Creek Crossing		Q 1
40	Leckie 1	Rails with Trails	Dilworth Dr	Q 4
41	Leckie 2	Dilworth Dr	Enterprise Way	Q 4
42	Leckie 3	Enterprise Way	Springfield Rd	Q 4
43	Rails with Trails	Spall Rd	Houghton 1	Q 1
44	Rose 1	Pandosy St	Ethel St	Q 2
45	Sutherland 1	Harvey Ave	Gordon Dr	Q 2
46	Sutherland 2	Gordon Dr	Lake Ave	Q 2

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City of Kelowna

DCC Active Transportation Program

Rev. April 7/11

CITY OF KELOWNA
2030 SERVICING PLAN AND FINANCING STRATEGY
ROADS PROJECT LIST
(BY ALPHA)

TARGET QUARTER	SECTOR	PROJECT NAME	FROM - TO	CROSS SECTION	RoW	TOTAL COST
						000's
Q2	I	**Abbott - AT**	Rose - Lakeshore	UCU2L	20	**10,978**
Q3	E	**Airport**	Hollywood Road - Highway 97	UAD2L	30	**1,517**
Q3	E	**Airport - AT**	Hollywood Road - Highway 97	UCD2L	30	**175**
Q3	I	**Begbie**	Glenmore Highlands - Glenmore Rd.	RCU2L	20	**2,247**
Q4	I	**Benvoulin 1**	Casorso Road - KLO Road	RAD4L	30	**9,242**
Q2	I	**Burtch 2**	KLO Road - Byrns Road	RAU2L	25	**4,830**
Q3	I	**Burtch 4**	Sutherland - Harvey Ave	UAD2L	25	**476**
Q4	*B	**Casorso 1**	Benvoulin - Swamp	RAU4L	30	**1,887**
Q3	I	**Casorso 3 -AT**	Barrera - KLO	UCU2L	20	**4,241**
Q3	I	**Casorso 4 - AT**	KLO - Raymer		6	**485**
Q4	*B	**Casorso Bridge - Mission Cr.**	Widening bridge to 4 lane	RAD4L	30	**2,744**
Q3	I	**Clement 1**	Ellis - Graham	UAD4L	30	**6,778**
Q1	I	**Clifton**	Clement - Mountain	UAD4L	30	**4,636**
Q4	I	**Clement 2**	Spall Road - Highway 33	RAD4L	35	**46,121**
Q4	I	**Clement 3**	Highway 33 - McCurdy Road	RAD4L	35	**2,093**
Q1	B	**Deficiencies**	Frst 2/3,Brnby 1,Kldr,S.Per 2,Stw 2,Grd 1			**2,366**
Q1	*B	**Dehart 2**	Lakeshore Road - Gordon Drive	UAU2L	26	**1,719**
Q1	I	**Ethel 1 - AT**	Clement - Lawson	UCU2L	20	**3,004**
Q1	I	**Ethel 2 - AT**	Lawson - Springfield	UCU2L	20	**4,026**
Q1	I	**Ethel 3 - AT**	Springfield - Morrison	UCU2L	20	**2,967**
Q1	I	**Ethel 4 - AT**	Morrison - Raymer	UCU2L	20	**2,383**
Q1	E	**John Hindle 1**	Glenmore Rd - Station 11+340	UAU2L	30	**2,923**
Q1	E	**John Hindle 1 - AT**	Glenmore Rd - Station 11+340			**586**
Q1	E	**John Hindle 2**	Station 11+340 - Station 11+900	RAU2L	30	**1,304**
Q1	E	**John Hindle 2 - AT**	Station 11+340 - Station 11+900			**245**
Q1	E	**John Hindle 3**	Station 11+900 - Station 12+300	RAU2L	30	**3,162**
Q1	E	**John Hindle 3 - AT**	Station 11+900 - Station 12+300			**175**
Q1	E	**John Hindle 4**	Station 12+300 - Station 12+750	RAU2L	30	**2,748**
Q1	E	**John Hindle 4 - AT**	Station 12+300 - Station 12+750			**197**
Q2	B	**Frost 1**	Killdeer - Chute Lake	UCU2L	20	**1,687**
Q4	D	**Gallagher 1**	Lago Vista - Gallagher Rd	RCU2L	16-20	**8,194**
Q2	I	**Glenmore 3 - AT**	Clement - High	UAD4L	30	**5,743**
Q2	I	**Glenmore 4 - AT**	High - Dallas	UAD4L	30	**7,001**
Q2	I	**Glenmore 5 - AT**	Scenic - EW Connector	RAU2L	30	**4,036**
Q2	B	**Gordon 1 - part 1**	Frost - South Crest Dr	UAD2L	30	**1,493**
Q2	B	**Gordon 1 - part 2**	South Crest Dr - S. Perimeter	UAD2L	30	**2,525**
Q4	I	**Gordon 4**	Old Meadows Rd - Lequime	UAD4L	30	**794**
Q3	*B	**Gordon Bridge - Bellevue Cr.**	Crossing - Bellevue Creek	UAU2L	20	**455**
Q2	I	**Guisachan 2**	Gordon - Nelson Rd	UAD4L	30	**2,089**
Q2	I	**Guisachan 3**	Ethel - Gordon	UAU2L	25	**2,186**
Cmplt	D	**Highway 33 (Complete)**	Mckenzie - Gallagher			**22,924**

TARGET QUARTER	SECTOR	PROJECT NAME	FROM - TO	CROSS SECTION	RoW	TOTAL COST
						000's
Q4	I	**Highway 33(1)**	Clement 2 - Enterprise	RAD4L	35	**4,307**
Q2	I	**Hollywd 3**	McCurdy Road - Stremel	UAU2L	25	**1,737**
Q2	I	**Hollywd 3 - AT**	McCurdy Road - Stremel			**158**
Q2	I	**Hollywd 4**	Stremel - Highway 97	UAU2L	25	**4,687**
Q2	I	**Hollywd 4 - AT**	Stremel - Highway 97			**363**
Q2	I	**Hollywd 5**	Highway 97 - Railway Track	UAU2L	25	**3,444**
Q2	I	**Hollywd 5 - AT**	Highway 97 - Railway Track			**197**
Q2	I	**Hollywd 6**	Railway Track - Sexsmith Rd	UAU2L	25	**578**
Q2	I	**Hollywd 6 - AT**	Railway Track - Sexsmith Road			**98**
Q2	E	**Hollywd 7**	Sexsmith Road - Appaloosa	UAD2L	25	**1,996**
Q2	E	**Hollywd 7 - AT**	Sexsmith Road - Appaloosa			**153**
Q4	E	**Hollywd 8**	Appaloosa - Quail Ridge	UAD2L	25	**10,640**
Q4	E	**Hollywd 8 - AT**	Appaloosa - Quail Ridge			**1,925**
Q2	I	**Hollywd 9 - AT**	Hollydell - Hwy 33	UAU2L	25-30	**3,199**
Q2	I	**Hollywd 10 - AT**	Hwy 33 - McCurdy	UAU2L	24-25	**1,716**
Q2	I	**Hollywd 11 - AT**	Springfield - Mission Creek	UCU2L	20	**68**
Q2	I	**Hollywd Bridge - Francis Cr.**	Francis Creek - Crossing	UAU2L	25	**35**
Q2	I	**Hollywd Bridge - Mill Cr.**	Mill Creek - Crossing	UAU2L	25	**1,052**
Q2	I	**Houghton 1 - AT**	Nickel - Rails w Trails	UCU2L	20	**4,165**
Q2	I	**Houghton 2 - AT**	Hllywd - Rutland	UCU2L	20	**3,880**
Q2	I	**Houghton Overpass - AT**	Overpass @ Hwy 97			**3,000**
Q4	I	**Hwy Link-Gordon**	Sutherland - Bernard	UAD4L	30	**3,443**
Q1	I	**Hwy Link-Pand 3**	Sutherland - Lawrence	UAD4L		**3,000**
Q3	I	**KLO 1 - AT**	Abbott - Pandosy	UCU2L	20	**726**
Q3	I	**KLO 2 - AT**	Pandosy - Okanagan College	UCU2L	25-30	**2,185**
Q3	I	**Lake 1 - AT**	Pandosy - Abbott	UCU2L	10-20	**1,290**
Q3	*B	**Lakshr 1**	Dehart Rd - Vintage Terrace	UAU2L	30	**4,998**
Q3	*B	**Lakshr 1 - AT**	Dehart Rd - Vintage Terrace			**416**
Q4	B	**Lakshr 1A**	Vintage Terrace Rd to Barnaby Rd	RAD2L	30	**2,377**
Q3	*B	**Lakshr 2**	Old Meadows - DeHart	UAU2L	30	**6,029**
Q3	*B	**Lakshr 2 - AT**	Old Meadows - DeHart			**459**
Q1	I	**Lakshr 3**	Richter Street - Old Meadows Road	UAU2L	30	**20,637**
Q1	I	**Lakshr 3 - AT**	Cook - Old Meadows Road	UAU2L		**1,190**
Q2	I	**Lakshr 4**	Lanfranco Road - Richter Street	UAU2L	30	**4,224**
Q2	I	**Lakshr 4 - AT**	Lanfranco Road - Richter Street	UAU2L		**149**
Q3	*B	**Lakshr Bridge - Bellevue Cr.**	Crossing - Bellevue Creek	UAD4L	30	**1,428**
Q1	I	**Lakshr Bridge - Mission Cr.**	Mission Creek - Crossing	UAD4L	30	**5,662**
Q1	I	**Lakshr Bridge - Wilson Cr.**	Wilson Creek - Crossing	UAD4L	30	**1,001**
Q4	I	**Leckie 1 - AT**	Rails w Trails - Dilworth		10	**380**
Q4	I	**Leckie 2 - AT**	Dilworth - Enterprise	UCU2L	25	**1,474**
Q4	I	**Leckie 3 - AT**	Enterprise - Springfield Rd.	UCU2L	24	**2,368**
Q4	D	**Lone Pine**	Highway 33 - 500m east	UCU2L	20	**2,878**
Q3	A	**McCulloch**	Various	RAU2L	20-30	**2,885**
Q4	I	**McCurdy 1**	Dilworth - COMC	RAU2L	30	**1,265**
DC	I	**McCurdy 2 (Dev Credit)**	COMC - Highway 97	UAU2L	30	**705**
DC	C	**McCurdy 4 (Dev Credit)**	Craig Rd - Tower Ranch (Dvlpr Crdt)	RAU2L	25	**5,489**
Q3	I	**Pandosy 1**	Raymer - Rose	UAU2L	20	**3,702**

TARGET QUARTER	SECTOR	PROJECT NAME	FROM - TO	CROSS SECTION	RoW	TOTAL COST
						000's
Q1	I	**Rails w Trails - AT**	Spall - Houghton 1		10	**4,399**
Q3	I	**Richter 1**	Sutherland - KLO	UAU2L	20	**7,173**
Q4	I	**Ridge**	Cara Glen Way - Union Road	UAU2L	20	**20,416**
Q3	I	**Rio 1**	Clifton Road - Clear Ponds Place	UCU2L	20	**1,286**
Q2	I	**Rose 1**	Pandosy - Ethel	UAU2L	25	**8,072**
Q2	I	**Rose 1 - AT**	Pandosy - Ethel			**263**
Q1	I	**Rutland 2**	Cornish Road - Old Vernon Road	UAD2L	30	**4,369**
Q4	B	**S. Perimeter 1**	Gordon Dr to Stewart 1	RAU2L	30	**7,065**
Q1	I	**Sexsmith 2**	Snowsell - Glenmore Bypass	UAD2L	30	**136**
Q1	I	**Sexsmith 3**	Glenmore Bypass - Valley Road	UAD2L	25	**1,650**
Q1	I	**Sexsmith 5**	Longhill - Rutland Road	UAD4L	30	**12,608**
Q4	*B	**Stewart 3**	Swamp - Crawford Rd	RAU2L	30	**6,443**
Q2	I	**Sutherland 1 - AT**	Hwy 97 - Gordon	UCU2L	20	**6,405**
Q2	I	**Sutherland 2 - AT**	Gordon - Lake	UCU2L	20	**5,056**
			Engineering/Administration			**1,995**
	TOTAL					**400,476**

This schedule is conceptual and is subject to revision to meet future needs and conditions.

CITY OF KELOWNA
2030 SERVICING PLAN AND FINANCING STRATEGY
ROADS PROJECT LIST
(BY QUARTER)

TARGET QUARTER	SECTOR	PROJECT NAME	FROM - TO	CROSS SECTION	RoW	TOTAL COST
						000's
Cmplt	I	**Highway 33(1)**	Clement 2 - Enterprise	RAD4L	35	4,307
Cmplt	I	**Sexsmith 2**	Snowsell - Glenmore Bypass	UAD2L	30	136
Cmplt	D	**Highway 33 (Complete)**	Mckenzie - Gallagher			22,924
DC	I	**McCurdy 2 (Dev Credit)**	COMC - Highway 97	UAU2L	30	705
DC	C	**McCurdy 4 (Dev Credit)**	Craig Rd - Tower Ranch (Dvlpr Crdt)	RAU2L	25	5,489
Q1	*B	**Dehart 2**	Lakeshore Road - Gordon Drive	UAU2L	26	1,719
Q1	B	**Deficiencies**	Frst 2/3,Brnby 1,Kldr,S.Per 2,Stw 2,Grd 1			2,366
Q1	E	**John Hindle 1**	Glenmore Rd - Station 11+340	UAU2L	30	2,923
Q1	E	**John Hindle 1 - AT**	Glenmore Rd - Station 11+340			586
Q1	E	**John Hindle 2**	Station 11+340 - Station 11+900	RAU2L	30	1,304
Q1	E	**John Hindle 3**	Station 11+900 - Station 12+300	RAU2L	30	3,162
Q1	E	**John Hindle 4**	Station 12+300 - Station 12+750	RAU2L	30	2,748
Q1	E	**John Hindle 2 - AT**	Station 11+340 - Station 11+900			245
Q1	E	**John Hindle 3 - AT**	Station 11+900 - Station 12+300			175
Q1	E	**John Hindle 4 - AT**	Station 12+300 - Station 12+750			197
Q1	I	**Clifton**	Clement - Mountain	UAD4L	30	4,636
Q1	I	**Hwy Link-Pand 3**	Sutherland - Lawrence	UAD4L		3,000
Q1	I	**Lakshr 3**	Richter Street - Old Meadows Road	UAU2L	30	20,637
Q1	I	**Lakshr 3 - AT**	Cook - Old Meadows Road	UAU2L		1,190
Q1	I	**Lakshr Bridge - Mission Cr.**	Mission Creek - Crossing	UAD4L	30	5,662
Q1	I	**Lakshr Bridge - Wilson Cr.**	Wilson Creek - Crossing	UAD4L	30	1,001
Q1	I	**Rails w Trails - AT**	Spall - Houghton 1		10	4,399
Q1	I	**Rutland 2**	Cornish Road - Old Vernon Road	UAD2L	30	4,369
Q1	I	**Sexsmith 3**	Glenmore Bypass - Valley Road	UAD2L	25	1,650
Q1	I	**Sexsmith 5**	Longhill - Rutland Road	UAD4L	30	12,608
Q1	I	**Ethel 1 - AT**	Clement - Lawson	UCU2L	20	3,004
Q1	I	**Ethel 2 - AT**	Lawson - Springfield	UCU2L	20	4,026
Q1	I	**Ethel 3 - AT**	Springfield - Morrison	UCU2L	20	2,967
Q1	I	**Ethel 4 - AT**	Morrison - Raymer	UCU2L	20	2,383
Q2	B	**Frost 1**	Killdeer - Chute Lake	UCU2L	20	1,687
Q2	B	**Gordon 1 - part 1**	Frost - South Crest Dr	UAD2L	30	1,493
Q2	B	**Gordon 1 - part 2**	South Crest Dr - S. Perimeter	UAD2L	30	2,525
Q2	E	**Hollywd 7**	Sexsmith Road - Appaloosa	UAD2L	25	1,996
Q2	E	**Hollywd 7 - AT**	Sexsmith Road - Appaloosa			153
Q2	I	**Abbott - AT**	Rose - Lakeshore	UCU2L	20	10,978
Q2	I	**Burtch 2**	KLO Road - Byrns Road	RAU2L	25	4,830
Q2	I	**Glenmore 3 - AT**	Clement - High	UAD4L	30	5,743
Q2	I	**Glenmore 4 - AT**	High - Dallas	UAD4L	30	7,001
Q2	I	**Glenmore 5 - AT**	Scenic - EW Connector	RAU2L	30	4,036
Q2	I	**Guisachan 2**	Gordon - Nelson Rd	UAD4L	30	2,089
Q2	I	**Guisachan 3**	Ethel - Gordon	UAU2L	25	2,186
Q2	I	**Hollywd 3**	McCurdy Road - Stremel	UAU2L	25	1,737
Q2	I	**Hollywd 3 - AT**	McCurdy Road - Stremel			158
Q2	I	**Hollywd 4**	Stremel - Highway 97	UAU2L	25	4,687
Q2	I	**Hollywd 4 - AT**	Stremel - Highway 97			363
Q2	I	**Hollywd 5**	Highway 97 - Railway Track	UAU2L	25	3,444

TARGET QUARTER	SECTOR	PROJECT NAME	FROM - TO	CROSS SECTION	RoW	TOTAL COST
						000's
Q2	I	**Hollywd 5 - AT**	Highway 97 - Railway Track			197
Q2	I	**Hollywd 6**	Railway Track - Sexsmith Rd	UAU2L	25	578
Q2	I	**Hollywd 6 - AT**	Railway Track - Sexsmith Road			98
Q2	I	**Hollywd 9 - AT**	Hollydell - Hwy 33	UAU2L	25-30	3,199
Q2	I	**Hollywd 10 - AT**	Hwy 33 - McCurdy	UAU2L	24-25	1,716
Q2	I	**Hollywd 11 - AT**	Springfield - Mission Creek	UCU2L	20	68
Q2	I	**Hollywd Bridge - Francis Cr.**	Francis Creek - Crossing	UAU2L	25	35
Q2	I	**Hollywd Bridge - Mill Cr.**	Mill Creek - Crossing	UAU2L	25	1,052
Q2	I	**Houghton 1 - AT**	Nickel - Rails w Trails	UCU2L	20	4,165
Q2	I	**Houghton 2 - AT**	Hllywd - Rutland	UCU2L	20	3,880
Q2	I	**Houghton Overpass - AT**	Overpass @ Hwy 97			3,000
Q2	I	**Lakshr 4**	Lanfranco Road - Richter Street	UAU2L	30	4,224
Q2	I	**Lakshr 4 - AT**	Lanfranco Road - Richter Street	UAU2L		149
Q2	I	**Rose 1**	Pandosy - Ethel	UAU2L	25	8,072
Q2	I	**Rose 1 - AT**	Pandosy - Ethel			263
Q2	I	**Sutherland 1 - AT**	Hwy 97 - Gordon	UCU2L	20	6,405
Q2	I	**Sutherland 2 - AT**	Gordon - Lake	UCU2L	20	5,056
Q3	*B	**Gordon Bridge - Bellevue Cr.**	Crossing - Bellevue Creek	UAU2L	20	455
Q3	*B	**Lakshr 1**	Dehart Rd - Vintage Terrace	UAU2L	30	4,998
Q3	*B	**Lakshr 1 - AT**	Dehart Rd - Vintage Terrace			416
Q3	*B	**Lakshr 2**	Old Meadows - DeHart	UAU2L	30	6,029
Q3	*B	**Lakshr 2 - AT**	Old Meadows - DeHart			459
Q3	*B	**Lakshr Bridge - Bellevue Cr.**	Crossing - Bellevue Creek	UAD4L	30	1,428
Q3	A	**McCulloch**	Various	RAU2L	20-30	2,885
Q3	E	**Airport**	Hollywood Road - Highway 97	UAD2L	30	1,517
Q3	E	**Airport - AT**	Hollywood Road - Highway 97	UCD2L	30	175
Q3	I	**Begbie**	Glenmore Highlands - Glenmore Rd.	RCU2L	20	2,247
Q3	I	**Burtch 4**	Sutherland - Harvey Ave	UAD2L	25	476
Q3	I	**Casorso 3 -AT**	Barrera - KLO	UCU2L	20	4,241
Q3	I	**Casorso 4 - AT**	KLO - Raymer		6	485
Q3	I	**Clement 1**	Ellis - Graham	UAD4L	30	6,778
Q3	I	**KLO 1 - AT**	Abbott - Pandosy	UCU2L	20	726
Q3	I	**KLO 2 - AT**	Pandosy - Okanagan College	UCU2L	25-30	2,185
Q3	I	**Lake 1 - AT**	Pandosy - Abbott	UCU2L	10-20	1,290
Q3	I	**Pandosy 1**	Raymer - Rose	UAU2L	20	3,702
Q3	I	**Richter 1**	Sutherland - KLO	UAU2L	20	7,173
Q3	I	**Rio 1**	Clifton Road - Clear Ponds Place	UCU2L	20	1,286
Q4	*B	**Casorso 1**	Benvoulin - Swamp	RAU4L	30	1,887
Q4	*B	**Casorso Bridge - Mission Cr.**	Widening bridge to 4 lane	RAD4L	30	2,744
Q4	*B	**Stewart 3**	Swamp - Crawford Rd	RAU2L	30	6,443
Q4	B	**Lakshr 1A**	Vintage Terrace Rd to Barnaby Rd	RAD2L	30	2,377
Q4	B	**S. Perimeter 1**	Gordon Dr to Stewart 1	RAU2L	30	7,065
Q4	D	**Gallagher 1**	Lago Vista - Gallagher Rd	RCU2L	16-20	8,194
Q4	D	**Lone Pine**	Highway 33 - 500m east	UCU2L	20	2,878
Q4	E	**Hollywd 8**	Appaloosa - Quail Ridge	UAD2L	25	10,640
Q4	E	**Hollywd 8 - AT**	Appaloosa - Quail Ridge			1,925
Q4	I	**Benvoulin 1**	Casorso Road - KLO Road	RAD4L	30	9,242
Q4	I	**Clement 2**	Spall Road - Highway 33	RAD4L	35	46,121
Q4	I	**Clement 3**	Highway 33 - McCurdy Road	RAD4L	35	2,093
Q4	I	**Gordon 4**	Old Meadows Rd - Lequime	UAD4L	30	794
Q4	I	**Hwy Link-Gordon**	Sutherland - Bernard	UAD4L	30	3,443

TARGET QUARTER	SECTOR	PROJECT NAME	FROM - TO	CROSS SECTION	RoW	TOTAL COST
						000's
Q4	I	**Leckie 1 - AT**	Rails w Trails - Dilworth		10	380
Q4	I	**Leckie 2 - AT**	Dilworth - Enterprise	UCU2L	25	1,474
Q4	I	**Leckie 3 - AT**	Enterprise - Springfield Rd.	UCU2L	24	2,368
Q4	I	**McCurdy 1**	Dilworth - COMC	RAU2L	30	1,265
Q4	I	**Ridge**	Cara Glen Way - Union Road	UAU2L	20	20,416
			Engineering/Administration			1,995
	TOTAL					400,476

This schedule is conceptual and is subject to revision to meet future needs and conditions.

2. Water Pumping/Distribution/Reservoirs

The total cost of the Water program is estimated to be $59.1 Million. The program represents an average annual expenditure of $3.0 Million over the 20 year planning horizon.

The water program as developed represents the required infrastructure needs to service the new population growth over the next 20 years. The projected works include the following:

- Improvements to the pumping capacity and pipelines for systems supplied by the Poplar Point water pump house and new Cedar Creek pump station.
- Extension and or improvements of the water distribution system primarily to provide for increased density in the Downtown, Skyline and Crawford Road areas and development in the South Slopes area.
- Upgrades to existing pumping system to provide capacity to the Clifton Road/Glenmore Highlands area of the city.

Key OCP policies guiding the direction of the Water Network:

- Ensure efficient, sustainable and context sensitive implementation of utilities.
- Ensure a high quality water supply
- Minimize unnecessary water consumption.

The following servicing assumptions have been incorporated into the water system:

- Water Improvement Districts, which operate within the municipal boundaries, will provide water service to growth projected to occur within their service boundaries, to the same design standards as used by the City.

- The City will purchase bulk water from Lake Country for resale to Industrial lands at the extreme north boundary of the city.

- The major water system for the South Mission area of the city has been constructed and financed by developers on a staged basis and recovery for excess capacity provided is to be recovered from benefiting property owners via an “ESA” extended service area. Costs for this system have not been included in this program.

- Further expansion of the High Level water system to the Glenmore Highlands will be “front-ended” by development in that area with recovery via D.C.C. credits.

- Additional treatment is expected to be in place for the Kelowna Water Utility by the end of 2011 in the form of ultra violet treatment. Treatment costs will be funded by utility users and are not included in the DCC program.

- Construction costs have been estimated on the basis of costs experienced on similar projects undertaken over the past several years and construction contingency of 25% has been added to projects to reflect the level of engineering effort (‘Class C’ estimate)

incorporated into the plan. The contingency on projects which have had preliminary engineering design completed ('Class B' estimate) will be reduced to 15%. It should be noted that lower levels of contingency do not translate into lower construction cost estimates, but do reflect a higher level of confidence in the cost estimates calculated.

The DCC water program is only one element of the City's water infrastructure needs. Other programs which must be undertaken over the 20 year planning horizon are:

- Replacement of cast iron water mains which cause problems in the system and other watermains are nearing the end of their service life.
- Replacement of undersized water mains to provide increased fire flow protection
- Provision of water service to existing developed areas which would normally be accomplished by formation of a Local Area Service (LAS).

Details of this program have been included in the City's Water Utility model for the purpose of projecting the impact on rates over the next 10 years.

Summary of 2030 major projects and description:

- Royal View and Mountain Upgrade
  To install pipe along Knox Mountain access road and along Royal View Dr. to Mountain Ave. This will increase conveyance to Dilworth Reservoir and improve supply to Skyline Pump Station.

- Skyline Pump Station
  Install a third pump at Skyline Pump Station which is required to meet the redundancy requirement and demand increases due to projected growth in the Clifton North and Glenmore Highland areas.

- Cedar Creek Transmission System Stage 1
  Dedication of a raw water transmission main from Stellar Pump Station to Adams Reservoir; treated water conveyance to distribution and fire flow improvements. This is a required component of Cedar Creek UV Treatment.

- Cedar Creek Transmission System Stage 2
  To increase capacity at the Cedar Pump Station, conveyance to Stellar and storage at Adams. IHA treatment requirements could trigger this project prior to year 2020.

- Knox Mountain Transmission System Upgrades
  To up size the existing main from Poplar Point Pump house to Knox Reservoir and is triggered by growth in sectors A and D

- Ethel Main Installation
  For installation of main on Ethel St from Weddell Pl to Clement Ave.

- Clifton Main Upgrade

To upsize the existing water main from Rio Dr to Bopart Ct. to provide sufficient fire flow and supply to future development in the Clifton North area. Previously identified in the 2020 Servicing Plan as SKY Trunk 2.

- Southcrest Transmission System
  A 750mm transmission main from Adams Reservoir to Southcrest reservoir. Significant conveyance is also required by the Utility to replace Eldorado capacity. As well, transmission main installations will be required from Southcrest reservoir to the Steele, Westpoint and McClure facilities to replace Eldorado supply capacity. These works are Utility funded as part of the Eldorado Pump house decommissioning.

- Frost Pump Station and Reservoir
  Future development in this area requires additional conveyance and storage capacity. These works will be funded by development as an Extended Service Area.

- PZ 419 Storage Upgrade
  Projected infill will require additional storage capacity in Sector A.

- Grainger Reservoir Expansion
  Approved development units require additional storage capacity at Grainger Reservoir. These works will be funded by development as an Extended Service Area.

- Upper Crawford Reservoir Expansion
  Additional storage capacity will be required to accommodate growth.

- Caraglen Supply Main Fire Flow Upgrade
  The existing main supplied by Caraglen PRV cannot meet fire flow requirements for future MF development west of Clifton Road.

- Capozzi Fire Flow Upgrade
  Existing water mains cannot meet fire flow requirements for future development in the North Mission Village area.

2020 Projects No Longer Required:

Due to conservation initiatives, project consolidation, alternate transmission main routes and changes to the proposed future land use, a number of projects identified in the 2020 Plan are excluded from the 2030 Plan. These are:

- Broadway Trunk Main 1, Broadway Trunk Main 2, Trench Trunk and Weddell Trunk are replaced by Royal View Transmission Main.
- Ellis and Broadway Trunk Mains will be necessary only if the Utility is mandated to install filtration for Popular Point source.
- Lakeshore Trunk Main is replaced by Adams to Southcrest/Westpoint projects.
- Cambridge, Broadway, Weddell Valve Chambers

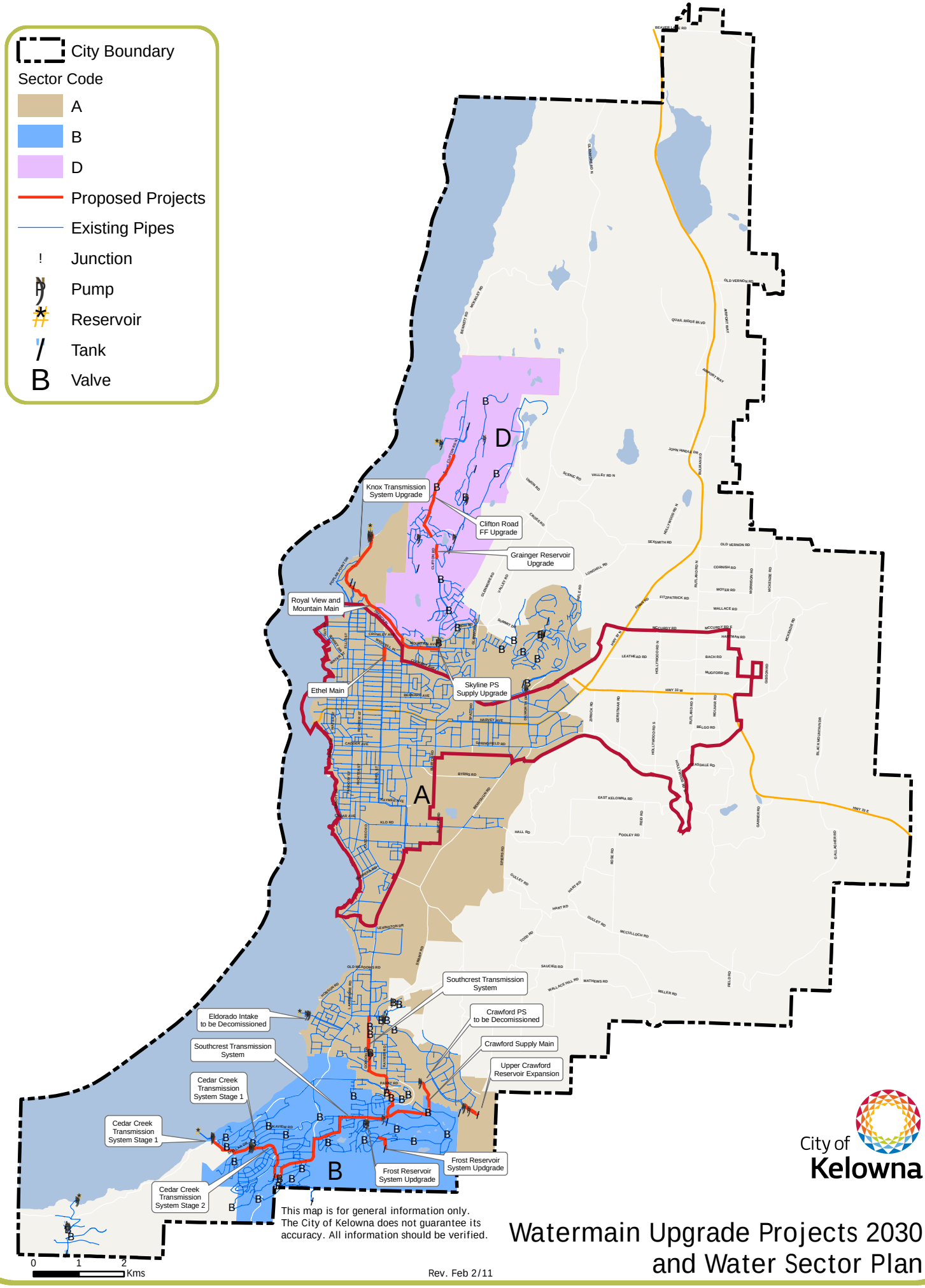
2020 Plan Projects Deferred Beyond 2030

Given the reduction in projected demand growth the 22% safety factor that was applied to future demands for existing development could be eliminated and a 15% reduction applied to all demands after 2015, to reflect the City's demand side management initiative. Therefore, several projects contained in the 2020 Plan can be deferred beyond the year 2030. These are:

- Broadway/Ellis Trunks
- Richter/Clement Trunks
- Dilworth Supply and Twinning
- Summit Reservoir
- Cedar Creek Transmission System Stage 3
- Lower Crawford Reservoir Expansion
- Steel Reservoir Expansion

In addition to a summary listing of the projects included in the water program, the following map has been included in this document:

- Map W-1 details the water projects which are to be completed over the next 20 years in accordance with the plan.


City Boundary
Sector Code
A
B
D
Proposed Projects
Existing Pipes
Junction
Pump
Reservoir
Tank
Valve
Knox Transmission System Upgrade
Clifton Road FF Upgrade
Grainger Reservoir Upgrade
Royal View and Mountain Main
Ethel Main
Skyline PS Supply Upgrade
Southcrest Transmission System
Eldorado Intake to be Decomissioned
Crawford PS to be Decommissioned
Crawford Supply Main
Upper Crawford Reservoir Expansion
Cedar Creek Transmission System Stage 1
Cedar Creek Transmission System Stage 2
Frost Reservoir System Upgrade
Frost Reservoir System Updgrade
This map is for general information only. The City of Kelowna does not guarantee its accuracy. All information should be verified.
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Rev. Feb 2/11
City of Kelowna
Watermain Upgrade Projects 2030 and Water Sector Plan

CITY OF KELOWNA
2030 SERVICING PLAN
AND FINANCING STRATEGY UPDATE
WATER PROJECTS LIST
(ALPHA)

Target Year	PROJECT	DESCRIPTION	TOTAL CAPITAL COST
	DEVELOPER CREDIT		245.0
2020	ADAMS RESERVOIRS - STAGE 2	Late comer as ESA	1,200.0
2013	ADAMS TO SOUTHCREST	Adams to Southcrest	5,814.0
2011	ADAMS UV DISINFECTION	Stage 1 UV	6,199.0
2010	CAPOZZI FIRE FLOW	Commercial fire flow N&S of Truswell	264.0
2010	CARAGLEN FIRE FLOW	Caraglen prv to Alameda Ct	651.0
2011	CEDAR CRK TRANS - Stage 1	Cedar Pump Upgrade (Stellar Improv.)	1,893.7
2020	CEDAR CRK TRANS - STAGE 2	Cedar Ck PS, Stellar PS	11,335.0
2011	CEDAR CRK TRANS STAGE 1	Adams Res - Quichena & McCarren	899.0
2010	CLIFTON MAIN UPGR.	Clifton Main Upgrade	1,542.0
2030	CRWFRD RES	Upper Crawford Reservoir Expansion	1,050.0
2016	ETHEL MAIN	Ethel St. (Weddell Pl - Clement)	551.0
2015	FROST PUMPSTATION	Frost Pump Station and Res Upgrade	2,698.0
2010	GRAINGER RESEVOIR	Grainger Reservoir Expansion	1,424.0
2020	KNOX MOUNTAIN TRANS	Popular Pt PS - Knox Reservoir	3,538.0
2025	PZ STRG UPGRADE	PZ 419 Storage Upgrade	5,586.0
2011	RYL & MNTN MAIN	Knox Resevoir - Skyline PS	6,475.0
2020	S0UTHCREST TO WESTPOINT TRANS	Adams Res-Sthcrst Res-Wstpnt Res	4,496.0
2011	SKYLINE PS	High Rd & Clifton Rd	323.0
2025	SKYLINE SUPPLY MAIN	Skyline Supply Main Upgrade	1,542.0
Annl	ANNL OS	Annual Oversizing Component	1,200.0
		Engineering/Administration @ 1%	126.5
		TOTAL	59,052.3

This schedule is conceptual and is subject to revision to meet future needs and conditions.

CITY OF KELOWNA
2030 SERVICING PLAN
AND FINANCING STRATEGY UPDATE
WATER PROJECTS LIST
(ALPHA)

Target Year	PROJECT	DESCRIPTION	TOTAL CAPITAL COST
	DEVELOPER CREDIT		245.0
2010	**CAPOZZI FIRE FLOW**	Commercial fire flow N&S of Truswell	264.0
2010	**CARAGLEN FIRE FLOW**	Caraglen prv to Alameda Ct	651.0
2010	**CLIFTON MAIN UPGR.**	Clifton Main Upgrade	1,542.0
2010	**GRAINGER RESEVOIR**	Grainger Reservoir Expansion	1,424.0
2011	**ADAMS UV DISINFECTION**	Stage 1 UV	6,199.0
2011	**CEDAR CRK TRANS - Stage 1**	Cedar Pump Upgrade (Stellar Improv.)	1,893.7
2011	**CEDAR CRK TRANS STAGE 1**	Adams Res - Quichena & McCarren	899.0
2011	**RYL & MNTN MAIN**	Knox Resevoir - Skyline PS	6,475.0
2011	**SKYLINE PS**	High Rd & Clifton Rd	323.0
2013	**ADAMS TO SOUTHCREST**	Adams to Southcrest	5,814.0
2015	**FROST PUMPSTATION**	Frost Pump Station and Res Upgrade	2,698.0
2016	**ETHEL MAIN**	Ethel St. (Weddell Pl - Clement)	551.0
2020	**ADAMS RESERVOIRS - STAGE 2**	Late comer as ESA	1,200.0
2020	**CEDAR CRK TRANS - STAGE 2**	Cedar Ck PS, Stellar PS	11,335.0
2020	**KNOX MOUNTAIN TRANS**	Popular Pt PS - Knox Reservoir	3,538.0
2020	**SOUTHCREST TO WESTPOINT TRANS**	Adams Res-Sthcrst Res-Wstpnt Res	4,496.0
2025	**PZ STRG UPGRADE**	PZ 419 Storage Upgrade	5,586.0
2025	**SKYLINE SUPPLY MAIN**	Skyline Supply Main Upgrade	1,542.0
2030	**CRWFRD RES**	Upper Crawford Reservoir Expansion	1,050.0
Annl	**ANNL OS**	Annual Oversizing Component	1,200.0
		Engineering/Administration @ 1%	126.5
		TOTAL	59,052.3

This schedule is conceptual and is subject to revision to meet future needs and conditions.

3. Wastewater Trunk Mains/Lift Stations

The total cost of the Wastewater Trunk Main and Lift Station program is estimated to be $37.9 Million. The program represents an average annual expenditure of $1.9 Million over the 20 year planning horizon.

The sewer trunk and lift station program as developed represents the required infrastructure needs to service the new population growth over the next 20 years.

Key OCP policies guiding the direction of the Water Network:

- Connect urban development to the sanitary sewer system.

More significant works include:

- Upgrade of Lakeshore Trunk (Gordon Trunk under the 2020 Plan) to service new growth. A financial analysis determined Lakeshore Road to be the preferred alignment with the added benefit of savings realized by doing the trunk main in conjunction with transportation improvements on Lakeshore Road.
- Completion of the Byrns–WWTF extension of the major trunk main from the sewage treatment plant to the north and east area of the city. This is required to handle additional flows that cannot be accommodated in the North East Trunk main (Highway 33/97 intersection back to the treatment plant).
- Extension of the Airport Gravity sewer trunk main to service new growth in the North End.
- Completion of Glenmore sewer trunk main to service new growth in the North Glenmore area.

2020 Plan Projects No Longer Required:

Due to changes in development servicing routing and upgrades to other trunk mains, as well as changes to the proposed future land use, a number of projects previously identified in the 2020 Plan can be excluded from the 2030 Plan. These projects include:

- Glenmore 7C
- Gordon ELS
- Ethel 3

The following servicing assumptions have been incorporated into the sewer trunk and lift station system:

- The South East Kelowna and North McKinley areas of the city will not be serviced by the city's sanitary sewer system within this planning horizon.

- All development in the remainder of the city will be serviced by the city's sanitary sewer system.

- Not all of the improvements to sanitary sewer lift stations are the responsibility of new growth and costs have been apportioned accordingly.

- The urbanized areas of Rutland will be totally serviced by the sanitary sewer system within the 20 year planning horizon.

- Construction costs have been estimated on the basis of costs incurred on similar projects undertaken over the past several years and construction contingency of 25% has been added to projects to reflect the level of engineering effort ('Class C' estimate) that has been expended to develop the plan. The contingency on projects which have had preliminary engineering design work completed ('Class B' estimate) have been reduced to 15%. It should be noted that lower levels of contingency do not translate into lower construction cost estimates, but do reflect a higher level of confidence in the cost estimates calculated.

The sanitary sewer trunk and lift station program is only one element of the City's sewer infrastructure needs. Other programs which must be undertaken over the 20 year planning horizon are:

- Replacement of wood stave and clay tile sanitary sewer mains which have deteriorated over time.
- Upgrade of sanitary sewer lift stations which are not directly attributable to new growth.
- Provision of sewer service to existing developed areas which would normally be accomplished by formation of Specified Areas.

Details of this program have been included in the City's Sewer Utility rate model for the purpose of projecting the impact on rates over the next 10 years.

In addition to a summary listing of the projects included in the sewer program, the following map has been included in this document:

- Map S-1 details the sewer projects which are to be completed over the next 20 years in accordance with the plan.

City Boundary

Generalized Future Sewer Limits to Year 2030

Core Area

Sector Code

City Wide

South Mission

Creek

Developer Build

Proposed Trunk

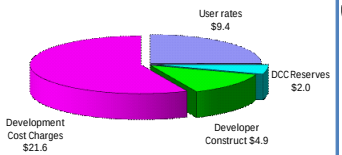
Completed Trunk

! Project Start and End Points

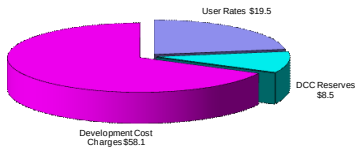
^ Proposed WWTF Expansion

NOTES:
FUTURE DEVELOPMENT AREAS INCLUDED IN DEVELOPMENT CHARGE CALCULATIONS ARE THOSE WHICH WILL ACCUR IN AREAS TO BE SERVICED BY THE CITY OF KELOWNA SEWER UTILITY FOR DISPOSAL THROUGH THE MAIN POLLUTION CONTROL CENTER. (NOT INCLUDING THE TRADE WASTE PLANT)
SERVICEABILITY TO BE DETERMINED ON A SITE SPECIFIC BASIS.
EXISTING LAND USE CONTRACT AREAS WITH IN ANY SECTOR SHOWN ON THIS MAP MAY BE EXEMPT FROM DEVELOPMENT COST CHARGE BY-LAW PROVISIONS.

CITY OF KELOWNA
WASTEWATER TRUNKS PROGRAM
FUNDING SOURCES
Total Program $37.9 MILLION



CITY OF KELOWNA
WASTEWATER TREATMENT
PROGRAM FUNDING SOURCES
Total Program $86.1 MILLION



Kinnikinnick
Airport
Glenmore Connection
6B Cross
S-A
Lane N Harvey
Rutland
Millsbar
Springzip
Water FM Phase 1
Water FM Phase 2
Byrnsbar Phase 1
Springblack
Gyro FM
Hall
KLO
Byrnsbar Phase 2
Lakeshore
S-B

This map is for general information only. The City of Kelowna does not guarantee its accuracy. All information should be verified.

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Rev. April 11/11

City of Kelowna

DCC Wastewater Trunks and Sector Plan

CITY OF KELOWNA
2020 SERVICING PLAN AND FINANCING STRATEGY UPDATE
WASTEWATER TRUNKS PROJECTS LIST
(ALPHA)

Target Year	PROJECT	FROM - TO	TOTAL CAPITAL COST
	O/S MS1 LKSHR	Outstanding Developer Credit	19.4
	Byrns Baron Trunk	Long Term Financing	1,433.2
cmplt	CROSS RD 6B	Glenmore - Valley	891.7
Q2	AIRPORT GRAVITY	Bulman - Airport	3,970.0
Q3	BYRNS/BARON - Ph 2	Byrns to WWTF	7,789.3
Q4	GLENMORE CONNECTION	Cross - 200 m. North of Scenic	1,792.0
Q2	GUY LS	Guy@Bay	836.0
Q1	GYRO FM	Gyro LS - KPCC	1,552.0
Q4	GYRO LS	Lakeshore - Swordy	1,274.0
Q3	KINNICKINNICK	Shayler - 1220 m North of Scenic	1,980.7
Q2	KLO	KLO - Swordy	588.0
Q1	LAKESHORE TRUNK	Old Meadows to KPCC	10,881.0
Q1	RAYMER LS	@ Curtis	638.0
Q3	ROSE AVE LS	Rose Ave @ Hospital	1,200.0
Q4	RUTLAND TRUNK	Ziprick to Houghton	1,211.0
Q3	WATER ST. FM	Pandosy to Ethel	465.0
	OVERSIZE	Oversize Component - $60,000/yr	1,200.0
		Engineering/Administration	215,515
		TOTAL	253,236

This schedule is conceptual and is subject to revision to meet future needs and conditions.

CITY OF KELOWNA
2020 SERVICING PLAN AND FINANCING STRATEGY UPDATE
WASTEWATER TRUNKS PROJECTS LIST
(BY QUARTER)

Target Year	PROJECT	FROM - TO	TOTAL CAPITAL COST
	O/S MS1 LKSHR	Outstanding Developer Credit	19.4
	Byrns Baron Trunk	Long Term Financing	1,433.2
cmplt	CROSS RD 6B	Glenmore - Valley	891.7
Q1	GYRO FM	Gyro LS - KPCC	1,552.0
Q1	RAYMER LS	@ Curtis	638.0
Q1	LAKESHORE TRUNK	Old Meadows to KPCC	10,881.0
Q2	KLO	KLO - Swordy	588.0
Q2	AIRPORT GRAVITY	Bulman - Airport	3,970.0
Q2	GUY LS	Guy@Bay	836.0
Q3	BYRNS/BARON - Ph 2	Byrns to WWTF	7,789.3
Q3	WATER ST. FM	Pandosy to Ethel	465.0
Q3	KINNICKINNICK	Shayler - 1220 m North of Scenic	1,980.7
Q3	ROSE AVE LS	Rose Ave @ Hospital	1,200.0
Q4	GYRO LS	Lakeshore - Swordy	1,274.0
Q4	RUTLAND TRUNK	Ziprick to Houghton	1,211.0
Q4	GLENMORE CONNECTION	Cross - 200 m. North of Scenic	1,792.0
	OVERSIZE	Oversize Component - $60,000/yr	1,200.0
		Engineering/Administration	215,515
		TOTAL	253,236

This schedule is conceptual and is subject to revision to meet future needs and conditions.

4. Wastewater Treatment and Disposal

The total cost of the Sewer Treatment and Disposal program is estimated to be $86.1 Million. The program represents an average annual expenditure of $4.3 Million over the 20 year planning horizon.

The sewer treatment and disposal program as developed represents the required infrastructure needs to service the new population growth over the next 20 years.

Some of the more significant works included are as follows:

- Long term debt totaling $63.4 million for the now completed major expansion to the existing sewage treatment facility.

- Further expansion to the City's Sewage Treatment and Disposal program includes the staged construction of a composting facility to adequately deal with de-watered sludge from the treatment facility.

It is anticipated that the requirement for an additional sewage treatment facility site is beyond the 20 year planning horizon so the cost sharing model allocates the estimated cost to taxation (taxation). When sufficient engineering information is available identifying the year the new site will be needed, a proportionate share will be allocated to new growth and reflected in future DCC revisions.

The following servicing assumptions have been incorporated into the sewer treatment and disposal system:

- The South East Kelowna area of the city will not be serviced by the City's sanitary sewer system. The North McKinley area and extreme northern areas of Glenmore, are also not anticipated to be serviced with sewer within 20 years.

- All development in the remainder of the city will be serviced by the City's sanitary sewer system.

- All units, within future sewer area boundaries will be levied a Sewage Treatment Development Cost Charge levy on the assumption that they will be connected to the plant within 20 years.

- Construction costs have been estimated on the basis of recent engineering studies which have been completed by outside consulting firms.

CITY OF KELOWNA

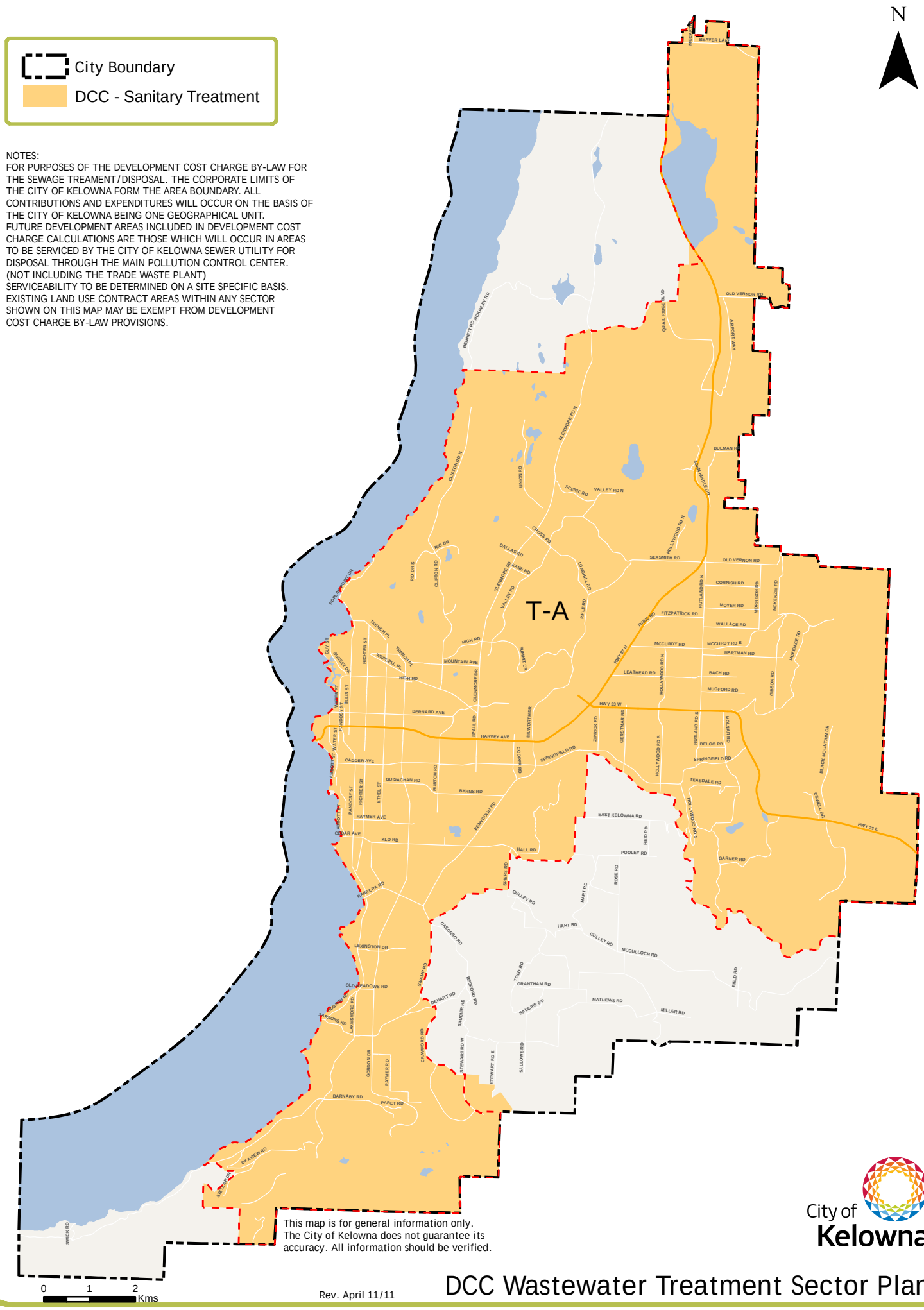
2020 SERVICING PLAN AND FINANCING STRATEGY UPDATE

WASTEWATER TREATMENT PROJECTS LIST

(ALPHA)

YEAR	PROJECT	DESCRIPTION	PROJECT COST
	KPCC Existing Debt Commitment		1,666.7
	WWTF - Phase 2 Plant Extension		52,192.8
	WWTF - Long Term Financing		11,216.8
2010	Existing Compost Plant Expansion		6,600.0
2016	Secondary Aeration Expansion		1,000.0
2018	Land Acquisition - Compost Site		1,218.0
2022	Primary/Sec Aeration Expansion		6,000.0
	WWTF Land Acquisition		5,600.0
	Engineering/Administration		581.2
	TOTAL		86,075

This schedule is conceptual and is subject to revision to meet future needs and conditions.



NOTES:
FOR PURPOSES OF THE DEVELOPMENT COST CHARGE BY-LAW FOR THE SEWAGE TREAMENT/DISPOSAL. THE CORPORATE LIMITS OF THE CITY OF KELOWNA FORM THE AREA BOUNDARY. ALL CONTRIBUTIONS AND EXPENDITURES WILL OCCUR ON THE BASIS OF THE CITY OF KELOWNA BEING ONE GEOGRAPHICAL UNIT.
FUTURE DEVELOPMENT AREAS INCLUDED IN DEVELOPMENT COST CHARGE CALCULATIONS ARE THOSE WHICH WILL OCCUR IN AREAS TO BE SERVICED BY THE CITY OF KELOWNA SEWER UTILITY FOR DISPOSAL THROUGH THE MAIN POLLUTION CONTROL CENTER. (NOT INCLUDING THE TRADE WASTE PLANT)
SERVICEABILITY TO BE DETERMINED ON A SITE SPECIFIC BASIS.
EXISTING LAND USE CONTRACT AREAS WITHIN ANY SECTOR SHOWN ON THIS MAP MAY BE EXEMPT FROM DEVELOPMENT COST CHARGE BY-LAW PROVISIONS.

City of Kelowna

DCC Wastewater Treatment Sector Plan

Rev. April 11/11

CITY OF KELOWNA

2020 SERVICING PLAN AND FINANCING STRATEGY UPDATE

WASTEWATER TREATMENT PROJECTS LIST

(ALPHA)

YEAR	PROJECT	DESCRIPTION	PROJECT COST
	KPCC Existing Debt Commitment		1,666.7
	WWTF - Phase 2 Plant Extension		52,192.8
	WWTF - Long Term Financing		11,216.8
2010	Existing Compost Plant Expansion		6,600.0
2018	Land Acquisition - Compost Site		1,218.0
2022	Primary/Sec Aeration Expansion		6,000.0
2016	Secondary Aeration Expansion		1,000.0
	WWTF Land Acquisition		5,600.0
	Engineering/Administration		581.2
	TOTAL		86,075

This schedule is conceptual and is subject to revision to meet future needs and conditions.

5. Parks/Open Space Acquisition

The total cost of the Parkland Acquisition program is estimated to be $125.5 Million. The program represents an average annual expenditure of $6.3 Million over the 20 year planning horizon.

The Parkland Acquisition program represents the costs of acquisition of city-wide, recreation, community and neighbourhood parks required to service the projected additional population over the 20 year planning horizon.

Based on a standard of 2.2 hectares per 1,000 population, the city will need to acquire 95 hectares of park over the next 20 years.

The following servicing assumptions have been incorporated into the park land acquisition program:

- In order to accommodate the higher density form of new growth projected in the Official Community Plan, there will be a need to acquire some land with existing improvements on the land. This will provide neighbourhood parks in close proximity to growth areas and will increase the average value of land as compared to purchasing vacant land.

- The cost of purchasing some waterfront parkland has been included in the calculations for City Wide park requirements.

- Acquisition costs are based on the current values of actual identified properties and estimated future acquisitions, by park type and by growth area.

- Other park amenities such as linear parks, creek corridors and natural open space will be acquired, however costs of these amenities will not form a part of the standard of 2.2 hectares per thousand and will not be recovered directly from new growth.

  The inclusion of linear parks and creek corridors would necessitate an increase in the current standard. It has been determined that these spaces relate to urban form and a desire to protect natural features within the community rather than to population growth and it would be impractical to set a standard based on acreages.

6. Overall Summary

The total cost of the Major Servicing program, as detailed above, is estimated to be $709.0 Million.

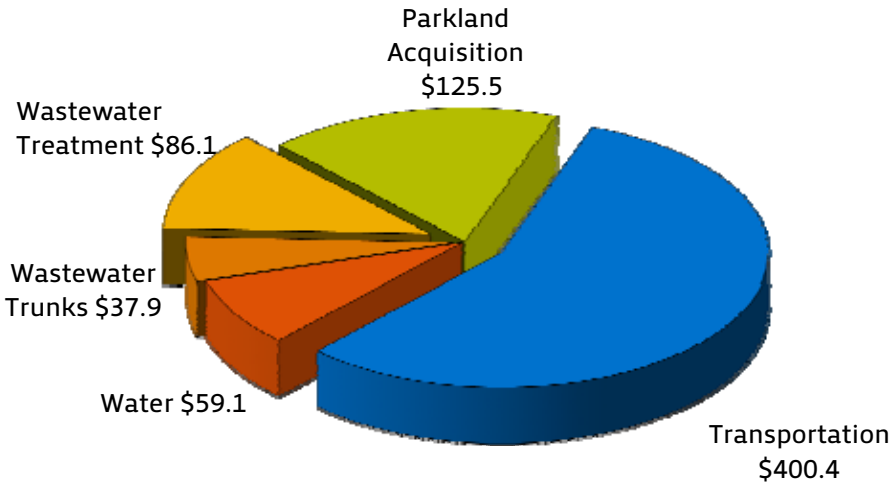
To summarize, the cost of the program is as follows:

Arterial Roads Program	$400.4
Water Pumping/Distribution/Reservoir	59.1
Sewer Collection/Lift Station System	37.9
Sewer Treatment/Disposal System	86.1
Parkland Acquisition Program	125.5
	$709.0

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.

The servicing costs of individual development improvements such as internal roads, water and sewer collection systems and street lighting are the responsibility of the developer and no attempt has been made to estimate the costs of these servicing requirements in this document.

City of Kelowna
20 Year Servicing Plan
Expenditures
Total Program $709.0 Million



($ Millions)

V. ANALYSIS OF COST SHARING - MAJOR SERVICES BY SERVICE TYPE

The purpose of this section is to provide a more detailed financial impact analysis of each major service category including the principles applied in development of the cost sharing methodology for each service and how those principles differ from those applied in previous plans.

For each service, a cost sharing model has been developed which itemizes each capital project included in the plan and how the cost of each project is to be financed over the 20 year planning horizon.

The individual capital project costs have been developed on the best information available and in most cases without the benefit of detailed engineering design work which would be unrealistic for a long range plan of this type.

1. Arterial Roads

Exhibit "A" – Updated 20 Year Off-Site Road Servicing Plan & Financing Strategy - Cost Sharing Model, attached, provides all of the detailed calculations for each capital project and how each project is shared between existing taxpayers and new growth within the 20 year planning horizon.

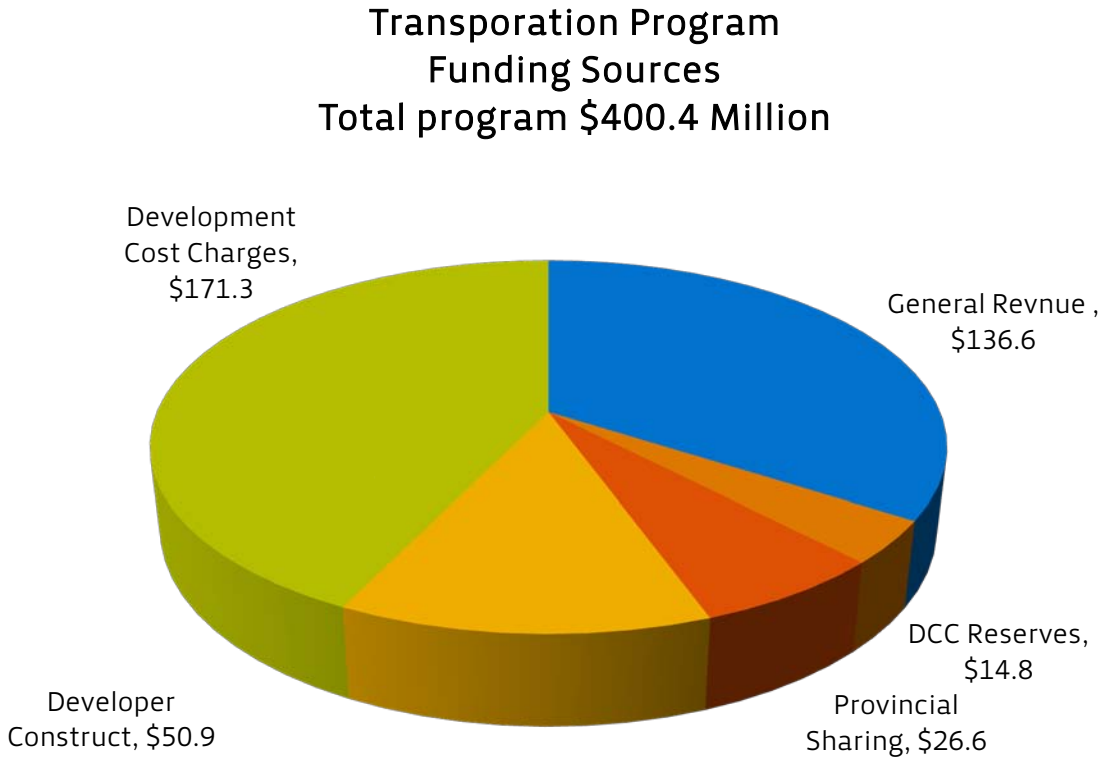
The model provides a further breakdown of how each new growth project is cost shared between benefiting sectors of the city.

The total cost of the Transportation program, over the 20 year planning horizon, is $400.4 million. A major cost factor in the program is the purchase of required rights-of-way to achieve widening of existing roads as well as the construction of new arterial roads where those roads are not on developable lands.

The cost of rights-of-way acquisition included in this program is $78.2 Million.

The following is a summary of the funding sources for the roads program based on the cost sharing principles and assumptions which have been incorporated in the cost sharing model for roads:

Total Program Cost	$400.4	%
Provincial Grants	$ 26.6	6.6
General Tax (Assist/General Benefit)	136.8	34.2
Development Cost Charge	171.3	42.8
Developer Construct	50.9	12.7
Development Cost Charge Reserves	14.8	3.7



Cost Sharing Principles and Assumptions

- Developers will continue to be responsible for the dedication of 20 meters of right-of-way for arterial roads through their development lands and will be responsible for the construction of two lanes of the arterial road.

- Unconditional Provincial Grants for qualifying projects under Provincial Revenue Sharing have been forecast at $150,000 per year based on the most recent experience. This is similar to the annual revenue forecast in the previous plan.

- Arterial roads projects identified as requiring Provincial Assistance are Highway 33, Clement 2, Highway Link – Gordon and Houghton Overpass - AT. Highway 33 has been completed; however it remains in the program as it had not yet been paid out as at the beginning of this Plan.

- Road improvements which have been identified as providing a general city-wide benefit have been cost shared between existing taxpayers and new growth based on the ratio of current population to projected total population at the end of the planning horizon, 2030. This result is a 73.4/26.6% ratio for cost allocation purposes and is applied to sidewalks on arterial roads, bicycle paths on arterial roads and one half of bridge costs where there is not an existing bridge in place.

Also included in this category are specific projects that have a high benefit to existing taxpayers and includes all Active Transportation corridors as well as John Hindel 1-4 (Glenmore Rd – Station 12+750).

- Strategic roads located in the heart of the City's existing population (the urban core) have been assigned an existing benefit ratio of 33.3 % based upon applying certain criteria on a road by road basis. This criteria includes:
  - upgrading from rural to urban; which has been applied to Guisachan 2, Guisachan 3, Hollywood 3, 4, 5 & 6, Pandosy 1 and Sexsmith 3
  - reducing congestion on other major roads; applied to Clement 2, Clement 3 and Highway 33(1).

- Additional taxation cost sharing is included on Lakeshore Bridge at Mission Creek to reflect a 50% benefit to existing residents from this bridge.

- Cost sharing is also recognized on Lakeshore 1 and Lakeshore 2 with existing benefit being applied on 4 meters of the 30 meter land right of way to coincide with construction of 26 meters of roadway only.

- Road costs will continue to be cost shared using a sector approach which recognizes that the cost of providing a road network in one area of the City may be more expensive than in other areas.

  The sector approach has been reduced in this plan to six (6) sectors with the amalgamation of sector D and sector F into one, sector D, in the east Highway 33 area of the City.

- Common roads, classified primarily as roads within the larger Inner City area, will continue to be shared on a prorata basis by the total number of units projected to be achieved within each sector. Roads which are specifically required to service growth within each of the outlying areas will be paid for entirely by growth in that sector.

- Sector I (Inner City) will contribute 25% towards each of Highway 33, Hollywood 7 and Hollywood 8 based on the common use of these roadways by all of the community.

- Sector A (SE Kelowna) will contribute towards Casorso 1 (30%) and Stewart 3 (45%) based on the use of these roadways by residents in the Crawford community.

- The Development Cost Charge rate for each outlying sector will be comprised of that sector's share of the common roads costs as well as the roads costs within that specific sector.

- The Secondary Suites rate differential, being that between the Residential 3 rate and the flat rate approved by Council, is apportioned to taxation.

- No consideration has been given for potential excess capacity which exists in the arterial road network and conversely no consideration has been given for potential excess capacity which will exist at the end of the current planning horizon.

- Because legislation does not allow 100% of development related costs to be charged to new development, it implicitly requires that an "assist factor" be applied. This assist factor is separate from any allocation of costs applied between new development and existing users. The arterial roads costs in this program have a 15% assist applied. This reflects the recognized benefit that new or expanded roads will be to existing taxpayers. The 15% has not changed from the previous plan.

- Costs of the arterial road network in the South Mission Sector have been included in this financial analysis. Developers in this area are responsible for the entire program meaning that they are required to build the roads in this sector, for which they receive DCC credits against development cost charges incurred at subdivision time.

Financial Impacts

- The program, based on the timing of the projects outlined in the plan and the projected cash inflow from Development Cost Charge levies, may result in the need to borrow funds. If borrowing is required, it will be necessary to debt finance and repay a portion of the debt with future DCC revenue.

  Debt Financing on roads projects do not form a part of the Development Cost Charge calculation and, therefore, will result in an additional tax burden for existing taxpayers or create a shortfall in the DCC program if DCC revenues are used to pay interest. There is a need to manage the program to minimize the level of borrowing and long term debt financing to the extent possible.

- A portion of the re-development which is to occur over the 20 year planning horizon will be exempt from the payment of Development Cost Charges by virtue of the Local Government Act and this cost must be recognized as a general taxpayer obligation.

- General Taxpayer obligations resulting from a combination of the assist factor, secondary suite rate differential, shared benefit roads and demand placed on services by new growth for which a Development Cost Charge cannot be collected, must be included in the annual pay-as-you-go capital program.

- Cash inflow from Development Cost Charges is impacted by Local Government Act regulations which provide protection from increased levies for one year from the date of application. In a period of high growth the reduction in revenue can present a significant financial burden on existing taxpayers or create a shortfall within the DCC revenue total.

CITY OF KELOWNA

2030 TRANSPORTATION SERVICING PLAN & FINANCING STRATEGY (2011)

COST SHARING MODEL

EXHIBIT "A" - TRANSPORTATION

(2010 Dollars X 1000)

Target Quarte	Sect	NAME	LOCATION	Cross Sctn	RoW (M)	TOTAL CAPITAL COSTS	NON DCC REVENUE SOURCES: By Devlp'r	Highways Assist	MOTH Max Lmt 150/yr	Total Existing Benefit (Taxation)	Secondary Suites (Taxation)	Grand Total Paid By Taxation	NET FOR DCC BASED CALC's	DCC SECTOR ALLOCATIONS: A S.E. Kelowna	B South Mission	C NE of Inner City	D Hwy 33	E North of Inner City	I COMMON
		Growth Units:									**450**		**16,507**	**45**	**2,117**	**691**	**1,657**	**2,146**	**16,507**
Q3	A	**McCulloch**	Various	RAU2L	20-30	**2,884.9**					14.7	14.7	**2,870.2**	2,870.2					
						2,884.9					**14.7**	**14.7**	**2,870.2**	**2,870.2**					
Q1	B	**Deficiencies**	Frst 2/3,Brnby 1,Kldr,S.Per 2,Stw 2,Grd 1			**2,366.5**					13.3	13.3	**2,353.1**		2,353.1				
Q2	B	**Frost 1**	Killdeer - Chute Lake	UCU2L	20	**1,686.7**					9.5	9.5	**1,677.2**		1,677.2				
Q2	B	**Gordon 1 - part 1**	Frost - South Crest Dr	UAD2L	30	**1,492.7**					8.4	8.4	**1,484.3**		1,484.3				
Q2	B	**Gordon 1 - part 2**	South Crest Dr - S. Perimeter	UAD2L	30	**2,524.5**					14.2	14.2	**2,510.3**		2,510.3				
Q4	B	**Lakshr 1A**	Vintage Terrace Rd to Barnaby Rd	RAD2L	30	**2,376.8**					13.4	13.4	**2,363.5**		2,363.5				
Q4	B	**S. Perimeter 1**	Gordon Dr to Stewart 1	RAU2L	30	**7,065.3**					39.8	39.8	**7,025.5**		7,025.5				
						17,512.5					**98.6**	**98.6**	**17,413.9**		**17,413.9**				
Q4	*B	**Casorso 1**	Benvoulin - Swamp	RAU4L	30	**1,886.8**				248.5	9.2	257.7	**1,629.0**	488.7	1,140.3				
Q4	*B	**Casorso Bridge - Mission Cr.**	Widening bridge to 4 lane	RAD4L	30	**2,743.7**					15.4	15.4	**2,728.3**		2,728.3				
Q1	*B	**Dehart 2**	Lakeshore Road - Gordon Drive	UAU2L	26	**1,719.4**				76.9	9.2	86.1	**1,633.3**		1,633.3				
Q3	*B	**Gordon Bridge - Bellevue Cr.**	Crossing - Bellevue Creek	UAU2L	20	**454.6**					2.6	2.6	**452.0**		452.0				
Q3	*B	**Lakshr 1**	Dehart Rd - Vintage Terrace	UAU2L	30	**4,998.4**				766.7	23.8	790.6	**4,207.8**		4,207.8				
Q3	*B	**Lakshr Bridge - Bellevue Cr.**	Crossing - Bellevue Creek	UAD4L	30	**1,428.3**					8.0	8.0	**1,420.2**		1,420.2				
Q3	*B	**Lakshr 2**	Old Meadows - DeHart	UAU2L	30	**6,028.6**	602.9			1,751.6	20.7	1,772.3	**3,653.5**		3,653.5				
Q4	*B	**Stewart 3**	Swamp - Crawford Rd	RAU2L	30	**6,443.2**					36.3	36.3	**6,406.9**	2,915.2	3,491.8				
						25,703.0	**602.9**			**2,843.7**	**125.3**	**2,969.0**	**22,131.1**	**3,403.9**	**18,727.2**				
DC	C	**McCurdy 4 (Dev Credit)**	Craig Rd - Tower Ranch (Dvlpr Crdt)	RAU2L	25	**5,488.9**							**5,488.9**			5,488.9			
Q4	D	**Lone Pine**	Highway 33 - 500m east	UCU2L	20	**2,877.7**					11.6	11.6	**2,866.1**				2,866.1		
Q4	D	**Gallagher 1**	Lago Vista - Gallagher Rd	RCU2L	16-20	**8,193.6**	6,964.6				4.9	4.9	**1,224.1**				1,224.1		
Cmplt	D	**Highway 33 (Complete)**	Mckenzie - Gallagher			**22,924.3**		11,931.4		2,188.9		2,188.9	**8,804.1**				6,603.0		2,201.0
						33,995.6	**6,964.6**	**11,931.4**		**2,188.9**	**16.5**	**2,205.4**	**12,894.3**				**10,693.3**		**2,201.0**
Q3	E	**Airport**	Hollywood Road - Highway 97	UAD2L	30	**1,516.7**	151.7				1.9	1.9	**1,363.1**					1,363.1	
Q1	E	**John Hindle 1**	Glenmore Rd - Station 11+340	UAU2L	30	**2,922.7**				2,145.3	1.1	2,146.4	**776.4**					776.4	
Q1	E	**John Hindle 2**	Station 11+340 - Station 11+900	RAU2L	30	**1,304.2**				957.3	0.5	957.8	**346.4**					346.4	
Q1	E	**John Hindle 3**	Station 11+900 - Station 12+300	RAU2L	30	**3,161.9**				2,320.9	1.2	2,322.0	**839.9**					839.9	
Q1	E	**John Hindle 4**	Station 12+300 - Station 12+750	RAU2L	30	**2,747.7**				2,016.8	1.0	2,017.8	**729.9**					729.9	
Q2	E	**Hollywd 7**	Sexsmith Road - Appaloosa	UAD2L	25	**1,996.0**	159.7			19.3	2.5	21.7	**1,814.6**					1,360.9	453.6
Q4	E	**Hollywd 8**	Appaloosa - Quail Ridge	UAD2L	25	**10,639.5**	6,383.7			242.2	4.3	246.5	**4,009.3**					3,007.0	1,002.3
						24,288.8	**6,695.1**			**7,701.7**	**12.4**	**7,714.2**	**9,879.5**					**8,423.6**	**1,456.0**
Q3	I	**Begbie**	Glenmore Highlands - Glenmore Rd.	RCU2L	20	**2,247.2**	2,247.2												
Q4	I	**Benvoulin 1**	Casorso Road - KLO Road	RAD4L	30	**9,242.0**				1,010.2	120.6	1,130.8	**8,111.2**						8,111.2
Q2	I	**Burtch 2**	KLO Road - Byrns Road	RAU2L	25	**4,830.2**				120.0	69.0	189.0	**4,641.2**						4,641.2
Q3	I	**Burtch 4**	Sutherland - Harvey Ave	UAD2L	25	**476.0**				13.4	6.8	20.2	**455.9**						455.9
Q3	I	**Clement 1**	Ellis - Graham	UAD4L	30	**6,778.4**	949.0			464.4	78.6	543.0	**5,286.4**						5,286.4
Q1	I	**Clifton**	Clement - Mountain	UAD4L	30	**4,635.8**				166.1	65.5	231.6	**4,404.2**						4,404.2
Q4	I	**Clement 2**	Spall Road - Highway 33	RAD4L	35	**46,121.3**		11,862.4		11,305.4	336.4	11,641.8	**22,617.1**						22,617.1
Q4	I	**Clement 3**	Highway 33 - McCurdy Road	RAD4L	35	**2,092.9**				690.6	20.6	711.2	**1,381.7**						1,381.7
Q4	I	**Gordon 4**	Old Meadows Rd - Lequime	UAD4L	30	**793.9**	793.9												
Q2	I	**Guisachan 2**	Gordon - Nelson Rd	UAD4L	30	**2,089.4**				775.6	19.3	794.9	**1,294.5**						1,294.5
Q2	I	**Guisachan 3**	Ethel - Gordon	UAU2L	25	**2,186.5**				754.1	21.0	775.0	**1,411.4**						1,411.4
Q2	I	**Hollywd 3**	McCurdy Road - Stremel	UAU2L	25	**1,737.2**	434.3			509.7	11.6	521.4	**781.5**						781.5
Q2	I	**Hollywd 4**	Stremel - Highway 97	UAU2L	25	**4,686.6**	1,171.6			1,343.4	31.8	1,375.2	**2,139.7**						2,139.7
Q2	I	**Hollywd Bridge - Francis Cr.**	Francis Creek - Crossing	UAU2L	25	**34.9**				12.8	0.3	13.1	**21.7**						21.7
Q2	I	**Hollywd 5**	Highway 97 - Railway Track	UAU2L	25	**3,443.7**	860.9			918.7	24.4	943.1	**1,639.7**						1,639.7

(2010 Dollars X 1000)

Target Quarte	Sect		NAME	LOCATION	Cross Sctn	RoW (M)	TOTAL CAPITAL COSTS	NON DCC REVENUE SOURCES: By Devlp'r	Highways Assist	MOTH Max Lmt 150/yr	Total Existing Benefit (Taxation)	Secondary Suites (Taxation)	Grand Total Paid By Taxation	NET FOR DCC BASED CALC's	DCC SECTOR ALLOCATIONS: A S.E. Kelowna	B South Mission	C NE of Inner City	D Hwy 33	E North of Inner City	I COMMON
			Growth Units:									**450**		**16,507**	**45**	**2,117**	**691**	**1,657**	**2,146**	**16,507**
Q2	I		**Hollywd Bridge - Mill Cr.**	Mill Creek - Crossing	UAU2L	25	**1,052.2**				386.1	9.8	395.9	**656.3**						656.3
Q2	I		**Hollywd 6**	Railway Track - Sexsmith Rd	UAU2L	25	**578.3**				224.0	5.2	229.2	**349.0**						349.0
Q4	I		**Highway 33(1)**	Clement 2 - Enterprise	RAD4L	35	**4,307.5**		1,435.8		974.7	27.8	1,002.5	**1,869.1**						1,869.1
Q4	I		**Hwy Link-Gordon**	Sutherland - Bernard	UAD4L	30	**3,442.7**				40.9	49.9	90.8	**3,351.9**						3,351.9
Q1	I		**Hwy Link-Pand 3**	Sutherland - Lawrence	UAD4L		**3,000.0**							**3,000.0**						3,000.0
Q1	I		**Lakshr 3**	Richter Street - Old Meadows Road	UAU2L	30	**20,637.2**	619.1			895.6	280.3	1,175.9	**18,842.2**						18,842.2
Q1	I		**Lakshr Bridge - Mission Cr.**	Mission Creek - Crossing	UAD4L	30	**5,661.7**	396.3			1,737.6	51.7	1,789.3	**3,476.1**						3,476.1
Q1	I		**Lakshr Bridge - Wilson Cr.**	Wilson Creek - Crossing	UAD4L	30	**1,001.1**					14.7	14.7	**986.4**						986.4
Q2	I		**Lakshr 4**	Lanfranco Road - Richter Street	UAU2L	30	**4,224.4**	1,394.1			108.1	39.9	148.0	**2,682.3**						2,682.3
Q4	I		**McCurdy 1**	Dilworth - COMC	RAU2L	30	**1,264.6**					18.5	18.5	**1,246.1**						1,246.1
DC	I		**McCurdy 2 (Dev Credit)**	COMC - Highway 97	UAU2L	30	**705.4**							**705.4**						705.4
Q3	I		**Pandosy 1**	Raymer - Rose	UAU2L	20	**3,701.5**				1,303.3	35.1	1,338.5	**2,363.1**						2,363.1
Q3	I		**Richter 1**	Sutherland - KLO	UAU2L	20	**7,173.1**				441.8	98.7	540.4	**6,632.7**						6,632.7
Q4	I		**Ridge**	Cara Glen Way - Union Road	UAU2L	20	**20,415.8**	20,415.8												
Q3	I		**Rio 1**	Clifton Road - Clear Ponds Place	UCU2L	20	**1,285.8**	1,285.8												
Q2	I		**Rose 1**	Pandosy - Ethel	UAU2L	25	**8,072.2**	565.1			192.1	107.2	299.3	**7,207.8**						7,207.8
Q1	I		**Rutland 2**	Cornish Road - Old Vernon Road	UAD2L	30	**4,369.4**				278.7	60.0	338.7	**4,030.7**						4,030.7
Q1	I		**Sexsmith 2**	Snowsell - Glenmore Bypass	UAD2L	30	**135.8**				49.5	1.3	50.8	**85.0**						85.0
Q1	I		**Sexsmith 3**	Glenmore Bypass - Valley Road	UAD2L	25	**1,649.8**	659.9			480.2	7.5	487.7	**502.2**						502.2
Q1	I		**Sexsmith 5**	Longhill - Rutland Road	UAD4L	30	**12,608.4**	3,782.5			710.1	118.9	829.0	**7,996.9**						7,996.9
							196,682.7	**35,575.6**	**13,298.2**		**25,907.3**	**1,732.3**	**27,639.6**	**120,169.3**						**120,169.3**
			ACTIVE TRANSPORTATION																	
Q3	*B		**Lakshr 1 - AT**	Dehart Rd - Vintage Terrace			**415.6**				305.1	1.6	306.7	**108.9**		108.9				
Q3	*B		**Lakshr 2 - AT**	Old Meadows - DeHart			**459.4**				337.2	1.8	339.0	**120.4**		120.4				
Q3	E		**Airport - AT**	Hollywood Road - Highway 97	UCD2L	30	**175.0**	17.5			115.6	0.6	116.2	**41.3**					41.3	
Q1	E		**John Hindle 1 - AT**	Glenmore Rd - Station 11+340			**586.3**				430.3	2.3	432.6	**153.7**					153.7	
Q1	E		**John Hindle 2 - AT**	Station 11+340 - Station 11+900			**245.0**				179.8	1.0	180.8	**64.2**					64.2	
Q1	E		**John Hindle 3 - AT**	Station 11+900 - Station 12+300			**175.0**				128.5	0.7	129.1	**45.9**					45.9	
Q1	E		**John Hindle 4 - AT**	Station 12+300 - Station 12+750			**196.9**				144.5	0.8	145.3	**51.6**					51.6	
Q2	E		**Hollywd 7 - AT**	Sexsmith Road - Appaloosa			**153.1**				112.4	0.6	113.0	**40.1**					30.1	10.0
Q4	E		**Hollywd 8 - AT**	Appaloosa - Quail Ridge			**1,925.0**				1,413.0	7.5	1,420.5	**504.5**					378.4	126.1
Q2	I		**Abbott - AT**	Rose - Lakeshore	UCU2L	20	**10,978.1**				8,057.9	42.8	8,100.7	**2,877.4**						2,877.4
Q3	I		**Casorso 3 -AT**	Barrera - KLO	UCU2L	20	**4,241.4**				3,113.2	16.5	3,129.8	**1,111.7**						1,111.7
Q3	I		**Casorso 4 - AT**	KLO - Raymer		6	**485.4**				356.3	1.9	358.2	**127.2**						127.2
Q1	I		**Ethel 1 - AT**	Clement - Lawson	UCU2L	20	**3,003.7**				2,204.7	11.7	2,216.4	**787.3**						787.3
Q1	I		**Ethel 2 - AT**	Lawson - Springfield	UCU2L	20	**4,026.3**				2,955.3	15.7	2,971.0	**1,055.3**						1,055.3
Q1	I		**Ethel 3 - AT**	Springfield - Morrison	UCU2L	20	**2,966.5**				2,177.4	11.6	2,189.0	**777.5**						777.5
Q1	I		**Ethel 4 - AT**	Morrison - Raymer	UCU2L	20	**2,383.2**				1,749.2	9.3	1,758.5	**624.6**						624.6
Q2	I		**Glenmore 3 - AT**	Clement - High	UAD4L	30	**5,743.3**				4,215.6	22.4	4,238.0	**1,505.3**						1,505.3
Q2	I		**Glenmore 4 - AT**	High - Dallas	UAD4L	30	**7,001.0**				5,138.7	27.3	5,166.0	**1,835.0**						1,835.0
Q2	I		**Glenmore 5 - AT**	Scenic - EW Connector	RAU2L	30	**4,036.5**				2,962.8	15.7	2,978.5	**1,058.0**						1,058.0
Q2	I		**Hollywd 3 - AT**	McCurdy Road - Stremel			**157.5**				115.6	0.6	116.2	**41.3**						41.3
Q2	I		**Hollywd 4 - AT**	Stremel - Highway 97			**363.1**				266.5	1.4	267.9	**95.2**						95.2
Q2	I		**Hollywd 5 - AT**	Highway 97 - Railway Track			**196.9**				144.5	0.8	145.3	**51.6**						51.6
Q2	I		**Hollywd 6 - AT**	Railway Track - Sexsmith Road			**98.4**				72.3	0.4	72.6	**25.8**						25.8
Q2	I		**Hollywd 9 - AT**	Hollydell - Hwy 33	UAU2L	25-30	**3,199.1**				2,348.1	12.5	2,360.6	**838.5**						838.5
Q2	I		**Hollywd 10 - AT**	Hwy 33 - McCurdy	UAU2L	24-25	**1,716.4**				1,259.8	6.7	1,266.5	**449.9**						449.9
Q2	I		**Hollywd 11 - AT**	Springfield - Mission Creek	UCU2L	20	**67.6**				49.6	0.3	49.9	**17.7**						17.7
Q2	I		**Houghton 1 - AT**	Nickel - Rails w Trails	UCU2L	20	**4,164.8**		1,374.4		2,048.2	10.9	2,059.1	**731.4**						731.4
Q2	I		**Houghton Overpass - AT**	Overpass @ Hwy 97			**3,000.0**				2,202.0	11.7	2,213.7	**786.3**						786.3
Q2	I		**Houghton 2 - AT**	Hllywd - Rutland	UCU2L	20	**3,880.4**	582.1			2,421.0	12.9	2,433.8	**864.5**						864.5
Q3	I		**KLO 1 - AT**	Abbott - Pandosy	UCU2L	20	**726.4**	508.5			160.0	0.8	160.8	**57.1**						57.1
Q3	I		**KLO 2 - AT**	Pandosy - Okanagan College	UCU2L	25-30	**2,185.1**				1,603.9	8.5	1,612.4	**572.7**						572.7
Q3	I		**Lake 1 - AT**	Pandosy - Abbott	UCU2L	10-20	**1,289.9**				946.8	5.0	951.8	**338.1**						338.1
Q4	I		**Leckie 1 - AT**	Rails w Trails - Dilworth		10	**379.8**				278.8	1.5	280.2	**99.5**						99.5
Q4	I		**Leckie 2 - AT**	Dilworth - Enterprise	UCU2L	25	**1,473.8**				1,081.8	5.7	1,087.5	**386.3**						386.3
Q4	I		**Leckie 3 - AT**	Enterprise - Springfield Rd.	UCU2L	24	**2,367.9**				1,738.1	9.2	1,747.3	**620.6**						620.6

(2010 Dollars X 1000)

Target Quarte	Sect		NAME	LOCATION	Cross Sctn	RoW (M)	TOTAL CAPITAL COSTS	NON DCC REVENUE SOURCES: By Devlp'r	Highways Assist	MOTH Max Lmt 150/yr	Total Existing Benefit (Taxation)	Secondary Suites (Taxation)	Grand Total Paid By Taxation	NET FOR DCC BASED CALC's	DCC SECTOR ALLOCATIONS: A S.E. Kelowna	B South Mission	C NE of Inner City	D Hwy 33	E North of Inner City	I COMMON
			Growth Units:									450		16,507	45	2,117	691	1,657	2,146	16,507
Q1	I		**Lakshr 3 - AT**	Cook - Old Meadows Road	UAU2L		**1,190.0**				873.5	4.6	878.1	**311.9**						311.9
Q2	I		**Lakshr 4 - AT**	Lanfranco Road - Richter Street	UAU2L		**148.8**				109.2	0.6	109.8	**39.0**						39.0
Q1	I		**Rails w Trails - AT**	Spall - Houghton 1		10	**4,398.7**				3,228.7	17.1	3,245.8	**1,152.9**						1,152.9
Q2	I		**Rose 1 - AT**	Pandosy - Ethel			**262.5**				192.7	1.0	193.7	**68.8**						68.8
Q2	I		**Sutherland 1 - AT**	Hwy 97 - Gordon	UCU2L	20	**6,405.5**				4,701.6	25.0	4,726.6	**1,678.9**						1,678.9
Q2	I		**Sutherland 2 - AT**	Gordon - Lake	UCU2L	20	**5,056.0**				3,711.1	19.7	3,730.8	**1,325.2**						1,325.2
			TOTAL ACTIVE TRANSPORTATION				**91,925.3**	**1,108.1**	**1,374.4**		**65,651.0**	**348.7**	**65,999.7**	**23,443.1**		**229.3**			**765.1**	**22,448.6**
			Annual MOTH							(3,000.0)				**(3,000.0)**						(3,000.0)
			Subtotal A				**398,481.8**	**50,946.2**	**26,604.0**		**104,292.7**	**2,348.5**	**106,641.2**	**214,290.4**	**6,274.1**	**36,370.5**	**5,488.9**	**10,693.3**	**9,188.7**	**146,274.9**
			Carry Over (2009-12-31 Reserve Balance):											**(14,816.4)**	**(6,255.8)**	**(1,821.8)**	**(46.5)**	**(3,856.6)**	**(1,350.8)**	**(1,485.0)**
			Subtotal B				**398,481.8**	**50,946.2**	**26,604.0**		**104,292.7**	**2,348.5**	**106,641.2**	**199,474.0**	**18.3**	**34,548.7**	**5,442.4**	**6,836.7**	**7,837.9**	**144,789.9**
			Subtotal C				**398,481.8**	**50,946.2**	**26,604.0**		**104,292.7**	**2,348.5**	**106,641.2**	**199,474.0**	**18.3**	**34,548.7**	**5,442.4**	**6,836.7**	**7,837.9**	**144,789.9**
							1,994.7	**Engineering/Administration**		**1%**				**1,994.7**	**0.2**	**345.5**	**54.4**	**68.4**	**78.4**	**1,447.9**
							400,476.5	**Subtotal D**						**201,468.8**	**18.4**	**34,894.2**	**5,496.9**	**6,905.1**	**7,916.3**	**146,237.8**
								Less Assist		**15%**				**(30,220.3)**	**(2.8)**	**(5,234.1)**	**(824.5)**	**(1,035.8)**	**(1,187.4)**	**(21,935.7)**
								Total for DCC						**171,248.4**	**15.7**	**29,660.1**	**4,672.3**	**5,869.3**	**6,728.9**	**124,302.2**

Residential 1:	**Sector**	**347**	**14,009**	**6,762**	**3,542**	**3,136**
	Common	**7,530**	**7,530**	**7,530**	**7,530**	**7,530**
	Total Roads	**7,878**	**21,540**	**14,292**	**11,072**	**10,666**
Residential 2:	**Sector**	**327**	**13,169**	**6,356**	**3,329**	**2,948**
	Common	**7,079**	**7,079**	**7,079**	**7,079**	**7,079**
	Total Roads	**7,405**	**20,247**	**13,435**	**10,408**	**10,026**
Residential 3:	**Sector**	**233**	**9,386**	**4,530**	**2,373**	**2,101**
	Common	**5,045**	**5,045**	**5,045**	**5,045**	**5,045**
	Total Roads	**5,278**	**14,432**	**9,576**	**7,419**	**7,147**
Residential 4:	**Sector**	**219**	**8,826**	**4,260**	**2,231**	**1,976**
	Common	**4,744**	**4,744**	**4,744**	**4,744**	**4,744**
	Total Roads	**4,963**	**13,570**	**9,004**	**6,976**	**6,720**
Residential 5 - per Sq Mtr:	**Sector**	**3**	**123**	**59**	**31**	**28**
(56 sq mtrs or less):	**Common**	**66**	**66**	**66**	**66**	**66**
	Sector	**69**	**189**	**126**	**97**	**94**
Commercial - per Sq Mtr:	**Sector**	**1**	**46**	**22**	**12**	**10**
	Common	**25**	**25**	**25**	**25**	**25**
	Total Roads	**26**	**71**	**47**	**37**	**35**
Industrial - per Hectare:	**Sector**	**858**	**34,603**	**16,701**	**8,749**	**7,746**
	Common	**18,600**	**18,600**	**18,600**	**18,600**	**18,600**
	Total Roads	**19,458**	**53,203**	**35,301**	**27,349**	**26,346**
Institutional - per Sq Mtr:	**Sector**	**1**	**46**	**22**	**12**	**10**
	Common	**25**	**25**	**25**	**25**	**25**
	Total Roads	**26**	**71**	**47**	**37**	**35**

2. Water Pumping and Distribution Systems

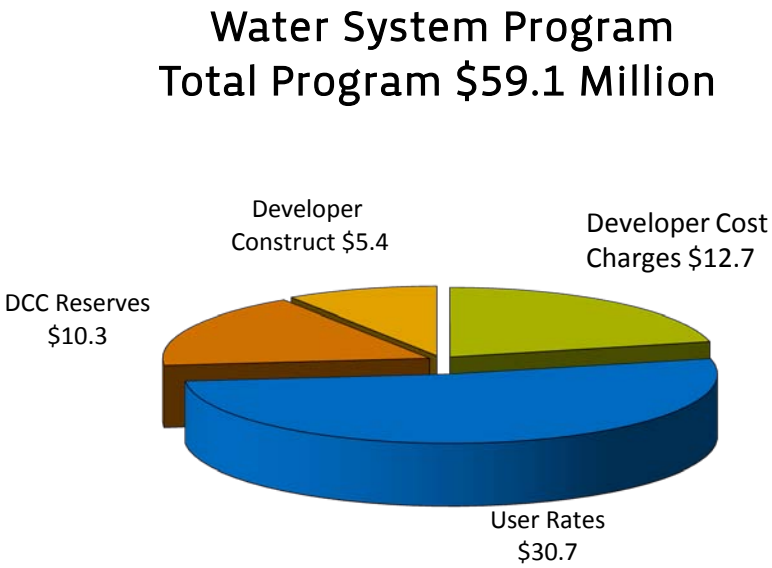
Exhibit "B" – Updated 20 Year Off-Site Water Servicing Plan & Financing Strategy - Cost Sharing Model, attached, provides the cost for each capital project and how the cost of the program is shared between existing taxpayers and new growth within the 20 year planning horizon.

The model provides a further breakdown of how each new growth project is cost shared between benefiting sectors of the city.

The total cost of the Water Servicing program, over the 20 year planning horizon, is $59.1 Million.

The following is a summary of the funding sources for the water program based on the cost sharing principles and assumptions which have been incorporated in the cost sharing model for the water system:

Total Program Cost	$59.1	%
User Rates (Assist/Gen Benefit/Oversize)	$ 30.7	52.0
Development Cost Charge	12.7	21.5
Development Cost Charge Reserves	10.3	17.4
Developer Construct	5.4	9.1



Cost Sharing Principles and Assumptions

- The Utility pays for projects or portions of projects that provide a benefit to existing customers; this includes any treatment related improvements. The DCC program pays for projects or portions of projects that allow for increased capacity to accommodate new development units.*

- The cost of capital improvements which provide excess capacity for growth beyond the 20 year planning horizon have not been allocated to new growth.

- A sector approach has been used to allocate capital project costs to distinctly different water service areas. The main city water system, serviced from the Poplar Point water intake; the Skyline/Clifton water system, which is serviced by a supplementary booster system and the South Mission water system which is serviced from a separate water intake in that area make up the three water service sectors.

- Maximum day demand for the system is significantly less than forecasted previously.

- A reduction in customer consumption is occurring due to water metering, customer education and conservation programs.

- The Secondary Suites rate differential, being that between the Residential 3 rate and the flat rate approved by Council, is apportioned to taxation.

Improvements to the Cedar Creek Transmission System and Adams Reservoir / Treatment Facility are predominantly Utility funded (oversize). It is unknown when IHA will order the construction of a Filtration System for this source, but this requirement will trigger several projects in the 2030 Servicing Plan. First, Eldorado Pumphouse will no longer be in service for potable water distribution and its capacity will be replaced by improvements to the Cedar Creek System. Associated projects include: Cedar Creek Transmission Stage 2, Adams to Southcrest, and Southcrest to Westpoint. In each case the cost share logic is based on the percentage that benefits existing users verses proposed new development users.

Financial Implications

- Extensive financial modeling of the water utility has been done to project the impact on user rates over the next 10 year planning horizon. User rates are impacted by a combination of providing for existing deficiencies in the water system, provision of excess capacity to service new growth, treatment

improvements and replacing aging infrastructure within the existing water supply system.

- Through the Water Sustainability Action Plan, the Kelowna Water Utility has committed to a 15% reduction in consumption by 2015. Installation of water meters, graduated rate structure, Landscape and Irrigation Standards and public education programs have collectively contributed to a reduction in the cost of the Water DCC program.

CITY OF KELOWNA
2030 WATER SERVICING PLAN & FINANCING STRATEGY (2011)
COST SHARING MODEL

EXHIBIT "B" - WATER

(2010 Dollars x 1000)

Sect	Target Year	PROJECT	DESCRIPTION	TOTAL CAPITAL COST	NON-DCC REVENUE SOURCES				NET FOR DCC CALC'S	DCC SECTOR ALLOCATIONS		
					By Devlp'r	Benefit Existing	Oversize	Secondary Suites		A Central	B South Mission	D Clifton
			Total Growth Units:					144	8,702	4,755	2,127	1,820
		DEVELOPER CREDIT		245.0				0.8	244.3			244.3
A	2010	CAPOZZI FIRE FLOW	Commercial fire flow N&S of Truswell	264.0	264.0							
A	2030	CRWFRD RES	Upper Crawford Reservoir Expansion	1,050.0	1,050.0							
A/D	2011	RYL & MNTN MAIN	Knox Resevoir - Skyline PS	6,475.0				20.8	6,454.2	4,905.2		1,549.0
A	2025	PZ STRG UPGRADE	PZ 419 Storage Upgrade	5,586.0				17.9	5,568.1	5,568.1		
A	2016	ETHEL MAIN	Ethel St. (Weddell Pl - Clement)	551.0				1.8	549.2	549.2		
A/D	2020	KNOX MOUNTAIN TRANS	Popular Pt PS - Knox Reservoir	3,538.0				11.3	3,526.7	2,680.3		846.4
D	2010	GRAINGER RESEVOIR	Grainger Reservoir Expansion	1,424.0	1,424.0							
D	2010	CARAGLEN FIRE FLOW	Caraglen prv to Alameda Ct	651.0				8.3	642.7			642.7
D	2010	CLIFTON MAIN UPGR.	Clifton Main Upgrade	1,542.0		724.7		10.5	806.8			806.8
B	2020	S0UTHCREST TO WESTPOINT TRANS	Adams Res-Sthcrst Res-Wstpnt Res	4,496.0		4,496.0						
B	2013	ADAMS TO SOUTHCREST	Adams to Southcrest	5,814.0		4,244.2		1.2	1,568.6		1,568.6	
B	2015	FROST PUMPSTATION	Frost Pump Station and Res Upgrade	2,698.0	2,698.0							
B	2020	CEDAR CRK TRANS - STAGE 2	Cedar Ck PS, Stellar PS	11,335.0			11,335.0					
B	2020	ADAMS RESERVOIRS - STAGE 2	Late comer as ESA	1,200.0			1,200.0					
B	2011	CEDAR CRK TRANS STAGE 1	Adams Res - Quichena & McCarren	899.0		786.4		0.1	112.5		112.5	
B	2011	ADAMS UV DISINFECTION	Stage 1 UV	6,199.0		6,199.0						
B	2011	CEDAR CRK TRANS - Stage 1	Cedar Pump Upgrade (Stellar Improv.)	1,893.7		927.9		0.8	965.0		965.0	
D	2025	SKYLINE SUPPLY MAIN	Skyline Supply Main Upgrade	1,542.0		524.3		13.0	1,004.7			1,004.7
D	2011	SKYLINE PS	High Rd & Clifton Rd	323.0				4.1	318.9			318.9
A	Annl	ANNL OS	Annual Oversizing Component	1,200.0				3.8	1,196.2	1,196.2		
			SUBTOTAL A	58,925.7	5,436.0	17,902.6	12,535.0	94.5	22,957.7	14,899.0	2,646.1	5,412.7
			Carry Over(2010-01-01 Reserve Balances)						(10,303.8)	(10,154.2)	(1,202.0)	1,052.4
			SUBTOTAL B	58,925.7	5,436.0	17,902.6	12,535.0	94.5	12,653.9	4,744.8	1,444.1	6,465.1
				126.5	Engineering/Administration @ 1%				126.5	47.4	14.4	64.7
				59,052.3					12,780.4	4,792.2	1,458.5	6,529.7
					Less Assist		@ 1%		(127.8)	(47.9)	(14.6)	(65.3)
					Total for D				12,652.6	4,744.3	1,443.9	6,464.4

NET UNIT DCC FOR:

Residential 1:	998	679	3,552
Residential 2:	668	455	2,380
Residential 3:	479	326	1,705
Residential 4:	339	231	1,208
Residential 5 - per sq m (56 sq m or less):	5.01	3.41	17.85
Commercial - Per Sq. Mtr.:	4.12	2.81	14.68
Industrial - Per Hectare:	6,904	4,698	24,578
Institutional - Per Sq. Mtr.:	4.12	2.81	14.68

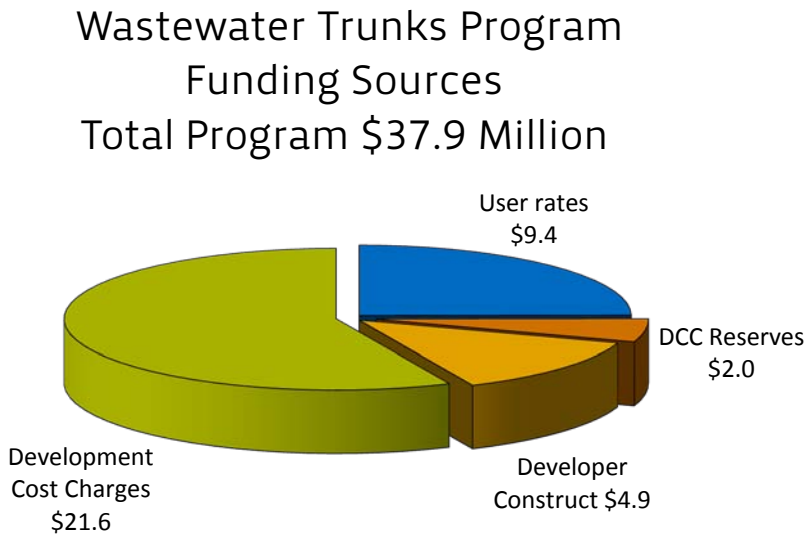
3. Wastewater Collection System

Exhibit "C" – Updated 20 Year Wastewater Trunk Servicing Plan & Financing Strategy - Cost Sharing Model, attached, provides all of the detailed calculations for each capital project and how the cost of the program is shared between existing taxpayers and new growth within the 20 year planning horizon. The model provides a further breakdown of how each new growth project is cost shared between the benefiting sectors of the city.

The total cost of the Wastewater Trunk Servicing program, over the 20 year planning horizon, is $37.9 Million.

The following is a summary of the funding sources for the sanitary sewer trunk program based on the cost sharing principles and assumptions which have been incorporated in the cost sharing model for sanitary sewer trunks:

Total Program Cost	$37.9	%
Developer Construct	4.9	13.0
User Rates (Assist/Gen Benefit/Oversize)	9.4	24.9
Development Cost Charge	21.6	56.8
Development Cost Charge Reserves	2.0	5.3



Cost Sharing Principles and Assumptions

- The cost of capital improvements which provide excess capacity for growth beyond the 20 year planning horizon have not been allocated to new growth. If the project is completed early in the planning horizon this represents a significant up-front investment by the general wastewater utility.

- Asphalt restoration costs are generally based on replacing full road width, as follows:
  - Minor road – 9.1m at 50mm thickness
  - Major road – 11.3m at 100mm thickness
  - Force main – assume replacement of 5.0m lane with at 100mm thickness.

- Project costs are shared between 2 sectors, the Southwest Mission and the remainder of the City water system not in the Southwest Mission.

- Cost sharing is based on the % of new units in each sector. For example, if 40% represents the number of new units and 60% represents existing units then the DCC program would pay 40% of the cost and the utility would pay 60%.

- The assist factor remains at 1%.

- The Secondary Suites rate differential, being that between the Residential 3 rate and the flat rate approved by Council, is apportioned to taxation.

Financial Impacts

- Extensive financial modeling of the sewer utility has been done to project the impact on user rates over the next 10 year planning horizon. User rates are impacted by a combination of providing for existing deficiencies in the sewer system, provision of excess capacity to service new growth and replacing aging infrastructure within the existing water supply system.

- A major impact on the sewer utility is the provision of sewage treatment facilities which will be dealt with in more detail in the next section of this document.

CITY OF KELOWNA

2030 WASTEWATER TRUNKS PLAN & FINANCIAL STRATEGY (2011)

COST SHARING MODEL

EXHIBIT "C" WASTEWATER TRUNKS

(2010 Dollars x 1000)

Target Quarter	PROJECT	FROM - TO	TOTAL CAPITAL COST	NON DCC REVENUE SOURCES			NET FOR DCC CALC'S	ALLOCATIONS	
				By Devlp'r	Benefit Existing	Secondary Suites		NOT South Mission	South Mission
		Total Growth Units:				365	15,648	13,508	2,140
	O/S MS1 LKSHR	Outstanding Developer Credit	19.4			0.0	19.4		19.4
	Byrns Baron Trunk	Long Term Financing	1,433.2			22.6	1,410.6	1,410.6	
cmplt	CROSS RD 6B	Glenmore - Valley	891.7	360.0		8.4	523.3	523.3	
Q2	KLO	KLO - Swordy	588.0			9.3	578.7	578.7	
Q1	GYRO FM	Gyro LS - KPCC	1,552.0			3.9	1,548.1	309.6	1,238.5
Q1	RAYMER LS	@ Curtis	638.0			10.0	628.0	628.0	
Q1	LAKESHORE TRUNK	Old Meadows to KPCC	10,881.0		4,809.4	15.3	6,056.3	1,211.3	4,845.0
Q2	AIRPORT GRAVITY	Bulman - Airport	3,970.0		2,708.0	19.9	1,242.1	1,242.1	
Q4	GYRO LS	Lakeshore - Swordy	1,274.0		240.8	16.3	1,017.0	1,017.0	
Q3	BYRNS/BARON - Ph 2	Byrns to WWTF	7,789.3			122.6	7,666.7	7,666.7	
Q3	WATER ST. FM	Pandosy to Ethel	465.0			7.3	457.7	457.7	
Q2	GUY LS	Guy@Bay	836.0		799.0	0.6	36.4	36.4	
Q4	RUTLAND TRUNK	Ziprick to Houghton	1,211.0			19.1	1,191.9	1,191.9	
Q3	KINNICKINNICK	Shayler - 1220 m North of Scenic	1,980.7	1,780.7	200.0				
Q4	GLENMORE CONNECTIO	Cross - 200 m. North of Scenic	1,792.0	1,592.0	200.0				
Q3	ROSE AVE LS	Rose Ave @ Hospital	1,200.0	1,200.0					
	OVERSIZE	Oversize Component - $60,000/yr	1,200.0			18.9	1,181.1	1,181.1	
		SUBTOTAL A	37,721.3	4,932.7	8,957.2	274.0	23,557.4	17,454.5	6,102.9
		Carry Over(2010-01-01 Reserve Balances)					(2,005.9)	23.4	(2,029.3)
		SUBTOTAL B	37,721.3	4,932.7	8,957.2	274.0	21,551.5	17,477.9	4,073.6
			215.5	Engineering/Admin		1.00%	215.5	174.8	40.7
			37,936.8				21,767.0	17,652.7	4,114.3
		Less Assist		@		1.00%	(217.7)	(176.5)	(41.1)
		Total for DCC					21,549.3	17,476.2	4,073.2

NET UNIT DCC FOR:

Residential 1:	1,294	1,903
Residential 2:	1,074	1,580
Residential 3:	724	1,066
Residential 4:	699	1,028
Residential 5 - per sq m (56 sq m or less):	10.2	15.0
Commercial - Per Sq. Mtr.:	5.35	7.87
Industrial - Per Hectare:	8,953	13,171
Institutional - Per Sq. Mtr.:	5.35	7.87

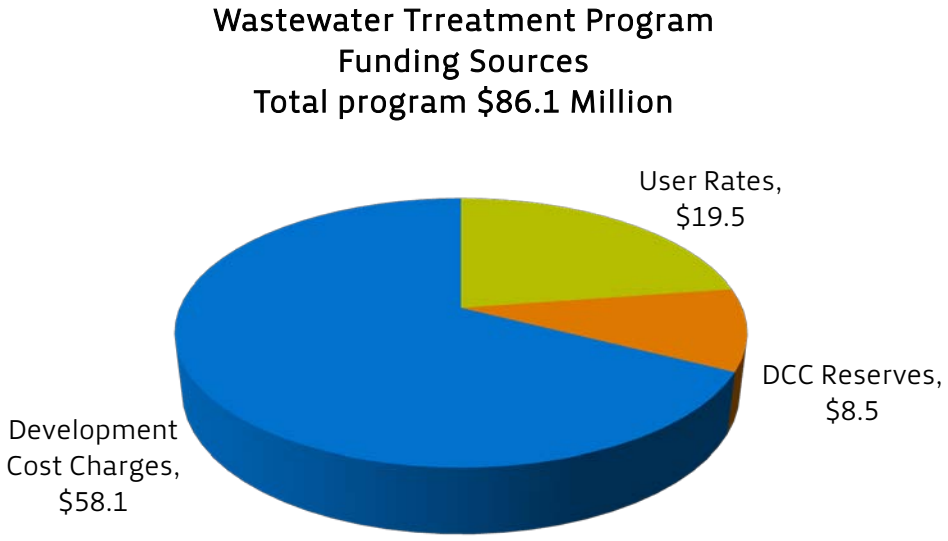
4. Wastewater Treatment and Disposal

Exhibit "D" – Updated 20 Year Wastewater Treatment and Disposal Servicing Plan & Financing Strategy - Cost Sharing Model, attached, provides all of the detailed calculations for each capital project and how the cost of the program is shared between existing taxpayers and new growth within the 20 year planning horizon. The model provides a further breakdown of how each new growth project is cost shared between the benefiting sectors of the city.

The total cost of the Sewer Treatment and Disposal Servicing program, over the 20 year planning horizon, is $86.1 Million.

The following is a summary of the funding sources for the sewer treatment program based on the cost sharing principles and assumptions which have been incorporated in the cost sharing model for sewer treatment:

Total Program Cost	$86.1	%
User Rates (Assist/Gen Benefit/Oversize)	19.5	22.6
Development Cost Charge	58.1	67.5
Development Cost Charge Reserve	8.5	9.9



Cost Sharing Principles and Assumptions

- $19.5 Million or 22.8% of the program has been allocated to existing utility rate payers to reflect the cost of capital improvements which provide excess capacity for growth beyond the 20 year planning horizon or provide capacity for existing properties not yet connected to the Treatment Plant but are planned to be connected within 20 years.

- The Secondary Suites rate differential, being that between the Residential 3 rate and the flat rate approved by Council, is apportioned to taxation.

- It is anticipated that the requirement for an additional sewage treatment facility site is beyond the 20 year planning horizon; therefore the land purchase is included under Oversize (taxation). When sufficient engineering information is available identifying the year the new site will be needed, a proportionate share will be allocated to new growth and reflected in future DCC revisions.

Financial Impacts

- Extensive financial modeling of the sewer utility has been done to project the impact on user rates over the next 10 year planning horizon. User rates have been projected on the basis of the incorporation of an interest component into the formulation of the Development Cost Charge levy.

- There is a significant risk factor associated with the construction of infrastructure components that involve “lumpy” investments, particularly if population growth immediately following the major investment does not materialize as projected.

- The indirect effects of increases in real interest rates are also relevant. Increase in real interest rates increase the cost of maintaining the over capacity that is built in the existing services systems of growing cities.

- Interest costs of $11.2 million, until payout in the year 2020, on long term debt in the amount of $52.2 million for the construction of the wastewater treatment plant.

CITY OF KELOWNA
2030 WASTEWATER TREATMENT PLAN & FINANCING STRATEGY (2010)
COST SHARING MODEL

EXHIBIT "D" - WASTEWATER TREATMENT

Target Year	PROJECT	TOTAL PROJECT COST	(2010 Dollars x 1000) BENEFIT EXISTING	OVERSIZE (2030+)	SECONDARY SUITES	NET FOR DCC CALC'S
	Total Growth Units:				**402**	**15,611**
	KPCC Existing Debt Commitment	**1,666.7**			20.5	**1,646.2**
	WWTF - Phase 2 Plant Extension	**52,192.8**	8,332		539.3	**43,321.2**
	WWTF - Long Term Financing	**11,216.8**			137.9	**11,078.8**
2010	**Existing Compost Plant Expansion**	**6,600.0**	3,462.4		38.6	**3,099.1**
2016	**Secondary Aeration Expansion**	**1,000.0**	637.0		4.5	**358.5**
2022	**Primary/Sec Aeration Expansion**	**6,000.0**			73.8	**5,926.2**
2018	**Land Acquisition - Compost Site**	**1,218.0**			15.0	**1,203.0**
	WWTF Land Acquisition	**5,600.0**		5,600.0		
	SUBTOTAL A	**85,494.2**	**12,431.7**	**5,600.0**	**829.5**	**66,633.0**
	Carry Over(2010-01-01 Reserve Balances)					**(8,516.0)**
	SUBTOTAL B	**85,494.2**	**12,431.7**	**5,600.0**	**829.5**	**58,117.0**
		581.2	**Engineering/Administration @ 1%**			**581.2**
		86,075.3				**58,698.2**
	Less Assist		**@ 1%**			**(587.0)**
	Total for DCC					**58,111.2**

NET UNIT DCC FOR:	
Residential 1:	**3,723**
Residential 2:	**3,090**
Residential 3:	**2,085**
Residential 4:	**2,010**
Residential 5 - per sq m (56 sq m or less):	**29.40**
Commercial - Per Sq. Mtr.:	**15.38**
Industrial - Per Hectare:	**25,760**
Institutional - Per Sq. Mtr.:	**15.38**

This schedule is conceptual and is subject to revision to meet future needs and conditions.

5. Park Land Acquisition

Exhibit "E" - 20 Year Parks Acquisition Plan & Financing Strategy - Cost Sharing Model, attached, provides the calculations used to develop the average cost per equivalent residential unit for park land acquisition based on the standard of 2.2 hectares per 1,000 population and the cost per hectare for land required to service growth as detailed in the Official Community Plan.

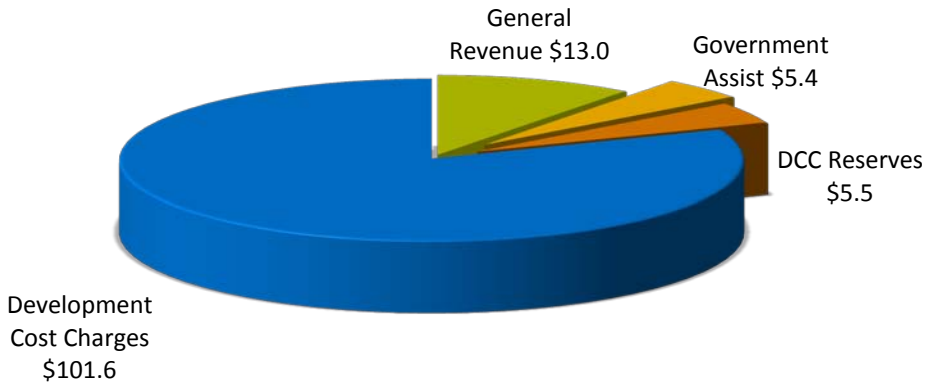
All of the park land required on the basis of the formula provided in the model is required for new growth and has been allocated accordingly.

The total cost of the Park Land Acquisition program, over the 20 year planning horizon, is $125.5 Million.

The following is a summary of the funding sources for the park land acquisition program based on the cost sharing principles and assumptions which have been incorporated in the cost sharing model for park land:

Total Program Cost	$125.5	%
General Taxpayer (Assist/Gen Benefit/Oversize)	$ 13.0	10.4
Development Cost Charge	101.6	80.9
Development Cost Charge Reserve	5.5	4.4
Provincial Grant	5.4	4.3

Parks/Open Space
Plan Expenditures
Total Program $125.5 Million



Cost Sharing Principles and Assumptions

- Acquisition of Park Land is assumed to be of primary benefit to residential growth and the cost of the program, therefore, is applied only to residential growth units.

- Required land and costs are based on a standard of 2.2 hectares per 1,000 population.

- DCC value based on population growth and specific lands to be acquired.

- A single sector approach has been used for the entire city which is consistent with the cost sharing methodology used in the previous plans.

- To determine the land values, developed areas were included where appropriate and limited provision was made for the acquisition of waterfront properties from new growth directly.

- The municipality, at its option, may require the developer to dedicate 5% of the land to be subdivided, in a location satisfactory to the city. The developer who dedicates land will receive credit for a portion (usually neighbourhood park component) of the Development Cost Charge.

The municipality may exercise this option only when it deems that the value of the dedicated land is equal to or exceeds the value of the Development Cost Charge credit.

- An “assist” factor of 8% has been used to develop the charge applicable to new growth which is the same rate used in the previous plan. The assist factor represents the deemed benefit to existing taxpayers of the acquisition of additional parks.

Financial Impacts

- Significant parks development costs are not included in the formulation of the Development Cost Charge levy and must be considered when developing the 10 Year Capital Plan.

- The purchase of linear parks, creek corridors and natural open space which is not achieved through re-development, will be purchased through general taxation.

CITY OF KELOWNA

2030 PARKS ACQUISITION PLAN & FINANCING STRATEGY (2011)

EXHIBIT "E" - PARKS

COST SHARING MODEL

(2010 Dollars x 1000)

TYPE	ACQUISITIONS	TOTAL CAPITAL COST	GOV'T ASSIST	TAXABLE BENEFIT	SECONDARY SUITES	NET FOR DCC CALCULATIONS
		Total Growth Units:			793	19,159
City	12 Hectares	51,547.5	5,400.0		1,624.1	44,523.3
Community	20 Hectares	27,226.7			958.2	26,268.5
Neighbourhood	23 Hectares	31,508.2			1,108.9	30,399.3
Recreation	40 Hectares	14,105.8			496.4	13,609.4
SUBTOTAL A	95 hectares	124,388.2	5,400.0		4,187.7	114,800.5
Carry Over (10-01-01 Reserve Balance - Committments)						(5,520.1)
SUBTOTAL B						109,280.4
		1,092.8	Plus Administration/Engineering @		1.00%	1,092.8
		125,481.0				110,373.3
			Less Assist @		8.00%	(8,829.9)
			Total for DCC			101,543.4

NET UNIT DCC FOR:	
Residential 1:	5,300
Residential 2:	5,300
Residential 3:	5,300
Residential 4:	5,300
Residential 5 - per sq m (56 sq m or less	95.13

VI. SUMMARY OF REQUIRED DCC RATES BY LAND USE TYPE

The **purpose of this section** is to summarize the required Development Cost Charge levies to support the growth plan and servicing plan as detailed in previous sections of this document.

For each different land use type, a comparative analysis has been included by service type and by different geographical area of the city.

The required rates are **based on assumptions** regarding growth rate, housing mix, growth areas in combination with principles used for cost sharing between existing taxpayers and new population growth. Cost sharing methodologies, described in previous sections of this report, have also been included in the calculations to determine how costs will be **shared between different land uses**.

Residential 1 - Single Family, Duplex - density to 15 units per hectare - rate per unit

Comparison to current rates

GROWTH AREA	Sector / Rate														
	Roads			Water		Sewer Trunks			Treatment			Parks	Total	(+)(-)
City Centre (2011)	I	7,530	A	998	A	1,294	A	3,723	5,300	**18,844**	-8.6%
(2009)	I	9,176	A	1,757	A	1,562	A	3,044	5,069	**20,608**	
Clifton/Glen. Hghld (2011)	I	7,530	D	3,552	A	1,294	A	3,723	5,300	**21,398**	-2.3%
(2009)	I	9,176	D	3,054	A	1,562	A	3,044	5,069	**21,905**	
Glenmore Valley (2011)	I	7,530		GEID	A	1,294	A	3,723	5,300	**17,847**	-5.3%
(2009)	I	9,176		GEID	A	1,562	A	3,044	5,069	**18,851**	
Rutland (2011)	I	7,530		RWW	A	1,294	A	3,723	5,300	**17,847**	-5.3%
(2009)	I	9,176		RWW	A	1,562	A	3,044	5,069	**18,851**	
Hall Road (2011)	I	7,530		SEKID	A	1,294	A	3,723	5,300	**17,847**	-5.3%
(2009)	I	9,176		SEKID	A	1,562	A	3,044	5,069	**18,851**	
North East Rutland (2011)	C	14,292		BMID	A	1,294	A	3,723	5,300	**24,608**	1.8%
(2009)	C	14,505		BMID	A	1,562	A	3,044	5,069	**24,180**	
Hwy 33 - (2011)	D	11,072		BMID	A	1,294	A	3,723	5,300	**21,389**	#####
(2009)	D	16,932		BMID	A	1,562	A	3,044	5,069	**26,607**	
University / Airport (2011)	E	10,666		GEID	A	1,294	A	3,723	5,300	**20,983**	#####
(2009)	E	14,203		GEID	A	1,562	A	3,044	5,069	**23,878**	
McKinley (2011)	E	10,666		GEID		N/A		N/A	5,300	**15,966**	#####
(2009)	E	14,203		GEID		N/A		N/A	5,069	**19,272**	
Southeast Kelowna (2011)	A	7,878		SEKID		N/A		N/A	5,300	**13,178**	#####
(2009)	A	25,529		SEKID		N/A		N/A	5,069	**30,598**	
S.W. Mission (2011)	B	21,540	B	679	B	1,903	A	3,723	5,300	**33,145**	-5.6%
(2009)	B	23,743	B	1,289	B	1,979	A	3,044	5,069	**35,124**	

BMID Serviced by Black Mountain Irrigation District
SEKID Serviced by South East Kelowna Irrigation District
RWW Serviced by Rutland Water Works
GEID Serviced by Glenmore Ellison Irrigation District
N/A Not Applicable as Sewer will not be in that area within the 20 Year period

Residential 2 - Small Lot Single Family, Row Housing - density >15-35 units per hectare - rate per unit

Comparison to current rates

GROWTH AREA	Sector / Rate															
	Roads			Water		Sewer Trunks			Treatment			Parks	Total	(+)(-)
City Centre (2011)	I	7,079	A	668	A	1,074	A	3,090	5,300	**17,210**	-1.2%
(2009)	I	7,341	A	1,178	A	1,297	A	2,526	5,069	**17,411**	
Clifton/Glen. Hghld (2011)	I	7,079	D	2,380	A	1,074	A	3,090	5,300	**18,922**	3.5%
(2009)	I	7,341	D	2,046	A	1,297	A	2,526	5,069	**18,279**	
Glenmore Valley (2011)	I	7,079		GEID	A	1,074	A	3,090	5,300	**16,542**	1.9%
(2009)	I	7,341		GEID	A	1,297	A	2,526	5,069	**16,233**	
Rutland (2011)	I	7,079		RWW	A	1,074	A	3,090	5,300	**16,542**	1.9%
(2009)	I	7,341		RWW	A	1,297	A	2,526	5,069	**16,233**	
Hall Road (2011)	I	7,079		SEKID	A	1,074	A	3,090	5,300	**16,542**	1.9%
(2009)	I	7,341		SEKID	A	1,297	A	2,526	5,069	**16,233**	
North East Rutland (2011)	C	13,435		BMID	A	1,074	A	3,090	5,300	**22,898**	11.7%
(2009)	C	11,604		BMID	A	1,297	A	2,526	5,069	**20,496**	
Hwy 33 - (2011)	D	10,408		BMID	A	1,074	A	3,090	5,300	**19,871**	#####
(2009)	D	13,546		BMID	A	1,297	A	2,526	5,069	**22,438**	
University / Airport (2011)	E	10,026		GEID	A	1,074	A	3,090	5,300	**19,490**	-3.8%
(2009)	E	11,362		GEID	A	1,297	A	2,526	5,069	**20,254**	
McKinley (2011)	E	10,026		GEID		N/A		N/A	5,300	**15,326**	-6.7%
(2009)	E	11,362		GEID		N/A		N/A	5,069	**16,431**	
Southeast Kelowna (2011)	A	7,405		SEKID		N/A		N/A	5,300	**12,705**	#####
(2009)	A	20,423		SEKID		N/A		N/A	5,069	**25,492**	
S.W. Mission (2011)	B	20,247	B	455	B	1,580	A	3,090	5,300	**30,672**	5.4%
(2009)	B	18,995	B	864	B	1,642	A	2,526	5,069	**29,096**	

BMID Serviced by Black Mountain Irrigation District
SEKID Serviced by South East Kelowna Irrigation District
RWW Serviced by Rutland Water Works
GEID Serviced by Glenmore Ellison Irrigation District
N/A Not Applicable as Sewer will not be in that area within the 20 Year period

Residential 3 - Row Housing & Up to 4 Story Apartments - density >35-85 units per hectare - rate per unit

Comparison to current rates

GROWTH AREA	Sector / Rate										
		Roads		Water		Sewer Trunks		Treatment	Parks	Total	(+)(-)
City Centre (2011)	I	5,045	A	479	A	724	A	2,085	5,300	**13,633**	0.7%
(2009)	I	5,047	A	844	A	875	A	1,704	5,069	**13,539**	
Clifton/Glen. Hghld (2011)	I	5,045	D	1,705	A	724	A	2,085	5,300	**14,859**	4.9%
(2009)	I	5,047	D	1,466	A	875	A	1,704	5,069	**14,161**	
Glenmore Valley (2011)	I	5,045		GEID	A	724	A	2,085	5,300	**13,154**	3.6%
(2009)	I	5,047		GEID	A	875	A	1,704	5,069	**12,695**	
Rutland (2011)	I	5,045		RWW	A	724	A	2,085	5,300	**13,154**	3.6%
(2009)	I	5,047		RWW	A	875	A	1,704	5,069	**12,695**	
Hall Road (2011)	I	5,045		SEKID	A	724	A	2,085	5,300	**13,154**	3.6%
(2009)	I	5,047		SEKID	A	875	A	1,704	5,069	**12,695**	
North East Rutland (2011)	C	9,576		BMID	A	724	A	2,085	5,300	**17,685**	13.2%
(2009)	C	7,978		BMID	A	875	A	1,704	5,069	**15,626**	
Hwy 33 - (2011)	D	7,419		BMID	A	724	A	2,085	5,300	**15,528**	-8.5%
(2009)	D	9,313		BMID	A	875	A	1,704	5,069	**16,961**	
University / Airport (2011)	E	7,147		GEID	A	724	A	2,085	5,300	**15,256**	-1.3%
(2009)	E	7,811		GEID	A	875	A	1,704	5,069	**15,459**	
McKinley (2011)	E	7,147		GEID		N/A		N/A	5,300	**12,446**	-3.4%
(2009)	E	7,811		GEID		N/A		N/A	5,069	**12,880**	
Southeast Kelowna (2011)	A	5,278		SEKID		N/A		N/A	5,300	**10,578**	#####
(2009)	A	14,041		SEKID		N/A		N/A	5,069	**19,110**	
S.W. Mission (2011)	B	14,432	B	326	B	1,066	A	2,085	5,300	**23,208**	7.6%
(2009)	B	13,059	B	619	B	1,108	A	1,704	5,069	**21,559**	

BMID Serviced by Black Mountain Irrigation District
SEKID Serviced by South East Kelowna Irrigation District
RWW Serviced by Rutland Water Works
GEID Serviced by Glenmore Ellison Irrigation District
N/A Not Applicable as Sewer will not be in that area within the 20 Year period

Residential 4 - Apartments Greater Than 4 Storys - greater than 85 units per hectare - rate per unit

Comparison to current rates

GROWTH AREA	Sector / Rate																	(+)(-)
	Roads			Water			Sewer Trunks			Treatment			Parks	Total	
City Centre (2011)	I	4,744	A	339	A	699	A	2,010	5,300	**13,092**	1.3%
(2009)	I	4,771	A	598	A	844	A	1,644	5,069	**12,926**	
Clifton/Glen. Hghld (2011)	I	4,744	D	1,208	A	699	A	2,010	5,300	**13,960**	4.4%
(2009)	I	4,771	D	1,038	A	844	A	1,644	5,069	**13,366**	
Glenmore Valley (2011)	I	4,744		GEID	A	699	A	2,010	5,300	**12,753**	3.4%
(2009)	I	4,771		GEID	A	844	A	1,644	5,069	**12,328**	
Rutland (2011)	I	4,744		RWW	A	699	A	2,010	5,300	**12,753**	3.4%
(2009)	I	4,771		RWW	A	844	A	1,644	5,069	**12,328**	
Hall Road (2011)	I	4,744		SEKID	A	699	A	2,010	5,300	**12,753**	3.4%
(2009)	I	4,771		SEKID	A	844	A	1,644	5,069	**12,328**	
North East Rutland (2011)	C	9,004		BMID	A	699	A	2,010	5,300	**17,013**	12.7%
(2009)	C	7,543		BMID	A	844	A	1,644	5,069	**15,100**	
Hwy 33 - (2011)	D	6,976		BMID	A	699	A	2,010	5,300	**14,984**	-8.4%
(2009)	D	8,805		BMID	A	844	A	1,644	5,069	**16,362**	
University / Airport (2011)	E	6,720		GEID	A	699	A	2,010	5,300	**14,729**	-1.4%
(2009)	E	7,385		GEID	A	844	A	1,644	5,069	**14,942**	
McKinley (2011)	E	6,720		GEID		N/A		N/A	5,300	**12,020**	-3.5%
(2009)	E	7,385		GEID		N/A		N/A	5,069	**12,454**	
Southeast Kelowna (2011)	A	4,963		SEKID		N/A		N/A	5,300	**10,263**	#####
(2009)	A	13,275		SEKID		N/A		N/A	5,069	**18,344**	
S.W. Mission (2011)	B	13,570	B	231	B	1,028	A	2,010	5,300	**22,139**	7.6%
(2009)	B	12,346	B	438	B	1,069	A	1,644	5,069	**20,566**	

BMID Serviced by Black Mountain Irrigation District
SEKID Serviced by South East Kelowna Irrigation District
RWW Serviced by Rutland Water Works
GEID Serviced by Glenmore Ellison Irrigation District
N/A Not Applicable as Sewer will not be in that area within the 20 Year period

Residential 5 - Apartments With Habitable Area of 55.7 Sq. Meters or less (per sq. mtr.)

(current rate changed to metric for comparison purposes)

Comparison to current rates

GROWTH AREA	Sector / Rate										
		Roads		Water		Sewer Trunks		Treatment	Parks	Total	(+)(-)
City Centre (2011)	I	66.2	A	5.0	A	10.2	A	29.4	95.1	**206.0**	1.9%
(2009)	I	65.9	A	8.8	A	12.3	A	24.0	91.0	**202.1**	
Clifton/Glen. Hghld (2011)	I	66.2	D	17.9	A	10.2	A	29.4	95.1	**218.8**	4.9%
(2009)	I	65.9	D	15.3	A	12.3	A	24.0	91.0	**208.6**	
Glenmore Valley (2011)	I	66.2		GEID	A	10.2	A	29.4	95.1	**201.0**	4.0%
(2009)	I	65.9		GEID	A	12.3	A	24.0	91.0	**193.2**	
Rutland (2011)	I	66.2		RWW	A	10.2	A	29.4	95.1	**201.0**	4.0%
(2009)	I	65.9		RWW	A	12.3	A	24.0	91.0	**193.2**	
Hall Road (2011)	I	66.2		SEKID	A	10.2	A	29.4	95.1	**201.0**	4.0%
(2009)	I	65.9		SEKID	A	12.3	A	24.0	91.0	**193.2**	
North East Rutland (2011)	C	125.7		BMID	A	10.2	A	29.4	95.1	**260.5**	12.5%
(2009)	C	104.1		BMID	A	12.3	A	24.0	91.0	**231.5**	
Hwy 33 - (2011)	D	97.4		BMID	A	10.2	A	29.4	95.1	**232.1**	-6.7%
(2009)	D	121.6		BMID	A	12.3	A	24.0	91.0	**248.9**	
University / Airport (2011)	E	93.8		GEID	A	10.2	A	29.4	95.1	**228.6**	-0.3%
(2009)	E	102.0		GEID	A	12.3	A	24.0	91.0	**229.3**	
McKinley (2011)	E	93.8		GEID		N/A		N/A	95.1	**189.0**	-2.1%
(2009)	E	102.0		GEID		N/A		N/A	91.0	**193.0**	
Southeast Kelowna (2011)	A	69.3		SEKID		N/A		N/A	95.1	**164.4**	#####
(2009)	A	183.3		SEKID		N/A		N/A	91.0	**274.3**	
S.W. Mission (2011)	B	189.5	B	3.4	B	15.0	A	29.4	95.1	**332.4**	8.1%
(2009)	B	170.5	B	6.5	B	15.6	A	24.0	91.0	**307.6**	

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GEID Serviced by Glenmore Ellison Irrigation District
N/A Not Applicable as Sewer will not be in that area within the 20 Year period

Commercial - rate per Sq. Mtr.

Comparison to current rates

GROWTH AREA	Sector / Rate										
		Roads		Water		Sewer Trunks		Treatment	Parks	Total	(+)(-)
City Centre (2011)	I	24.8	A	4.1	A	5.3	A	15.4	N/A	**50**	#####
(2009)	I	30.4	A	7.3	A	6.5	A	12.6	N/A	**57**	
Clifton/Glen. Hghld (2011)	I	24.8	D	14.7	A	5.3	A	15.4	N/A	**60**	-3.1%
(2009)	I	30.4	D	12.6	A	6.5	A	12.6	N/A	**62**	
Glenmore Valley (2011)	I	24.8		GEID	A	5.3	A	15.4	N/A	**45**	-8.0%
(2009)	I	30.4		GEID	A	6.5	A	12.6	N/A	**49**	
Rutland (2011)	I	24.8		RWW	A	5.3	A	15.4	N/A	**45**	-8.0%
(2009)	I	30.4		RWW	A	6.5	A	12.6	N/A	**49**	
Hall Road (2011)	I	24.8		SEKID	A	5.3	A	15.4	N/A	**45**	-8.0%
(2009)	I	30.4		SEKID	A	6.5	A	12.6	N/A	**49**	
North East Rutland (2011)	C	47.0		BMID	A	5.3	A	15.4	N/A	**68**	1.0%
(2009)	C	48.0		BMID	A	6.5	A	12.6	N/A	**67**	
Hwy 33 - (2011)	D	36.4		BMID	A	5.3	A	15.4	N/A	**57**	#####
(2009)	D	56.1		BMID	A	6.5	A	12.6	N/A	**75**	
University / Airport (2011)	E	35.1		GEID	A	5.3	A	15.4	N/A	**56**	#####
(2009)	E	47.0		GEID	A	6.5	A	12.6	N/A	**66**	
McKinley (2011)	E	35.1		GEID		N/A		N/A	N/A	**35**	#####
(2009)	E	47.0		GEID		N/A		N/A	N/A	**47**	
Southeast Kelowna (2011)	A	25.9		SEKID		N/A		N/A	N/A	**26**	#####
(2009)	A	84.5		SEKID		N/A		N/A	N/A	**85**	
S.W. Mission (2011)	B	70.9	B	2.8	B	7.9	A	15.4	N/A	**97**	-7.5%
(2009)	B	78.6	B	5.3	B	8.2	A	12.6	N/A	**105**	

BMID Serviced by Black Mountain Irrigation District
SEKID Serviced by South East Kelowna Irrigation District
RWW Serviced by Rutland Water Works
GEID Serviced by Glenmore Ellison Irrigation District
N/A Not Applicable as Sewer will not be in that area within the 20 Year period

Industrial - rate per hectare - by growth area - by service type

Comparison to current rates

GROWTH AREA	Sector / Rate										
		Roads		**Water**		**Sewer Trunks**		**Treatment**	**Parks**	**Total**	(+)(-)
City Centre (2011)	I	18,600	A	6,904	A	8,953	A	25,760	N/A	**60,217**	-9.7%
(2009)	I	22,665	A	12,155	A	10,806	A	21,049	N/A	**66,675**	
Clifton/Glen. Hghld (2011)	I	18,600	D	24,578	A	8,953	A	25,760	N/A	**77,891**	3.0%
(2009)	I	22,665	D	21,121	A	10,806	A	21,049	N/A	**75,641**	
Glenmore Valley (2011)	I	18,600		GEID	A	8,953	A	25,760	N/A	**53,313**	-2.2%
(2009)	I	22,665		GEID	A	10,806	A	21,049	N/A	**54,520**	
Rutland (2011)	I	18,600		RWW	A	8,953	A	25,760	N/A	**53,313**	-2.2%
(2009)	I	22,665		RWW	A	10,806	A	21,049	N/A	**54,520**	
Hall Road (2011)	I	18,600		SEKID	A	8,953	A	25,760	N/A	**53,313**	-2.2%
(2009)	I	22,665		SEKID	A	10,806	A	21,049	N/A	**54,520**	
North East Rutland (2011)	C	35,301		BMID	A	8,953	A	25,760	N/A	**70,014**	3.4%
(2009)	C	35,827		BMID	A	10,806	A	21,049	N/A	**67,683**	
Hwy 33 - (2011)	D	27,349		BMID	A	8,953	A	25,760	N/A	**62,062**	#####
(2009)	D	41,822		BMID	A	10,806	A	21,049	N/A	**73,678**	
University / Airport (2011)	E	26,346		GEID	A	8,953	A	25,760	N/A	**61,059**	-8.8%
(2009)	E	35,081		GEID	A	10,806	A	21,049	N/A	**66,937**	
McKinley (2011)	E	26,346		GEID		N/A		N/A	N/A	**26,346**	#####
(2009)	E	35,081		GEID		N/A		N/A	N/A	**35,081**	
Southeast Kelowna (2011)	A	19,458		SEKID		N/A		N/A	N/A	**19,458**	#####
(2009)	A	63,057		SEKID		N/A		N/A	N/A	**63,057**	
S.W. Mission (2011)	B	53,203	B	4,698	B	13,171	A	25,760	N/A	**96,833**	-5%
(2009)	B	58,645	B	8,914	B	13,686	A	21,049	N/A	**102,295**	

BMID Serviced by Black Mountain Irrigation District
SEKID Serviced by South East Kelowna Irrigation District
RWW Serviced by Rutland Water Works
GEID Serviced by Glenmore Ellison Irrigation District
N/A Not Applicable as Sewer will not be in that area within the 20 Year period

Updated Development Cost Charge Rates

ARTERIAL ROADS

Development Cost Charges Applicable to Development Within the Municipality

Development Type	Sector A SE Kelowna	Sector B South Mission	Sector C NE of Inner City	Sector D Hwy 33	Sector E N of Inner City	Sector I Inner City
Residential 1	**7,878**	**21,540**	**14,292**	**11,072**	**10,666**	**7,530**
Residential 2	**7,405**	**20,247**	**13,435**	**10,408**	**10,026**	**7,079**
Residential 3	**5,278**	**14,432**	**9,576**	**7,419**	**7,147**	**5,045**
Residential 4	**4,963**	**13,570**	**9,004**	**6,976**	**6,720**	**4,744**
Residential 5 - Per Sq. Mtr.	**69.3**	**189.5**	**125.7**	**97.4**	**93.8**	**66.2**
Commercial - Per Sq. Mtr.	**25.9**	**70.9**	**47.0**	**36.4**	**35.1**	**24.8**
Institutional A - Per Sq. Mtr.	**25.9**	**70.9**	**47.0**	**36.4**	**35.1**	**24.8**
Institutional B - Per Sq. Mtr.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Industrial - Per Hctr	**19,458**	**53,203**	**35,301**	**27,349**	**26,346**	**18,600**
Current Residential 1 Rate	**25,529**	**23,743**	**14,505**	**16,932**	**14,203**	**9,176**

WATER

Development Cost Charges Applicable to Development Within the Municipality

Development Type	Sector A Inner City	Sector B South Mission	Sector D Glenmore/ Clifton
Residential 1	**998**	**679**	**3,552**
Residential 2	**668**	**455**	**2,380**
Residential 3	**479**	**326**	**1,705**
Residential 4	**339**	**231**	**1,208**
Residential 5 - Per Sq. Mtr.	**5.0**	**3.4**	**17.9**
Commercial - Per Sq. Mtr.	**4.1**	**2.8**	**14.7**
Institutional A - Per Sq. Mtr.	**4.1**	**2.8**	**14.7**
Institutional B - Per Sq. Mtr.	**4.1**	**2.8**	**14.7**
Industrial - Per Hctr	**6,904**	**4,698**	**24,578**
Current Residential 1 Rate	**1,646**	**1,292**	**2,943**

Updated Development Cost Charge Rates

WASTEWATER TRUNK MAINS

Development Cost Charges Applicable to Development Within the Municipality

Development Type	Sector A Inner City	Sector B South Mission
Residential 1	**1,294**	**1,903**
Residential 2	**1,074**	**1,580**
Residential 3	**724**	**1,066**
Residential 4	**699**	**1,028**
Residential 5 - Per Sq. Mtr.	**10.2**	**15.0**
Commercial - Per Sq. Mtr.	**5.3**	**7.9**
Institutional A - Per Sq. Mtr.	**5.3**	**7.9**
Institutional B - Per Sq. Mtr.	**5.3**	**7.9**
Industrial - Per Hctr	**8,953**	**13,171**
Current Residential 1 Rate	**1,562**	**1,979**

WASTEWATER TREATMENT

Development Cost Charges Applicable to Development Within the Municipality

Development Type	Sector A All City
Residential 1	**3,723**
Residential 2	**3,090**
Residential 3	**2,085**
Residential 4	**2,010**
Residential 5 - Per Sq. Mtr.	**29.4**
Commercial - Per Sq. Mtr.	**15.4**
Institutional A - Per Sq. Mtr.	**15.4**
Institutional B - Per Sq. Mtr.	**15.4**
Industrial - Per Hctr	**25,760**
Current Residential 1 Rate	**3,044**

Updated Development Cost Charge Rates

PARKLAND - PUBLIC OPEN SPACE

Development Cost Charges Applicable to Development Within the Municipality

Development Type	Sector A All City
Residential 1	**5,300**
Residential 2	**5,300**
Residential 3	**5,300**
Residential 4	**5,300**
Residential 5 - Per Sq. M. (56 sq. m.	**95.1**
Commercial - Per Sq. Mtr.	**-**
Institutional A	**-**
Institutional B	**-**
Industrial - per Hctr.	**-**
Current Residential 1 Rate	**5,069**

Link to the *Development Cost Bylaw*

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