

COMOX VALLEY DEVELOPMENT IMPACTS MODEL

- ASSUMPTIONS FOR CITY OF COURTENAY IMPACTS

The Comox Valley Development Impacts Model has been created to provide an estimate of the community impact of proposed development projects across three dimensions:

1. **Temporary Construction Impacts**, including local construction spending, local employment and development-related revenue to the City of Courtenay and Comox Valley Regional District.
2. **Ongoing Financial Impacts to City of Courtenay (Annual)**, which is an estimate of the net impact on municipal finances each year. It is based on the expected increase in property tax revenue and the expected increase in municipal expenditures generated by the project upon completion.
3. **Additional Property Tax Revenue for other Local Authorities (Annual)**, which is an estimate of the additional revenue generated each year for the Comox Valley Regional District, Hospital District and School District.

OVERALL ASSUMPTIONS

New development projects create a range of impacts on the local government and the community at large that cannot be distilled into a single number. Nevertheless, the information provided through the Development Impacts Model is intended to provide an additional perspective on proposed developments that has not previously been made available on a regular basis.

The specific calculation methods and underlying assumptions for each part of the model are summarized below. Key overall assumptions, most of which relate to the calculation of Ongoing Financial Impacts under point #2 above, include the following:

- **Current municipal service levels.** It is assumed that services are provided by the municipality at the same level as currently provided.
- **Constant dollars.** All dollar figures are expressed in terms of constant dollars as of the base year in the model, which is currently 2014. All tax rates, fee schedules and municipal expenditures are calculated based on their level in 2015.
- Future municipal costs associated with proposed development projects are estimated based on three factors, as determined in consultation with City of Courtenay staff:
 1. **Population** – the estimated number of people living in the new development
 2. **Housing units** – the number of units being constructed

3. **Non-residential floorspace** – the amount of additional floorspace being built

With respect to population growth, and the evaluation of residential developments, there are several important points to clarify.

- From a strictly financial perspective, people who live in new development are a cost to the municipality because they consume municipal services. The allocation of municipal costs is currently estimated to be two-thirds driven by population and housing growth and one-third driven by non-residential floorspace growth.
- Based on Census data and BC Stats population estimates from 2006 and 2011, population growth in Courtenay has been slower than growth in the number of housing units. More specifically, population growth has been 81% as fast as housing growth (9.5% population growth, 11.7% housing unit growth).
- This means that a reasonable assumption for new housing developments is they will be filled with about 80% new residents and 20% existing residents.
- Without new housing development in Courtenay, the following would occur:
 1. Some people would choose to live outside the Comox Valley .
 2. Some people would choose to live in a different community in the Comox Valley, many of whom would access City of Courtenay services without contributing tax revenue.
 3. Some people would still choose to live in Courtenay but in an inferior housing situation. With a fixed amount of housing demand, the lower supply of housing would lead to higher housing prices, lower quality housing for the same price, or some combination of the two.

There is no way to know exactly how many people would fit into each of these three categories.

- Even though additional residents represent a cost to the municipality, there should also be recognition of their value as workers and entrepreneurs, as customers for local businesses, and as volunteers and participants in many other aspects of civic life.
- Municipal property taxes are structured such that commercial and industrial properties pay a higher tax rate than residential properties for a property of equivalent value. In 2015, business properties (Class 6) pay 2.8 times as much as residential properties and industrial properties (Classes 4 and 5) pay 3.9 times as much as residential properties.
- The combination of (1) the majority of City costs are assumed in the model to be driven by population growth, and (2) residential properties pay relatively lower taxes, means that on a purely financial basis, most residential projects will have a lower net financial benefit to the City

compared to commercial projects. In many cases, residential projects will show a net negative financial outcome and commercial projects will show a net positive income, reflecting the way that the business tax base is used to help support residential services.

- Following from the point above, residential projects and commercial projects should not be directly compared to each other, and negative financial outcomes for residential projects does not mean they are undesirable projects.
- The financial outcome of residential projects can be compared to each other and taken into consideration along with the many other factors that are considered as part of the development approval process.

LIMITATIONS (POSSIBLE AREAS FOR FUTURE IMPROVEMENT)

Cost projections based on average, not marginal costs

The model calculates additional City costs from new development based on the current average cost in each department on a per-person or floor area basis, which is relatively easy to calculate. But using the average cost means the model is not reflecting potential economies (or diseconomies) of scale.

For example, once the City has paid the initial cost of equipment and buildings and setting up programs and services, and provided there is excess capacity within those facilities and programs, the marginal cost to service an additional resident could be quite small. Or conversely, if facilities or programs are at capacity and extra residents are the tipping point that necessitate a few facility or new program, the marginal cost of an additional resident could be very large.

Ideally, the financial impact of new projects are calculated using these marginal costs, but they are not easily measured. In this initial version of the Development Impact Model, average costs are used. This means that the model may not correctly capture or reflect the cost impact of projects that are more infrastructure intensive, such as developments further away from existing City services or for boundary extensions in areas which have very old existing infrastructure.

Lifecycle infrastructure impacts not included

The model includes current servicing costs for infrastructure, but does not include transfers to reserve accounts to cover future infrastructure maintenance and repair expenses and eventual replacement. There is also no estimate of the long-term (lifecycle) costs associated with any new infrastructure that is built by the project developers and is then transferred to City ownership (which also transfers the financial responsibility to maintain and eventually replace that asset).

A future version of the model could incorporate the annual share of infrastructure's full lifecycle cost, showing whether sufficient revenue is being generated to cover these long-term costs. A full

consideration of lifecycle costing may also include water and sewer infrastructure, which is otherwise excluded from the model because it is assumed to operate on a full user-pay basis.

CALCULATION OF PART 1 - TEMPORARY CONSTRUCTION IMPACTS

Direct construction spending in the Comox Valley

Based on the project construction budget as outlined in the permit application, adjusted by the percentage of spending that is estimated to occur in the Comox Valley. This value can be adjusted if information on additional project spending over and above the amount shown on the application is provided by the developer or otherwise obtained.

Local employment (person-years)

The local employment estimate includes direct employment in construction, as well as estimated indirect and induced employment.

It is calculated based on the amount of local construction spending, which can be converted in an employment estimate using multipliers from the BC Input-Output Model (BCIOM). Direct employment is simply the expected number of construction jobs based on the size of the budget. Indirect employment is created among the suppliers to the construction project (e.g., lumber yards, architects and engineers, household furnishing stores). Induced employment is created when the direct and indirect employees spend their paycheques and generate additional employment in local grocery stores, restaurants and dry cleaners.

BC Stats has estimates for the local share of all of these employment impacts and these are programmed into the Development Impacts Model. All employment is shown in terms of “person-years,” which is the equivalent to one person working for one year.

Development-related revenue to the City of Courtenay

Values for calculated for **Development Fees** and **Development Cost Charges** based on the City's current application fees and DCC bylaws and the characteristics of each project application (such as amount of commercial floor area, number of housing units, etc.).

Development-related revenue to the Comox Valley RD

Some development cost charges for projects in Courtenay are paid to the Comox Valley Regional District. The calculation is based on the CVRD's DCC bylaw.

CALCULATION OF PART 2 - ONGOING CITY OF COURTENAY IMPACTS (ANNUAL)

Revenue (Additional property tax)

Revenue is calculated by estimating the difference between the current assessed value of the subject property and its future assessed value upon completion, multiplied by the appropriate property tax rate.

Current assessed values are known and future values are estimated based on the construction value of the project (unless the project developer provides a different estimate of future project value).

Costs (Additional municipal expenses)

Increased municipal costs are based on the projected increase in the number of residents and/or the size of the non-residential development. New developments are assumed to generate a range of costs across most City departments, as outlined in the table below. The determination of cost drivers is based on discussions with City of Courtenay staff, as well as an analysis of total floor area in the community in 2013 that showed 69% (roughly two-thirds) was residential and 31% (roughly one-third) was non-residential.

With respect to recreation and cultural services, even though these services are consumed by people (residents), there is a strong argument to be made that businesses also desire and support these services as part of the community’s package of amenities that are required to attract and retain skilled workers and a strong customer base.

Assumed Cost Drivers for City of Courtenay Municipal Expenditures

City of Courtenay Cost Category	Cost Drivers		
	Population	Housing Units	Non-Residential Floor Area
General Government Services	66.7%		33.3%
Protective Services			
...Police	66.7%		33.3%
...Fire		66.7%	33.3%
...Other Protective	66.7%		33.3%
Transportation Services	66.7%		33.3%
Environmental Health Services	Full cost recovery based on user fees.		
Public Health and Welfare Services*	66.7%		33.3%
Planning & Development Services		50%	50%
Recreation and Cultural Services	66.7%		33.3%

*It is assumed that only 25% of the cost of Public Health and Welfare Services is reliant on the cost drivers shown in the table. The other 75% is recovered from user fees, primarily from the cemetery.

The estimated cost impacts of a proposed development are based on the City’s average cost in each category on a per capita, per housing unit, or per floor area basis. **The per capita estimates are then adjusted down by 20% to reflect the assumption that 20% of residents will be existing residents (and therefore not creating a new cost for local government).**

For example, a proposed residential development would generate an increase in general government service costs of \$67 for each new resident. A development with an estimated population of 100 people would have an estimated 80 new residents, creating a total cost impact of \$5,360 at full build-out.

Population estimates for residential developments are based on the type of unit (single-family or multi-family) and the average per-unit population in Courtenay as of the 2011 Statistics Canada Census.

There are several cost categories where user fees or some other revenue source offsets part of the City's costs. These revenue offsets have been included in the calculations such that the City costs outlined below are estimated net costs

*Average Municipal Expenditures Expressed in Terms of Cost Drivers, 2015
(Net of Offsetting Revenue, if applicable)*

Cost Category	Cost Drivers		
	Population (per capita for net new residents)	Housing Units (per unit)	Non-Residential Floor Area (per 1,000 m ²)
General Government Services	\$61		\$1,117
Protective Services			
...Police	\$127		\$2,330
...Fire		\$193	\$644
...Other Protective	\$8		\$144
Transportation Services	\$70		\$1,285
Public Health and Welfare Services (25% from tax revenue, 75% from user fees)	\$1		\$23
Planning & Development Services		\$32	\$427
Recreation and Cultural Services			
...Recreation	\$72		\$1,319
...Culture	\$56		\$1,018
TOTAL	\$395	\$125	\$8,306

The values for each cost driver that are used to generate the average values are outlined below.

Base Values for Cost Drivers

	Population	Housing Units	Non-Residential Floor Area
Base Year	2015	2015	2015
Value	25,244	11,414	862,200 m ²
Data Source	BC Stats estimate	Baseline from 2011 Census / Updates estimated from 2011-2015 building permits	Baseline from 2013 BC Assessment / Updates estimated from 2015 building permits

Net Impact (annual)

The Net Impact is simply the difference between the estimated Revenue and the estimated Costs. This is an annual estimate of the net impact on the City's finances once the project reaches full build-out.

CALCULATION OF PART 3 - ADDITIONAL PROPERTY TAX REVENUE FOR OTHER LOCAL
AUTHORITIES (ANNUAL)

Comox Valley Regional District tax revenue, annual

Based on the increase in property assessment and the appropriate Regional District tax rate.

Hospital District tax revenue, annual

Based on the increase in property assessment and the appropriate Hospital District tax rate.

School District tax revenue, annual

Based on the increase in property assessment and the appropriate School District tax rate.