FIVE YEAR CAPITAL PLAN

2025/26 - 2029/30



UNBC - Five Year Capital Plan - August 2024

Approved October 4, 2024, by the UNBC Board of Governors



SUMMARY

This document outlines the University's plans for the next five years for the planning and construction of new buildings and the renewal of others.

The priority capital project is a new Student Housing building on the Prince George Campus. The objective is to develop 150 new student beds, enriched with Indigenous cultures and values, situated near the Agora Dining Hall. This Provincial government has requested that UNBC submit a detailed business case that meets the goals of creating housing while confirming financial sustainability. The focus is on facilitating a smooth transition for students new to the UNBC Prince George campus by enhancing community living, student experience, support, and affordability. As this business case is already in progress with the provincial call for proposals it is not included in this capital plan.

A proposal has also been submitted to the Province for new childcare spaces to be constructed on campus. This would involve relocating the existing facility to be adjacent to the Northern Sports Centre, and would create a net new 111 spaces. This project is also not included in this capital plan.

UNBC is partnering with Northern Health, Lheidli T'enneh, UBC and others to create an Indigenous-informed, purpose-built, technology-leading health research focused building with a primary focus on developing new knowledge and celebrating, amplifying, and disseminating the world-leading health expertise that exists across northern BC. The building to house this exciting initiative is our top new priority project.

UNBC continues to include for a separate multi-use student housing building that would house 200 student beds, the dining hall, the First Nations Centre, student supports and academic programming space. The housing component of this project would continue to diversify the on-campus housing offerings.

UNBC has also been in discussion with Coast Mountain College regarding a new joint building on their Terrace campus that would house UNBC operations in that region.

UNBC's Vision 'Leading a Sustainable Future' is a key principle behind building renewal projects within the Routine Capital submission. Sustainable renewal of the Research Lab and Agora buildings are two projects that would improve the energy efficiency, resilience and accessibility of these buildings while positioning them for the next three decades of service to research and teaching.

UNBC Office of Indigenous Initiatives has partnered with Facilities Management to progress planning for a memorial to children who died in residential schools and a pilot project focused on indigenization of campus wayfinding. Both projects are currently in a design development phase.

UNBC continues to partner with the David Douglas Botanical Garden Society to develop the northern most Botanical Garden in Canada at the University of Northern British Columbia. The initial development phase is complete, with pathways, trees, a Visitor's Kiosk and irrigation in place.

Conceptual planning of new space for Student Housing and a new Childcare Facility will be a focus for the coming year. UNBC will also explore options for program expansion and other relevant capital projects that are aligned with its strategic plan and ministry priorities.

The University of Northern British Columbia (UNBC) ITS Team is embarking on a series of seven pivotal projects aimed at bolstering the digital infrastructure and accelerating transformational change across the institution. These initiatives represent a critical investment in UNBC's digital future, with the ultimate goal of empowering the



research community, enriching the student experience, and contributing positively to the broader community. Each project signifies a step forward in UNBC's mission to foster academic excellence, innovate education, and build a resilient, secure digital environment.

Our Priorities

This Plan reflects UNBC's commitment to the internal priorities laid out in our Strategic Road Map.

The 2023-2028 Strategic Plan 'READY' guides the development of these projects as we seek to be ready to cultivate curiosity, act on truth and reconciliation, empower northern communities and foster local solutions for global impact.

Facilities development is guided by the Campus Master Plan, most recently updated in 2019 under the title of Destination 2040.

Our Progress

UNBC has completed projects to increase nursing spaces (both Baccalaureate and Family Nurse Practitioner) in recent years. Additional Routine Capital funding has also allowed timely renewal of multiple roofs and core fibre optic systems. The current level of Routine Capital funding is sufficient to manage most building FCI at a reasonable rate, given the young age of the campus, though building renewal needs are increasing. Replacement of elevators and roofs will require a significant portion of the funding available through the Routine Capital program for the coming years. Therefore, UNBC is requesting additional Routine Capital funding to continue a multi-year investment in roofing replacements and begin to address climate risk mitigation. Energy and efficiency projects are important for institutional sustainability, and a suite of potential projects has been included under the Carbon Neutral Capital Program category.

As new programs continue to grow, they will have need for expanded facilities (Civil Engineering, Environmental Engineering, Physical Therapy and Occupational Therapy are all expected to see strong enrolment in coming years).

Canada's Green University will continue to lead in the reduction of greenhouse gas emissions. We are developing plans to bring the entire Prince George campus to net zero emissions through building envelope enhancement, heat recovery via low carbon electrification, and local carbon sequestration. These plans continue to be included in capital planning and will build upon the 60% reduction in GHG emissions that UNBC has achieved to date.

Project Overview

The following graphics and tables outline the Building and IM/IT projects that UNBC has in progress. The objective is to move projects forward in planning and implementation, such that resource bandwidth is not overtaxed while still serving the developing needs of the institution.



Building and Renovation Projects



- Nursing Expansion Prince George Campus: additional nursing seats on the Prince George campus and office spaces for faculty and staff on the 4th floor of WDIC. Construction is nominally complete and the project close-out is in progress.
- David Douglas Botanical Garden Society Gardens Expansion: the first phase of this expansion is complete and fundraising continues for future phases.
- Quesnel River Research Center (QRRC) Lab Expansion: Building expansion at the QRRC site has been approved and is currently in design for construction in 2025.
- Student Housing new 150 bed building focused on easing the transition for students who are coming to campus for the first time. Business case submission is in progress.
- Northern BC Hub for Health Research Health Research Centre focusing on urban and rural health. Partnerships are established and funding applications are in progress.
- Physical Therapy/Occupational Therapy Phase 3 Clinic: approved in principle, this project involves collaboration with Northern Health and UBC to determine the operating model. Once this is established a business case submission will be made.
- Student Housing / Mixed Use: this building would house students, the cafeteria, the First Nations Centre, student supports and academic space. Planning has not moved beyond initial concept, but a recent demand study has confirmed there is adequate housing demand.
- (8)

7

1

2

3

4

5

6

Terrace Coast Mountain College Joint Building: No activity on this project following preliminary discussions in 2020. There would be operational synergies, but the details of the co-location partnership between the two institutions will need to be worked out.

9

Deep Retrofits of Existing Buildings: Part of the campus decarbonisation plan would see buildings retrofitted to recovery heat, improve building envelope and reduce carbon emissions to near zero. First buildings to be examined for this include the Research Laboratory and the Agora.

IM/IT Projects

1

2

3

4

5



UNBC Hybrid Classroom Initiative: We are just before the approval stage, with precise budget estimates and a comprehensive project understanding. Pending approval by January 1, 2025, we aim to start installations on March 1, 2025. This project will modernize classrooms to enhance accessibility and learning experiences for students across Northern British Columbia, with completion expected by 2030. Formal estimates are in place, with an average annual capital funding requirement of \$610,000 over the next five years, extending the project timeline to 2032. Operating costs will be covered by existing resources, implementing a self-service model to ensure efficiency and reduce barriers to technology use.

Core Network Security Refresh: We are planning for approval and budget availability by October 2026, with the goal of upgrading our central firewall infrastructure to enhance network security and performance for over 3,000 students, faculty, and staff. The project timeline includes hardware ordering in February 2027, followed by a 10-week lead time, and subsequent phases of installation, integration, testing, commissioning, and cleanup. This structured approach ensures thorough preparation and execution, aiming for completion by mid-2027.

Campus Core Hardware Refresh: We are currently just before the approval stage, with precise budget estimates and a clear understanding of the project scope. The project is scheduled to run from April 2026 to August 2026, aiming to replace existing network infrastructure with new core hardware. This upgrade will enhance network speed and security, meeting the growing demands of researchers and the UNBC community. By proactively addressing anticipated limitations of current hardware, we aim to ensure a robust and efficient network capable of supporting the University's needs well into the future.

WAN Hardware Refresh: We are just before the approval stage, with precise budget estimates and a clear project scope. The WAN Hardware Refresh is scheduled to commence in early 2027 and complete by summer 2028. This project aims to upgrade the WAN infrastructure across all UNBC campuses to meet growing performance demands and bandwidth requirements. By ensuring a seamless transition with minimal disruption to services, the project will enhance network speed, reliability, and security, supporting the University's commitment to high-quality education, advanced research, and efficient administrative operations. Most operational changes will be conducted during spring/summer and outside typical work hours to minimize interruptions.

Diverse Path Fiber Network Expansion: We are currently just before the approval stage, with detailed budget estimates and a comprehensive project plan in place. The project is set to enhance the fiber infrastructure at the Prince George campus by installing new conduit paths to critical buildings, improving path diversity and reducing the risk of damage. Initial planning and assessment have been completed in

collaboration with the Facilities Management department, and necessary permits and approvals are being secured. An RFP process will be used to select a suitable contractor for horizontal boring and conduit installation, ensuring the project is ready to commence upon approval.



Prince George Primary Campus Diverse Path to Prince George City Hall: We are in the initial planning phase, collaborating with City of Prince George staff to develop a diverse fiber path between the UNBC Prince George campus and City Hall. With a \$150,000 investment, this phase focuses on path planning, permit identification, and timeline estimation. Once the detailed plan is approved, a Category-D budget assessment will follow. The project aims to ensure robust and continuous connectivity for UNBC, enhancing disaster recovery and business continuity capabilities.

Attachments:

Att 2 – Five Year Capital Plan – Project Overview

New Priority Investment Projects

- Northern BC Hub for Health Research (NHHR)
- Engineering Building
- CMTN and UNBC Terrace Learning Centre

Student Housing

 New Mixed Use Student Housing, Academic Programs, Connection Hub and Food Services Building

Routine Capital

- Lecture Theatre Seating
- Campus Accessibility Improvement Program
- Roofing Replacements
- Climate Risk Mitigation Program
- CCTV System Replacement
- Agora Renewal
- Research Lab Renewal

Carbon Neutral Capital Program

• Campus Energy Upgrades Program

IM/IT Projects

- UNBC Hybrid Classroom Initiative
- Core Network Security Refresh
- Campus Core Hardware Refresh
- WAN Hardware Refresh
- Diverse Path Fiber Network Expansion
- Prince George Primary Campus Diverse Path to Prince George City Hall
- Att 3 Prioritized Proposed Projects
- Att 4 Student Housing Inventory

Project Overview				
Institution	Campus	Category	Priority in Category	Program Type
UNBC	Prince George	New Priority Investments	1 of 3	Health Sciences
a · ·				

Project Title

Northern Hub for Health Research (NHHR)

Brief Project Description

Development of a health research hub that is co-led with Indigenous and health system partners to advance research to achieve health equity for rural, indigenous and northern BC. This will entail new health research infrastructure, including a 2460 m² health research building comprising collaborative spaces, research facilities, and labs.

Project Definition

Project Scope

Building:

New purpose-built research building - Estimated total gross area 2460 m² . Will include:

- Entrance/Main floor (~1080m²), HRI Welcome Atrium. Central circular atrium that influences the exterior of the building for informal/formal gathering and meeting. The space would include architecture and works of art acknowledging the Lheidli T'enneh and other Indigenous territories and their connection to health, wellness and healing. Physical space for the HRI reception/office space, a large circular meeting room that has flexible layout options for seminars, maker-labs, knowledge exchange workshops, break-out spaces for small group discussion/meeting. Food service space. Associated equipment and furnishing, including Indigenous works of art, display cases/signage, furniture for gathering/ independent study, moveable meeting tables, furniture, meeting room furniture.
- Second floor (~690m²), Northern Analytical Laboratory Service for Health (NALS-H). A diagnostics arm of NALS will house analytical and diagnostic equipment that can manage small volume biomedical research samples or be optimized for specialized/academic clinical research measures not performed at UHNBC hospital labs. 4 offices for NALS (2) and HRI (2) staff. Associated equipment and furnishings: office room furniture, safety equipment and specialized research equipment.
- Third floor (~690m²), Knowledge Synthesis and Exchange Centre. Physical space for the HRI Knowledge Synthesis Centre will
 include computer workstations for literature searches, desks/tables for consultations (in-person or hybrid). 4 offices for KS
 Centre staff/faculty. 2 dry labs/meeting space for knowledge exchange activities, equipped for hybrid meetings, workshops,
 partner research space, research participant interviews. Associated equipment and furnishings: Computer workstations
 equipped with software for knowledge synthesis, office furniture, meeting room furniture.

Staffing:

- Building specific maintenance, research safety, and security staffing will be required.
- Additional complement of staff, including administrative assistants, IT support, research staff, etc.

Governance and Leadership:

To support the project, the following teams and resources are in place:

- NHHR Working Group comprising administrative leaders, faculty members and researchers, and health system and Indigenous partners.
- NHHR Project Management Coordination and planning of related applications
- UNBC Facilities Support for functional planning

Project Objectives

Problem/Opportunity:

Northern British Columbia (BC) currently lacks an Indigenous-informed, purpose-built, technology-leading health research focused building with a primary focus on developing new knowledge and celebrating, amplifying, and disseminating the world-leading health expertise that exists across northern BC. Together, the Heath Research Institute (HRI) and the Northern Centre for Clinical Research (NCCR) are proposing the creation of the Northern BC Hub for Health Research through a large infrastructure investment to collectively advance health research in northern BC. The infrastructure that will create new and reimagined research spaces and equipment will be located on Lheidli T'enneh Territory at the Prince George campus of the University of Northern British Columbia (UNBC) and at the University Hospital of Northern BC (UHNBC). This application focuses specifically on the UNBC elements of the project.

Project Objectives:

...

- Advancement of Clinical and Health Research to address complex health and social disparities in northern BC and beyond
- Promote access to state-of-the-art research facilities, including diagnostics and translational research infrastructure and support
- Increasing research infrastructure and supports to attract, retain, and advance top researchers from around the world
- Build collaboration between academic, health, Indigenous, private, public, and not-for-profile sectors
- Increased capacity for research training

Key RISKS	
Project Risk(s)	Proposed Mitigation Strategy
Large scale project requiring significant investment and infrastructure	 Potential to explore multiple streams of revenue to support project, including Canada Foundation for Innovation. Active engagement and support from multiple key partners
Communication and consultation about project and progress does not reach appropriate people within Northern BC	 Consultation and communications about the project and its progress with Lheidli T'enneh, other northern communities, health providers, patients, partners and user groups remain regular, timely and meaningful and are disseminated using a variety of media and formats. Integration of Project Manager provides central coordination and support of planning activities
Short timelines for funding do not align with planning/building timelines	 Explore options for modular builds or renovations to support and facilitate alignment of the requested infrastructure with future investments in research/innovation infrastructure at UNBC and UHNBC.
Ontions Considered	

Options Considered

A phased approach has been considered. The advantage of a phased approach would be the potential for reduced costs in the short term, however, this approach could also lead to increased costs over the long term. A phased approach would furthermore restrict the scope of use of the building until all phases were complete. A phased approach would also have an impact on the cohesiveness of the spaces.

Current Situation		
Northern British Columbia (BC) currently lacks an Indigenous-informed, purpose-built, technology-leading health research focused building with a primary focus on developing new knowledge and celebrating, amplifying, and disseminating the world-leading health expertise that exists across northern BC.		
Strategic Alignment		
Institution Priorities	Indigenous Reconciliation (Declaration Act)	

The NHHR aligns well with UNBC's Mission, Vision and Master Plan. UNBC facilitates learning and generates knowledge through teaching and research. How we do that is unique. We are connected to the North and the communities that call northern British Columbia home. Supporting the sustainability of these communities is why we exist – this is what drives UNBC. In service to the North, we ignite curiosity, inspire creativity, and champion excellence to help the region thrive. We lead positive change by sharing what we learn with the world.	The UNBC Prince George campus is situated on the unceded traditional territories of the Lheidli T'enneh First Nation (LTFN), part of the Dakelh (Carrier) Peoples' territory. The LTFN has been involved in project planning from the outset. Members of the LTFN, including the Chief, sit on the Oversight Committee.
The NHHR aims to 'Ignite. Inspire. Lead Change,' by advancing clinical and health research in northern BC and beyond; promoting access to research facilities; attracting, retaining and advancing top researchers from around the world; building collaboration between academic, health, Indigenous, private, public, and not-for-profile sectors; and increasing capacity for research training.	
The NHHR aims to advance research to achieve health equity for rural, indigenous and northern BC, which aligns with UNBC's Vision 'Leading a Sustainable Future.'	
Project aligns directly with UNBC Strategic Plan 'READY' and is fully supported by UNBC Leadership	

Environmental, Social, Governance Framework for Capital (ESGFC) Eligibility

Eligibility: Yes	Rationale:
Climate Change (CleanBC)	Child Care
Project will pursue Passive House certification for energy efficiency and will	N/A
Mass Timber & Wood First	Labour & Employment
To be determined	The project will attract, retain and advance top researchers from around the world. It will increase the capacity for research training. There will be opportunities to build and employ a skilled workforce.
Project Budget (\$ millions)	

Total Project Cost	Provincial Funding	PSI Contribution	
\$61 M	\$ 61 M	\$0	
Class Level and Year of Cost Estimate: Notional Capital Funding Assumptions: Research specific equipment may be funded through federal funding applications Operating Funding Assumptions: The project partners will contribute to operations			
Project Schedule			
Target Business Plan Approval Date	Target Construction Start Date	Target Occupancy Date	

Attachment 2a: Project Overview - Priority Investments & Student Housing 5-Year Capital Plan (2025/26 – 2029/30)

Apr 2025	Apr 2027	Aug 2029
 Key Timing Assumptions: Detailed Design, Class C Cost Estim 2027 construction start. April is ty thaw techniques which adds costs Construction timeline would be ov September 2029 semester. 	nate and Procurement would be performed ov /pically the soonest you can break ground in N to civil construction. er a two-year and four-month period with the	er a two-year period allowing for an April orthern BC without having to use ground plan to occupy the building for the

Project Overview				
Institution	Campus	Category	Priority in Category	Program Type
UNBC	Prince George	New Priority Investments	2 of 3	Sciences & Technology
Proiect Title	-			

UNBC Engineering Program expansion

Brief Project Description

New building to support UNBC Engineering Program expansion

Project Definition

Project Scope

Civil and Environmental engineering programs at UNBC continue to grow enrollment and require expanded space for both teaching labs and research space.

Total estimated NASM for the building is 3400 m². This includes:

- 450 m² for faculty and staff offices
- 1,000 m² for new teaching and research laboratories
- 100 m² for meeting rooms
- 350 m² to accommodate graduate/research students
- 200 m² to accommodate post-doctoral fellows/visiting faculty
- 1,000 m² for classrooms and design studios
- 50 m² for a workshop
- 200 m² for collaboration spaces
- 200 m² for replacement of existing teaching laboratories

Project Objectives

Problem/Opportunity: As the UNBC School of Engineering reaches full undergraduate program implementation and nears a full faculty complement, space limitations are becoming increasingly pressing. National and provincial trends indicate substantial demand for both graduating engineers, and program spaces for prospective students.

Research space requirements within Engineering have grown significantly as recently hired faculty continue to attract research funding, develop relationships with industry, and also develop joint applications with other faculty members.

Project Objectives: To create the teaching and research spaces required to support continued growth of UNBC Engineering programs

Key Risks		
Project Risk(s)	Proposed Mitigation Strategy	
Global supply chain and material delivery disruptions	Prioritize local components, and incorporate lead time into estimates	
Availability of skilled trades	Work with contractors well established in local market with strong connections to a broad range of trades	
Ontions Considered		

Existing labs and other spaces have been re-purposed and co-scheduled as an interim measure. A small annex will likely be pursued as a further measure to relieve space constraints. Partnering with local industries (particularly asphalt, and mass timber) has been explored but will not meet the needs due to specific equipment and protocol needs of the research.

Current Situation

Space was repurposed to initiate the engineering program expansion but this didn't include research space nor all of the teaching laboratories needed for a fully developed program.

- . Engineering program capacity is 35 FTE Civil and 35 FTE Environmental per cohort
- If not funded UNBC may lose faculty to other opportunities due to lack of research space. Existing teaching labs are at risk of damage due to experiments being conducted for which the space was not designed (concrete and asphalt work in particular)

Strategic Alignment		
Institution Priorities	Indigenous Reconciliation (Declaration Act)	
Continued growth of new programs supports expanding engineering will boost enrollment and these spaces will support fulfilling student learning journeys.	UNBC coordinates all development on campus with the Lheidli T'enneh	
Environmental, Social, Governance Framework for Capita	al (ESGFC) Eligibility	
Eligibility: Yes	Rationale:	
Climate Change (CleanBC)	Child Care	
Passive House certification for energy emissions, connection to low carbon district heating loop	N/A	
Mass Timber & Wood First	Labour & Employment	

UNBC favours mass timber implementation but recognizes that Contractors will be encouraged to employ apprentices and will structural engineering laboratory requirements will likely require track the labour data.

Project Budget (\$ millions)		
Total Project Cost	Provincial Funding	PSI Contribution
\$54.0 M	\$54.0 M	\$0

Class Level and Year of Cost Estimate: Notional

Capital Funding Assumptions: N/A

a primarily concrete structure.

Operating Funding Assumptions: Operating funding is expected to primarily come from the operating budgets of the engineering program.

Project Schedule

Target Business Plan Approval Date	Target Construction Start Date	Target Occupancy Date	
April 2028	April 2030	April 2032	
Key Timing Assumptions: To be determined as project plan is further developed.			

Project Overview					
Institution	Campus	Category	Priority in Category	Program Type	
UNBC	Terrace	New Priority Investments	3 of 3	Arts & Sciences	
Project Title					
CMTN UNBC Terrace Learning Centre					

Brief Project Description

New joint building for UNBC Terrace campus on the Coast Mountain Campus site

Project Definition

Project Scope

At a conceptual level this would be nominally 11,000 m² in gross area and of mass timber construction.

Programs include Nursing, Social Work and Education from UNBC, and Early Childhood Education, Social Work and Nursing from CMTN.

Project Objectives

Kay Diaka

Problem/Opportunity: The primary reason for considering this is to provide an enhanced learning environment for our students in North Western BC, and ensure that our students have the supports they need to succeed. This would create operational efficiencies especially around facilities and expand the support systems for students (many of which UNBC shares with CMTN now, even though we are not on the same site).

Project Objectives: UNBC is exploring the idea of moving our operations out of UNBC's existing facility in Terrace and disposing of both the land and the building.

Rey RISKS	
Project Risk(s)	Proposed Mitigation Strategy
The project is at the concept development stage; key risks will be developed as the Functional Planning is completed (Fall 2025).	The project is at the concept development stage; proposed mitigation strategies will be developed as the Functional Planning is completed (Fall 2025).

Options Considered

The primary alternative option would be to maintain the status quo of each institution within their existing facilities on separate sites while the buildings continue to age.

Current Situation

UNBC will continue to strengthen our partnerships with the colleges that operate in the North, particularly where there are synergies in facility utilization and program delivery. The aim is to provide better pathways for our students wherever possible.

The UNBC Terrace campus is a single 1,314 m² building with an FCI of 0.44 that is owned by UNBC. Due to challenges associated with operating a single remote building, and a desire to provide better pathways for students in the Northwest region, UNBC and Coast Mountain College are proposing combining programming into a single site and a new building.

The Terrace campus accommodates roughly 80 FTE.

The expectation is that the existing Terrace UNBC campus building and land would be sold.

Strategic Alignment

Inst	itution Priorities	Indigenous Reconciliation (Declaration Act)
•	Supports UNBC's regional campus goals, and supporting students in rural areas of the province. Cost effectiveness would be achieved through combined building services. On the broader campus level there would be shared usage of existing CMTN facilities including housing and the First Nations Longhouse. Videoconference classroom for remote support of the Nursing program, and joint delivery of programs between the University and the College as a means to meet the educational needs to rural regions of the province. Space utilization would be improved through co-location of student services between the two institutions. Shared services within the building would include the Cafeteria and Erond Services	Student and local First Nations consultation will be a strong component of the design development. This project will build on and complement the Indigenous forms and spaces of the recently completed student housing project at the Coast Mountain College site. It is expected that students and faculty from the Frieda Diesing School of Northwest Coast Art will have opportunities to contribute art towards the project. Better integration with the College, and stronger service delivery in the home regions will improve the access to education for Aboriginal learners.
Env	ironmental, Social, Governance Framework for Capita	al (ESGFC) Eligibility

Eligibility: Yes		Rationale:	
Climate Change (CleanBC)		Child Care	
Energy efficiency of a new building constructed to Energy Step 4 is expected to reduce emissions by approximately 75% relative to comparable institutional buildings. Operating a single combined building (rather than two buildings on separate sites) will achieve additional efficiencies.		No additional childcare spaces would be created as part of this project.	
Mass Timber & Wood First		Labour & Employn	nent
Mass timber is expected to be the primary construction methodology, subject to confirmation during detailed design.		Contractors will be encouraged to employ apprentices and will track the labour data.	
Project Budget (\$ millions)			
Total Project Cost	Provincia	l Funding	PSI Contribution

Total Project Cost	Provincial Funding	PSI Contribution	
\$160 M	\$160 M	\$0	

Class Level and Year of Cost Estimate: Estimate is notional, based on square footage construction costs in local market. Original budget was collated in 2019 and has been inflation adjusted based on current construction schedule.

Capital Funding Assumptions: Funding would be provided to a single institution to develop and manage the project with stakeholders from both UNBC and CMTN.

Operating Funding Assumptions: The annual operating costs are anticipated to be met through reallocation of existing resources for the buildings that would be replaced.

The existing UNBC Terrace building and land could potentially be sold – this revenue has not currently been factored into the project funding.

Project Schedule				
Target Business Plan Approval Date	Target Construction Start Date	Target Occupancy Date		
April 2027	April 2029	August 2032		

Key Timing Assumptions: The two institutions intend to proceed with functional planning in 2025 with a possible construction timeline as indicated above.

Project Overview				
Institution	Campus	Category	Priority in Category	Program Type
UNBC	Prince George	Student Housing	1 of 1	Student Housing
Project Title				

New Mixed Use Student Housing, Academic Programs, Connection Hub and Food Services Building

Brief Project Description

New dedicated space and Housing beds for Indigenous students, constructing new campus student Housing beds, advanced wood product use in construction, flexible space for work integrated learning and training and employment initiatives, as well as space for professional programs to be determined

Project Definition

Project Scope

Construct a new 8,300 m² mixed use building as the heart of the campus. A mass timber residence would be situated atop a two story conventional construction academic foundation. The housing will be single bedrooms, with central washrooms. Indoor and outdoor social spaces, expansion of our First Nations Centre, new dining hall, and an Innovation Centre incorporated in the lower two floors of the building, along with potential new academic program space.

The location for the building is to the west of the Wintergarden, between the existing residences and the Agora/Library. UNBC Planning students put forward concepts to consider. Aspects we like are the integration of First Nations design elements, including notion of a pit house, thoughtful connections with existing buildings and outdoor space to develop thoroughfare from current Residences, and social/innovation space with views of the City (further solidifying in design the relationship with community).

Project Objectives

Problem/Opportunity:

This building will support existing programs through the provision of space designed for connections: between program areas, faculty and students, students and community, researchers and residents. Space for upskilling and reskilling programs through Continuing Studies is a key consideration at this time. New academic programs will be integrated depending on program type.

- 4,750 m² housing 200 beds, single occupancy bedrooms with central washrooms, no kitchens and basement laundry
- 1,200 m² food services cafeteria and kitchen to supports 700 students on campus, plus catering for off campus staff, students and faculty. Seating for 300 in "all you care to eat" plus general access seating for another 150 learners
- 1,000 m² new academic programs new programs to come based on academic priorities; space is needed for labs, distance learning enabled classrooms, faculty offices and problem based learning breakout rooms
- 500 m² new Innovation Centre the Global North Innovation Centre will support all academic programs at UNBC. It will enhance Economic Diversification in northern British Columbia and northern Canada by:
 - Working with northern and Indigenous communities to develop and enhance sustainable economic and commercial opportunities that provide employment and community building.

- Creating partnerships with industry to research, develop, demonstrate and commercialize new and innovative processes, technologies and resource management practices that are environmentally sustainable and enhance global competitiveness;

- Supporting the green economy, sustainability in the north and diversification of resource-based industries.

For several years prior to COVID, UNBC Housing maintained a waiting list. Market studies show demand as well.

Project Objectives:

This project will increase student housing available on campus, add a new unit style and shift first and second year students living on campus closer to support services. This building will provide suitable housing options for Indigenous students, and co-locates the First Nations Centre to assist with integrated programming. Priority access for former youth in care, Indigenous students, and first year

Attachment 2a: Project Overview - Priority Investments & Student Housing 5-Year Capital Plan (2025/26 – 2029/30)

students will be key. The building will develop social space on campus, ideally incorporating elements to promote innovation and work-integrated learning in connection with research, business and industry. A new Dining Hall will allow for meal plan students from existing and new residences to take advantage of informal mentoring opportunities in an "all you care to eat" facility at the heart of campus, along with specific programs to support wellbeing and healthy living. The overall project will demonstrate mass timber construction with high supply chain integration and efficient site construction.

Drawing on our unique geographic perspective and inter-disciplinary approach to research, development, and educational program delivery, the Innovation Centre will:

- Be a catalyst for industrial partnerships that drive research, innovation and commercialization of processes and technologies that are environmentally sustainable and enhance global competitiveness while providing educational and training opportunities for coding and digital skills development to Canadian youth;
- Be a leader in applied research and teaching in civil and environmental engineering for changing northern climates and ecosystems, prepare future engineers for the emerging low-carbon, green economy and climate change, and meet the current shortfall and high forecasted demand for engineers in northern BC;
- Explore how resource-dependent communities in northern British Columbia and around the world can adapt to globalization and changing economic and environmental conditions.

Kev Risks

Project Risk(s)	Proposed Mitigation Strategy
Multi-use building with multiple funding sources	Concerted effort to coordinate the design and ensure all funding partners' needs are met
Tall wood and mass timber construction using prefabricated elements is still an emerging field in BC	Detailed supply chain planning and Building Information Modelling (BIM) to ensure components arrive just in time for short duration construction. BIM will also lower the long term costs of maintaining the building

Options Considered

One and two bedroom suites were considered, but are too low of density to be cost-effective to construct, nor does it provide an advantage to first and second year student retention.

Current Situation

This would be a new building on vacant land adjacent to existing buildings. Current Student Housing is one style (4-room suites) with consistent wait lists during the past 5 (non-COVID) years. Efforts are underway to integrate Housing programming more closely with Student Services on main campus, with a focus on first year experience and retention.

Dedicated space for Indigenous students within and connected to Housing is desired, along with opportunities to increase programs such as Elder in Residence. As work integrated learning matures at UNBC, space for students to innovate alongside business and industry leaders, as well as connect research to communities of practice is essential.

The work of Continuing Studies in upskilling and reskilling also requires additional space, which could be programmed flexibly to optimize space use. Finally, the existing Dining Hall is capable of supporting existing meal plan students, but could not reasonably support the needs of a new Housing development.

The existing Agora Dining Hall would be repurposed as an open access learning commons, with retail food services for Housing residents and commuters.

Strategic Alignment	
Institution Priorities	Indigenous Reconciliation (Declaration Act)
A signature building that champions Indigenization, sustainability and mass timber construction, and connection to community fits UNBC's vision to be Canada's leading destination University, supports our identity as Canada's Green University, and models	Existing supports for Indigenous students will be enhanced through purpose build housing and social space. Flexible space for work integrated learning and training/skills development programs will enhance existing academic programs

Attachment 2a: Project Overview - Priority Investments & Student Housing 5-Year Capital Plan (2025/26 – 2029/30)

our signature areas such as Indigenous priorities and Northern Community Sustainability and Development. The 2019 Campus Master Plan identified the proposed location as a key spot for enhancing the community and culture of the campus.		and provide connections for students to research and communities of practice.			
Environmental, Social, Governance Fr	amework for Capit	al (ESGFC) Eligibility			
Eligibility: Yes		Rationale:			
Climate Change (CleanBC)		Child Care			
As a passive house project this building will use 90% less heat than existing buildings on campus, and will be heated by the Bioenergy facility to further reduce greenhouse gas emissions		N/A			
Mass Timber & Wood First		Labour & Employr	nent		
Mass timber passive house construction will result in lower life cycle costs and GHG emissions. Fast site works will lower overall construction costs.		Contractors will be encouraged to employ apprentices and will track the labour data.			
Project Budget (\$ millions)					
Total Project Cost Provincial Funding PSI Contribution			PSI Contribution		
\$112.75 M	\$110 M		\$2.75 M		
Class Level and Year of Cost Estimate: Notional					
Capital Funding Assumptions: N/A					
Operating Funding Assumptions: Annual operating costs will be cost recovery for the housing and food services portions of the project, new funding sought from government for the operations of the academic programs. The funding for the First Nations Centre will be maintained through internal operating budgets.					
Project Schedule					
Target Business Plan Approval Date	Target Constru	ction Start Date	Target Occupancy Date		
April 2028	April 2030 April 2032				
Key Timing Assumptions: To be determined as project plan is further developed.					

Project Overview				
Institution	Campus	Category	Priority in Category	Program Type
UNBC	Prince George	Routine Capital	1 of 7	Other
Project Title				

Lecture Theatre Seating

Brief Project Description

Tiered Lecture Theatre seating renewal to address accessibility and maintenance while maintaining classroom capacity

Project Definition

Project Scope

The large tiered lecture theatres that were part of the original campus construction (1994) are still equipped with their original fixed tablet seating. This project would replace the seating with swing seats and fixed tables in a manner that preserves seating capacity.

Lecture theatres include:

- 6-306 Canfor Theatre (capacity 350)
- 7-212 Lecture theatre (capacity 167)
- 7-238 Weldwood theatre (capacity 167)

Project Objectives

Problem/Opportunity: Existing tiered lecture theatre seating is at end of life, but fixed seating is required for safety reasons in a tiered theatre. Cannot be converted to a flat floor classroom due to tiers being cast in place concrete and part of the overall structure. Original spacing of seats is too close, making it uncomfortable or not possible to use the seats with some body shapes. Provision for seating those with mobility aids is either very limited or non-existent.

Project Objectives: Replace seating with more broadly accessible chairs while maintaining overall capacity and increasing spaces for those with mobility aids.

Key Risks			
Project Risk(s)	Proposed Mitigation Strategy		
Unknown conditions uncovered while conduction renovation work in existing theatre	Exploratory investigation as part of design and planning		
Cost escalation	Secure vendor price guarantee early in project		

Options Considered

Would fund through Routine Capital funding envelope if not identified for specific funding.

Current Situation

Tiered lecture theatres contain seating that is no longer able to be repaired (parts availability issues) and the seats pose an accessibility barrier for certain body shapes

Attachment 2b Project Overview – Routine Capital, Carbon Neutral, & IM/IT 5-Year Capital Plan (2025/26 – 2029/30)

Strategic Alignment			
Institution Priorities Government		Government Priori	ties
Maintaining assets and reducing barriers to education		Maintaining assets and reducing barriers to education	
Project Budget (\$ millions)			
Total Project Cost	Provincial Funding		PSI Contribution
\$0.6 M	\$0.6 M		\$0.00
Level and Year of Cost Estimate: Class D estimate prepared in 2024 based on vendor pricing for similar seating installed in smaller theatres.			
Operating Funding Assumptions: No operational funding required.			
Project Schedule			
Target Approval Date	Target Start Date Target Completion Date		
April 2025	May 2025		Aug 2025

Key Timing Assumptions: Describe project timing assumptions, including key milestones such as targeted approvals, anticipated start/end dates, phasing, etc.

Project Overview				
Institution	Campus	Category	Priority in Category	Program Type
UNBC	Prince George	Routine Capital	2 of 7	Public Safety / Security
Project Title				

Campus Accessibility Improvement Program

Brief Project Description

Multi-year construction program to support campus accessibility improvements

Project Definition

Project Scope

Installation of auto openers on existing doors to improve accessibility on campus. Scope includes 65 washroom doors and 40 building exterior doors. Includes 4 push buttons per door, and exterior envelope restoration as required for exterior doors.

Project Objectives

Problem/Opportunity: Access barriers within the existing campus buildings pose a challenge for members of the campus community.

Project Objectives: In response to the Accessible BC Act, the UNBC Accessibility Plan aims to reduce accessibility barriers and challenges.

Key Risks

Project Risk(s)	Proposed Mitigation Strategy
Shifting priorities for accessibility upgrades	Frequent coordination with Accessibility Committee

Options Considered

This initiative will continue beyond door access phase and will seek grants, internal funding and other sources to improve campus accessibility.

Current Situation

Campus accessibility is based on building code from time of construction. Each building has at least one accessible exterior access equipped with an auto operator to assist those with reduced mobility. Many washrooms have barrier free entrance but some buildings include washrooms with doors equipped with auto closures.

Strategic Alignment				
Institution Priorities	Institution Priorities Government Priorities		ties	
Increasing access to education is a key priority, and is coupled with decreasing physical barriers		Accessible BC Act	Accessible BC Act	
Project Budget (\$ millions)				
Total Project Cost	Provincial Funding	5	PSI Contribution	
\$5.0 M	\$5.0 M		\$0.00	
 Level and Year of Cost Estimate: Class D estimate completed in 2024 by UNBC Facilities. Capital Funding Assumptions: Assumes that most of the installation is contracted out, rather than relying on in-house crews being available to complete this work. Operating Funding Assumptions: Operational funding will be redirected to support he ongoing maintenance and refurbishment of this additional campus infrastructure. 				
Project Schedule				
Target Approval Date	Target Start Date Target Completion Date		Target Completion Date	
April 2025	May 2025 Aug 2035		Aug 2035	
Key Timing Assumptions: Project will proce	ed with design and pla	nning in the first year fo	blowed by implementation over a number of	

Key Timing Assumptions: Project will proceed with design and planning in the first year, followed by implementation over a number of years to distribute the access impediments of construction.

Project Overvi	ew				
Institution	Cam	ous	Category	Priority in Category	Program Type
UNBC	Prince G	eorge	Routine Capital	3 of 7	Other
Project Title					
Roofing Replacem	ents				
Brief Project De	escription				
Roofing renewals for main campus buildings					
Project Definit	ion				
Project Scope					
Replacement of ro for replacements.	oofs on existing original	campus buil	dings. Roofing condition as	sessment was completed an	d identified priority order
2025 Agor 2026 Conf	a Wintergarden South	\$600,000 \$650,000			
2027 CJMH	H Building	\$600,000			
2028 Powe	er Plant	\$275 <i>,</i> 000			

Project Objectives

2029 Teaching Lab

2030 Medical Building

Problem/Opportunity: Roofs on original campus buildings have reached the point that they require either a complete re-roof or substantial refurbishment

Project Objectives: Replace roofs based on prioritized need as part of a multiple year initiative

\$675,000

\$475,000

Key Risks	
Project Risk(s)	Proposed Mitigation Strategy
Availability of skilled trades – only two RCABC qualified roofing contractors in this market	Post procurement documentation early so that contractors load their summer schedule with this project

Options Considered

Individual roof areas can be incorporated into existing Routine Capital funding but will take many years to complete all required areas. There are efficiencies in handling several areas in a single season and the work can stay ahead of roof failures.

Current Situation

• Original campus roofs consist of SBS, some green roof and standing seam metal.

Strategic Alignment				
Institution Priorities	nstitution Priorities Government Priorities			
Maintenance of existing facilities		N/A		
Project Budget (\$ millions)				
Total Project Cost	Provincial Funding	5	PSI Contribution	
\$3.275 M	\$3.2	75 M	\$0	
Level and Year of Cost Estimate: Costs prepared by roofing consultant in 2023				
Capital Funding Assumptions: Each roof hat together.	is been estimated as a s	tand-alone project, so a	ny combination of them could be bundled	
Operating Funding Assumptions: No impact on operating costs				
Project Schedule				
Target Approval Date	Target Start Date		Target Completion Date	
April 2025	June 2025 Aug 2030			
Key Timing Assumptions: Due to need to procure in advance of the construction season, approval for work in each year is required by December of the prior year.				

Project Overview				
Institution	Campus	Category	Priority in Category	Program Type
UNBC	Prince George	Routine Capital	4 of 7	Other
Proiect Title				

Climate Risk Mitigation Program

Brief Project Description

Risk Mitigation Program including Student Housing A/C, infrastructure upgrades, and exterior building sprinkler system/storm water detention pond pumps study.

Project Definition

Project Scope

- Research Lab EnerPHit Upgrade
 - o \$30,000,000
 - Full envelope and ventilation upgrade, targeting EnerPHit standard.
- Cooling System for Housing Buildings
 - o **\$2,500,000**
 - o Design and installation of a new system to cool the existing housing buildings during the summer.
- QRRC Access Road Upgrade
 - o \$1,000,000
 - Upgrade the existing road to mitigate landslide risk. The road is currently at risk of a slide, which would block off access to the site.
- Cooling Tower Replacement
 - o **\$1,000,000**
 - o Replacement of the existing cooling tower that is nearing end of life.
- Server Room UPS Upgrades
 - o \$500,000
 - o Replacement of critical UPS equipment and batteries that are at end of life in the server room.
- District Cooling Optimization
 - o \$500,000
 - o Optimization of plant side district cooling system, including variable speed pumps and control optimization.
- Energy Storage Project
 - o \$500,000
 - Potentially paired with new solar generation and demand-side management, this would entail the installation of an energy storage system for use in case of emergencies or peak load reduction.
- QRRC Diesel Generator Replacement
 - o \$300,000
 - Replacement of diesel generator system that is at end of life.
- Bioenergy Plant Magnetic Separation System
 - o **\$250,000**
 - Install new magnetic separation system to remove harmful metal objects from the fuel feed and prevent them from damaging process equipment and causing unexpected outages.

- Research Lab Basement Ventilation Upgrade
 - o \$200,000
 - Upgrade ventilation systems in basement lab areas.
 - Essential Power for Housing
 - o \$150,000
 - Design and install essential power to the existing Housing buildings.
- Study for Exterior Building Sprinkler System
 - o \$150,000
 - Conduct study to investigate best approach for fire risk mitigation using a temporary or permanent exterior building sprinkler system. This would include investigating the use a new pumping system for supplying water from the storm water detention ponds in the event that there is no water supply from the city.
- Terrace Campus Controls Upgrade
 - o \$75,000
 - o Upgrade outdated and discontinued building system controls architecture with new parts and wiring.

Project Objectives

Problem/Opportunity: With the increase in climate risks such as wildfire, there are various opportunities to improve aging campus infrastructure while helping to mitigate these risks.

Project Objectives: Mitigate climate risks and improve key campus infrastructure.

Key Risks	
Project Risk(s)	Proposed Mitigation Strategy
Delays due to availability of skilled trades	Develop and post procurement documentation early so that contractors can load projects into their schedules earlier
Delays due to availability of equipment	Develop and post procurement documentation early so that equipment can be procured earlier

Options Considered

Projects could be integrated into larger building or site renewals; however, these will likely take many years to develop and complete, and are likely to be done one at a time. There is a timeline and cost benefit to tackling these upgrades separately.

If no actions are taken, key infrastructure will be more susceptible to climate risks.

Current Situation

Aging physical infrastructure, in most cases not renewed since original construction, and not designed for the increasingly severe climate risks.

Strategic Alignment			
Institution Priorities		Government Priorities	
Maintenance and improvement of existing facilities; climate risk mitigation.		Climate risk mitigation.	
Project Budget (\$ millions)			
Total Project Cost	Provincial Funding		PSI Contribution
\$37.125 M	\$37.125 M		\$0

Level and Year of Cost Estimate: Notional estimates in 2024.

Capital Funding Assumptions: Each project has been estimated as a stand-alone project, so any combination of them could be bundled together. There may be other projects that could overlap and if already funded or in progress would partially reduce the funding requirement.

Operating Funding Assumptions: A net reduction in operating and maintenance costs is expected due to newer and more efficient mechanical systems.

Project Schedule				
Target Approval Date	Target Start Date	Target Completion Date		
April 2025	May 2025	April 2036		

Key Timing Assumptions: Each project will require varying levels of design and planning work ahead of construction. Larger and more complex projects may span multiple financial years.

Project Overview					
Institution	Campus	Category	Priority in Category	Program Type	
UNBC	Prince George	Routine Capital	5 of 7	Public Safety / Security	
Project Title					
CCTV System Replacement	t				
Brief Project Description					
New CCTV system on main campus					
Project Definition					
Project Scope					
Implement new CCTV system to support security personnel at the Prince George campus. Will include:					
 New networked cameras in fixed locations (entrances, retail establishments, research areas with accreditation requirements) Data collection point on campus but all data stored in data cloud off site 					

- Monitoring station in campus security office to permit surveillance of remote areas on campus
- Interface and access protocols for retrieval of archived footage

Project Objectives

Problem/Opportunity: Existing CCTV system is out of date and no longer functional. Local union is requesting CCTV to support the work of campus security officers in monitoring remote parts of the campus.

Project Objectives: Procure and install a cloud based security camera system that can be scaled as additional locations are identified

Key Risks			
Project Risk(s)	Proposed Mitigation Strategy		
Privacy and security breach or unacceptable impact	Data security protocols, appropriate retention schedule		
Lack of skilled trades for both installation and maintenance	Procurement to focus on available workforce and inherent complexity of system		

Options Considered

Existing system refurbishment was explored but is not viable due to age of equipment, need for local technician and limitations of original (1994) system design.

Current Situation

Cameras and data video recorders were installed in distributed locations on campus but most of them are no longer operational. Footage of security incidents is not available on request, despite visible presence of cameras. Security personnel are only able to monitor the area of campus that is within line of site of their location while conducting periodic patrols.

Attachment 2b Project Overview – Routine Capital, Carbon Neutral, & IM/IT 5-Year Capital Plan (2025/26 – 2029/30)

Strategic Alignment					
Institution Priorities		Government Priori	ties		
Providing a safe learning and working environment and equipping campus security with the tools to conduct their work		Preservation of assets and providing a safe environment			
Project Budget (\$ millions)					
Total Project Cost	Provincial Funding	5	PSI Contribution		
\$1.0 M	\$1.	0 M	\$0		
Level and Year of Cost Estimate: Notional e available budget. Capital Funding Assumptions:	Level and Year of Cost Estimate: Notional estimate based on scope (number of cameras) at present. Deployment is scalable to meet available budget.				
Operating Funding Assumptions: Operating costs (licensing and storage) will be covered within the existing operating budget of UNBC.					
Project Schedule					
Target Approval Date	Target Start Date		Target Completion Date		
April 2025 Sept 2025		2025	March 2026		
Key Timing Assumptions: Timeline assumes qualified respondents to procurement.					

Project Overview				
Institution	Campus	Category	Priority in Category	Program Type
UNBC	Prince George	Routine Capital	6 of 7	Other
Proiect Title				

Agora Renewal

Brief Project Description

Whole building renewal including: building envelope, HVAC efficiency upgrades and finishes

Project Definition

Project Scope

This project will involve an evaluation, repair and upgrade to the mechanical and electrical systems, stabilization of concrete retaining walls, substantial roof repairs (green, BUR, concrete pavers, etc.), and architectural interior work including glazing, doors, accessibility upgrades and access control.

Project Objectives

Problem/Opportunity: The building has been in service for 30 years and replacement requirements are increasing. There are synergies in addressing multiple items at one time, and an opportunity to mitigate carbon emissions and potential future climate impacts.

Project Objectives: The primary objective of the project would be to repair and/or replace aging infrastructure prior to any further damage taking place. Several of the upgrades will also have energy savings opportunities.

Key Risks

•	
Project Risk(s)	Proposed Mitigation Strategy
The project will need to be competed while the campus is operational	Close cooperation with the scheduling office, night work and swing spaces
Renovation work has the potential to uncover unknown conditions	Exploratory checks during design and contingency budgeting

Options Considered

The only option available is to try to address small parts of this project with the yearly Routine Capital funding. Given the project management resources available and the volume of work required, this would take up to ten years to complete and is not a viable option.

Current Situation

One of the original five campus buildings, the Agora was constructed in 1994 and contains Lecture Theatres, Main Entrances, Lobby, Offices and Food Services. It connects all the original buildings and behind all these services is the Utilidor that contains all the campus utility infrastructure.

The exterior of the building includes cast-in-place concrete walls, stone and brick cladding finishing's and pre-cast concrete elements. The roof includes adhered built-up-roof with concrete interlocking pavers, metal roof assemblies and green roofs.

With a high FCI (at 0.54), and being the heart of the campus, this building has been deemed the highest maintenance priority. According to VFA there are \$31.9 million worth of requirements identified in the next five years.

The Agora will continue to serve as the heart and hub of campus – connecting most of the building while providing essential student services and classroom space.

Strategic Alignment			
Institution Priorities		Government Priorities	
Sustainability and efficient provision of campus space are strategic university goals. Maintenance of key campus buildings is a central tenet of the campus master plan. Describe how the project aligns with government priorities investment in new training and employment opportunities Improved building envelope and advanced heat recovery will enable low carbon electrification of the building heating		The Agora hosts the First Nations Centre, which will be enhanced as it is included within the scope. Consultation for design and planning will include the staff and participants in the First Nations Centre, as well as the UNBC Office of Indigenous Initiatives. The main campus entrance will enhance the Elder's welcome area and aims to incorporate elements to increase the welcome for Indigenous members of our campus community.	
Campus infrastructure services would be upgraded to current standards as part of the renewal.			
Repairing and renewing the building at this stage in its life is more cost effective than deferring until catastrophic failures occur.			
Provides high quality and safe learning envi	ronment.		
Upgrades to HVAC, lighting, heat recovery and building envelope will be included to further reduce the emissions resulting from operating this building.			
Project Budget (\$ millions)			
Total Project Cost Provincial Funding			PSI Contribution
\$31.75 M	\$31.	75 M	\$0

Level and Year of Cost Estimate: Notional, based on VFA requirements as listed in 2024.

Capital Funding Assumptions: Assumes this project is funded as a stand-alone initiative. Campus accessibility, carbon emissions reduction and roof replacement projects would all overlap with this project and if already funded or in progress would partially reduce the funding requirement.

Operating Funding Assumptions: A net reduction in operating and maintenance costs is expected due to newer and more efficient mechanical systems.

Project Schedule			
Target Approval Date	Target Start Date	Target Completion Date	
April 2027	April 2029	August 2031	

Key Timing Assumptions: A renovation of an existing building such as this requires significant design and planning work ahead of construction. The timeline is based on planning and exploratory investigation in the first year of funding and construction in the second.

Project Overview				
Institution	Campus	Category	Priority in Category	Program Type
UNBC	Prince George	Routine Capital	7 of 7	Sciences & Technology
Project Title				

Research Lab Renewal

Brief Project Description

Whole building renewal including: building envelope, HVAC efficiency upgrades and finishes

Project Definition

Project Scope

This project will involve an evaluation, repair and upgrade to the mechanical and electrical systems, Fire Alarm system renewal, exhaust system renewal (fume hoods), substantial roof repairs (green, BUR, concrete pavers, etc.), and architectural interior work including glazing, doors, accessibility upgrades and access control.

Project Objectives

Problem/Opportunity: The building is aging and many systems require replacement. This provides an opportunity to re-envision the thermal and energy functions of the building to simultaneously restore peak functionality and dramatically reduce greenhouse gas emissions. This project also includes the first functional planning exercise for this building since the adjacent Teaching Lab was built in 2002/2004 and the use of this original lab building changed.

Project Objectives: The primary objective of the project would be to repair and/or replace aging infrastructure prior to any further damage taking place. A number of the upgrades will also have positive energy savings opportunities.

Key Risks	
Project Risk(s)	Proposed Mitigation Strategy
Renovation work has the potential to uncover unknown conditions. Exploratory checks during design and contingency budgeting will reduce this to a manageable level.	The project will need to be competed while the campus is operational – close cooperation with the scheduling office, night work and swing spaces will be utilized to mitigate impacts.
Options Considered	

The only option available is to try to address small parts of this project with the yearly Routine Capital funding. Given the project management resources available and the volume of work required, this would take up to ten years to complete and is not a viable option.

Current Situation

Attachment 2b Project Overview – Routine Capital, Carbon Neutral, & IM/IT 5-Year Capital Plan (2025/26 – 2029/30)

One of the original five campus buildings, this building is a four-storey building with approximately 7,581 square meters of floor space. The "Research Lab" was originally built as the only lab on campus and housed, teaching labs, research labs and graduate space. This building is now used solely for Research and Graduate students and contains a variety of research labs, a greenhouse, an archaeology lab, DNA sequencing lab, loading bay, Chemical Stores, multiple specialized labs and substantial associated mechanical and electrical systems.

With UNBC's highest FCI (at 0.69) this building has been deemed a high maintenance priority.

According to VFA there are \$34.4 million worth of requirements identified in the next five years.

The Research Lab will continue to provide lab space for research and office space for faculty and graduate students

Strategic Alignment

Institution Priorities	Government Priorities		
Sustainability and efficient provision of campus space are strategic university goals. Maintenance of key campus buildings is a central tenet of the campus master plan. Repairing and renewing the building at this stage in its life is more cost effective than deferring until catastrophic failures occur. Improved building envelope and advanced heat recovery will enable low carbon electrification of the building heating systems. Campus infrastructure services would be upgraded to current standards as part of the renewal. Provides high quality and safe learning environment.	Indigenous engagement and consultation for this project will focus on enhancing the Indigenous welcome and sense of place through the interior finishes revitalization.		
Project Budget (\$ millions)			

Total Project Cost	Provincial Funding	PSI Contribution	
\$41.75 M	\$41.75 M	\$0	

Level and Year of Cost Estimate: Notional, based on VFA requirements as listed in 2024.

Capital Funding Assumptions: Assumes this project is funded as a stand-alone initiative. Campus accessibility, carbon emissions reduction and roof replacement projects would all overlap with this project and if already funded or in progress would partially reduce the funding requirement.

Operating Funding Assumptions: A net reduction in operating and maintenance costs is expected due to newer and more efficient mechanical systems.

Project Schedule			
Target Approval Date	Target Start Date	Target Completion Date	
April 2027	April 2029	August 2031	

Key Timing Assumptions: A renovation of an existing building such as this requires significant design and planning work ahead of construction. The timeline is based on planning and exploratory investigation in the first year of funding and construction in the second.

Project Overview									
Institut	tion	Campus	Category	Priority in Category	Program Type				
UNBC		Prince George	Carbon Neutral Capital	1 of 1	Other				
Project	Project Title								
6	Franciska and a	- D							
Campus	Energy Upgrade	s Program							
Brief P	roject Descrip	tion							
Campus	Energy Upgrade	s Program including various	energy efficiency and decarb	ponization projects.					
Project	t Definition								
Projec	t Scope								
-	Bioenergy Plan	t Revitalization							
	 \$5,000,00 Replacem 	0 ent/rebuild of key equipme	nt such as gasifier and oxidiz	⊃r					
	o nepideeni								
-	District Heating	g Electrification Project							
	 Replace al 	o n existing boiler in central p	lant with heat pump system	or electric boiler.					
-	NSC Low Carbo	n Heating Conversion							
	 Convert existing gas heating systems to low carbon (electric) systems. 								
-	Research Lab S	trobic System Conversion							
	o \$1,500,000								
	• Convert to strobic exhaust system and potentially implement other advanced exhaust ventilation (e.g. Aircuity).								
-	- Teaching Lab Strobic System Optimization								
	 \$750,000 Implement improved exhaust system to reduce energy usage. 								
_	Kitchen Exhaust DCV and Hest Becovery								
	 \$350,000 								
	 Install demand-controlled kitchen exhaust fan with integrated sensors. Install heat recovery system for exhaust air. 								
-	- QRRC Pumping Optimization								
	 \$300,000 Improve efficiency of existing numping systems with piping and equipment modifications 								
	a minimum control of existing particing systems with piping and equipment modified to is.								
-		ntrol Valve Replacement							
	 Solution Complete replacement of aging three-way cooling coil control valves with new two-way valves to allow for variable speed pumping. 								
-	Bioenergy Plan	t Soot Blower System							
	 \$250,000 Install nev 	v soot blower system for Bi	oenergy Plant boiler to auton	natically clean tubes and prev	vent ash build-up. This				

will increase efficiency and reduce outages.

Project Objectives

Problem/Opportunity: There are various opportunities to improve aging infrastructure that will lead to reduction in energy usage and GHG emissions.

Project Objectives: Renew aging infrastructure, improve energy efficiency, and decrease GHG emissions.

Key Risks			
Project Risk(s)	Proposed Mitigation Strategy		
Delays due to availability of skilled trades	Develop and post procurement documentation early so that contractors can load projects into their schedules earlier		
Delays due to availability of equipment	Develop and post procurement documentation early so that equipment can be procured earlier		

Options Considered

Projects could be integrated into larger building renewals; however, these will likely take many years to develop and complete, and are likely to be done one at a time. There is a timeline and cost benefit to tackling these system upgrades separately from whole building renewals.

Current Situation

Aging inefficient physical infrastructure, in most cases not renewed since original construction.

Strategic Alignment			
Institution Priorities	Government Priorities		
Maintenance and improvement of existing facilities; energy conservation; GHG emissions reduction.	Energy conservation; GHG emissions reduction.		

Project Budget (\$ millions)				
Total Project Cost	Provincial Funding	PSI Contribution		
\$12.9 M	\$12.9 M	\$0.00		

Level and Year of Cost Estimate: Notional estimates in 2024.

Capital Funding Assumptions: Each project has been estimated as a stand-alone project, so any combination of them could be bundled together. There may be other projects that could overlap and if already funded or in progress would partially reduce the funding requirement.

Operating Funding Assumptions: A net reduction in operating and maintenance costs is expected due to newer and more efficient mechanical systems.

Project Schedule				
Target Approval Date	Target Start Date	Target Completion Date		
April 2025	May 2025	August 2030		

Key Timing Assumptions: Each project will require varying levels of design and planning work ahead of construction. Larger and more complex projects may span multiple financial years.

Project Overview					
Institution	Campus	Category	Priority in Category	Program Type	
UNBC	All Campus Locations	IM/IT - Increased Delivery Demand	1 of 6	Other	

Project Title

UNBC Hybrid Classroom Initiative

Brief Project Description

The UNBC Hybrid Classroom Initiative upgrades classrooms with advanced hybrid learning technologies. Over five years, it aims to enhance accessibility for all students, including those in remote areas, ensuring consistent technology in every classroom for improved teaching and learning experiences.

Project Definition

Project Scope

Renewal and Replacement: Replace aging projectors, outdated screens, and other incompatible equipment with new projectors, projector screens, high-quality webcams, and ceiling microphones.

Expansion: Implement these upgrades across all classrooms to ensure uniform technology access, supporting flexible and inclusive learning for students throughout Northern British Columbia.

Program and FTE Support

Programs Supported: All academic programs at UNBC will benefit from the upgraded learning environments, providing a consistent and modern educational experience across disciplines.

FTE Support: This project will support the entire student population, ensuring that all students have access to high-quality, hybrid learning environments.

The UNBC Hybrid Classroom Initiative will involve replacing outdated classroom equipment with advanced hybrid learning technologies, ensuring cost-efficient, high-quality learning experiences. This expansion will enhance UNBC's ability to reach more students across the north and provide greater flexibility in teaching and learning approaches for faculty.

Project Objectives

Problem/Opportunity: The current classroom technology at UNBC is outdated and incompatible with modern devices, hindering educational experiences. Upgrading to modern technology will enhance accessibility, especially for students in remote areas, and meet labor market demands for a well-educated workforce in these rural and remote areas.

Project Objectives

- 1. **Modernize Technology:** Replace aging projectors and screens with new projectors, screens, webcams, and ceiling microphones.
- 2. Enhance Accessibility: Provide hybrid learning options for remote and rural students.
- 3. Improve Learning Experience: Facilitate interactive and engaging learning environments.
- 4. Increase Enrollment: Attract more students with flexible learning options.
- 5. Support Faculty: Ensure consistent technology in all classrooms.
- 6. **Cost Efficiency:** Implement a cost-effective, high-quality solution.

Key Risks

Project Risk(s)	Proposed Mitigation Strategy
Potential lack of capacity at UNBC to install all required technology.	Subcontract some installations, carefully schedule to avoid resource constraints, augment staffing to include more deployment roles, and train staff for installation tasks.
Risk of exceeding the allocated budget due to inflationary pressures.	Implement strict budget management, regularly review expenditures, and adjust plans to account for inflation.

Students in remote areas may lack reliable internet connections.	Promote the use of Starlink, a proven solution with a successful track record in the north. While the cost is borne by students, it significantly reduces the need for relocation (student housing) and associated expenses, providing overall cost savings.

Options Considered

Status Quo (No Hybrid Delivery)

- Advantages: No immediate financial investment required, maintains current operations without disruption.
- **Disadvantages:** Does not align with UNBC's strategic plan, limits accessibility for remote and rural students, misses opportunities to modernize and enhance learning experiences.

Sophisticated Single-Purpose Rooms

- Advantages: High-quality, dedicated spaces for hybrid learning with advanced features.
- **Disadvantages:** Creates scheduling problems and limited access, more complex and expensive than necessary, and restricts flexibility for faculty and students.

Current Situation

Number of FTEs and Programs Currently Accommodated:

UNBC currently supports approximately 3,500 FTEs across various undergraduate and graduate programs. These programs span multiple disciplines, including arts, sciences, health, and engineering.

Current Infrastructure Condition:

The classroom infrastructure at UNBC is aging, with many projectors, screens, and other equipment nearing the end of their useful life. There is a need for significant upgrades and replacements to maintain functional and modern learning environments.

Impact if Project Not Funded:

- Limited Accessibility: Students in remote and rural areas will continue to face barriers to accessing quality education.
- Reduced Enrollment: Potential students may choose other institutions with more modern and flexible learning options.
- **Outdated Learning Environment:** UNBC will struggle to provide a competitive and engaging educational experience.
- Scheduling Challenges: The continued use of outdated single-purpose rooms will exacerbate scheduling difficulties and limit faculty flexibility.

Strategic Alignment

Institution Priorities	Government Priorities
The UNBC Hybrid Classroom Initiative aligns with the University's Strategic Plan 2023-2028 by supporting its mission to ignite curiosity, inspire creativity, and lead positive change. The project enhances academic excellence, experiential learning, inclusiveness, and community by upgrading classroom technology for flexible and inclusive learning. It empowers Northern communities, supports reconciliation goals, and fosters innovative educational solutions for local and global challenges. Additionally, the initiative is part of UNBC's digital transformation efforts and aligns with capital planning priorities, ensuring the University remains competitive and prepared for the future.	The UNBC Hybrid Classroom Initiative aligns with key BC government priorities, particularly in service expansion and increasing enrollment. By upgrading classroom technology and offering hybrid learning options, this initiative improves access to high-quality education for students in remote and rural areas, supporting the government's goal of expanding educational services. This aligns with the BC government's emphasis on building resilient communities, supporting people and families, and fostering inclusive growth. The initiative enables UNBC to attract more students and provide flexible learning opportunities, contributing to the overall goal of creating a more inclusive and sustainable economy
Project Budget (\$ millions)	

Total Project Cost	Provincial Funding	PSI Contribution	
\$3.043 M	\$3.043 M	\$0	

Level and Year of Cost Estimate

We have formal estimates, and the orders for the equipment are ready to go immediately. The planned installations will commence as soon as possible.

Capital Funding Assumptions

Key assumptions include:

- The capital funding required for the project is based on formal cost estimates obtained recently.
- The orders for the necessary equipment are ready to be placed immediately, ensuring a swift start to the project.
- The total capital funding required is approximately an average of \$610,000 annually for the next five years.
- The timeline to complete all classrooms is greater than 5 years (7 years), as such the larger project will likely continue for 2 more years after this into 2032.

Operating Funding Assumptions

- The operating costs associated with the improved infrastructure will be supported by our existing resources that currently support classroom technologies.
- We will implement a self-service model to maintain efficient operations and eliminate the need for mobile video conferencing technologies that require setup and takedown for each lecture.
- Ensuring the technology is permanently available in classrooms will reduce barriers to use and support.

Project Schedule

Target Approval Date	Target Start Date	Target Completion Date	
Jan 1, 2025	Mar 1, 2025	Jan 1, 2030	

Project Timing Assumptions

- 1. Approval Process: Secure necessary approvals by January 1, 2025, to ensure timely commencement.
- 2. **Project Start:** Begin installations on March 1, 2025, following the approval.
- 3. Phased Implementation:
 - a. Phase 1 (2025): Pilot installations in select classrooms to test and refine the technology setup. Rooms 5-121, 5-122, 6-305, 6-306, 6-307, 8-362, 10-3034, 8-417, 8-420, 8-421, 8-424, and theatres 7-212 and 7-238.
 - b. Phase 2 (2026-2027): Expand installations to additional classrooms, incorporating feedback and improvements from Phase 1. Rooms 10-4034, 10-4044, 10-4072, 10-4520, 10-4588, 10-4560, WIDC 260.
 - c. Phase 3 (2027-2028): 3-1007, 3-1069, 3-1084, 5-123, 8-118, 8-127, 8-129, 10-2522, 10-4068
 - d. Phase 4 (2028 2029): 5-154, 5-158, 5-173, 5-175, 8-164, 8-166, 10-3518
 - e. Phase 5 (2029 2030): 5-153, 5-171, 5-174, 5-177, 5-178, 5-183, 5-184, 8-160, 8-161, Terrace 103/104
- 4. Completion: Finalize all installations and ensure full operational status by January 1, 2030.

These key milestones ensure a structured and manageable implementation process, allowing for continuous assessment and improvement throughout the project's duration.

Project Overview					
Institution	Campus	Category	Priority in Category	Program Type	
UNBC	All Campus Locations	IM/IT - Security & Privacy	2 of 6	Other	
Project Title					
Core Network Security Refresh					

Brief Project Description

UNBC's core network security platform is due for refresh in 2027.

Project Definition

Project Scope

UNBC's core network security devices are critical for protecting the network infrastructure relied upon by over 3,000 FTE students, 1,200 employees, and numerous community members and visitors. The current Palo Alto equipment, which went End-Of-Sale on August 31, 2023, will be supported until Summer 2028 per Palo Alto's End-Of-Life (EOL) policy. This project aims to replace the existing Palo Alto hardware with the latest generation from the same manufacturer by 2027.

Renewal and Replacement Aspects

- Renewal: Upgrade to current-generation Palo Alto hardware to ensure continued protection and performance.
- Replacement: Replace end-of-life Palo Alto equipment to maintain robust network security.

Expansion Aspects

- Consolidation and Optimization: Continue to leverage the benefits of Palo Alto's platform for optimized security operations.
- Enhanced Security: Ensure ongoing security enhancements with new features and capabilities of the latest hardware.

Rationale for Staying with Palo Alto

- Substantial Training Investment: UNBC has heavily invested in training its technical staff on the Palo Alto platform.
- Experience and Expertise: UNBC's technical staff have extensive experience with Palo Alto, ensuring smooth operation and management.
- Vendor Support: Palo Alto has provided reliable support, contributing to the secure and efficient operation of UNBC's network.
- Avoiding High Costs and Effort: Switching to a different vendor would require significant time and financial investment for evaluation, integration, and commissioning of a new platform

Project Objectives

Problem/Opportunity: UNBC's existing core network appliance is End-of-Life as of August 31 2028. It should be replaced before its End-of-Life, during a time of the year that is minimally disruptive to students and faculty.

Project Objectives: Risk avoidance (running end of life network), Enhanced service capability (increased bandwidth)

Key Risks	
Project Risk(s)	Proposed Mitigation Strategy
Identify key project risks and proposed mitigation strategies.	
Downtime During transition from Existing to new hardware	UNBC's architectural design is highly available; in addition, major cutover events will happen in the evening to further reduce the likelihood of observable network connectivity outages.

Compatibility Issues	This is unlikely because we plan on staying with the same vendor. It has been UNBC's experience that migrating between different models of hardware from the same vendor has been simple.

Options Considered

Option 1: Do Nothing

- Advantages: No immediate financial investment required.
- Disadvantages: Not a viable option as it would be negligent to ignore the need for updating core network security appliances. Failure to upgrade would leave the network vulnerable to security breaches and compromise the protection of data for students, staff, faculty, and visitors.

Option 2: Migrate to a Different Vendor

- Advantages: Potential for exploring newer technologies and features from other vendors.
- Disadvantages: This option significantly increases the complexity of the migration process, extending the project timeline from weeks to over a year. It requires substantial effort in qualifying, evaluating, integrating, and commissioning a new vendor's platform. Additionally, supporting the existing platform while learning a new one increases workload and risks improper configurations that could lead to security regressions.

Option 3: Upgrade to Current Generation Palo Alto Hardware (Proposed Solution)

- Advantages: Ensures continuity and leverages the existing investment in training and expertise. The upgrade process will be straightforward, minimizing disruption and maintaining a high security posture with familiar technology. Vendor support remains consistent, reducing the risk of configuration errors and security issues.
- Disadvantages: Requires financial investment for the new hardware.

The proposed solution to upgrade to the current generation Palo Alto hardware provides the best balance of security, efficiency, and cost-effectiveness, aligning with UNBC's operational needs and strategic goals.

Current Situation

This project supports the entire UNBC student and employee community, along with all those that visit campus and connect to the digital infrastructure. The existing infrastructure, as already discussed is End of Sale with a End of Life approaching in 2028. While it is currently operational and meeting the needs, it is required to be replaced before it reaches its end of life from the vendor. Should this not be funded UNBC will need to shut down all campus networks.

Strategic Alignment

Institution Priorities	Government Priorities
Aligned with UNBC's Strategic Plan 2023 to 2028, this firewall replacement enhances our digital infrastructure, bolstering network security against modern threats and improving speed and capabilities for academic and research activities. The initiative supports over 3,000 students, faculty, and staff, ensuring a secure, resilient environment. It embodies 'En Cha Huná by safeguarding the digital experiences of all individuals, fostering local solutions with global impact, empowering northern communities, and reinforcing inclusiveness, diversity, and integrity. This upgrade is essential for maintaining UNBC's competitiveness and readiness for future challenges.	The replacement of UNBC's network firewall aligns with the Government of British Columbia's priorities by enhancing cybersecurity, supporting educational excellence, driving innovation, preparing a skilled workforce, and strengthening Indigenous relations. This strategic upgrade not only helps to secure UNBC's digital environment but also reinforces the University's commitment to contributing positively to the Province's broader goals.
Project Budget (\$ millions)	

Total Project Cost	Provincial Funding	PSI Contribution
\$0.75 M	\$0.75 M	\$0

Level and Year of Cost Estimate: budgetary quote in progress - should have quote estimates by August 2024

Capital Funding Assumptions: Capital costs are a portion of this project. Approximately 30%, all other costs are licensing, and UNBC Finance department has indicated that licensing is not a capitalizable item

Operating Funding Assumptions: This new hardware will be licensed similarly to existing hardware. The vendor controls the price, which has typically seen a 10% lift year over year. In addition, with the hardware being more performant it is expected that the price of the support will go up accordingly beyond just the standard amount for the first support time window.

Project Schedule		
Target Approval Date	Target Start Date Target Completion Date	
October 2026	May 2027	October 2027
Key Timing Assumptions:		
Approval / Budget availability by October 2	026	
Hardware Order – February 2027		
Hardware Lead time – 10 weeks		
Installation – 2 weeks		
Integration – 8 weeks		
Testing – 4 weeks		
Commissioning – 4 weeks		
Cleanup – 2 weeks.		

Project Overview				
Institution	Campus	Category	Priority in Category	Program Type
UNBC	Prince George	IM/IT - Security & Privacy	3 of 6	Other
Project Title				

Campus Core Network Refresh

Brief Project Description

Refresh UNBC's campus core network infrastructure to support increased speeds, enhanced capabilities, and improve security.

Project Definition

Project Scope

This project aims to replace existing under-provisioned network hardware at the Prince George campus of UNBC. It will support all networks at this location, including the Wood Innovation Research Laboratory, Wood Innovation Design Centre, Northern Sports Centre, and various buildings on campus at 3333 University Way, Prince George.

The project will address connectivity, throughput, and the capability to support an increasing number of connected devices. Current hardware is expected to exceed its capabilities by 2027-28, necessitating proactive replacement to meet growing on-campus requirements. The new core networking equipment will be appropriately sized to meet both current and future needs of the University.

Supported Programs and FTEs

This project will support all network-dependent programs and approximately 3,000 FTE students, as well as faculty, staff, and community members utilizing the network infrastructure at the Prince George campus.

Project Objectives

Key Risks

Problem/Opportunity: UNBC's campus core is projected to reach the limits of its capabilities on or before 2028. With existing planned upgrades to other areas of the network and network infrastructure, there is an opportunity for a single investment to dramatically increase the capabilities and services delivered by the campus core network.

Project Objectives: reduction in the number of active devices on the network, reduction in the complexity of network management, increase in network performance, increase in network segmentation capabilities

Project Risk(s)	Proposed Mitigation Strategy
Identify key project risks and proposed mitigation strategies.	
Vendor Supply chains and lead time extending	Order equipment 4 months prior to it being required to arrive allowing flexibility in the supply chain. In addition, working with a VAR through BCNet to determine what lead times for this equipment is realistically expected
Outages during the upgrade	UNBC's network is designed to be highly available. Initial assessment suggests that the upgrade will be able to be done with virtually no observable impact by the UNBC community
Options Considered	

Do nothing: Continue with the existing network infrastructure. This option is not viable due to the current networks' projected inability to meet the University's needs within the next 4 years.

If the network situation becomes critical UNBC would have to expend internal funding, which may impact other operational priorities.

Current Situation

- Approx 3000 FTEs and all programs on the Prince George campus are supported by this infrastructure.
- Should this project not be funded UNBC's campus network will experience performance degradation and service delivery challenges, which will impact delivery of programs at UNBC including instructional remote delivery with the Northern Medical Program.

Strategic Alignment

Institution Priorities	Government Priorities
Upgrading the campus core network infrastructure aligns closely with UNBC's Strategic Plan 2023 to 2028, particularly under the theme of "Empower Northern Communities" and the foundational goal of supporting fulfilling student learning journeys. By enhancing network capabilities, UNBC strengthens its capacity to deliver high-quality education and research experiences essential for preparing students and fostering community resilience in a rapidly evolving digital landscape. This initiative also contributes to the university's commitment to innovation and sustainability, supporting local solutions with global impact. As articulated in the strategic plan, UNBC is poised to lead positive change by leveraging technological advancements to better serve its diverse community and advance its mission of leading a sustainable future through education, research, and community impact.	Upgrading campus core network infrastructure at UNBC aligns strategically with key priorities of the Government of British Columbia. By enhancing digital infrastructure, this initiative supports the government's objectives to expand connectivity across the province, promote innovation and technology development, and strengthen educational and workforce capabilities. Improved network capabilities at UNBC facilitate advanced research collaborations and educational opportunities, contributing to a more resilient and inclusive community infrastructure statewide. This alignment underscores UNBC's role in advancing provincial goals of economic growth, digital equity, and innovation leadership through enhanced digital connectivity and educational excellence

Project Budget (\$ millions) Total Project Cost Provincial Funding PSI Contribution \$0.5 M \$0.5 M \$0

Level and Year of Cost Estimate: Budgetary pricing was obtained in early 2024. The pricing reflected represents predicted inflationary pressures and changes in costs for the products.

Capital Funding Assumptions: If the network situation becomes critical UNBC would have to expend internal funding, which may impact other operational priorities.

Operating Funding Assumptions: Operational costs for existing campus core hardware are similar to that of the new hardware, any change should be able to be accommodated by UNBC operational funds

Project Schedule		
Target Approval Date	Target Start Date	Target Completion Date
September 2025	April 2026	August 2026

Key Timing Assumptions:

This is a single-phase project. UNBC's network is designed to be highly-available as such most of this work will be transparent to the campus community. Lead-time for this equipment is currently twelve weeks, projected timelines accommodate that lead-time.

Project Overview				
Institution	Campus	Category	Priority in Category	Program Type
UNBC	Prince George	IM/IT - Security & Privacy	4 of 6	Other
Project Title				

WAN hardware Refresh

Brief Project Description

Refresh of UNBC's WAN hardware to prepare for increased performance expectations and bandwidth demands.

Project Definition

Project Scope

This project aims to upgrade the Wide Area Network (WAN) infrastructure for UNBC, supporting over 3,000 FTE students and 1,200 faculty and staff members. The scope includes the procurement, installation, configuration, and commissioning of new WAN hardware components. These upgrades are essential to meet the growing performance demands and bandwidth requirements of academic, research, and administrative operations.

Key aspects of the project include:

- Assessment: Evaluate current network capabilities to identify optimal hardware solutions.
- Procurement and Installation: Acquire and install new WAN hardware to replace outdated components.
- Configuration and Commissioning: Configure the new hardware and commission it for operational use.
- Security Enhancements: Implement robust security measures to safeguard network integrity.
- Testing and Integration: Conduct thorough testing and integration to ensure a seamless transition and minimal disruption to University services.
- Operational Timing: Most changes will be made during spring/summer and outside typical work hours to reduce interruptions.

By enhancing our WAN infrastructure, this project supports UNBC's commitment to delivering high-quality education, facilitating advanced research activities, and effectively supporting the University's administrative functions.

Project Objectives

Problem/Opportunity: the existing WAN infrastructure, while functional, is not ready to support the projected demands for speed expected at remote sites spread throughout the northern part of the Province. UNBC's locations at Ft. St. John, Terrace, Quesnel, Pr. Rupert, and Likely (QRRC) sites are all seeing more activity in the last few years, with some sites getting additional investments to increase capabilities and research outputs.

Project Objectives: Outline key objectives

Key Risks	
Project Risk(s)	Proposed Mitigation Strategy
Identify key project risks and proposed mitigation strategies.	
Disruption to Service	Evening and weekend work during critical stages. Planning and communication with the groups will ensure that this is minimized if not eliminated.
Options Considered	

There are different architectural designs that UNBC has considered. At a high level one option is to run each site as its own location with independent but centrally managed security devices. This option was considered as it reduces dependence on central service and central connectivity, at the expense of increased cost (additional hardware, licensing, and maintenance) and management complexity. The increased costs and complexity was found to be higher than reasonable both fiducially and operationally. Another option considered was to increase use of BCNet services to leverage proposed managed firewall services. This option is not yet mature enough for it to be viable from a security standpoint.

Current Situation

UNBC's current WAN infrastructure can meet the short-term needs of the University sites in terms of throughput (bandwidth) and reliability (redundant individual devices). UNBC ITS has seen a 40% increase year-over-year in demand for connectivity services for the last 5 years. Combining the increased demands for bandwidth with UNBC ITS's cloud adoption strategy the demands on connectivity and reliability will further emphasize the demand on these services.

Strategic Alignment

Institution Priorities	Government Priorities
The WAN hardware refresh project at UNBC aligns strategically with the university's overarching goals as outlined in its Strategic Plan 2023 to 2028. By upgrading the Wide Area Network infrastructure, the project supports UNBC's commitment to fostering educational excellence and advancing research capabilities. This initiative directly contributes to cultivating a culture of curiosity and expanding experiential learning opportunities for students and faculty. Additionally, enhancing network capabilities strengthens UNBC's role in empowering northern communities by improving access to educational resources and supporting community-based research initiatives. Moreover, the project underscores UNBC's dedication to innovation and sustainability, enabling the university to lead positive change locally and globally. By ensuring robust network performance and operational efficiency, the WAN hardware refresh project reinforces UNBC's mission to provide a supportive learning environment and celebrate achievements across its campuses in northern British Columbia	The WAN hardware refresh project at UNBC closely aligns with the strategic priorities of the Government of British Columbia. By upgrading the university's Wide Area Network infrastructure, the project supports the province's commitment to advancing digital infrastructure development. This initiative enhances broadband access and reliability, crucial for supporting education, healthcare, and economic growth statewide. Furthermore, the project promotes innovation and technological advancement by enabling UNBC to foster research collaborations and attract tech industries. It contributes to enhancing educational opportunities and preparing a skilled workforce, aligning with provincial goals for education and workforce development. Moreover, by improving network resilience and promoting inclusivity, particularly in remote and underserved communities, the project supports community resilience and economic inclusivity objectives. Overall, the WAN hardware refresh project at UNBC plays a pivotal role in advancing British Columbia's strategic priorities for digital infrastructure, innovation, education, and economic sustainability

Project Budget (\$ millions)

Total Project Cost Provincial Funding		PSI Contribution
\$0.25 M	\$0.25 M	\$0

Level and Year of Cost Estimate: Budgetary pricing was obtained in early 2024. The pricing reflected represents predicted inflationary pressures and changes in costs for the products.

Capital Funding Assumptions: If the WAN situation becomes critical UNBC would have to expend internal funding, which may impact other operational priorities.

Operating Funding Assumptions: Operational costs for existing WAN hardware are similar to that of the new units; any change should be able to be accommodated by UNBC operational funds

Project Schedule			
Target Approval Date	Target Start Date	Target Completion Date	
October 2026	January 2027	August 2027	

Key Timing Assumptions:

Assumption – hardware lead time is 12 weeks or less

Assumption – each site will take two weeks to complete, but will only take on-site technical staff one evening worth of work. Most work can be completed at the central location (Prince George)

Local testing can be achieved before shipping/travel is booked

Project Overview				
Institution	Campus	Category	Priority in Category	Program Type
UNBC	Prince George	IM/IT - Emerging Priority	5 of 6	Other
Project Title				

Diverse Path Fiber Network Expansion

Brief Project Description

UNBC ITS is working on updating the fiber infrastructure at the Prince George campus. Part of this project has identified critical buildings that lack sufficiently diverse fiber paths, increasing the risk of damage. This project will employ contractors to perform horizontal boring and install conduit along new paths, enhancing the diversity and reliability of the network infrastructure.

Project Definition

Project Scope

This project aims to enhance the network reliability and performance by installing a diverse path fiber connection between two existing buildings at the UNBC Prince George campus. It will support the connectivity needs of 3,000 FTE students and 1,200 faculty and staff members, ensuring robust and uninterrupted network services.

The scope includes:

- Contractor Employment and Equipment Use: Engage contractors with specialized equipment to install buried conduit along a diverse path identified by network operations staff as critical for service path diversity.
- Initial Planning and Assessment: Collaborate with the Facilities Management department to determine optimal routes, ensuring the new path maintains appropriate distances from other utilities. Obtain necessary permits and approvals during the planning and design phase.
- Request for Proposal (RFP) Process: Conduct an RFP to select a vendor that provides excellent value and is well-equipped for the project.
- Stage 1: Installation of Buried Conduit:
 - Tasks: Install buried conduit and service points at each end using specialized equipment.
 - Requirements: Specialty equipment and materials for conduit and service entry points installation.
- Stage 2: Installation of High-Capacity Fiber-Optic Cable:
 - Tasks: Install high-capacity fiber-optic cable for the Northern Sports Centre building, ensuring high service availability and path diversity.
 - Requirements: Fiber media, connector housings, connectors, termination, and certification to ensure usability and functionality.

By enhancing network redundancy and reliability, this project supports UNBC's commitment to providing robust and resilient network infrastructure, essential for academic, research, and administrative operations.

Project Objectives

Problem/Opportunity: This project is designed to reduce risk of connectivity failures to the Northern Sports Centre.

Project Objectives: Identify Diverse Path, install conduit, install fibre, put fibre into service

Key Risks			
Project Risk(s)	Proposed Mitigation Strategy		
Environmental assessments may discover additional items that need to be accommodated or designed.	ITS will work with Facilities to determine how to integrate the assessment into the RFP. The selected contractor will be required to do an assessment of the site and provide a work plan as part of the RFP process.		
Initial proposed path may not be suitable	Alternative paths will be explored as required		

Attachment 2b Project Overview – Routine Capital, Carbon Neutral, & IM/IT 5-Year Capital Plan (2025/26 – 2029/30)

Physical Damage during installation process	Reduce these risks through careful planning and coordination with UNBC's Facilities Management department

Options Considered

UNBC has considered the acceptance of the existing diverse path. It has been determined that accepting this risk is not compatible with the campus plan and projected campus development projects. This diverse path needs to be completed in the next three years to reduce the risk to acceptable levels

Current Situation

- The current situation is such that the diversity of the path is reduced to zero for more than 225M. This means that a single event can result in loss of connectivity for the building for a duration as long as required to repair.
- Should this project not get funding UNBC will need to choose to accept the risk, or will be required to find funding sources to complete this project.

Strategic Alignment

Institution Priorities	Government Priorities
Installing a diverse path of fibre on campus aligns with UNBC's Strategic Plan 2023-2028 by ensuring robust, reliable digital infrastructure that supports our commitment to academic excellence, community engagement, and reconciliation with Indigenous Peoples. This initiative enhances our ability to facilitate cutting-edge research and experiential learning, reflecting our value of curiosity and innovation. It strengthens our digital resilience, essential for preparing for a rapidly changing future and addressing global challenges locally. Moreover, it underscores our dedication to inclusiveness and diversity by providing equitable access to digital resources, thereby fostering a more inclusive and accessible university community.	It enhances digital infrastructure development by expanding broadband access, crucial for education, healthcare, and economic growth. This investment also promotes innovation and technological advancement, attracting tech industries and supporting research institutions. Moreover, it contributes to sustainability goals by improving network resilience and reducing service disruptions. Enhanced connectivity fosters educational opportunities and community access to digital resources, aligning with the government's objectives for equitable social development and inclusive growth across the province.

Project Budget (\$ millions)

Total Project Cost Provincial Funding		PSI Contribution
\$350 M	\$350 M	\$0

Level and Year of Cost Estimate: This is a notional estimate.

Capital Funding Assumptions: This is one-time funding,

Operating Funding Assumptions: No additional operating expenses will be incurred because of this project being funded or completed

Project Schedule

Target Approval Date Target Start Date		Target Completion Date
February 2025	March 2026	October 2026

Key Timing Assumptions:

Funding approval will initiate RFP.

RFP will need to be conducted over spring/summer 2025 to allow site-visits

RFP will take 4 months from initial publication to award (completed by October 2025)

Permits (if required) expected to take up to 6 months (completed by May 2026)

Staging of equipment and installation of conduit expected to take 8 weeks (completed by August 2026)

Installation of fibre, termination, certification, and commissioning expected to take 4 weeks. (Completed by October 2026)

Project Overview				
Institution	Campus	Category	Priority in Category	Program Type
UNBC	Prince George	IM/IT - Emerging Priority	6 of 6	Other
Project Title				

Prince George Primary Campus Diverse Patch to Prince George City Hall.

Brief Project Description

UNBC ITS will work with the City of Prince George to identify, plan, scope, install, and commission a diverse fibre path between the Prince George Primary campus (3333 University Way) and City of Prince George City Hall (1100 Patricial Boulevard)

Project Definition

Project Scope

This project supports diverse connections for most of the enrollment at UNBC, benefiting approximately 3,000 FTE students. It ensures that all UNBC campus locations remain connected in the event of a service disruption in Prince George.

The project is part of UNBC ITS's Disaster Recovery and Business Continuity planning process. It involves collaboration with Prince George City staff to develop an initial path plan for diverse fiber connections between the UNBC Prince George campus and Prince George City Hall. The City of Prince George will be responsible for creating a detailed plan, including path, installation type, and service delivery details.

The project will require an initial investment of \$150,000 for UNBC to support the City of Prince George in developing the plan and working with city planners, engineers, and civil departments. This phase will identify necessary permits, approvals, and assessments, along with estimated timelines for completion.

Upon acceptance of the detailed plan by UNBC ITS and the City of Prince George, a Category-D budgetary assessment will be completed. Following funding approval, the second phase will commence, with the City of Prince George managing the RFP and installation process, including obtaining approvals, permits, and notifications.

The City of Prince George will handle installation, verification, and certification, while UNBC will commission the link once it is ready for use.

Current Status of the Prince George Primary Campus Diverse Path to Prince George City Hall

We are currently in the initial planning phase, collaborating with the City of Prince George to develop the path plan. The project aims to ensure robust and continuous connectivity for UNBC's primary campus, supporting disaster recovery and business continuity efforts. Once the detailed plan and budget are approved, the installation process will proceed, managed by the City of Prince George with funding from UNBC.

Project Objectives

Problem/Opportunity: UNBC ITS is adopting a variety of cloud-based services, and has a focus to move critical systems to cloud-based carriers such as Amazon's AWS and Microsoft's Azure to increase the durability of the systems compared to on-premise infrastructure. In order to maximise the availability of those services to those working on-campus and students on-campus UNBC ITS has identified an opportunity to increase the durability of the fibre infrastructure connectivity by implementing a diverse path in conjunction with the City of Prince George.

Project Objectives: The primary objective of this project is to reduce the risk of a single point of failure, that being the connection between the Prince George Primary campus location, and the Prince George City Hall location, where BCNet has its infrastructure located.

Key Risks	
Project Risk(s)	Proposed Mitigation Strategy
Identify key project risks and proposed mitigation strategies.	

Attachment 2b Project Overview – Routine Capital, Carbon Neutral, & IM/IT 5-Year Capital Plan (2025/26 – 2029/30)

Failure to fund project	Work with the City to determine if there are alternative funding opportunities that can be explored
Failure to find suitable diverse path that meets UNBCs expectations	Continued work with City Staff to determine suitable alternatives
Options Considered	

List and describe alternative options for program delivery and project solutions, including advantages/disadvantages of each (e.g., status quo, lease, phased approach, build new, distance learning, use/rental of vacant or under-utilized public assets, sublease of existing facilities, partnership with industry).

Status quo is an option for this project. If this was the chosen option UNBC leadership would need to accept the risk initially while working to find alternatives that would reduce the risk to acceptable levels. While not an ideal situation this would leave UNBC vulnerable to single points of failure for primary campus service delivery

Alternatives such as wireless connections have been considered, however at the recommendation of the network team they have been deprioritized because those options increase risks rather than reducing risks

Current Situation

Describe the current situation including:

• Currently UNBC uses a single path between Primary Campus (3333 University Way) and Prince George City Hall. This is not ideal as it puts UNBC at risk of a single point of failure for primary campus service.

Strategic Alignment				
Institution Priorities		Government Priorities		
Installing a diverse path of fibre to key service provider infrastructure aligns with UNBC's strategic plan, "Ready. UNBC's Strategic Plan 2023 to 2028," by enhancing our technological foundation to support our mission of leading a sustainable future through education, research, and community impact. This upgrade ensures robust, high-speed connectivity, facilitating advanced research and learning opportunities, which are essential for fostering a culture of curiosity and innovation. Additionally, this infrastructure improvement supports our commitment to Truth and Reconciliation by enabling better collaboration and communication with Indigenous communities. It also empowers northern communities by providing reliable access to digital resources, fostering local solutions with global impact. By investing in cutting-edge technology, we demonstrate our readiness to adapt to a rapidly changing world, ensuring that UNBC remains a leader in education, research, and community engagement.		The installation of a diverse path of fibre for key university systems supports the Government of British Columbia's priorities by enhancing digital connectivity, fostering economic development, advancing education, and ensuring infrastructure resilience and sustainability.		
Project Budget (\$ millions)				
Total Project Cost	Provincial Funding		PSI Contribution	
\$2.5	\$2.5		\$0	

Attachment 2b Project Overview – Routine Capital, Carbon Neutral, & IM/IT 5-Year Capital Plan (2025/26 – 2029/30)

Level and Year of Cost Estimate: The pricing proposed is a nominal estimate based on proposed fibre path and distance, and brief market analysis of price-per-kilometre installation. This pricing exercise was completed in Summer 2024. There is some contingency planned as well as accommodations for materials costs increases, labour cost increases, and market force adjustments.

Capital Funding Assumptions: UNBC is asking for an initial \$150,000 to be allocated in 2027 to allow for sufficient time for planning and project scoping to occur. UNBC will adjust the budget for the project based on the category-d estimates once obtained.

Operating Funding Assumptions: There will be no operational requirements because of this project and its completion

*Please note: the forecasted project cashflow is to be detailed on Attachment 3: Prioritized Proposed Projects

Project Schedule

Target Approval Date	Target Start Date	Target Completion Date
January 2027	March 2029	October 2029

Key Timing Assumptions: Describe project timing assumptions, including key milestones such as targeted approvals, anticipated start/end dates, phasing, etc.

Initial Approval – January 2027

Design, assessment, planning - completed by April 2028

Re-submit accurate budget request based on initial assessment pricing April 2028

Phase 2 Approval April 2028

RFP, award, installation, completion – completed by October 2029

Attachment 3 - Instructions	
Field	Examples/Guidance
Project Title	Concise project title that clearly describes the project programming / intent (e.g. "Technology, Science & Math Building" vs. "Classr
Project Description	Clear succinct language describing the spaces included (labs, classrooms, office space), including: •Total estimated area (m2) •Breakdown of area (m2) that applies to renewal, replacement and or expansion •Describe the program(s) and # of FTE(s) that will be supported, including the type of space required
Facility Condition Index	Where an existing asset is involved (whole asset replacement/renewal / Major Routine Capital, etc., please include the current FCI
Asset Replacement Value	Where an existing asset is involved (whole asset replacement/renewal / Major Routine Capital, etc., please include the Asset Replacement/renewal / Major Routine Capital, etc., please include the Asset Replacement/renewal / Major Routine Capital, etc., please include the Asset Replacement/renewal / Major Routine Capital, etc., please include the Asset Replacement/renewal / Major Routine Capital, etc., please include the Asset Replacement/renewal / Major Routine Capital, etc., please include the Asset Replacement/renewal / Major Routine Capital, etc., please include the Asset Replacement/renewal / Major Routine Capital, etc., please include the Asset Replacement/renewal / Major Routine Capital, etc., please include the Asset Replacement/renewal / Major Routine Capital, etc., please include the Asset Replacement/renewal / Major Routine Capital, etc., please include the Asset Replacement/renewal / Major Routine Capital, etc., please include the Asset
Anticipated Approval Date	Using the provided timeline as a guide, provide the anticipated project approval date (i.e. business case, if applicable).
Anticipated Start Date	Using the provided timeline as a guide, provide the anticipated project start date (i.e. construction, if applicable).
Anticipated Completion Date	Using the provided timeline as a guide, provide the anticipated project completion date (i.e. occupancy, if applicable).
Total Project Budget	Ensure project costs, contingencies and escalations reflect the realistic approval timelines mentioned above.

room Building 1")

I rating from the VFA database.

acement Value from the VFA database.

Project Rank (within category)	Institution	Campus	Project Category	Program Type	Project Title	Project Description	Facility Condition Index (for existing assets)	Asset Replacement Value	Anticipated Approval Date (Month/Year)	Anticipated Construction Start Date (Month/Year)	Anticipated Occupancy Date (Month/Year)	Total Project Budget	Total Cashflow Forecast 2025/26	Total Cashflow Forecast 2026/27	Total Cashflow Forecast 2027/28	Total Cashflow Forecast 2028/29	Total Cashflow Forecast 2029/30	Total Cashflow Forecast Outgoing Years	Provincial Cashflow Forecast 2025/26	Provincial Cashflow Forecast 2026/27	Provincial Cashflow Forecast 2027/28	Provincial Cashflow Forecast 2028/29	Provincial Cashflow Forecast 2029/30	Total Provincial Cashflow Forecast Outgoing Years	Total Provincial Budget	Project Fully Funded by the Province? (Yes/No)
1	UNBC	Prince George	New Priority Investments	Health Sciences	Northern BC Hub for Health Research (NHHR)	Health Research Centre focusing on Urban and Rural Health		N/A	Apr/2025	Apr/2027	Aug/2029	\$ 61,000,000	\$ 2,500,000	\$ 3,000,000	\$ 20,000,000	\$ 27,500,000	\$ 8,000,000	s -	\$ 2,500,000	\$ 3,000,000	\$ 20,000,000 \$	27,500,000	8,000,000	\$-	\$ 61,000,000	YES
2	UNBC	Prince George	New Priority Investments	Science & Technology	Engineering Building	New building to support UNBC Engineering Program expansion		N/A	Apr/2028	Apr/2030	Aug/2032	\$ 54,000,000				\$ 2,500,000	\$ 3,000,000	\$ 48,500,000			\$	2,500,000	3,000,000	\$ 48,500,000	\$ 54,000,000	YES
3	UNBC	Prince George	New Priority Investments	Arts & Sciences	CMTN and UNBC Terrace Learning Centre	New joint building for UNBC Terrace campus on the Coast Mountain Campus site	0.71	\$ 6,251,449	Apr/2027	Apr/2029	Aug/2032	\$ 160,000,000		5	\$ 6,750,000	\$ 9,750,000	\$ 31,000,000	\$ 112,500,000			\$ 6,750,000 \$	9,750,000	31,000,000	\$ 112,500,000	\$ 160,000,000	YES
4												\$-													\$-	YES
5												\$-													\$-	
6												\$-													\$-	
7												\$-													\$-	
8												\$-													\$-	
9												\$ -													\$-	
10												\$-													\$-	
Note: Please refi	rain from the use	of formulas in the cell	\$.									\$ 275,000,000	\$ 2,500,000	\$ 3,000,000	\$ 26,750,000	\$ 39,750,000	\$ 42,000,000	\$ 161,000,000	\$ 2,500,000	\$ 3,000,000	\$ 26,750,000 \$	39,750,000	42,000,000	\$ 161,000,000	\$ 275,000,000	



Project Rank (within category)	Institution	Campus	Project Category	Program Type	Priority in Category	Project Title	Project Description	# of beds (SH projects only)	Facility Condition Index (for existing assets)	Asset Replacement Value	Anticipated Approval Date (Month/Year)	Anticipated Construction Start Date (Month/Year)	Anticipated Occupancy Date (Month/Year)	Total Project Budget	Total Cashflow Forecast 2025/26	Total Cashflow Forecast 2026/27	Total Cashflow Forecast 2027/28	Total Cashflow Forecast 2028/29	Total Cashflow Forecast 2029/30	Total Cashflow Forecast Outgoing Years	Provincial Cashflow Forecast 2025/26	Provincial Cashflow Forecast 2026/27	Provincial Cashflow Forecast 2027/28	Provincial Cashflow Forecast 2028/29	Provincial Cashflow Forecast 2029/30	Total Provincial Cashflow Forecast Outgoing Years	Total Provincial Budget	Project Fully Funded by the Province? (Yes/No)
1	UNBC	Prince George	Student Housing	Student Housing	1	New Mixed Use Student Housing, Academic Programs, Connection Hub and Food Services Building	Multi-use Building: Housing, First Nations Centre, Food Services and Professional Programs	200			Apr/2027	Apr/2029	Aug/2032	\$ 112,750,000			\$ 5,750,000	\$ 6,750,000	\$ 25,750,000	\$ 74,500,000			\$ 5,750,000	6,750,000 \$	\$ 25,750,000	\$ 74,500,000	\$ 110,000,000	NO
2														\$ -													\$-	
3														\$-													\$-	
4														\$ -													\$-	1
5														\$ -													\$-	1
6														\$ -													\$-	1
7														\$ -													\$-	1
8														\$ -													\$-	1
9														\$ -													\$-	1
10														\$ -													\$-	
Note: Please ref	ain from the use	of formulas in the cells												\$ 112,750,000	\$ -	\$ -	\$ 5,750,000	\$ 6,750,000	\$ 25,750,000	\$ 74,500,000	\$-	\$-	\$ 5,750,000	6,750,000	\$ 25,750,000	\$ 74,500,000	\$ 110,000,000	1



Project Rank (within category)	Institution	Campus	Project Category	Program Type	Priority in Category	Project Title	Project Description	Anticipated Approval Date (Month/Year)	Anticipated Start Date (Month/Year)	Anticipated Completion Date (Month/Year)	F	Total Project Budget	Total Cashflow Forecast 2025/26	Total Cashflow Forecast 2026/27	Total Cashflow Forecast 2027/28	Total Cashflow Forecast 2028/29	Total Cashflow Forecast 2029/30	Total Cashflow Forecast Outgoing Years	Provincial Cashflow Forecast 2025/26	Provincial shflow Forecast C 2026/27	Provincial ashflow Forecast C 2027/28	Provincial ashflow Forecast C 2028/29	Provincial ashflow Forecast 2029/30	Total Provincial Cashflow Forecast Outgoing Years	Total Provincial Budget	Project Fully Funded by the Province? (Yes/No)
1	UNBC	Prince George	Routine Capital	Other - please specify	1	Lecture Theatre Seating	Lecture Theatre Seating Renewal	Apr/2025	May/2025	Aug/2025	\$	600,000	\$ 600,000						\$ 600,000					:	\$ 600,000	YES
2	UNBC	Prince George	Routine Capital	Public Safety/ Security	2	Campus Accessibility Improvement Program	Multi year construction program to support Campus accessibility improvements	Apr/2025	May/2025	Aug/2035	\$	5,000,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 2,500,000	\$ 500,000 \$	500,000 \$	500,000 \$	500,000 \$	500,000	\$ 2,500,000	\$ 5,000,000	YES
3	UNBC	Prince George	Routine Capital	Other - please specify	3	Roofing Replacements	Roofing Renewals for Main Campus Buildings	Apr/2025	Jun/2025	Aug/2030	\$	3,275,000	\$ 600,000	\$ 650,000	\$ 600,000	\$ 275,000	\$ 675,000	\$ 475,000	\$ 600,000 \$	650,000 \$	600,000 \$	275,000 \$	675,000	\$ 475,000	\$ 3,275,000	YES
4	UNBC	Prince George	Routine Capital	Other - please specify	4	Climate Risk Mitigation Program	Risk Mitigation Program including Student Housing A/C, infrastructure upgrades, and exterior building sprinkler system/storm water detention pond pumps study.	Apr/2025	May/2025	Apr/2036	\$	37,125,000	\$ 725,000	\$ 600,000	\$ 1,300,000	\$ 2,500,000	\$ 3,000,000	\$ 29,000,000	\$ 725,000 \$	600,000 \$	1,300,000 \$	2,500,000 \$	3,000,000	\$ 29,000,000	\$ 37,125,000	YES
5	UNBC	Prince George	Routine Capital	Public Safety/ Security	5	CCTV System Replacement	New CCTV System on Main Campus	Apr/2025	Sep/2025	Mar/2026	\$	1,000,000	\$ 1,000,000						\$ 1,000,000					:	\$ 1,000,000	YES
6	UNBC	Prince George	Routine Capital	Other - please specify	6	Agora Renewal	Whole building renewal including: building envelope, HVAC efficiency upgrades and finishes	Apr/2027	Apr/2029	Aug/2031	\$	31,750,000			\$ 1,500,000	\$ 2,000,000	\$ 9,000,000	\$ 19,250,000		\$	1,500,000 \$	2,000,000 \$	9,000,000	\$ 19,250,000	\$ 31,750,000	YES
7	UNBC	Prince George	Routine Capital	Science & Technology	7	Research Lab Renewal	Whole building renewal including: building envelope, HVAC efficiency upgrades and finishes	Apr/2027	Apr/2029	Aug/2031	\$	41,750,000			\$ 1,500,000	\$ 2,500,000	\$ 12,000,000	\$ 25,750,000		\$	1,500,000 \$	2,500,000 \$	12,000,000	\$ 25,750,000	\$ 41,750,000	YES
8											\$	-												:	\$-	
9											\$	-												:	ş -	
10											\$	-												:	\$-	
Note: Please refr	ain from the use	of formulas in the cells.									\$	120,500,000	\$ 3,425,000	\$ 1,750,000	\$ 5,400,000	\$ 7,775,000	\$ 25,175,000	\$ 76,975,000	\$ 3,425,000 \$	1,750,000 \$	5,400,000 \$	7,775,000 \$	25,175,000	\$ 76,975,000	\$ 120,500,000	



Project Rank (within category)	Institution	Campus	Project Category	Program Type	Priority in Category	Project Title	Project Description	Anticipated Approval Date (Month/Year)	Anticipated Start Date (Month/Year)	Anticipated Completion Date (Month/Year)	Total Project Budget	Total Cashflow Forecast 2025/26	Total Cashflow Forecast 2026/27	Total Cashflow Forecast 2027/28	Total Cashflow Forecast 2028/29	Total Cashflow Forecast 2029/30	Total Cashflow Forecast Outgoing Years	Provincial Cashflow Forecast 2025/26	Provincial Cashflow Forecast 2026/27	Provincial Cashflow Forecast 2027/28	Provincial Cashflow Forecast Ca 2028/29	Provincial ashflow Forecast C 2029/30	Total Provincial ashflow Forecast Outgoing Years	otal Provincial Budget	Project Fully Funded by the Province? (Yes/No)
1	UNBC	Prince George	Carbon Neutral	Other - please specify	1	Campus Energy Upgrades Program	Campus Energy Upgrades Program including various energy efficiency and decarbonization projects.	Apr/2025	May/2025	Aug/2030	\$ 12,900,000	\$ 1,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 1,400,000	\$ 1,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000 \$	2,500,000 \$	1,400,000 \$	12,900,000	YES
2											\$ -												\$	-	, I
3											\$-												\$	-	(
4											\$-												\$	-	(
5											s -												\$	-	í
6											s -												\$	-	
7											\$ -												\$	-	(
8											s -												\$	-	(
9											s -												\$	-	í
10											s -												\$	-	
Note: Please re	frain from the use	of formulas in the cells.									\$ 12,900,000	\$ 1,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 1,400,000	\$ 1,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000 \$	2,500,000 \$	1,400,000 \$	12,900,000	i



Project Rank (within category)	Institution	Campus	Project Category	Program Type	Priority in Category	n Project Title	Project Anticipa Description (Month/Y	ted A Date 'ear) (M	Anticipated Start Date Month/Year)	Anticipated Completion Date (Month/Year)	F	Total Project Budget	Total Cashflow Forecast 2025/26	Total Cashflow Forecast 2026/27	Total Cashflow Forecast 2027/28	Total Cashflow Forecast 2028/29	Total Cashflow Forecast 2029/30	Total Cashflow Forecast Outgoing Years	Provincial Cashflow Forecast 2025/26	Provincial Cashflow Forecast 2026/27	Provincial Cashflow Forecast 2027/28	Provincial Cashflow Forecast 2028/29	Provincial Cashflow Forecast 2029/30	Total Provincial . Cashflow Forecast Outgoing Years	Total Provincial Budget	Project Fully Funded by the Province? (Yes/No)
1	UNBC	Multi-Campus	IM/IT-Increased Delivery Demand	Other - please specify	1	UNBC Hybrid Classroom Initiative	The UNBC Hybrid Classroom Initiative upgrades classrooms with hybrid learning technologies. Over five years, it aims to enhance accessibility for all students, including those in remote areas, ensuring consistent technology in every classroom for improved teaching and learning experiences.		Jan/2025	Jan/2030	\$	3,043,000	\$ 578,000	525,000	\$ 600,000	\$ 635,000	\$ 705,000		\$ 578,000	\$ 525,000	\$ 600,000	\$ 635,000	\$ 705,000	\$	i 3,043,000	YES
2	UNBC	Multi-Campus	IM/IT-Security and Privacy	Other - please specify	2	Core Network Security Refresh	UNBC ITS is actively monitoring the capacity of our central frewall infrastructure, which is currently 5 years old. Anticipating the need for an upgrade, we plan to replace and enhance the hardware appropriately by summer 2026. This proactive approach ensures continued protection and performance, supporting our commitment to maintaining a secure and resilient network environment for all users.		Apr/2027	Aug/2027	\$	750,000	Ş	5 750,000						\$ 750,000				\$	5 750,000	YES
3	UNBC	Prince George	IM/IT-Security and Privacy	Other - please specify	3	Campus Core Hardware Refresh	UNBC ITS is preparing for a collapsed core network delivery model for the Prince George campus. To facilitate faster speeds and enhance our response to network security demands form researchers and the broader UNBC community, we will be purchasing new campus core hardware to replace the existing infrastructure. This lugrade will enable us to provide both higher speeds and better security, ensuring a robust and efficient network capable of meeting the current and future needs of all campus users.		Apr/2026	Aug/2026	\$	500,000	\$ 500,000						\$ 500,000					\$	500,000	YES
4	UNBC	Multi-Campus	IM/IT-Security and Privacy	Other - please specify	4	WAN Hardware Refresh	The existing WAN infrastructure at UNBC will be approaching its end of service life and capacity by summer 2028. This investment is critical to ensure that all campus locations have up-lo-date infrastructure, meeting the security expectations and operational needs of the University. By refreshing the WAN hardware, we ask in to maintain a secure, reliable, and high- performance network across all UNBC campuses, supporting the diverse needs of students, faculty, and staff.		Apr/2027	Aug/2027	\$	250,000			\$ 250,000						\$ 250,000			\$	5 250,000	YES
5	UNBC	Prince George	IM/IT-Emerging Priority	Other - please specify	5	Diverse Path Fiber Network Expansion	UNBC ITS is working on updating the fibre infrastrucre at the Prince George campus location. Part of this project has identified a small number of fibre paths to critical buildings that do not have a sufficiently diverse paths to reduce risk of damage. This project will employ contractors to perform horizontal boring to install conduit on paths that would enhance path diversity		Apr/2026	Aug/2026	\$	350,000							\$ 350,000					\$	350,000	YES
6	UNBC	Prince George	IWIT-Emerging Priority	Other - please specify	6	Prince George Primary Campus Diverse Path to Prince George City Hall	This project is a partnership betwen UNBC and the city of Prince George. As of summer 2024, it is in early conversations between UNBC IT management, and City of Prince George IT management. UNBC ITS management has begun conversations with the City of Prince George to determine feasability and category-D costing estimates. In order to get accurate (category-A) estimates and prepare for a tender process an initial investment of \$150,000 will be needed.		Mar/2029	Oct/2029	s	2,500,000									\$ 150,000	\$ 1,000,000	\$ 1,350,000	\$	5 2,500,000	YES
7 8											\$ \$	-												\$		
9											\$	-												\$		
Note: Please refra	in from the use	of formulas in the cells		1		1	1				\$	7,393,000	\$ 1,078,000	1,275,000	\$ 850,000	\$ 635,000	\$ 705,000	\$-	\$ 1,428,000	\$ 1,275,000	\$ 1,000,000	\$ 1,635,000	\$ 2,055,000	\$ - \$	7,393,000	



Insitution	
BCIT	
CAM	
CAPU	
CMTN	
CNC	
COTR	
DOUG	
ECUAD	
JIBC	
KPU	
LANG	
NIC	
NLC	
NVIT	
OKAN	
RRU	
SELK	
SFU	
IRU	
OBC	
UNBC	
VCC	
VIU	

Campus	Region
Abbottsford	Cariboo
Belmont	Kootenav
Burnaby	Mainland/Southwest
Burns Lake	Nechako
Campbell River	North Coast
Castlegar	Northeast
Chetwynd	Thompson/Okanagan
Chilliwack	Vancouver Island / Coastal
Coastal Centre	
Colwood	
Comox Valley	
Coquitlam	
Cowichan	
Cranbrook	
Creston	
Dawson Creek	
Delta	
Fernie	
Fort Nelson	
Fort St. James	
Fort St. John	
Golden	
Goldell Grand Farka	
Hazolton	
Interurban	
Invermere	
Kamloons	
Kelowna	
Kimberley	
KPU Civic Plaza	
KPU Tech	
Landsdowne	
Langlev	
Lonsdale	
Mackenzie	
Maple Ridge	
Merritt	
Mission	
Mount Currie	
Multi-Campus	
Nanaimo	
Nelson - Silver King	
Nelson - Tenth Street	
New Westminster	
New Westminster - Anvil Office Tower	
North Vancouver	
Okanagan	
Parksville - Qualicum	
Penticton	
Pitt Meadows	
Port Alberni	
Port Hardy	
Powell River	
Prince George Drince Ruport	
Richmond	
Salmon Arm - Revelstoke	
Sechelt	
Smithers	
Sunshine Coast	
Surrey	
Terrace	
Trail	
Tumbler Ridge	
UBC Robson Square	
Ucluelet	
Vancouver	
Vancouver - Broadway	
Vancouver - Downtown	
Vanderhoof	
Vernon	
Victoria	
West Broadway Centre	
Williams Lako	

	ProgramType
	Arts & Sciences
	Business & Economics
west	Health Sciences
	Public Safety/ Security
	Science & Technology
	Student Housing

alth Sciences ublic Safety/ Security cience & Technology udent Housing Trades Other - please specify

ProjectCategory New Priority Investments Student Housing Routine Capital Carbon Neutral IM/IT-Security and Privacy IM/IT-Increased Delivery Demand IM/IT-Emerging Priority

IMITSubCategory New Enhancement Critical Replacement

Yes_No
Yes
No

Attachment 4 - Instructions

Important note: Sor	ne of the information provided in this spreadsheet may be posted publicly to meet legislative requirements. For further detail, see the Guide to Requireme
Field	Examples/Guidance
Room Type	List the type(s) of rooms offered within the building (e.g. single dorm, shared dorm, connected single dorm, Nano unit, Studio/Bachelor, 1 bedroom, 2 be
Building Type	 Provide the type of building: Dormitory - traditional accommodation where rooms are offered on multiple floors. Sometimes the room is shared by one or two students. No kitche Apartment/Townhouse - self-contained units with rooms configured as bachelor or up to 4 bedrooms suites. Usually comes with a kitchen, bathroom Mixed - a combination of various types of accommodation in the building (e.g. dorm and 4-bedroom apartments) Other - please add further details, as required.
Student Type	Language that would describe the type(s) of students that will be housed in the building, including: • General - all student types and classifications, or • Specific student classifications such as 1st year, undergrad, grad, trades, family, or other (please specify).
Kitchen Facilities	 Describe the type of kitchen facilities for that building: No kitchen Kitchenette - smaller kitchen for limited cooking Private kitchen - a kitchen used by a single occupant Shared kitchen - a kitchen shared by a smaller group of students (typically 2 to 4) Common kitchen - a kitchen shared by a large number of students (>5) Other kitchen configuration - please add further details, as required.
Number of Beds	Indicate the total number of beds in the student housing facility. Please specify the overall bed capacity rather than the occupancy level. Beds can be o student's family, etc.
Building Status	Indicate whether the building is: under construction, complete/operational, or scheduled to be closed.
Notes	An optional field to describe any other pertinent building details

ents for Housing Needs Reports.

edroom, 4 bedroom, family, etc).

en facilities. Bathrooms are shared. m and common space.

occupied by students, student advisors, elders,

Attachment 4: Student Housing Inventory 5-Year Capital Plan Instructions (2025/26 to 2029/30)

#	Institution	Campus	Municipality	Neighbourhood / Building Group Name	Building Name	Room Type	Building Type	Student Type	Kitchen Facilities	Number of Beds	Building Status	Year Built/ To be Completed	Year Renovated (if applicable)	Description of Renovations Notes
1	UNBC	Prince George	Prince George		Neyoh - Dorm 1	4 Bedroom	Apartment/Townhouse	Undergrad	Shared Kitchen	270	Operational	1905	1905	The work completed was substantially on the interior and involved the architectural elements (eg. Paint, flooring and furniture replacements, washroom upgrades, upgraded social space and lighting). All electrical baseboard heaters within the suites and common areas were also replaced with hydronic radiators and connected to the Bioenergy Plant. Door hardware was also replaced and upgraded to card access. Basic envelope repairs were completed to the roof and the exterior, as well as a major upgrade to the sidewalk to accommodate accessibility issues. Cost was \$5.2 million.
2	UNBC	Prince George	Prince George		Keyoh - Dorm 2	4 Bedroom	Apartment/Townhouse	Undergrad	Shared Kitchen	270	Operational	1905	1905	The work completed was substantially on the interior and involved the architectural elements (eg. Paint, flooring and furniture replacements, washroom upgrades, upgraded social space, and lighting, the same as Neyoh. All electric baseboard heaters within the suites and common areas were also replaced with hydronic radiators and connected to the Bioenergy Plant. Door hardware was also replaced and upgraded to card access. Basic envelope repairs were completed to the roof and the exterior, as well as a major upgrade to the sidewalk to accommodate accessibility issues. Cost was \$5.5 million.
3														
5														
6														
8														
9 10														
11														
13														
14 15														
16														
17														
19 20														
21														
22														
24														
26														
27 28														
29														
31														
32														
34														
35														
37														
39														
40 41														
42														
43														
45														
47														
48 49														
50														
51 52														
53 54														
55														
56 57														
58														
59 60														
61														
62 63														
64 65														
- 00		1	1	1	1				Total	540			1	I I I I I I I I I I I I I I I I I I I

