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A University for Timmins? Possibilities and Realities

By Ken Coates

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Contents

5	Introduction: University Access and Community Aspirations in Northern Ontario
8	Northern Ontario's Universities
9	Northeastern Ontario's Population
11	Northern Ontario's Educational and Post-secondary Environment
16	The Politics of Ontario Post-secondary Expansion
17	Post-secondary Education: Myths, Realities, Expectations, and Opportunities
19	The Canadian College, Polytechnic, and University System
22	Comparative Northern and Remote Institutional Contexts
24	Models of University Program Delivery
26	Northern Ontario: Recent Transitions
28	Prospects and Opportunities in Timmins and Northeast Ontario
30	Recommendations for Timmins and Northeast Ontario
34	The Prospects for a University Presence in Timmins
39	Final Thoughts: An Algoma University Satellite Campus in Timmins?
41	Appendix A: Profiles of Northern Institutions
47	Appendix B: Admissions and Registrants, Northern Ontario's Universities



Introduction:

University Access and Community Aspirations in Northern Ontario

In 2016, the Timmins Economic Development Commission approached Northern Policy Institute with a simple question: Would it be possible for Timmins and Northeast Ontario to support an English-language university, adding to the three existing universities in the region? The issue was raised with a sense of urgency shaped by uncertainty about the answer. There was no question about the city's interest in having an English language degree-granting institution. There was also a certain amount of frustration. As Timmins mayor Steve Black likes to point out, there are few communities in Canada of over 40,000 people without a degree-granting institution within three and a half hours' travel. But Timmins had been rebuffed by the Ontario government in its attempts to secure much-needed backing for the university idea. But in an age when university attendance is seen by the majority of parents and an increasing number of employers as the "golden ticket" to the middle class, some saw the inability of the City of Timmins to attract a local university as a significant drag on economic opportunity and a sign that their community was somehow "incomplete."

Timmins knows that it faces an uphill struggle in its efforts to secure a degree-granting institution. Much as enthusiasm is strong and consistent, there is a prevailing sense that the deck is stacked against the community. This is seen, with some justification, as reflecting a Southern Ontario bias against the North, the typecasting of Timmins as a mining/resource town, and the reality that the province is already funding four northern institutions: Lakehead University, Algoma University, Laurentian University (including its French-language affiliate, the Université de Hearst, based in Timmins), and

Nipissing University, as well as six community colleges (Boreal, Cambrian, Canadore, Confederation, Northern, and Sault). The diversity of post-secondary institutions serving the 780,000 people in Northern Ontario makes it impossible to argue that the broader region has been ignored, even if Timmins has been left on the outside of the North's university system.

Awareness of the challenges facing a local bid for a degree-granting institution convinced the City of Timmins and the Timmins Economic Development Commission to proceed carefully. The standard practice in such circumstances is to launch a strong, highly political campaign for a financial commitment and to mobilize community support both in favour of the concept and against any government that rejected the overture. There had been efforts of this type in the past, but community leaders opted for a more cautious approach. They requested instead a preliminary analysis of the prospects for a sustainable and regionally centred English-language university. This review, conducted under the auspices of Northern Policy Institute, is decidedly not a partisan effort. The mandate was to review the evidence and the environment and to ascertain the viability of a degree-granting institution in Timmins. The report is not an exercise in advocacy, but rather an effort to examine the prospects in a realistic and future-focused manner so that local leaders have the information and context they need to decide if pursuing an English-language university in Timmins is a good idea in the current circumstances. It is expected that this evaluation will be reviewed by community leaders and provincial officials, helping the Timmins Economic Development Commission and the City of

Timmins determine the best path forward in their efforts to diversify the regional economy, serve the peoples and businesses in the area, and generally improve the quality of life in Northeastern Ontario. The arguments in favour of building a university or an enhanced college operation in Timmins include the following:

a university adds to educational and career preparation opportunities for young people and mature learners;

a local institution substantially reduces the cost of university attendance for students who now have to leave their community to pursue studies;

the availability of a regional institution will increase post-secondary participation rates and, therefore, the training and preparation of young people from the North;

a university brings substantial resources into the community, in the form of capital investment, a substantial number of high-paying professional jobs, and student spending on local businesses;

a successful institution results in the infusion of substantial research funding into the local economy, with potential flow-on benefits in the form of new businesses and additional jobs associated with the commercialization of academic research;

a northern university, properly conceived and executed, could work with Indigenous communities to address pressing needs for properly trained professionals and could focus research efforts on First Nations and Métis concerns;

a surge in local confidence and pride is often associated with the availability of a university, one of the core building blocks of the modern economy;

a regional institution would accelerate the development of local and locally educated university graduates who have specialized preparation for living and working in Northern Ontario;

regional businesses, industry, and government agencies, which typically have difficulty attracting and retaining high-quality employees, likely would have a larger, locally trained workforce at their disposal, an argument often advanced by regional colleges.

Conversely, the standard arguments against the opening of a university in a smaller centre, particularly in a remote northern community, include the following:

the regional population, taking into account projected demographic changes, in more remote regions is often not sufficient to support a new university;

The northern, small-city location of such an institution is seen as unattractive to high-quality university faculty, many of whom were raised and educated in southern, urban settings;

distance from major centres, the cost of travel, and the length and severity of winter, among other factors, discourage southern, urban, and international students from applying for admission, although Laurentian and Lakehead have had success in this area;

pressing demands for university spaces in southern, urban places vastly outstrip the need in the North, a situation re-enforced by anticipated population growth in the South;

many young people, having grown up in smaller centres and remote regions, are eager to leave for larger communities, and would prefer to attend institutions elsewhere;

limited applicant demand for spaces would force the institution to become more “open entry,” which, in turn, would lower graduation rates and, potentially, reduce the quality and employability of graduates;

current and anticipated changes in the natural resources economy, particularly through the introduction of new technologies, are forecast to reduce regional jobs, economic activity, and, in turn, the regional population;

diseconomies of scale in terms of financial resources and student numbers would limit program options and thereby reduce the ability of the institution to contribute to regional business development and to meet student demand;

local industries, which emphasize natural resources development and basic services, are not knowledge-intensive and do not, therefore, draw heavily on the professional and research capabilities of a university; modern industry, in contrast, is going through rapid technological transformation, which puts a premium on advanced technical trades and applied sciences.

an institution in Timmins could hold onto students from the city and surrounding region, although this possibility would be offset by the inevitably limited program offerings of a small institution;

Northern Ontario's Universities

The development of post-secondary education in Northern Ontario has followed the major trends in the evolution of the provincial university system, particularly rapid growth in the 1960s and the return to regional expansion after 1990. The region's institutions focus on undergraduate instruction, although both Lakehead University and Laurentian University have substantial graduate and research programs. The North has French-language institutions, solid university-college collaborations, and access-driven satellite campuses. Timmins, however, has been largely left out this expansion, save for a campus of the Université de Hearst. It is useful to recall the origins of the northern institutions.

LAKEHEAD UNIVERSITY

The Lakehead Technical Institute, opened in 1946, established the foundations for Lakehead University, which was formally established in 1965. The newly established institution invested substantially in research and teaching programs focused on Northwest Ontario, particularly related to the forestry sector and regionally significant professional programs. More recently, Lakehead has established a reputation for innovation in Indigenous education and Aboriginal outreach. The university has close to 8,000 students.

LAURENTIAN UNIVERSITY

Laurentian University has religious origins, particularly with the Roman Catholic Church and the United Church's Huntington College, the University of Sudbury (Catholic), and the Anglican Church's Thorneloe College. Classes started in the Collège du Sacre-Coeur before moving to a new main campus in Sudbury in 1964. Two other northern institutions — Nipissing University (1992) in North Bay and Algoma University (2008) in Sault Ste. Marie — originated as federated colleges of Laurentian. Nipissing is known for its partnerships and co-location with Canadore College and its education and nursing programs. Algoma has launched innovative approaches to undergraduate education, including block programs, whereby students take one course at a time. Laurentian and Lakehead partnered on the successful launch of the Northern Ontario School of Medicine (2001). Laurentian, which recently opened the North-focused McEwan

School of Architecture, is widely known for its research and teaching connections with the mining industry. It is federated with the French-language Université de Hearst, with campuses in Kapuskasing, Timmins, and Hearst. The Université de Hearst's small enrolment and comparatively large number of academic and support staff is evidence that Ontario's student-driven financial model does not apply in all contexts.

As I show later, the barriers to a university in Timmins are not insurmountable, just as the arguments in favour of institutional development do not automatically carry the day. There are many highly successful northern and small-city universities around the world, from Tromsø, Norway, to Fairbanks, Alaska. Universities have been established in communities not dissimilar to Timmins, including Brandon, Manitoba (some 200 kilometres from Winnipeg) and Corner Brook, Newfoundland and Labrador (close to 700 kilometres from St. John's). In the rapidly changing circumstances of the twenty-first century, however, the standard measures and analytics that led to the creation of these institutions are somewhat less compelling. In the current political environment, opening a new university, in Timmins or any other northern community, has to be tied to the educational needs and employment possibilities of the coming decades, a reality that makes it more difficult to determine which elements are determinative and which investments would have the greatest educational and employment impact.

Northeastern Ontario's Population

Population is typically a key driver of government policy and investment. This is particularly the case in Ontario, where the population continues to expand, particularly in the Greater Toronto Area. Governments struggle to cope with increased demand for services and related infrastructure. That the Ontario government recently authorized the development of two new partnership campuses, in Brampton and Milton, shows its responsiveness to demographic pressures and pent-up demand. Ontario's population grew by over one million people between 2007 and 2015, an expansion that is close to double the population of Northern Ontario by a considerable margin (see Table 1).

Table 1: Population, Timmins, Northeastern Ontario, and Ontario, 2007–15

POPULATION	2007	2009	2011	2013	2015
Timmins	44,530	44,293	44,385	43,962	43,320
Northeastern Ontario	571,069	569,021	567,076	564,303	558,765
Ontario	12,764,195	12,997,687	13,263,544	13,551,004	13,792,052

Sources: Statistics Canada, Estimates of Population, custom request, and CANSIM database, table 051-0059.

The situation in the North is quite the opposite of that for the province as a whole, with the region's population falling by over 12,000 people over the same period. The City of Timmins, likewise, has seen its population fall — by 1,210 people between 2007 and 2015. At a time of rapid growth and severe strains on the provincial government's services, it is difficult to make a demography-driven argument for the development of a new English-language university in Timmins, at least to the degree that population growth is likely to produce an expansion in demand for post-secondary education.

Of course, prudent government service planning does not focus on the immediate situation, however important that is, but anticipates future needs. Here, however, the demographic situation is even more serious. Northeastern Ontario's population is forecast

to drop from 558,765 in 2015 to 538,950 in 2040. Sharp drops are also forecast in the youth population, with the 0–4 age group falling by around 3,500 and the 15–19 age group by 3,800 (see Table 2). The closing of one or more major mines, beyond that already anticipated, could accelerate the decline beyond these estimates. Expanding economic activity, in turn, would see an increase in population. Proponents of a new university in Timmins argue, quite forcefully, that the presence of an English-language degree-granting institution would stabilize the region and, in fact, could encourage population growth. On balance, however, the demographic profile of the Northeast limits the attractiveness of post-secondary investment in the region, particularly given the dramatic population gains elsewhere in the province.

Table 2: Projections of Pre-school and School-Age Population, Northeastern Ontario, 2015–40

YEAR	AGE GROUP				
	0-4	5-9	10-14	15-19	TOTAL, ALL AGES
2015	25,990	27,404	27,182	31,980	558,765
2020	26,312	26,492	27,790	27,758	556,489
2025	25,751	26,923	26,934	28,425	553,608
2030	24,290	26,522	27,454	27,676	549,724
2035	22,955	25,191	27,138	28,325	544,615
2040	22,405	23,914	25,894	28,151	538,950

Sources: Statistics Canada estimates, 2015; Ontario, Ministry of Finance, "Ontario Population Projections Update, 2016–2041," table 14, available online at <http://www.fin.gov.on.ca/en/economy/demographics/projections/table14.html>.



Northern Ontario's Educational and Post-Secondary Environment

Any plan for additional English-language university capacity in Northern Ontario requires a detailed understanding of the current educational environment. The data show that the demographic and educational environments do not point to the need for an expansion of the university system.

HIGH SCHOOL ENROLMENT AND GRADUATION RATES, TIMMINS

Given the region's overall profile, it is not surprising that high school enrolment in Timmins has been slipping over the past decade. Timmins High and Vocational School, the largest in the region, has seen the school population decline sharply, from 956 in academic year 2006–07 to 785 in 2013–14 (Table 3). That is dramatic slippage, but consistent with patterns in the non-metropolitan parts of Ontario and much of Canada. Ideally, a new university would open in an area with a sizable and growing high school population so as to hold the promise that it can be sustained into the future. The trajectory in Timmins and region is not promising in this regard, although it is not surprising given the general economic and demographic conditions.

Table 3: High School Enrolment, Timmins and Northeast Ontario, academic years 2006-07 to 2013-14

NUMBER OF STUDENTS, BY SCHOOL	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014
École secondaire catholique Thériault	919	919	903	884	838	844	821	781
École secondaire Renaissance	118	119	118	107	109	120	92	96
La Clef	35	40	50	44	46	52	49	42
O'Gorman High School	507	548	528	491	487	456	461	426
PACE (Adult Continuing Education)	49	37	41	40	58	56	80	82
Timmins High and Vocational School	956	922	881	907	885	880	820	785
Roland Michener Secondary School	369	339	331	319	298	277	271	266
Total	2,953	2,924	2,852	2,792	2,721	2,685	2,594	2,478

Sources: Ontario, Ministry of Education, as reported on the Onsis system.

At the same time, Timmins and Northeast Ontario generally perform poorly, compared with the provincial average, in terms of high school graduation rates. Save for the francophone schools, which graduate their students near or above the provincial average, the English-language schools fall well below provincial norms (Table 4). Taken together, the number of high school students in the area and the graduation rates suggest that Timmins and region are not well situated at present to generate sustained interest in university attendance. It is worth noting that the establishment of other northern universities — for example, Tromsø, Alaska, and Northern British Columbia — had a significant impact on university participation rates and focused more attention at the high school level on potential university attendance.

Table 4: High School Graduation Rates, Ontario, 2015

SCHOOL BOARD	FOUR-YEAR GRADUATION RATE (percent)	FIVE-YEAR GRADUATION RATE (percent)
Conseil scolaire de district du Nord-Est de l'Ontario	78.40	82.40
Conseil scolaire catholique de district des Grandes Rivières	87.60	91.20
District School Board Ontario North East	46.10	65.50
Northeastern Catholic District School Board	62.70	70.30
Provincial graduation rate	78.30	85.50

Source: Ontario, Ministry of Education, as reported on the Onsis system.

ENROLMENT IN NORTHERN ONTARIO UNIVERSITIES

Northern Ontario's three largest universities have, between them, over 15,500 full-time undergraduate students, over 1,000 full-time Master's students, and over 250 full time Doctoral students (Table 5). Although this collective total puts them well short of the largest provincial institutions, it demonstrates that the northern institutions have attracted significant number of local, regional, and provincial students. An increased effort has been made to recruit international students, which offsets declining or steady-state regional participation rates. The significant number of students, combined with the expansion of professional schools and graduate programs, indicates continuing Ontario government to commitment to the region. Although Timmins can point out that it has not participated in the rapid expansion of the post-secondary system, the region as a whole cannot claim that its educational aspirations have been ignored, particularly when college enrolment and facilities are factored into the equation.

Table 5: University Enrolment, Northern Ontario, 2015

UNIVERSITY	Bachelor's and First Professional Degree		Master's Degree		Doctoral Degree	
	FULL-TIME	PART-TIME	FULL-TIME	PART-TIME	FULL-TIME	PART-TIME
Lakehead	6,132	783	657	12	126	0
Laurentian	6,304	1,855	360	314	104	64
Nipissing	3,269	1,724	105	181	30	0

Source: Council of Ontario Universities, available online at <http://cudo.cou.on.ca/>.

ENGAGEMENT WITH THE POST-SECONDARY SYSTEM

It is widely understood that northern regions with strong resource economies typically have lower-than-standard levels of educational attainment. When assessing the potential for post-secondary investment, governments typically focus on the gap between regional and provincial or national attainment, with particularly reference to the skills and education needed by local employers. Several things stand out in terms of Northeastern Ontario's educational engagement (see Table 6). The region has, with the rest of Northern Ontario, a high percentage of the population with no advanced education or training — more than 7 percent higher than Ontario as a whole. Conversely, and reflecting the nature of the northern economy, Northeastern Ontario has 3.4 percent more people with apprenticeship or trades certification than does the province as a whole. The deficiency — and it is a striking one — rests at the university level. The percentage of the population with university training is well below that of Canada as a whole and well below the Ontario experience. The availability of a university degree, it seems, might not be as important as broader demographic conditions and the nature of the regional economy in shaping regional educational engagement and outcomes.

Table 6: Secondary and Post-secondary Participation Rates, Canada and Ontario, 2001, 2006, and 2011

EDUCATIONAL ATTAINMENT	Canada			Ontario			Northern Ontario			Northeastern Ontario		
	2001	2006	2011	2001	2006	2011	2001	2006	2011	2001	2006	2011
No certificate, diploma or degree	33.2	23.8	20.1	31.5	22.2	18.7	39.0	29.2	24.2	38.9	28.8	23.8
High school diploma or equivalent	23.0	25.5	25.6	23.8	26.8	26.8	22.0	25.3	25.6	22.2	25.4	25.7
Apprentice- ship or trades certificate or diploma	10.9	10.9	10.8	9.4	8.0	7.4	12.7	11.3	11.3	12.8	11.4	11.3
College, CE- GEP, or other non-university certificate or diploma	15.0	17.3	18.2	15.7	18.4	19.8	15.3	20.3	23.0	15.5	21.0	23.7
University certificate or diploma below bachelor level	2.5	4.4	4.4	2.1	4.1	4.1	1.3	2.5	2.4	1.2	2.3	2.3
University certificate, diploma or degree at bachelor level or above	15.4	18.1	23.4	17.5	20.5	23.4	9.6	11.4	13.5	9.3	11.1	13.1

Source: Statistics Canada, National Household Survey, 2011.

There is another, more positive, way to view this evidence. Northeastern Ontario clearly has a significant deficit in university diploma and degree completion, and would have to expand university participation and degree completion substantially to get up to provincial or even national norms. The Ontario government has emphasized degree completion for the past twenty years, although it has shifted the emphasis to college and polytechnic education more recently. Given that moving from Timmins to an institution elsewhere in Ontario would represent a clear financial hardship for many northern residents, a solid case can be made that Northeast Ontario will continue to experience a substantial deficit in degree holders, with the related implications for job creation, economic growth, and career opportunities. New initiatives, such as reduced tuition fees and northern “rides home” programs could lower these barriers. There is, in other words, a clear gap to address in the post-secondary possibilities in Northeastern Ontario. Note, however, that roughly the same degree deficit holds for Northern Ontario as whole, despite the availability of significant university opportunities across the region.

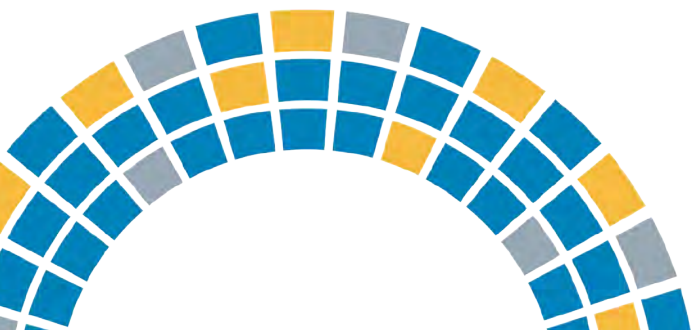
PATTERNS IN REGISTRATION AND APPLICATIONS

Within the broader international post-secondary system, the conversion rate — the number of applicants who are accepted by the institution and who subsequently enrol — is a key indication of the balance of supply and demand. An elite university, such as Harvard or Stanford, accepts as few as 5 percent of all applicants, most of whom subsequently attend the institution. More open-entry universities in rural and northern areas, in contrast, will accept the majority of those who apply. But many of the students will be admitted to multiple institutions, if they apply, and the number who choose to attend will be quite small. The arts and science programs at Algoma University, for example, received 762 applicants in 2013, but only 117 students actually registered. Lakehead's engineering program handled applicants from 725 prospective students, but only 137 were both accepted and subsequently enrolled. Laurentian University received almost 600 applicants for its business programs, but fewer than one-third (187) registered. The conversion rates do not tell the full story. In selected professional programs, class size is limited by government funding or the number of authorized spaces. Nipissing University's nursing program, for example, attracted a large number of applications (735), but only 99 students were accepted into the program and subsequently decided to enrol.

Applications to Northern Ontario's universities follow predictable patterns. All four universities are

comparatively open-entry, with significant exceptions in selected fields — typically law, architecture, medicine, and engineering. With a proud and appropriate focus on regional accessibility, institutional commitments to non-traditional students, and with many coming from rural and remote regions or retraining in response to economic change, the admissions experience is unsurprising. Those seeking programs with a strong regional concept — outdoor recreation, mining, Indigenous studies, and forestry — will often have one of the northern institutions as their highest priority, students with more general interests will often prioritize more selective institutions in southern and urban areas. In these circumstances, northern universities appeal to people who are place-bound, who cannot afford the cost of moving and living in the South, and who are unable to secure acceptance to a higher-status institution.

The situation is quite the reverse in most major cities. At universities such as McGill, Toronto, Waterloo, Calgary, and the University of British Columbia, province-wide, national, and international demand for spaces is intense, and many local students are denied an opportunity to study close to home. Ontario students can easily apply for admission to multiple institutions due to the centralized application system. It is commonplace for students, when ranking their educational preferences, to include more than one institution as a backup to their application to an elite school (or schools). The application and admission information shows that the northern institutions attract a considerable number of applications, but, typically, a much lower number of registrants. Although this might reflect intense demand in selected areas, it generally means that the institutions benefit from strong local and regional preferences, but lose many applicants to other universities. Importantly, over half of the applications to Lakehead University, to use one example, have that university as at their first choice. This is consistent with the Canadian practice of most students studying close to home, but it negates the suggestion that northern institutions are invariable second and third choices for students who wish to pursue post-secondary education.



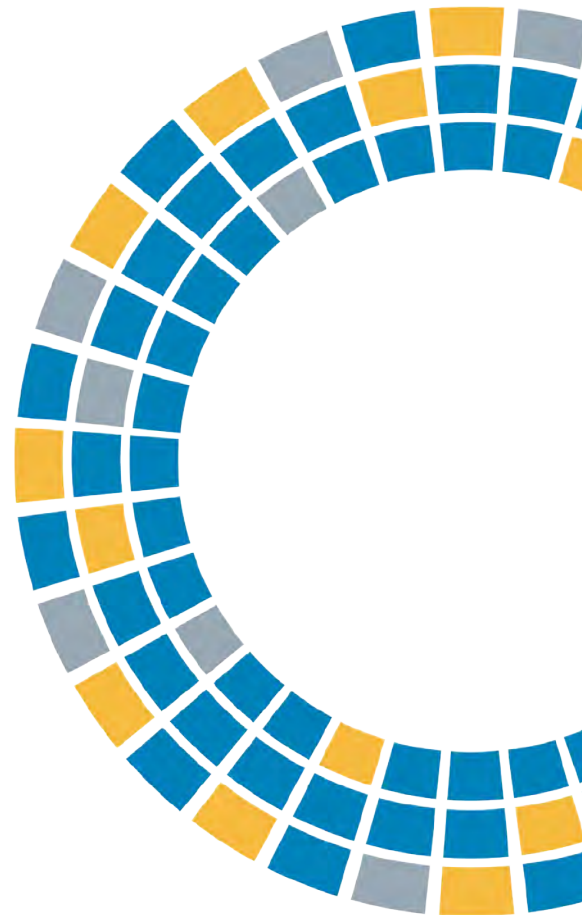
PROGRAM OFFERINGS AND THE CASE FOR A NORTHERN INSTITUTION: LESSONS FROM THE NORTHERN ONTARIO SCHOOL OF MEDICINE

The idea that a northern-based institution cannot attract a large number of well-qualified applicants has been disproven in several important cases. The University of Tromsø (Norway) was built around a medical school and has enjoyed strong enrolment from the outset. Similarly, the impressive success of the Northern Ontario School of Medicine, a joint operation of Lakehead University and Laurentian University, demonstrates that an elite, high-quality, career-oriented program can attract a sizable and sustainable number of applicants to a northern-based institution. Of course, not many programs have the cachet and career potential of medicine, although the addition of the McEwan School of Architecture at Laurentian and the Boris Laskin Faculty of Law at Lakehead represent efforts to serve regional needs and draw students to these northern institutions. As with medicine, these programs offer a restricted number of spaces, but have attracted many applications. With over 2,100 applications for 64 spots, however, the Northern Ontario School of Medicine leads the others by a considerable amount (see Table 7). The School of Architecture, in comparison, attracted 306 applications in 2014, its second year of operation, with 68 students registering in the program.

**Table 7: Medical School Applications and Registrations,
Northern Ontario School of Medicine, 2005–16**

YEAR	APPLICANTS	REGISTRANTS
2005	2,095	56
2006	2,050	56
2007	2,274	56
2008	1,894	58
2009	1,845	56
2010	1,748	64
2011	1,756	64
2012	1,932	64
2013	1,976	64
2014	2,115	64
2015	2,135	64
2016	2,153	64

Source: Ontario Universities' Application Centre 2017.



The Politics of Ontario Post-Secondary Expansion

Public institutions, by definition, are shaped and constrained by politics. In Ontario, many communities, mostly with larger populations, are promoting post-secondary expansion. If Timmins and region wished to make a compelling, evidence-based case for the development of a new university, it would find itself in line with other cities and towns with comparable aspirations, most justifiable and compelling. To secure government, business, and community support for a degree-granting institution, pro-university initiatives historically have needed the following elements:

strong and sustained leadership from the civic government, extending beyond the Mayor's Office and incorporating consistent engagement from local business leaders;

a local or regional political "patron" or two, preferably in the provincial cabinet;

strong support from provincial government civil servants who have responsibility for managing post-secondary education;

financing from the provincial government and other partners (the federal government, regional industry, philanthropists, and local governments are typical supporters);

solid evidence of sustained regional interest in having a local university, both in terms of long-term enrolment potential and short-term and sustainable community interest; local and regional media outlets play a crucial role in this regard; and

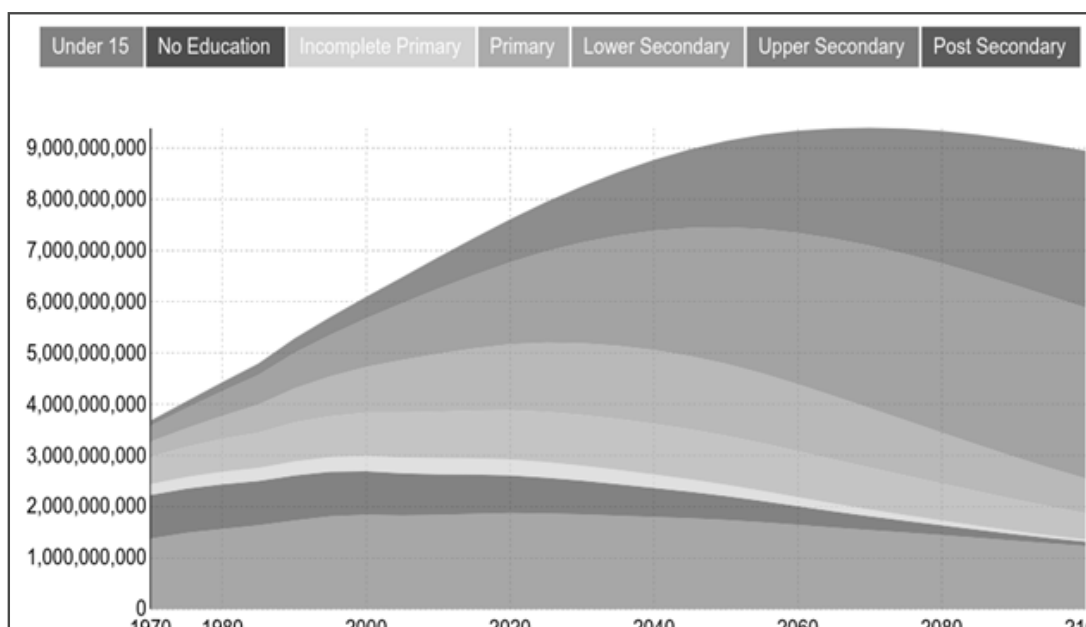
engagement with existing post-secondary institutions, including arrangements that show that the growth of the new institution will not come at the expense of currently operating colleges and universities.

These elements, it is important to recognize, are necessary but not necessarily sufficient conditions for a project of this nature. If the provincial government is operating under difficult financial constraints, an otherwise viable project could remain undeveloped.

Post-secondary Education: Myths, Realities, Expectations, and Opportunities

The world is awash in post-secondary/university enthusiasm. The expansion of the global university system in the years since the Second World War has been meteoric. Students, parents, and governments have become preoccupied with university attendance and graduation, believing that a degree from an accredited and recognized university provides ready, if not quite guaranteed, access to the middle class. For decades, expectations matched the reality quite closely. An expanding global economy, marked by rapid expansion of the middle class, provided ample evidence that a degree was equated with economic opportunity, personal prosperity, and career advancement. As Figure 1 indicates, forecasts of educational levels suggest that the percentage of people with post-secondary credentials will grow dramatically in the years ahead.

Figure 1: World Population by Level of Education, 1970-2100 (projected)



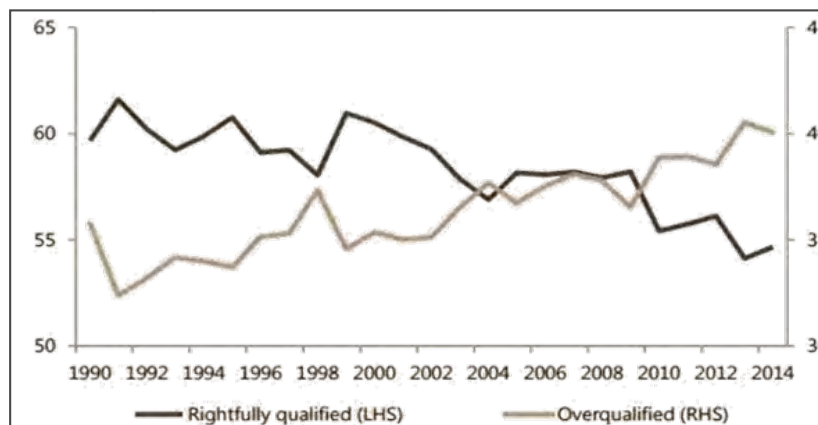
Source: Roser n.d.

But as with any market, a disconnection between supply and demand could quickly upset the status quo. The supply of university graduates got out of step with the employment market in two ways. First, the Canadian and US production of university graduates outgrew the demand for workers with general university-level skills. University graduates still have more positive employment outcomes than individuals without a college diploma or university degree, but in recent years a growing number have accepted jobs that do not require university learning, pursued advanced professional degrees, or returned to college or other training institutes to secure a marketable skill. The second transition is potentially more disruptive. The growth of non-Western university enrolment — China has more students in higher education than Canada has people — has allowed a great deal of the production of specialized and highly skilled workers to migrate from North America and western Europe to East Asia, South Asia, and eastern Europe.

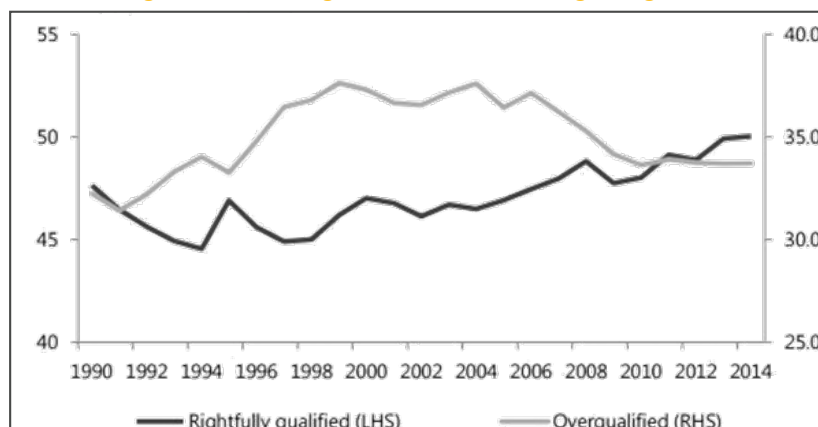
At present, there is strong national and international demand for graduates in selected professional fields — engineering, accounting, medicine, nursing, and a few others. In other areas of long-standing opportunity, including the legal and teaching professions, universities produce more graduates than the workforce can readily absorb. In the more general arts and science fields, there is little evidence of unmet demand for general graduates, and considerable employment uncertainty and underemployment for graduates (see Figure 2). The problem is even more acute in Europe, North Africa, and the Middle East, fuelling political instability in these areas. With the costs of university attendance increasing much faster than the rate of inflation in many countries, employment anxiety and student debt have become a fact of life in many parts of the world, including China and India.

Figure 2: Educational Credentials versus Educational Requirements for Recent University and College Graduates, Canada, 1990-2014

A. Percentage of workers ages 25-34 with a university degree



B. Percentage of workers ages 25-34 with a college degree



Source: Tencer 2015

The Canadian College, Polytechnic, and University System

The Canadian post-secondary system is one of the best in the world. Canada has one of the highest rates of post-secondary participation, in substantial measure because of the widespread appeal of colleges and polytechnics. Governments continue to promote advanced education, believing that increased enrolment will produce a highly skilled workforce that, in turn, will produce, sustain, and fuel an innovation economy. Canada has four universities ranked among the top one hundred in the world and twenty-five of the leading five hundred institutions globally. The country's polytechnics, while attracting much less attention than they deserve, are expanding advanced technological training and employment-ready skills development. Colleges cover a broader range of programs, focusing on career entry, adult basic education, and trades and technical education. The system is even more complex, with a series of provincially run distance education institutions, private universities, faith-based colleges and universities, private career colleges, and literally hundreds of privately operated training institutes. Several international universities, primarily from the United States, have campuses in Canada. As well, a growing number of private institutions cater to international students, typically by brokering programs from accredited universities and colleges. Put simply, post-secondary education is about far more than local degree-granting institutions supported by provincial funds and offering degree programs accredited by provincial government agencies.

ONTARIO'S POST-SECONDARY EDUCATION SYSTEM

Ontario's post-secondary system is the largest part, and a microcosm, of Canadian colleges, universities, and other educational institutions. Ontario has advanced network of provincially funded, degree-granting universities. Several of the universities maintain satellite campuses, ranging from the large-scale operations of the University of Toronto in Mississauga

and Scarborough to the French-language Université de Hearst with a campus in Timmins, federated with Laurentian University, and outreach centres in places such as Orillia (Lakehead). Ontario's universities have even established overseas campuses in areas as diverse as the United Arab Emirates (Waterloo, now withdrawn) and the United Kingdom (Queen's). The province also has a fine series of community colleges and polytechnics. The Ontario government has been actively encouraging an expansion of college-university collaboration, which includes several popular Timmins-based collaborations between northern universities and Northern College, and is eager to support easier transitions between colleges, polytechnics, and universities.

PARENTAL EXPECTATIONS AND THE UNIVERSITY PREFERENCE

Based largely on the career experiences of university graduates in recent decades and the apparently societal preference for university education, universities have become the institutions of choice for many — probably most — parents. University studies or degrees are required to get into elite or career-oriented academic programs such as teaching, law, medicine, pharmacy, veterinarian medicine, and business administration, and are believed to provide ready access to high-paying, stable, and prestigious private and public sector careers.

With endless public conversation about the "knowledge economy" — a long-time preoccupation of former Ontario premier Dalton McGuinty (2003–13) — and widespread popular culture celebration of the campus-like workplaces and stock options of Google, Open Text, Apple, BlackBerry, Facebook, and other high-tech firms, it is hardly surprising that parents and many young people favour these careers over blue collar, trades, and technical work. The result, however, has been a growing emphasis on

university attendance, such that a significant number of ill-suited students are pushed by parents, friends, guidance counsellors, and others toward universities. With a finite (but unknown) number of highly intelligent, well-motivated, and committed students available for a growing number of institutions and an expanding number of university spaces, it follows that some poorly prepared, less motivated students have enrolled in universities. This, in turn, has resulted in significant dropout rates (students who decide not to continue their studies) and a growing number of students who manage to graduate with a degree (particularly a three-year degree) but only after prolonged registration in the institution.

STATUS/PRESTIGE AND THE EDUCATIONAL HIERARCHY

An unsurprising outcome of the university preference has been the establishment of an unofficial institutional hierarchy. The informal structure is simple: the top and most qualified students go to university, where they are trained for high-quality, well-paying careers; trades and technical-oriented students head to a polytechnic — a college with degree-granting privileges in applied degrees and applied research activities; and weaker individuals looking for basic career entry go to a community college. This hierarchy is more misleading than helpful. Some college and polytechnic programs have long waiting lists, often requiring intending students to delay their entry for several years. Many college and polytechnic graduates receive competitive job offers and enjoy secure, high-paying jobs. Conversely, some graduates of university programs, often of exceptional academic quality, struggle to find work and have wages that are closer to those of high school graduates than stereotypical assumptions about those of university graduates.

PATTERNS IN THE EXPERIENCES OF CONTEMPORARY UNIVERSITY STUDENTS

There is, to be clear, no simple, assured, or guaranteed path from academic and technical studies into the job market. Five years ago, students who entered oil and gas engineering anticipated high-paying jobs and competitive opportunities. With the collapse of that sector, finding a basic job is challenging. In certain fields — such as engineering, computer science, nursing, accounting, and economics — job prospects remain strong. Conversely, the systematic overproduction of qualified teachers has resulted in a large surplus and widespread unemployment and temporary employment of education graduates. Many university graduates, without a clear path to the workforce, enrol in colleges or polytechnics to make themselves more attractive to employers, while many college and polytechnic graduates continue their studies at university, and

combine technical and academic training. Mid- and late-career retraining results in a blurring of the lines between college, polytechnic, and university education. Despite the simplistic assumptions of parents, students, and government officials, the actual experience of young adults suggests that the educational hierarchy is false, and that the intersection of education, training, job search, and employment is much more complicated than people believe. University education, while not panacea, does provide reasonable prospects for those who complete their studies and even better opportunities for those who select programs in high employment demand. The same is true of colleges and polytechnics, producing solid job prospects and reasonable returns on students' investments of time and money.

SKILLS GAPS, EMPLOYMENT, AND THE CHALLENGES OF THE TWENTY-FIRST CENTURY

Predicting future employment prospects has proved to be difficult and unreliable. The combination of global competition, the economic rise of East and South Asia, cyclical shifts in commodity markets, and the workplace impact of new technologies (particularly robotics and artificial intelligence) have undermined many of the certainties of the past. Some researchers argue that a quarter to a half of the Western industrial workforce could be displaced through technological innovation. Major disruptions have already been felt in some parts of the natural resources economy, particularly forestry, and throughout the manufacturing sector. The reach of technological change is now spreading to the services sector, most obviously in banking, and is making inroads in professional services such as law and accounting. Many observers anticipate substantial shifts in health care and education in the coming years.

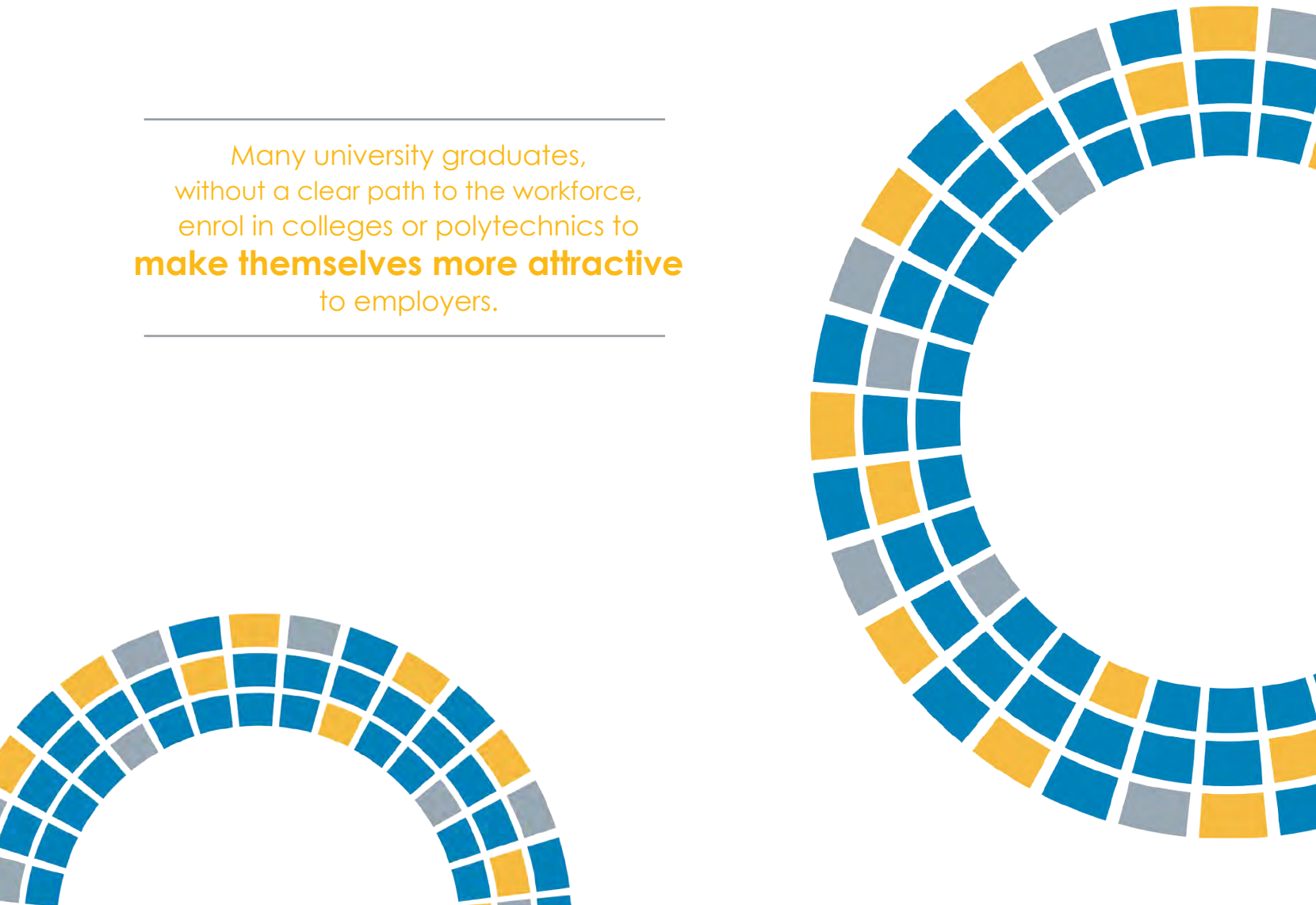
On top of technology-based changes, a considerable amount of work has shifted from industrial and resources work to the services sector. Part-time and contingent (short-term contracts) labour has become more commonplace, while fierce competition for well-paid, stable jobs has held down wages. In Canada and the United States, large numbers of people have opted out of the workforce altogether. A significant number of potential workers, including Indigenous peoples living in remote communities, the disabled, ex-prisoners, and long-term, multi-generational unemployed people, are even further distanced from the workforce. Ontario, as one analyst has described it, has an economy characterized by "people without jobs, jobs without people" (Miner 2010). Governments around the world are struggling to determine both the future of employment and the best strategies for preparing young adults for long-term work.



There are few certainties in twenty-first-century employment, although the prospects are more positive than some believe. The displacement of some kinds of work liberates money and workers for other kinds of business and employment. There is every reason to believe that there will continue to be many jobs in the future, but they are likely to be significantly different in nature, skill-level, and remuneration than is current work. Emerging companies are pushing the frontier of commerce and services, and new technologies will create products, services, and employment opportunities that have not yet been conceptualized.

What is also likely is that a higher percentage of work in the future will be entrepreneurial in nature, particularly in the form of the sale of personal services and small-scale services companies. Post-secondary institutions of all types face the formidable challenge of preparing young adults for the workforce of a future that is little understood at present.

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Comparative Northern and Remote Institutional Contexts

The prospect of a free-standing English language university in Timmins should be understood in the broader context of post-secondary educational programming in remote and sparsely populated regions.

CANADA

Canada's provinces and territories have developed a comprehensive post-secondary education system, with a significant number of independent institutions and the widespread availability of university-level programming across the northern parts of the country. The following list identifies some of the institutions and post-secondary options operating in northern Canada.

Northern Ontario: As described earlier, Northern Ontario has a robust post-secondary system, including a successful set of community colleges and four universities. In addition, the province supports OntarioLearn and eCampusOntario, which provide online and distance education opportunities for students from across the province.

Northern Quebec: Quebec's expansive CEGEP (pre-university and college) and Université de Québec systems has a presence in the North. There are several universities with responsibilities in the middle North, with the Université du Québec à Rimouski the northernmost part of the system.

Yukon: Yukon College maintains campuses in all sizable communities in the territory. The institution brokers programs, primarily professional in nature, from Canadian and US (Alaskan) universities in response to identified territorial need and demand.

British Columbia: The provincial government established the University of Northern British Columbia (UNBC) in response to demand for a sustained and well-coordinated regional campaign. UNBC opened in 1994, and has emerged as one of the country's elite small universities. The university operates in collaboration with four northern community colleges, sharing facilities at the largest campuses, drawing on college faculty, and developing ladder academic programs.

Alberta: Northern Alberta hosts a series of regional colleges, focusing largely on technical and service diploma programming. Athabasca University (AU), Alberta's distance education institution, makes a special effort to serve northern, rural, and Indigenous communities. AU maintains a campus in the town of Athabasca, but does not offer face-to-face programs. The institution's extensive online course and program offerings are matched with an open-access policy to broaden access for northern and rural students.

Manitoba: Manitoba's three southern institutions have long histories of providing university-level programming in the North. The primary institution is the University College of the North, headquartered in Thompson, with a secondary site in The Pas, and twelve community centres. The college offers a full array of technical, diploma, and degree programs, with a primary emphasis on addressing the academic and professional needs of the northern half of the province.

Saskatchewan: There is only one post-secondary institution in northern Saskatchewan, Northlands College. The college, working on the model of Saskatchewan's regional college system, focuses on basic adult upgrading and brokered academic and professional programs, primarily from Saskatchewan universities and SaskPoly. The University of Saskatchewan offers a special graduate program, the Master's of Northern Governance and Development, designed to prepare northern residents for work in the region.

Newfoundland and Labrador: Memorial University of Newfoundland and Labrador provides province-wide services and programming. Of particular significance are the Harris Centre, a community-based research and outreach agency, and the Labrador Centre, located in Happy Valley-Goose Bay and responsible for promoting regionally relevant research and teaching.

In sum, the Canadian North is served by a series of research universities, teaching-focused institutions, and colleges focused on professional training, technical training, and the trades and apprenticeships. Institutions range in size from tiny community centres to research-intensive regional universities. Northern Ontario has one of the most comprehensive post-secondary system in the country, with an array of colleges and universities in the region.

OTHER COUNTRIES

Canada is not, of course, the only country facing the challenge of providing post-secondary education, university programs, and advanced research in its northern or remote regions. It is worth examining a few other examples, if only in brief.

United States: The United States has the largest and most comprehensive post-secondary system in the world, including private and public institutions, colleges, and universities. Alaska, for example, has a comprehensive system that combines college and university programming. The flagship research institution is in Fairbanks, while the largest student body is at the University of Alaska-Anchorage. A series of community centres provide courses and, in some communities, degree programs. Hawaii has a similarly designed system, run by the University of Hawaii, which includes three academic campuses and seven community college campuses, as well as a series of local centres providing access to college and university courses and programs.

Australia: Australia's university system, like Canada's, is largely urban in nature. Smaller centres do, however, have stand-alone universities, such as the University of New England, in Armidale, New South Wales, the distance education university for the country, and Charles Darwin University, in Darwin, Northern Territory. In other communities, there are satellite facilities — such as the University of South Australia campus in Wyalla — specifically designed to meet the needs of their region and of smaller communities and rural areas in general.

Scandinavia: Norway, Sweden, Finland, and Iceland each has an elaborate network of colleges and universities that well serves northern regions, smaller centres, and remote areas. The institutions range from large and successful research universities (Tromsø, Umeå, and Oulu), campuses providing specialized programming for the country as a whole (University of Rovaniemi), and culturally informed institutions such as the Sámi University of Applied Sciences. Scandinavian countries have experimented with distributed institutions (campuses at various communities), the integration of colleges and universities (Tromsø), and research and graduate studies-only institutions (University Centre in Svalbard).

Greenland/Faroe Islands: Remote regions, island societies, and sparsely populated areas have, like Timmins, seen universities as central to economic and social development. Both Greenland and the Faroe Islands have small universities that are not truly sustainable based on student enrolment numbers, but are maintained to provide access to academic programs of professional significance to the region, to support specialized research programs, and to demonstrate, symbolically, the state's commitment to the region.

The main point here is simple: in some northern regions, governments invest heavily in research and teaching; in others, services are minimal and far below those available in southern and urban areas. Overall, Canada's investment in and commitment to post-secondary education in northern settings is focused primarily on community colleges and the trades and technical education. Small and dispersed populations undercut the efficacy of enrolment-based university models. Conversely, institutions based on region-specific research and specialized professional programming have done better. Those areas with large Indigenous populations generally have been served by institutions with a primary focus on basic education, upgrading, and trades and technical education.

As the profiles in Appendix A demonstrate, there is no single model of northern/remote post-secondary education. The characteristics shared by successful northern institutions are:

sustained political support by the regional and/or national government;

a high-profile symbolism attached to the presence of a university in the community or region;

strong community commitment (shown by students' preference for studying locally);

a specific northern/regional mandate that is revealed in program offerings and research centres; and

a business model that is not driven primarily by student enrolment.

Models of University Program Delivery

Although most people understand universities in traditional terms as having a physical facility, a permanent faculty, and face-to-face instruction, the reality is that there are numerous models of university education and research.

The stand-alone university: Communities typically favour the standard, stand-alone, degree-granting university. Such institutions generally have sizable and properly equipped facilities, permanent faculty and staff, student services, a library, laboratories, and a charter from the appropriate level of government. They are autonomous, self-managed institutions.

The access point model: Smaller centres in many jurisdictions have often been served by smaller and more limited campuses, typically only for first- and second-year students. These institutions serve students moving directly from high school or returning to education as a mature learner. Northern College performs this valuable function in the Timmins region.

The satellite campus of an existing university: One way of limiting expenses, particularly on the administrative side, is to establish a satellite campus of an existing university and to restrict program delivery. In some instances, these institutions focus on a small number of degree programs and provide easy pathways to degree completion on the main campus.

Brokered programs/specific program delivery: In many smaller communities and remote regions, there are not enough students to sustain permanent programs. It is increasingly commonplace for institutions, working in partnership, to deliver a time-limited (and often cohort-based) degree program. These are typically in such professional areas as nursing, education, and business.

Multi-institutional program offerings: An innovative model for post-secondary training is the development of multi-institutional programs to serve dispersed populations. The Northern Ontario School of Medicine, a collaboration of Laurentian University and Lakehead University, has been a significant achievement in this regard. Its success lies not just in the training of doctors, but even more in the maintenance of a North-centred, regionally appropriate medical training. The school, despite being in existence only since 2005, has already had a major impact on addressing the shortage of doctors in Northern Ontario.

An innovative model for
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Distance education institution: Governments struggling to meet student demand and provide widespread access have become more supportive of online or distance education institutions and capabilities. They are attracted, in part, by perceived economies of scale and lower costs per student and by the contribution that online systems make to ensuring that university education is truly accessible to all. These systems have challenges, particularly with course and degree completion, but they have made it possible for students in remote communities or living far away from a physical campus to continue their academic studies. The existence of eCampus Ontario, for example, provides learners across Ontario, including in the North, with access to hundreds of courses and dozens of degree programs, with an extensive laddering and transfer credit capability. Online courses and institutions are obviously not constrained by provincial or national boundaries: most of the students at Alberta's Athabasca University are not from the northern part of the province at all, but from Alberta's major cities and, interestingly, from Ontario (accounting for 35 percent of its students).

Laddered programs between colleges/polytechnics and universities: Northern communities and regions that can attract or sustain a separate institution have worked to connect colleges and polytechnics with universities to develop laddered programs. In these instances, students start their academic work at the college level and then, typically in the same facilities, complete their degree at a university. In Timmins, Northern College has a strong track record in facilitating this delivery model.

Northern Ontario: Recent Transitions

Northern Ontario is at an important point in its history. The long-standing natural resources economy is undergoing a major transition. Thousands of forestry-related jobs have disappeared, and forestry-dependent communities have declined in size and economic robustness. The mining sector is doing reasonably well, but as mines reach the end of their life cycle (such as the Kidd Mine near Timmins), communities will experience substantial job and business losses. More subtly, emerging technologies have been chipping away at jobs in the resources and services sectors, although at a pace that is difficult to ascertain with accuracy. The region is much different than in the 1950s and 1960s, when sustained resources development and associated government investments in infrastructure spurred steady and occasionally dramatic growth in the North. This was, after all, the time when Laurentian, Lakehead, and Nipissing universities were created and when the northern college system expanded dramatically. Northern Ontario is, in comparative terms, reasonably wealthy, although most of the Indigenous communities in the region have not shared equitably in the prosperity.

DEMOGRAPHIC PROFILE

As noted earlier, Timmins and region have not kept pace demographically with the rest of Ontario and Canada. Canada's population grew dramatically, from slightly under 22 million people in 1971 to 36.5 million people in 2016. In contrast, the population of Timmins fell by more than four thousand between 1991 and 2011. The Indigenous population in the region, conversely, has continued to grow substantially. Demographically, the argument for a university would not relate to addressing the unmet needs of a growing population, but instead the opportunity to stabilize, expand, and diversify the region economy, thereby contributing to future population growth.

FIRST NATIONS AND MÉTIS

Indigenous peoples have always been culturally and demographically important in the North. The continued empowerment of Indigenous communities through political agreements, court decisions, and efforts at reconciliation have increased their role in the economic, social, and political life of Northern Ontario. Indigenous communities have substantial unmet educational needs, but the primary focus will be on the pre-university level for the next generation or two.

The region's existing universities have exemplary programs designed specifically to serve Indigenous students and communities. The primary educational requirements are at the pre-school, elementary, and secondary level; universities contribute significantly to this effort through the training of early childhood specialists, teachers, social workers, and other professionals.

POLITICAL REALITIES OF ONTARIO'S NORTH

The provincial North, and not just in Ontario, is generally the most politically powerless part of the country. These areas have limited representation — just 10 out of 107 members of the Ontario legislature, and greatly outnumbered by those from the Greater Toronto Area — and regional concerns have only rarely been featured prominently in provincial politics. True, the North is not underrepresented in terms of its population, but the logistical and personal challenges of representing far-flung northern constituencies makes the political life of an elected northern official challenging. It is not surprising, therefore, that northern concerns get relatively limited attention at the provincial level. The challenges of generating support for northern concerns is influenced, as well, by historical voting patterns. In large measure because of the long-term strength of trade unions in the resources and industrial sectors, Northern Ontario has tilted toward the New Democratic Party, which has tended to support regional issues. The

NDP, however, is usually in opposition, and there is acknowledgement that not having a representative in the government caucus carries an unknown price — a well-recognized challenge, one hastens to add, for areas represented by opposition party members. Since a new institution would be competing for students and funding with the three existing northern universities, it is possible that the representatives of the communities in which these universities are located would resist the establishment of a university in Timmins.

To the degree that the current provincial government is focused on the post-secondary system — and the government continues to privilege university expansion and the promotion of college and polytechnic education — Northern Ontario appears to be low on the list of expansion plans. The October 2016 announcement that the provincial Liberal government will support new campuses (with existing universities) in Milton and Brampton, as well as the 2017 announcement of a new campus of York University in Markham, designed to serve the large suburban population of over one million people living in York Region, demonstrate the provincial government's investment emphasis on educational expansion in Southern Ontario — indeed, Barrie, a large and rapidly growing city just an hour's drive north of Toronto, was passed over.

THREATS AND OPPORTUNITIES

Northern Ontario faces a diverse set of opportunities and threats in the coming years. If commodity prices stay high, if environmental questions can be addressed, and if the support and engagement of Indigenous communities can be gained, the resources sector could remain strong and could boost the northern economy. The hotly debated Ring of Fire deposits alone could produce billions of dollars' worth of additional activity. Conversely, the impending closure of the Kidd Mine is a painful reminder for Timmins residents of the cyclical nature of the mining industry. Failure to address any of these three main questions could slow down the northern economic significantly.

Although forestry operations, including pulp and paper, enjoyed long and generally profitable runs, long-term downturns in international markets have undercut a significant segment of the northern economy. Mining is inherently cyclical, due to global price and demand fluctuations and the historically short life cycles of most operations. These patterns are expected to continue, with the general trend toward fewer operations and fewer jobs. In addition, a growing company preference for a fly-in/fly-out labour force, which makes it easier for firms to manage labour force requirements, has reduced the percentage of the workforce based permanently in the North. This, in turn, reduces the local economic impact of resources development and spreads the benefit of employment in resources operations to other parts of the country. Aggressive

tourism promotion has help offset the generally stagnant resources economy, but northern tourist activity historically has been restricted to the three or four months of summer and fall — although the Timmins Economic Development Corporation has been emphasizing winter tourism and other winter-based activities. The North does not yet have a strong alternative economy under development, but Laurentian University and Lakehead University, along with the North's colleges, have been working aggressively on diversification, focusing largely on value-added extensions of the resources sector.

NEW TECHNOLOGIES AND NORTHERN PROSPECTS

On a global scale, forecasts of medium- and long-term economic development focus on the commercialization of science and technology and the expansion of the knowledge economy. In the first instance, technological change, particularly industrial robots and emerging artificial intelligence systems, are rewriting the basic rules of manufacturing, industrial processes, and, more recently, the services sector. The technological transition shows up in such innovations as online banking, self-checkout at supermarkets, computer-controlled sawmills, mining robots, and automated trucking. In the coming years, companies might opt for fully automated mines, operated at a distance from the ore body, and remote diagnosis and medical treatment. Continued innovations in the education sector have the potential to disrupt traditional teaching methods at both the K-12 and post-secondary levels. Many companies and agencies are wrestling with making continued investments in traditional means of doing business versus committing to newer, technology-driven systems. Emerging technologies have brought about major societal and economic shifts — think of iTunes, Netflix, smart phones, online banking, and others — that have disrupted economic activity substantially. Many observers believe that the next quarter-century will see even faster and more sweeping changes, with greater employment and economic dislocations. Turning the technological revolution from a net loss — the current trajectory — to a net gain will require technological vigilance, a willingness to experiment, a highly trained workforce, strong underlying infrastructure (electricity and the Internet, in particular), and readily available investment capital. At present, most northern and remote regions are tied to traditional economies, are risk averse, have infrastructure deficiencies, struggle to attract and retain technological specialists, and have limited investment capital. Unless the North generally and Northeastern Ontario specifically change their orientation toward technological change, they will either avoid a tech bubble (such as the dot-com boom that was based on highly inflated expectations) or miss out on the transition to a robust and creative new economy.

Prospects and Opportunities in Timmins and Northeast Ontario

Universities are expensive and require immediate capital investment and long-term salary and maintenance costs. Canada already has one of the most extensive and comprehensive post-secondary education systems in the world. The case for a new post-secondary institution needs to be brought forward in the social, economic, and political environment of the proposed host community and region. The situation in Northeast Ontario and Timmins is complex and challenging, reflecting the realities of isolation, small population, and a cyclical resources economy. The following represent several of the key characteristics and socio-economic realities facing the region.

DEMOGRAPHIC REALITIES AND POTENTIAL STUDENT DEMAND

The primary and typical justification for the establishment of a new university or satellite campus is unmet student demand for post-secondary study. Timmins and Northeastern Ontario have substantial populations, but are still subject to substantial cyclical swings and considerable uncertainty. The number of high school graduates has been in steady decline, and this trend is likely to continue. First Nations and Métis communities are growing significantly, and a growing number of Indigenous peoples are shifting from isolated and often remote reserves to larger towns and cities. With the high school graduation rates for Indigenous peoples running well below provincial and national averages, it likely will take several generations before post-secondary participation rates of Indigenous peoples approach provincial standards. This means, in short, that unmet demand for university access in the region is well below the Ontario-wide situation.

SKILLS GAPS AND EMPLOYMENT OPPORTUNITIES

The skills and employment gap in Canada has been widely discussed but is poorly understood. Although some industries and sectors are experiencing acute shortages of trained workers, this problem is typically associated with the trades (such as pipefitters and radiation technologists) and specialized professions (particularly in engineering and the health fields). There is no specific shortage of general arts and

science graduates in the North or elsewhere in Canada. Employment opportunities expand and contract in association with the opening and closing of mines, forestry operations, and major construction projects and with the expansion or contraction of government services. In these situations, companies and agencies have addressed shortages by hiring fly-in/fly-out workers or recruiting across the country or internationally. On the trades side, Northern College and other regional colleges capitalize on their close relationship with major employers to connect local students with the workforce. It must be admitted, however, that the nature of the northern economy is such that demand for university graduates is smaller there than in southern and urban districts, but employers in Timmins and elsewhere in the region seem to prefer regional residents, believing that locally raised and hired employees adapt better to local conditions and are likely to stay longer with an employer. In general, there is no large and sustained unmet demand for university graduates in the North beyond the degree to which a well-educated and highly motivated workforce contributes to the general economic well-being of the community or region.

CURRENT UNIVERSITY PROGRAMMING

The second rationale for establishing a new university campus or expanded post-secondary programming is that local residents live too far away from a regular university campus and/or do not have access to a university that offers programs designed to meet local

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employment and professional needs. It is challenging to make this case in Northeast Ontario. Laurentian University's main campus in Sudbury, with an expansive set of programs targeted at Northern Ontario's needs and interests, is a three-and-a-half-hour drive from Timmins. It also has large student residences and extensive outreach throughout the region. Lakehead University, although much farther away from Timmins, also has extensive university programming aimed at northern students and regional employment opportunities. Algoma University, the newest in the region, is expanding its services for Northern Ontario, and Nipissing University has, particularly in education, a well-established reputation for addressing northern and Indigenous needs. Few communities in Canada of more than 40,000 people are without a university within easy driving distance, and university students in Timmins and Northeast Ontario have four universities that are deliberately and systematically seeking to address the region's needs. This means, incidentally, that the addition of another Northern Ontario campus, while likely to expand participation rates in the area, would serve primarily as a local option for students who might otherwise have attended one of the other four institutions in the region.

Recommendations for Timmins and Northeast Ontario

This examination of the prospects for a stand-alone, English-language university in Timmins has considered the standard elements associated with the development of post-secondary programming. Detailed comments are offered on five different alternatives as the city and region contemplate the best means of moving ahead. It is important to state again that this report was commissioned as a non-partisan overview, and was not intended to advocate for any specific outcome or proposal. It is clear that there is support, political and otherwise, for a university in Timmins, although the extent and depth of community enthusiasm is unclear and, at present, inconsistent.

It is not obvious that the level of support is sufficient to overcome the political, financial, and social barriers to the successful launch of a new university in the area, particularly in the short term. Based on this examination, the following recommendations are offered for community consideration.

PROSPECTS FOR A STAND-ALONE UNIVERSITY

The prospects of Timmins securing a stand-alone university are limited. The combination of demographic considerations (not enough potential students), the availability of other institutions with a regionally appropriate program mix, the provincial government's financial realities, and competing demands within Ontario argue against the substantial financial and sustainability risks associated with a new university. In short, Timmins does not, on the basis of the statistical situation and the standard metrics for post-secondary institutions, have a clear or unassailable case for the establishment of a new university. Furthermore, such an institution would have no obvious unique role — save perhaps as one devoted to the education and training of Indigenous people — that would fit well with the profile of Timmins and region. Timmins finds itself in a

situation similar to that of cities in Alberta such as Red Deer, Fort McMurray, and Grande Prairie, all of which have a larger population than Timmins, but none of which has a free-standing university.

PROSPECTS FOR A SATELLITE CAMPUS OF AN EXISTING UNIVERSITY

There is a stronger, but not entirely compelling, case for the establishment of a satellite campus of a current regional institution — likely Laurentian University or Algoma University. Many communities around the world with a smaller population than Timmins host satellite institutions. In Canada, Corner Brook, for example, is half the size of Timmins, and yet has a substantial campus of Memorial University of Newfoundland. Operating as a satellite campus would limit administrative costs and allow for the rapid establishment of a new institution. The problem with this approach, however, is that Northern Ontario already has excess capacity, a diminishing pool of eligible students, and significant sustainability challenges.

A satellite campus in Timmins could take away from enrolments in other regional universities. In a buoyant economy with full provincial coffers, Timmins might be able to make the case for a satellite campus, although its case would fall short of claims by other communities in the province. Timmins would have better prospects if, for example, Ontario had established a multi-campus University of Northern Ontario, with a series of regional centres, rather like the University of Alaska and other multi-campus systems. Such a regional university, constructed from established and well-regarded existing universities, likely would meet with strong resistance, with considerable harm to the vitality of the post-secondary system in the North. (It is worth noting that, in Norway, the creation of a regional university system by expanding the University of Tromsø through mergers with other northern

institutions was not undertaken because of desperate financial circumstances or under compelling external pressures, but it is too early to know the full effect of the Norwegian integration.)

The success of the satellite model rests on the willingness of an existing university to give serious consideration to the opportunity in Timmins, a possibility that Algoma University has examined. The case for a satellite campus — and note that Algoma is less research intensive than is Lakehead or Laurentian — would require considerable development work, the identification of funding for capital projects, and a great deal of collaborative effort. Any proposal for a satellite campus would have to address the standard questions of student interest, program mix, Ontario government support, and community/future employer engagement. That the students attracted to a Timmins campus would come, in substantial measure, from potential recruits for other northern institutions would add to system-wide resistance to the expansion. In these circumstances, and following on the successful models used for Stratford (digital arts), Cambridge (architecture), Sudbury (architecture), and Laurentian and Lakehead (medicine), a Timmins campus would have to position itself as distinctive, important addition to the provincial post-secondary landscape.

PROSPECTS FOR AN EXPANDED, COORDINATED NORTHERN COLLEGE–UNIVERSITY PARTNERSHIP

Northern College services Timmins and region well, including through the provision of a brokered university degree program. Even supporters of the stand-alone campus model have made it clear that no new university should be allowed to harm Northern College. One option is a permanent and more substantial collaboration between Northern College and a single-partner institution or two or more northern institutions to capitalize on the regional program mix. Such a model likely would require a core set of degree programs, built upon existing and additional Northern College courses (primarily first-year university transfer classes) and a rotating set of degree completion opportunities designed to respond to specific workplace requirements in the region. This approach likely would find support in Timmins and region, particularly among those already impressed with the responsiveness and local focus of Northern College. The partnership model would not satisfy those who want to see a substantial facility with its attending faculty and staff; moreover, the net economic impact would be small, though not insignificant. A Northern College–university collaboration also would draw primarily from adult learners, and would not provide a substantial option for recent high school graduates seeking to pursue a university degree, save for those already continuing their studies at Northern College.

THE FULL CASE FOR A UNIVERSITY IN TIMMINS

A new, stand-alone, English-language university for Timmins is unlikely in the short term. Moreover, the attempt make the full case for one would take a year or more and could cost a great deal of money — the comparable campaign undertaken for the University of Northern British Columbia in the 1980s cost over \$1 million, in a situation that offered a more compelling case. Such an investigation would require, among other things, the following:

a detailed analysis of the demography of Northeast Ontario and surveys that examine student interest in post-secondary education, student preferences relating to university choice, program choice, and parental expectations concerning the value and attractiveness of a northern university relative to existing university options;

an expensive, community-based evaluation of the post-secondary educational needs of First Nations in Northeast Ontario and Indigenous community support for a regionally focused institution;

the development of an academic plan that responds to student interests, employers' needs, contemporary currents in curriculum design, an instructional plan, and a staffing plan for the faculty and staff needed to deliver and support the degree offerings;

a comprehensive evaluation of the cost of designing, building, and maintaining a university or satellite campus, focusing on the establishment and initial operation of the physical plant;

formal indications of support from the City of Timmins and from each of the towns and First Nations in Northeast Ontario — and, consistent with recent developments in Ontario and elsewhere, direct contributions from the city, likely in the form of land and/or a significant amount of money;

a Memorandum of Understanding with Northern College that outlines the institutions' relative roles and describes the programmatic and service relationships between the college and the proposed university or campus;

a Memorandum of Understanding with each of the four northern universities that outlines the academic, curriculum, and service relationships among the four and one proposed institution;

a Memorandum of Understanding with eCampusOntario that describes the manner in which the programs and courses available through the provincial online education system would be integrated into the operations of the Timmins university or campus;

a comprehensive evaluation of the economic impact of a new and comparatively small university;

a survey of major regional employers and philanthropists to ascertain their willingness to commit money to support the foundations of the university, including capital contributions and funding for scholarships and bursaries; and

an extended outreach initiative with regional citizens and organizations to develop widespread support for, and understanding of, the proposed university and to secure their support for a political campaign in aid of the initiative.

What is required, in other words, is evidence to demonstrate widespread community support, buy-in from business, industry, and local government, and a fully costed business plan that would produce, in a reasonable time, a financially sustainable institution. The City of Timmins and other supporters would have to address, up front and in convincing fashion, all of the major concerns that the Ontario government and the public at large might have about a university or campus in Timmins. The city leaders cannot assume that others share their basic enthusiasm for a Timmins-based university, and should recognize that potential stakeholders would have numerous questions about the

appropriateness and business case for another university campus in a region with a declining population. Overcoming anticipated resistance, however, would take both a compelling case and a comprehensive political movement designed to demonstrate to the Ontario government that a new university is the highest and most compelling priority for Northeast Ontario. This project, if undertaken, should be done with the understanding that other communities are aggressively lobbying for government support for a new university or campus and that the success of any Timmins initiative would be far from assured.

AN ALTERNATIVE TO TRADITIONAL UNIVERSITY PROGRAMMING

Another option, again not assured of success, would be to approach the Ontario government with a proposal for a new university that would add something significant and important to the provincial post-secondary system. Consider one of two alternatives, neither of which has been explored or developed in full.

An Indigenous Institution for Ontario?

Ontario has several Indigenous institutes, and existing colleges and universities have taken significant steps in recent years to meet the needs of Indigenous peoples and governments. Several post-secondary institutions — Trent, Laurentian, Nipissing, and Lakehead among them — have long-established and impressive programs and services designed to meet the pressing and unique educational needs of Ontario's 300,000 First Nations and Métis peoples. In Saskatchewan, the revitalization of the First Nations University of Canada, based in Regina, demonstrates the unique contribution that an Indigenous-controlled institution can make to the post-secondary education system. It is possible that Ontario would respond favourably to an Indigenous-led and widely supported proposal for a university built on Indigenous principles, pedagogy, and programs. Such an institution, however, would have to draw students away from existing universities, and might undermine the financial viability of universities that have already made a strong commitment to meeting the needs of Indigenous peoples. It would be important to determine — and here the experience of First Nations University of Canada would be instructive — if Indigenous students would automatically transfer their attention from public institutions to one built specifically for them and their communities. The success of such an initiative would, properly, depend on the level of support from Indigenous communities and from both the federal and Ontario governments.

A Work-Focused Institution for Ontario?

Ontario's existing universities follow a standard model, with relatively small variations. Sixty years ago, the newly created University of Waterloo introduced a controversial innovation: cooperative education. In the employment and career-obsessed environment

of the early twenty-first century, students, parents, employers, and government are increasingly concerned about the transition from university to the workforce. Universities have responded to this concern by introducing cooperative education programs, adding paid and unpaid internships, and introducing numerous experiential learning opportunities. These approaches, which have had considerable success for participating students, have become increasingly standard across Ontario. They also privilege the educational aspects of career preparation, for good and logical reasons. Moreover, the federal and Ontario governments are clearly open to innovations in instructional design and preparation for the workforce. The recent report of the Advisory Council on Economic Growth (2017), for example, and the federal government's March 2017 budget (Canada 2017) make it clear that innovations in skills, training, and employment will require extensive changes to formal education systems.

One possibility that might attract more government attention is a small, specialized institution with strong connections to the region and local employers that flips the standard approach to a university education. The standard approach to cooperative education has students go to school, for a semester or a full degree, and then make the transition to the workforce. An alternative approach would be to place students with an employer after high school or after being admitted to the university. This model, adopted with considerable success in France, where it is called alternating education, shifts the focus of post-secondary education away from general education and toward workplace preparation. Students could work on a continuing basis while studying in a combination of online and face-to-face courses — the latter in the evenings, on weekends, or on vacation breaks. Over a five- or six-year period, students would complete a full degree program while working steadily, gaining valuable workplace experience, and earning a significant and increasing income.

Such an approach would require considerable and sustained support from local employers, who would have to hire and pay for the students-in-training, but the model potentially would work well in a rural, remote, northern region where companies and government agencies put a premium on hiring people with local knowledge and where employee retention is a major concern. Placing a high priority on workplace experience and building academic programs and structures around the needs of the regional economy would represent an alternative to traditional university systems. Given the Ontario government's evident desire to produce career-ready graduates, and given the unique economic and workplace situation in Northeast Ontario, it is possible that the province would be open to a such significant experiment in post-secondary education.

OTHER OPTIONS

The two examples presented here — an Indigenous-run institution and a work-focused university — represent different approaches to the development of university options in Ontario and Canada. Neither has been developed to a significant extent, and their feasibility has not been investigated. Other alternatives, however, also exist, ranging from institutions based on advanced communication and visualization technologies to education and training programs rooted in digital gamification to institutions and advanced distance-delivered systems — for example, Minerva University in the United States moves students around the world on a semester-by-semester basis. The point here is not to privilege a particular model of approach, but rather to show that Timmins could attract the attention of the Ontario government more by offering a new and visionary approach to advanced education than through a minor modification of existing models and practices. If Timmins wished to attract provincial interest for a campaign for a new university of satellite campus, a request for a traditional campus unlikely would win the day. The presentation of a radical new model, particularly if focused on workforce preparation and/or specialized preparation for the new economy, might gain provincial support.

The Prospects for a University Presence in Timmins

A recent report, *University Sustainability: Signal Data* (Weingarten et al. 2017), undertaken for the Higher Education Quality Council of Ontario, provides strong evidence that challenges the case for an English-language university in Timmins. In this review of the sustainability of universities, defined by current fiscal well-being and current and projected enrolments and financial circumstances, the report concludes that the four northern institutions — Algoma, Lakehead, Laurentian, and Nipissing — suffer from stagnant or declining enrolment and face severe sustainability challenges, particularly with anticipated regional

population decline. Even a cursory glance at Tables 8 and 9 and Figures 3 and 4 show the gap between provincial norms and northern post-secondary realities. This, in turn, creates substantial financial challenges that weaken the viability of many non-metropolitan institutions in Ontario and across the country. Put simply, urban institutions attract students from the cities and many from smaller towns and rural areas. The Ontario government has explored different funding models for universities, but has balked when faced with the realization that standardized systems work against the interests of the northern universities.

Standardized systems
work against
the interests of the northern universities...

Table 8: Full-Time-Equivalent Enrolments and Trends, Ontario Universities, academic years 2005-06 to 2015-16

	FTE ENROLMENTS				% CHANGE IN ENROLMENT		
	2005-06	2010-11	2012-13	2015-16	10 Years	5 Years	3 Years
Algoma	818	1,028	1,342	1,323	62%*	29%	-1%
Brock	14,156	15,693	16,574	16,801	19%	7%	1%
Carleton	20,540	22,497	24,161	26,044	27%	16%	8%
Guelph	19,379	24,725	25,948	26,909	39%	9%	4%
Lakehead	7,148	8,193	8,392	7,800	9%	-5%	-7%
Laurentian	7,062	8,062	8,073	8,041	14%	0%	0%
McMaster	22,798	26,543	27,518	27,872	22%	5%	1%
Nipissing	5,181	5,344	5,188	4,376	-16%	-18%	-16%
OCADU	2,866	3,614	4,117	4,022	40%	11%	-2%
Ottawa	27,881	34,961	37,227	37,733	35%	8%	1%
UOIT	2,880	6,761	8,164	8,649	200%*	28%	6%
Queen's	19,743	22,481	23,049	25,582	30%	14%	11%
Ryerson	23,596	28,560	30,664	36,252	54%	27%	18%
Toronto	64,831	72,882	76,954	83,368	29%	14%	8%
Trent	7,474	7,344	7,609	7,753	4%	6%	2%
Waterloo	24,102	31,387	33,555	35,568	48%	13%	6%
Western	32,743	34,995	36,203	36,901	13%	5%	2%
Laurier	12,453	15,874	17,246	17,468	40%	10%	1%
Windsor	15,215	14,675	15,083	14,736	-3%	0%	-2%
York	41,783	47,948	48,817	46,577	11%	-3%	-5%

*Ten-year trends capture start-up growth curves at two institutions:
UOIT opened in September 2003; Algoma became a stand-alone university in 2008.

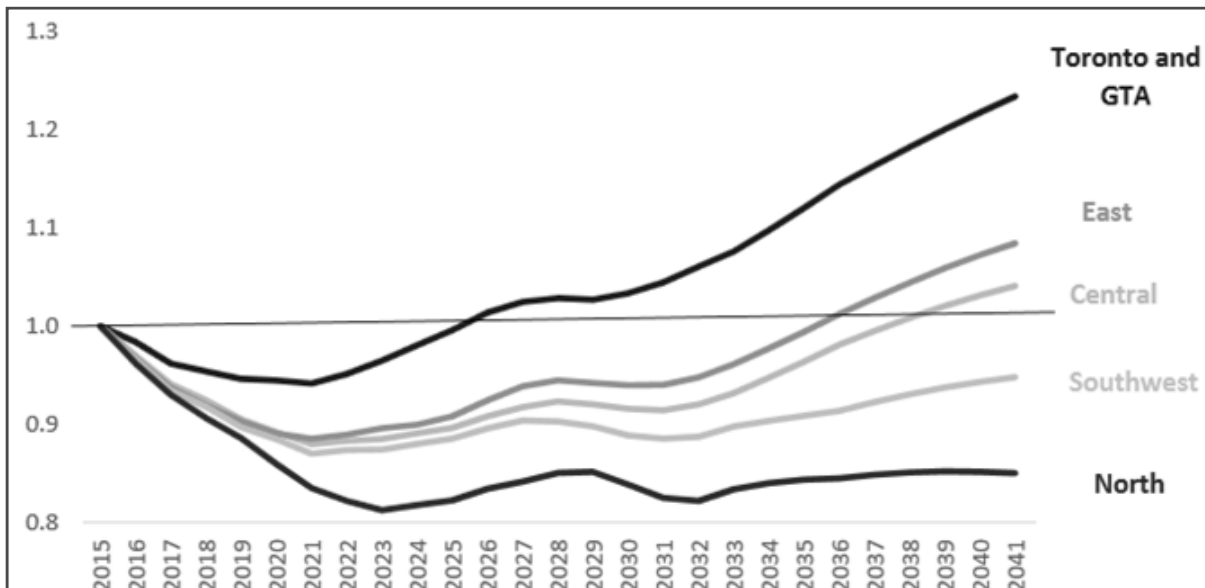
Source: <http://www.heqco.ca/SiteCollectionDocuments/University%20Sustainability%20FINAL.pdf> (p.7). MAESD. FTE enrolments includes all students – full-time and part-time, eligible and ineligible, degree and certificate. Undergraduate FTEs are for all terms and graduate FTEs are for fall and summer term.

Table 9: Signals of Enrolment Demand, Financial Sustainability, and Expenditure Challenges, Ontario Universities

	5 YEAR % CHANGE IN ENROLMENT	PROJECTED DEMOGRAPHIC CHANGE TO 2033	DEMAND		FINANCIAL HEALTH INDICATORS (out of 5)		% FACULTY OVER 65
			A:R RATIO	ENTERING MARKS > 75%	# ABOVE SYSTEM AVERAGE	# IMPROVED OVER 4 YEARS	
Algoma	29%	-11%	5:1	72%	1	1	n/a
Brock	7%	-1%	6:1	83%	2	5	11%
Carleton	16%	-2%	6:1	87%	5	5	10%
Guelph	9%	1%	7:1	99%	5	5	6%
Lakehead	-5%	-8%	5:1	73%	1	4	9%
Laurentian	0%	-9%	5:1	83%	1	4	11%
McMaster	5%	2%	8:1	100%	5	5	11%
Nipissing	-18%	-6%	6:1	84%	0	1	6%
OCADU	11%	5%	3:1	85%	0	4	1%
Ottawa	8%	-3%	7:1	95%	5	3	10%
UOIT	28%	6%	6:1	76%	2	5	4%
Queen's	14%	2%	7:1	100%	5	5	11%
Ryerson	27%	6%	8:1	95%	3	1	11%
Toronto	14%	5%	6:1	98%	5	5	11%
Trent	6%	0%	6:1	77%	1	4	7%
Waterloo	13%	1%	6:1	100%	5	3	5%
Western	5%	-1%	8:1	100%	5	4	9%
Laurier	10%	1%	7:1	88%	0	2	9%
Windsor	0%	-7%	5:1	83%	0	4	13%
York	-3%	7%	6:1	88%	1	5	16%

Source: <http://www.heqco.ca/SiteCollectionDocuments/University%20Sustainability%20FINAL.pdf> (p.23).

Figure 3: Population Projections, 18-20-Year-Olds, Ontario Regions, 2015-41



Source: Weingarten et al. 2017, figure 2.

Table 4: High School Graduation Rates, Ontario, 2015

SCHOOL BOARD	FOUR-YEAR GRADUATION RATE (percent)	FIVE-YEAR GRADUATION RATE (percent)
Conseil scolaire de district du Nord-Est de l'Ontario	78.40	82.40
Conseil scolaire catholique de district des Grandes Rivières	87.60	91.20
District School Board Ontario North East	46.10	65.50
Northeastern Catholic District School Board	62.70	70.30
Provincial graduation rate	78.30	85.50

Source: Ontario, Ministry of Education, as reported on the Onsis system.

There is compelling evidence that all four of the northern universities face significant sustainability challenges. Given that a new northern institution, almost inevitably, would take students, resources, and community support away from one or more of the northern universities, it is highly unlikely that the Ontario government would accede to further investments in northern post-secondary education that might weaken another campus or the regional system as whole. To the degree that post-secondary educational investments

are evidence-based, there is mounting evidence that Northern Ontario has sufficient post-secondary capacity at present, even if a substantial city like Timmins is currently left out of the system.

To be clear, Timmins is right to give serious consideration to the idea of a free-standing institution or a satellite campus — most communities of comparable size in Canada have a significant university presence. It would be wrong for the city simply to surrender to the

southern and urban view that the northern part of the province is suitably served. Universities do contribute to local economic development through capital investments, faculty, and staff hiring, and from subsidiary benefits from conferences, research projects, and other spending related to the academic enterprise. A local institution would improve access to post-secondary education for local and regional students and, with the right program mix, help communities and employers find workers attuned to Northern Ontario realities. Universities also bring other benefits, including enhanced cultural programming, improved local recreational facilities, and a boost in local stature. Communities with a smaller population than Timmins host public universities, although this pattern is not as widespread in Canada as in the United States. These universities have operated for decades, and draw on students from across the country. Conversely, not many cities the size of Timmins are as far away from a free-standing university. In a time when post-secondary education is held out as central to personal and community economic well-being, communities such as Timmins understandably feel aggrieved by the absence of a government-funded university close at hand.

The effort to secure a stand-alone, English-language university for Timmins and the surrounding area is at a preliminary stage. The Timmins Economic Development Corporation requested this study to provide context for the community's examination of the prospects — political, financial, social, and economic — for the creation of a regional institution. As the analysis provided here suggests, however, the immediate prospects are not promising. The political, enrolment, workforce, and other arguments for a Timmins-based institution do not align well with provincial fiscal realities and priorities or with Ontario's post-secondary needs. Without a comprehensive, multiyear evaluation and campaign, the effort to promote Timmins as a site for university expansion is not likely to succeed. Even with such an effort, there is no assurance a campaign will be successful. In the fast-moving effort at post-secondary reform, limits on government funding, workplace transformation, and the changing environment of skills and training, the prospects for continued expansion of traditional university educational institutions are limited, at best. Given that the standard metrics underlying university expansion work against the Timmins case — and might look even less compelling in the coming years — the City of Timmins and its regional allies will have to decide if they are willing to work against compelling barriers and struggle against prevailing assumptions and expectations in order to win the local and provincial support required.

A final word is in order. Globally, a series of northern universities has opened in the past half-century or so, but only a few of them were based on the standard justifications of unmet demand and potential enrolment. The vast majority of these universities — including such now substantial institutions as the University of Tromsø and the University of Alaska Fairbanks — were established for largely symbolic purposes, with governments believing that a research and teaching institution could underpin community and regional development. This model has not been developed as extensively in Canada, which is why the Canadian Arctic and northern Canada generally do not have a substantial university presence. The major exception, importantly, is Northern Ontario, where the provincial government has established and sustained a significant and regionally successful university system. The success of the University of Northern British Columbia, which was created over government resistance, demonstrates that such investments can and often do bring substantial benefits.

The best opportunity for the establishment of a university in Timmins would not be one driven by potential enrolment and unmet student demand, important as these would be to the community, students, and their families, but rather as a symbolic commitment to the future of an important part of the province. The additional challenge in Northern Ontario is that the provincial government has already responded to the needs of the North through major investments in Thunder Bay, Sudbury, Sault St. Marie, and North Bay. It is nonetheless the case that, although the North has been quite well served in general, the advanced education and research needs of Timmins and area have not been addressed directly. Convincing the Ontario government to adopt a different foundation for university development in Timmins will be challenging. The government has a strong skills and training agenda and an accessibility commitment that drives investments in post-secondary education, so changing its approach on university creation would require Timmins and region to develop a compelling and carefully constructed case. Such a case would have to be tied to Ontario's strategies for twenty-first-century competitiveness, backed by strong community and industry support and engagement, substantial regional resources, and a clearly identified mission that held the promise of a sustained and effective institution that could fuel regional development and long-term prosperity.

Final Thoughts: An Algoma University Satellite Campus in Timmins?

While this review was under way, Algoma University and the City of Timmins began preliminary discussions about the possibility of developing a satellite campus in collaboration with Northern College. This initiative is among the more favourable options available to Timmins and region, as described above. Early discussions have been positive and encouraging, but both sides clearly understand that a great deal more work is required to bring this initiative to fruition.

As the potential partners, and other stakeholders, consider this possibility in detail, they will have to take several key considerations into account.

1. Any post-secondary initiative in Northern Ontario could have an impact on other regional universities. The partners thus should reach out to key institutions, particularly Laurentian University, to understand their perspective and the potential ramifications of an Algoma University satellite campus.
2. The partners should meet with Ontario government officials, as a matter of priority, to outline their plans and ideas and to determine the level of government engagement and support.
3. The partnership with Northern College, as both Algoma and the City of Timmins have made clear, is pivotal to the success of a satellite campus. Preparing a Memorandum of Understanding between Algoma, Timmins, and Northern College would be an important early step in this process.
4. Given provincial fiscal realities, it is unlikely that the Ontario government would be a "first mover" in terms of support for the capital requirements for this project. It is important, therefore, that the City of Timmins and its partners outline the financial commitment they are prepared to make for a satellite campus.

5. Although contributions from the City of Timmins and others to cover the capital costs would be crucial, ongoing financial support for the campus would also be vital. This could come in the form of scholarship funding, summer jobs for students, coordinated approaches to the hiring of graduates of the Timmins campus, support for experiential work opportunities for students, and funding for research focused on Northeast Ontario.

6. Although the opening of a local campus in Timmins would generate some incremental student demand, it is not clear that the local and regional population could sustain a satellite operation over the coming decades, particularly given the changes occurring across Canada and internationally in post-secondary education. An Algoma satellite campus likely would not succeed by replicating program models offered at all other Ontario campuses; thus, program innovation, based on a review of employment possibilities and regional interest, should be a critical part of any Algoma–Northern College evaluation.

7. Building a campus is no assurance that student enrolment would sustain a satellite campus over the longer term. In this context, the partners have several options in determining how to proceed. One option would be to expand Algoma–Northern College academic partnerships slowly, adding carefully selected (and market-tested) degree programs to determine and build student interest in a Timmins campus. Such a slow approach, however, likely would not meet community expectations or generate sufficient student enthusiasm for a satellite operation. A second option would be to develop an expanded online and video-conference presence for Algoma University in Timmins. This approach would allow for an expansion of course and degree offerings while limiting program delivery costs, and could serve as both a transitional enterprise and an opportunity to

test program offerings, but it likely would have a limited impact on full-time enrolment. A third option would be to launch a substantial and coordinated Algoma–Northern College partnership, offering a limited but significant set of degree offerings and drawing substantially on Northern College courses as appropriate. If the goal is a long-term, sustainable cohort of students — and that is clearly the shared objective — the program offerings should be tied to regional job opportunities and levels of preparation of high school graduates, and, potentially, be unique within Ontario, and therefore possibly attract students from outside the region and internationally.

8. All partners in a potential Algoma–Northern College partnership would want to know if there is substantial and sustained demand for a regional campus. The partners should complete a comprehensive review that included, among other topics, the following elements:

- interest among area students (senior high school, college, and university students from the region) in attending a Timmins campus of Algoma University;
- support among employers in Northeastern Ontario for the graduates of a Timmins-based campus, and an analysis of forecast employment market needs and an indication of employers' willingness to hire Timmins campus students in summer positions and post-graduation; and
- support among Indigenous communities in Northeast Ontario, with a specific emphasis on programs that would serve both the students and the communities.

It is clear that Algoma University and the City of Timmins have thought about these topics and many others would have to be addressed before a satellite campus could be developed, and listing them here is not intended to direct or limit their careful and considered work. Instead, outlining the challenges that lie ahead is designed to indicate to community members and supporters of the Timmins campus that a great deal of work remains to be done before a physical building and expanded programming could become a reality. As well, the questions outlined in this study are meant to indicate that the desire for a satellite campus is not sufficient in itself to produce a new post-secondary institution. The issues before campus proponents are significant, and require detailed attention if the idea of a Timmins campus is to be pursued.

The City of Timmins should be pleased that its exploration of the potential for a university campus has attracted the attention of Algoma University, although the university's interest is preliminary at this stage and much work remains to be done by all sides to determine the viability a Timmins satellite facility. The Northern Ontario

post-secondary system faces many challenges and serious demographic issues; that said, there remains room for innovative, creative, and community-focused solutions to university programming and delivery.

There remains room for
**innovative, creative, and
community-focused solutions**
to university programming and delivery.

Northern Ontario needs skilled, trained, adaptable people who understand the complexities of human societies, and there remain substantial requirements for basic education and critical thinking. Within this environment, it is clear that the City of Timmins, Northern College, and Algoma University have a unique opportunity to develop a post-secondary collaboration that would be of substantial importance to Timmins and Northeastern Ontario.

Author's Note

The post-secondary environment in Ontario, across Canada and internationally remains extremely volatile. In the United States, the administration of President Donald Trump appears to be reducing the oversight of private institutions while the country wrestles with major questions about free speech and social commentary on campuses. The United Kingdom is engaged in serious debate about Vice-Chancellor salaries and tuition fees, along with facing the anticipated disturbances associated with the possible withdrawal from the European Union. Internationally, the debates range from experiments with free tuition to expanding polytech-style education, greater attention to retention rates and post-graduation career experiences, and the balance between traditional academic disciplines and applied and professional studies. Add to these ongoing discussion about the "return on investment" to individual students and the economic benefits for host communities and regions and one realizes why colleges and universities still hold the public's attention.

In this context, the August 2017 announcement by the Government of Ontario that they were considering adding a French language university to the stock of Anglophone and bilingual (English-French) institutions in the province caught many observers, including me, by surprise. As Ontario's Francophone Affairs Minister, Marie-France Lalonde said, "This is strongly reaffirmed today with the government's intent to provide high-quality postsecondary education to francophone students. The creation of a new French-language university, governed by and for francophones, is a critical milestone for Franco-Ontarians and future generations." With some universities in Ontario struggling to fill their classrooms, considerable capacity in French language institutions in Quebec and New Brunswick, the existence of York University's Glendon College, and significant questions about student interest in an Toronto-based Francophone university, the Government of Ontario's commitment seemed a tad curious.

Interestingly, the debate has focused largely on the attractiveness of such an institution to Francophone students; recent experience in Quebec suggests that Anglophone students might be interested in the additional option as well. As Rene Bruemmer of the Montreal Gazette reported in August 2017, there is "a growing cohort of English students in the province who are opting to attend francophone universities in order to improve their French, study in the field of their choice and maximize their chances of finding work and staying in the province. They are being enticed as well by French universities that are actively recruiting English students to bolster their numbers and improve their diversity in a global marketplace where fluency in multiple languages is seen as a commodity." There is a strong flow in the opposite direction. More than 20% of the Quebec students at McGill and Concordia are Francophones.

The prospects for the new institution are, to say the least, intriguing. The debate about the value and significance of a French language institution will be joined by many others in the coming months, particularly as lobbying about the location of the Francophone university intensifies. For the purposes of the study of the feasibility of a university of Timmins, the Government's announcement provides a reminder of the inherently political nature of post-secondary educational investments and the possibility of decisions that are not driven by identified student demand, concerns about regional economic impact or proven employer's interest. The push to serve under-resourced regions and populations, after all, contributed greatly to the growth of the northern post-secondary system over the past forty years. It is possible that this might happen in the future for a university for Timmins.

In the short to medium-term, the Government's commitment to expanding university capacity at two new Greater Toronto Area campuses, to which the Francophone institution is now added, will attract much of the province's attention and incremental funding. As this report notes, getting the attention of the Government of Ontario for an English language university in Timmins will be a real challenge. While the announcements over the past two years of incremental capacity in the GTA takes some if not much of the wind of the sails of the North-East Ontario university advocates, the community and region can take heart from the Government's obvious openness to specific interest institutions, as in the case of the Francophone university. Timmins supporters might well make effective use of the coming years to refine the case for the Northeast Ontario institution based on special student markets or unique programming that could attract the attention of the Government of Ontario.



Appendix A: Profiles of Northern Institutions

The following brief descriptions of leading northern institutions in Canada and elsewhere illustrate the strategies and circumstances that led to the expansion of post-secondary systems in remote regions.

NORTHERN INSTITUTIONS IN CANADA

University of Northern British Columbia

Prince George, the self-proclaimed "Capital of Northern British Columbia," had its eyes on a university beginning in the 1960s, when land was set aside for an institution. The provincial government had different ideas, however, and established four community colleges throughout the region, with satellite campuses in several dozen small cities and towns. The idea resurfaced in the 1980s, when local boosters pressed the BC government for a free-standing institution, establishing the Interior University Society and finding a solid supporter in the local member of the provincial legislature, who secured a sizable contribution from the government to investigate the idea. Regional enthusiasts kept the pressure up, attracting over 15,000 signatures on a petition calling for a university for the North. The minister of advanced education, Stan Hagen, ironically aided the process by publicly ridiculing the need for an institution in the region. The provincial government established an Interim Governing Council, and work began on the legal creation of the University of Northern British Columbia (UNBC). Geoffrey Weller, formerly vice-president (academic) at Lakehead University and a specialist in northern politics, was named the first president.

The BC government provided funding for the construction of an impressive campus, and gave the university both a generous start-up budget and on ongoing per student allocation that was substantially higher than the provincial norm, reflecting the challenges of operating in the vast northern half of the province. UNBC has a mandate to deliver academic programs and conduct research in communities

across the North, with instructions to provide services in cooperation with the province's four northern colleges.

Queen Elizabeth II came for the official opening of UNBC in August 1994, and the main campus in Prince George held its first classes the following month. When the university opened competitions for the first forty faculty positions, it attracted over four thousand applicants. UNBC attracted close to 1,200 individual students in its first full year of operations, close to double the number expected by the BC government. By 2014, UNBC had more than 4,000 undergraduate and graduate students. Even more significantly, the university was ranked by Maclean's magazine as the best small university in Canada.

University College of the North (Manitoba)

Northern Manitoba is a large, resource-development-dependent region, with a substantial Indigenous population and dozens of small and isolated communities. It is also, with Northern Saskatchewan, one of the poorest parts of Canada. The mining centre of Thompson, population around 14,000, is the largest community in the northern part of the province; The Pas, a historic mining town, has fewer than 6,000 people. Post-secondary education initially was provided through the Northern Manitoba Vocational Centre, later Keewatin Community College. Southern Manitoba universities delivered a variety of distance education and online courses, the most prominent and long-lasting of which was Brandon University's Northern Teacher Education Program.

With growing pressure to train more people for northern employment and provide greater opportunities for

northerners, particularly Indigenous people, the Manitoba government opted to convert Keewatin Community College to University College of the North in 2004. The University College has close to 1,800 students at its two campuses (Thompson and The Pas) and a series of regional facilities. The institution is best known for its North-focused programming and its relationships with Indigenous governments. Most of its programming is at the adult upgrading, trades, and diploma levels, although it also offers degrees in the arts, business, and community development, among others, as well as a series of northern and Indigenous studies diplomas. Students often complete one or two years at University College of the North before continuing their studies at other institutions.

University College of the North has limited research capacity and degree completion offerings, but it has made major contributions in adult upgrading and career-focused training, and has done excellent work responding to the educational needs of the Indigenous population. The college operates, however, in an expensive setting, and faces significant challenges of distance, extreme weather, a weak regional high school system, and endemic poverty in many smaller communities.

Yukon College

Canada is the only circumpolar nation that does not have a university in the Arctic — defined, for Canada, as including Yukon, the Northwest Territories, and Nunavut. Yukon has a small population (about 34,000 people) spread across a large territory. Approximately 75 percent of the territory's population is in Whitehorse, the capital city. It does not have a free-standing university at present, although the recently elected Liberal federal government has recommitted the territory to the development of a new institution. No firm date has been identified for the transition from Yukon College, the territory's only post-secondary institution, to a degree-granting university.

The as-yet-unnamed university will build on the impressive foundation developed by Yukon College. Whitehorse developed a Vocational and Technical Training Centre in 1963, securing community college status twenty years later. The college maintains learning centres in eleven Yukon communities, focusing primarily on adult basic education and trades and technical programs. The University of British Columbia (UBC) began offering university transfer courses in the 1980s, with control of these classes later transferring to Yukon College. Other academic and professional degree programs, such as education and public administration,



are offered in partnership with UBC, the University of Regina, the University of Alberta, and the University of Alaska.

Yukon College has been innovative in responding to regional needs. It was an early and active member of the University of the Arctic, a consortium of circumpolar and allied institutions, and has undertaken extensive North-centred research through the Cold Climate Innovation Centre and the Northern Research Institute. It is well regarded for its extensive educational, training, and support programs for First Nations people, with numerous collaborations and partnerships with Yukon First Nations.

INTERNATIONAL NORTHERN INSTITUTIONS

University of Alaska Fairbanks (United States)

The United States has a long-standing tradition of establishing land-grant public universities in newly settled areas. The University of Alaska was formally established in 1917 in the small and isolated mining town of Fairbanks, located in the centre of the then Alaska Territory, and opened for classes in 1922. The federal government provided the initial resources for the new institution, primarily in the form of a grant of land, which was to be sold to pay for the establishment

of the university. The institution started operations as the Alaska Agricultural College and School of Mines, changing its name to the University of Alaska eighteen years later. The university continued to expand, focusing largely on natural resources, geophysical sciences, and professional training targeted at the Alaska work environment. The university maintained an active research program, benefiting from substantial funding from the US government and strong territorial support, and made major and sustained contributions to the territory's development. The federal government's interest continued even after Alaska was granted statehood in 1959, in significant measure because of Alaska's prominent role as a northern outpost during the Cold War and as a staging area during the Vietnam War.

The University of Alaska Fairbanks became the flagship of the University of Alaska statewide system in 1975, and maintains a reputation as one of the circumpolar world's elite institutions. Its graduate programs are among the largest North-focused offerings, with prominent roles in space science, regional development, Indigenous studies, northern education, and resource development. The University of Alaska Fairbanks has over ten thousand students, and is the most prominent unit in the thirty-five-thousand-student University of Alaska system, which



incorporates university sites and colleges. The university is widely credited with supporting the state's postwar economic prosperity and with providing a large cohort of northern training specialists to support regional business and government operations.

Alaska Pacific University (United States)

University systems across the North are almost exclusively publicly funded, primarily because the circumpolar countries favour such institutions and, in the case of Alaska, because of the small population. Alaska Pacific University (initially Alaska Methodist University) was established in Anchorage, the largest city in the state, in 1959. The university, which has fewer than 750 students, shifted to a more secular approach to post-secondary education in the 1970s, largely in an attempt to broaden its recruiting base. The university operates in the classic model of the US liberal arts college, offering an alternative educational pathway, albeit with tuition fees of more than \$20,000 per year. Small, private institutions are commonplace across the United States, but they have not taken firm root in Alaska. Sheldon Jackson College, founded in 1878 and located in the isolated community of Sitka, closed in 2007 due to low enrolment and the attending financial challenges.

University of Tromsø (Norway)

The University of Tromsø-The Arctic University of Norway is one of the top-ranked institutions in the circumpolar world. It was established in 1968, and opened for classes four years later. The controversial decision of the Norwegian government to base the country's second medicine school in Tromsø, hundreds of miles north of the major population centres, gave the institution instant credibility. More important, the medical school has attracted hundreds of southern students to the campus over the years, with many staying after graduation to provide professional services for the previously ill-served northland.

The Norwegian government has made major post-secondary investments across the Far North, even though the region has a comparatively small and widely dispersed population. Over the past decade, the government decided to centralize northern institutions under the control of the University of Tromsø. In short order, the university merged with Tromsø University College, Finnmark University College, Narvik University College, and Harstad University College. It has significant research centres across the North and maintains an impressive Arctic marine research program. The University of Tromsø built its academic programs on the strengths and needs of the region, with leading research and teaching programs in polar science, oil and gas science, Sámi and Indigenous studies, and the preparation of professionals for Arctic work. The main campus of the university has contributed substantially to the development of Tromsø and Troms County, one of the most prosperous and compelling areas in the Arctic.

Its first-rate research programs attract large amounts of funding. The city, which now calls itself "the capital of the Arctic," and the university host the annual Arctic Frontiers conference, which hosts over one thousand of the world's leading scientists, researchers, and government officials.

Nord University (Norway)

Northern post-secondary educational opportunities expanded greatly in the 1960s through the 1980s by a combination of new universities, community colleges, and trade schools. Over the past decade, there has been considerable consolidation in the search for administrative efficiencies and the attempt, in many jurisdictions, to facilitate connections between adult basic education, trades, core university programs, and professional training. The result has been considerable reorganization of institutions, often resulting in considerable political debate. In Norway, there was some support for bringing all northern institutions under the supervision of the University of Tromsø, a proposition that was not greeted with enthusiasm by the University of Nordland.

The Norwegian government created Nord University in 2015, bringing the University of Nordland, Nesna University College, and Nord-Trøndelag University College into a single institution. Nord University is based in Bodø, a coastal city of about fifty thousand people. The institution has prioritized the development of a circumpolar presence, particularly through the annual High North Dialogue, and is best known internationally for its business programs and research.

Sámi University College (Norway)

The education and training of Indigenous peoples has emerged as a top government and northern priority. Advanced education has been seen, appropriately, as a key element in the effort to improve the socio-economic conditions of northern Indigenous communities. Although Norwegian post-secondary institutions have made substantial commitments to Indigenous education, the development of an Indigenous institution has been particularly important for the Sámi people. The opening of the Sámi University of Applied Science in Kautokeino in 1989 was an event of great political and cultural significance, providing the Sámi with educational independence and a post-secondary foundation for their cultural renaissance.

Sámi University College does not operate under anything approaching North American educational funding models. The government and the Sámi people support the institution strongly, and do not judge the campus by the same metrics as most other post-secondary institutions. The campus has fewer than two hundred students but more than fifty faculty and staff. It puts a high priority on preserving and promoting the Sámi language. The University College also offers selected

professional programs, including teacher training, and conducts research on Sámi issues.

University of Greenland

Greenland is a small, emerging nation — officially an autonomous constituent country — still linked politically, economically, and culturally to its former colonial power, Denmark. From the beginning of the era of self-government, post-secondary education has figured prominently in Greenland's plans for economic development, cultural revitalization, and social stability. The University of Greenland, created in 1987, is based in the capital city of Nuuk, which has close to seventeen thousand of the country's fifty-six thousand people. The institution started small, with only a handful of staff and faculty. The institution is, like many northern institutions, highly symbolic, and holds pride of place within the country as a sign of regional independence and Indigenous revitalization.

The small size of the university means that many Greenland students attend universities in Denmark or other European countries. But the university's existence represents a commitment to cultural vitality and economic revitalization and is not enrolment driven: after thirty years of operations, the University of Greenland has some fifteen faculty, augmented with visiting lecturers and researchers, and fewer than seven hundred students. The institution offers a variety of undergraduate and graduate degrees in education, nursing and health care, social sciences, and Greenlandic history, culture, and language. The emphasis on Greenlandic studies has magnified the impact on Nuuk and the country as a whole, while the university's faculty and students have connected Greenland to the broader circumpolar world.

University of Akureyri (Iceland)

In several Scandinavian countries, post-secondary institutions have been created in smaller centres, representing a significant part of the national commitment to accessibility and regional development. Akureyri, with a population of fewer than twenty thousand, is the second-largest community in Iceland. The University of Akureyri was created in 1987, and has grown from a tiny initial operation to an institution with more than two thousand students. The university is Iceland's primary distance education facility, with remote learners accounting for close to half of the total student population. The institution is a northern leader at programmatic collaboration, being an active participant in the University Centre of the Westfjords (UCW) and in Nordic studies and polar law. UCW opened in 2006 with a mandate to promote research and inter-institutional collaboration in distance learning, particularly at the graduate level. UCW and the University of Akureyri maintain a strong presence in the field of coastal and maritime affairs and contribute significantly to research on the science, law, and

management of maritime resources.

Umeå University (Sweden)

Sweden has an expansive and comprehensive post-secondary system, with significant contributions to the northern and remote regions. The main institution in the North is Umeå University. Founded in 1965, it has more than thirty thousand students at the undergraduate and graduate levels. The institution is, like Tromsø in northern Norway, designed as a key national university. In addition to the full range of standard undergraduate programs, the university has advanced expertise in Sámi studies, forestry and forest products, environmental sustainability, and technology. Umeå is well connected internationally, and is funded as a major Swedish research institution.

Luleå University of Technology (Sweden)

Luleå University of Technology was created as a technological college in 1971 and made the transition to a university in 1997, with both steps part of a government-led effort to encourage northern Sweden's transition from a resource-dependent region to a competitive high-technology-based economy. The technology-focused institution has its main campus in Luleå and specialized research centres devoted to emerging economic sectors. Kiruna, one of the most important mining sites in Europe — close to Sudbury in significance and impact — hosts an active space science facility. There is also a unique facility devoted to teaching and creative work in Piteå. Luleå University is strongly connected to the economic strategies of northern Sweden, and has played a significant role in attracting global high-technology firms to the area and promoting inclusive and innovative mining development.

The University of Lapland (Finland)

Most northern universities follow traditional lines, offering standard undergraduate programs and occasional regionally specific offerings. When the City of Rovaniemi, located immediately south of the Arctic Circle and with a population of more than sixty thousand, petitioned for a university, the Finnish government resisted the effort. A new model emerged, with the University of Lapland (established in 1979) developing programs of national importance, including art and design and law, together with degrees that respond more specifically to regional concerns, including education and social sciences. It is not a "traditional" university or a standard regional access point. It has attracted close to 5,500 students. The University of Lapland has also established a significant circumpolar presence. The Arctic Centre is one of the world's most important northern research and outreach operations, routinely hosting major international conferences and circumpolar meetings, as well as the offices of the European Union's Arctic Information Centre. The University of Lapland is also closely tied to

other Finnish post-secondary institutions. It participates in the Lapland University Consortium with the Lapland University of Applied Sciences, which originated from a 2014 merger of the Rovaniemi University of Applied Sciences and the Kemi-Tornio University of Applied Sciences.

The University of the Faroe Islands

The Faroe Islands, located between Norway and Iceland, is a small autonomous country affiliated with Denmark. It has a total population of close to fifty thousand spread out on many small islands. The University of the Faroe Islands started operations in a limited way in 1965, focusing largely on Faroese culture and language. The university is deeply committed to cultural revitalization, as shown by its operating solely in the Faroese language. Despite its small size, around six hundred students, the university offers undergraduate and graduate programs. Its coverage expanded in 2008 when the Faroese School of Education and the Faroese School of Nursing were amalgamated with the University of the Faroe Islands. Almost four hundred students were enrolled in the nursing or education.

The university demonstrates the value of some northern institutions for regional cultural survival and vitality...

The university demonstrates the value of some northern institutions for regional cultural survival and vitality, and is seen as contributing directly to the Faroe Islands' economic well-being. From an administrative point of view, the institution is viewed in much the same way as the Sámi University College, the University of Greenland, and the Université de Hearst, all of which exist for a combination of educational, cultural, political, and linguistic purposes, and are not funded primarily on the basis of enrolment.

Appendix B:

Admissions and Registrants (full-time, first year applicants and registrants in first-entry programs), Northern Ontario's Universities, Selected Years

ALGOMA UNIVERSITY			
Program	2013	2009	2008
<i>Arts/Humanities/Social Science</i>			
Total applications (all choices)	672	NA	2,645
Total registrants (all choices)	117	NA	1,273
<i>Science</i>			
Total applications (all choices)	259	NA	180
Total registrants (all choices)	60	NA	58
<i>Commerce/Management/Business Administration</i>			
Total applications (all choices)	149	NA	1,404
Total registrants (all choices)	31	NA	495
<i>Fine & Applied Arts</i>			
Total applications (all choices)	19	NA	0
Total registrants (all choices)	0	NA	0
<i>Social Work</i>			
Total applications (all choices)	108	NA	0
Total registrants (all choices)	22	NA	0

LAKEHEAD UNIVERSITY, INCLUDING AFFILIATES/CAMPUSES, EXCEPT FOR FALL 2015				
Program	2015	2014	2013	2012
<i>Arts/Humanities/Social Science</i>				
Total applications (all choices)	612	647	670	759
Total registrants (all choices)	117	121	143	139
<i>Science</i>				
Total applications (all choices)	819	808	856	801
Total registrants (all choices)	152	192	183	172
<i>Commerce/Management/Business Administration</i>				
Total applications (all choices)	773	678	528	510
Total registrants (all choices)	135	115	90	106
<i>Education</i>				
Total applications (all choices)	981	1,174	1,412	1,253
Total registrants (all choices)	249	281	328	287

LAKEHEAD UNIVERSITY, INCLUDING AFFILIATES/CAMPUSES, EXCEPT FOR FALL 2015				
Program	2015	2014	2013	2012
<i>Physical Education/Health Education/Recreation</i>				
Total applications (all choices)	415	476	429	486
Total registrants (all choices)	88	108	90	118
<i>Engineering & Applied Science</i>				
Total applications (all choices)	725	617	488	438
Total registrants (all choices)	137	121	112	81
<i>Fine & Applied Arts</i>				
Total applications (all choices)	26	39	34	46
Total registrants (all choices)	0	7	5	14
<i>Forestry</i>				
Total applications (all choices)	147	132	145	121
Total registrants (all choices)	25	34	34	30
<i>Music</i>				
Total applications (all choices)	21	31	35	28
Total registrants (all choices)	0	8	6	7
<i>Nursing</i>				
Total applications (all choices)	846	754	646	600
Total registrants (all choices)	153	149	138	106
<i>Social Work</i>				
Total applications (all choices)	358	404	365	371
Total registrants (all choices)	82	117	104	80
<i>Other degrees</i>				
Total applications (all choices)	464	508	438	196
Total registrants (all choices)	96	122	94	48

LAURENTIAN UNIVERSITY, INCLUDING FEDERATED UNIVERSITIES (THORNELOE, HUNTINGTON, UNIVERSITY OF SUDBURY, AND LAURENTIAN UNIVERSITY), AS WELL AS THE COLLABORATION WITH GEORGIAN COLLEGE AND ST. LAWRENCE COLLEGE (BBA ONLY), BUT EXCLUDING ALGOMA, HEARST, THE NORTHERN ONTARIO SCHOOL OF MEDICINE, AND COLLABORATIONS WITH SAULT, NORTHERN, CAMBRIAN, AND ST. LAWRENCE COLLEGE (NURSING PROGRAM)				
Program	2014	2013	2012	2011
<i>Architecture</i>				
Total applications (all choices)	306	279	0	0
Total registrants (all choices)	68	64	0	0
<i>Arts/Humanities/Social Science</i>				
Total applications (all choices)	2,175	2,439	1,709	1,907
Total registrants (all choices)	409	391	354	440
<i>Science</i>				
Total applications (all choices)	1,816	1,742	1,398	1,336
Total registrants (all choices)	409	362	342	338
<i>Commerce/Management/Business Administration</i>				
Total applications (all choices)	596	556	499	500
Total registrants (all choices)	187	124	121	135
<i>Education</i>				
Total applications (all choices)	661	1,264	1,032	1,162
Total registrants (all choices)	102	104	160	178
<i>Physical Education/Health Education/Recreation</i>				
Total applications (all choices)	481	513	510	512
Total registrants (all choices)	89	92	89	93
<i>Engineering & Applied Science</i>				
Total applications (all choices)	705	624	485	319
Total registrants (all choices)	172	132	114	67

LAURENTIAN UNIVERSITY, INCLUDING FEDERATED UNIVERSITIES (THORNELOE, HUNTINGTON, UNIVERSITY OF SUDBURY, AND LAURENTIAN UNIVERSITY), AS WELL AS THE COLLABORATION WITH GEORGIAN COLLEGE AND ST. LAWRENCE COLLEGE (BBA ONLY), BUT EXCLUDING ALGOMA, HEARST, THE NORTHERN ONTARIO SCHOOL OF MEDICINE, AND COLLABORATIONS WITH SAULT, NORTHERN, CAMBRIAN, AND ST. LAWRENCE COLLEGE (NURSING PROGRAM)				
Program	2014	2013	2012	2011
<i>Fine & Applied Arts</i>				
Total applications (all choices)	61	17	9	43
Total registrants (all choices)	7	0	0	5
<i>Music</i>				
Total applications (all choices)	17	34	33	47
Total registrants (all choices)	0	0	5	6
<i>Nursing</i>				
Total applications (all choices)	908	797	696	625
Total registrants (all choices)	141	74	85	76
<i>Social Work</i>				
Total applications (all choices)	527	579	500	472
Total registrants (all choices)	142	124	90	99
<i>Other administration</i>				
Total applications (all choices)	307	270	249	277
Total registrants (all choices)	71	52	38	49
<i>Other degrees</i>				
Total applications (all choices)	186	151	150	115
Total registrants (all choices)	28	17	21	22

NIPISSING UNIVERSITY, INCLUDING AFFILIATES				
Program	2014	2013	2012	2011
<i>Arts/Humanities/Social Science</i>				
Total applications (all choices)	1,071	1,155	1,214	1,260
Total registrants (all choices)	248	297	329	401
<i>Science</i>				
Total applications (all choices)	308	292	302	263
Total registrants (all choices)	75	69	65	79
<i>Commerce/Management/Business Administration</i>				
Total applications (all choices)	580	517	461	365
Total registrants (all choices)	83	96	88	70
<i>Education</i>				
Total applications (all choices)	497	473	654	680
Total registrants (all choices)	0	12	17	96
<i>Physical Education/Health Education/Recreation</i>				
Total applications (all choices)	268	269	279	295
Total registrants (all choices)	81	88	90	90
<i>Fine & Applied Arts</i>				
Total applications (all choices)	45	71	76	80
Total registrants (all choices)	10	11	19	24
<i>Nursing</i>				
Total applications (all choices)		661	536	488
Total registrants (all choices)		114	100	81

Source: Council of Ontario Universities, available online at <http://cudo.cou.on.ca/>.

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“ Northern Ontario needs **skilled, trained, adaptable people**

who understand the complexities of human societies, and there remain substantial requirements for basic education and critical thinking. Within this environment, it clear that the City of Timmins, Northern College, and Algoma University have a **unique opportunity** to develop a post-secondary collaboration that would **be of substantial importance to Timmins and Northeastern Ontario. ”**



About Northern Policy Institute

Northern Policy Institute is Northern Ontario's independent think tank. We perform research, collect and disseminate evidence, and identify policy opportunities to support the growth of sustainable Northern Communities. Our operations are located in Thunder Bay, Sudbury, and Sault Ste. Marie. We seek to enhance Northern Ontario's capacity to take the lead position on socio-economic policy that impacts Northern Ontario, Ontario, and Canada as a whole.

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