

TRILOGY PROPERTIES VI CORPORATION

Community Impact Assessment

Lots – 2, 3, 5, 7, 8A, 9A, 10, 11



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EXECUTIVE SUMMARY

A recent market assessment revealed that Cumberland's residential community offering is lagging behind other communities in the Comox Valley. In 2004, the community reached a consensus as to its vision for the future. It expressed a "fondness" for its current state; however, it acknowledged it is experiencing the following problems:

- i) There is excessive leakage of retail spending to retail establishments outside the community due to the absence of commercial services such as a major grocery store, and
- ii) the village's public infrastructure is in need of updating and repair.

The community recognizes that its current tax base cannot accommodate the required expenditures on infrastructure and that new sources of funding must be found. It believes that such income must come from new development. It further believes that commercial and industrial development will yield the most tax income for the village.

The community wants to maintain its status as a "historic village with an identity and sense of community worth preserving". To that end, Cumberland insists that new residential, commercial and industrial development conforms to the village's concepts, images and its vision of the future.

As a general comment, community development and growth is a sign of a healthy community. It has been proven that communities cannot stand still in time and enjoy vibrancy over the long term. Existing, and potentially new residents are constantly in search of a quality living experience, and if they don't find that a particular community provides it, they will relocate to one that will. School enrolments fall, retail sales decline, property values decline, crime increases, unemployment increases and stagnation becomes reality.

Recognizing that growth is a positive feature in a healthy community, the focus in many communities today is that of "smart growth". Avoiding urban sprawl, promoting central city vitality, efficient use of land and infrastructure, greater mixes of land uses and housing choices, and enhancement of environmental and cultural resources, are key pillars of any community development plan.

Given Cumberland's desire for suitable development, and Trilogy Properties VI Corporation's ("Trilogy") attractive real estate development proposal (residential and commercial) currently under consideration by the village, there appears to be a solution to mitigating Cumberland's current state of underdevelopment. This report attempts to quantify the fiscal and economic impacts of Trilogy's proposed development.

The following report portrays the fiscal and economic impacts flowing from Trilogy's proposed real estate development. The development's details are contained on page 7 of this report. It envisages mixed use (residential, commercial, recreational (golf)) on approximately 350 of its 764 acre landholding.

Community Impact Assessment

The fiscal and economic impact flowing from each phase of the development is expressed in this report within a 10 year timeframe from the date each phase commences. The cumulative total from all of the 10 year periods is presented below :

- a) If residential development is maximized, the total economic impact will range between \$481 million and \$660 million and produce between 9,900 and 16,200 person years of employment. This is the model Trilogy is working with.
- b) If commercial development is maximized, the total economic impact will range between \$455 million and \$755 million and produce between 10,100 and 18,500 person years of employment.

Under both development scenarios, the economic impact on both the local and total economies is significant.

OVERVIEW

The Comox Valley is experiencing a significant growth rate. According to Comox Valley Economic Development, this growth is amongst the fastest in British Columbia and the trend has continued over the last 5 years by achieving an increase of 9%. The population of the Comox Valley is further projected to grow at almost 2% a year over the next 5 years. Should this growth rate continue, it is feasible that the Valley will become the largest regional hub on Vancouver Island, north of Nanaimo.

The Village of Cumberland, (The Village) being a part of the Comox Valley and its residents have recognized the need to grow to meet the fiscal and infrastructure demands that have accumulated over time and will continue to do so on an increasing basis.

In 2005, Trilogy secured 764 acres of land in Cumberland from Comox Timber Ltd. The land comprises eleven lots in total. In alignment with its “Smart Growth” development practices and its comprehensive planning processes, Trilogy has proposed development plans for these lots to be completed over the next ten to fifteen year time period.

As a part of the development approval process, the Village requested that Trilogy provide a community impact analysis of the development in Cumberland. Trilogy engaged Meyers Norris Penny LLP. (MNP) to assist with the task of performing the analysis for the development of lots 2, 3, 5, 7, 8A, 9A, 10, 11 (The LOTS)

This report outlines the findings of this analysis and includes an assessment of the economic impacts of the development as well as impacts on public services and indirect impacts on other areas of the community.

STUDY METHODOLOGY AND ASSUMPTIONS

METHODOLOGY

The methodology adopted for this study is based on recognized practices for economic impact analysis. Where applicable, relevant models for calculating economic impact have been used to support the findings. Some estimations are based on current spending patterns in similar communities and municipalities.

Information to complete the study was obtained from various sources including Statistics Canada, economic development studies, the US National Home Building Association, the Canadian Construction Association as well as many other sources as the need arose. Information has also been compiled using Trilogy's plans for development, including the diagrams for site and building construction land uses. Other background information has been collected from the Village and Comox Valley information sites, as well as information which is public knowledge from previous engineering and economic studies.

ASSUMPTIONS

With a development of this size and nature, it is not always clear what the intended land use, zoning and final application on the land will ultimately be. With this in mind, many of the findings of this report are based on assumptions about land usage and the projected development.

It is also prudent to remind the reader that projections are inherently incorrect and the nature of this study relies heavily on these projections in some instances. The study and analysis assumes that the projections provided by the various institutions and references are sufficiently robust from which to draw reasonably accurate conclusions. Where sufficient information was not available, conclusions were drawn based on assumptions and historical data.

This analysis separates the findings into three main sections:

- i) the economic impact on the Village from the residential and commercial development,
- ii) the impact on public services, and
- iii) those impacts of a non-financial or determinable nature, but which are deemed to have an intrinsic impact on the Village.

DESCRIPTION OF DEVELOPMENT

This report addresses a subset of the development in Cumberland. The subset includes lots numbered 2, 3, 5, 7, 8A, 9A, 10, 11 (The LOTS). The following list provides a breakdown of the intended land use and the potential development options, but is not intended to provide an exhaustive listing of the development plans for these lots. As the project progresses, the development plans will be proposed and reviewed by the Village and Trilogy.

Table 1: Proposed Land use and development options

Lot 2A and B	2A – Single family 1.5 acres each (maximum 5 parcels) 2B - Multi-family (townhouses) to a maximum of 496,000 sq ft. (360 units) The units predominantly fronting onto streets or greens. In addition to an environmental reserve, lot 2B would also have local green space and parks serving the neighborhood.
Lot 3A and B	3A and 3B – Commercial mixed use. Highway commercial. 3A could be up to 6,500 sq ft (maximum) 3B could be up to 62,500 sq ft (maximum)
Lot 3C	This lot has a BCH right of way running through it. The zoning would allow for mixed use/ commercial/ residential. Mixed use – townhouses to maximum of 67,500 sq ft.,
Lot 5	This site helps compliment its location as the heart of commercial mixed use opportunity, with individual components integrating, supporting and complementing one another. In addition to normal commercial uses, other mixed use such as institutional, public amenity and residential is proposed. The residential mix may occur in various forms, either in flexible live/ work configurations, or as separated multi-family residential building with units predominantly fronting onto streets and greens. Residential/ mixed use or townhouses 55,650 sq ft maximum. Up to 53 residential units to a max of 55, 650 sq ft and 56,850 sq ft of commercial, or 112,500 sq ft of commercial; The majority of this site is preserved as Roy Creek headwaters.
Lot 7	Up to 25,000 sq ft of commercial, plus institutional, public assembly, light industrial and office.
Lot 8A	Commercial mixed use/residential with a potential for up to 40,000 sq ft of residential. Up to 80,000 sq ft of commercial. Commercial uses could include institutional, public assembly, light industrial, office, automotive, and recreational vehicle sales.
Lot 9A	Up to 34,000 sq ft of commercial. Golf course, driving range and clubhouse with a pro shop, restaurant and other ancillary commercial.
Lot 10	Up to 85 residential units to a max of 114,750 sq ft and 120,250 sq ft of commercial, or 235,000 sq ft of commercial only. Commercial uses include institutional, public assembly, light industrial and office. Multi-family residential may occur as integrated in flexible live/ work configurations, or as separated multi-family residential building with units predominantly fronting onto streets or greens.
Lot 11	A residential neighborhood situated next to Maple Lake. Residential development may occur as single family, duplex or as multi-family to a maximum of 160 residential units. (maximum 216,000 sq ft)

ECONOMIC IMPACT

The following findings are derived from MNP's research efforts:

Local impact of residential construction in a typical metropolitan area

Impact statistics were gleaned from several sources described below:

- a) The Greater Toronto Home Builder's Association estimates that the construction of a single residence creates the equivalent of 3.3 person years of employment. It states that "because 5 out of 6 jobs created in residential construction takes place away from the building site, we consider the residential construction sector to be an invisible giant when it comes to job creation".
- b) The W. E. Upjohn Institute for Employment Research in Michigan, USA, recently (March, 2008) assessed the economic impact of a proposed real estate development comprised of
 - i) 826 residential units averaging 1,234 sq. ft.,
 - ii) 44,000 sq. ft. of commercial and retail space,
 - iii) two hotels and a golf course.

Every \$46,411 of non-residential construction expenditures created one direct/indirect job for 1 year, rising slightly higher (\$52,727) for residential construction expenditures.

In the 12 year period 2009 to 2020, the construction of 826 residential housing units and associated road infrastructure is expected to create 150 to 200 jobs per annum (1,800 to 2,400 jobs in total). This equates to 2.2 to 2.9 person years of employment (direct plus indirect) per housing unit, slightly below the 3.3 job estimate of the Greater Toronto

Home Builder's Association.

- c) The US National Association of Home Builders has assessed the local impact of single family and multi-family home building in a typical metropolitan area. Its 2008 impact model "captures the effect of the construction activity itself, the impact that occurs when income earned from the construction activity is spent and the impact that occurs when the new home is occupied". It presents the impacts of building both 100 single family residences and 100 multi-family units in the community, using key inputs (new home prices, raw land values, construction-related fees) set to national averages.

One might argue that the data may not be accurate for the Comox Valley region; however, the Canadian and US dollars are virtually at par and wages in the USA and the Comox Valley are likely within a reasonable range of comparability. The home price and raw land cost assumptions (see below) are about 50% lower than those in the Comox Valley so the impacts calculated below are conservative from Cumberland's perspective.

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i) Single family residences

	<u>Direct, indirect and induced impacts</u>	
	One Year	Additional, annually recurring
Local income (\$mill.)	16.0	3.20
Taxes and other revenue for local governments (\$ mill.)	1.8	.648
Local person years of employment	284	63

Underlying assumptions:

- average home price	\$284,887
- raw land (lot) value	\$ 45,012
- local government fees	\$ 7,008
- average annual property tax	\$ 3,211

ii) Multi-family residences

	<u>Direct, indirect and induced impacts</u>	
	One Year	Additional, annually recurring
Local income (\$mill.)	7.0	3.20
Taxes and other revenue for local governments (\$ mill.)	.710	.461
Local person years of employment	133	52

Underlying assumptions:

- average home price	\$112,277
- raw land value	\$ 17,740
- local government fees	\$ 2,762
- average annual property tax	\$ 1,266

Community Impact Assessment

The NAHB also calculated the local government's cost of providing services to the new residences as follows (\$ millions):

- i) 100 single family residences

	<u>Year of Incurrence</u>	
	One Year	Annual, recurring
Current expenditures	.189.0	.378
Capital expenditures	1.900	0

- ii) 100 multi-family residences

	<u>Year of Incurrence</u>	
	One Year	Annual, recurring
Current expenditures	.125	.251
Capital expenditures	1.200	0

It can be seen that annual/recurring local government revenues exceed their annual/recurring costs, resulting in an operating surplus that can be used to pay down the debt associated with local government's capital investment.

The following table illustrates the impact on the economy over the initial 10 year period:

	Single	Multifamily	Total
Local government revenues	\$7,632,000	\$4,859,000	\$12,491,000
Local government annual recurring expenditures	\$3,591,000	\$2,384,000	\$ <u>5,975,000</u>
Impact on the economy			\$ <u><u>6,516,000</u></u>

ECONOMIC IMPACT FROM TRILOGY'S RESIDENTIAL DEVELOPMENT

The residential component planned for the Trilogy Lands is outlined in the table below:

Lot Number	Number of Units	Sq. ft. of Residential
Lot 2A	360 multi-family	496,000
Lot 2B	5 single family	20,000
Lot 3C	50 multi-family	67,500
Lot 5	53 multi-family	55,650
Lot 10	85 multi-family	114,750
Lot 11	Single family, duplex or multi-family to a maximum of 160 units	216,000

Lot 8a has potential for residential development, but Trilogy is not considering it at this time.

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With the rezoning, some of the lots would allow for commercial and residential development to a certain square footage in entirety, with maximum allowances for residential units. Trilogy has been working with a model that allows for the maximum residential to commercial ratio on these multi-purpose lots. Therefore, single family homes could range from 5 to 165 units. Using the model from the US National Association of Home Builders the economic impacts would be as follows:

Direct, indirect and induced impacts	5 Units		165 Units	
	One-year	Additional annually recurring	One-year	Additional annually recurring
Local income	\$800,000	\$160,000	\$26,400,000	\$5,280,000
Taxes and other revenue for local governments	\$ 90,000	\$ 32,400	\$ 2,970,000	\$1,069,200
Local person years of employment	14	3	469	104
Cumberland's cost of providing services				
Current expenditures	\$ 9,450	\$ 18,900	\$ 311,850	\$ 623,700
Capital expenditures	\$ 95,000	0	\$ 3,135,000	0

The number of multi-family homes could range from 548 to 708. Using the model from the US National Association of Home Builders the economic impacts would be as follows:

Direct, indirect and induced impacts	548 Units		708 Units	
	One-year	Additional, annually recurring	One-year	Additional annually recurring
Local income	\$38,360,000	\$17,536,000	\$49,560,000	\$22,656,000
Taxes and other revenue for local governments	\$ 3,890,800	\$ 2,526,280	\$ 5,026,800	\$ 3,263,880
Local person years of employment	729	285	942	368
Cumberland's cost of providing services				
Current expenditures	\$ 685,000	\$ 1,375,480	\$ 885,000	\$ 1,777,080
Capital expenditures	\$6,576,000	0	\$ 8,496,000	0

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Ignoring inflation and the time value of money, the following table illustrates the impact on the economy for the period under consideration on minimum single family homes and maximum multi-residential homes:

	Single	Multi-family	Total
Local government annual and recurring revenues	\$ 381,600	\$ 34,401,720	\$ 34,783,320
Local government annual and recurring expenditures	\$ 274,550	\$ 25,374,720	\$ 25,649,270
Net to Village of Cumberland	\$ 107,050	\$ 9,027,000	\$ 9,134,050
Local income	\$2,240,000	\$253,464,000	\$255,704,000
Impact on the economy	\$2,347,050	\$262,491,000	\$264,838,050
Number of person years of employment	41	4,254	4,295

Ignoring inflation and the time value of money, the following table illustrates the impact on the economy for the period under consideration based on maximum single family homes and minimum multi-residential homes:

	Single	Multi-family	Total
Local government annual and recurring revenues	\$12,592,800	\$ 26,627,320	\$ 39,220,120
Local government annual and recurring expenditures	\$ 9,060,150	\$ 19,640,320	\$ 28,700,470
Net to Village of Cumberland	\$ 3,532,650	\$ 6,987,000	\$ 10,519,650
Local income	\$73,920,000	\$196,184,000	\$270,104,000
Impact on the economy	\$77,452,650	\$203,171,000	\$280,623,650
Number of person years of employment	1,405	3,294	4,699

The results of applying the US National Association of Homes Builders economic model show that the Village of Cumberland should see between \$9.1 million and \$10.5 million in net revenues generated from the residential side of this project ignoring finance charges on any debt incurred, while the entire region will generate income between \$264 million and \$280 million over for the period under consideration and between 4,295 and 4,699 person years of employment.

If the minimum residential was to be built based on maximizing commercial space (which is not Trilogy's current vision), the impact on the economy and number of person years of employment generated from 5 single family homes and 520 multi-family homes would be:

$$\$ 2,347,050 + \$192,790,000 = \$195,137,050$$

$$41 + 3,129 = 3,170 \text{ person years of employment}$$

Whereas with 165 single family homes and 360 multi-family homes the impact on the economy would be:

$$\$77,452,650 + \$133,470,000 = \$210,922,650$$

$$1,405 + 2,174 = 3,579 \text{ person years of employment}$$

It is evident that three independent sources produce similar job estimates resulting from construction of residential units ranging from 2.2 - 3.3 person years of employment, with the U.S. National Association of Home Builders (the model used) estimate of the 2.8 falling in the middle of this range.

Discussion of model used to measure the economic impacts of the residential development on the Trilogy lots

The US National Association of Home Builders has developed a model that measures the local economic impact of building housing based on over 325 individual local impact reports from various metropolitan areas throughout the United States. The resulting model is considered representative of a typical metropolitan area. The model considers the one time effects that occur as the result of construction activity such as jobs, wages and local taxes (including permit, utility connection and impact fees) generated by the actual development, construction and sale of the home. It also considers the ripple effect, being the wages and profits for local area residents earned during the construction period spent on other locally produced goods and services and finally the ongoing, annual effect, being the local jobs, income and taxes generated as a result of the home being occupied. This is a comprehensive model and given the proximity to the US in terms of the dollar and building costs, is one that can be applied with a good degree of confidence.

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Local impact of commercial construction in metropolitan areas

MNP's research yielded the following information:

- i) A Washington State study found that 1,000 sq. ft. of new commercial space (high-tech, retail, office) creates 3.29 direct jobs. The study also found that the indirect job multiplier ranged from 1.53 to 1.77 times the direct job numbers, depending on the specific use of the space.
- ii) Another Washington State study found that 1,000 sq. ft. of new office space creates 3 direct jobs, and 1,000 sq. ft. of new retail space creates 3.26 direct jobs.
- iii) A study of the economic and fiscal impact of commercial construction in the Phoenix and Tucson areas revealed the following annual economic impacts created by office, retail and industrial construction cost (2006 \$):

	Phoenix	Tucson
Const'n cost per 1 direct/indirect/induced job	\$50,960	\$46,450
Economic output per \$1 of construction cost	\$1.90	\$1.80

Local government recurring revenues
Cumberland ratio of tax rates:

Commercial business and other/residential 1.92 times
Tax rate = 7.5834 per \$1,000 assessment

- iv) A San Diego, California study of the impacts of a 60,000 sq. ft. commercial (retail, office, restaurants) real estate development concluded that the project would yield the following job creation impact:

each 126 sq. ft. of space would create 1 direct job and an additional .5 indirect job.

ECONOMIC IMPACT FROM TRILOGY'S COMMERCIAL DEVELOPMENT

The commercial component planned for the lots is outlined in the table below:

Lot Number	Square Feet of Commercial	
	Minimum	Maximum
Lot 3A, B & C	325,000	393,000
Lot 5	56,850	112,500
Lot 7	25,000	25,000
Lot 8 A	80,000	80,000
Lot 9 A	34,000	34,000
Lot 10	120,250	235,000
Total	641,100	879,500

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In the table above, the “maximum” column assumes that for the multi-purpose lots, no residential development occurs, whereas the “minimum” column assumes the residential development is maximized. The minimum commercial development is the more likely scenario and is the model Trilogy has been using.

Cost of construction and development

Offsite infrastructure costs for commercial development on lots 3, 5, 7, 8A, 9A and 10 is estimated to be a minimum of \$6,663,615

Construction costs are estimated as follows:

Trilogy currently envisions the commercial uses on lots 5, 7, 8A, 9A and 10 to be mostly comprised of retail and restaurants while lot 3 will also have gas stations. Estimated per square foot costs have been derived from local Vancouver Island construction estimators and are summarized in the table below:

	Low Quality	Medium Quality	High Quality
Restaurant – one storey	\$170.12 - \$218.68	\$161.21 - \$227.76	\$178.86 - \$243.05
Convenience store – one storey	\$ 92.35 - \$125.51	\$ 97.52 - \$147.90	\$ 98.12 - \$191.18
Store, department – one storey	\$ 87.01 - \$111.21	\$ 87.67 - \$113.80	\$ 89.82 - \$117.26
Store – retail – one storey	\$ 87.12 - \$132.06	\$ 91.85 - \$142.89	\$ 96.25 - \$153.62
Supermarket – one storey	\$ 88.17 - \$126.45	\$ 92.84 - \$137.78	\$ 98.07 - \$140.20
Cost ranges	\$ 87.01 - \$218.68	\$ 87.67 - \$227.76	\$ 89.82 - \$243.05

The higher costs within each range represent buildings of lower square footage. These costs do not include leasehold improvements or costs to ready the units for operation.

Another source of square foot cost comes from a Vancouver development consultant quoting the following for Nanaimo development (the costs for Nanaimo are equivalent to the Comox Valley costs according to the Vancouver Island construction estimators):

	Low Quality	Medium Quality	High Quality
Strip commercial with large anchor tenants	\$171.95	\$190.05	\$208.15
Strip commercial without large anchor tenants	\$ 165.30	\$182.70	\$200.10
Mixed use commercial up to 1000 sq ft	\$185.25	\$204.75	\$224.25
Mixed use commercial over 1000 sq ft	\$180.50	\$199.50	\$218.50
Cost ranges	\$163.50 – \$185.25	\$182.70 – \$204.75	\$200.10 – \$224.25

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The above represents the expected on site construction costs in a normal, competitive environment. Areas are based on above ground, gross floor, calculations. These are averaged figures.

Given that it is likely that there will be a mixture of types and sizes of commercial retail and there is no way to predict with accuracy what the mix will be at this time, ranges have been used.

It is apparent that the figures from the Vancouver development consultant fall within the ranges noted by the Vancouver Island estimators.

Assuming that the commercial development comprises retail, restaurants and mixed use (with residential), the cost of commercial development is estimated to be as follows:

Based on minimum commercial development

	Low Quality	Medium Quality	High Quality
External infrastructure costs	\$ 6,663,615	\$ 6,663,615	\$ 6,663,615
Onsite infrastructure cost	\$ 27,000,140	\$ 27,000,140	\$ 27,000,140
Low	<u>\$ 55,782,111</u>	<u>\$ 56,205,237</u>	<u>\$ 57,583,602</u>
Total	<u>\$ 89,445,866</u>	<u>\$ 89,868,992</u>	<u>\$ 91,247,357</u>
Per sq ft costs including infrastructure	\$139.52	\$140.18	\$142.33

	Low Quality	Medium Quality	High Quality
External infrastructure costs	\$ 6,663,615	\$ 6,663,615	\$ 6,663,615
Onsite infrastructure costs	\$ 27,000,140	\$ 27,000,140	\$ 27,000,140
High	<u>\$140,195,748</u>	<u>\$146,016,936</u>	<u>\$155,819,355</u>
Total	<u>\$173,859,503</u>	<u>\$179,680,691</u>	<u>\$189,483,110</u>
Per sq ft costs including infrastructure	\$ 271.19	\$ 280.26	\$ 295.56

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Based on maximum commercial development

	Low Quality	Medium Quality	High Quality
External infrastructure costs	\$ 6,613,615	\$ 6,663,615	\$ 6,663,615
Onsite infrastructure costs	\$ 27,654,204	\$ 27,654,204	\$ 27,654,204
Low	<u>\$ 76,525,295</u>	<u>\$ 77,105,765</u>	<u>\$ 78,996,690</u>
Total	<u>\$110,843,114</u>	<u>\$111,423,584</u>	<u>\$113,314,509</u>

Per sq ft costs including infrastructure

	\$ 126.03	\$ 126.69	\$ 128.84
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	Low Quality	Medium Quality	High Quality
External infrastructure costs	\$ 6,663,615	\$ 6,663,615	\$ 6,663,615
Onsite infrastructure costs	\$ 27,654,204	\$ 27,654,204	\$ 27,654,204
High	<u>\$192,329,060</u>	<u>\$200,314,920</u>	<u>\$213,762,475</u>
Total	<u>\$226,646,879</u>	<u>\$234,632,739</u>	<u>\$248,080,294</u>

Per sq ft costs including infrastructure

	\$ 257.70	\$ 266.78	\$ 282.07
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External infrastructure costs are based on Trilogy's projected costs related to the lots and their commercial development.

The onsite infrastructure costs are estimated with regard to the size of the lots and the commercial development, based on a cost schedule from a case study on infrastructure costs conducted by the Utah Governor's Office of Planning and Budget.

Discussion of the model used to measure the economic impacts of commercial development on the Trilogy lots

The Phoenix and Tucson model measures the economic and fiscal impacts of construction in a commercial real estate market, which encompasses construction of commercial space in 2006 dollars. The model does not measure the impact of the companies that occupy commercial buildings such as impacts from retail sales that occur at retail establishments. The direct, indirect and induced economic and fiscal impacts are captured in this model. The model is based on a mix of 23.4% office, 29.75% retail and 46.83% industrial.

In the model, the per sq ft cost of construction for office space is about 1.5 times the cost of retail whereas the cost for retail is about 2.1 times the cost of industrial space development. According to the Vancouver development consultant's per sq ft costs, light industrial costs are about 47% of retail costs while low rise office costs are only about 1.2 times the cost of retail but high rise office costs are about 1.5 times retail.

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Given that Trilogy currently envisions all retail and restaurants the model produces economic output that will be 13% to 20% lower than the Trilogy lots can expect. See the calculation below.

The most conservative of the Phoenix and Tucson multipliers has been used in this report.

If retail cost \$100 then the model produces

23.40% x 1.2 x 100	35.10	
23.40% x 1.5 x 100		28.08
29.75% x 1.0 x 100	29.75	29.75
46.83% x .4761 x 100	<u>22.30</u>	<u>22.30</u>
	<u>87.15</u>	<u>80.13</u>

Application of the multipliers

Assumptions

1. It is assumed that a commercial development has a similar ratio of local government recurring expenditures to recurring revenues as residential development and so 73% has been used.
2. It is assumed that commercial development produces a similar percentage of jobs on a recurring basis as single family residential.

Applying the multipliers from the Phoenix and Tucson model as well as tax rates from the Village of Cumberland and estimated proportional expenditures, yields the following economic impacts from commercial development:

Economic output based on minimum commercial development

One time

Minimum	$1.8 \times 113\% \times 139.52 \times 641,100 = \$181,933,717$
Maximum	$1.8 \times 113\% \times 295.56 \times 641,100 = \$341,070,329$

Recurring

Minimum

Local government recurring revenue	$139.52 \times 641,100 \times 7.5834/1,000 =$	678,307
Local government recurring expenditures	$73\% \times 678,307 =$	495,164
Recurring surplus		183,143

Maximum

Local government recurring revenue	$295.56 \times 641,100 \times 7.5834/1,000 =$	1,436,929
Local government recurring expenditures	$73\% \times 1,436,929 =$	1,048,958
Recurring surplus		387,971

It should be noted that the value of the land has not been factored into the recurring tax revenue calculations so the surpluses are likely understated.

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Number of person years of employment based on minimum commercial development

One time

Minimum $89,445,866/50,960 = 1,755$ jobs
Maximum $189,483,110/50,960 = 3,718$ jobs

Recurring

Minimum $1,755 \times 22\% = 386$ jobs
Maximum $3,718 \times 22\% = 818$ jobs

Economic output based on maximum commercial development

One time

Minimum $1.8 \times 113\% \times 126.03 \times 879,500 = \$224,455,445$
Maximum $1.8 \times 113\% \times 282.07 \times 879,500 = \$504,595,869$

Recurring

Minimum
Local government recurring revenue $126.03 \times 879,500 \times 7.5834/1,000 = 840,570$
Local government recurring expenditures $73\% \times 840,570 = 613,616$
Recurring surplus 226,954

Maximum

Local government recurring revenue $282.07 \times 879,500 \times 7.5834/1,000 = 1,881,294$
Local government recurring expenditures $73\% \times 1,881,294 = 1,373,345$
Recurring surplus 507,949

It should be noted that the value of the land has not been factored into the recurring tax revenue calculations so the surpluses are likely understated.

One time number of person years of employment based on minimum commercial development

Minimum $110,843,114/50,960 = 2,175$ jobs
Maximum $248,080,294/50,960 = 4,868$ jobs

Recurring

Minimum $2,175 \times 22\% = 479$ jobs
Maximum $4,868 \times 22\% = 1,070$ jobs

To test the job figures produced above, the Washington study would create:

Minimum $4.79 \times 641,100/1000 = 3,070$ jobs
Maximum $4.79 \times 879,500/1000 = 3,773$ jobs

This result falls within the job figures produced by application of the Phoenix and Tucson model.

LOCAL IMPACT OF 9-HOLE GOLF COURSES

For purposes of estimating the economic impact of a local 9-hole golf course, the following assumptions are used to estimate the golf course's gross annual revenue (it must be noted that **a formal feasibility study has not been undertaken**):

Number of golf days	270
Number of rounds per day (7.5 starts per hour for 6 hours for an average group of 3 golfers)	135
Percentage of golfers (2) renting a cart	50%
Average fee per round	\$30
Average cart fee	\$13

Gross revenue \$1,211,965 (green fees \$1,093,500; cart rental \$118,465)

A 2006 study on the economic impact of golfing in Arizona indicated that green fees and cart rentals account for 60.6% of total course revenues (excluding membership and initiation fees). Consequently, it can be reasonably assumed that the Cumberland golf course's annual revenues from all sources (food, beverage, retail, teaching, but excluding membership and initiation fees) would be approximately \$2 million.

Two economic impact studies in the USA estimated total direct, indirect and induced economic impact at 1.65 to 1.79 times revenue collected by South Carolina and Arizona golf courses respectively. Assuming such multipliers are valid for the Cumberland golf course, the total annual economic impact of the course's presence would be \$3.3 million to \$3.58 million.

The two studies also yielded the following job statistics:

Direct, indirect, and induced economic output required to produce 1 job

South Carolina	\$73,082
Arizona	\$74,092

Assuming such would be the case for the Cumberland course, the number of local and other jobs created by the course's presence in Cumberland would be in the range of 45 to 48 jobs.

Community Impact Assessment

TOTAL IMPACT

Below is the total impact for the different scenarios indicated:

Scenario 1

	Economic Output		Person Years of Employment	
	Minimum	Maximum	Minimum	Maximum
Minimum commercial	\$181,933,717	\$341,070,329	1,755	3,718
Recurring surplus from commercial	\$ 1,648,287	\$ 3,491,739	3,474	7,362
Maximum single family and minimum multi-family on maximum residential	\$ 280,623,650	\$ 280,623,650	4,699	4,699
Golf course	\$ 33,000,000	\$ 35,800,000	450	480
Total	\$ 497,205,654	\$ 660,985,718	10,378	16,259

Scenario 2

	Economic Output		Person Years of Employment	
	Minimum	Maximum	Minimum	Maximum
Minimum commercial	\$ 181,933,717	\$341,070,329	1,755	3,718
Recurring surplus from commercial	\$ 1,648,287	\$ 3,491,739	3,474	7,362
Minimum single family and maximum multi-family on maximum residential	\$ 264,838,050	\$ 264,838,050	4,295	4,295
Golf course	\$ 33,000,000	\$ 35,800,000	450	480
Total	\$ 481,420,054	\$ 645,200,118	9,974	15,855

Scenario 3

	Economic Output		Person Years of Employment	
	Minimum	Maximum	Minimum	Maximum
Maximum commercial	\$ 225,455,445	\$ 504,595,869	2,175	4,868
Recurring surplus from commercial	\$ 2,042,586	\$ 4,571,541	4,311	9,630
Minimum single family and maximum multi-family on minimum residential	\$ 195,137,050	\$ 195,137,050	3,170	3,170
Golf course	\$ 33,000,000	\$ 35,800,000	450	480
Total	\$ 455,635,081	\$ 740,104,460	10,106	18,148

Community Impact Assessment

Scenario 4

	Economic Output		Person Years of Employment	
	Minimum	Maximum	Minimum	Maximum
Maximum commercial	\$ 225,455,445	\$ 504,595,869	2,175	4,868
Recurring surplus from commercial	\$ 2,042,586	\$ 4,571,541	4,311	9,630
Maximum single family and minimum multi-family on minimum residential	\$ 210,922,650	\$ 210,922,650	3,579	3,579
Golf course	\$ 33,000,000	\$ 35,800,000	450	480
Total	\$ 471,420,681	\$ 755,890,060	10,515	18,557

If the residential development is maximized, the economic impact will range between \$481 million and \$660 million and produce between 9,900 and 16,200 person years of employment. This is the model Trilogy is working with.

If the commercial development is maximized, the economic impact will range between \$455 million and \$755 million and produce between 10,100 and 18,500 person years of employment.

TRIOLOGY'S CONTRIBUTION TO THE COMMUNITY

Trilogy has agreed to give the Village \$4.32 million as a village infrastructure upgrade contribution plus \$4.5 million in amenity payments. The \$4.32 million will be returned to Trilogy in the form of development cost charge credits on commercial and residential development or by way of repayment.

IMPACT ON PUBLIC RESOURCES

The previous section dealt primarily with the models and the outcomes of the economic impact on the Village. This section addresses the impact on public resources and in some cases will include further discussion of the economic impact. These impacts should not be seen as cumulative over and above those of the previous section.

ROADS

The developer has the responsibility of constructing new roads within the LOTS under consideration, and in establishing the network connections to existing roads. After completion, the maintenance of the roads become the Village's responsibility.

The Village's current expenditures on "transportation services" were about \$320,000 in 2006. Assuming the Village has roughly 50 km of internal roads, this suggests a per-km expenditure of approximately \$6,500.¹ This number is currently based on the fact that the existing roads are not new and require significant maintenance.

The road network feeding the LOTS under consideration is difficult to compute at this point due to the lack of information specific to the type of development. However, assuming there are to be 10km of new roads built within all of the LOTS, there could potentially be an annual maintenance cost of up to \$65,000.00. These figures do not include the expense of major capital upgrades, although the provision of new roads should not require capital to rebuild in the short term.

SEWER AND WATER INFRASTRUCTURE

The Village infrastructure is currently in need of upgrades. Previous studies indicate that the water and sewer is not able to support the existing population without upgrades. The cost to upgrade these services is presently under review by the Village and the upgrades required will potentially be significant, notwithstanding the development requirements. Trilogy is planning on contributing 4.32 million dollars to this exercise, over and above the 4.5 million dollars of amenity payment to the Village.

POLICE SERVICES

Police services in British Columbia are undergoing significant changes. According to a report published by the Ministry of Public Safety and Solicitor General, in populations of less than 5000, residents will be expected to pay a "police tax" which amounts to half of the province's costs.² In an adjustment to this report published in November 2006³, it was estimated that based on the population projections of 2005, Cumberland residents would need to pay an additional \$80,548.00 or an average of \$52 per single family house.

In the short term, this will impact the residents of the village; however, with the developments that Trilogy and other developers are planning, it is expected that the population will change significantly, surpassing the 5,000 threshold soon and eliminating this extra police tax to the residents.

¹ VANNSTRUTH Consulting Group Community Impact Analysis of Trilogy at Cumberland Lot 9b February 12, 2007

² Ministry of public safety and Solicitor General - A New Police Financing Model in Small Communities and Rural Areas – April 2006

³ Ministry of public safety and Solicitor General - Adjustments to the New Police Financing Model in Small Communities and Rural Areas – November 2006

Although this burden will be transferred to the Village, a previous community impact report compiled by VannStruth Consulting Group, indicates that the new Small Community Grants program, in recognition of the hardships that small communities will face, should offset most or all of the additional police services cost.⁴

FIRE SERVICES

The Cumberland Fire Department will require upgrading from its existing human resource and equipment capacity. According to previous reports, the department is currently constrained by buildings of 10 metres or more. There would be a further requirement to expand the permanent resources within the team. As an example, Comox services a population of roughly 13,000 people with 3.5 paid staff.

It is difficult to project the requirements for extra fire services specific to the LOTS; however, with the increase in population in the Village, as well as new commercial buildings, residences and hotels, Cumberland will need to increase this infrastructure.

A comprehensive review of the facilities will need to be undertaken and recommendations made as to the requirements for additional fire services.

PARKS AND RECREATION

A significant portion of the land base throughout the development is being assigned to parks and recreation. Small neighbourhood parks and playgrounds will potentially place the most burden on Village resources. Some additional cost will be required to maintain the growing environmental use in and around the village. However, the Village's Vision articulates that the environment should play a major role in new economic opportunities for the Village. If the opportunities are sufficiently managed, the net increase of requirements from the village resources should be minimal or self sustaining.

The increased population will also create increased demand for recreational services. Part of these increased costs will be offset by user fees and increased facility rentals.

LIBRARY

The current library that is available to the residents of Cumberland is below the standard set out by the Vancouver Island Regional Library. The 840 square feet of library space is deficient by approximately 200 square feet for the population's size. With the development that Cumberland will see from Trilogy's efforts, it is expected that a far superior service will be available to residents through an increased size of library as well as the materials and facilities available. These facility improvements further enhance the lifestyle and education of local children and provide a better opportunity to attract more diverse families to the region. The current hours of operation of the library make the facility difficult to access and use. Should the facility grow in staffing and in capabilities, it will be able to provide a more convenient service to local residents.

⁴ VANNSTRUTH Consulting Group - Community Impact Analysis of Trilogy at Cumberland Lot 9b - February 12, 2007

SCHOOLS

Previous reports on the Village of Cumberland indicate that school enrollment is declining and is likely to continue to do so. With the Village's current income levels and the need for infrastructure upgrades, it will be hard pressed to provide competitive education and facilities that will attract new attendees. With an increase in residential areas, there will be more financial resources to amortize across the area to provide these services to the community, resulting in families who are more likely to remain in the region and to send their children to local schools.

OTHER IMPACTS FROM THE DEVELOPMENT

This section considers impacts on the Village that may be intangible or difficult to value. These impacts cannot be quantified in the same way as the other impacts in this report. With the land use mix of residential and commercial under consideration, the Village has recognized that there are problems with sustaining infrastructure, retaining the spending from local income in the Village and creating sources of local funding. The Village recognizes that these sources of income will have to come mainly from new development. The development that is proposed for the region will have significant self sustaining capabilities in the following ways:

RETAINED FUNDS FROM LOCAL RESIDENCES

With the diversity of residences and commercial properties being proposed, the area can expect a compounded cycle of growth. Increased local residential population will lead to increased local spending. This, in turn, will allow businesses to provide more flexibility and choice and thereby cater to more residents. Furthermore, the availability of local shops and resources will lead to more spending in the local area and reducing the leakage of retail revenue to larger surrounding areas.

EXPANSION OF CHOICE FOR HOUSING

To support a growing economic region, a diversity of housing is required. Should Cumberland experience commercial growth, it would become beneficial to the community to maintain housing options for a variety of population types. The single family home currently comprises the majority of the housing stock in Cumberland with only 5% of housing currently in apartments. The increase in local residents will then support the first statement in this section, i.e. that there will be increased local spending, assisting the compounded growth cycle. The increased diversity in housing types beyond single family homes and basement suites will attract a wider variety of population and allow people to stay in the region throughout the various stages of their life, from early adulthood to child-rearing years. Affordable housing starts are becoming more of an issue in the region, and this expansion and diversity will lead to more choice being available in different income brackets.

EXPANSION OF LOCAL LABOUR FORCE

More residents living in Cumberland will deepen the pool of workers for both new and existing businesses wishing to relocate to the region. Business drivers for relocation consider the availability of labour in relocation decisions and business owners are not likely to locate to an area where labour shortages are going to negatively impact their businesses.

VARIETY OF LEASABLE COMMERCIAL SPACE

A further business driver for businesses considering relocation to the area is the availability of space for new business and for growing business. The possibility of many smaller businesses relocating to Cumberland, the gateway to outstanding outdoor resources, is high. The increase in leasable commercial space would encourage these smaller businesses to move forward in their plans, further attracting locals and tourists to the area.

INCREASED LOCALLY AVAILABLE GOODS AND SERVICES

At present there is the requirement to contract resources from outside of the area for many services required. An increase in the residential population will place a greater demand on these services, further fueling the buy locally phenomenon. Increasing the variety of commercial developments will provide a greater choice to local residents and will speed up time and service availability. Access to desirable goods and services will be enhanced.

BUSINESS CONTRIBUTION

Local businesses often enhance the community in several ways. Financial assistance to local projects as well as investment into the community and activities for the community are ways in which businesses demonstrate their degree of social responsibility to the communities that support them. Expanded professional memberships, business sponsored community events, celebrations, awards and local sport team sponsorships are included in this consideration.

BENEFITS OF COMPETITION

Business competition is healthy. It provides benefits to the public in that produced goods and services are driven to higher levels of quality, lower costs and ultimately customer satisfaction. Due to the increased choice and availability, a wider variety of goods is available at competitive prices. This is almost always positive for the local population, although there are risks that there would be undue pressure on local businesses to improve their service and quality levels. Existing businesses may be forced to upgrade their operations at significant cost.

ENVIRONMENT

The Comox Valley's growth is undoubtedly attracting more people to the region. Along with the growth of the local population and increased tourism comes a burden on environmental issues. British Columbia lags behind provinces such as Alberta with infrastructure and resources to manage the ever increasing use (and misuse) of the environment. The random use of trails and the inability to manage and educate trail users leads to damage of the environment. Stewardship of this task becomes important in that there needs to be an infrastructure that can maintain the trails, parks and use of the environmental lands. Trilogy's proposal includes the establishment of significant green areas and wetlands to assist in the task of "smart" land use.