

Lakeport Beach Fiscal Impact Study

Independent Real Estate Intelligence

November 22, 2021



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Landlab

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EXECUTIVE SUMMARY

Introduction

Altus Group Economic Consulting was retained by Landlab to examine the potential financial impacts of the proposed Lakeport Beach project on the finances of both the Township of Alnwick/Haldimand and Northumberland County. Landlab is proposing to develop 800 units of housing, ranging from detached homes, to townhouses, to senior-oriented housing. The project builds on existing planning approvals for 200 acres of land near the village of Lakeport, of which 40% of the lands will remain as greenspace, and it will include a self-sufficient, self-financed water and wastewater system.

Income of employees for the construction of development would amount to \$97 million over the construction period and the construction of the development would generate \$429 million in gross output and contribute \$205 million to GDP.

The annual spending on goods and services by new residents will amount to approximately \$39.5 million per year. A significant portion of this annual spending can be expected to be done at stores, businesses and service providers in the Township and County.

Capital Revenues and Expenditures

The Lakeport Beach development will provide Alnwick/Haldimand and Northumberland County with up-front revenue through development charges (DCs). The County charges \$3,289 per single-detached unit and \$2,569 per townhouse unit to pay for growth-related community costs. With the Lakeport Beach development, \$2.3 million in new revenue would be paid to the County. Alnwick/Haldimand also charges a per-unit development charge of \$10,205, which would generate \$8.2 million in new revenue for the Township.

This report explores two options for municipal water servicing, both of which were deemed financially feasible. One was estimated to cost \$8.0-\$10.5 million, and the other was estimated at \$8.1-\$11.1 million. In both scenarios, the developer would pay the full cost for the systems.

For wastewater treatment, a previous WSP report recommended an on-site treatment plant which is estimated to cost \$9.1-\$11.6 million. This solution

can be expanded as more homes are built, and similar systems are already in use at other nearby developments in Young's Cove in Prince Edward County, as well as the Talbotville development in Southwold. The developer would cover the cost of building the wastewater facility. Water and wastewater user fees will be set at a level to ensure that the facilities cover their own costs to operate, and only Lakeport Beach residents using them will pay for their operation. No costs or user fees will be borne by existing Alnwick/Haldimand residents. Households at Lakeport Beach will pay an average of \$1,033/year or \$86/month for access to water and sewer.

The development will have 10.3 kilometers of roads, with the majority being funded and maintained by residents in the development. Only 2 kilometers will be assumed by Alnwick/Haldimand. Based on existing Township road maintenance cost benchmarks, the annual cost for the Township to maintain this small section of roads would be \$1,000, with an annual lifecycle contribution of \$13,700.

Ongoing Revenues and Expenditures

Based on an average home sales price of \$700,000 (home prices will range between \$400,000 and \$1,200,000), and corresponding assessment values, the Lakeport Beach development would create \$371,200,000 in new assessment values. This would result in an additional \$1,972,300 in tax revenue for the Township, and \$1,756,000 for the County. When combined with education taxes, the development will generate an additional annual \$4.3 million in property tax revenue.

Lakeport Beach will not result in other Alnwick/Haldimand or Northumberland County ratepayers paying more taxes. Instead, it will provide a net increase in revenue for both the Township and County. When completed and occupied, the Lakeport Beach development will generate incremental soft service operating costs to Alnwick/Haldimand of \$626 per resident in the new community annually, however it will generate \$1,119 per resident in property taxes each year, an amount that is 79% greater than the costs to the Township of delivering the services. For Northumberland County, soft service costs would be \$727 per resident with annual property tax revenues of \$997 per resident. This excess revenue for the County is 37% greater than the costs to deliver services.

Operating and Lifecycle Costs

For Northumberland County, Lakeport Beach will contribute 19-22% of the County's annual lifecycle funding requirements for planned new growth-related infrastructure.

Lakeport Beach's water and wastewater will be managed by a communal system, with installation funded entirely by the developer. Only the users of this system will pay to operate, maintain, and eventually replace it, with no annual maintenance and lifecycle costs accruing to the municipalities. This report explored a scenario where the Township or County might operate the system, to make sure that all potential costs are understood. The cost to operate the system would be \$569,600 per year, and lifecycle costs would be \$256,500 annually. These costs would only be paid by residents who use it, and would cost each home \$1,033 per year, or \$86 per month.

Conclusion

Landlab's Lakeport Beach development will be a net financial contributor, meaning that it will generate more tax revenue than it costs to service. For Alnwick/Haldimand, the project will generate a \$837,300 annual surplus, representing \$475 in extra revenue per resident in the development. For Northumberland County, this annual surplus will be \$431,800, or \$245 per resident.

Lakeport Beach would have a positive impact on local job creation and generate opportunities for existing businesses. Additionally, the property tax dollars raised by the development, as well as the forecast annual surplus of year-to-year revenues relative to costs can help ensure that the community amenities and social infrastructure that an older population relies upon will be adequately funded by a growing property tax assessment base.

TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	i
1 INTRODUCTION	1
1.1 Background	1
1.2 Proposed Development	1
2 CAPITAL REVENUES AND EXPENDITURES	4
2.1 Estimates of Development Charge Revenues	4
2.2 Capital Infrastructure Requirements	5
3 ON-GOING REVENUES AND EXPENDITURES	9
3.1 Revenues	9
3.2 Expenditures	11
4 OPERATING AND LIFECYCLE COSTS FOR COMMUNAL WATER AND WASTEWATER SYSTEMS	16
4.1 Creation of Water and Wastewater Operating and Lifecycle Cost Benchmarks	16
4.2 Operating Costs for Water & Wastewater	16
4.3 Annual Lifecycle Replacement Costs for Water & Wastewater	18
4.4 Total Annual Operating and Lifecycle Costs per Unit	19
5 CONCLUSIONS RE: FISCAL IMPACTS	22
6 ECONOMIC BENEFITS	24
6.1 Construction Jobs	24
6.2 Permanent Jobs	24
6.3 Annual Retail Spending by New Households	25
6.4 Utilizing Available School Capacity	26
6.5 Township and County has Disproportionately Older Population	27

1 INTRODUCTION

Altus Group Economic Consulting was retained by Landlab to examine the potential financial impacts of the proposed Lakeport Beach project on the finances of both the Township of Alnwick/Haldimand (the “Township”) and Northumberland County (the “County”).

1.1 BACKGROUND

Figure 1 shows the location of the subject site, which is located along Lake Ontario, in the Township of Alnwick/Haldimand, which is within Northumberland County. The site is approximately 200 acres in size.

Figure 1

Location of Lakeport Beach Development Site, Township of Alnwick/Haldimand, Northumberland County



Source: Landlab Inc.

1.2 PROPOSED DEVELOPMENT

The proposed development consists of a lakeside community that contains a mix of housing types and expands upon the existing permissions for residential development.

It is estimated that the proposed development consists of approximately 800 residential dwelling units, including a mix of single-family homes, cottages, and town homes.

Figure 2

Concept Plan, Lakeport Beach



Source: Landlab Inc.

The development will preserve approximately 40% of the site as green space comprised of a mix of forested areas, parks and beachfront. The open space including the waterfront parks and beach will be made publicly accessible.

Figure 3

Overview of Proposed Development and Estimated Population Generation, Lakeport Beach

Housing Type	Units	PPU	Population
Single Detached	300	2.59	777
Townhouses	450	2.02	910
Seniors Housing Units	50	1.50	75
Total	800		1,762

Source: Altus Group Economic Consulting based on information from client

Based on average household sizes by unit type from the Northumberland County 2021 Development Charges Background Study, it is estimated that the proposed development would accommodate 1,762 persons.

2 CAPITAL REVENUES AND EXPENDITURES

This section outlines the capital expenditures required to service the proposed development, and the sources of funding for the works, and the associated impact on the Township and County budgets.

2.1 ESTIMATES OF DEVELOPMENT CHARGE REVENUES

2.1.1 DC Revenues

Northumberland County imposes development charges (DCs) on residential development, with DC rates in-effect as of the writing of this report amounting to \$3,289 per single-detached unit and \$2,569 per townhouse unit.

Figure 4

DC Revenue Estimates, Northumberland County Generated by Lakeport Beach Development, Alnwick/Haldimand			
Units	350	450	
	DC Rates by Unit Type		
	Singles and Semis	Townhouses	Total
DC Rates by Service	<i>Dollars / Unit</i>		
Roads and Related	2,100.00	1,640.00	
Growth-Related Studies - County-Wide	45.00	35.00	
Growth-Related Studies - Area-Specific	1.00	241.00	
Homes for the Aged	309.00	74.00	
Paramedic Services	95.00	494.00	
Community Housing	632.00	29.00	
Waste Diversion Services - Facilities	37.00	55.00	
Waste Diversion Services - Curbside Collection	70.00	1.00	
Total	3,289.00	2,569.00	
Revenues by Service	<i>Dollars</i>		
Roads and Related	735,000	738,000	1,473,000
Growth-Related Studies - County-Wide	15,750	15,750	31,500
Growth-Related Studies - Area-Specific	350	108,450	108,800
Homes for the Aged	108,150	33,300	141,450
Paramedic Services	33,250	222,300	255,550
Community Housing	221,200	13,050	234,250
Waste Diversion Services - Facilities	12,950	24,750	37,700
Waste Diversion Services - Curbside Collection	24,500	450	24,950
Total	1,151,150	1,156,050	2,307,200

Source: Altus Group Economic Consulting based on Northumberland County DC Rates effective August 25, 2021

The estimated development of Lakeport Beach at today's DC rates would generate approximately \$2.3 million in DC revenues for the County.

The Township also imposes DCs of \$10,205.70 per dwelling unit, with the charges recovering growth-related costs for services such as roads, recreation centres, libraries, cemeteries, bulk water services, public works, fire protection, community policing and studies.

Figure 5

DC Revenue Estimates, Alnwick/Haldimand Township, Generated by Lakeport Beach Development, Alnwick/Haldimand

Units	350		450		
	DC Rates by Unit Type				
DC Rates by Service	Singles and Semis		Townhouses		Total
	Dollars / Unit				
Emergency Measures	2.03		2.03		
Fire	1,987.91		1,987.91		
General Government	507.22		507.22		
Indoor Recreation	1,140.90		1,140.90		
Library	254.10		254.10		
Other Transportation Service	1,547.06		1,547.06		
Roads	4,725.95		4,725.95		
Water	31.64		31.64		
Cemeteries	9.19		9.19		
Total	10,205.70		10,205.70		
Revenues by Service		Dollars			
Emergency Measures	712		915		1,627
Fire	695,769		894,560		1,590,329
General Government	177,525		228,247		405,772
Indoor Recreation	399,316		513,406		912,722
Library	88,935		114,345		203,280
Other Transportation Service	541,472		696,178		1,237,650
Roads	1,654,083		2,126,678		3,780,760
Water	11,073		14,237		25,309
Cemeteries	3,215		4,134		7,349
Total	3,571,995		4,592,565		8,164,560

Source: Altus Group Economic Consulting based on Township DC Rates effective January 2021

The development of Lakeport Beach at today's DC rates is estimated to generate approximately \$8.2 million in DC revenues for the Township.

2.2 CAPITAL INFRASTRUCTURE REQUIREMENTS

This section of the report presents information estimating the infrastructure requirements of the build-out of the subject development.

Each of the infrastructure requirements are compared to the relevant local service guidelines set out by the Township or County, which sets out the 'rules' for which infrastructure is deemed eligible for funding from DC revenues, or directly from developers (if considered a local service).

2.2.1 Water & Wastewater Capital Needs

2.2.1.1 Water

Based on the Preliminary Servicing Options Study prepared by WSP Canada (August 2021), the need for water servicing for the subject development can be achieved via municipal servicing (Option 1) or through an on-site water supply from surface water. The capital costs of both scenarios are similar, and while both options are technically feasible, Option 1 would depend on municipal partnership.

Figure 6

Water Servicing Options, Lakeport Beach	
	Cost Range
Scenario 1 - Municipal Servicing	
Water Reservoir and Booster Pumping Station	\$3,000,000 to \$4,000,000
Watermain	\$4,500,000 to \$5,500,000
Other (Site Preparation, etc.)	\$500,000 to \$1,000,000
Total	\$8,000,000 to \$10,500,000
Scenario 2 - On-Site Water Supply from Surface Water	
Water Treatment System	\$2,600,000 to \$3,100,000
Water Reservoir and Booster Pumping Station	\$3,000,000 to \$4,000,000
Watermain	\$1,000,000 to \$1,500,000
Inlet Structure	\$1,000,000 to \$1,500,000
Other (Site Preparation, etc.)	\$500,000 to \$1,000,000
Total	\$8,100,000 to \$11,100,000
Source: WSP Canada	

Option 2 includes servicing the development with a private drinking water system, including water takings directly from Lake Ontario (surface water). Water will be treated via a communal water treatment plant with intake from Lake Ontario and distributed to the dwelling units via a distribution network.

The water distribution system to be constructed to service the development is estimated to include 8.25 km of watermains. The costs of building this water system would be borne solely by Landlab and will not be a cost to existing ratepayers.

2.2.1.2 Wastewater

Construction of Lakeport Beach's wastewater treatment system will also be financed by Landlab, resulting in no impact to current rate payers. The wastewater system will be a separate stand-alone system that will not affect the neighbouring systems.

According to WSP Canada, there are several servicing scenarios. The first option which involves municipal servicing, has the highest capital cost. The operating costs are estimated by WSP to be the highest due to the pumping station.

Figure 7

Wastewater Servicing Options, Lakeport Beach	
	Cost Range
Scenario 1 - Municipal Servicing	
Expansion of Colborne WWTP	\$10,000,000 to \$12,000,000
Forcemain and Pumping Station	\$4,000,000 to \$5,000,000
Other (Site Preparation, etc.)	\$500,000 to \$1,000,000
Total	\$14,500,000 to \$18,000,000
Scenario 2 - On-Site Wastewater Treatment with Surface Disposal	
Sanitary Collection System	\$1,000,000 to \$1,500,000
Flow Equalization Tank and Treatment System	\$6,600,000 to \$7,600,000
Forcemain and Outlet Structure	\$1,000,000 to \$1,500,000
Other (Site Preparation, etc.)	\$500,000 to \$1,000,000
Total	\$9,100,000 to \$11,600,000
Scenario 3 - On-Site Wastewater Treatment with Subsurface Disposal	
Flow Equalization Tank and Treatment System	\$5,000,000 to \$8,000,000
Sanitary Collection System	\$1,000,000 to \$1,500,000
Leaching Bed	\$1,500,000 to \$2,500,000
Other (Site Preparation, etc.)	\$500,000 to \$1,000,000
Total	\$8,000,000 to \$13,000,000
Source: WSP Canada	

The second option, communal wastewater servicing with surface water disposal requires a high level of wastewater treatment. The option allows for a phased construction of the WWTP allowing the plant to increase capacity as more homes are built. According to WSP, the approach recommended through Option 2 has been done for numerous other developments in Ontario, including Young's Cove in Prince Edward County and the Talbotville development in Southwold.

The third option, communal wastewater servicing with subsurface water disposal requires approximately 2 hectares of land for the leaching bed,

equating to 3.3% of the site area. While the capital costs for this option may be lower than that of Option 2, the loss of development land and park space needs to be considered when estimating the net impact.

The WSP Preliminary Servicing Options Study recommends Option 2 – communal servicing with surface disposal of sewage effluent.

The sanitary collection system to be constructed to service the development is estimated to include 8.25 km of sanitary sewers.

2.2.1.3 Water/Wastewater Revenues

Based on WSP Canada's recommendations regarding communal servicing for both water and wastewater services, the water and wastewater rates charged to users of the communal systems will be based on a cost recovery basis, allowing the rate revenues to cover anticipated annual operating, maintenance and future lifecycle costs.

In estimating water demand and wastewater flows and anticipated operating and lifecycle costs of the water and wastewater system, an assumption of 407 litres per capita per day (L/c/d) were used, consistent with WSP Canada's Preliminary Servicing Options Study.

Estimates of operating and lifecycle costs for water distribution, water treatment, wastewater treatment, and wastewater collection are detailed later in this report.

2.2.2 Roads

Based on a Transportation Due Diligence Review undertaken by WSP Canada, even with the addition of site-generated traffic, the nearby unsignalized intersections will not be busier than they are today. However, all of the critical traffic movements are expected to operate well within capacity and no changes to the existing road network are recommended.

The internal roads within the development will amount to 10.3 km of road, or 20.6 lane-km (based on two travel lanes included on all road segments), however the majority of these roads will be communally funded roads, with approximately only 2 km of roads (or 4 lane km) to be assumed by the Township.

3 ON-GOING REVENUES AND EXPENDITURES

This section provides an overview of the methodology for determining the net annual fiscal impact of development.

3.1 REVENUES

3.1.1 Property Tax Revenues

The assessment value assumptions are based on anticipated sales prices for units in the proposed development, reduced to account for the typical difference between sales price and assessment values, as well as the usual 'lag' between sales prices and assessment values to account for the phase-in provisions of property tax assessment values, which would usually be a four-year phase-in, but may be a six-year phase-in due to the two-year delay in the originally planned 2020 Current Value Assessment that was postponed to 2022 due to the COVID-19 pandemic.

Based on average sales prices for units in the proposed development of \$700,000 and using MPACs Assessment to Sales Ratio for the Township of 0.96, the estimated assessment value for 2022 would be \$672,000.

However, as this 2022 sales/assessment value is to be the assessed value used in the 2026 tax year, seven years of price appreciation need to be removed to replicate an assessment value for the 2019 base year used in this report.¹

Based on average annual sales price changes in nearby Quinte West, as reported by CMHC, of 5.43% per year, the \$672,000 assessment value in 2022 for the 2026 tax year would be approximately \$464,100 per unit for the 2019 tax year, which is the base-year for the analysis in this report.

¹ 2019 is the base year chosen for this report based on the availability of Financial Information Return data and the avoid the data from 2020 that may have been impacted from temporary impacts of the COVID-19 pandemic on municipal revenues and costs.

Figure 8

Conversion of Estimated Average Sales Prices to Assessed Values for 2019 Tax Year (for Fiscal Impact Modelling),

Assumptions		
Estimated Sales Price (avg)	\$ 700,000	dollars
MPAC Assessment to Sales Ratio (ASR), A/H Tw p.	0.96	
Estimated Assessment Value (2022 CVA)	\$ 672,000	dollars
Average Annual Price Appreciation (2015-2020), Absorbed SDU, Quinte West	5.43%	
	Assessed Value (estimates)	Tax Year
Value-Year / Description	\$ / Unit	
2022 Assessment Value (CVA), est.	672,000	2026
2021 5/6th phase-in 2016-2022	637,380	2025
2020 4/6th phase-in 2016-2022	604,543	2024
2019 3/6th phase-in 2016-2022	573,398	2023
2018 2/6th phase-in 2016-2022	543,858	2022
2017 1/6th phase-in 2016-2022	515,839	2021
2016 Assessment Value (est.)	489,264	2020
2015 3/4th phase-in 2012-2016	464,058	2019
2014 2/4th phase-in 2012-2016	440,151	2018
2013 1/4th phase-in 2012-2016	417,475	2017

Note: assumes that there will be a six-year phase in of assessment values between 2016 CVA and upcoming 2022 CVA, as previously scheduled 2020 CVA was postponed due to COVID-19 pandemic

Source: Altus Group Economic Consulting based on MPAC Assessment Roll Quality Report, Alnwick/Haldimand Township, CMHC Housing Portal

In total, it is estimated that the proposed development, at full build-out, would generate \$371 million in additional assessment values.

Using the Township and County tax rates for 2019 (used so as to be consistent with the most current operating cost data from the Township and County's respective 2019 Financial Information Return), the total amount of annual property tax revenue generated by the development at build-out would be approximately \$1,972,300 for the Township, and \$1,756,000 for the County. Combined with education, the total amount of revenue generated annually from the proposed development amounts to approximately \$4.3 million.

Figure 9 Estimated Annual Property Tax Revenues, Lakeport Beach

Unit by Type	Units	Avg. Assessment Value / Unit	Total Assessment Value	
		<i>\$/ Unit</i>	<i>Dollars</i>	
Single Detached	300	464,000	139,200,000	
Townhouses	450	464,000	208,800,000	
Seniors Housing Units	50	464,000	23,200,000	
	800		371,200,000	
Tax Rates (2019) and Revenue				
	Township	County	Education	Total
	<i>Percent</i>			
Tax Rate	0.531335%	0.473056%	0.161000%	1.165391%
	<i>Dollars</i>			
Tax Revenue	1,972,316	1,755,984	597,632	4,325,931

Source: Altus Group Economic Consulting based on information provided by client

3.1.2 Non-Tax Revenues

In addition to the property tax revenues generated annually by the proposed development, the units and residents will also generate a variety of annual non-tax revenues for the Township and County. These non-tax revenues include fees for items such as licenses, permits (excluding building permits), fines and donations, etc.

After making provisions for non-tax revenues that would increase along with residential growth, and the proportion to which residential development would contribute to an increase in those revenues, we have estimated that the proposed development would add approximately \$34.87 per capita to the Township's annual non-tax revenues, and \$20.34 per capita the County's annual non-tax revenues.

The calculations of non-tax revenues are shown in Appendix A.

3.2 EXPENDITURES

3.2.1 Net Operating Expenditures

The additional operating costs that will result from residential and non-residential uses for services such as roads, recreation, cultural services and fire protection are calculated using the following five steps:

- 1) Obtain the operating expenditures of the Township/County in 2019, from Schedule 40 of the 2019 Financial Information Return;

- 2) Expenditures for each service relating to long-term debt interest, amortization, and any user fee and service charge revenues associated with each service are deducted to reach net operating expenditures;
- 3) Deductions are also made for grants that are provided by the federal government, provincial government and other municipalities to fund Township/County administered services, such as social assistance, child care, and public housing.
- 4) To estimate the degree to which the net operating expenditures will increase in step with growth, a “growth-related factor” is applied to the net operating expenditures, to reach net growth-related operating expenditures. In most cases, the need for services will generate a nearly proportional increase in operating costs, with a small allowance made for efficiencies and economies of scale. Other services will grow at a much slower pace than population growth, such as government, and planning department costs.
- 5) A share of the net growth-related operating expenditures is allocated to residential growth, by applying residential/non-residential factors to each service based on typical usage and/or the prevailing residential/non-residential split in the Township/County. The result of this calculation is known as the net residential growth-related operating expenditures.

In total, we have estimated that the proposed development would represent an additional annual operating cost to the Township of approximately of \$621 per capita, and to Northumberland County of \$727 per capita. The detailed calculations are presented in Appendix A.

As a point of comparison, the development is estimated to generate \$1,119 per capita for the Township (or 79% higher than estimated annual operating costs per capita for the Township) and \$997 per capita for the County (or 37% higher than estimated annual operating costs per capita for the County).

As the water and wastewater systems are proposed to be communal systems, the average operating and lifecycle costs relating to water and wastewater are excluded from this part of the analysis and covered separately in a later section of this report.

3.2.2 Annual Operating and Lifecycle Costs for Internal Roads

Based on the average operating costs per lane km, annual lifecycle replacement costs for roads and the 2 km of roads to be constructed within the development lands and assumed by the Township, the costs of operating and ultimate replacement of the internal roads are estimated. Other roads within the development will be local roads where the operating and lifecycle costs will be the direct responsibility of residents of the community.

3.2.2.1 Operating Costs

Based on data taken from the Township's 2019 Financial Information Return annual operating costs for Township roads, after deducting amortization costs (to avoid double counting with the calculation of lifecycle costs below), the annual operating costs of the internal roads, if assumed by the Township would be approximately \$1,000 per year.

3.2.2.2 Lifecycle Costs

Based on the estimated value of roads in the Township and the useful life of components of typical road infrastructure works, it is estimated that the roads constructed within the development will require an annual lifecycle contribution of approximately \$13,700.

Figure 10 **Estimated Lifecycle Costs, Internal Road Infrastructure, Alnwick/Haldimand**

	Unit Measure	Unit Cost	Capital Cost	Asset Useful Life	Lifecycle Factor	Annual Contribution
	<i>Lane Km</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Years</i>		<i>Dollars</i>
Transportation						
Local Roads (lane km)	4.00	104,432	417,728			
			Base	75	0.0059	7,884
			Surface	25	0.0312	5,777
Total - Transportation Infrastructure						13,661
			Residential Share		100.0%	13,661
			Non-Residential Share		0.0%	-

Source: Altus Group Economic Consulting based on average costs from Township of Alnwick/Haldimand FIR

3.2.3 Indirect Lifecycle Costs

Northumberland County's 2020 DC Background Study included numerous proposed capital works needed by growth across the County. Future growth, such as that of the subject development, will contribute to the need for these

works. The associated annual lifecycle expenditures need to be factored into the estimation of net annual fiscal impact of development.

Based on estimates of the annual lifecycle expenditures necessary to fund eventual replacement of capital works, the annual lifecycle costs to the County for all identified capital works (roads, paramedic services, community housing, etc.) equate to \$526,400. Of this, approximately \$410,500 in annual lifecycle costs per year are attributable to the residential sector.

Of this, the Lakeport Beach project would equate to 19-22% of planned residential population growth, meaning that 19-22% of the annual lifecycle costs related to new infrastructure are attributed to Lakeport Beach for the purposes of this study.

For the County's capital works needed to accommodate projected growth, the subject development's share of these annual costs would be approximately \$79,600.

Figure 11

Estimated Indirect Lifecycle Costs, Northumberland County

	Annual Lifecycle Contribution	Forecast Period	Residential Share	Residential Share of ALC	Development Share of Township-wide Population Growth	Proportionate Share of Annual Lifecycle Costs for Subject Development
	<i>Dollars</i>				<i>Percent</i>	<i>Dollars</i>
<u>Tax-Supported</u>						
Roads & Related	420,876	2020-2031	77.0%	324,075	18.71%	60,630
Homes for Aged	25,543	2020-2029	76.0%	19,413	21.89%	4,249
Paramedic services	44,569	2020-2029	76.0%	33,872	21.89%	7,414
Community Housing	33,179	2020-2029	100.0%	33,179	21.89%	7,262
Waste Diversion	2,214	2020-2029	76.0%	n.a.	21.89%	n.a.
Total Tax-Supported	526,381			410,539		79,556
		<u>Population</u>				
Subject Development		1,762				
10-Year Growth		8,048				
Subject Development as % of 10-Year Growth		21.9%				
12-Year Growth		9,416				
Subject Development as % of 12-Year Growth		18.7%				

Source: Altus Group Economic Consulting based on Northumberland County, 2020 DC Study

A similar calculation for the development's share of Township capital works required to service growth is not possible as the Township's DC background study is not available. However, as a rough assumption, it is assumed that the annual indirect lifecycle costs are the same as those calculated for County services.

Based on the anticipated annual property tax revenues that would be generated by the development, the anticipated annual lifecycle costs to the

County and Township would be sufficiently funded by the net new property tax revenues that each would receive.

4 OPERATING AND LIFECYCLE COSTS FOR COMMUNAL WATER AND WASTEWATER SYSTEMS

The water and wastewater system is planned to be served by a communal system constructed by the landowners, with annual costs funded directly by users of the system.

However, as part of the purpose of this report, we have estimated the annual operating and lifecycle costs that would be incurred in the event that the water or wastewater system be the Township's or County's responsibility. This will help understand what the Township's on-going cost obligations would be and assess what water and sewer rates would be required to be imposed on residents of the Lakeport Beach community to fund all operating, maintenance and lifecycle costs for the systems going forward.

4.1 CREATION OF WATER AND WASTEWATER OPERATING AND LIFECYCLE COST BENCHMARKS

Neither the Township or County report any annual operating expenditures relating to a municipal water or wastewater system. Benchmark costs for annual operating and lifecycle costs per megalitre of water or wastewater treated, and per kilometre of water or wastewater pipes have been taken from the Financial Information Returns of other Eastern Ontario municipalities, including Peterborough, Brockville, Quinte West, Prince Edward County and Belleville.

4.2 OPERATING COSTS FOR WATER & WASTEWATER

The benchmark annual operating costs for water and wastewater treatment amount to \$954 per megalitre of water treated and \$629 per megalitre of wastewater treated. For water distribution and wastewater collection, the annual operating cost benchmarks are \$9,142 per km and \$9,663 per km, respectively.

Based on the amount of water and wastewater to be treated (approximately 262 Megalitres per year), and the length of watermains and sewer mains to be installed (8.26 km of both watermains and sanitary sewers), if the system needed to be turned over to the County or Township, the annual operating costs would be \$569,600. These costs would be borne by users of the system only.

Figure 12 Benchmark Operating Costs, Water & Wastewater Services in Other Eastern Ontario Municipalities

OPERATING COSTS	Annual Operating Cost	Interest on Long-Term Debt	Amortization	Net Operating Expenditures	Units	Operating Costs per Unit
Water Treatment		<i>Dollars</i>			<i>Megalitres</i>	<i>\$/ ML</i>
Belleville	5,047,622	473,634	977,189	3,596,799	7,687.0	468
Brockville	1,872,837	16,862	131,926	1,724,049	3,753.0	459
Prince Edward County	3,637,091	175,681	570,328	2,891,082	1,045.0	2,767
Quinte West	4,950,531	627,256	825,767	3,497,508	5,255.3	666
Peterborough City	7,867,538	-	1,703,733	6,163,805	14,995.6	411
Total / Average						Water Treatment - Operating Costs per Megalitre 954
Water Distribution		<i>Dollars</i>			<i>Km</i>	<i>\$/ Km</i>
Belleville	4,643,353	7,401	1,865,880	2,770,072	251.0	11,036
Brockville	1,929,600	-	212,596	1,717,004	129.0	13,310
Prince Edward County	1,662,979	236,080	581,885	845,014	113.0	7,478
Quinte West	2,656,923	-	1,013,415	1,643,508	228.0	7,208
Peterborough City	8,096,157	325,964	4,685,083	3,085,110	462.0	6,678
Total / Average						Water Distribution - Operating Costs per Km 9,142
Wastewater Treatment		<i>Dollars</i>			<i>Megalitres</i>	<i>\$/ ML</i>
Belleville	4,929,616	-	1,444,383	3,485,233	12,075.6	289
Brockville	5,540,141	179,053	1,238,980	4,122,108	6,751.0	611
Prince Edward County	2,478,156	418,045	920,606	1,139,505	1,551.0	735
Quinte West	8,024,506	1,110,599	1,501,143	5,412,764	6,557.7	825
Peterborough City	8,425,913	-	1,737,948	6,687,965	9,741.7	687
Total / Average						Wastewater Treatment - Operating Costs per Megalitre 629
Wastewater Collection		<i>Dollars</i>			<i>Km</i>	<i>\$/ Km</i>
Belleville	3,733,952	217,403	1,612,681	1,903,868	210.0	9,066
Brockville	603,109	12,878	69,675	520,556	111.0	4,690
Prince Edward County	1,507,203	115,503	168,354	1,223,346	49.0	24,966
Quinte West	695,690	-	433,202	262,488	132.0	1,989
Peterborough City	4,926,407	451,607	1,547,192	2,927,608	385.0	7,604
Total / Average						Wastewater Distribution - Operating Costs per Km 9,663

Source: Altus Group Economic Consulting based on 2019 Financial Information Returns

Figure 13 Estimated Annual Operating Costs of Water and Wastewater Servicing, Lakeport Beach

	Operating Costs		
	Benchmark	Units	Annual Operating Costs
Water	<i>\$/ ML</i>		
Water Treatment	954	261.69	249,679
	<i>\$/ Km</i>		
Water Distribution	9,142	8.26	75,475
Subtotal Water			325,153
Wastewater	<i>\$/ ML</i>		
Wastewater Treatment	629	261.69	164,649
	<i>\$/ Km</i>		
Wastewater Collection	9,663	8.26	79,775
Subtotal Wastewater			244,424
Total			569,577

Source: Altus Group Economic Consulting

4.3 ANNUAL LIFECYCLE REPLACEMENT COSTS FOR WATER & WASTEWATER

The benchmark annual lifecycle contributions necessary to fund future replacement costs for water and wastewater treatment amount to \$259 per megalitre of water treated and \$283 per megalitre of wastewater treated. For water distribution and wastewater collection, the benchmark annual lifecycle contributions necessary to fund future replacement costs are \$7,702 per km and \$6,175 per km, respectively.

Figure 14 **Benchmark Annual Lifecycle Costs, Water & Wastewater Services in Other Eastern Ontario Municipalities**

LIFECYCLE COSTS	Value of Infrastructure	Units	Value per Unit	Useful Life	Sinking Fund Factor	Annual Lifecycle Cost
Water Treatment						
Belleville	46,984,193	7,687.0	6,112	50	0.0118	195
Brockville	6,008,704	3,753.0	1,601	50	0.0118	51
Prince Edward County	22,696,158	1,045.0	21,719	50	0.0118	691
Quinte West	33,655,474	5,255.3	6,404	50	0.0118	204
Peterborough City	73,547,726	14,995.6	4,905	50	0.0118	156
Total / Average			Water Treatment - Annual Lifecycle Costs per Megalitre			259
Water Distribution						
Belleville	115,722,758	251.0	461,047	100	0.0032	10,698
Brockville	14,592,294	129.0	113,119	100	0.0032	2,625
Prince Edward County	42,224,022	113.0	373,664	100	0.0032	8,670
Quinte West	72,236,383	228.0	316,826	100	0.0032	7,351
Peterborough City	182,520,928	462.0	395,067	100	0.0032	9,167
Total / Average			Water Distribution - Annual Lifecycle Costs per Km			7,702
Wastewater Treatment						
Belleville	64,482,597	12,075.6	5,340	50	0.0118	170
Brockville	50,323,600	6,751.0	7,454	50	0.0118	237
Prince Edward County	31,844,449	1,551.0	20,532	50	0.0118	653
Quinte West	44,627,494	6,557.7	6,805	50	0.0118	217
Peterborough City	42,241,556	9,741.7	4,336	50	0.0118	138
Total / Average			Wastewater Treatment - Annual Lifecycle Costs per Megalitre			283
Wastewater Distribution						
Belleville	111,416,796	210.0	530,556	100	0.0032	12,310
Brockville	5,700,606	111.0	51,357	100	0.0032	1,192
Prince Edward County	12,952,097	49.0	264,329	100	0.0032	6,133
Quinte West	37,460,002	132.0	283,788	100	0.0032	6,585
Peterborough City	77,253,836	385.0	200,659	100	0.0032	4,656
Total / Average			Wastewater Distribution - Annual Lifecycle Costs per Km			6,175

Source: Altus Group Economic Consulting based on 2019 Financial Information Returns

Based on the amount of water and wastewater to be treated, and the length of watermains and sewer mains to be installed (8.26 km), if the system needed to be turned over to the County or Township, the annual lifecycle contributions necessary to ensure full funding of replacement costs would be

approximately \$256,500. These costs would be borne by users of the system only.

Figure 15

Estimated Annual Lifecycle Contributions, Water and Wastewater Servicing, Lakeport Beach

	Lifecycle Costs		Annual Operating Costs
	Benchmark	Units	
Water	<i>\$ / ML</i>	<i>ML</i>	<i>Dollars</i>
Water Treatment	259	261.69	67,857
Water Distribution	<i>\$ / Km</i>	<i>Km</i>	63,586
Subtotal Water	7,702	8.26	131,443
Wastewater	<i>\$ / ML</i>	<i>ML</i>	
Wastewater Treatment	283	261.69	74,064
Wastewater Collection	<i>\$ / Km</i>	<i>Km</i>	50,980
Subtotal Wastewater	6,175	8.26	125,044
Total			256,488

Source: Altus Group Economic Consulting

4.4 TOTAL ANNUAL OPERATING AND LIFECYCLE COSTS PER UNIT

In total, the annual operating and lifecycle costs for water and wastewater infrastructure installed is estimated to be \$826,100. When these costs are divided by the number of dwelling units in the Lakeport Beach plan, the costs per unit amount to approximately \$1,033 per year. This means that the average monthly water/sewer bill for each household in the Lakeport Beach development will be approximately \$86 per month.

If assumptions are used that 35% of the annual costs are covered by monthly fixed fees to each user, and the other 65% of annual costs are covered by per cubic metre rates, the annual costs to users for water would amount to \$16.65 per month in a fixed rate, plus \$1.13 per cubic metre. These rates would be sufficient to cover the annual operating and lifecycle costs associated with operating the water system to be installed for the Lakeport Beach development.

Figure 16

Estimated Annual Operating and Lifecycle Costs for Water and Wastewater Infrastructure

	Operating	Lifecycle	Total
<u>Alnwick/Haldimand</u>		<i>Dollars</i>	
Water Treatment	249,679	67,857	317,536
Water Distribution	75,475	63,586	139,061
Wastewater Treatment	164,649	74,064	238,713
Wastewater Collection	<u>79,775</u>	<u>50,980</u>	<u>130,755</u>
Total	569,577	256,488	826,065
			<i>Units</i>
Dwelling Units, Lakeport Beach			800
			<i>\$/ Unit</i>
Annual Cost per Dwelling Unit - Water & Wastewater Services			1,033

Source: Altus Group Economic Consulting

For wastewater, a monthly fixed fee of \$13.47 per month and a variable usage rate of \$0.92 per cubic metre would be sufficient to cover all operating and lifecycle costs associated with the wastewater system to be installed.

Figure 17

Estimated Water and Wastewater Rates to Fund Annual Operating and Maintenance Costs, Lakeport Beach

Dwelling Units, Lakeport Beach	800 units	
Water Demand / WW Flows	261,694 cubic metres	
Water		
<u>Annual Operating & Lifecycle Costs</u>		\$ 456,597
Monthly Fixed Fee (35% of Costs)	\$ 16.65	<u>\$ 159,809</u>
Required Usage-Based Revenues		\$ 296,788
Required per Cubic Metre Rate		\$ 1.13
Wastewater		
<u>Annual Operating & Lifecycle Costs</u>		\$ 369,469
Monthly Fixed Fee (35% of Costs)	\$ 13.47	<u>\$ 129,314</u>
Required Usage-Based Revenues		\$ 240,155
Required per Cubic Metre Rate		\$ 0.92

Source: Altus Group Economic Consulting

By comparison the water and sewer rates imposed by Lakefront Utilities for users in the Cobourg community (to cover all operating and lifecycle costs) are as follows:

Figure 18

	Communal System (estimated)	Cobourg – Lakefront Utilities (2021 rates)
Water – Monthly	\$16.65 / month	\$14.74 / month
Water – Usage	\$1.13 / m ³	\$1.47 / m ³
Sewage – Monthly	\$13.47 / month	\$15.70 / month
Sewage – Usage	\$0.92 / m ³	\$1.54 / m ³
Estimated Average Monthly Bill	\$86 per month	\$112 per month (assuming same 407 L/c/day)

Source: Altus Group Economic Consulting

5 CONCLUSIONS RE: FISCAL IMPACTS

Figure 19 shows the calculation of the net annual fiscal impact of the proposed development. The estimated annual fiscal impact does not incorporate the annual operating or lifecycle costs of the communal water and wastewater systems, as they will be the responsibility of system users.

The subject proposal is estimated to generate a positive fiscal impact for both the Township and County. For the Township of Alnwick/Haldimand, at build-out, the development is estimated to generate an annual fiscal surplus of \$837,300, or approximately \$475 per capita. For the County, the development is estimated to generate an annual fiscal surplus of \$431,800, or \$245 per capita.

These annual surpluses could be utilized to mitigate future property increases, increase contributions to a tax stabilization reserve fund, expand municipal services, fund state of good repair capital works, or some combination of the above.

Figure 19 Estimate of Net Annual Fiscal Impact, Lakeport Beach, Township of Alnwick/Haldimand, Northumberland County, at Build-Out

	Township of Alnwick/Haldimand		Northumberland County	
	Dollars	Dollars per Capita	Dollars	Dollars per Capita
Units	800			
Persons	1,762			
Revenues				
Property Taxes	1,972,316	1,119.62	1,755,984	996.81
Non-Tax Revenues	61,432	34.87	35,835	20.34
Water and Wastewater Revenues	n.a.	n.a.	n.a.	n.a.
Total Revenues	2,033,748	1,154.49	1,791,819	1,017.15
Expenditures				
Net Operating Expenditures	1,102,292	625.73	1,280,472	726.88
Annual Lifecycle Costs - Roads	13,661	7.76	n.a.	n.a.
Operating Expenditures - Roads	982	0.56	n.a.	n.a.
Indirect Lifecycle Costs - County	79,556	45.16	79,556	45.16
Total Expenditures	1,196,490	679.21	1,360,027	772.04
Net Annual Fiscal Surplus / (Deficit)	837,258	475.28	431,792	245.11

Source: Altus Group Economic Consulting

If, in the highly unlikely event that the water and wastewater infrastructure needed to be assumed by the Township or County, the annual operating and lifecycle costs would appear to be easily funded by the water and wastewater user rate revenues that the households would generate.

6 ECONOMIC BENEFITS

This section of the report reviews some of the economic benefits that the proposed development would generate for the regional economy as well as the general well-being of County and Township residents.

6.1 CONSTRUCTION JOBS

Based on modelling by Altus Group Economic Consulting, and Statistics Canada's Input-Output data, construction of the Lakeport Beach development would generate the following impacts on the local and regional economy, both in terms of output and employment directly in the construction industry, but also in businesses that provide services and materials to the construction industry:

- Employment impacts of 2,080 person-years in the construction of the development, including 1,245 person-years of employment directly in the construction of the development, as well as 835 person-years indirectly in businesses that provide materials and services to the construction industry;
- Income of employees for the construction of development would amount to \$97 million over the construction period;
- The construction of the development would generate \$429 million in gross output and contribute \$205 million to GDP.²

6.2 PERMANENT JOBS

Based on benchmark assumptions for Floor Space per Worker (FSW) from the County's recent Development Charges Background Study, it is estimated that the 27,600 square feet of retail space incorporated into the proposed development would generate approximately 50 permanent jobs.

² Gross output represents a measure of economic activity in the production of new goods and services, and includes intermediate and final outputs. For example, in the production of wood furniture, the purchase of wood from a sawmill for \$100 (the intermediate input) and the end-price of the finished furniture of \$400 (the final output) are added together to estimate Gross Output. Gross Domestic Product (GDP) represents economic activity in the production of new goods and services and includes only final outputs, and in the example of the production of wood furniture, would represent the 'value added' to the raw wood, where the \$400 furniture was created from a \$100 input – in this case, the GDP would be \$300 (\$400 final value less \$100 input value).

According to Statistics Canada data, average weekly earnings for retail employees in Ontario were approximately \$650 per week. Therefore, the 50 jobs generated in the Lakeport Beach project would generate annual income of \$1.7 million.

6.3 ANNUAL RETAIL SPENDING BY NEW HOUSEHOLDS

It is estimated that the buyer of a newly built detached home spends an additional \$4,500 over the first two years of occupying a new house on furnishings, appliances, decoration and miscellaneous home improvements.³ At this rate, the new households in Lakeport Beach are estimated to spend **approximately \$3.6 million in the early stages of occupying their new homes.**

Beyond that initial spending amount, the residents of the Lakeport Beach will continue to help support local retail stores and businesses through daily and regular purchases of goods and services. Based on the estimates of annual household spending from Statistics Canada Survey of Household Spending, which showed that annual household spending on goods and services of \$49,300s, which includes spending on food, household operation, furnishings and equipment, clothing, transportation, health care, recreation, etc.

Figure 20

Estimated Spending on Goods and Services by Future Households of Lakeport Beach	
	<i>Dollars</i>
Estimate of Average Household Spending, Ontario, 2019	\$ 97,385
Less:	
Shelter Costs	\$ 22,364
Personal Taxes	\$ 17,911
Insurance and Pension Contributions	\$ 5,346
Gifts of Money	\$ 2,252
Games of Chance (net)	\$ 193
Estimate of Average Household Spending on Goods and Services, Toronto CMA, 2016	\$ 49,319
	<i>Units</i>
Residential Units in Lakeport Beach Development	800
	<i>Dollars</i>
Estimated Annual Retail Sales, Lakeport Beach	\$39,455,200
<p>Note: Household Spending after deductions includes food, household operation, furnishings and equipment, clothing, transportation, health care, personal care, recreation, reading materials and other printed matter, education, tobacco products and alcoholic beverages, and miscellaneous expenditures</p> <p>Source: Statistics Canada, Tables 203-0001 and 203-0021: Survey of household spending (SHS)</p>	

³ National Association of Home Builders, July 2017

The annual spending on goods and services by new residents will amount to approximately \$39.5 million per year. A significant portion of this annual spending can be expected to be done at stores, businesses and service providers in the Township and County.

6.4 UTILIZING AVAILABLE SCHOOL CAPACITY

Based on pupil yield factors from the local Public and Catholic Board's 2020 Education Development Charges Background Study, it is estimated that the 800 units would generate a total of 339 pupils, including:

- 177 Public elementary pupils;
- 68 Public secondary pupils;
- 56 Catholic elementary pupils;
- 38 Catholic secondary pupils;

Figure 21

Estimated Pupils Generated by Lakeport Beach Project

Unit Type	Units	Pupil Yield Factors			
		Public Board		Catholic Board	
		Elementary	Secondary	Elementary	Secondary
		<i>Pupils / Unit</i>		<i>Pupils / Unit</i>	
Single Detached	300	0.257	0.097	0.076	0.056
Towns	450	0.221	0.087	0.074	0.048
Seniors Housing Units	50	n.a.	n.a.	n.a.	n.a.
Total	800				

Unit Type	Pupil Generation			
	Public Board		Catholic Board	
	Elementary	Secondary	Elementary	Secondary
	<i>Pupils</i>		<i>Pupils</i>	
Single Detached	77	29	23	17
Towns	99	39	33	22
Total	177	68	56	38

Source: Altus Group Economic Consulting based on Kawartha Pine Ridge District School Board and Peterborough Victoria Northumberland and Clarington Catholic District School Board, Education Development Charges Background Study, (April 23, 2020)

Of the nearest schools serving each panel (elementary & secondary) within each school board (Public and Catholic), three of the four schools are operating below capacity, with the Public Elementary school operating at 52% of capacity, with just 119 pupils for 231 pupil places.

Figure 22

Capacity, Current Enrolment and Projected Enrolment in Schools Closest to Subject Site

	Public Board		Catholic Board	
	Colborne PS	East Northumberland SS	St. Mary CES Grafton	St. Mary CSS Cobourg
			<i>Pupil Places</i>	
OTG Capacity	231	1,086	176	873
Occupied Portables	-	1	4	6
			<i>Pupils</i>	
Current Year Enrolment	119	835	285	836
			<i>Percent</i>	
Current Enrolment as % of Capacity	52%	77%	162%	96%

Source: Altus Group Economic Consulting based on KPRDSB Long-Term Accommodation Plan (2020-25) and PVNCCDSB Long-Term Accommodation Plan (2019-23)

While the nearest Catholic Elementary school (St. Mary's in Grafton) is above capacity, four of the other five Catholic elementary schools that act as feeder schools to St. Mary Catholic Secondary School in Cobourg are each below capacity:

- St. Joseph CES, Cobourg – 73% utilization;
- St. Michael CES, Cobourg, 68% utilization;
- St. Anthony, CES, Port Hope, 90% utilization;
- Notre Dame CES, Cobourg, 99% utilization;
- St. Mary CES, Campbellford, 128% utilization.

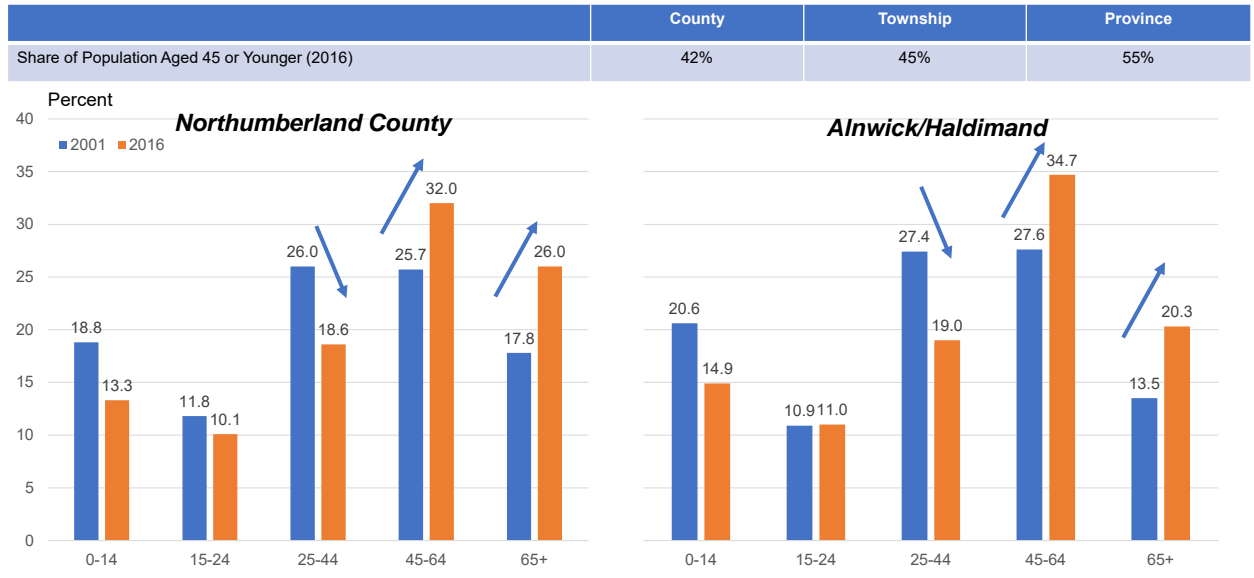
6.5 TOWNSHIP AND COUNTY HAS DISPROPORTIONATELY OLDER POPULATION

Since 2001, the proportion of population in both the County and Township over the age of 45 has increased significantly. As of 2016, the proportion of persons aged 45 or younger has fallen in the County from 57% to 42%, and from 59% to 45% in the Township. Province-wide as of 2016 approximately 55% of the population is aged 45 and younger.

The significant aging of the population in the County and the Township means that the 'young professional' labour force, aged 25-44 has shrunk significantly – there are nearly 4,200 fewer persons aged 25-44 in the County than there were in 2001. The aging of the population has significant impacts on the ability of communities to fill professional service roles (doctors,

dentists, etc.), and an older population can place additional strain on public services more heavily relied on by seniors such as health, long-term care, housing, as well as recreation facilities, libraries, etc.

Figure 23 Change in Share of Population by Age Group, 2001-2016, Northumberland County and Alnwick/Haldimand



Source: Statistics Canada, 2001 and 2016 Census

While the demographic make-up of residents in Lakeport Beach cannot be known at this time, at a minimum the property tax dollars raised by the development, as well as the forecast annual surplus of year-to-year revenues relative to costs can help ensure that the community amenities and social infrastructure that an older population relies upon will be adequately funded by a growing property tax assessment base.

Appendix A
Detailed Tables

Figure A-1 Estimate of Non-Tax Revenues, Township of Alnwick/Haldimand

	Non-Tax Revenues	Less: Building Permit Revenues <i>Dollars</i>	Net Non-Tax Revenues	Grow th Related Percent	Grow th Related Non- Tax Revenues <i>Dollars</i>	Res. Share Percent	Residential Grow th Related Non- Tax Revenues <i>Dollars</i>
Licenses, Permits, Rents, etc.							
Licenses and Permits	199,428	99,714 ¹	99,714	95%	94,728	74%	69,824
Rents, Concessions, etc.	19,624	-	19,624	95%	18,643	74%	13,742
Subtotal	219,052	99,714	119,338		113,371		83,566
Fines and Penalties							
Other Fines	-	-	-	95%	-	74%	-
Penalties and Interest on Taxes	184,572	-	184,572	95%	175,343	74%	129,246
Subtotal	184,572	-	184,572		175,343		129,246
Other Revenue							
Investment Income	99,077	-	99,077	0%	-	74%	-
Gaming and Casino Revenues	-	-	-	95%	-	74%	-
Donations	56,205	-	56,205	95%	53,395	74%	39,357
Subtotal	155,282	-	155,282		53,395		39,357
Total	558,906	99,714	459,192		342,109		252,169
							<i>Persons</i>
							7,231
							<i>\$/ Capita</i>
							34.87
							Population Estimate
							\$/ Capita or Employee - Growth Related Non Tax Revenues

¹ Assumed that 50% of Licenses and Permit fees are from building permits

Source: Altus Group Economic Consulting based on Alnwick/Haldimand Township, 2019 Financial Information Returns

Figure A-2 Estimate of Non-Tax Revenues, Northumberland County

	Non-Tax Revenues	Less: Building Permit Revenues <i>Dollars</i>	Net Non-Tax Revenues	Grow th Related Percent	Grow th Related Non- Tax Revenues <i>Dollars</i>	Res. Share Percent	Residential Grow th Related Non- Tax Revenues <i>Dollars</i>
Licenses, Permits, Rents, etc.							
Licenses and Permits	32,250	16,125	16,125	95%	15,319	74%	11,291
Rents, Concessions, etc.	2,584,468	-	2,584,468	95%	2,455,245	74%	1,809,766
Subtotal	2,616,718	16,125	2,600,593		2,470,563		1,821,058
Fines and Penalties							
Other Fines	-	-	-	95%	-	74%	-
Penalties and Interest on Taxes	-	-	-	95%	-	74%	-
Subtotal	-	-	-		-		-
Other Revenue							
Investment Income	1,517,957	-	1,517,957	0%	-	74%	-
Gaming and Casino Revenues	-	-	-	95%	-	74%	-
Donations	17,149	-	17,149	95%	16,292	74%	12,009
Subtotal	1,535,106	-	1,535,106		16,292		12,009
Total	4,151,824	16,125	4,135,699		2,486,855		1,833,066
							<i>Persons</i>
							90,110
							<i>\$/ Capita</i>
							20.34
							Population Estimate
							\$/ Capita or Employee - Growth Related Non Tax Revenues

Source: Altus Group Economic Consulting based on Northumberland County, 2019 Financial Information Returns

Figure A-3

Estimate of Net Operating Expenditures, Alnwick/Haldimand Township								
					Growth Related			Residential
	Expenditures	Less: Interest on Long Term Debt	Less: User Fees and Service Charges	Less: Amortization	Net Expenditures	%	Net Operating Expenditures	Related Net Operating Expenditures
							Res. Share	
General Government								
Governance	137,916	-	-	19,518	118,398	75%	88,799	65,454
Corporate Management	667,631	-	-	30,819	636,812	75%	477,609	352,047
Program Support	59,636	-	-	-	59,636	75%	44,727	32,968
Subtotal	865,183	-	27,920	50,337	814,846		611,135	450,469
Protection Services								
Fire	978,088	-	30,698	181,844	765,546	95%	727,269	536,071
Police	1,149,535	-	6,764	-	1,142,771	95%	1,085,632	800,222
Conservation authority	118,303	-	-	-	118,303	100%	118,303	87,201
Protective Inspection and Control	250,868	-	7,751	7,003	236,114	95%	224,308	165,338
Building Permit and Inspection Service	29,030	-	-	-	29,030	95%	27,579	20,328
Subtotal	2,525,824	-	45,213	188,847	2,291,764		2,183,091	1,609,161
Transportation Services								
Roads - Paved	2,438,200	4,095	18,195	2,304,195	111,715	95%	106,129	78,228
Roads - Unpaved	196,442	-	-	29,793	166,649	95%	158,317	116,695
Roads - Bridges and Culverts	196,442	-	-	65,017	131,425	95%	124,854	92,030
Roads - Traffic Operations & Roadside	108,394	-	-	6,808	101,586	95%	96,507	71,135
Winter Control - Except Sidewalks, Parking Lots	269,040	-	-	-	269,040	95%	255,588	188,394
Winter Control - Sidewalks, Parking Lots Only	1,952,773	-	-	811	1,951,962	95%	1,854,364	1,366,856
Street Lighting	20,235	-	2,000	-	18,235	95%	17,323	12,769
Subtotal	5,181,526	4,095	2,000	2,406,624	2,750,612		2,613,081	1,626,385
Environmental Services								
Solid Waste Disposal	24,187	-	22,033	-	2,154	95%	2,046	1,508
Waste Diversion	10,276	-	-	-	10,276	95%	9,762	7,196
Subtotal	34,463	-	22,033	-	12,430		11,809	8,704
Health Services								
Cemeteries	23,830	-	2,900	-	20,930	95%	19,884	19,884
Subtotal	23,830	-	2,900	-	20,930		19,884	19,884
Recreation and Cultural Services								
Parks	44,110	-	-	9,441	34,669	95%	32,936	32,936
Recreation Facilities - All Other	742,299	-	151,251	66,324	524,724	95%	498,488	498,488
Libraries	265,611	1,883	6,006	37,774	219,948	95%	208,951	208,951
Cultural services	6,924	-	-	-	6,924	95%	6,578	6,578
Subtotal	1,058,944	1,883	157,257	113,539	786,265		746,952	746,952
Planning and Development								
Planning and Zoning	193,207	-	78,940	-	114,267	75%	85,700	63,170
Commercial and Industrial	3,616	-	-	-	3,616	75%	2,712	-
Tile drainage/shoreline assistance	-	-	-	-	-	75%	-	-
Subtotal	196,823	-	78,940	-	117,883		88,412	63,170
Total	9,886,593	5,978	336,263	2,759,347	6,794,730		6,274,363	4,524,724
							Population Estimate	7,231
							\$/ Capita - Growth Related Net Operating Expenditures	625.73

Source: Altus Group Economic Consulting based on 2019 Financial Information Returns for Township of Alnwick/Haldimand

Estimate of Net Operating Expenditures, Northumberland County

	Expenditures	Less: Interest on Long Term Debt	Less: User Fees and Service Charges	Less: Amortization	Net Expenditures	Growth Related		Res. Share	Residential Growth Related Net Operating Expenditures
						%	Net Operating Expenditures		
General Government									
Governance	328,131	-	-	5,300	322,831	75%	242,123	74%	178,470
Corporate Management	4,438,943	-	503,554	-	3,935,389	75%	2,951,542	74%	2,175,588
Program Support	865,340	125,112	-	740,228	-	75%	-	74%	-
Subtotal	5,632,414	125,112	503,554	745,528	4,258,220		3,193,665		2,354,057
Protection Services									
Court Security	594,161	-	-	-	594,161	95%	564,453	74%	416,059
Building Permit and Inspection Service	336,965	-	417,214	3,063	(83,312)	95%	(79,146)	74%	(58,339)
Emergency Measures	1,031,726	-	24,403	6,333	1,000,990	100%	1,000,990	74%	737,832
Provincial Offences Act	1,480,271	2,051	-	-	1,478,220	95%	1,404,309	74%	1,035,119
Subtotal	3,443,123	2,051	441,617	9,396	2,990,059		2,890,606		2,130,672
Transportation Services									
Roads - Paved	13,570,417	-	223,041	5,144,465	8,202,911	95%	7,792,765	74%	5,744,064
Winter Control - Except Sidewalks, Parking Lots	3,434,050	-	-	-	3,434,050	95%	3,262,348	74%	2,404,683
Subtotal	17,004,467	-	-	5,144,465	11,636,961		11,055,113		8,148,747
Environmental Services									
Solid Waste Collection	2,848,832	-	2,695,608	-	153,224	95%	145,563	74%	107,295
Solid Waste Disposal	12,668,426	91,017	1,856,793	309,356	10,411,260	95%	9,890,697	74%	7,290,454
Waste Diversion	5,557,305	2,716	1,344,445	297,717	3,912,427	95%	3,716,806	74%	2,739,665
Subtotal	21,074,563	93,733	5,896,846	607,073	14,476,911		13,753,065		10,137,414
Health Services									
Public Health Services	2,094,792	-	-	-	2,094,792	95%	1,990,052	74%	1,466,872
Ambulance Services	12,569,227	19,001	31,435	578,638	11,940,153	95%	11,343,145	100%	11,343,145
Subtotal	12,569,227	19,001	31,435	578,638	11,940,153		11,343,145		11,343,145
Social and Family Services									
General Assistance	10,639,783	-	23,683	7,555	10,608,545	95%	10,078,118	74%	7,428,602
Assistance to Aged Persons	15,465,217	24,975	3,585,311	112,549	11,742,382	95%	11,155,263	74%	8,222,568
Child Care	9,158,975	-	1,038	-	9,157,937	95%	8,700,040	74%	6,412,818
Subtotal	35,263,975	24,975	3,610,032	120,104	31,508,864		29,933,421		22,063,989
Social Housing									
Public Housing	6,478,699	-	219,289	1,158,668	5,100,742	95%	4,845,705	100%	4,845,705
Non-Profit/Cooperative	2,625,851	-	-	-	2,625,851	95%	2,494,558	100%	2,494,558
Rent Supplement Programs	1,761,579	-	-	-	1,761,579	95%	1,673,500	100%	1,673,500
Subtotal	10,866,129	-	219,289	1,158,668	9,488,172		9,013,763		9,013,763
Planning and Development									
Planning and Zoning	262,721	-	86,841	-	175,880	75%	131,910	74%	97,231
Commercial and Industrial	2,826,624	-	15,602	385,750	2,425,272	75%	1,818,954	0%	-
Agriculture and reforestation	555,519	-	165,615	9,781	380,123	75%	285,092	74%	210,142
Subtotal	3,644,864	-	268,058	395,531	2,981,275		2,235,956		307,373
Total	109,498,762	264,872	10,970,831	8,759,403	89,280,615		83,418,735		65,499,161
							Population Estimate		90,110
							\$ / Capita - Growth Related Net Operating Expenditures		726.88

Source: Altus Group Economic Consulting based on 2019 Financial Information Returns for Northumberland County