

STRONGER TOGETHER

LEVERAGING THE POWER OF COMMUNITY



BCNET 2020/2021
ANNUAL REVIEW

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Stronger Together

Connections Helped Create
New Opportunities

This past year has proved exceptional as we lived, worked and persevered through the COVID-19 pandemic. While it presented many unforeseen challenges for the higher education sector, it also opened doors to new opportunities. Our members came together with determination and a unified goal to help one another for the common good, becoming more connected and engaged in the process.

By leveraging this power of community, members flourished while pivoting to remote work, study and research.

True to our mission, we remained focused on delivering exceptional value for our members by building on the trust we have earned during the last 30 years.

We are inspired by the level of confidence that our members continue to place in BCNET, evidenced by the growing range of products and services that we offer.

Today, we are stronger, and better prepared for whatever the future might hold.



■ MESSAGE FROM

The Chair

The past year has been a challenge for everyone as we all tried to manage through the complexities and uncertainties of COVID-19 in both our professional and personal lives. During this time, I have witnessed BCNET and its members grow stronger together by working collectively to meet the challenges of the COVID-19 pandemic. As a community, we connected, engaged and thrived while pivoting to remote work, study and research. It was this collaborative spirit that resonates today, providing a true testament to the trust that BCNET has built with its college, university

and research institute members in British Columbia.

During the crisis, BCNET stepped up to support its members by offering technology solutions for online learning and remote work, sourcing critical PPE supplies, strengthening the security posture of the sector, and providing online forums and events to foster communication and learning across the sector. Members leveraged the power of community not only for procuring much-needed supplies, but also by sharing tips and pooling resources during a time of great uncertainty.

BCNET's Advanced Network continues to be its foundational service, delivering the performance, security and capabilities designed for the needs of the research and education community. In 2020/2021, BCNET accomplished a major milestone in implementing diverse network infrastructure, protecting institutions from network outages and ensuring the high availability of online services that are critical to institutions. This critical access and dependence on network infrastructure became even more important in the last year.

Cybersecurity continues to be a key strategic priority for BCNET. Working in cooperation with members, the Government of B.C. and partners of the National Research and Education Network, we have made great strides in enhancing cybersecurity by offering advanced security technologies, collective expertise and world-class cybersecurity initiatives.

The progress we have witnessed in the evolution and adoption of our services are evidence of the strength of our community. We would like to thank you for your trust and willingness to engage, which creates stronger communities that benefit all. I also want to personally thank the dedicated staff within BCNET, our members who continue to provide their time and expertise — without whom BCNET could not achieve the successes it has — my colleagues on the Board and a special thank you to Jennifer Burns who, as vice-chair, assumed the role of chair for part of the year. I look forward to the future and our continued success together.

GAYLE GORRILL

CHAIR



■ MESSAGE FROM

The President & CEO

It is my pleasure to present the 2020/2021 Annual Review, *Stronger Together*.

Through the pandemic, we have collectively ensured that education and research were not interrupted, even as we retreated to our individual bubbles. The collaborative spirit of the community was not dampened or diminished, even as we were forced into isolation. If anything, the resolve to connect and collaborate for the common good became stronger,

evidenced by the growing range of services and solutions we now offer.

As we look to a brighter future, we are ready to bounce forward, get back to the new and better normal, and become a stronger and more inclusive community that offers opportunities for every student, staff, faculty and researcher to participate and contribute irrespective of their location, institution, gender, colour, race or creed.

Through all this isolation, discomfort, pain and suffering, we have made some huge gains — and we want to build on that to go from strength to strength. We owe that to ourselves as well as to millions around the world whose lives were lost prematurely.

In addition to the challenges brought on by the pandemic, we are also starting to experience increased levels of cybersecurity threats throughout the sector. The threats we face today, or those we may face in the future, are better met with the strength of our collective capacity. Helping our members minimize these cybersecurity

threats is becoming a focus of BCNET.

To my colleagues at BCNET — who are inspired by our vision and strive for our values of collaboration, innovation and responsiveness in each interaction — I am very proud to have the honour and privilege to be your leader and work by your side.

BALA KATHIRESAN

PRESIDENT & CEO



Institutions Find Strength in Numbers to Meet Pandemic Challenge

When facing a crisis, it helps to have the power of collaboration on your side. This became especially evident for B.C.'s higher education institutions at the start of the pandemic when they suddenly needed to source critical supplies that faced worldwide shortages.

Rather than being a single entity competing on the global playing field for scarce supplies, each of the 25 institutions were able to tap in to BCNET's collective buying power. They were also able to draw strength from within the community by sharing tips, ideas and experiences.



"The power of the collaborative community is valuable in a time of crisis. We were able to leverage each other, to talk to one another and find out what others were doing, including sharing where they were finding scarce PPE. To pool our needs and do some collaborative sourcing for some of those products has been very valuable."

SHELLY MORRISON

SENIOR DIRECTOR OF FINANCIAL SERVICES AND STRATEGIC PROCUREMENT |
UNIVERSITY OF B.C.

This time of crisis has given procurement professionals the opportunity to step up, cooperate and get creative to find new ways of meeting ever-evolving needs. Many institutions have done things they never could have imagined in normal times.

Collective Buying Power

Working together through BCNET joint agreements has been hugely beneficial during these challenging times, says Xavier Serrano, Director of Purchasing Services at University of Victoria.



"As a sector, we carry much more weight than as an independent institution. By joining forces with other post-secondary institutions, we've been able to move forward and make progress on contracts and licences at a speed that we wouldn't have been able to do on our own."

XAVIER SERRANO

DIRECTOR OF PURCHASING SERVICES | UNIVERSITY OF VICTORIA

Procurement contracts arranged through BCNET included everything from sourcing PPE and touch-free hand sanitizer dispensers to arranging technology solutions that support remote teaching and learning.

"One unexpected and very positive aspect we discovered is how we, as an organization, were able to pivot with lightning speed from full face-to-face, in-person teaching, learning and working to distance learning and working remotely," explained Serrano. "BCNET was instrumental in being able to quickly obtain the tools that we needed for that very significant change."

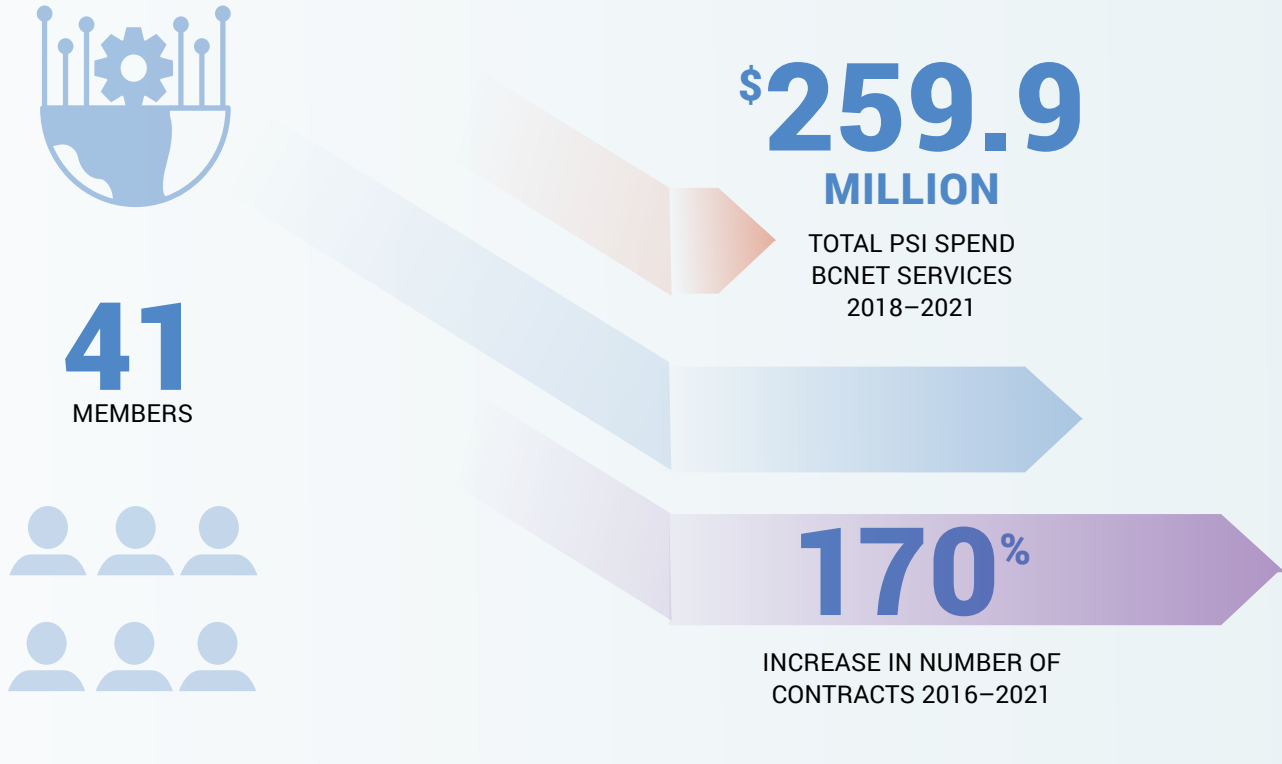
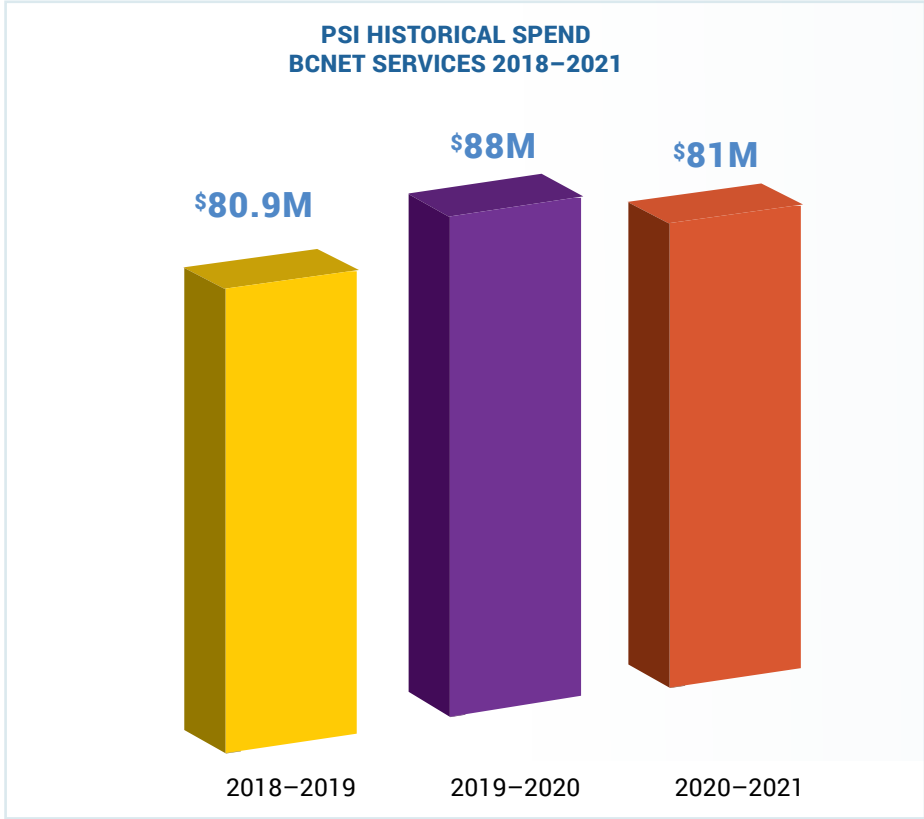
Shared Learnings

While continuing to deliver value and gain access to items in demand are important, the sharing of information has also proved hugely beneficial. The bringing together of institutions through webinars, forums and other networking opportunities has helped open new doors for shared learnings.

"The increase in virtual meetings since COVID-19 has helped me out by being able to network with more people and benefit from their ideas and discussions," said Jocelyn Templeman, buyer at Selkirk College. "Keeping these collaborations going is fundamental to survival."

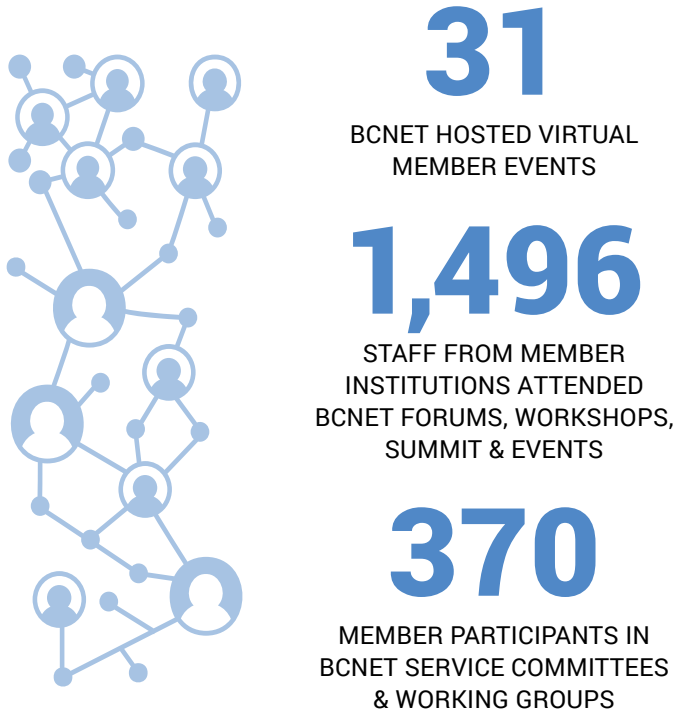
Our Services Impact

Members Achieve Value Through Contracts and Services Provided by BCNET



Our Collaboration Impact

We Foster Member Engagement, Making Our Community Stronger Together



Partnership with Shaw Business Provided Support During COVID-19

Cellular Devices Donated to Students in Need

At the outset of the COVID-19 pandemic, we reached out to our long-standing industry partner, Shaw Business, to explore ways to support online learning for higher education students in need.

Shaw stepped up to the request and donated 500 free cellular devices with no-fee data plans from Freedom Mobile for eight months for eligible students enrolled at BCNET higher education member institutions.

“We are pleased to partner with Shaw to help bridge the digital and equity divide by providing B.C. students with better access to the internet to support online learning,” said Bala Kathiresan, president and CEO of BCNET. “We are very grateful that Shaw stepped up to support students in this critical time of need due to the pandemic.”



“Many of us may take for granted the power of technology to bring us together in this time of need, but not everyone enjoys the same privileges and access. We are thrilled that Shaw has been generous in working with us to help keep students connected.”

SANDEEP SIDHU
CIO | EMILY CARR UNIVERSITY



Shaw) Business

Devices Supported Online Learning

BCNET member institutions distributed 500 devices to provide critical support and equitable internet access for students in need. Students were presented with the option to purchase service at a reduced rate after the free, eight-month plan expired. After the plan ended, the discounted fees ensured students continued to stay connected, while providing some financial relief.

“Students who have limited access to computers and high-speed internet are not able to participate in remote learning,” explained Ted Pennell, the CIO at Camosun College. “Unfortunately, not all students can afford these services. However, with the support of Camosun’s student laptop loaner program, and high-speed internet from our amazing partners at Shaw and BCNET, we are reducing barriers to student learning at Camosun College.”

“As schools and post-secondary institutions rely more heavily on online learning due to the pandemic, it is critical that students are able to connect to the internet to access their coursework and curriculum. This partnership with BCNET will help ensure the students who may not have the resources needed to get online have an equal opportunity to stay engaged throughout the school year.”

KATHERINE EMBERLY
PRESIDENT, BUSINESS | SHAW COMMUNICATIONS.

A YEAR IN REVIEW



BCNET Advanced Network

We Evolved B.C.'s Digital Infrastructure, Supporting the Unique Needs of Research and Higher Education

BCNET's advanced network continues to be our foundational service, providing the performance, resiliency, security and capabilities designed for the needs of the research and education community. Building a robust provincial infrastructure has been at the forefront of our efforts for the last 30 years. This foresight has paved the way for how we have been able to support our member community, even in the most challenging of times. When considering that students and staff were working and learning remotely, our networks still moved about 71 per cent of the traffic they did before stay-at-home directives.

Our Pandemic Response

Throughout the year, we engaged with our member community to ensure the continuation of quality education and research as institutions transitioned to operations in an online environment.

We offered a host of dedicated network resources to support members as they shifted to remote learning, research and work.



2020/2021 Highlights

Safeguarding Online Services

Our network team accomplished a major milestone by implementing diverse networks at both of BCNET's Prince George and Kelowna Transit Exchange sites. Diverse network infrastructure ensures the high availability of network-dependent services for our members.

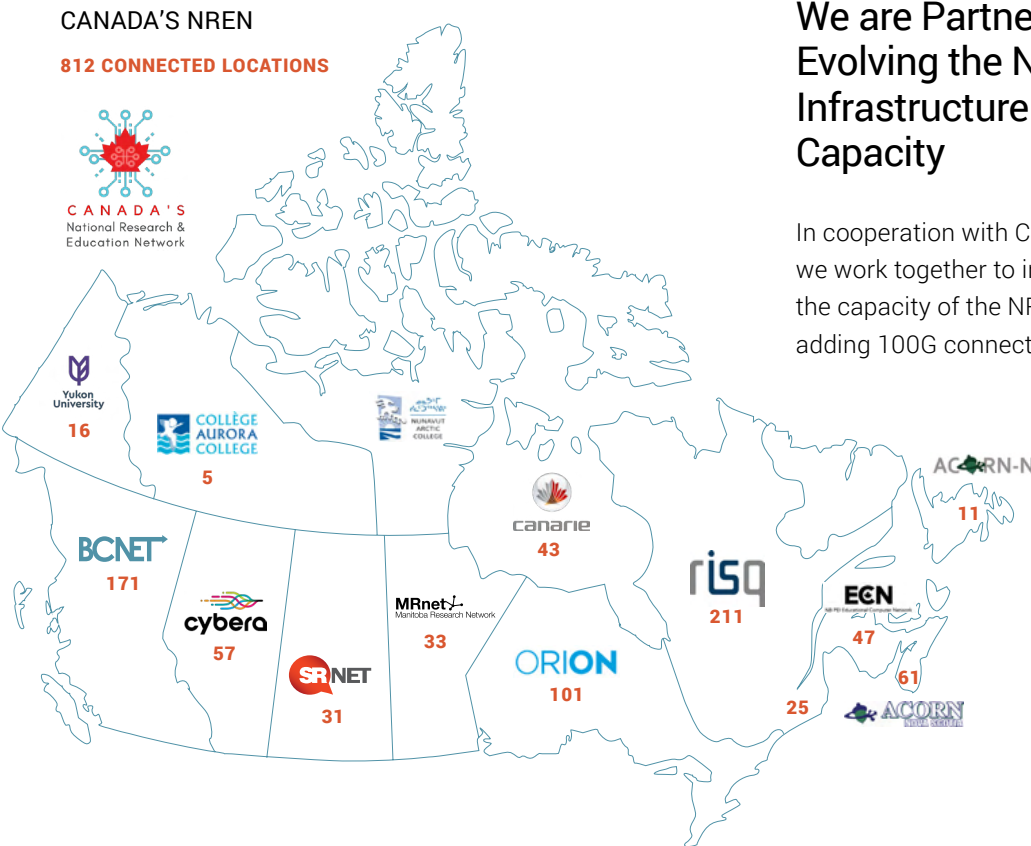


National Research and Education Network

Connecting Canada's Research, Education and Innovation Communities

BCNET is one of 14 provincial, territorial and federal National Research and Education Network (NREN) Partners that connect Canada's researchers, educators and innovators to each other, and to data, technology and colleagues around the world.

The NREN is a federation of infrastructure, tools, and people that are vital to Canada's innovation and economic growth.



We are Partners in Evolving the NREN Infrastructure Capacity

In cooperation with CANARIE, we work together to increase the capacity of the NREN by adding 100G connections.

New Infrastructure Safeguards Mission-Critical Services

Investment Ensures a Robust Network for Members in Northern B.C. and the Okanagan



We completed a diverse network infrastructure project at our Prince George and Kelowna Transit Exchange points, extending alternate paths to protect essential online services for our members in Northern B.C. and the Okanagan.

Funded by BCNET, this project completes a multi-year investment in geographically diverse networks aiming to protect member institutions from potential interruption to services. The diverse network infrastructure

safeguards higher education and research institutions, and ensures the high availability of technology-enabled and connectivity-dependent services that support teaching, learning and research in B.C.

“Our continued investment in diversity is strengthening resiliency and increasing robustness, while ensuring high-availability technology services for all public, post-secondary institutions in B.C.,” says Bala Kathiresan, president and CEO of BCNET.

“The network is critical for delivering uninterrupted teaching and learning during the current pandemic situation, and also helps B.C. researchers work with their peers from around the world to develop a vaccine for the virus.”

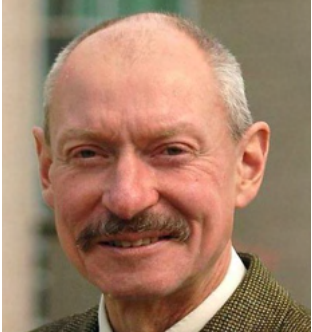
The network expansion project marks the completion of a long-term plan to build diverse infrastructure for B.C.’s public, post-secondary institutions at BCNET’s Transit Exchange Points. The Transit Exchanges are located at six geographically diverse locations throughout the province: Vancouver, Victoria, Surrey, Kelowna, Kamloops and Prince George.



“Northern Lights College relies heavily on the BCNET Network to collaborate across our geographically distant locations and to deliver high-quality educational experiences to the communities we support. This additional link will fortify that capability and help ensure students have access to our systems.”

RYAN MORAN
CHIEF INFORMATION OFFICER | NORTHERN LIGHTS COLLEGE

“The completion of a second 10-gigabit link connecting Prince George to Edmonton is a great step forward for UNBC and the communities we are honoured to serve. It assures a secure link in the event that the



connection between Prince George and Vancouver is interrupted or severed by accident or natural disaster. In a world that is more and more reliant on connectivity, this is a real plus for UNBC, providing service, security and peace-of-mind. We thank all those who helped make it possible.”

MARK DALE
INTERIM PROVOST & VP ACADEMIC | UNIVERSITY OF NORTHERN BRITISH COLUMBIA.

Cybersecurity is a Team Sport

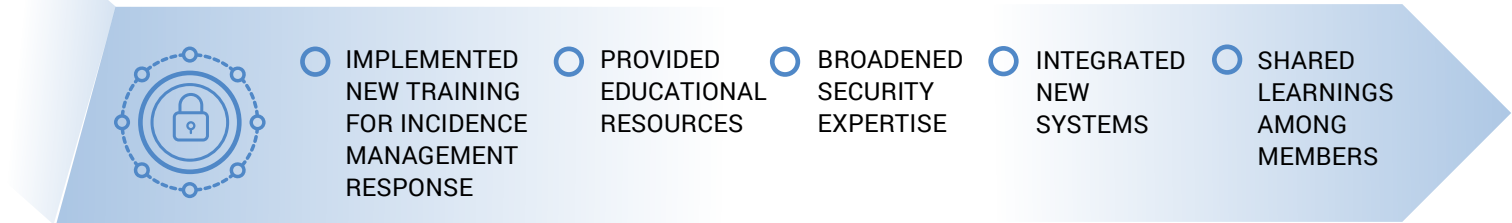
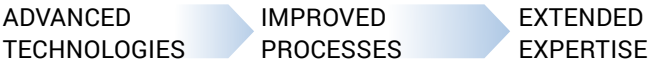
By Working Together, We are Helping Strengthen the Security Posture of Higher Education and Research Institutions

BCNET works collaboratively with our members, the Government of B.C., CANARIE and partners of the NREN to align and coordinate processes to strengthen the security posture of the higher education and research sector.

This year, we facilitated meetings with the Cybersecurity Services Committee, developed a common cybersecurity framework, created a roadmap of future services and helped members take advantage of the NREN Cybersecurity Initiative program.

BCNET’s Approach to Cybersecurity

CYBERSECURITY | WE ARE STRONGER TOGETHER



2020/2021 Highlights

Cybersecurity is an Ever-Shifting Landscape Requiring a Guide

DEVELOPED ALIGNMENT TO A COMMON NIST* CYBERSECURITY FRAMEWORK (CSF)



In cooperation with the community, we built a cybersecurity framework using the widely recognized NIST* CSF to provide institutions with guidance on how to prevent, detect and respond to cyberattacks. Developing and agreeing upon a framework helps to create sector-wide alignment and guide institutions with best practices and services to manage and reduce risk.

*National Institute of Standards and Technology US Dept of Commerce

Created a Cybersecurity Roadmap

BCNET used a collaborative approach to create a cybersecurity roadmap of services to detect, respond, identify and protect. A balanced portfolio of services within each function offers institutions with essential capabilities for a robust and holistic cybersecurity defense program.



Cybersecurity is a Team Sport

Launching New Services

Launched SIEM-as-a-Service

We launched SIEM-as-a-Service (Security Information Event Management), a fully hosted solution designed to strengthen security by simplifying the management and monitoring of business-critical systems and applications. The service offers all the benefits of a SIEM solution without the challenges of securing capital investment. BCNET manages the infrastructure, maintenance, upgrades, patches, capacity planning, backups and security of the entire system.

Participated in SIEM Deployment for NREN

BCNET worked together with NREN partners to acquire and develop security expertise to support the effective deployment of SIEM infrastructure for the entire NREN Network. Today, our national cohort of SIEM professionals continually collaborate for ongoing learning and knowledge sharing.

Building a Multi-institutional Response Team

We are developing a Distributed Cybersecurity Incident Response Team, a dynamic, multi-institutional team of cybersecurity specialists to help coordinate resources during a cyber incident to minimize impact and quickly restore operations. In the event of an incident, the distributed team will collaborate to provide an organized response and support institutions in need.



Educational and Technology Services

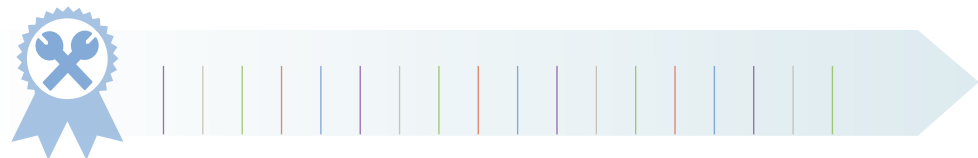
We Supported Technology Innovation and Student Success

In 2020, our Shared Systems and Technology team supported the community in identifying, sourcing and adopting technology for IT systems, teaching and learning. They quickly transitioned institutions to existing services and collaborated with members through services-focused communities of practice. Through working with members and stakeholders, we were able to understand their technology needs for the classroom and beyond.

Our Pandemic Response

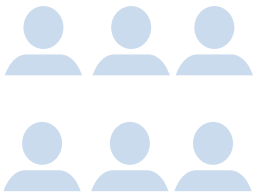
The pandemic prompted colleges and universities to pivot to online learning, remote work and other activities to help contain the spread of the novel coronavirus. BCNET stepped up to support institutions by escalating the availability of new technologies, services and contracts to enable student success.

- Distributed ed tech survey to CIOs to understand critical needs
- Identified the top three required solutions to support online teaching and learning
- Purchased and allocated videoconferencing licences and offered funding support for members
- Offered video learning solutions
- Optimized usage of share systems and technology services



Measuring Success by Service Adoption

Shared Systems & Technology Services

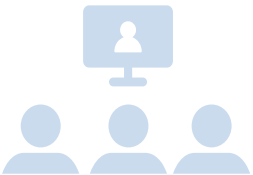


72%

PARTICIPATION
IN IT CONTRACTS



VIDEO CONFERENCING ENABLES
REMOTE, TEACHING, LEARNING & WORK



1,194,126

PARTICIPANTS

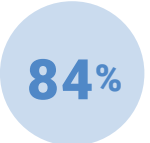
216,698

MEETINGS

MOST WIDELY ADOPTED SHARED
SYSTEMS & TECHNOLOGY SERVICES
AMONG MEMBER INSTITUTIONS



VIDEO
CONFERENCING



KALTURA



EDUCLOUD
SERVER



IBM SPSS
SOFTWARE



Educational and Technology Services

2020/2021 HIGHLIGHTS
We Provided New Services

Sourced an Online Recruitment Platform to Help Institutions Find Talent

We enlisted TalentMarketplace to offer an online recruitment platform for members. The service offers direct access to pre-screened talent in the areas of project managers, business analysts and project coordinators.

Offered Tools to Improve Academic Integrity

We signed a sector-wide agreement with Turnitin to provide preferred pricing on solutions that promote academic integrity, streamline grading and feedback, deter plagiarism and improve student outcomes.



Procurement

The Power of a Collaborative Community

WE WERE RESILIENT AND RESPONSIVE TO THE RAPIDLY CHANGING MARKET DYNAMICS

BCNET’s team of procurement professionals continued to partner with members and industry to offer sector-wide contracts that improve efficiencies, reduce costs and offer market-leading products and services. Despite the rapidly changing market dynamics, BCNET proved to be resilient and responsive to meet members’ needs.

Our Pandemic Response

At the outset of the pandemic, our member institutions needed to source critical supplies while faced with worldwide shortages. Our procurement team stepped up to collaborate and support the sourcing of personal protective equipment, remote teaching

and learning solutions, as well as supplies for working on campus.

We partnered with members and vendors to source critical supplies and contracts. The collective and cooperative efforts proved to be much faster and more efficient than each institution working on their own.

WE SOURCED CRITICAL SUPPLIES AND SOLUTIONS FOR MEMBERS

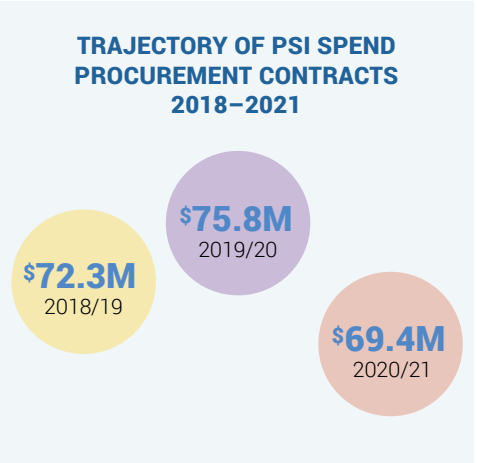


- Built a COVID-19 online member resource centre
- Sourced PPE supplies: 139,000 masks & 293,000 litres of hand sanitizer
- Offered Dell Laptops for Students’ Program
- Secured 500 free devices plus 8-month free plans to students in need – Shaw COVID Internet Initiative and Support Program
- Offered Internet Options for Vulnerable Students by TELUS

Tracking our Success in Contract Adoption

\$69.4M
TOTAL PSI SPEND ON
IT & GENERAL CONTRACTS
2020–2021

27%
INCREASE IN NUMBER OF
CONTRACTS SINCE 2019/20



84
NUMBER OF
AVAILABLE CONTRACTS

2020/2021 HIGHLIGHTS

Partnerships for a National Web Conferencing Solution for Higher Ed

Working with our provincial and territorial National Research and Education Network partners, we led a national web conferencing RFP and awarded two web conferencing agreements, which are available for Canadian higher education institutions.

CONTRACTS PROCURED

- Similarity Checking Software
- Incident Management Training
- Pre-Qualification Network Services Roster
- Maintenance Repair and Operational Supplies
- Wireless Networking
- Waste Management Services
- IT Professional Services Roster

Professional Development and Training Services

We Offer High-Impact and High-Demand Training

We continued to offer professional development and training courses to support the advancement of IT knowledge and skills. As well, we fostered the development of IT leaders in the sector through our mentorship program.

Our Pandemic Response

During the COVID-19 crisis, we rapidly moved our professional development and training courses online, where we delivered 11 courses and trained 111 IT professionals.



2020/2021 PD & TRAINING HIGHLIGHTS

Investing in the Success of IT Leaders of Tomorrow

Our Mentorship Program is designed to support IT professionals, at all levels, with opportunities to learn from senior IT leaders and advance in their career. Since inception, we have supported 16 participants through the program offering valuable guidance, leadership skills, knowledge, experiences and networking skills.

Created a Committee to Guide our Services

We organized a new Professional Development and Training Service Committee to offer guidance and direction for the portfolio. The committee will lead the strategies for the portfolio aimed at enhancing services that reflect the needs of the membership.

FINANCIAL HIGHLIGHTS



BCNET Financial Overview 2021

BCNET generated a surplus of \$188K (2020–\$89K), which was \$17K ahead of the budgeted surplus of \$171K. BCNET's overall results are comparable to prior years and budgeted amounts despite the impact of the COVID-19 pandemic.

Revenue was up 3% at \$22.1M (2020–\$21.5M). The network is still core, generating 39% (2020–40%) of all revenues.

The Shared Services & Technology portfolio has seen the biggest increase in demand due to members switching platforms and services in response to the COVID-19 environment.

The Statement of Financial Position shows \$4.7M in cash equivalents at March 31, 2021. This reflects deferred funding received for future projects. These funds are deposited in the B.C. Government's Central Deposit Program (CDP).

The cumulative surplus of \$4.3M reflects a contingency operating reserve of \$2M and a capital reserve of an additional \$2.3M.

To view the full audited financial statements for the year ending March 31, 2021, go to www.bc.net/news-events/financial-statements.

Statement of Operations

Revenues	Budget	2021	2020
Operating revenue	12,022,346	11,899,802	11,353,636
Operating grants	1,686,648	1,975,908	2,314,898
Capital grants	431,699	452,713	414,310
Pass through services	7,755,129	7,811,890	7,420,275
\$	21,895,822	\$ 22,140,313	\$ 21,503,119

Expenses

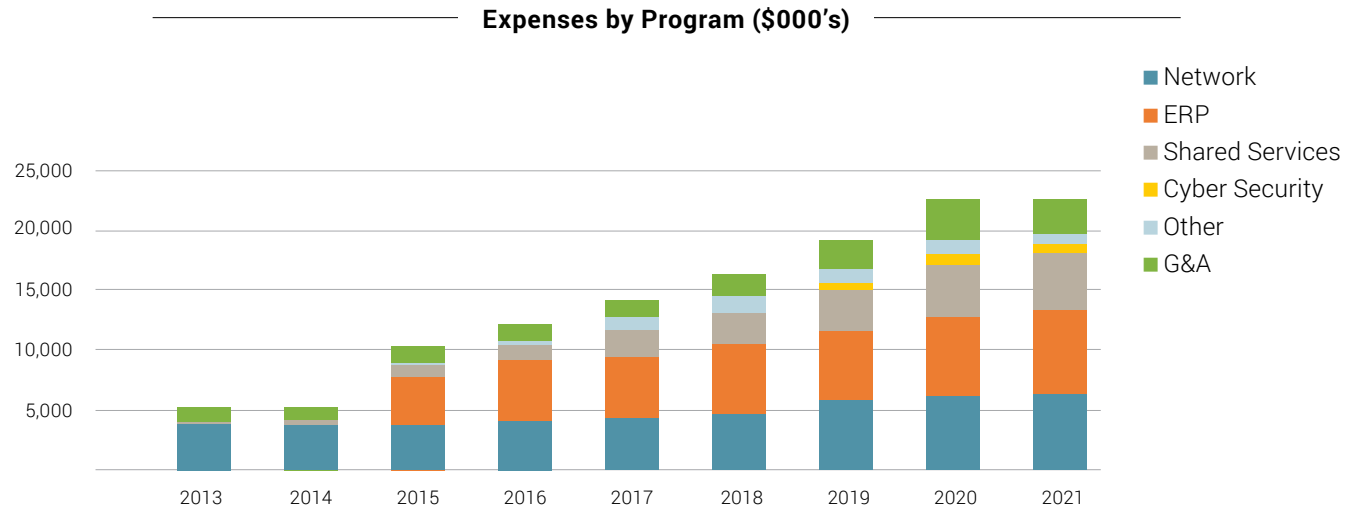
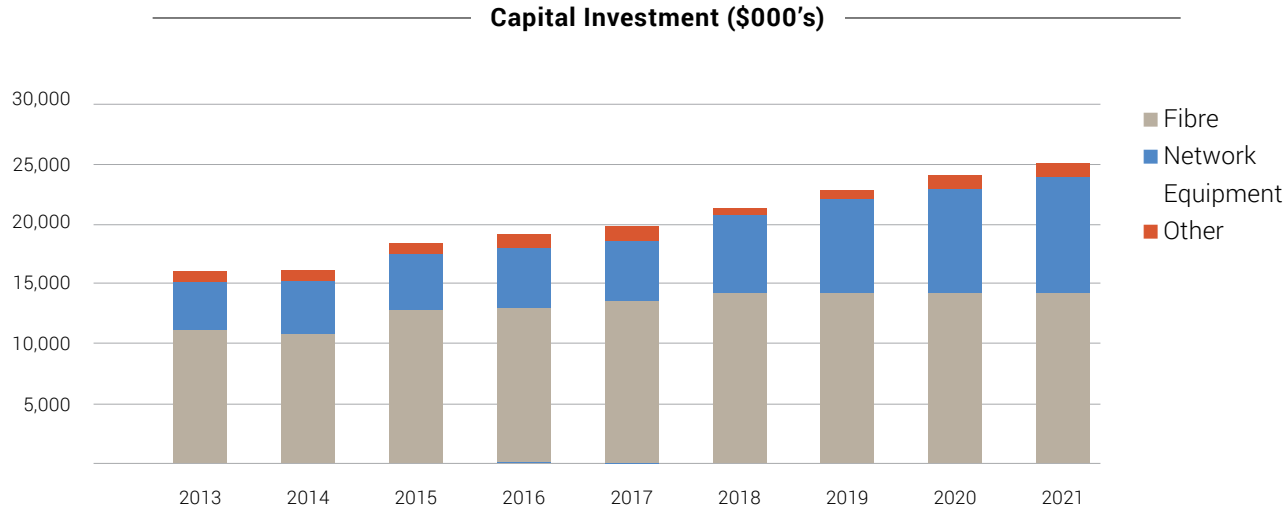
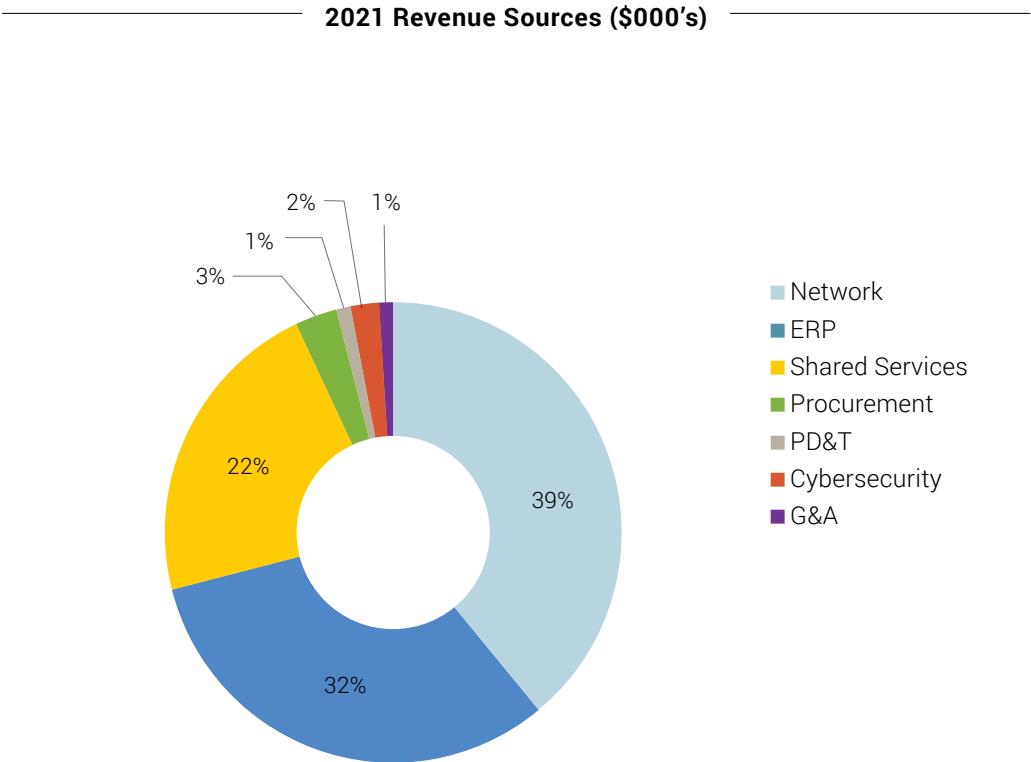
Cost of services	7,428,566	7,455,614	7,607,053
Staffing	4,290,383	4,538,526	4,367,131
Operating	877,562	698,665	814,665
Amortization	1,373,006	1,452,110	1,204,881
Pass through services	7,755,129	7,806,962	7,420,277
\$	21,724,646	\$ 21,951,877	\$ 21,414,007

Surplus

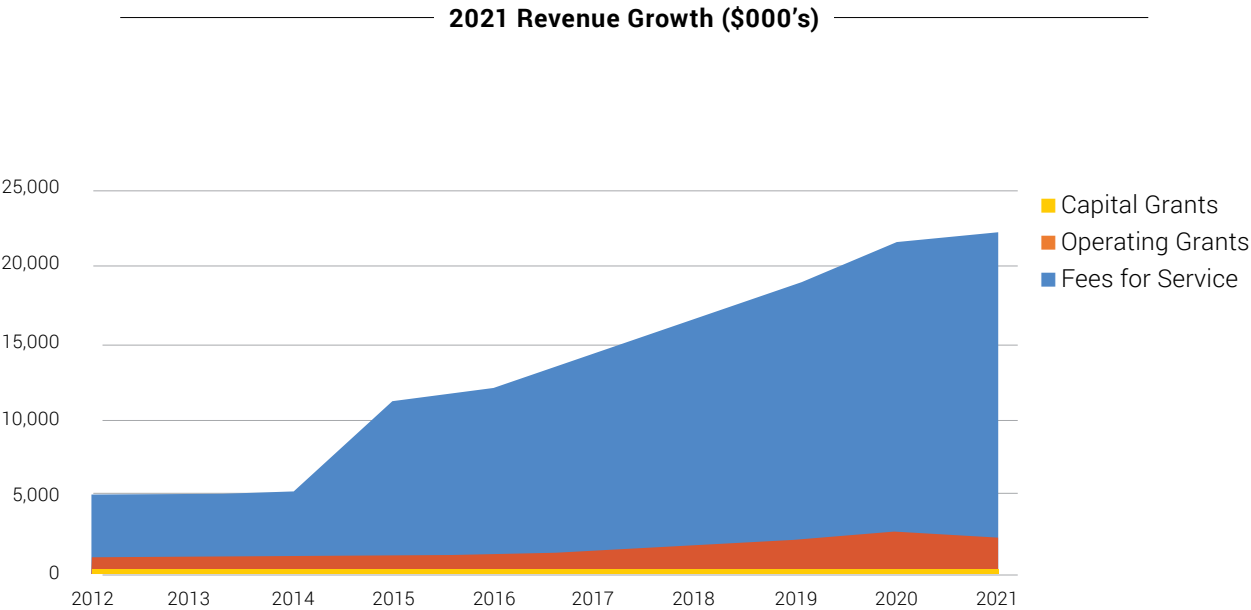
\$	171,176	\$ 188,436	\$ 89,112
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Statement of Operations

	2021	2020
Financial Assets	\$ 4,706,846	\$ 3,305,446
Liabilities	8,223,868	7,219,392
Net Debt	(3,517,022)	(3,913,946)
Non-Financial Assets	7,840,822	8,049,310
Accumulated Surplus	\$ 4,323,800	\$ 4,135,364



Summary
of Financial
Statements





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