University Feasibility and Benefits Study

Final Report to the City of Yellowknife

January 2019

CREATING CONDITIONS FOR SUCCESS

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About the Report

Disclaimer

- StrategyCorp's report is written with the recognition that the City of Yellowknife, as a municipal government, does not possess the legislative or regulatory authority to establish alternate models of post-secondary education delivery (e.g. university). Rather, this report is an examination of the community's and territory's capacity to support and sustain a new post-secondary institution (e.g. university, polytechnic university, satellite campus)
- StrategyCorp has written this report without consideration for the specific program or strategic mandates and priorities of Aurora College – as such, this study focuses on providing a third-party analysis of the feasibility of a university (or variation thereof) instead of evaluating the current model in place (i.e. Aurora College)
- StrategyCorp has developed this report acknowledging data limitations. Where possible, StrategyCorp has leveraged various reports, data, and information from primary and secondary sources (e.g. third-party organizations) available at the time that this report was developed to inform its results
- StrategyCorp held a number of interviews with various key stakeholders and subject matter experts from the business community, government, local Indigenous organizations, and relevant education and academic institutions. The interviews did not include elected officials of the NWT Legislative Assembly, the City of Yellowknife, or encompass deep community engagement sessions

Background Context

- In June 2018, the Government of the Northwest Territories ("GNWT") released the *Aurora College Foundational Review* ("Review"), a commissioned report which provided a roadmap for the transition of Aurora College into a polytechnic institution capable of granting both college diplomas and university degrees
- A key recommendation of the Review was that the polytechnic institution be headquartered in Yellowknife, rather than at Aurora College's main campus located in Fort Smith. Community satellite campuses would be maintained in Inuvik (Aurora) and Fort Smith (Thebacha)
- In July 2018, StrategyCorp Inc. ("SCI") was engaged by the City of Yellowknife to develop a feasibility and benefits study for a university in Yellowknife, Northwest Territories
- In October 2018, the GNWT responded to the Review, accepting or partially accepting all recommendations. However, the decision to establish a polytechnic campus in Yellowknife was deferred until an undetermined future date

Purpose of the Report

- This report is intended to present preliminary findings to the City of Yellowknife for discussion and evaluation

How StrategyCorp's study differs from the *Aurora College Foundational Review*

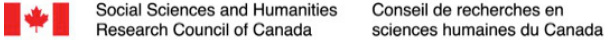
	Aurora College Foundational Review	University Feasibility and Benefits Study
Purpose	• Commissioned by the GNWT to provide an objective and independent assessment of key components and challenges faced by Aurora College	• Commissioned by the City of Yellowknife to determine whether a university model (or polytechnic university) would be feasible and provide benefits to the community and Territory
Areas of Focus	• Governance Structure of Aurora College • Aurora College Accountability Structure • Academic Program Management/Quality • Aurora College Business Model • Recruitment and Retention of Students • Community Consultations • Jurisdiction Scans	• Review current Yellowknife and Territory context (e.g. population, demographic, labour market trends) • Create "straw models" of various options (including university) • Review peer models in similar northern contexts • Conduct interviews with key stakeholders/experts (e.g. government, business, community organizations) to garner their perspectives • Review feasibility and benefits of the options • Recommend the most feasible post-secondary model for Yellowknife

StrategyCorp's study is intended to avoid replication with the findings and recommendations of the *Aurora College Foundational Review* and focuses on exploring the potential feasibility and benefits of alternate models of delivery (e.g. university, university satellite campus, or Polytechnic university) rather than evaluating the current Aurora College model

StrategyCorp's methodology was informed by both the conditions of the City of Yellowknife's RFP, as well as feasibility study best practice principles

	Project Kick off	Review of Northern University Models	Environmental Scan	Subject Matter Expert and Stakeholder Interviews	Feasibility and Benefits Study	Finalize Report for Presentation
Actions	A. Kick-Off meeting to : • Confirm project purpose, scope, deliverables, work plan & timeline • Explore project opportunities & challenges • Confirm northern university models to be reviewed • Review background information & other data requests	A. University Model Review: • Yukon University • University of Alaska • University of Tromsø B. The review will highlight how other universities: • Deliver education • Evolved from established through to present • Developed success • Support local economies and communities C. Develop peer analysis report	A. Review of Demographic Trends and Economic Forecasts B. Review of Southern Canadian post-secondary interests in the Canadian North and Arctic C. Review of Straw Models (e.g. college, university, polytechnic) D. Review of legislation and bylaws E. Examination of community supports F. Federal funding scan G. Integrate information from phases 1, 2, and 3 to develop the interim/ background report	A. Develop stakeholder engagement materials: • Discussion guide and other communications materials • Outreach to schedule sessions B. Conduct stakeholder interviews C. Consolidate Data	A. Develop a draft final report including: • Analysis of benefits • Options development • Assessment of community support • Potential funding options • Potential programming options	A. Integrate comments: • Integrate comments regarding draft report • Finalize report B. Present final report
Deliverables	• Kick-off agenda • Summary memorandum • Background information/ data requests	• Peer analysis of university models	• Interim/Background report	• Final list of interview targets • Interview discussion guide • Summary of interview insights	• Draft feasibility and benefits study	• Final report • Final presentation to City project team

StrategyCorp conducted interviews with key stakeholders and subject matter experts to provide additional context and inform research direction and findings



Feasibility and Benefits Executive Summary

The most feasible path to transforming NWT's post-secondary system lies in establishing a polytechnic university that can meet current challenges and opportunities…

Fresh Vision	Opportunity to set a new vision and energy – and to specialize in areas where Yellowknife and the Northwest Territories can lead
Brand Reputation	Opportunity to set new education delivery model that is internationally recognized – and which can have tie-ins with the City's immigration, economic development, and tourism objectives
Governance	Enables the right degree of academic freedom and independence from government in order to succeed

Programming (aligned with Labour Market needs):
Opportunity to offer programming that is specialized and aligned with labour market needs for both applied and academic learning (as well as Indigenous student needs), such as:

- Upgrading (GED) offerings, adult literacy, ESL and FSL
- Professional development
- Nursing, social work, mining, education, environmental studies
- Construction trades, heavy equipment operating
- Arts and culture, Indigenous languages and governance

Maintain connection and develop new university-based programming (stand alone or with other institutions)

Student Population

- Core focus on keeping students home and maintaining Indigenous, Francophone, and local needs
- Prioritize marketing efforts to southern and international students from the start (to drive mass required for a university model)
- Flexible opportunities to support mature student learning (e.g. evening classes)

Delivery Model

- Review existing assets to understand potential new capital requirements
- Yellowknife would benefit from an expanded campus location, in part given the size of the City's population, as well as potential interest from southern and international students to study in a major Northern city centre
- Community campus locations can specialize in particular programming focuses

Faculty and Research

- Attract Ph.D. faculty over time (to enable research and drive curriculum quality)
- Incorporate the role of the community in program development, including through traditional knowledge, Indigenous culture, local industry/business

Community Supports

- Work with the City and developers to build affordable student housing as student population increases, as well as with the community to identify and establish student supports (e.g. daycare, mental health, apprenticeships)

A polytechnic university is the best of both worlds: it follows a made-in-NWT solution that builds on the existing assets and programming of Aurora College, while testing and refining new university-based programming as it evolves

Sources: (1) Stakeholder interviews; (2) StrategyCorp Subject Matter Experts

...while being on a roadmap to becoming a full-fledged university

Polytechnic University → **Full University**

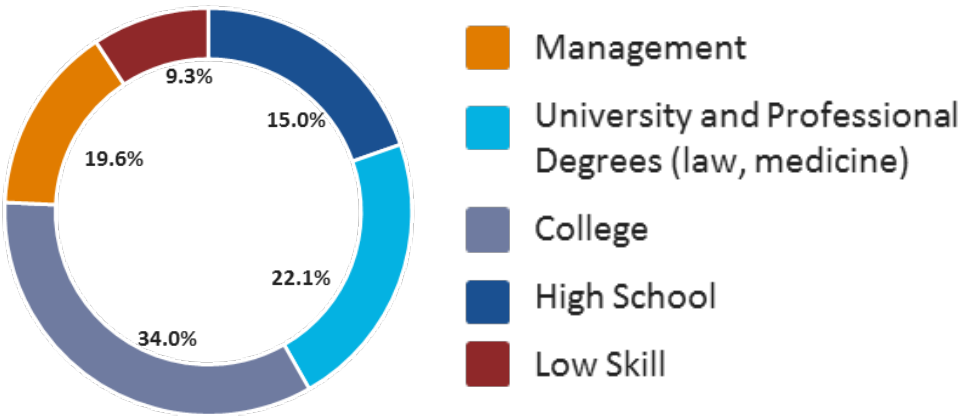
	Lean Start-up Phase	Maturation Phase	Mature Phase
Requirements	• Comparatively minimal (e.g. legislative, governance) to achieve polytechnic status • Apply for federal funding to cover any capital costs for upgrades	• Prepare requirements to achieve university status • Apply for federal funding to cover any capital costs for upgrades, new buildings • Work with the City and private developer to create affordable student housing	**Accredited University***
Students	• Build local student demand and interest • Focus on international student attraction from the start • Support student transitions from upgrading to university degrees	• Continue building brand and reaching a critical mass of students (including international) to sustain a university	• University destination with local and international student interest • Net importer of talent
Programming	• Focus on applied learning, leveraging existing Aurora College programming • Incorporate university-based programming	• Add university-based programming (standalone or partnerships) • Test, refine, and expand university-based programming	• Growing set of strong, high-quality, and competitive offerings – aligned with NWT strengths and industry diversification
Faculty & research	• Include faculty from industry and community	• Recruit Ph.D. and (applied) research faculty	• Strong set of academic Ph.D.-level faculty attracting research dollars and talent
Delivery model	• Expand campus in Yellowknife to leverage business, government , community resources • Leverage existing Aurora College assets (upgrade where necessary)	• Continue to upgrade existing community assets to allow a strong university student experience	• Expanded campus and specialized regional campuses

*As per Universities Canada membership criteria

A polytechnic university is most aligned with NWT's labour market needs ...

Local labour market will have continued needs for university and college graduates

Projected Annual Job Openings (2015—2030)*



- Over the next 15 years, 28,500-36,700 job openings are projected to emerge in the NWT, of which 78% will require both college-based and university-based post-secondary education and/or work experience
  - 98% of these jobs will be to replace retirees or outward migrants (Conference Board of Canada)
- Currently, industry, government, and businesses rely on southern Canadian institutions to educate the local labour force and provide university-level skills training
- Anecdotally, many positions requiring post-secondary education are being filled by employees without higher education

*Medium Case Scenario (*Northwest Territories Labour Market Forecast and Needs Assessment*)

Sources: (1) GNWT Main Estimates and Budget Address (2018); (2) Conference Board of Canada (Territorial Outlook 2018; NWT Labour Market Forecast and Needs Assessment); (3) Stakeholder Interviews

...and can help to drive the City of Yellowknife's overall growth objectives through new educational pathways and research to drive economic diversification

CITY OF YELLOWKNIFE

Council's Goals and Objectives, 2016—18

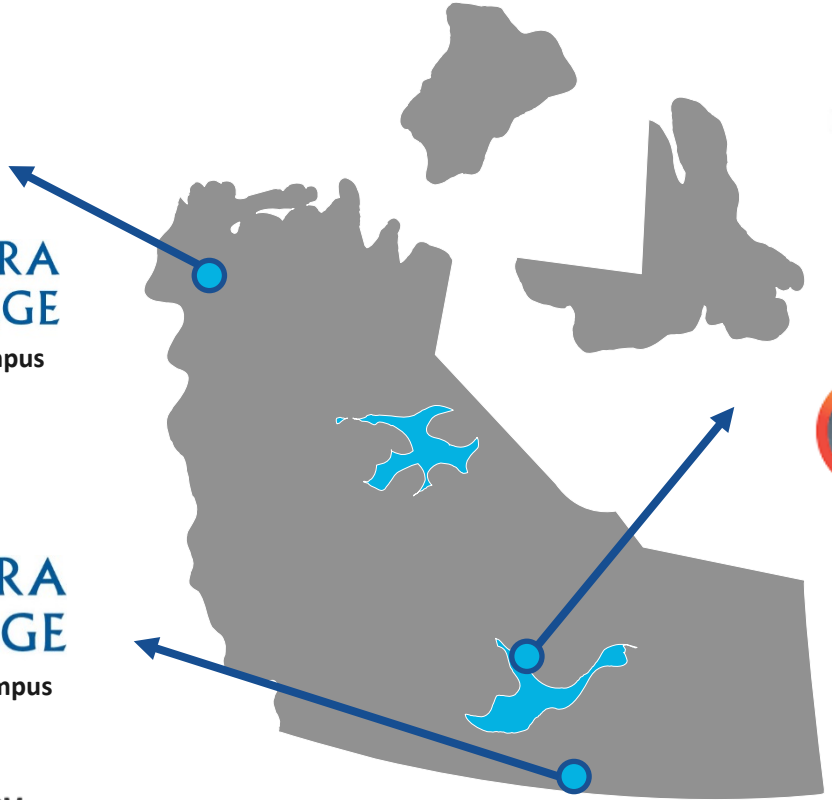
- **Better Engagement with Stakeholders**
- **Downtown Revitalization**
- **Strengthen and Diversify the Economy**
- **Community Sustainability**
- **Stronger Internal Working Relationships and Accountability**

- Labour force skills development
- Advancement of the knowledge economy
- Business incubation
- Economic development through academic research and infrastructure spending (see page 57)
- Attraction of national and global talent
- Retention of local students

Associated university benefits that are relevant to Yellowknife's economy and labour market

Source: Yellowknife Council Goals and Objectives, 2016—18

A polytechnic university can aggregate and more closely align an ecosystem of partners to develop a collective approach to competitive post-secondary education and research



AURORA COLLEGE
Aurora Campus

AURORA COLLEGE
Thebacha Campus

AURORA COLLEGE
Yellowknife Campus

Northwest Territories

Dechinta

CDETN 15
Conseil de développement économique des Territoires du Nord-Ouest

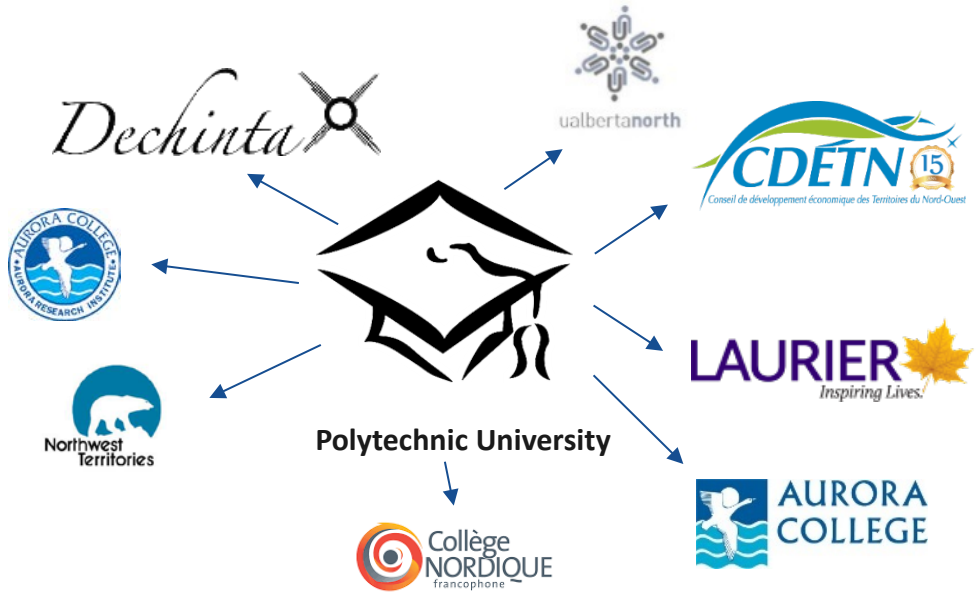
Collège NORDIQUE francophone

ualbertanorth

LAURIER
Inspiring Lives.

A federated model would help to accelerate a lean start-up approach for a polytechnic university

A federation allows institutions to form a new university ecosystem with the authority to grant degrees, facilitate credit transfers, integrate service offerings, and receive government funding, while protecting the diversity of individual partners



Value of a Federated Model

- Federations prioritize teaching equally as much as research and innovation
- Adopting a federated model allows for the collaboration across existing institutions
- Individual members have the authority to offer degree-eligible credits that speak to a specialized educational need (e.g. Indigenous traditional knowledge, Francophone education, job skills development)
- Federations can leverage shared resources (libraries, IT, administration, recruitment)
- Ecosystems can capture federal research funding and territorial operating grants, rather than just a polytechnic
- Federated models protect a diversity of interests and lead to localized decisions
- Academic innovation flows more readily as the ecosystem experiments with new teaching and research methods
- A federated model allows for best practices across Canada to be applied in the NWT

To achieve targets, the new polytechnic university will require a core focus on marketing to create new student demand over time – including recruiting southern and international students

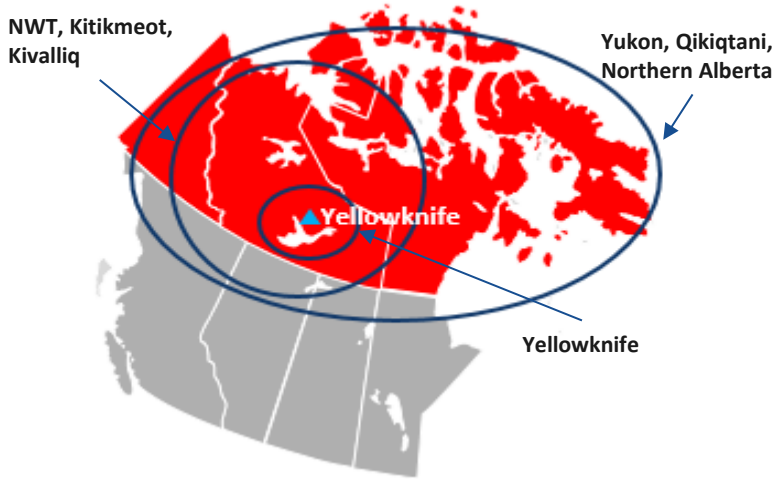
Student enrolment limitations

- Northern Canada struggles with lower educational outcomes compared to much of southern Canada – this directly affects the readiness and supply of students for post-secondary opportunities
- Territorial demographics also affect university sustainability in medium term:
  - Northwest Territories is facing a continued population decline of (population decline of 1,092 by 2040) and the population is aging (in NWT, there will be 5,486 more people aged 65 and over by 2040)
- A polytechnic university focused on attracting students from outside the NWT may help stem the outmigration trend

Competition for university-based programming

- While educational outcomes in Yellowknife and Whitehorse are higher than in other regions, the two capitals alone are producing limited graduates – all of whom have various choices for university programming: existing southern Canadian universities and a new Yukon University in the making

Student Catchment Areas Struggle to Produce Demand



- **NWT: 367 graduates in 2016; rate of 67.5%**
- **Nunavut: 252 graduates in 2016; rate of 41.7%**
- **Yukon: 409 graduates in 2016; rate of 75%**

The new polytechnic university will need to be heavily marketed to southern Canadian and international student target markets

Sources: (1) *Northwest Territories Labour Market Forecast and Needs* Assessment (GNWT/ECE); (2) *Graduation Rates in the NWT* (GNWT/ECE); (3) NWT Census Profile, 2016 (StatsCan); (4) Territorial Outlook, 2018 (Conference Board); (5) Auditor General Reports on Education in Yukon, NWT, and Nunavut

Community and other supports will be required to make NWT an affordable destination for students to study and live

Addressing the issue of affordable and available student housing is key to attracting southern Canadian and international students

- Yellowknife is considered an expensive place to live by Canadian standards (see Appendix C)
- Overall, the cost of modest, basic standard living is rising at a 4% rate annually in Yellowknife (compared to national average of ~2%)
- Low vacancy rates (4.2% in 2017) mean that there are insufficient (affordable) housing units to meet current market demand – an issue both the GNWT and the City of Yellowknife are working to address
- Although the Northern Living Allowance can offset costs by $4,015–$8,030 per person (or student), it does not overcome the difference in living costs, especially for many students wit limited budgets
- Living costs are reflected in salaries paid in most industries
- However, Northwest Territories has the highest median household income in Canada

Source: CBC; CMHC; NWT Bureau of Statistics; Statistics Canada

A local polytechnic can provide significant benefits to society and the economy (1/2)

Fostering creativity

- A polytechnic balances the applied learning of a college with the conceptual thinking of a university, allowing the local arts scene and intellectual debate to flourish
- Polytechnics can leverage academic networks to spark new approaches to culture, language, history, and sciences that reflect the unique identity of local peoples

Supporting Indigenous culture and governance

- Indigenous peoples should see themselves reflected in their institutions. Polytechnics can integrate traditional knowledge and elder learning into culturally relevant, academic and applied learning that supports language and culture, governance, and land-based learning
- Polytechnic status can help faculty capture federal research funding, creating opportunities to partner with Indigenous groups on issues of importance to Indigenous communities

Sparking debate and civic engagement

- A polytechnic university in a capital city provides government support for evidence-based policy-making, while challenging government to be innovative
- Faculty can be leveraged for their expertise and experience on territorial, federal, and municipal matters
- For residents, access to higher education has shown to increase civic engagement, enhancing citizens' role in community decision-making

Contributing to municipal and social infrastructure

- A campus presence contributes to the revitalization of the downtown core and spurs investment in infrastructure (e.g. housing)
- Campuses create social space for communities to share, making a community more welcoming and engaging

Sources: (1) Stakeholder Interviews; (2) Polytechnics Canada; (3) Council of Ontario Universities; (4) StrategyCorp Subject Matter Experts; (5) Conversation Canada

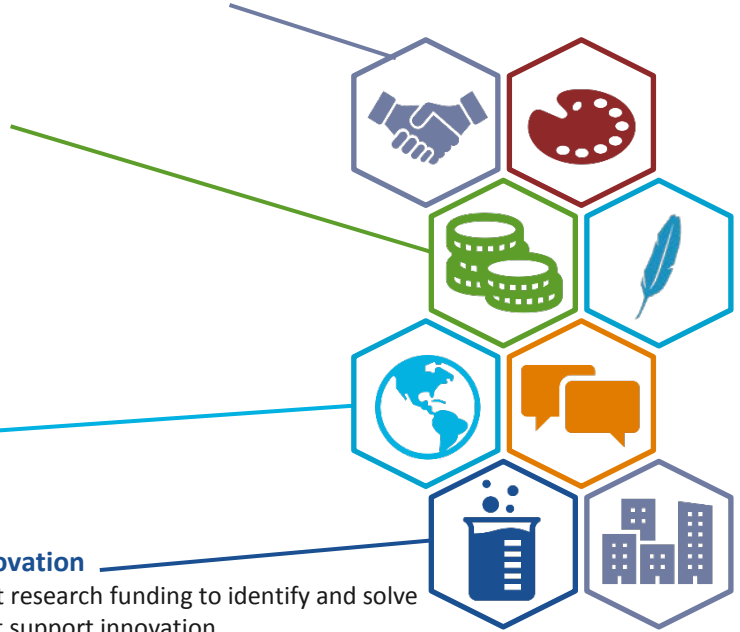
A local polytechnic can provide significant benefits to society and the economy (2/2)

Encouraging collaboration across society and business

- Polytechnics can leverage their intellectual and infrastructural assets to identify solutions to socio-economic challenges
- Companies based near polytechnics can take advantage of local talent
- A polytechnic can solve real world R&D and commercialization problems for local firms through close partnerships with industry

Driving economic growth

- Polytechnics are serious contributors to economic growth through training, research, and partnerships with local entrepreneurs and governments
- Polytechnics provide students with the applied learning and critical thinking skills required to compete in increasingly competitive labour market – polytechnics themselves are a major source of investment and employment
- Polytechnics can support economic diversity through the incubation of the knowledge economy, creating new economic sectors long-term



Establishing a global presence

- Polytechnics can help put communities on the map, attracting talent and attention
- International students can bring talent and diversity to the community, as well as new opportunities
- A polytechnic university in Yellowknife would strengthen the NWT's position in Circumpolar research and policy
- Long-term, a polytechnic university can strengthen tourism attraction for a community

Attracting research and innovation

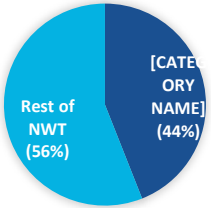
- Faculty will be able to attract research funding to identify and solve NWT-specific challenges that support innovation
- Established research partnerships can drive change in scientific methods or public policy at the regional and national levels

Sources: (1) Stakeholder Interviews; (2) Polytechnics Canada; (3) Council of Ontario Universities; (4) StrategyCorp Subject Matter Experts; (5) Conversation Canada (6) *Harvard Business Review*

As a capital city, Yellowknife has unique conditions that are necessary for a new Polytechnic University to succeed

Population advantage

- Yellowknife is home to 44% of the NWT's population and the majority of the territory's high graduates



Transportation and access advantage

- Yellowknife is the linchpin of the NWT's transportation network, providing a number of ways to travel within and to / from the city for residents, non-resident students, and visiting academics

Yellowknife Transit

The only transit system in the Northwest Territories

Yellowknife Airport

Major hub for Northern Canada: largest airport in the NWT – with key flight connections

Yellowknife Highways

Yellowknife is connected by the Yellowknife and Mackenzie Highways

Capital city "pull" advantage

- A key driver of success for a polytechnic university over time is its ability to attract both faculty and students from other parts of Canada and the world (e.g. decrease reliance on existing NWT population that is not currently growing)
- A capital city will be in a greater position to attract (and retain) non-NWT faculty and students

Existing ecosystem advantage

- Yellowknife has an ecosystem that is hard to replicate in other parts of the territory – this would help drive many essential parts of a successful university, including research (core function of any university) and student success

Student success
- Career centre
- Job board
- Study at home

Yellowknife

Research
- Significant public and private research occurring in Yellowknife
- Pre-existing partners
- Coordination with government, industry, and First Nations

First Nations
- Economic development
- Governance partners
- Cultural programming

Industry
- Work placements
- Applied learning

With a GNWT commitment to a polytechnic university, it is a matter of time before Yellowknife transitions into the new centre of learning

The GNWT response to the *Aurora College Foundational Review* commits the NWT to a polytechnic vision, but defers the decision to base an expanded campus in Yellowknife

The GNWT's Response to the Review provides the City with the opportunity to work with the GNWT to create clear and evident conditions to support establishing a polytechnic university in Yellowknife

Early evidence supporting the likelihood of a Yellowknife-based polytechnic

- NWT students are more likely to pursue education and career opportunity in a larger city centre
- As a capital city and NWT's largest community, Yellowknife is much more likely to attract investment, research dollars, and immigration (including international students)
  - Yellowknife offers students greater access to amenities, housing, and recreational facilities that improve the student experience
  - Yellowknife offers greater access to labour market and opportunities in key territorial industries
- In practice, other jurisdictions headquarter satellite universities in major centres (e.g. UBC, U of T, Université du Québec, Yukon University) as a matter of practicality and access to policy-makers
- The new Associate Deputy Minister of Post-Secondary Education (overseeing polytechnic transition) will be based in Yellowknife

Sources: (1) GNWT Response to the ACFR

Conclusion: A polytechnic university in Yellowknife maximizes local opportunity, accessibility, and affordability

- Post-secondary education transformation is essential to advancing and supporting the labour market in Yellowknife and the Northwest Territories
- As other Northern institutions have realized, a polytechnic university meets labour market needs by ensuring academic upgrading and college trades programs are retained, while enabling higher levels of education to be obtained
- In planning program and infrastructure developments, a polytechnic university should seek federal/territorial support through the budget process – and the implementation of the GNWT Response to the *Aurora College Foundational Review*
- Nonetheless, to be sustainable, a successful polytechnic must prioritize the attraction of top faculty talent, as well as enrolment from southern Canadian and international students
- Importantly, a polytechnic also needs academic independence and sound governance to succeed and compete at the university level

The Path Forward

A polytechnic university represents the most feasible path forward for the Territory and the City to transform the post-secondary landscape to support local needs

A polytechnic university is best-suited to meet the unique socio-economic challenges and needs of Yellowknife and the Northwest Territories in the medium-term

Yellowknife is well-positioned to support a university campus – and stands to gain from the associated benefits over time

As the City sets plans for welcoming a polytechnic university, focused plans also need to be made to improve housing affordability/availability, education outcomes,

Appendix A: Detailed Feasibility and Benefits Analysis

The study reviewed key education delivery model options*

	College	Polytechnic University	University/Satellites
Credentials Offered	• Academic upgrading • Diplomas/Certificates • Post-graduate credentials • Limited undergraduate degree offerings (for select programs) – in partnership with universities	• Academic upgrading • Diplomas/Certificates • Post-graduate credentials • Breadth of undergraduate degree offerings (standalone and with other universities)	• Undergraduate degrees • Graduate/post-graduate degrees • Professional degrees • Post-graduate certificates
Entrance requirements	• Varies, generally high school diploma is required	• Varies, generally high school diploma is required • Grade requirements and testing for undergraduate degrees	• High school diploma • Grade requirements • Supplementary applications for select programs
Accreditation type	• Varies jurisdiction-to-jurisdiction • Some jurisdictions require accreditation for colleges • Degree offerings must be accredited	• Varies jurisdiction-to-jurisdiction • Some jurisdictions provide specific designations • Degree offerings must be accredited	• Individual provinces and territories decide which institutions can grant degrees and call themselves universities • Degree offerings must be accredited • Universities Canada establishes national criteria
Research	• Limited applied or academic research	• Applied research tied to solving problems brought forward by industry	• Academic, discovery research, • Dependent on research interests of faculty
Programming	• Focus on shorter courses and lower technology offerings • Tied closely with labour market demand, with an accessibility focus	• Emphasis on key programs of study with more intensive diploma and degree study • Tied closely with labour market demand, with an accessibility focus	• Broad range of programming which is only tangentially aligned to the demands of business
# of institutions in Canada	• ~180 (public + private)	• 13	• 96

*Note: the study reviewed the college model independently of Aurora College (i.e. not a review of current system's performance or architecture)

Source(s): (1) Polytechnics Canada; (2) *Globe and Mail*; (3) *Maclean's*; (4) Universities Canada; (5) SCI Research

1 College Model

Overview:

- Canada's colleges are adult educational institutions that provide higher and tertiary education, granting certificates and diplomas. Some colleges offer their own stand-alone degrees, as well as joint degrees with universities through articulation agreements that can result in students emerging with both a diploma and a degree

Select Colleges in Canada

Credentials Offered

- Academic upgrading (GEDs)
- Diplomas/Certificates
- In-class training for apprenticeship programs
- Undergraduate degrees (for specific programs)
- Post-graduate credentials

Delivery Model

- Mix of on-campus, online, and blended courses
- Open Study, Part-time, and Accelerated Options
- Evening and Weekend Courses
- Simplified re-admission process

Scope of Programming

- GEDs, English/French Second Language, Adult Literacy
- Broader range of technical, technological, vocational, and professional training programs from apprentice training to degrees, diplomas, and certificates

Statistics

- Approximately 180 colleges currently operating in Canada
- About 205,000 students graduate from colleges annually (2015)
- Graduate employment rates average 83%
- Colleges witnessing an increasing number of international student enrollment

Source(s): (1) Ontario Colleges; (2) SCI Research

2 Polytechnic Model

Overview:

- A polytechnic education combines the practical approach of a college education and the depth of study usually associated with a university program. Unlike other colleges, polytechnics emphasize programs of study that require a more intensive diploma and degree study. Polytechnics engage in research, just like universities, but with a different approach often tailored to finding solutions to challenges for local business and industry. Polytechnics are beginning to take on characteristics of universities, offering degrees, securing government research funding, and building connections with government and the private sector

Examples of Polytechnics in Canada

Credentials Offered

- Academic upgrading
- Advanced diplomas/certificates
- Undergraduate degrees
- In-class training for apprenticeship programs
- Post-graduate credentials

Delivery Model

- Mix of on-campus, online, and blended courses
- Open Study, Part-time, and Accelerated Options
- Evening and Weekend Courses
- Simplified re-admission process

Scope of Programming

- GEDs, English/French Second Language, Adult Literacy
- Broader range of technical, technological, vocational, and professional training programs from apprentice training to degrees, diplomas, and certificates

Statistics

- Currently, 13 designated Polytechnic institutions operate in Canada
- About 75,000 students graduate from polytechnics annually (2015)
- Graduate employment rates average 87%
- International students comprise 24% of enrollment (55,000+ students)

Source(s): (1) Polytechnics Canada; (2) *Maclean's*; (3) SCI Research

3 University Model

Overview:

- A university is an institution focused on both teaching and research, that is authorized to grant academic degrees (e.g. undergraduate and graduate degrees). A university offers instruction in various areas of advanced learning and generally confers degrees under various faculties. Universities should have a robust quality assurance program in place that affords academic freedom for the institution

Members of U15 Canada

Credentials Offered

- Undergraduate degrees
- Graduate degrees
- Professional degrees
- Advanced diplomas

Scope of Programming

- Teaching (degree-granting) and research
- Institutions may also confer professional degrees (e.g. medical, law)

Delivery Model

- Mix of on-campus, online, and blended courses
- Open Study, Part-time, and Accelerated Options
- Evening and Weekend Courses

Statistics

- Currently, 96 universities operate in Canada
- About 75% of students complete their degree
- Graduate employment rates average 91%
- Over 1.7M enrolled students (2017)

Source(s): (1) University Canada; (2) *Maclean's*; (3) Council of Ontario Universities; (4) SCI Research

4 University Satellite (Branch) Campus Model

Overview:

- A satellite campus is an affiliated campus of a university which is physically removed from the main campus and may be located in another city, province (most often), or even country. Satellite campuses are usually smaller than the main campus and may offer specialized or limited programming. Programming and policy direction of a satellite campus is most often influenced – and subject to – the academic and policy considerations of its parent institution, rather than its physical location

Examples of Satellite Campuses

Credentials Offered

- Undergraduate degrees
- Graduate degrees
- Professional degrees
- Advanced diplomas

Scope of Programming

- Teaching (degree-granting) and research
- Campuses are often specialized, offering limited programming or a unique student experience
- Institutions may also confer professional degrees (e.g. medical, law)

Delivery Model

- Mix of on-campus, online, and blended courses
- Open Study, Part-time, and Accelerated Options
- Evening and Weekend Courses

Statistics

- Varies according to delivery model and parent institution

Source(s): (1) University Canada; (2) SCI Research

Stakeholder views were split when evaluating the models, but they highlighted key requirements of a “Made-in-NWT” solution (1/3)

	Characteristics of a successful “Made-in-NWT” education delivery model
Fresh vision	A new vision is required that would bring new energy and excitement. The new model should propagate that Yellowknife and the Northwest Territories have a lot to offer the world; that they have areas of specialization that they can lead in. An institution should eventually consider whether it could tie-in with the City's immigration or tourism goals
Brand reputation	The new model should consider setting up and growing a fresh new brand for the territory’s education system
Governance	The new model should harbour the right level of academic freedom and independence in order to succeed
Curriculum quality	There should be a clear value-proposition for each expected student group: • Indigenous • Resident, non-Indigenous • Francophones • southern Canadians • International students (need associated marketing and brand)
Focused programming	Programming needs to be differentiated rather than general. It should be aligned with labour market needs (current and diversification imperatives) and has a core focus on Indigenous student needs. Potential areas proposed: • Upgrading (GED) offerings • Adult literacy, ESL, FSL • Health sciences, mining, construction trades, education, natural resources management • Arts and culture, sciences • Indigenous languages Best served by a Polytechnic University model There was wide consensus that any model needs to maintain connection with existing college programming and foster partnerships with other institutions (e.g. joint degree programming) and with Indigenous peoples and organizations

Stakeholder views were split when evaluating the models, but they highlighted key requirements of a “Made-in-NWT” solution (2/3)

	Characteristics of a successful “Made-in-NWT” education delivery model
Delivery model	• Yellowknife would be an attractive expanded campus location, in part given the size of the city's population and the preference of southern Canadian and international students to study in a larger urban centre • Community campus locations can specialize in particular programming focuses to reflect labour market needs • Some general interest existed for online learning programming (e.g. in-class learning is not aligned with student learning styles) • In addition, the model should offer weekend/night courses to allow flexibility to working students
Faculty and access to research	The new model needs to attract research that otherwise is channeled through other institutions. To do this, the new model needs to attract high-quality faculty first and foremost
Role of community	The new model needs to incorporate the role of the community, including Indigenous governments and peoples, Francophones, and local businesses/industry
Student enrolment	The new model should elicit stronger interest and demand from southern Canadian and international students for long-term sustainability, while ensuring that the core focus still meets local resident (including Indigenous) needs
Student success	The new model can consider incorporating key student success elements: • Financial assistance (SFA) • Childcare • Mental health supports • Affordable student housing (including for families that are attached) • Exchange programs (to give outside exposure) • Partnerships with career centers, employers, etc. • Student voice (e.g. student government)
Keep locals home	Opportunities for locals (especially mature students) to stay and study in the North – programs have to “lead somewhere”

Stakeholder views were split when evaluating the models, but they highlighted key requirements of a “Made-in-NWT” solution (3/3)

	Characteristics of a successful “Made-in-NWT” education delivery model
Infrastructure	Key infrastructure needs should be observed, depending on the model, such as: • Affordable student housing • Learning spaces • Faculty offices and labs • Student life space
Labour market alignment	The new model must be aligned with labour market needs. Key areas include mining and oil and gas, nursing, education (teachers), and construction-related fields. In addition, the new model needs to support and develop certain types of skills: • Critical thinking • Leadership • Basic financial literacy There was uncertainty whether the new model needs to focus on graduate and post-graduate education to start The new model should also be one that can support the economic diversification of the City and the Territory given the expected medium-term slump of traditional industries/sectors
Political will/alignment with Northern interests	A new model should have the right level of independence and strong governance to evolve and grow. It should have academic and institutional freedom with respect to designing relevant programs (e.g. degrees), accreditation and program delivery models, as well as attracting high quality faculty A local university or polytechnic university presence can be seen as a source of pride, positioning Yellowknife as a centre of Arctic research and allowing the community to keep students home (I took out “for residents” as we didn’t do focus groups with them directly)

These characteristics were factored into a two-step feasibility and benefits evaluation matrix

Stage 1

This stage looks to build a base outline of key characteristics the ideal model should possess

Made-in-NWT solution: Does it incorporate elements that objectively solve the unique challenges and needs of the current system?

Models that best solve Yellowknife's challenges and needs

Stage 2

This stage looks to review the models from a business lens – analyzing various elements that will ultimately form a "grounded within reality" business case of a model that will work

Financial: What investment is required to set up an alternate model of delivery?

Legacy: Does it continue the legacy of the current system without leaving a gap?

Practical: Do we have the right conditions and infrastructure today?

Opportunity: Does it present new opportunities to grow Yellowknife's economy?

Model that is the most feasible (and provides the most benefits) for Yellowknife and the NWT

The evaluation matrix was designed to:

- Ensure that the proposed model is actually solving unique local needs
- Address the actual "needs" vs. "wants" of Yellowknife and the NWT
- Maintain an overarching aspiration, but ground it in today's reality and constraints
- Ensure that the conditions to succeed are present (so as to prevent setting up Yellowknife for failure), while recognizing that conditions can also be developed over time (e.g., economic diversification)
- Incorporate the possibility of a phased approach – learning from the journeys of other Northern peer institutions

Stage 1: Alignment with a “Made-in-NWT” Solution

A university or polytechnic model appears to address Yellowknife's current challenges and needs best (1/5)

	College	University	Polytechnic	Satellite Campus	Rationale
Fresh vision	L	H	H	L	• The university and polytechnic models have notable differentiating qualities from the delivery model in place in the Territory – they provide an opportunity to restart or overhaul the current system in place • A satellite campus will rely largely on the vision of the parent institution – Yellowknife would have limited control over this vision
Market reputation	M	H	H	M	• Both the university and polytechnic models are internationally recognized • There is a perception that a university degree is considered more prestigious (based on stakeholder interviews) • Should a satellite campus model be deployed, the brand reputation will largely rely on how well the parent institution is recognized/perceived
Governance	L	H	H	L	• Both the university and polytechnic models allow the institution to set up its own independent board of governors and academic body, whereas a college model is less independent* • Satellite campuses will be subject to the direction and control of the parent institution (see “straw models” analysis)

*See Appendix E for further details

A university or polytechnic model appears to address Yellowknife's current challenges and needs best (2/5)

	College	University	Polytechnic	Satellite Campus	Rationale
Curriculum quality	H	H	H	H	• All models have the potential to offer a high-quality curriculum offering to students (e.g. based on faculty recruitment and degree of academic freedom)
Focused programming	M	M	H	M	• A college model will be constrained in being able to offer only applied learning (non-academic) courses and universities focus on theoretical learning courses • With polytechnic models, the pathway possibilities are higher as they can offer the best of both worlds – applied and theoretical learning courses
Delivery model	H	H	H	H	• All models are able to offer a delivery model that addresses certain unique needs of the community (e.g. weekend/ night courses to allow flexibility for working students)
Faculty and access to research	M	H	H	H	• Colleges and polytechnics can leverage a wider pool of talent, since not all programs require Ph.D.-accredited faculty (unlike universities) • However, university models can have greater appeal for faculty, based on certain factors (e.g. tenure, prestige, salary range, labs and equipment)

A university or polytechnic model appears to address Yellowknife's current challenges and needs best (3/5)

	College	University	Polytechnic	Satellite Campus	Rationale
Role of community	H	M	H	M	• There was consensus among stakeholders that maintaining a role for the community is imperative (e.g. program development, business incubation, teaching) • A university could limit community involvement in charting a course for the institution because of high levels of academic independence • A satellite campus would be most at risk of failing to meet that need, given it is subject to the direction of a parent institution
Student enrolment	M	M	H	M	• In the context of Yellowknife's catchment area, it is unclear whether a university model would see greater enrolment, given the continued demand of students requiring applied and trades based learning (see Slides 13 & 15) • While statistics show that a university model has a stronger likelihood of attracting international students, there are other factors that contribute to student enrolment (e.g. global brand of university, location, student life experience) • In the context of Yellowknife, a polytechnic model may be best positioned to maximize student enrolment – including students seeking applied learning, theoretical learning and have the ability to attract international students and students the rest of Canada

Sources: (1) Stakeholder Interviews; (2) StrategyCorp Subject Matter Experts; (3) Conversation Canada

A university or polytechnic model appears to address Yellowknife's current challenges and needs best (4/5)

	College	University	Polytechnic	Satellite Campus	Rationale
Student success	H	M	H	M	• College and polytechnic models are more student focused and have more pathways aligned with local needs
Keep locals home	-	-	-	-	• It is unclear whether any model in-and-of-itself can solve this issue – more research is required to understand why students leave and whether this can be solved (e.g. do students leave because there is a gap in programming, because they want to move to a different city, or to attend a particular renown institution, etc.?)
Infrastructure	H	M	M	M	• It appears that the city does not currently possess – and will need to build – infrastructure to sustain an alternate model (e.g. student housing for a university model)
Labour market alignment	M	M	H	M	• Based on stakeholder interviews and labour market forecasts, there is an overall need for graduates from both applied (trades) and theoretical based institutions • There are existing partnerships between the current institution and businesses towards recruitment • A polytechnic model will serve both needs while other models will be at risk of not filling all opportunities or creating gaps

A university or polytechnic model appears to address Yellowknife's current challenges and needs best (5/5)

	College	University	Polytechnic	Satellite Campus	Rationale
Alignment with Northern interests	M	M	H	M	• Universities and colleges on their own are unable to meet the breadth of higher education needs in Northern labour markets, whereas hybrid models can align well by offering university degrees, college diplomas, and upgrading
On Balance Assessment	Low-M	High-M	H	M	• A polytechnic provides a broader set of learning pathways and is more aligned with local student needs and labour market needs for talent and research capacity • Polytechnics are internationally understood institutions which would be attractive for international students (appropriately targeted) • A university provides a fresh vision and also completes the continuum of high education pathways for the NWT

The alignment assessment points to a polytechnic university with an expanded campus in Yellowknife as being a strong model for the GNWT to consider in fulfilling its aspirations and matching local demand requirements

Stage 2: Feasibility and Benefits Review

Financial: Establishing a polytechnic university will depend on leveraging existing assets and investing in required upgrades

Key Commentary and Assumptions

New Campus Model - Approximate construction costs for a new, *built-from-scratch* campus of 200 full-time and 4,000 part-time students in Yellowknife could cost up to $80million

The model presented is high-level and directional – it is only intended to show potential options

- The model assumes that the expanded university campus in Yellowknife will resemble Yukon College in terms of area amenities per full-time student equivalent (as a high-cost projection)
- This scenario assumes that the university will be built from scratch, using no pre-existing infrastructure (e.g. Aurora or Thebacha campuses). It does not factor in land value or purchase costs for a campus, nor does it propose a location
- Given the labor supply requirement, a premium would need to be added on construction costs to incentivize workers to relocate for the completion of the project
- Capital costs are based on construction benchmarks for types of buildings, required usage, and square feet

Key model inputs

- **Student & Staff Population:** a campus in Yellowknife conservatively aims for 200 full-time students and 4,000 part-time/non-credit students – approximately 30% higher than Aurora College – to account for future growth and scale required. These student numbers were then converted to a full-time equivalent basis for the model
- **Construction Unit Costs:** after identifying the average cost to build different types of university buildings in the Greater Toronto Area, this benchmark was then converted proportionately to consider Yellowknife construction costs
- **Construction Area:** pro-rated for full-time equivalent students

Sources: (1) Altus Consulting; (2) Creston; (3) *Yukon College Ayamdigut Campus Master Plan*; (4) Council of Ontario Universities; (5) Aurora College Annual Report (2016—17)

...and transforming to a standalone university model will require meeting certain targets

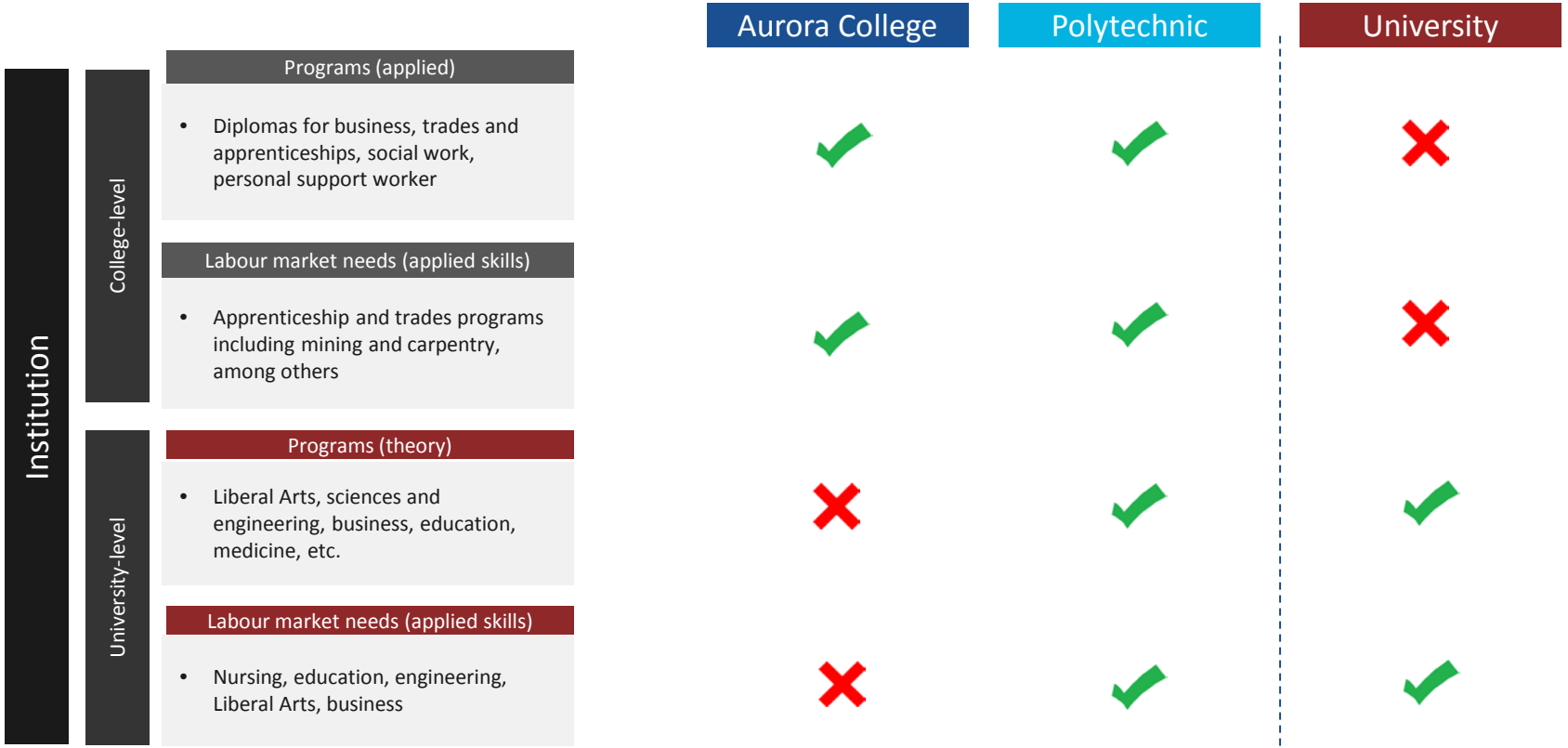
	Base	Year 1	Year 2	Year 3	Year 4	Year 5
Student Breakdown (FTE)						
Total Students	800	840	882	926	972	1021
% enrolment growth		5%	5%	5%	5%	5%
Program Growth						
Current diploma and trade-based programs (continued)	14	14	14	14	14	14
Current partnership programs	2	2	2	2	2	2
New Polytechnic Programs			2	3	4	5
# of Programs	**16**	**16**	**18**	**19**	**20**	**21**
Polytechnic Transition Costs						
New program costs (cumulative)		$ 1,.3M	$ 2.3M	$ 3.2M	$ 4.3M	$ 5.3M
Change management costs		$ 1.1M	$ 0.5M			
Revenues		$ 57M	$ 59M	$ 63M	$ 66M	$ 71M
Government contributions		$ 37M	$ 39M	$ 41M	$ 44M	$ 46M
% of total expenses		66%	66%	66%	66%	66%
Tuition		$ 2.1M	$ 2.1M	$ 2.2M	$ 2.3M	$ 2.4M
Total operating expenses		**$ 56,605**	**$ 59,390**	**$ 62,638**	**$ 66,498**	**$ 70,552**

The model is high level and directional – and it is only intended to show one potential scenario for discussion

- The model was guided by the financial statements available from an institution in Saskatchewan transitioning from a college to a sustainable polytechnic model
- Student FTE converts targeted part-time student enrollment into full-time equivalents
- The model assumes an average student population FTE growth of 5% per year – including 20 additional international students per year (current student growth at Aurora College is lower than this)
- By Year 5, a sustainable model assumes 10% of student population to be international
- The model assumes the college (i.e. Aurora) will add a certain number of new polytechnic degree programs over time
- The student/program ratio is assumed to grow at an existing overall ratio of 48:1 (noting that the minimum required students for a new program is 8)
    - The administrative costs for new programs are based on existing Aurora College financials
- While the transition to polytechnic status is expected to impose limited changes to Aurora's operating costs, new expenses in program development, change management, campus construction/renovation costs will be incurred
- Change management fees are based on benchmarks of consulting firm rates
- It is assumed that domestic tuition ($3,000/year) and international tuition ($9,000/year) rates would be unchanged over the period

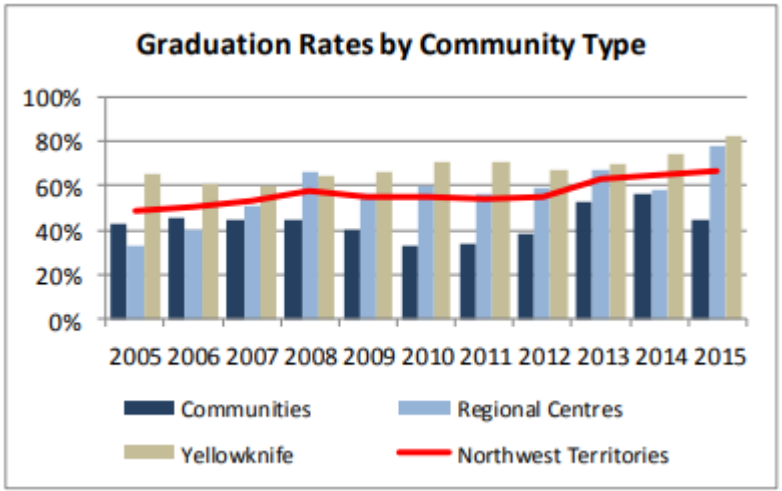
Sources: (1) *Aurora College Annual Report* (2016—17); (2) Saskatchewan Polytechnic Annual Statements

Legacy: A polytechnic university model is able to build on current education system assets, while a university model may create gaps for students and industry



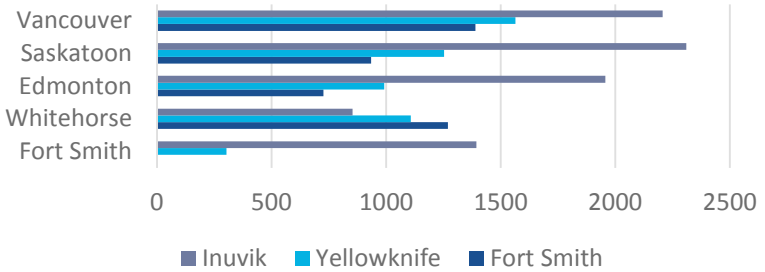
Practical: A polytechnic university in Yellowknife maximizes local opportunity, accessibility, and affordability for a significant number of the Territory's students

- Yellowknife is home to the largest volume (and highest rate) of high school graduates in the NWT
- A university in the community would assist many students with affordability challenges by allowing them to **study at home and avoid high travel and accommodation costs**



Yellowknife University Expands Access to Higher Education

Distance to Higher Education (km)



- Students from the NWT have long distances to travel without a university in the Territory
- As a result, 58% of all higher education (college, university) obtained by NWT students was **received in southern Canada** from 2001 to 2010
- As a regional hub, Yellowknife is much easier to access for many residents and outside students

Sources: (1) NWT Student Financial Assistance Program Review (2012); (2) *Maclean's* ("Cost of a Canadian University Education"); (3) NWT Bureau of Statistics; (4) Royal Bank of Canada ("The Cost of Credentials, June 2018"); (5) Graduation Rates in the NWT (ECE)

Opportunity: A polytechnic university should be leveraged to create opportunities for economic diversification for the City/Territory as has been the case elsewhere in Canada

Mount Allison University

Examples of Economic Impact

- In Sackville, New Brunswick, Mount Allison university increases the town's population by 42% during the school year. These students grow local businesses through part-time employment and their disposable income
- The university supports provincial Indigenous growth through its Aboriginal Community Development Centre
- Employment by the university makes up 15-35% of the area's total jobs, while the university's capital campaign in 2018-2019 spent $468,000 in the community. **For every dollar spent by Mount Allison, another dollar was spent somewhere else in the region**
- Wages for locally-hired support staff increased by roughly 1% yearly. To compensate for increased revenues, the town's strategic plan outlined infrastructure expansion and housing development through 2017-2020

UNB EST. 1785 UNIVERSITY OF NEW BRUNSWICK Saint John

Examples of Economic Impact

- The University of Saint John, New Brunswick offers sustainable projects and development to an otherwise industrial city. The university purchases $40 million in goods and services from the local community
- The student body increases the city's population by around 11,000 students who support the local economy. **Student spending off-campus in Saint John is roughly $25 million dollars in a single calendar year**
- The university pays around $45 million in salaries to its Saint John staff. UNB Saint John contributed roughly $100 million to the province's GDP and added around 700 jobs to the city.
- In a smaller centre, the university had a greater impact on the local economy in the past calendar year than the University of Toronto, the University of British Columbia and the University of Windsor

Sources: Town of Sackville Strategic Plan, Mount Allison University, The Association of Atlantic Universities, University of New Brunswick, City of Saint John

A polytechnic university would also open up opportunities to capture more Northern and Arctic research dollars

Most Arctic and Northern research is occurring in southern Canada

Note this was not included in the 'financial analysis` as it is uncertain how much funding the new model can realistically capture

- In the past five years, significant federal funding has been awarded for Northern and Arctic research initiatives:

Social Sciences and Humanities Research Council (SSHRC)	**$16.97 million**
Natural Sciences and Engineering Research Council (NSERC)	**$39.62 million**
Canadian Institutes for Health Research (CIHR)	**$32.28 million**

- In 2016—17, Aurora College/Aurora Research Institute captured just $390,000 of this funding – a significant lost opportunity for the local knowledge economy

Improving competitiveness for, and access to, federal research funding can have a positive affect on the GDP of the NWT – every dollar invested in a university can generate $1.36 in economic activity

Sources: Association of Canadian Universities for Northern Studies; Council of Ontario Universities; SSHRC; NSERC; CIHR; Aurora College Annual Report (2016—17)

A local polytechnic can provide significant benefits to society and the economy (1/2)

Fostering creativity

- A polytechnic balances the applied learning of a college with the conceptual thinking of a university, allowing the local arts scene and intellectual debate to flourish
- Polytechnics can leverage academic networks to spark new approaches to culture, language, history, and sciences that reflect the unique identity of local peoples

Supporting Indigenous culture and governance

- Indigenous peoples should see themselves reflected in their institutions. Polytechnics can integrate traditional knowledge and elder learning into culturally relevant, academic and applied learning that supports language and culture, governance, and land-based learning
- Polytechnic status can help faculty capture federal research funding, creating opportunities to partner with Indigenous groups on issues of importance to Indigenous communities

Sparking debate and civic engagement

- A polytechnic university in a capital city provides government support for evidence-based policy-making, while challenging government to be innovative
- Faculty can be leveraged for their expertise and experience on territorial, federal, and municipal matters
- For residents, access to higher education has shown to increase civic engagement, enhancing citizens' role in community decision-making

Contributing to municipal and social infrastructure

- A campus presence contributes to the revitalization of the downtown core and spurs investment in infrastructure (e.g. housing)
- Campuses create social space for communities to share, making a community more welcoming and engaging

Sources: (1) Stakeholder Interviews; (2) Polytechnics Canada; (3) Council of Ontario Universities; (4) StrategyCorp Subject Matter Experts; (5) Conversation Canada

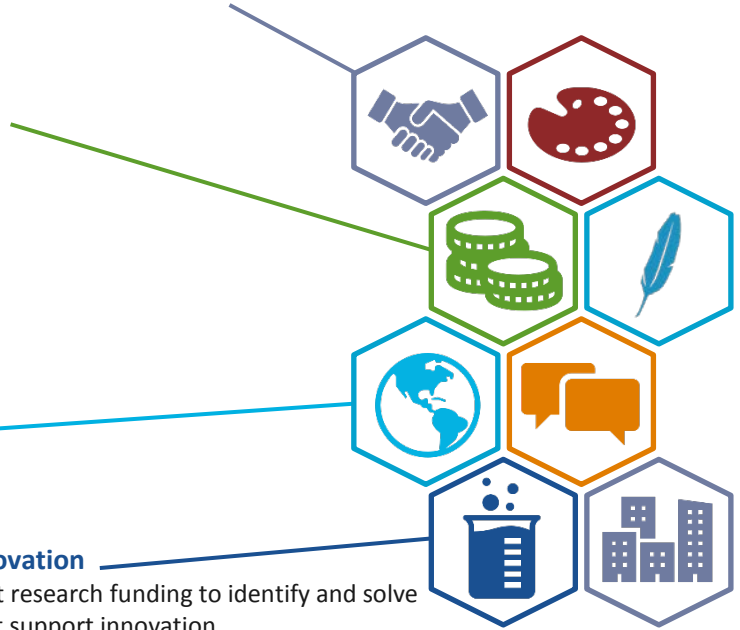
A local polytechnic can provide significant benefits to society and the economy (2/2)

Encouraging collaboration across society and business

- Polytechnics can leverage their intellectual and infrastructural assets to identify solutions to socio-economic challenges
- Companies based near polytechnics can take advantage of local talent
- A polytechnic can solve real world R&D and commercialization problems for local firms through close partnerships with industry

Driving economic growth

- Polytechnics are serious contributors to economic growth through training, research, and partnerships with local entrepreneurs and governments
- Polytechnics provide students with the applied learning and critical thinking skills required to compete in increasingly competitive labour market – polytechnics themselves are a major source of investment and employment
- Polytechnics can support economic diversity through the incubation of the knowledge economy, creating new economic sectors long-term



Establishing a global presence

- Polytechnics can help put communities on the map, attracting talent and attention
- International students can bring talent and diversity to the community, as well as new opportunities
- A polytechnic university in Yellowknife would strengthen the NWT's position in Circumpolar research and policy
- Long-term, a polytechnic university can strengthen tourism attraction for a community

Attracting research and innovation

- Faculty will be able to attract research funding to identify and solve NWT-specific challenges that support innovation
- Established research partnerships can drive change in scientific methods or public policy at the regional and national levels

Sources: (1) Stakeholder Interviews; (2) Polytechnics Canada; (3) Council of Ontario Universities; (4) StrategyCorp Subject Matter Experts; (5) Conversation Canada (6) *Harvard Business Review*

Appendix B – Summary of Subject Matter Expert Interviews

Interviewees spoke of the challenges for a “brick and mortar” university

Whereas a university can bring a lot of community benefits, there are real challenges to establishing a new institution, both nationally and in the North

1. **Existing Competition:** When a university is established in the NWT, it will be in direct competition with Yukon University and other universities – it should not compete where it is not strong
2. **Talent Attraction:** Even with generous salary and living allowances, it is a challenge to attract qualified faculty and researchers – particularly outside the capital cities
3. **Unique Value Proposition:** Future students need an academic reason to attend a Northern university. NWT needs to choose what to offer
4. **Endowment:** Brick-and-mortar universities require significant start-up funding for capital investments and research trusts to succeed – the territorial government does not always have this capacity
5. **Sustainability:** Government is needed for heavy subsidization, whether in the form of operating costs, student financial assistance, or grants – no Northern institution can compete without partnerships
6. **International students:** International students do not form enough of the student population to sustain costs – and many do not stay after
7. **Political sensitivities:** Communities need to be reflected in the vision, leadership, and programming of the university – a reason why a southern satellite campus might not succeed up North

Interviews also revealed challenges ahead for NWT post-secondary education

Political Realities

- Universities can not succeed if they remain institutions of the government
- Leadership, academic quality, and program direction must be set internally – a reality that can be politically unpalatable in Northern Canada
  - With faculty setting research direction, interests might not always reflect community needs
  - Universities could make operational decisions that industry or communities do not support
- College programming still needs to be available in the NWT – competing with a university limits resources and opportunity
- GNWT might have challenges funding programming at the rate of academic inflation

What They Said – System Challenges

- A lack of local post-secondary opportunities is contributing to serious outmigration – **students who study in the South often do not return home**
- **Aurora College has a public image problem** among local residents and local business/industry, though it does have certain academic strengths (northern leadership, natural resources)
- **Secondary education in the Territory requires a serious overhaul** if any post-secondary reforms are to succeed – high school graduates still require upgrading and future students (and faculty) want to be challenged by other students in the classroom
- Post-secondary **curriculum needs to be more reflective of local Indigenous culture** to be relevant to community and socio-economic realities
- **Many faculty do not posses appropriate academic accreditation** (i.e. graduate, post-graduate degrees) to teach students
- Without **dedicated subsidized student housing**, a university in Yellowknife will be unappealing to many students (particularly from outside the Territory)
- **Mature students are often forgotten** when considering potential university supports – not all students are young high school graduates
- **Current legislation needs to prevent political and bureaucratic interference** in an NWT college or university – it should also outline a vision for a community-university relationship

Interviewees viewed an alternate made in NWT post-secondary model as an economic opportunity for the community and for the territory

- Offering university courses alongside college-level programming can **position the community to meet current – and future – needs** of the territory as the knowledge economy and resource economy evolve
- Having a university-based offering in Yellowknife **provides the territory with a global voice** on Circumpolar issues
- The Northwest Territories is **in a position to pioneer the incorporation of Indigenous cultural content and traditional knowledge**, creating access to university-based programming relevant to many residents
- **Attracting research opportunities to the community can create significant opportunities** for business collaboration, industry development, and talent attraction
- Bringing a university-based model to the community can help **rejuvenate the local population**, while helping local students **access education within their own community** (and stay)
- A university can help local businesses **develop the labour market** according to their present and future needs
- Polytechnics in particular serve as hubs across the country, leading on research in the areas of technology adoption, applied research and learning, and in **responding to industry needs**
- There is a **clear lack of Northern context** in southern university education – a perspective relevant to Northerners and to many southern and international students

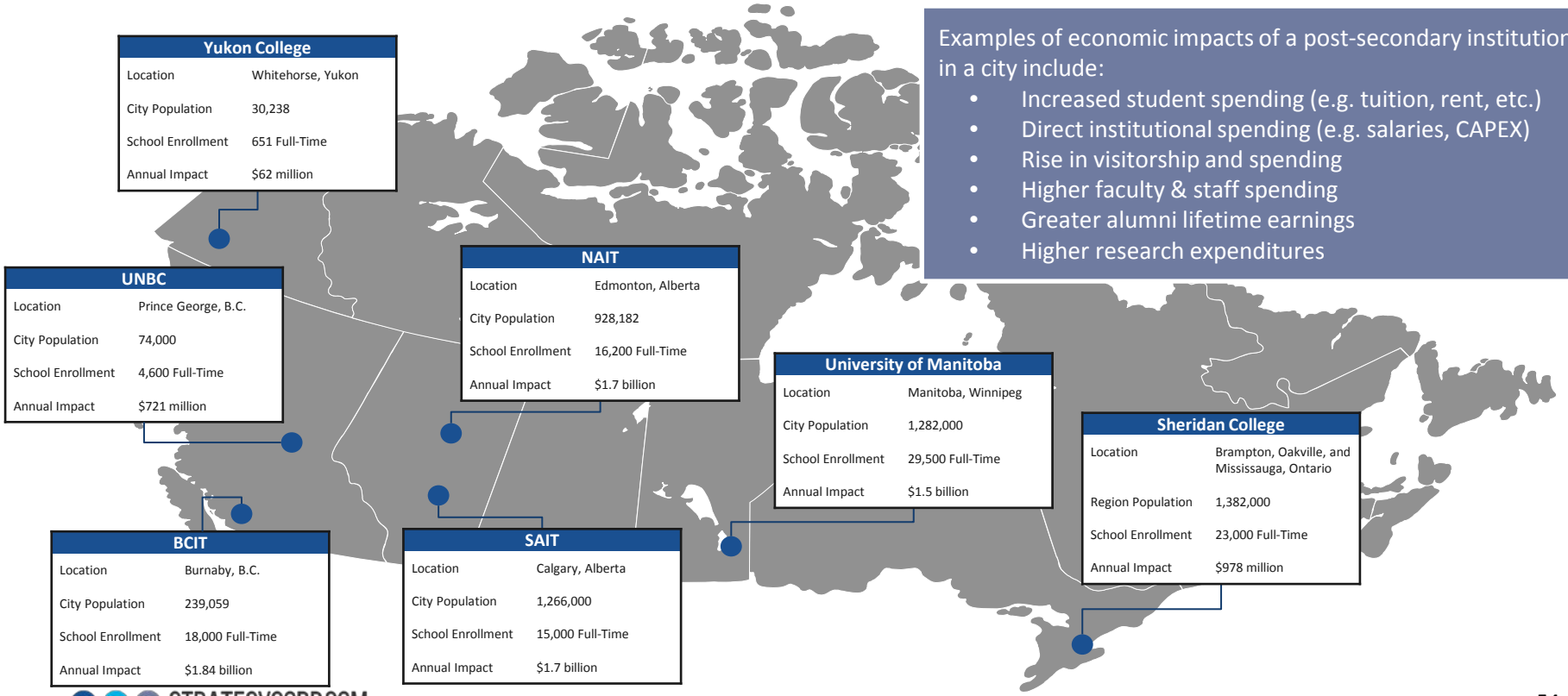
Interview Guide: Stakeholders and Subject Matter Experts

The following is a list of questions provided to stakeholders and subject matter experts to inform the university and feasibility benefits study. The interviews were conducted on a confidential basis, both in-person and over the phone. Participants were provided with questions in advance to guide an informed discussion

1. What does establishing a university in the North mean to you?
2. What conditions or requirements do you think will allow a new university to be established successfully in Yellowknife? Do these exist today (e.g. policy, government support, private/industry support, community support, student population/demand, campus/student housing infrastructure)?
3. Do you support the establishment of a new university in Yellowknife? Why or why not?
4. How can industry support the development/work with a new university? Who are the key stakeholders and in what ways can they collaborate?
5. What are the requirements that must/should be met for a college to transition into a university (e.g. financial, legislative, credentials)?
6. What hurdles must be overcome to establish a university in Yellowknife?
7. What competitors would a Yellowknife-based university face in the post-secondary space in terms of student enrolment, faculty attraction, and research dollars?
8. In your view, what potential benefits does a new university generate (e.g. economic, industry, community, etc.)?
9. What key problem does the new university solve (e.g. brain drain, students leaving home to study elsewhere)?
10. How can a university serve the unique needs of your community (e.g. municipal, Indigenous, Francophone, business, industry)?
11. What are some of your biggest concerns regarding the transition of Aurora College to a new university (if any)?
12. What are some key risks associated with this (e.g. establishing the university, change management)?
13. If the decision is made to establish a new university in Yellowknife, what should the new university look like (e.g. programming, operating model, research priorities, faculty/student composition)?

Appendix C – Economic and Demographic Analysis

The presence of a post-secondary institution has a concrete impact on the local economy



Yukon College	
Location	Whitehorse, Yukon
City Population	30,238
School Enrollment	651 Full-Time
Annual Impact	$62 million

UNBC	
Location	Prince George, B.C.
City Population	74,000
School Enrollment	4,600 Full-Time
Annual Impact	$721 million

NAIT	
Location	Edmonton, Alberta
City Population	928,182
School Enrollment	16,200 Full-Time
Annual Impact	$1.7 billion

University of Manitoba	
Location	Manitoba, Winnipeg
City Population	1,282,000
School Enrollment	29,500 Full-Time
Annual Impact	$1.5 billion

Sheridan College	
Location	Brampton, Oakville, and Mississauga, Ontario
Region Population	1,382,000
School Enrollment	23,000 Full-Time
Annual Impact	$978 million

BCIT	
Location	Burnaby, B.C.
City Population	239,059
School Enrollment	18,000 Full-Time
Annual Impact	$1.84 billion

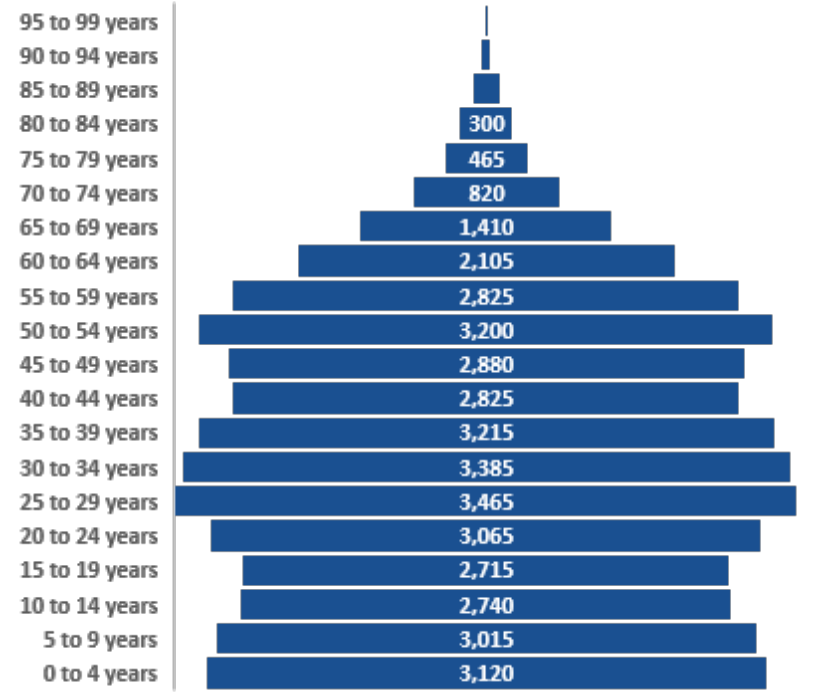
SAIT	
Location	Calgary, Alberta
City Population	1,266,000
School Enrollment	15,000 Full-Time
Annual Impact	$1.7 billion

Examples of economic impacts of a post-secondary institution in a city include:

- Increased student spending (e.g. tuition, rent, etc.)
- Direct institutional spending (e.g. salaries, CAPEX)
- Rise in visitorship and spending
- Higher faculty & staff spending
- Greater alumni lifetime earnings
- Higher research expenditures

Over the next 20 years, the NWT's overall population is expected to decline, while its share of dependant senior citizens is projected to rise rapidly

NWT Demographic Age Breakdown (2016)



Population Trends

- Despite a birth rate above the Canadian average, the Northwest Territories' population is expected to shrink as a result of net outmigration
- This continued trend is expected to contribute to a **population decline of 1,092 by 2040**, with youth outward migration accounting for much of the decline
- At the same time **there will be 5,486 more people aged 65 and over** than there are now in the NWT
- Though the GNWT has recognized the upcoming labor shortage over the next 15 years, and has instituted favorable nomination programs to fast track immigration to Canada through the territory immigration is still low. Last year, 293 foreign nationals immigrated to the NWT

Negative population trends will inevitably place a greater burden on the working-age population, which will be charged with supporting the costs of an anticipated increase in demand for healthcare and social services

Source: Census Profile NWT, Statistics Canada, Immigrate NWT

In addition, the current socio-economic outlook is not creating conditions for the labour market to expand

Stagnant Economic Growth	• GDP growth is expected to remain constant between 2015—2030, unless the global commodities outlook improves
Negative Demographics	• Outside of a resource boom, NWT's population is projected to shrink due to an aging population, low birth rate, and increasing outmigration
Low Graduation Rates	• Northern graduation rates are consistently lower than the rest of Canada; students often require academic upgrading to continue their education
Stagnant Job Creation	• GNWT economic outlooks indicate that most new jobs will be only required to replace existing workers through to 2030, not to meet net-new industry demand
Specialized Degree Demand	• Though the GNWT projects a future demand for jobs requiring a university degree, most of those positions will require specialized/advanced degrees

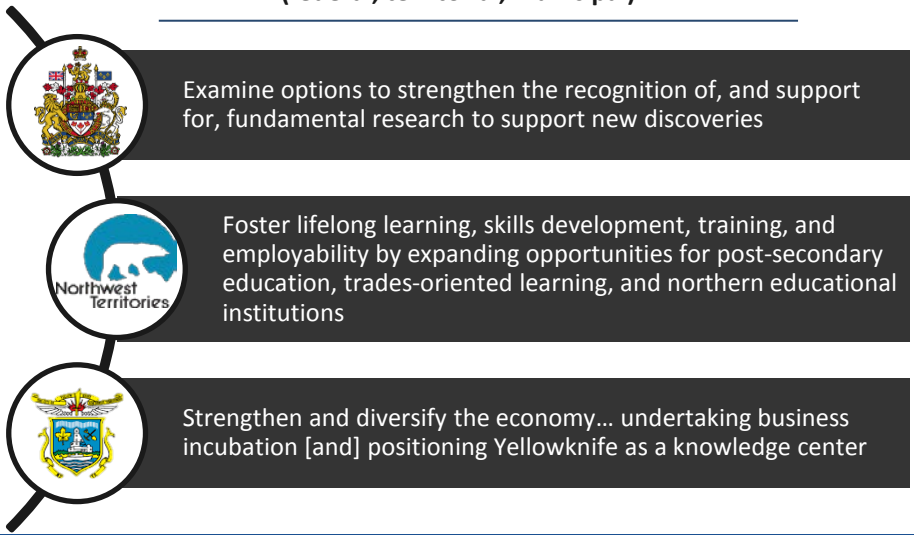
Snapshot of NWT Economic Outlook

- Although the Northwest Territories boasts a high median personal income of $50,618 compared to a national average of $30,359, primary industries such as mining, construction, and oil and gas are expected to decline in the coming years
- Peak diamond production has passed in the Northwest Territories and will soon begin to fall. All three major operating mines – Gahcho Kué, Diavik, and Ekati – are projected to close by 2035
- Real GDP growth over this time period is therefore expected to contract by 2.9% this year, followed by a plateau in 2019, before falling for the foreseeable future

Sources: (1) *Northwest Territories Labour Market Forecast and Needs* Assessment (GNWT/ECE); (2) *Graduation Rates in the NWT* (GNWT/ECE); (3) NWT Census Profile, 2016 (Stats Can); (4) Territorial Outlook, 2018 (Conference Board); (5) CBC North (N.*W.T. premier issues 'red alert' on 'colonial' attack on territory's oil and gas future*)

A university benefits the economic agenda of Canada, Government of the Northwest Territories and Yellowknife

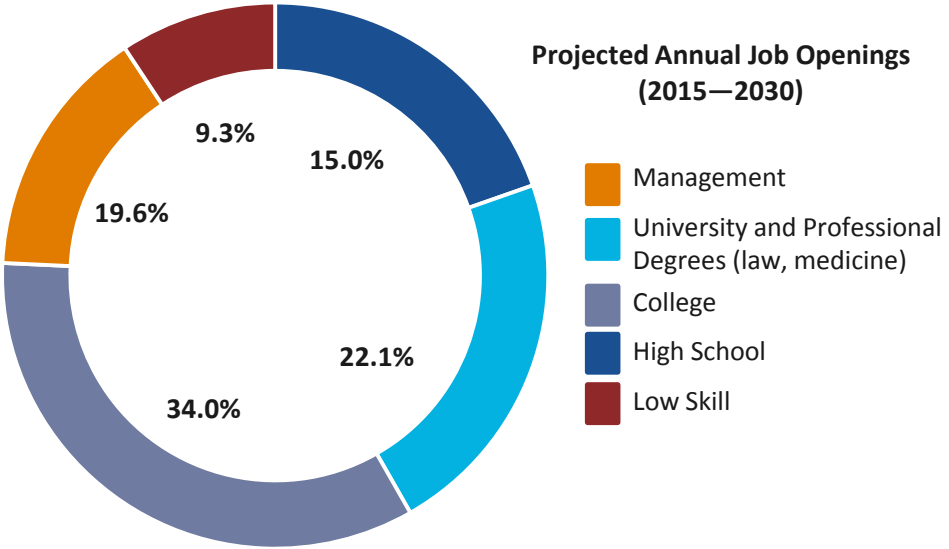
Examples of knowledge economy priorities (federal, territorial, municipal)



- In the North, economic opportunity is highly linked to the resource economy and government, which traditionally requires post-secondary education
- Challenges with long-term labour force participation are particularly acute in Indigenous and Northern Canadian communities

Sources: (1) Prime Minister's Advisory Council on Economic Growth; (2) Yellowknife Council Goals and Objectives, 2016—18; (3) Mandate Letter of the Minister of Science (12-Nov-15); (4) Priorities of the 18th Legislative Assembly; (5) CBC North (*Arctic university proponents meet in Yellowknife*)

Universities can help unlock labour market potential



Medium Case Scenario (Northwest Territories Labour Market Forecast and Needs Assessment)

- Over the next 15 years, 28,500-36,700 job openings are projected to emerge in the NWT, of which 78% will require some form of post-secondary education and/or work experience
  - 98% of these jobs will be to replace retirees or outward migrants
- Importantly, while many future job openings are for positions that typically require a university degree, current data suggests that many positions will need to be filled with non-degree holders

Source: Conference Board of Canada

Enhancing access to post-secondary education is a powerful means of promoting social mobility and reducing inequality

- **Proximity and access to higher education** are key drivers of upward income mobility.
- A larger body of research that suggests that the presence of a university or college in a town or small city makes students – regardless of income level of – more likely to attend
- Recent studies suggest Southwestern Ontario as an important case study: despite a declining local manufacturing base and regional economy, children of low-income parents exhibit some of the highest rates of upward mobility in Canada – in part due to the high number of higher education institutions (e.g. colleges, universities, polytechnics) in the area

Income Mobility Through Education

$153,520

Individual benefits to a Canadian male who receives postsecondary education

35-40%

Probability of remaining in the bottom quintile of national earners for men and women in the Inuvik and Fort Smith Regions

1 in 5

Undergraduate degree holders earn less than ½ the median Canadian income

Proximity and access to post-secondary education can improve persistent inequality in a community

Sources: (1) Miles Corak, Presentation to the Canadian Economics Association ; (2) Canada 2020 background paper on inequality; (3) The Globe and Male: A Tale of Two Canadas); (4) Conference Board of Canada, Returns to Tertiary Education

The GNWT will need to address the challenges of setting up a new university or polytechnic university, including

1. **Capital Requirements** in relation to existing and future infrastructure priorities

2. **Aging and declining population** will place greater strain on GNWT program spending, restricting capacity for new social initiatives

3. **Cost of living** – the North is traditionally considered an expensive place to live

4. **Housing Affordability** – rent higher than national average

Source: GNWT (*Budget 2018-2019*)

Yellowknife's cost of living and income

Cost of Living

- Yellowknife is considered an expensive place to live – for example, prices are 20% higher than in Edmonton
- Compared to the Canadian average ($82,697), the average Yellowknife household expenditure is significantly higher ($125,783)

Although the Northern Living Allowance can offset costs by $4,015–$8,030 per person (or student), it does not overcome the differential in living costs

To overcome housing challenges, a Yellowknife university/campus would likely need to offer both student and mature students (families) subsidized housing units

Income

- Northwest Territories has the highest median household income in Canada
- Compared to the Canadian average ($70,366), the median Yellowknife household income is significantly higher ($142,616)

Median Income by Community, Northwest Territories, 2015

	Median Income ($)		
	Household	Econ. Family	Personal
Northwest Territories	117,688	138,515	50,618
Yellowknife Area	141,700	163,493	67,178
Detah	59,264	x	x
Yellowknife	142,616	164,104	67,792

Source: NWT Bureau of Statistics

Appendix D – Northern Post-Secondary Institution Peer Reviews

Overview of Northern University Models

StrategyCorp conducted a peer review of other northern post-secondary models to determine similarities and best practices in relation to their history, mandates, and operating contexts (when benchmarked to Aurora College), which include a key focus on Indigenous education and supports, interdisciplinary research focus, location in similarly sized and remote communities, and their relative isolation from other institutes of higher learning within their countries

In addition to Aurora College, three Northern post-secondary institutions were examined:

1. Yukon College (Yukon University)
2. University of Alaska
3. University of Tromsø

Among other things, the review provides a fact base that ultimately focused insights and take-aways from the following perspectives:

1) What model did these institutions start with and how did they evolve (e.g. value proposition, delivery model, initial scope of programming, level of competition/demand in catchment area)?
2) What type of support/conditions allowed them to grow (e.g. support [grants, funding-per-student], population, partnerships, etc.)?
3) What is their state today (e.g. government funding, value proposition, student breakdown [youth, mature students, international], scope of programming, campus locations, and specializations, research funding)?
4) What best practices can be applied to the Northwest Territories?

Benchmark: Aurora College

Funding Model
- 65% of College funding comes from the GNWT
- Federal funding makes up only 3% of the annual revenues, and tuition only 4%
- In 2016-17, the College received $32.7 million from government (territorial and federal)

Research focuses/research institutes
- The Aurora Research Institute has three Research Centres. The Institute focuses on the advancement of indigenous knowledge and the joining of indigenous knowledge with western science.

Staff Demographics
- 30% of employees Indigenous
- 69% of employees are permanent; 31% are casual

Scope of Programming
- The College offers 16 programs, including a Bachelor of Education (under review) and Nursing, as well as Master of Nursing
- Diplomas for business, social work, personal support worker, liberal arts, among others
- Apprenticeship and trades programs including mining and carpentry, among others

Student Demographics
- Student enrolment numbers (FTE) by program division have been declining, down 10% from 2015-16 to 2016-17
- Part-time enrolment is down 29% from 2015-16 to 2016-17

Campus Model
- Aurora College delivers programs at three Campuses
- There are 21 Community Learning Centres and other community sites in the Northwest Territories

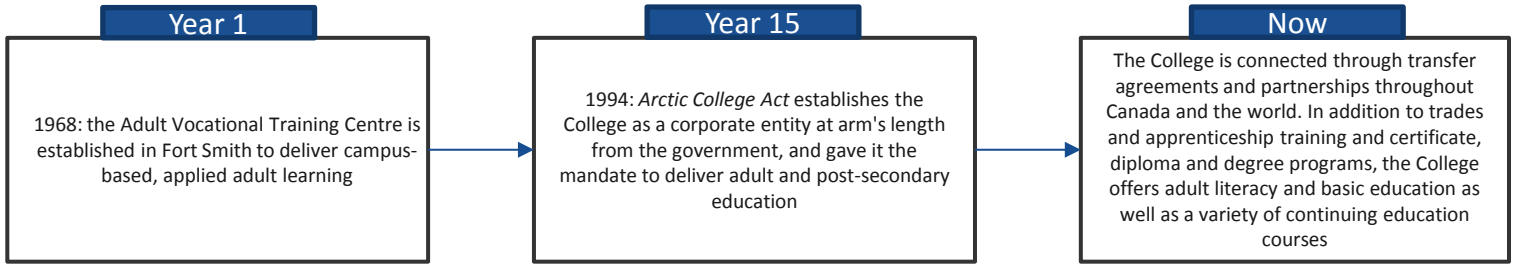
Type:	Public
Year Established:	1981-1984-1995
Revenue:	CAD $49.9 million
Graduation Rate:	Unknown; 111 graduates in 2017
# of employees:	250
Jurisdiction:	Northwest Territories
Jurisdiction Size:	44,700
# of Students enrolled:	2,915
# of programs:	16
# of courses:	Unknown
Credentials offered:	GED, Certificate, Diploma, Undergraduate (Education and Nursing); Graduate

Source(s): Aurora College

University Model Review: Aurora College

Background/History of the school

- 1968—69: The Government of Canada devolves authority for legislation to the NWT Legislative Assembly. The Adult Vocational Training Centre establishes a post-secondary campus in Fort Smith
- 1982: The Legislative Assembly's Special Committee report on Education, *Learning: Tradition and Change in the Northwest Territories*, proposes a return to a model of program delivery at the community level
- 1984: Arctic College created with campuses in Fort Smith and Iqaluit. The College grows quickly to include campuses in each region of the NWT (and present-day Nunavut)
- 1986: The *Arctic College Act* establishes the College as a corporate entity at arm's length from the government, and gave it the mandate to deliver adult and post-secondary education
- 1987: The GNWT mandates that community learning centres across the North would join the College system, a process completed in 1990
- 1992: The Government Leader announced that the Yellowknife head office of Arctic College would be transferred to the communities of Fort Smith and Iqaluit in preparation for the partition of Aurora College from Arctic College, upon implementation of the *Nunavut Land Claims Agreement*
- 1994: What is now Aurora College continues to evolve as the needs of the NWT labour market changed. In response to a need for more nurses, the College establishes the Northern Nursing Diploma
- 1995: Two colleges are created – Nunavut Arctic College in the Eastern Arctic, and Aurora College in the Western Arctic
- 1995: Aurora Research Institute of the former Science Institute of the Northwest Territories were amalgamated with the new colleges. The portion which now functions as a division of Aurora College is called the Aurora Research Institute, and offers licensing and research assistance in Western NWT
- 2000: The College developed a partnership with the University of Victoria to begin delivery of a Bachelor in the Science of Nursing Degree. The College built upon its partnership with the University of Saskatchewan, expanding the two-year diploma in teacher education to a three-year diploma
- 2007: Aurora College replaces the three-year diploma in teacher education program with a Bachelor of Education Degree (now under review)
- 2018: The *Aurora College Foundational Review* recommends the transition of the College into a Polytechnic university



Source(s): Aurora College

University Model Review: Aurora College

Key Partnerships

- Partners include Aboriginal groups, government and non-government departments, and business and industry partners
- The four major partnerships are, in addition to the university program partners:
- UArctic (network of universities and research institutes across the circumpolar region)
- National Research and Education Network: network access
- Mine Training Society: training purposes
- NWT Institute of Supply Chain Management Association: delivery of SCMA Diploma

Competitors

- Institutions (i.e. colleges, universities) in the Yukon neighbouring provinces are chief competitors, namely in British Columbia and Alberta
- In terms of Arctic and Northern research, competitors include members of ACUNS and UArctic partner schools

Campus Locations

Analysis

- The small number of university graduates at Aurora College suggests that while there is a value to these programs, the real need of the territory is in upgrading, college, and apprenticeship programs
- The evolution of the college and its offerings, from its inception, to the shift in programming in year 8 of operation, indicates the ability to be nimble and aligned with the needs of the surrounding region
- The reliance on government funding to sustain the College, and the minimal 4% revenue from tuition shows the limitations of the school as it is now. The school is not financially sustainable, and will need to draw significant revenue and more students to show its stability and ability to survive

Source(s): Aurora College; NWT Student Financial Assistance Program Review (2012)

University Model Review: Yukon College

Funding Model
- Annual revenue of $46M
- Funded through a combination of tuition and government funding (~50% through Yukon Government)

Research focuses/research institutes
- Northern research focus: climate change; mining; environmental sustainability; natural and social sciences; Indigenous studies/languages
- Recognized for Centre for Northern Innovation in Mining; Cold Climate Innovation Centre Indigenous governance studies

Staff Demographics
- Not disclosed

Scope of Programming
- Focus at inception: employment skills
- Unique northern programming (e.g. BAs in Indigenous Governance & Northern Studies; Diplomas in Northern Building Science & Northern Environmental Management)

Student Demographics
- 26% of students in 2016-17 were Indigenous (32% full-time, 18% part-time). This is decreasing from 2013-14, when 31% of students were First Nations (38% full-time, 25% part-time)
- Majority of students are Yukon residents
- 61% female, 37% male (2016-17)
- Median age of 27 (2016—17)
- In 2016/17, the full-time equivalent count for international students was 98, and 55 students were enrolled for short-term study tours
- In 2016-17, a total of 151 credentials were awarded (certificate, degree, etc.), down from 170 in 2015-16

Campus Model
- In 1988, main campus relocated from Whitehorse to Yukon Place, alongside the Yukon Arts Centre and the Yukon Archives
- The College currently has 13 community campuses located throughout the Yukon

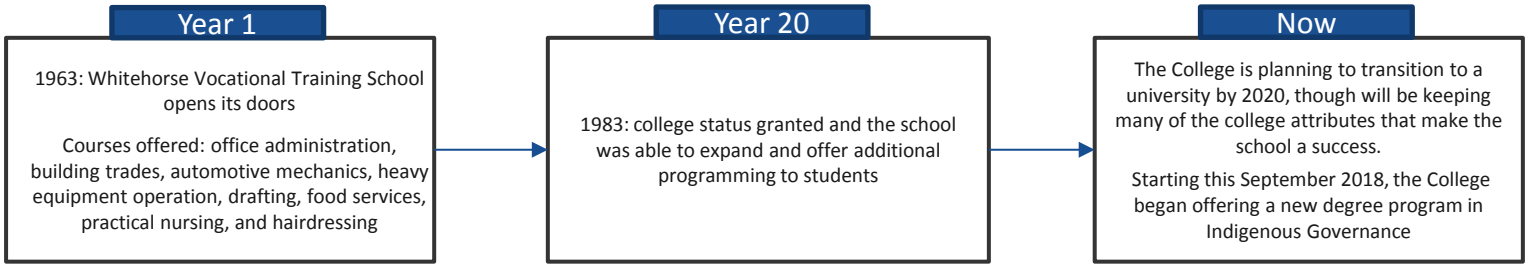
Type:	Public College
Year Established:	1983
Revenue:	CAD $46 million
Graduation Rate:	Unavailable
# of employees:	585 (FT/PT staff and faculty)
Jurisdiction:	Yukon
Jurisdiction Size:	38,459
# of University Students enrolled:	161, and 458 University Transfer
# of programs:	56
# of courses:	Over 600
Credentials offered:	Undergraduate, Diploma/ Certificate, GED

Source(s): Yukon College

University Model Review: Yukon College

Background/History of the school

- 1963: Yukon Vocational and Technical Training Centre founded. Originally, courses offered in office administration, building trades, automotive mechanics, heavy equipment operation, drafting, food services, practical nursing, and hairdressing
- 1983: College status was granted in the spring, when the College is provided an endowment to build the Ayamdigut campus in Whitehorse. Since that time Yukon College has grown to include 13 campuses throughout the Yukon Territory
- 1988: The new $50 million Yukon College Ayamdigut campus officially opens
- 1989: Yukon Native Teacher Education Program is launched, offering a Bachelor of Education degree in partnership with the University of Regina
- 1995: Yukon College beings offering a Bachelor of Social Work in partnership with the University of Regina to meet the needs of local residents
- 2002: *Yukon College Act* introduced, legislating the College as an arms-length institution with a mandate to provide educational programs, services and activities to meet the needs of Yukoners
- 2007: Whitehorse hosts the Canada Winter Games, handing over the newly built athletes village to the College for student housing
- 2009: The Yukon Government passes legislation permitting the College to offer degree programs with approval from an external quality assurance board
- 2016: Yukon College opens the Centre for Northern Innovation in Mining, with support from the territorial and federal governments
- 2017: Campus Alberta Quality Council confirms the College meets the requirements to offer undergraduate degree programs, paving the way for the school's Indigenous governance degree and ultimately, Yukon University. Degree programs in Northern Business Administration and Northern Studies are expected to follow
- 2018: Yukon College collaborates to establish the Yukon Innovation Hub for Yukon entrepreneurs to network and partner and receive business advisory and support services



Source(s): Yukon College

University Model Review: Yukon College

Key Partnerships

- Partnership with Vancouver Island University for Indigenous youth that enhances existing supports for Yukon First Nations students and youth and creates new opportunities to increase access and remove barriers to post-secondary education
- The College has various partnerships with companies, communities, and others, including the Kluane First Nation (diesel reliance), Casino Mining Group, the City of Whitehorse, and others. These relate to specific programming – where the partner seeks answers to questions that students can provide through their programs

Competitors

- University of Alaska (offers in-state tuition rates)
- Institutions (i.e. colleges, universities) in neighbouring provinces are chief competitors, namely in British Columbia and Alberta
- Other UArctic partner schools who offer degree programs and who are full universities

Campus Locations

Analysis

- Yukon College's slow growth (taking 20 years to become an accredited college), shows the reality of growth and transformation into a community support with reputational success
- Making a deliberate decision to house the main campus in the capital, supported by community campuses and e-learning, is a key reason for the College's success in talent attraction, affordability, and business incubation
- The recent decision to maintain a hybrid education model (i.e. college and university programming) as the College transitions to a university is one of the attributes that has made the college so successful in serving the needs of the region and communities
- Importantly, Yukon College has required significant federal funding to grow both its academic and campus (e.g. student housing) infrastructure

Source(s): Yukon College

University Model Review: University of Alaska System

Funding Model
- During FY 2017, the System received 42.3% of its revenues from State Appropriations, 22.1% from Government Grants, and 17.4% from Tuition and Fees
- Total government funding allocation for 2019 was $317M; $24M less than what the Board of Regents requested for FY 2019
- There are domestic, international and WUE (Western Undergraduate Exchange) rates

Research focuses/research institutes
- Full suite of northern research programming, including:
- Agricultural and Forestry Experiment Station
- Institute of Arctic Biology
- Institute of Northern Engineering
- International Arctic Research Center
- UA Museum of the North

Staff Demographics
- Not disclosed

Scope of Programming
- Initially began with specializations in agricultural programming
- Eventually expanded to all levels of education, including scientific and liberal arts education programming

Student Demographics
- 91% of students are in-state
- 49% Caucasian, 7% Native or Indian-American
- 93% undergraduate
- 51% female, 49% male

Campus Model
- The University of Alaska System was created in 1975. Since then, it has expanded to nineteen campuses between three separately accredited universities (in Anchorage, Juneau, and Fairbanks)
- It also includes three large satellite community colleges on UAA's accreditation.

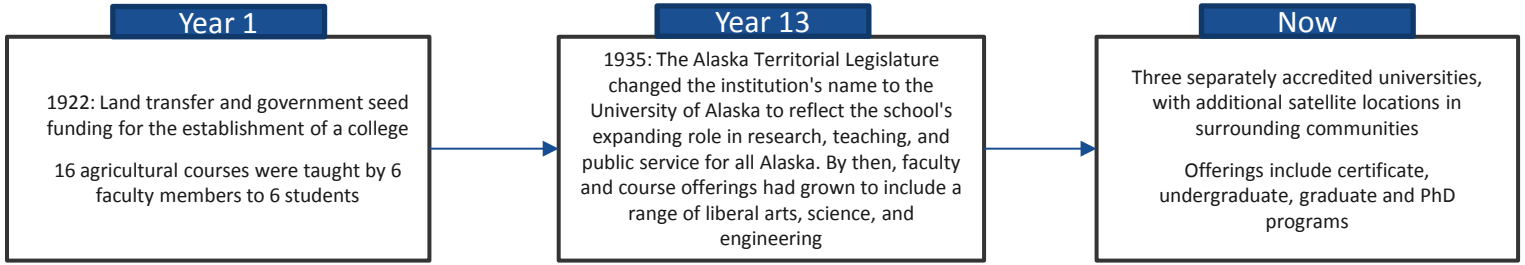
Type:	System
Year Established:	1975
Revenue:	CAD $1.0 billion
Graduation Rate:	37%
# of employees:	901 Staff; 562 Faculty
Jurisdiction:	Alaska
Jurisdiction Size:	739,795
# of Students enrolled:	35,000
# of programs:	400
# of courses:	Unknown
Credentials offered:	Undergraduate, Graduate

Source(s): University of Alaska

University Model Review: University of Alaska

Background/History of the school

- 1906: the hill where UAF now stands became part of a federal Agricultural Experiment Station in Fairbanks, Alaska
- 1915: U.S. Congress approved money and transferred a piece of land from this station to establish a school of higher education.
- 1917: Alaska Territorial Gov. John Strong signed the bill to create the institution now known as the University of Alaska.
- 1922: With a federal land grant, and added funding from the Alaska Territorial Legislature, construction was completed in 1922
- 1931: the federal government transferred the entire Agricultural Experiment Station to the college.
- 1935: the Alaska Territorial Legislature changed the institution's name to the University of Alaska to reflect the school's expanding role in research, teaching, and public service for all Alaska. By then, faculty and course offerings had grown to include a range of liberal arts, science, and engineering
- 1946: the Geophysical Institute was established by the U.S. Congress
- 1959: Alaska becomes 49th State of the United States
- 1960-62: the Alaska Legislature created the Institute of Marine Science (and the Institute of Arctic Biology two years later)
- 1969: the Geophysical Institute begins operation of Poker Flat Research Range, providing launch facilities for NASA and the Department of Defense
- 1970: the university was designated a federal sea grant institution for marine research
- 1972: the Alaska Legislature established the Alaska Native Language Center and provided operating funds. Since then the university has supported research, documentation and teaching of the state's 20 Native languages
- 1975: the University of Alaska statewide system was created. Campuses in Anchorage and Juneau were assigned their own chancellors and central staffs, with the statewide administration and overall university president remaining in Fairbanks



Source(s): University of Alaska

University Model Review: University of Alaska

Key Partnerships

- UArctic (association of universities and research institutes across the Arctic region)
- The school has expanded scholarship and global education efforts in a series of agreements with schools in Japan, Denmark, Canada, the People's Republic of China, and Russia

Competitors

- Alaska Bible College, private, undergraduate, non-denominational Bible college in Glennallen
- Alaska Pacific University, a private, baccalaureate university associated with the United Methodist Church in Anchorage
- Yukon College, a degree-granting college in the Yukon, which offers domestic tuition rates to Alaskan residents

Campus Locations

Analysis

- Alaska took time and effort to transform from a small farming college to the university system today – indicative of the realities facing such an institution in the North
- Enrolment, programming, and endowment have benefited from Alaska-specific factors: state population, high economic output, and the distance from the Continental US
- Collectively, these factors created financial incentives for residents to attend an in-state versus an out-of-state school, giving the university a competitive advantage
- As a result, the University of Alaska evolved to meet unique state economic needs, while providing residents a solid in-state education – and a reason for residents to remain in Alaska

Source(s): University of Alaska

University Model Review: University of Tromsø

Funding Model
- 1.5% of all government expenditure is given to universities
- The Government gives 168,793 Norwegian Krone ($20,000 USD) per student within the region of Troms Romsa, where the university is located
- There are no tuition fees for international students, though there are nominal semester (ancillary) fees that must be paid by all students

Research focuses/research institutes
- Full suite of research programming
- Focuses: polar environment/climate research; Indigenous people; telemedicine; medical biology; space physics; fishery/marine science; linguistics; and computational chemistry

Staff Demographics
- 20% of staff are foreign nationals

Scope of Programming
- The school has a wide variety of programs and offerings, many of which are unique
- The unique nature of these programs aligns with the various northern and indigenous-focused offerings
- See the research focus areas for specifics

Student Demographics
- 90% domestic students
- 10% international students

Campus Model
- The University now has 10 campuses consisting of various universities and colleges as a result of mergers over the last decade
- Tromsø is the main campus out of all the locations

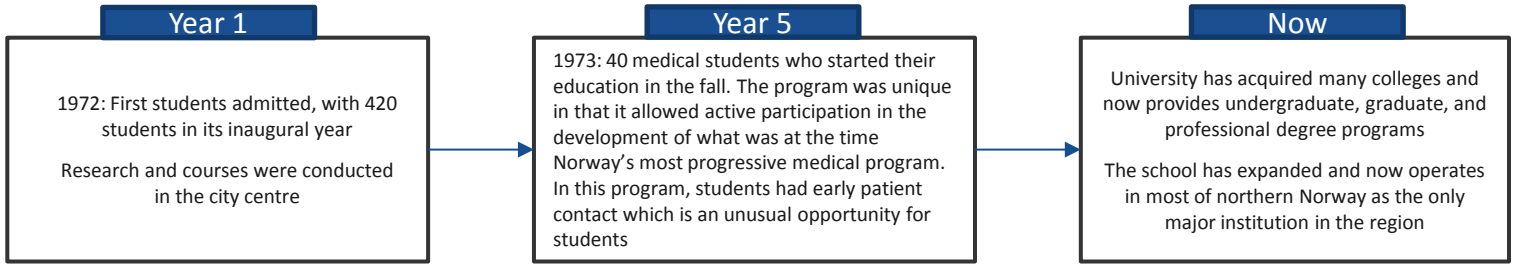
Type:	Public University
Year Established:	1968
Revenue:	CAD $92.6 million
Graduation Rate:	Unknown
# of employees:	3,487
Jurisdiction:	Tromsø, Norway (and northern Norway)
Jurisdiction Size:	5,200,000
# of Students enrolled:	16,476
# of programs:	35
# of courses:	Unknown
Credentials offered:	Undergraduate, Graduate, Professional (Law, Medicine)

Source(s): University of Tromsø

University Model Review: University of Tromsø

Background/History of the school

- 1968: University of Tromsø established
- 1972: First students admitted
- 1973: First medical students admitted and Finnmark University College established. Finnmark University College is one of Tromsø's partner schools.
- 1983: Harstad University established, later to merge with the University of Tromsø as a community campus
- 1987: Law studies established at university
- 1988: The Norwegian College of Fishery Science merges with the university
- 1994: New pharmacology program established at the university
- 2004: Odontology program established at the university
- 2009: Tromso University College merges with the university
- 2013: Finnmark University College merges College is established. Harstad University College is one of Tromsø's partner schools
- 2016: The University Colleges in Harstad and Narvik Merge with UiT. The University of Tromsø has changed its name and become UiT the Arctic University of Norway following the mergers. The new name (UiT) represents the coalition of schools.



Source(s): University of Tromsø

University Model Review: University of Tromsø

Key Partnerships

- UiT The Arctic University of Norway is a founding member of the University of the Arctic, an international network of 160 study and research institutions of the circumpolar region
- The University cooperates with all parts of the world. 200 international agreements secure an active academic exchange of students and staff with partner institutions worldwide

Competitors

- There are seven other universities in Norway which may be identified as competitors for students; however, Tromsø is the largest research and educational institution in northern Norway
- Many other university competitors would exist throughout Scandinavia (e.g. Sweden, Finland) and throughout Europe

Campus Locations

Analysis

- Tromsø is a difficult comparator to some other Circumpolar universities, owing to the availability of government funding and free tuition (for both domestic and international students) available for post-secondary education in Norway
- Because of the significant government funding provided to the university by the Norwegian government, the school is able to offer start-up and scale programming at a rapid, sustainable pace. Education, not institutional profitability is the key policy priority in Norway
- Though the university offers a unique circumpolar perspective (and is in the hometown of the Arctic Council), other regional competitors (e.g. Lapland) offer similar programs

Source(s): University of Tromsø

Northern best practices demonstrate that establishing a university should not come at the expense of college programming

- With a shrinking population in the Northwest Territories, it will be imperative for post-secondary educational institutions to be a factor in supporting the regional economy – likely playing a key role in supporting population retention
- StrategyCorp's analysis of Northern peer institutions found that institutions were founded to reflect the needs of the regional economy, whether through upgrading, farming, or other educational focuses
- The reason for the **success of these institutions is their ability to attend to community needs organically**, growing their base (and value proposition) as the region grows and changes. Historically, these slow-growth institution only supported opportunities for improvement when they were sustainable – and forward thinking
    - The exception is the quick growth of Tromsø University, which was due to funding allocations from the government and the overall lack of financial constraint. As financials are more of an issue in the Canadian context, it will be difficult to mimic this growth in Canada without serious federal support
- As best practices have demonstrated, **keeping the roots of a college – through upgrading, apprenticeships, and other college-level programs – has allowed the region to keep up with socio-economic changes** (even as an institution evolves), ensuring opportunities for both academic growth and economic advancement within the region. Importantly, it also has prevented the introduction of internal, regional competitors

Appendix E – Review of Relevant Legislation and Bylaws

Legislative considerations for a university in the Northwest Territories

- Canadian post-secondary education is exclusively within provincial/territorial jurisdiction – **federal and municipal levels of government have little to no regulatory role**
  - Provinces and territories have the sole legislative authority to establish a university, though a lack of quality and academic independence of an institution could cause reputational harm and isolate it from national associations
- Pursuant to section 150 of NWT's *Education Act*, establishing or creating any university in NWT requires: (a) express legislative authority and (b) authorization by the Minister of Education
  - While there is no enabling legislation as of yet, the legislature could enact a new statute through its existing statutory process
  - Given the extensive scope of this provision, these two pre-requisites would likely apply equally to establishing a university in the NWT, whether by creating a southern university's satellite campus in the NWT or transitioning Aurora College into a university*

s. 150: "No university or degree-granting institution, by whatever name, and no institution purporting to be a university or purporting to grant degrees, shall be established or created in the Territories except under the express authority of an Act, and no institution shall be operated as a university in the Territories without the written authorization of the Minister." [Emphasis Added]

**StrategyCorp encourages the City of Yellowknife (and the GNWT) to seek formal legal advice regarding the interpretation of this provision*

Legislative framework for transitioning Aurora College to a University

- Transitioning Aurora College to a university would require amendments to the *Aurora College Act* (the "ACA")
- The ACA provides the Minister with broad authority to direct the activities of the College (directly and through appointees), and these would likely continue should it be converted into a university
- Changes to the Act would not automatically create an acceptable institution (e.g. one of high-quality programming, research, etc.), but such changes establish a path forward legislatively

Select responsibilities under the ACA do not facilitate academic or institutional independence for the institution	
Minister	• Give direction to the Board respecting the exercise of its powers and the performance of its duties; • Establish programs and courses of Aurora College; • Recommend Executive Council to make regulations to prescribe the degrees to grant; and • May appoint officers and employees as the Minister considers necessary for the operation of Aurora College
Board of Governors (all Minister-Appointed)	• Recommend priorities to the Minister for programs and courses • Submit budgets to the Minister • Establishes and dissolves student associations
President (Minister-Appointed)	• Serves as a member of the GNWT public service

The ACA provides that the purpose of Aurora College is to "deliver adult and post-secondary education, including the delivery of university level programs and the granting of prescribed [by the Commissioner in Executive Council] university degrees and applied bachelor degrees

Defining a "University"

- Defining what is (and what is not) an accredited university is ultimately the legislative prerogative of provincial and territorial governments
- Although the legislation of the Northwest Territories does not yet permit a university to operate (without ministerial and legislative approval), it could be amended to do so
- Nationally, **Universities Canada** maintains criteria for membership that restricts those that may join the association (though it does not restrict the ability to offer degrees)
- Following a KPMG review, the Government of Nunavut decided against transitioning Nunavut Arctic College into a university after it was unable to meet key elements of Universities Canada's criteria

StrategyCorp has reviewed Universities Canada's membership criteria and determined that currently a university in the NWT would struggle to meet some of this criteria

Select Universities Canada Criteria	NWT Status
Authority vested in academic staff for decisions affecting academic programs including admissions, content, graduation requirements/standards	Unless the NWT *Education Act* is amended, the GNWT remains the final authority on academic matters
An independent board of governors, or appropriate equivalent, that has control over the institution's finances, administration and appointments	Unless the NWT *Aurora College Act* is amended, the institution remains an entity of the GNWT, lacking appropriate independence
It has as its core teaching mission the provision of education of university standard with the majority of its programs at that level	Unless the institution elected not to offer college diplomas, university programs would be in the minority of programs
A quality assurance policy that results in cyclical or continuous assessment of all of its academic programs and support services	Unless the *Aurora College Act* is amended, quality assurance remains the purview of the GNWT, not the institution
Has, in the academic year in which it makes application for membership, and has had in the two preceding years, an enrolment of at least 500 FTE	Aurora College currently meets this requirement when counting its college-level FTEs, but is far from 500 university-level FTEs

Source(s): Universities Canada; GNWT (*Education Act* & *Aurora College Act*); Government of Nunavut University Feasibility Study (KPMG, April 2016)

Best practices for legislative frameworks related to publicly funded universities

Mechanism	Description	Examples
Quality Assurance Program or Administrator	Oversees quality assurance of programs through audits and reviews	Alberta's Campus Alberta Quality Council; Ontario's Universities Council on Quality Assurance
Mandate Agreements	Agreements between individual universities and the host province highlighting institutional priorities	Alberta's Post-Secondary Institution Mandates, Ontario's Strategic Mandate Agreements, British Columbia Mandate Letters
Major Capacity Expansion policy	Provides terms of reference for if and where satellite campuses can be located within the province	Ontario's Major Capacity Expansion Policy

- Although the GNWT would have the legislative authority to approve the opening of a satellite campus in the territory, provincial policies/programs for satellite campuses would be determined by the province (or territory) where host campus is located, rather than the satellite campus
    - With a southern satellite campus, the GNWT would not have oversight over the institute
- The creation of a new university or satellite university may spur the NWT to legislate comparable policies/programs that other provinces use to regulate their publicly-funded universities
    - These policies/programs would operate in addition to the aforementioned requirements under NWT's *Education Act*
- It is uncertain whether a southern institution would agree to a satellite campus being governed by GNWT legislation or political direction

Source(s): GNWT (*Education Act* & *Aurora College Act*)

Other Legislative Considerations

- A university in NWT would likely be found to be a "portion of the public service" (as Aurora College is now) which triggers compliance with provisions of the *Public Service Act*, including:
  - Terms and conditions of employment (remuneration, tenure, etc.);
  - Equal pay for work of equal value; and
  - Collective agreement provisions
- Because schools in NWT are also subject to the NWT *Human Rights Act*, an NWT university would need to **ensure that it complies with this Act by providing appropriate accommodation for students**
- **Yellowknife would likely require a zoning bylaw amendment** to authorize the change of use for the selected lands and to comply with the NWT *Community Planning and Development Act*
- While each university typically has different processes, the creation of a satellite campus would require approval by its Board of Governors (often in the form of a motion or university bylaw)
  - There is no Canadian precedent for a university establishing a satellite campus in a province/territory outside of the host province/territory, though this precedent exists internationally

Source(s): GNWT (*Human Rights Act*; *Education Act* & *Aurora College Act*)

Appendix F – Overview of Northern and Arctic Research Funding in Canada

Academic research contributes to greater socio-economic outcomes in Northern communities

- For universities, attracting research and research funding provides an opportunity for external investments in the institution, allowing for the growth of innovation through a profit-building stream of the institution
- For communities, research provides economic opportunity for the surrounding region, through job creation, knowledge mobilization, talent attraction and retention, development of innovative practices and additional technologies, and outside investment that provides further supports for all involved
- There is significant opportunity in the delivery of federal funding for research:
    - Budget 2018 included more than $1.7 billion for researchers, infrastructure, and equipment to support Canadian researchers through Canada's granting councils and research institutes
- Importantly, an added consideration is that Universities Canada views a proven record of scholarship, academic inquiry and research – and the institutional support to do so – as a key criteria for being accepted as a university
- Accordingly, StrategyCorp examined the research ecosystem of circumpolar, Northern, and Arctic research as part of its feasibility and benefits study

Major Academic Research Networks

Association of Canadian Universities for Northern Studies (ACUNS)

Plays a leadership role in promoting a diverse and comprehensive understanding of the North through the facilitation of collaborative research, knowledge mobilization and education. Members include universities, colleges, and learning centres across Canada

University of the Arctic (UArctic)

A cooperative network of universities, colleges, research institutes and other organizations concerned with education and research in and about the North. Members include northern colleges and universities across the globe, and others with environmental studies programs

U15 Group of Canadian Research Universities

Association of major Canadian research

Canada's Landscape of Arctic Research Universities and Colleges

- Academic research on the Canadian North and Canadian Arctic research is conducted by universities and institutes across Canada
- Academic institutes with an interest in the facilitation of research, knowledge mobilization, and education in the Canadian North are part of the **Association of Canadian Universities for Northern Studies (ACUNS)**
  - 10/15 U15 members are part of ACUNS
- As part of its research, StrategyCorp examined ACUNS as an indication of the level of interest in Canadian Arctic and Northern research

ACUNS Membership (2018)		
Aurora College	**Université Laval**	**University of Toronto**
Brock University	**Université du Québec à Montréal**	University of Victoria
Cape Breton University	Université du Québec à Trois-Rivières	**University of Waterloo**
Carleton University	Université du Québec en Abitibi-Témiscamingue	**Western University**
Churchill Northern Studies Centre	**University of Calgary**	Wilfrid Laurier University
Concordia University	University of Guelph	Wilp Wilxo'oskwhl Nisga'a Institute
Dalhousie University	University of Lethbridge	York University
Institut national de la recherche scientifique (INRS)	**University of Manitoba**	Yukon College
Labrador Institute of Memorial University	University of New Brunswick	
Laurentian University	University of Northern British Columbia	
McGill University	University of Ottawa	
Nunavut Arctic College	University of Prince Edward Island	
Queen's University	University of Regina	
Trent University	**University of Saskatchewan**	

***Bold denotes U15 member**

Sources: ACUNS

Social Sciences and Humanities Research Council Funding Grants

- StrategyCorp analyzed the federal funding awarded under the Social Sciences and Humanities Research Council (SSHRC) for projects focused on research in the North, the Arctic, as well as the Northwest Territories
  - SSHRC promotes and supports post-secondary research and training in the arts and social sciences
- StrategyCorp found that over the previous five years (2013—17), **SSHRC awarded $16.97 million to 417 recipients**
  - The majority (258) were for grants of $25,000 or less
  - A further 117 awards were for grants between $25,001 - $50,000
  - The average award size was for $40,692
- While Northerners won several awards, only 2/417 awards were granted to a Northern institution (Aurora College and Yukon College)

Top 5 SSHRC Recipients (2013—17)

Administrating Organization	Research Initiative	Total Funding Award
Dalhousie University	Safe and Sustainable Development of the Ocean Frontier	$1,764,760
Université Laval	Improving understanding of the northern environment and its impact on human beings and their health	$1,386,137
University of Manitoba	Learning partnership for community development in First Nation communities	$500,000
Université Laval	Knowledge network on mining encounters and Indigenous sustainable livelihoods in Circumpolar North and Australia	$418,414
University of Manitoba	Implications of hydro development for environments and Indigenous communities in Northern Canada	$356,500

Sources: Social Sciences and Humanities Research Council Database

Natural Sciences and Engineering Research Council Funding Grants

- StrategyCorp analyzed the federal funding awarded under the Natural Sciences and Engineering Research Council (NSERC) for projects focused on research in the North, the Arctic, as well as the Northwest Territories
- StrategyCorp found that over the previous five years (2013—17), **NSERC awarded $39.62 million to 987 recipients**
  - The majority (534) were for grants of $25,000 or less
  - A further 300 awards were for grants between $25,001 - $50,000
  - The average award size was for $40,137
- NSERC did not track which institutions won its awards, choosing to report only on the individuals and their research initiatives

Top 5 NSERC Recipients (2013—17)

Research Initiative	Total Funding Award
Contributions of climate change and hydro-electric regulation to the variability and change of freshwater-marine coupling in the Hudson Bay system	$1,930,000
NSERC Canadian Lake Pulse Network	$1,000,000
Quantifying climate-dependent and anthropogenic impacts on ecosystem services in the Subarctic Pacific Ocean; State-of-the-art observational tools to inform policy and management	$331,700
Ice Cube data analysis and detector upgrade developments	$271,000
Carbonate budgets, paleoceanography and ecology of deep-sea gorgonian coral forests in the northern Labrador Sea and southern Baffin Bay	$270,000

Sources: Natural Sciences and Engineering Research Council Database

Canadian Institutes of Health Research Funding Grants

- StrategyCorp analyzed the federal funding awarded under the Canadian Institutes of Health Research (CIHR) for projects focused on research in the North, the Arctic, Circumpolar issues, as well as the Northwest Territories
  - CIHR is the major federal funder of health and medical research in Canada
- StrategyCorp found that **CIHR awarded $32.28 million** in federal funding
  - The average award size for Arctic-focused research was for $207,403

Examples of Recent CIHR Initiatives

Research Initiative	Total Funding Award
Mental Well-being and Suicide Prevention in Circumpolar Regions	$250,000
A research program on adaptation to the health effects of climate change in the Canadian Arctic	$753,001
Land-centred mitigation strategies and Indigenous health and well-being in Canada	$1,277,550
Creating mental health programs for offenders with mental illness in remote, mainly Inuit Arctic communities	$92,000
Colonization Impacts and Mental Health Stakeholders	$25,000

Sources: Canadian Institutes of Health Research Database

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