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BRITISH COLUMBIA INSTITUTE  
OF TECHNOLOGY

**RESPONSE TO PROVINCIAL  
POST-SECONDARY FUNDING MODEL**

JUNE 30, 2022

# Table of Contents

Executive Summary .....	3	6. What stands in the way of you collaborating more with the rest of BC's PSE system? .....	8
1. What are the most important contributions your institution makes to the economic, social, and environmental health of British Columbia? .....	1	7. What are the key economic, demographic, social, and technological trends that will unfold over the next 30 years that will impact British Columbia's PSE system? .....	8
2. What is your institution doing to promote Reconciliation with Indigenous People and First Nations? .....	5	8. How do you think the PSE system needs to evolve in response to those trends? .....	9
3. What is your institution doing to promote equitable access for people who come from disadvantaged socio-economic circumstances? .....	5	9. How does your institution need to evolve in response to those trends? .....	10
4. What are your major challenges in enhancing the contribution your institution makes to the economic, social, and environmental health of British Columbia? .....	6	10. Considering the above, what modifications to the funding formula would you recommend? .....	10
5. What are the most significant contributions your institution makes in collaboration with other parts of BC's PSE system? .....	7	11. Additional Opportunities .....	11

## Our vision

Empowering people. Shaping BC. Inspiring global progress.

## Our mission

- Strategic workforce development for the province of British Columbia.
- Partnering learners and industry for success through workforce development.
- We're focusing on what sets BCIT apart: applied education and integration with industry.
- We are also challenging ourselves to be more ambitious, more purposeful, and more integrated.
- We are strengthening our commitment to improving the lives of the people who learn and work at BCIT.

## Our values

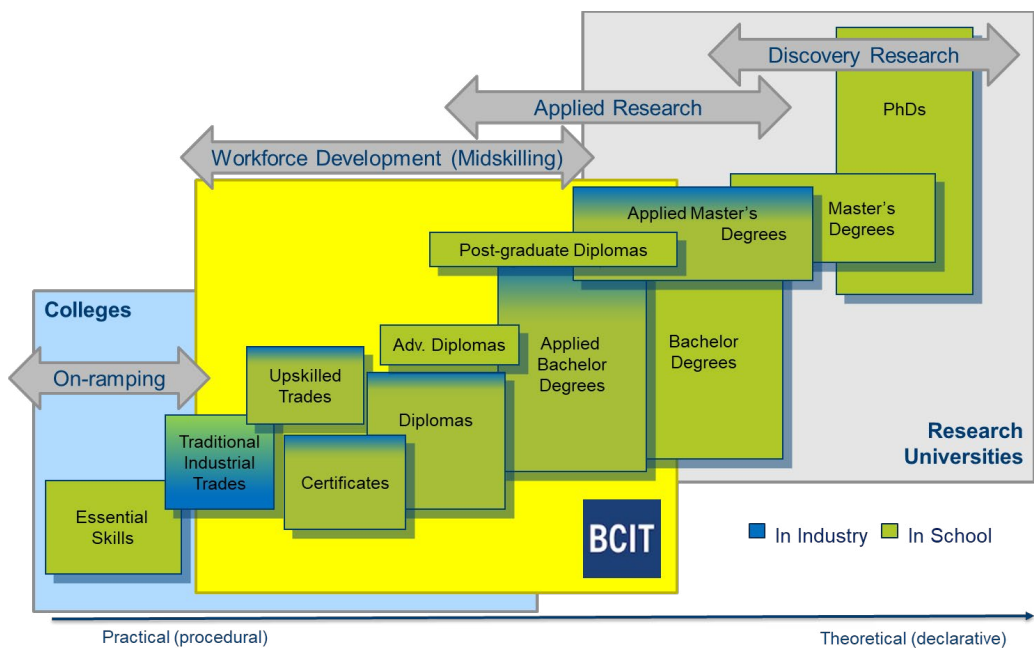
- Achieve excellence
- Embrace innovation
- Champion diversity & inclusion
- Pursue collaboration
- Engage with respect

# Executive Summary

Established in 1964, BCIT is provincially mandated under the BC College and Institute Act to act as a polytechnic institution for British Columbia by offering technological and vocational instruction, as well as baccalaureate and applied master’s degree programs.

In 1964, BCIT’s philosophy was to prepare career-ready graduates. Over the years, the Institute has seen many changes, but has upheld that key philosophy. For that reason, graduates of BCIT trades, apprenticeship, technology, and professional programs remain some of the most sought-after talent in Canada. BCIT’s fundamental commitment to graduates’ career success is woven throughout the Institute’s history. BCIT is a significant contributor to the British Columbia economy with a return on government investment of \$3.45 million in regional economic activity generated per \$1 million tax dollars invested<sup>1</sup>.

BCIT’s distinct position is attributed to the core business of delivering strategic workforce development to support British Columbia’s economic prosperity through applied education model. The Institute continues to cultivate partnerships with business, industry, high schools, and other post-secondary institutions. These partnerships have allowed the advancement of the Institute’s vision in several ways, including improving core offerings, increasing the number of degree programs, launching a comprehensive suite of micro-credentials, enhancing applied research to support advanced studies, strengthening Work Integrated Learning [WIL] opportunities, and expanding partnerships to include international post-secondary institutions.



BCIT meets learners where they are and offers them the programs and services they need for upskilling and reskilling—including through Prior Learning Assessment and Recognition [PLAR] and International Credential Evaluation Service [ICES]. A focus on the preparation of career-ready graduates and the progression of practice are both enabled by our distinctive partnerships with industry—this allows us to deliver outstanding learning outcomes and real-world impact.

<sup>1</sup> 2022 BCIT Economic Impact Report

# 1. What are the most important contributions your institution makes to the economic, social, and environmental health of British Columbia?

## Overview

As a provincially mandated polytechnic post-secondary, BCIT is a unique institution focused on the preparation of career-ready graduates and the progression of practice, enabled by our distinctive partnerships with industry. Our provincial role is to deliver high-quality education that is accessible and affordable, contribute to broad-based sustainable economic growth, and advance the objectives of Reconciliation. Our key differentiators include providing applied education and Work Integrated Learning within a technology-rich environment, providing students with industry connections and expertise, and offering flexibility for their learning journey. Our contributions to strategic workforce development surpass all other post-secondary institutions in the province and, in addition to our overarching [strategic plan](#), we have a distinct plan for [academics](#), [applied research](#), [internationalization](#), [sustainability](#), [Indigenization](#), [anti-racism](#), [campus development](#), and [supporting our employees](#).

## Economic Contribution

In addition to employing almost 3,000 faculty and staff at BCIT, the Institute contributes skilled labour to all of the major sectors of the BC economy and supports the province's direction for an inclusive, sustainable, and innovative economy that works for people. BCIT upskills, reskills, and educates a workforce that is ready to enter some of the province's priority sectors including healthcare, technology, trades, and business. Within various sectors there are a significant number of skill sets that are either solely taught by BCIT or where BCIT is the only large-scale provider of training in that skill.

## Our Graduates

While BCIT makes up close to 15 percent of the post-secondary Full-time Equivalents (FTEs), it is often the dominant, if not the only, supplier of skilled workers for a wide range of industries and professions. BCIT is responsible for more than 20 percent of all domestic post-secondary credentials, which is the largest portion of any post-secondary institute [excluding the research universities]<sup>2</sup>.

We are proud to consistently provide our students with real-world skills and practical experience—so they're work-ready from the day they graduate. Our strong student outcomes further highlight our graduates' success and readiness in the labour market. The median hourly wage is \$33 for apprenticeship completers and \$29 for graduates of certificate and diploma programs, and the median annual salary is \$71,646 for graduates of degree programs<sup>3</sup>. BCIT is a major provider of apprenticeship training in British Columbia, with over 1,200 apprentices completing their final apprenticeship level each year<sup>4</sup>.

## Social Contribution

Putting people at the core of everything we do is paramount. Our mandate is to educate people, and the people with whom we work are what make BCIT distinct. In a world characterized by uncertainty, we must ensure that BCIT is a place in which all people—learners, faculty, and staff—are continuously developing while feeling valued, supported, and connected. Governments and society often look at BCIT to interpret new technologies and emerging professions into tangible programs and career paths. BCIT has the capacity, indeed the responsibility, to step forward and respond to the requirements of learners, employees, and industry to support society.

Innovation through applied education, industry engagement, and investment in technology remain paramount of all that we are seeking to achieve. Amplified areas of focus include mental health and remote service delivery to support our learners, as well as training and support for our instructors in new teaching modalities. Well-being and connectedness throughout the BCIT community, dialogue and activity that foster understanding and progress in social justice, and new levels and forms of partnership are also critical. Student experience and affordability are areas of further heightened attention.

Stakeholder engagement is essential to the creation of a future-ready and accessible post-secondary institute that supports a clean economic future for everyone, and is at the core of BCIT's Strategic Plan, the Indigenous Vision, the Sustainability Vision, the Strategic Enrolment Management (SEM) Plan, the Education Plan, and the Anti-Racism Framework.

<sup>2</sup> Central Data Warehouse, May 2021

<sup>3</sup> BC Student Outcomes, prepared by BC Stats, 2021

<sup>4</sup> BCIT Facts & Figures, 2021

## Highlights

- **Support for eLearning and Remote Access:** A new eLearning Strategy Action Plan was developed to adapt to the ever-evolving learning environment, leading to the implementation of several new digital strategies including virtual classrooms, online support for faculty, an online Student Success Hub, and enhancements to the BCIT AppsAnywhere tool.
- **Micro-credentials:** Under BCIT's Strategic Plan, Agile Learning is one of the top priorities and is achieved through the renewal of flexible pathways to credential completion and the implementation of micro-credentials. Following an initial pilot of three micro-credential programs in early 2021, close to 30 new programs have been developed in support of both industry and community needs, providing almost 750 seats – one third of the provincial total. Micro-credentials are scalable, provide cost-effective training, can keep existing employees engaged in their workplace and lifelong learning, and provide workers with the opportunity to learn emerging skills that are in demand.
- **Prior Learning Assessment and Recognition (PLAR):** PLAR is a key access tool for enabling learners to use knowledge and skills learned outside regular academic programming—including volunteer work, hobbies, on-the-job experience, or independent study—to gain exemption for particular courses in the program of their choice. The BCIT SITE Centre uses the Advanced Placement & Prior Learning (APPL) method to create flexible entry pathways for specialized groups and adult learners. APPL is an innovative approach to translating experience into BCIT credits. The APPL method goes above and beyond traditional course-by-course equivalency of the PLAR as well as assessing for direct placement into an upper level of a BCIT business program. This model builds on the assumption that “the whole is greater than the sum of the parts.”
- **Co-op and Work Integrated Learning:** BCIT continues to offer and expand on a range of WIL opportunities for students including apprenticeships, co-op, practicums, clinical placements, internships, directed studies, and capstone projects with industry. BCIT is a member of the national Business/Higher Education Roundtable (BHER), where post-secondary advocates work with key business leaders across all sectors to expand WIL opportunities.
- **Health Seat Expansion:** In early 2022, responding to the growing needs of healthcare workers in the public health sector, the BC government announced additional funding for health-related seats to be added to public post-secondary institutions. BCIT accepted the responsibility for 124 additional seats to be distributed across its Bachelor of Nursing (96 seats), Medical Laboratory Science (16 seats), and Magnetic Resonance Imaging (12 seats) programs.
- **Student Safety and Well-being:** BCIT has a [Student Well-being and Resilience Framework](#) that supports the Strategic Plan by outlining strategies to promote and support students' success, well-being, and resilience. One of the key tools is Early Assist—a confidential and comprehensive service that provides BCIT faculty, staff, and students an opportunity to identify students who may be struggling personally or academically, and offer them appropriate support and services at an early stage. Further, BCIT participated in the Sexual Violence Perceptions Survey to help BC post-secondary institutions and the Ministry better understand student perceptions of sexual violence in the BC System and create a safer and healthier learning environment for students.

## International

Our initiatives through global collaboration and partnership development with international educational institutions and industry provide opportunities for:

- Experiencing academic and industry culture overseas
- International and domestic faculty to travel to and from BCIT
- Students to visit partner institutions promoting the development of a global perspective
- International students with BCIT's International Diploma to advance their studies at BCIT
- Transferring credits to and from BCIT as a result of program-specific articulation agreements with partner institutions
- Internationalization and an inclusive cultural diversity, which are vital parts of our vision for the future of education in BCIT
- Our graduates to take their international knowledge and skills directly to the workforce and help build a better world

## Applied Research

BCIT Applied Research collaborates with national and international institutions, organizations, and industry partners, providing innovative solutions to real-world problems. Over the past 30 years, applied research at BCIT has attracted over \$60 million in additional lab infrastructure that is available for use by faculty, students, and industry. Across the Institute, we have been awarded over \$40 million in operating research funding from granting agencies and corporate sponsors. Our leadership in technological inquiry has led to unreserved recognition by The Natural Sciences and Engineering Research Council of Canada [NSERC]. We now qualify for university-level funding, the ability to host National Centres of Excellence, and Canada Research Chairs [CRCs]. Our world-class, award-winning research centres—such as Centre of Applied Research & Innovation, the Rivers Institute, the Building Science Centre of Excellence, the Emission Reduction and Research Test Hub [ERRTH], and others—have raised BCIT's profile well beyond the Lower Mainland.

BCIT has an allocation of four Canada Research Chairs [CRC] including in Photoanalytics and Rehabilitation Engineering Design. Additionally, BCIT has a Rudy North Chair in River Ecology hosted in the globally-renowned BCIT Rivers Institute. Industry has begun to directly support excellence in research at BCIT through the installation of Integrated Industry Chairs such as the Seaspan Chair in Welding Technologies and Metallurgy, and the BC Housing Chair in Building Science. Our instructors are subject-matter experts demonstrating an impressive breadth of expertise, ranging from directly applied disciplines to fundamental science. Our applied research is enabled through institutional and school-specific research funds, professional development leave, federal and provincial government grants, as well as industry, not-for-profit organizations, and even international sources.

## Environmental Contribution

A number of areas across BCIT contribute to advancing our commitments to, and the province's work on, sustainability, environmental preservation, and clean growth. BCIT's internal operations and academic delivery support the province to meet BC's climate commitments, to be leaders on environmental and social responsibility, and to drive innovation across the economy. We collaborate across the post-secondary sector, as we did recently to develop a Social Procurement Guide that was recognized as a leading practice in the inclusion of sustainability, Indigenization, and living wage perspectives in procurement.

BCIT fosters the development of sustainability skills through access to campus infrastructure and information, demonstration of leading-edge technologies and equipment, and opportunities to conceptualize, design, and implement solutions. We are home to Canada's first national prototype campus-wide smart micro-grid, containing the Energy OASIS project (a solar-powered electric car-charging station) and were awarded a prestigious Envision Gold award for the North Campus Infrastructure Project. This award recognized a collaborative approach to constructing a key piece of electrical infrastructure with sustainable building methods and materials.

## Institute Sustainability

At BCIT, sustainability means innovation to support the social and economic prosperity of the province without harming our natural environment. The BCIT Institute Sustainability office is empowered to shed light on current activities, and wields the ability to impact the state of practice across multiple industries throughout British Columbia and the world. Our [Sustainability Vision](#) launched in 2019 to identify and embed policies, practices, and culture at BCIT to advance sustainability, which we define as enabling socially just lives within ecological limits.

In 2021, we completed BCIT's first Institute-wide comprehensive accountability reporting through the Sustainability Tracking and Reporting System [STARS] from the Association for Advancement in Higher Education [AASHE]. We are proud to have achieved a Silver Rating for our sustainability accomplishments. We assessed BCIT's contribution to the 17 global [Sustainable Development Goals](#) [SDGs] and furthered our leadership by [becoming a signatory](#) to the SDG Accord. BCIT's [Institute Sustainability](#) provides expertise, coordination, facilitation, capacity, and reporting across BCIT to model best practices while eliciting greater societal change.

Through The BCIT Centre for Ecocities, we refined our tools to help 30 BC municipalities measure their ecological footprints and consumption-based greenhouse gas emissions inventories. We offer training, workshops, and webinars on related topics to practitioners in our ever-growing Ecocity Peer Network. In partnership with UN-Habitat and Colleges and Institutes Canada, we delivered the Climate Changemakers Youth Leadership curriculum to 120 youth from 14 countries who are seeking skills and knowledge to tackle the most critical global challenges. BCIT's expertise in sustainability is supporting local, national, and international stakeholders by collaborative information sharing through conferences, podcasts, and lectures.

## Aligning Academic Programs at BCIT with the Health of the Environment

BCIT has over 30 applied science programs, from Chemical and Environmental Technology to Sustainable Energy Management, that contribute to student learning about environmental sustainability. We are a leader in science-based natural resource management and restoration of aquatic ecosystems in BC through the BCIT Rivers Institute. The School of Construction and the Environment is concerned with the natural environment, the built environment, and the relationship between them. With almost 80 full-time and part-time programs and close to 270 part-time courses, BCIT is the lead contributor of trades, engineering, and applied and natural sciences professionals in the province of British Columbia.

The BCIT Advanced Diploma in Sustainable Business Leadership (SBL) is the only program of its kind in BC to focus purely on sustainable business leadership. This program delivers case-based learning and applied activities, including a Sustainable Business Consulting Project, which enables students to work with an industry client to solve a sustainable business challenge. BCIT's Building Energy Modelling Advanced Certificate program will help prepare industry for net-zero ready buildings by 2030. The aim of this program is to prepare graduates as proficient building energy modelers and to improve the state of practice among current industry practitioners.

BCIT offers a number of micro-credentials in advance sustainability, including:

- Applied Circular Economy: Zero Waste Buildings, with a focus on deconstruction skills
- Essential Field Skills for Environmental Professionals
- Intro to Forest Health Quantification Using Remotely Piloted Aircraft System (RPAS)
- Environmental, Social, Governance Fundamentals
- Essentials of Net Zero and Passive House Construction
- Introductory Studies in Mass Timber Construction
- Supervising Net-Zero and Passive House Buildings Construction

## Facilities and Campus Development

Our Facilities and Campus Development team is focused on advancing sustainability practices across all campuses. Initiatives include:

- Energy and greenhouse gas management
- **LEED for Existing Buildings: Operations and Maintenance** and Integrated Design Standards,
- Adapting custodial practices for the **LEED for Existing Buildings: Green Cleaning** program
- Sustainable approaches to waste management, grounds, landscaping, and pest control
- Targeting **LEED Gold** [or equivalent] for new buildings
- Developing long-range plans based on sustainable land use principles while also collaborating to use the campuses as living labs for learning

## 2. What is your institution doing to promote Reconciliation with Indigenous People and First Nations?

Led by BIT's Indigenous Initiatives and Partnerships team, the introduction of the Indigenous Vision in 2019 provides a focal point for the celebration of BCIT's 25+ year commitment to the success of Indigenous learners. Through BCIT's strategic workforce development focus and underpinned by successive strategies, we have designed and delivered Indigenous programs and services since 1985, operated a dedicated Indigenous Services department since 1994, and worked and studied together in the BCIT Indigenous Gathering Place [Mi Chap Tukw] on the Burnaby Campus since 2011.

BCIT places a strong emphasis on Indigenous Economic Independence. We strive to identify opportunity and provide programming so that Indigenous people can remain on their traditional lands while pursuing a prosperous future. For example, an initial education in an industrial trade may later translate into a career in supply chain management for the region.

Indigenous student demand remains strong and experienced rapid recovery in 2021-22. Prior to the pandemic, total Indigenous enrolments were over 1,700. We continue to ensure access to high demand programs. As an example, five seats are reserved for Indigenous students in each intake of the Bachelor of Science in Nursing Program. We are anticipating continued increases in Indigenous student enrollment as our engagement and partnerships with Indigenous communities grow.

In June 2022, BCIT was recognized as a leader in Indigenous Education and received a gold award from the World Federation of Colleges and Polytechnics. We continue to expand our partnerships and projects throughout BCIT, we believe everyone has a role to play in Reconciliation and together we are stronger.

- Over 6000 participants enrolled in free and openly available Indigenous Cultural Awareness Online Modules
- We are achieving a steady increase in partnerships with Indigenous communities
- Micro-credential offerings are creating opportunities for Indigenous knowledge holders to share their experience with learners

## 3. What is your institution doing to promote equitable access for people who come from disadvantaged socio-economic circumstances?

Empowering the next generation of creators, innovators, and doers requires an open and diverse environment that breaks down the walls preventing new ideas and solutions from coming to fruition. At BCIT, we will continue to build a community that supports everyone. BCIT is, and will continue to be, an inclusive environment that welcomes a diversity of ideas, people, cultures, and backgrounds. We will ensure our community reflects the society in which we live. We will provide people with the support they need to thrive at BCIT and beyond.

Woven throughout the BCIT Strategic Plan are deliverables to improve access and success of all students. The **Strategic Enrolment Management (SEM) Plan** was launched to promote access and entrance, provide service excellence, engage learners, and foster student success. BCIT remains committed to continuing to increase Indigenous recruitment, retention, and completion rates, with the goal of achieving enrolments that mirror the regional Indigenous population. BCIT's continuation of the INSPIRE campaign will raise funds for access and inclusion, among other priorities.

BCIT is represented in the Ministry-led Campus Navigator Community of Practice, supporting former youth in care to access post-secondary education and achieve positive learning outcomes. Within the Community of Practice, BCIT participates in ongoing dialogue about best practices by collaborating and building relationships, and sharing knowledge and resources to help resolve issues related to supporting former youth in care.

At BCIT, each student on the government tuition waiver program is supported by a Student Financial Aid and Awards (SFAA) Coordinator. They are provided with proactive supports including access to the Youth Futures Education Fund, general check-ins, and reminders of upcoming deadlines. These students are also reminded of and provided with referrals to other support services, including Indigenous Initiatives and Partnerships for those who self-identify as Indigenous.

In recognition of diversity in gender identity, BCIT students will see new gender and identity categories when creating or updating a BCIT ID. Students may update their gender information at any time using BCIT's online self-service platform. The change to data collection is aligned with recommendations made by the BC Registrars Association through their work with the Ministry.



## 4. What are your major challenges in enhancing the contribution your institution makes to the economic, social, and environmental health of British Columbia?

### Enrolment

Targeted student recruitment programs combined with strategic enrolment planning is vital to managing sustainable program delivery. There are three key themes for students entering post-secondary: access, affordability, and student choice. In recent years, we have found students are taking serious consideration to the cost and time restraints before committing to post-secondary education. Potential students are seeking flexible options, in program type and length, as well as how they engage with their institution and receive services.

Institutions in the Lower Mainland will continue to compete for college-age students, while also having to serve the needs of older workers and aging professionals. In the age of innovation and changing skill requirements within a high-demand labour market, we recognize that it is important to provide a range of educational programs and timelines, including access for students who are looking to retrain and upgrade their skills. To support the ever-changing needs of industry it is important that our programs be nimble, and it is critical that we are provided the ability for regular review, aligning the cost of tuition with the price to deliver. BCIT is committed to exploring opportunities that offer existing and mature professionals the tools to upgrade their skills including through the additional offering of micro-credentials.

It is important to note that we are experiencing an increase in the number of supports students are requiring as part of their post-secondary journey, and the cost associated with providing these supports continue to grow. We are seeing domestic and international students struggling with housing uncertainty and food insecurity, often due to unforeseen circumstances. Specific recognition of student supports as part of the provincial funding model would provide a foundation for learner success.

### Financial

As a post-secondary institution with a provincial mandate, BCIT continues to support strategic workforce development for British Columbia. As part of the current funding model, our primary accountability is to deliver educational programs to domestic students, limiting our opportunity for revenue growth through enrolment. BCIT's applied learning model is highly regarded by international students, in particular our part-time studies programs, and was considered a significant source of revenue for the Institute. Unfortunately, the impacts from COVID-19 created a significant and sustained decline in our international student base, this, along with other additional COVID-19-related costs, have created revenue generation challenges for BCIT.

Due to a significant drop in international part-time studies [PTS] tuition fees, our capacity for further investment in programming and capital equipment is constrained. We are appreciative of the capital funding provided by the province and note that the incremental costs associated with operating expenses are creating growing challenges and inhibiting our potential to expand program areas and procure relevant equipment. Funding associated with new infrastructure, requires parallel funding to support the day-to-day operation of the buildings and the strategic development associated with industry-supported programming. Depending heavily on international PTS programs as a main source of revenue generation is unstable and we are currently updating our recovery plan to achieve a sustainable financial structure.

### Technology for Academic and Business Services

We require consistent investment in technology, digital tools, and ongoing process improvements to allow BCIT to be agile not only in our programs, but for our faculty and internal operations. It is vital that our faculty and staff have access to current technology to support a multi-modal program delivery options as well as relevant teaching tools that mirror those of industry. We want to ensure that our faculty and staff time is maximized to support applied education for learners, and to connect education, industry, and government to power provincial recovery and resilience.

## Efficiently Delivered Programs

In trades, BCIT is facing the systemic challenge of increasing supply costs paired with fixed funding rates for trades training. With the Industry Training Authority (ITA) funding rates unchanged since 2001, BCIT's cost pressures continue to grow with supply costs increasing as a percentage of trades and technical training direct costs. We have seen supply costs escalate over the past two decades and, due to the current inflationary spike, are now significantly higher than when the ITA funding rates were initially set. The consistent increase in material costs is aggravated by short-term spikes, which often render budgets and medium-term plans outdated. BCIT is a government reporting entity, and as such, is unable to access surplus reserves to invest in programming and manage operational expenses pressures.

Giving students the opportunity to access discovery programs – such as Trades Discovery and Tech Entry – are critical components of bringing people into post-secondary education and supporting them to enter the workforce. The BCIT Trades Discovery for Women (TDW) program started in 1995 and was expanded into a program for men in 2001—led by female faculty. This unique 16-week, credentialed program is not adequately funded as the program is no longer eligible for Adult Basic Education/English Language Learning. The current funding model acts as a barrier for learners, many of whom are the first in their families to enter post-secondary and are primarily women, LGBTQ+, and/or Indigenous learners. Providing core funding for Trades Discovery programs that invest in skilled trades results in immense benefits for the students, for government, and for industry employers.

In recent years, BCIT has expanded our graduate level programs. We currently offer a Master of Applied Science (Building Engineering/ Building Science), Master of Engineering (Building Science), Master of Engineering (Smart Grid Systems and Technologies), and Master of Science (Ecological Restoration). Additional graduate-level programs are being developed in Applied Computing and Management of Digital Transformation. The current funding model does not adequately enable BCIT to offer a full suite of learning and student experience supports to our growing investments in this area of student learning to meet industry needs. While we have made internal investments, including designating a librarian to support graduate level inquiry, the current model neither adequately provides an employment model for the work that faculty conduct in order to supervise graduate students, nor provides additional capacity for student services that are tailored to graduate level studies.

## 5. What are the most significant contributions your institution makes in collaboration with other parts of BC's PSE system?

BCIT continues to expand collaborative and joint program offerings with other post-secondary institutions, including notable partnerships with the University of British Columbia, University of Victoria, Simon Fraser University, and Emily Carr University of Art and Design. Across British Columbia, BCIT is deploying a hub-and-spoke model in support of local education providers through curriculum and subject-matter expertise. This includes agreements with Northern Lights College, Coast Mountain College, and the College of New Caledonia for the delivery of specified apprenticeship, trades, and health offerings. BCIT is also a part of the consortium of institutes for marine programming across Vancouver Island.

### Specific Initiatives

- In partnership with Vancouver Island University, BCIT has developed an Essentials of Natural Resource and Environmental Protection (MENREP) micro-credential program.
- Clear Seas launched the 2022 edition of the [Indigenous Internship Program](#) in collaboration with Mitacs and BCIT as the main educational partner. The program builds capacity in Indigenous communities by providing opportunities for students, and prioritizes the inclusion of Traditional Knowledge in research on impacts of marine shipping on coastal communities in Canada.
- The second offering of the School of Transportation [Aviation Explorer](#) program is underway. This innovative high school, dual credit program is delivered in collaboration with the Surrey School District and BCIT. The program is designed to allow high school students to explore and sample aviation education and career pathways.
- BCIT is one of five consortium institutions awarded with two international development projects by Colleges and Institutes Canada (CICan) for the Young Africa Works project at a total value of \$2.5M funded by the Mastercard Foundation. BCIT will partner with College of the Rockies, Vancouver Island University, and North Island College to work on curriculum development and teacher training in trades and vocational programs, all in an effort to improve and develop technical programs at various Kenyan institutions.

- Technology Teacher Education (TTED) is a unique program offered jointly with the University of British Columbia (UBC) and it enables students to teach industrial and technology education in BC's middle and high school system. The program explores technical components at BCIT and the teaching component at UBC, and meets needs for both the Ministry of Advanced Education and Skills Training and the Ministry of Education.
- BCIT works with school districts across the province and current initiatives include dual credit, pathway, and laddering academic programs in the areas of business and media, computing and IT, health sciences, trades, technical studies, and apprenticeship. All dual credit and transitioning programs involve career exploration and personalized learning opportunities within an applied hands-on educational model. In alignment with the K-12 BC Graduation Program, these programs are designed to ensure that high school students can seamlessly transition into post-secondary education.
- In 2022, BCIT signed a partnership and support agreement with the College of the Rockies to bring a broader range of programming into the East Kootenay region.

## 6. What stands in the way of you collaborating more with the rest of BC's PSE system?

As a provincially-mandated, post-secondary Institute, we believe that collaboration with other institutions is very important, however, sharing programs can be extremely complex. With 25 post-secondaries across British Columbia, each institution attempts to offer all parts of every program, leading to duplication within the system.

We recognize the importance of effective cost distribution of technology and equipment across all provincial institutions, and support the on-going investment of campus renewal across the post-secondary system. However, not all institutions can be all things to all students. We offer the idea of specialization, with smaller institutions supported by larger campuses. We imagine BCIT as a provincial hub working in collaboration with regional institutions to support the more tech-intensive programs. This model would reinforce a more collaborative system that would generate mutual benefits for learners, regional communities, and would leverage BCIT curriculum, outcomes, and experience.

## 7. What are the key economic, demographic, social, and technological trends that will unfold over the next 30 years that will impact British Columbia's PSE system?

We believe there will be a number of trends that will continue to pose challenges to the post-secondary system including the perceived value of advanced education in general. In the future, the public education system will continue to struggle to keep pace with workforce needs along with a number of related challenges:

- Rapid growth in technology and transportation industries
- Shifts in student needs and expectations away from linear delivery of long-term programs following high school
- The need for a full range of educational options and flexible learning
- The need for direct alignment of trades training with employment opportunities
- A multidisciplinary and collaborative approach
- Changing demographics
- Employment volatility in various sectors
- More interdisciplinary careers as new professions emerge at the interface of existing fields
- Need for value-added upgrading, especially among mid-skilled practitioners and in vocational fields
- Digital transformation and autonomous systems penetrating all industry sectors and private lives
- Artificial Intelligence (AI) accelerating Industry 5.0, and partial automation giving way to fully autonomous systems

- The global supply chain creating the need for integrated thinking and internationalization
- An aging population requiring more services, both human and automated
- Climate change requiring new professions around disaster prevention, management, and recovery
- Increasingly automated and competitive ports and supply chains
- Shortages of professionals requiring better integration of foreign trained professionals

## 8. How do you think the PSE system needs to evolve in response to those trends?

In response to anticipated changes in program delivery preferences, BC post-secondary institutions need to be prepared to expand their learning options. Opportunities for hands-on learning experience may be in high demand, requiring increased outreach and partnership with industry to create more Work Integrated Learning opportunities, and an expansion of lab and workshop spaces and program-related tools and technology. Integrating more industry experience within credential programs may assist in heightening the perceived value of advanced education by providing work experience alongside academic learning.

Greater access to remote and flexible learning options may be desirable as well, reaching a larger audience of students and allowing them to schedule their studies around work and family commitments. This might include shifting more existing programs to remote delivery, and continuing to develop condensed learning opportunities such as micro-credentials. Remote program delivery may also contribute building equity in education, reaching communities where higher education is not available and travel is not convenient. This could include Indigenous communities throughout BC and other provinces.

Ongoing growth of automation and innovation creates a need for education in new and expanding technological fields. New programming, revisions to keep existing programming up-to-date, and new teaching resources may be required to keep up with rapidly evolving technologies. Expansion in the health workforce is being addressed by the provincial government's funding for additional health seats, ongoing review of health program demand and capacities compared to vacancy rates in the health sector, as well as maintaining up-to-date equipment for health programs may help ensure the sector is well supported moving forward.

The implementation of the Skilled Trades Certification in BC will likely contribute to an increase in demand for space, materials, and instruction. Post-secondary institutions offering trades training should be prepared to increase intakes, where possible, to accommodate an anticipated increase in students in impacted trades. Soft skills have been identified as a gap in trades workers, therefore further consideration should be given to ways of supporting soft skills training within trades programming in BC.

The use of foreign trained practitioners and professionals will become an even stronger pillar in BC's fight against labour shortages and denial of services. Many accreditation agencies erect barriers that prevent immigrants from being certified in their chosen fields. Skills gap analyses, bridge programs, and open credentials will become important tools to offer access to meaningful careers.

Climate change, environmental pollution, and urbanization will require new environmental literacy that permeates all programs and careers and that puts sustainable practices at the forefront of academic planning and curriculum development.

In order to respond significantly to these evolving trends, we recommend:

- A meaningful portion of institutional funding be tied to comprehensive and clear performance measures, while still prioritizing the institution's strategic goals. The differentiator of the mandate should be clearly established and funded by the province in order to achieve the workforce that is needed.
- Funding that would directly advance government mandate priorities and offer the development of provincial curriculum in the areas of Climate Change, Equity, Diversity, and Inclusion, and Reconciliation and could be delivered as prerequisite courses across the system.
- An increase in student experience funding when there is a funding increase to expand seats in a program. This would provide for wrap-around supports like accommodations and accessibility for students, and ensure completion success.

## 9. How does your institution need to evolve in response to those trends?

What differentiates BCIT from our peers is our focus on applied education at all levels of credentialing. We combine theory and practice in ways that enable our learners to leave BCIT confident with noticeable and immediate impacts to their career of study. We must continue to evolve our methodologies to stay ahead of the needs of industry, and we must nurture an environment in which learners and faculty thrive.

BCIT provides applied education ranging from the industrial trades to applied masters degrees. Internally, our Schools are organized by industry sector, not by credential type. This leads to collaboration and exchange between different occupational categories just as it does in industry. As a result, our graduates are able to confidently engage with all members of the workforce.

The mission is for BCIT to drive strategic workforce development in support of economic recovery and growth across British Columbia. Key components include:

- Establishment of micro-credentials as a new currency in skill building
- Development of a social justice strategy to help embed diversity and inclusion in the workforce
- Enhanced applied research and industry collaborations to advance sustainability knowledge and practice

Our focus is provincial, but our context is global. We will learn from experience and seek to inform practice beyond our borders. Our work in new models of credentialing to facilitate reskilling and upskilling is pivotal for the economy, drawing upon proprietary BCIT activities in open multidisciplinary credentials and prior learning assessment and recognition. The drive towards sustainability and equity is pivotal for society, leveraging unique BCIT expertise and resources, from environmental innovations, to Indigenous 101, to Women in Trades programs.

## 10. Considering the above, what modifications to the funding formula would you recommend?

With British Columbia's public post-secondary system focused on the delivery of access to quality education and as a key contributor to social and economic prosperity, the need for a strategic approach to provincial funding is paramount. The focus on the value proposition of advanced education must be revisited. People from all demographics are facing a number of long-term pressures around cost of living while industry is experiencing a severe skilled workforce shortage. The lack of access and cost of obtaining higher education can create a number of negative effects: lack of skilled workers, unmet industry needs,, and slowed or stagnant economic growth.

A provincial funding model that is directly connected to supporting the economy and that is designed to support student access, and social and economic development should be considered. Funding to create more skilled workers and drive stability and growth in key sectors would yield a positive return on investment in post-secondary education—for the student and for the province. This model could assess the workforce needs of the province by working in partnership with sector employers to provide flexible funding programs that would allow people to access training programs that suit the needs of the employer and the worker.

We recognize that high school students are also rethinking what education looks like for them. This demographic is no longer considering the traditional route of going straight to post-secondary after graduation and are looking to create their own path for the future. This is the right time to strengthen high school partnerships to secure student enrollment into post-secondary by creating a pathway to highly skilled careers through flexible interdisciplinary learning for new job types.

## 11. Additional Opportunities

BCIT produces skilled, career-ready graduates who meet the needs of high-demand sectors and expanding industries highlighted in the BC Labour Market Outlook. Public infrastructure development and other in-demand areas will require the apprenticeship system, and its education and training model, to adapt and respond to labour market demands. BCIT continues to work with government on the implementation of Skilled Trades Certification. Further, BCIT is committed to meeting the employment needs of the province by ensuring a focus on updated curriculum and training facilities, application of innovative instructional methods, and programs that are accredited by industry and regulatory bodies.

BCIT is uniquely positioned to deliver strategic workforce development with our extensive faculty knowledge and our provincial training mandate. Whether in digital marketing, project management, or whatever business leaders require, we are well positioned to be a provincial partner in delivering nimble and adaptive upskilling and reskilling as we continue to navigate the pandemic recovery period and beyond.

The new Skilled Trades BC Act means that all trades workers with relevant job experience but are not currently red seal-certified, need to be assessed to receive credit for their skills to determine what further education is required for red seal certification. BCIT has extensive expertise in this area and is ready and willing to be a partner by expanding in this area to support the province's skilled trades priorities.

### Supporting International Students and Workers

In concrete ways, we could increase access to our trades programs for international students when domestic enrolment is low. For example, auto collision training, currently offered through BCIT's industry services, is in the process of developing a diploma program and heavy-duty truck technology could also be expanded for international student intakes. A scan of our programs could strategically identify where we might rebalance domestic vs. international enrolment opportunities. There is a possibility of cross-recruiting as well, when international students who are ready to enroll are waitlisted. The balancing act is a real pressure, if we have a domestic waitlist yet add seats for international, we try to manage the waitlist and still have international enrolment. There is an opportunity to open up domestic seats to international students in low-enrolled programs, if not already accepting international students.

Recent economic outlooks say that BC is going to need one-million new workers. To meet this demand, we need to support immigration and increase our capacity for recognition of foreign credentials. The province's challenge will be to increase its scope to assess skills and provide credentials that can be utilized in BC's workforce. BCIT has the experience needed to support the province's priorities for enabling BC immigrants to enter the labour market and contribute the skills, education, and credentials they acquired outside Canada. With our extensive experience in Prior Learning Assessment and Recognition [PLAR] to recognize knowledge and skills learned outside recognized programs, and the our SITE Centre's use of the Advanced Placement and Prior Learning [APPL] method to create flexible entry pathways for specialized groups and adult learners, we are uniquely positioned to increase our work in this area. This supports credentialed workers in the health workforce, technology, and other key growth sectors in the BC economy.

### English Language Learning

BCIT has a long history in supporting English as an Additional Language [EAL] students. Our International Student Entry Program [ISEP] is an academic English language program that prepares students for success at BCIT, and helps them to meet the English requirements of a full-time BCIT program. Our Professional English Language Development [PELD] program is a great option for EAL and non-EAL speakers who need an English upgrade to enter BCIT programs or other post-secondary programs at institutes across BC.

BCIT's School of Computing and Academic Studies recently received funding from Future Skills Canada for a multi-year **Language Learning for Young Newcomers** project. Through discipline-specific language supports, language assessment, and hands-on practical experience, this project seeks to provide post-admission support for EAL students in diploma programs and share best practices for EAL students who are pursuing skilled jobs in BC and across the country. This project will create innovative content and language-integrated curricula, develop language assessment tools, and build relationships with industry sponsors to provide authentic job application and interviewing experience. It is critical – for learning success as well as for supporting EAL workers to be successful [and decreasing workplace safety incidents] once they enter industry—that the province invests in sustainable funding for ongoing, sustainable, discipline-specific English language learning for the polytechnic environment.

## Renewal in Flexible Studies Learning

Part-time Studies is the fastest growing category of BCIT's broad portfolio of courses. This reflects a rising demand for dynamic, accessible, and modular education—particularly for professional practice. As a result, our peer institutions have begun to target this field to increase their market share. Building from our foundation of offerings, we have an opportunity to recalibrate our operating model and better accommodate the diversity of learners and instructors, as well as to propel growth. We will:

- Strengthen support for part-time faculty,
- Create new competency-based courses that promote reskilling and resonate with a technologically-advanced society
- Create pathways for learner progression and introduce open multidisciplinary credentials that reward the general pursuit of knowledge,
- Facilitate non-traditional entry through alternative mechanisms that recognize prior learning in direct support of professional development among our industry partners

## Interdisciplinary and Integrative Learning

The road to the establishment of BCIT's Education Plan highlighted the importance of learning that bridges disciplines, connects technical and soft skills, and links theory with practice and education with research. Confirmed as imperatives through our employer survey, these approaches equip our students for success and mobility in the workplace. Our focus will be on innovation that tests new content and learning modalities. BCIT will work to promote curriculum renewal to help ensure program quality and currency, and new curriculum development will be informed by our understanding of shifting skill requirements and global competences. We will introduce interdisciplinary offerings that respond to emerging professions, and create opportunities for work-integrated learning and custom training to strengthen learner outcomes and industry practice. Our applied research will be channeled towards societal challenges in which we are positioned to make a real difference, effectively embedding these activities to enrich the education experience.

## Augmented and Sustainable Environments

Learning environments and communities, both physical and virtual, are key enablers of excellence in education. They must evolve in ways that uphold BCIT's commitment to both quality and sustainability. Today, our campuses and many of our facilities need renewal, student housing is a pressing requirement, and our digital learning infrastructure leaves much room for improvement. We will accelerate plans for critical facilities upgrades at all campuses and, underpinned by the INSPIRE Campaign, move forward systematically with our plans for the transformation of the Burnaby Campus. At the same time, we will clarify our environmental impact targets and define our priorities for sustainable development and operations, including student housing communities on and near our campuses. The use of space across BCIT will be reviewed, with the intention of creating new hubs for discourse and exchange. In addition, we will explore—and implement thoughtfully—technologies that enhance the quality, accessibility, and experience of education at BCIT, including simulation and distributed and hybrid learning, as well as virtual, augmented, and mixed realities.

## Improved Utilization

Currently, many post-secondary institutions are delivering similar programs. Often, they are equipment-intensive programs. Students are being divided, and few programs are running optimal or cost-effective models. It is almost impossible for programs to maintain their equipment and ensure it is current. To alleviate this challenge, the Ministry could identify one or more institutions to specialize in certain skills or sectors; for example, health, trades, and other university transfer or arts-based programs. The institutions that are identified as the leaders in specific areas of study could collaborate with institutions throughout BC to support delivery across multiple regions. This would enable the Ministry to ensure that the appropriate institutions are funded to deliver high-quality instruction, with the right equipment for the students to be career-ready on graduation.

There is an opportunity, in the provision of post-secondary physical and virtual spaces and places, to avoid duplication for the best possible use of provincial funds. By investing in capital projects at BCIT, the province is investing in the region and improves our capacity to develop partnerships with other institutions for regional learning and training. BCIT is a public good and we invite the province, and other public agencies, to partner with us to maximize utilization of our facilities, particularly in low usage times.

