Students Going Digital The Economic Impact on Niagara

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Vivian Kinnaird, CEO and Kevin McPhillips, Research Associate

Niagara Workforce Planning Board







Students Going Digital – the economic impact on Niagara

Kevin McPhillips

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Project Overview

- COVID-19 forced post-secondary institutions to shift many programs to a virtual model, greatly impacting the Niagara region
- A decline in enrollment and increased ability to remain at-home while studying virtually led to a significant decrease in post-secondary students living in Niagara

This project quantifies the subsequent economic effect through the lens of post-secondary education in Niagara



Project Overview

This economic analysis is broken into four sections

- The first assesses the decrease in rental property demand;
- The second provides an overview of COVID-19's impact on Niagara's public transit system;
- The third measures the pandemic's impact on localized student spending, and
- The fourth outlines the impact on labour supply in both workintegrated learning placements and employment.



Rental Property Demand

 COVID-19 led to a decrease of between 1,713 and 2,544 students renting a housing unit, a year-over-year decrease of 13.8% to 20.5%

Original Demand	Demand Decrease	Corresponding 2020 Demand	Difference in post- secondary renters	
12,411	13.8%	10,698	-1,713	
	20.5%	9,867	-2,544	

 We also saw a decrease of 2,941 to 4,369 fewer students living in Niagara during the 2020-21 school year, representing a decrease of 23.7% to 35.2%

Original Demand	Decrease in Renters Living in Niagara	Corresponding 2020 Renters Living in Niagara	Difference in students living in Niagara	
12,411	23.7%	9,470	-2,941	
12,411	35.2%	8,042	-4,369	



Niagara Region Public Transit

 The pandemic has led to a decline in student U-Pass payments of between \$2.9 million and \$3.3 million, a 79.6% decrease relative to 2019-20 totals.

	Lower Revenue Scenario			Higher Revenue Scenario		
Revenue Source	BUSU	NCSAC	Total	BUSU	NCSAC	Total
Pre-pandemic revenue	\$1,500,000	\$2,170,000	\$3,670,000	\$1,700,523	\$2,460,090	\$4,160,612
Fee decrease during pandemic	50%	100%	79.6%	50%	100%	79.6%
Pandemic revenue	\$750,000	\$0	\$750,000	\$850,261	\$0	\$850,261
Decrease in revenue due to pandemic	\$750,000	\$2,170,000	\$2,920,000	\$850,261	\$2,460,090	\$3,310,351



Student Spending in Niagara

 We estimate that local student spending has seen a decrease of between \$2.8 and \$4.8 million monthly, representing 19.0% to 27.8% of pre-pandemic student spending

	Lesser Spending Estimate		Higher Spending Estimate	
	Lesser demand decrease	Higher demand decrease	Lesser demand decrease	Higher demand decrease
Rent cost per month	\$425.00	\$425.00	\$531.00	\$531.00
Rent demand decrease	1,713	2,544	1,713	2,544
Rent payment decrease	\$728,025.00	\$1,081,200.00	\$909,603.00	\$1,350,864.00
Non-rent cost per month	\$706.40	\$706.40	\$782.80	\$782.80
Decrease in renters actively living in Niagara	2,941	4,369	2,941	4,369
Student spending decrease	\$2,077,522.40	\$3,085,555.20	\$2,302,214.80	\$3,419,270.40
Total monthly impact:	\$2,805,547.40	\$4,166,755.20	\$3,211,817.80	\$4,770,134.40
Total yearly impact	\$25,356,479.20	\$37,658,841.60	\$29,332,954.40	\$43,564,531.20



Student Employment

- The pandemic led to an estimated decrease in Niagara's GDP output of between \$37.1 and \$47.7 million due to a lack of student labour supply in the region.
- These totals suggest a decline between 15.8% and 20.3% of pre-pandemic student-driven GDP output.

	Low-impact estimate	High-impact estimate	
Decrease in FTE students employed due to the pandemic	950.5	1221.2	
GDP output per FTE employee, Niagara, 2019	\$41,076.71		
Total training cost savings	\$1,898,688.00	\$2,439,886.00	
Net impact on GDP output	\$37,135,428.36	\$47,711,048.14	



Work-Integrated Learning

 Our data suggests that the pandemic decreased Niagara's GDP output by \$39.0 million due to a lack of student work-integrated learning placements within the region. This total suggests a reduction in work-integrated learning economic output of 32.2%.

	2020-21 Estimates
GDP output per WIL student, St. Catharines-Niagara CMA	\$12,965.78
Decrease in WIL students due to COVID-19	3,006
Total expected decrease in GDP output	\$38,975,134.68



Effects outside the scope of this paper

- While this report provides insight into the economic impacts of virtual post-secondary education, other impacts that may be valuable to assess in future research include:
- Staff layoffs,
- Future capital expenditures placed on hold due to a lack of cash flow, and
- The loss of future localized earnings from students who may have remained in Niagara post-graduation had they physically lived within the region in 2020



Overall Project Findings

- In total, this report suggests that the impact from the pandemic related to direct student engagement in Niagara's economy over the course of the 2020-2021 school year is between \$104.4 million and \$133.6 million.
- This range represents a relative reduction in postsecondary student economic output of between 21.2% and 25.8% compared to pre-pandemic estimates.

			U-Pass	Student Spending	GDP Output, Student Employment	GDP Output, WIL Engagement	Total
	Low- Impact	2019	\$3,670,000	\$133,433,143	\$235,099,655	\$121,031,096	\$493,233,895
		2020	\$750,000	\$108,076,664	\$197,964,227	\$82,055,961	\$388,846,852
Estimated		Total Decrease	\$2,920,000	\$25,356,479	\$37,135,428	\$38,975,135	\$104,387,043
Decrease	High- Impact	2019	\$4,160,612	\$156,805,538	\$235,099,655	\$121,031,096	\$517,096,902
		2020	\$850,261	\$113,241,007	\$187,388,607	\$82,055,961	\$383,535,836
		Total Decrease	\$3,310,351	\$43,564,531	\$47,711,048	\$38,975,135	\$133,561,066



Thank you

Contact us:

Vivian Kinnaird – <u>vivian@nwpb.ca</u> Kevin McPhillips – <u>kevin@nwpb.ca</u>