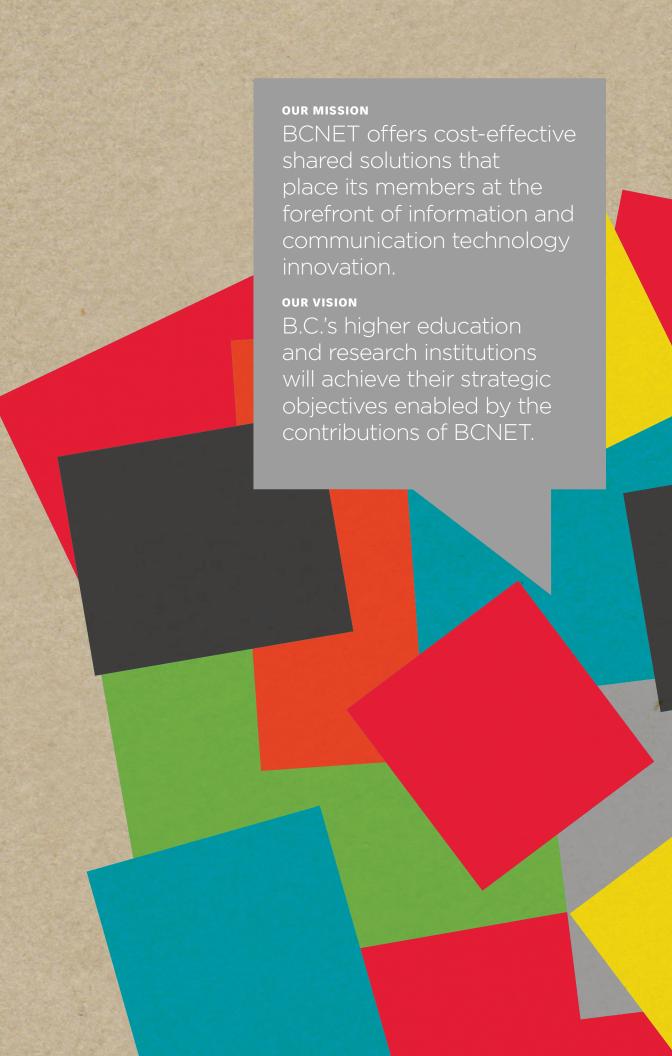


# building value through collaboration







# message from the president



This year, both BCNET and the Internet's arrival in our province marked 25-year anniversaries. To say that the changes we've seen in technology in just over a quarter century have been remarkable is an understatement.

The Internet was indeed one of the first true shared IT services, as it was created with multiple computers in mind. On the Internet, each computing device can talk to any other without an appointment—or even knowing where the others are located. And much like the advent of call waiting and conference calls for the telephone, those pesky Internet packets brought in the concept of mass sharing.

The virtualization revolution in computing, storage and software, built over the Internet, and next-generation networks like BCNET and CANARIE, now make it possible to apply the same principles of infrastructure sharing to these "big iron" installations. Data centres, disk farms, desktops and software packages can now be shared on a grand scale, and dedicated hardware for applications is no longer an issue; this evolution is not unlike the telephone to Internet metamorphosis.

If network infrastructure can be shared successfully across our community, can other pieces of IT infrastructure and services be similarly shared? Can the BCNET model of a member-driven, distributed organization be extended?

BCNET, as a promulgator of the Internet, pioneered the concept of a community-owned and shared network infrastructure. So it really wasn't a huge leap to apply this model more broadly to IT services, a notion the BCNET board, management and membership began to consider in 2010.

Over the past year, we have worked with our member community to fulfill this vision, and held a series of detailed discussions with Higher Education Information Technology (HEITBC), to extend the model to IT services across the higher education and research sector in the province. Our focus was on planning, procuring and implementing these shared IT services—services that our members operate and we coordinate on their behalf. We also welcomed Dean Crawford of the University of Victoria as manager of shared IT services. Since joining BCNET, Dean has been busy building business cases and organizing services.

These are without a doubt exciting times, and the technological and organizational change wrought by innovations such as the Internet and virtualization will continue to move us forward.

But then again, that has been the history and culture of BCNET for the past 25 years.

MA

MICHAEL HRYBYK PRESIDENT AND CEO, BCNET

# message from the chair

On behalf of BCNET, I am pleased to present the BCNET Annual Report for 2012–2013, which has been approved by the Board.

It has been an exciting year on many fronts, with BCNET continuing to evolve in its role as a larger shared services organization for the higher education sector in British Columbia. Not only have we expanded our shared IT services offering, we've grown our membership, welcoming new members from the BC Association of Institutes and Universities (BCAIU) as well as BC Colleges.

To meet the needs of our expanded membership, we put significant time and effort into enhancing our governance, operational model and committees, which now encompass the entire sector. We engaged with one another with a view to understand how we can work towards a stronger, more unified structure that also encompasses the activities of BCNET and HEITBC.

While carrying out this careful, considered strategy, we continued to enhance the value and scope of our core services—networking, shared procurement and IT services—as well as the expansion of our Advanced Network. More and more, our services and organization are being held up as models for other jurisdictions in North America.

Our timely expansion closely supports the Ministry of Advanced Education Innovation and Technology goals. In early 2013, the Ministry published the results of the Administrative Transformation Delivery Service project, which identifies opportunities to reduce costs and streamline the delivery of IT services through cross-sector collaboration. The report shows that not only has BCNET been effective in communicating how we provide significant value, it proved that BCNET is the main vehicle through which shared services for information technology and communications should be delivered in B.C.

You will find many details and statistics related to those services in the body of this report. Our achievements speak to the many ways BCNET reduces costs, creates economies of scale and provides a forum for important technology discussions among members. Our financial statements also emphasize how well-grounded we are as an organization.

Speculating on the future is risky at best, but can't be discounted in a province like ours where politics are a significant factor. However, to the extent we understand what 2013–14 may bring, we see opportunities for improvement, and foresee a year that will be characterized by consolidation and refinement as we grow into our new, expanded role.

It has been my pleasure to act as Chair of BCNET these past two years, and I look forward to the year ahead. I would like to extend my sincerest gratitude to our members, Board and staff for their support, contributions and insight.



A Black

CHAIR, BCNET BOARD OF DIRECTORS

# who we are

# building value through collaboration

BCNET has the right structure, track record and governance and proven ability to provide shared services to its members.

Oliver Grüter-Andrew Chief Information Officer UBC

# BCNET BY THE NUMBERS

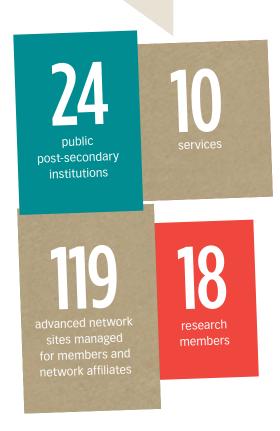
We manage the delivery of IT services across B.C.'s post secondary sector:

BCNET is a not-for-profit, shared information technology (IT) services organization led by and for our members, British Columbia's higher education and research institutions. Owned, governed and funded primarily by our members, we facilitate a unique, collaborative, inter-institutional environment—one based on equality and common goals—to explore and evaluate shared IT solutions for mutual technology challenges.

We leverage our collective infrastructure, expertise and resources to offer shared IT services that cut costs, streamline processes, eliminate technology duplication and improve operational efficiency of our members that in turn help better serve students, faculty, staff and communities.

#### MEMBER-RUN, MEMBER-LED

BCNET is built on the leadership and IT expertise of our members who run, lead and own (in part) our organization. Representatives from our members provide technological expertise and advice to the Board, and lead the direction and creation of our services by participating in numerous committees and working groups. Our Board of Directors, which includes CIOs and senior-level decision-makers, provides strategic direction, leadership and oversight.



# the BCNET difference

# transforming the delivery of higher education IT services

#### A TRUSTED TECHNOLOGY COMMUNITY

With a 25-year track record of managing the Advanced Network, BCNET has successfully fostered a cooperative technology community and an environment of mutual trust, understanding and respect. For over two decades, our members have come together to share technology challenges and solutions.

As we continue to evolve our service offerings, our shared success depends on our members—new and existing. We support and foster their involvement in our governance, working groups and committees.

#### A COST-EFFECTIVE SERVICE PROVIDER

We continually look for opportunities to streamline our operations for greater productivity. We strive to keep overheads low, while ensuring we have the right people, skills and resources within our organization to provide and maintain a high level of service excellence.

We leverage the vast resources of institutions to deliver shared IT services to the entire public post-secondary sector by pooling:

- Infrastructure
- Expertise
- Skills
- Knowledge
- Human resources
- Capital resources

Our organizational model brings together network engineers, IT staff and human resources from our members. We have 23 full- and part-time staff.

We act as the service operator and provide support for DATA-SAFE to ensure campus data is transmitted and stored safely outside the earthquake zone. The service is built on a unique partnership between SFU, TRU and BCNET.

Jeff Bryer Systems Administrator IT Infrastructure, SFU

committees at a glance

> This year, 146 people participated in technologyfocused committees and working groups. With our support, these groups recommended improvements to existing services, and identified and developed new services.



# our members

# broadening our membership

We were committed to joining BCNET to leverage its portfolio of shared IT services. Membership will let our institutes and universities explore ways to improve network capacity, and take advantage of opportunities to cut costs and improve operational efficiencies.

Ruth Wittenberg President BCAIU

#### **NEW MEMBERS**

In 2012–2013, we expanded our membership to include the entire public, post-secondary sector in British Columbia. We welcomed new members of BCAIU and BC Colleges.

#### **BCAIU**













#### **BC Colleges**

BC Colleges is a consortium representing 11 public community colleges serving almost 200,000 students annually with campuses in over 60 communities throughout the province. Three members of BC Colleges joined BCNET last year.











#### **EXISTING MEMBERS**

#### **Founding Members**









a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA

#### **Core Members**







#### MEMBER PROFILE:

#### **BC LIBRARIES** COOPERATIVE

#### **Higher Education Members**















#### **Research Members**



Government of Canada

Gouvernement du Canada

AGRICULTURE AND AGRI-FOOD CANADA

#### ENVIRONMENT CANADA

CANADIAN CENTRE FOR CLIMATE MODELLING AND ANALYSIS NATIONAL WATER RESEARCH INSTITUTE



KELOWNA GENERAL HOSPITAL ROYAL INLAND HOSPITAL



#### NATIONAL RESEARCH COUNCIL

DOMINION RADIO ASTROPHYSICAL OBSERVATORY

HERZBERG INSTITUTE OF ASTROPHYSICS INSTITUTE FOR FUEL CELL INNOVATION



BC CHILDREN'S HOSPITAL



UNIVERSITY HOSPITAL OF NORTHERN B.C.



ROYAL JUBILEE HOSPITAL



THE Research Universities' Council OF BRITISH COLUMBIA













BC INTERUNIVERSITY DATA CENTRE





PRINCE GEORGE PUBLIC LIBRARY VICTORIA PUBLIC LIBRARY The BC Libraries Cooperative ioined BCNET to extend better service delivery to its libraries in four provinces and two territories. In phase one, they connected their data centre. and the Greater Victoria and Prince George Public Libraries. to the Advanced Network.

We host shared services and resources that our members access every day. High-speed connections to BCNET's Advanced **Network will** enable the delivery of more content and resources faster. cheaper and more efficiently to member libraries that are connected.

Ben Hyman Managing Director **BC Libraries Cooperative** 

\* new members

# our operational model

# governance, transparency, accountability

As a shared services organization, we continually evaluate our internal structure and processes to ensure we are delivering IT services the most optimal and efficient way possible. Here are the initiatives we undertook in 2012–2013 to improve our operational model and ongoing practices.

# WE ENHANCED OUR GOVERNANCE STRUCTURE TO ACCOMMODATE OUR EXPANDED MEMBERSHIP

In 2012, BCNET assembled a Governance Review Working Group comprised of representatives from new and existing member institutions. The group documented recommendations to modify voting, member classes, by-laws and new board committees to reflect the entire membership.

# WE EXPLORED THE ALIGNMENT OF SHARED IT SERVICES ORGANIZATIONS IN BRITISH COLUMBIA

This year, we formed a working group to explore the possibility of aligning BCNET with HEITBC, a shared services organization for public post-secondary institutions. The group discussed opportunities to put into operation an integrated organization with a range of combined services. They documented the benefits of a single entity that could offer lower overheads, increased service offerings, improved procurements, greater collaboration across the sector and a single governance and membership structure. Additionally, they discussed the possibility of an integrated network across the entire post-secondary sector in B.C.

## WE INVOLVE OUR MEMBERS IN OPERATIONAL PLANNING AND BUDGETING

We use a rigorous, structured and collaborative strategic planning process to drive our priority roadmap and operational plan. Each year, that planning process includes our entire staff and member stakeholders who provide direction and input to our strategies and goals.

#### WE FOSTER A CULTURE OF TRANSPARENCY

We cultivate an environment of openness and transparency. We use Confluence, a team collaboration software tool, to share operational plans, policies and procedures, governance and legal documents, project and service plans, and working group and committee documents with our entire community.

# WE ARE ACCOUNTABLE FOR A HIGH LEVEL OF SERVICE QUALITY AND PERFORMANCE

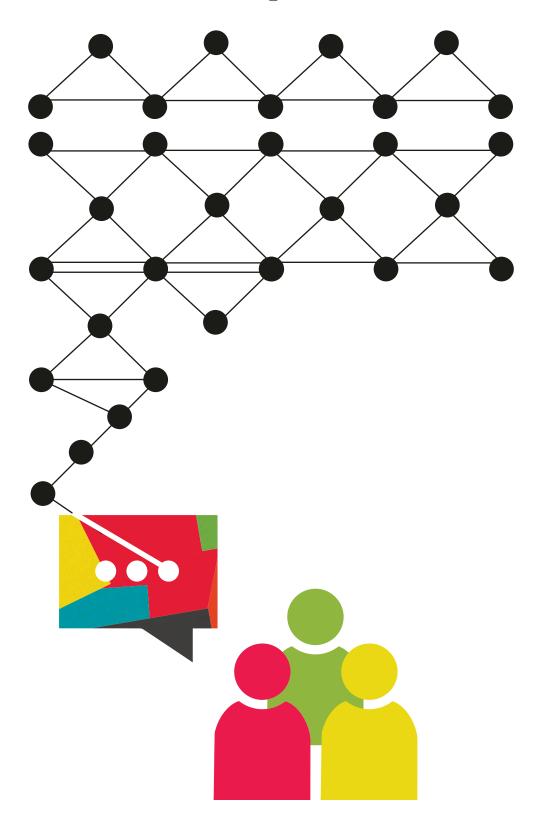
We track our progress and performance measurements, reporting to the Board three times a year.





# strategies

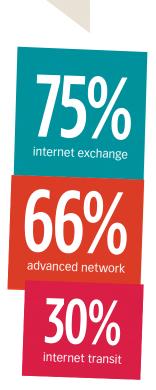
this year, we defined and executed six strategies



#### one

# expand and improve the advanced network

PERCENTAGE
OF MEMBERS
USING
BCNET
NETWORK
SERVICES



# WE ARE BUILDING BIGGER, FASTER AND MORE RESILIENT NETWORKS

Our core members expressed a need to improve network resiliency and safeguard against failures. We supported that goal by building diverse network infrastructure for campuses in the Vancouver region.

A member-led working group provided oversight for the project team that began building alternate network paths and an Internet Exchange Point in Surrey. Now 55 per cent complete, the new infrastructure will offer an alternate route outside Vancouver's Internet Exchange Point at Harbour Centre.

# WE ACTIVELY SEEK PARTNERSHIPS TO EXPAND OUR NETWORK INFRASTRUCTURE

We seek community partnerships to expand our reach and share existing fibre-optic infrastructure. We organized three meetings of 50 individuals from municipalities and organizations that are interested in sharing infrastructure in Metro Vancouver.

The UBC Faculty of Medicine relies on the rock-solid connections of BCNET's Advanced Network for delivering distributed education to students located across B.C. through interactive video conferencing. Last year alone, we logged 150,000 video conferencing hours in over 100 classrooms at four university sites and 25 hospitals.

The Advanced Network makes it possible for health professionals to have better access to education and knowledge-sharing opportunities, and allows them to dedicate their time to activities, such as clinical practice, in the communities where they live, rather than travelling.

Anthony Knezevic Senior Manager, Collaboration Technologies, MedIT Faculty of Medicine, UBC

#### WE IMPROVED NETWORK SECURITY AND RESILIENCY

Our members told us they needed to improve visibility into the network to assess security and trouble incidents, so in 2012 we implemented NetFlow Auditor, a real-time network traffic analyzer and monitoring solution.

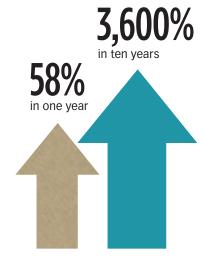
#### WE OPENED A NETWORKING TEST BED FOR THE FUTURE

- Jointly funded a MITACS internship program to support a test bed to trial LISP technology (Locator Independent Session Protocol) for network researchers at SFU.
- Provided network support for a 100G demonstration that smashed global records for data transfer at the Super Computing Conference in Salt Lake City, Utah, November 12-16, 2012.

#### WE BOOSTED COMMERCIAL INTERNET CAPACITY

We procured a single low-cost contract for commercial Internet service providing three times the capacity for our members and Western Canadian partners in Advanced Networking, including Cybera and SaskNet.

**ADVANCED NETWORK** TRAFFIC **GROWTH** 



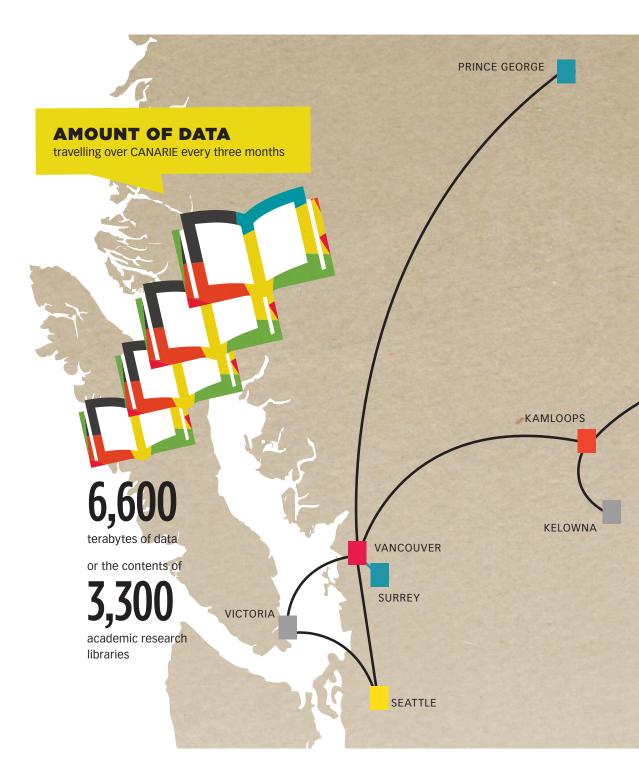
COMMERCIAL INTERNET CAPACITY BOOSTED TO



# the advanced network

The BCNET Advanced Network is one of the world's most advanced research and education networks. It is an ultra-high-speed fibre optic network that spans 2,029 kilometers across British Columbia.

BCNET's Network links to CANARIE, Canada's national backbone, which stretches 19,000 kilometers across Canada. The Canadian Advanced Network links researchers and educators to a worldwide web of 112 private research networks reaching over 80 countries.



#### **BCNET MEMBERS ARE AMONG** CANARIE'S TOP 30 USERS IN 2012-2013

Their annual network traffic is measured in terabytes.

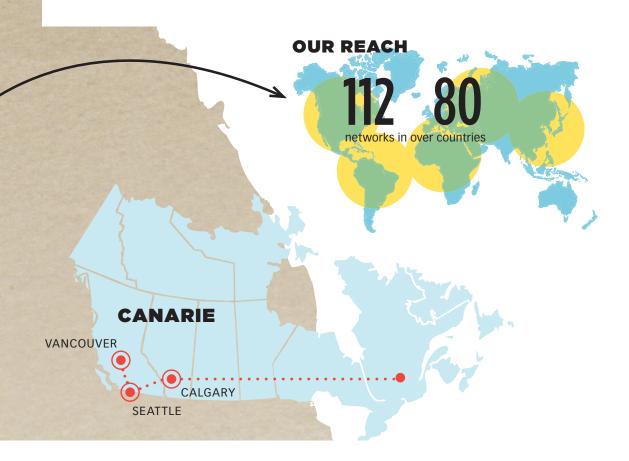
- I TRIUMF **9,189**
- I University of British Columbia 1,349
- I University of Victoria 541
- I Simon Fraser University 429
- I BC Genome Sciences Centre 107

# of the advanced network

We serve as a fibre holding company, providing a means for our member community to acquire fibre optic networks.

BCNET core members pay a combined annual rate of \$1.7 million for fibre optic advanced network service that has an estimated market rate of \$3.4 million for the equivalent level of high-speed service.





## two

# provide cost-effective shared solutions

#### **SAVINGS**

**50/0**on average, under the Microserve MSA contract

\$334,000 a year by members using HDVC\*

> \*based on aggregating port costs versus each institution purchasing their own service





# WE INTRODUCED STANDARDIZED DESKTOP AND LAPTOP PURCHASING

Members told us they wanted to decrease workstation costs and streamline the management of multiple contracts by aggregating the purchase of desktop and laptop computers across institutions. In 2013, we signed a Master Supply Agreement (MSA) with Microserve to provide a central point of purchase.

# WE NEGOTIATED LOW-COST SOFTWARE LICENSING PROCUREMENT

In 2012, we signed an MSA with Long View Systems, an IT solutions and services company. Our agreement offers members a pre-negotiated price and service contract for low-cost software licensing and hardware maintenance with market-leading software and hardware vendors.

# WE RENEWED HIGH-DEFINITION MULTI-PARTY VIDEO CONFERENCING (HDVC) FOR MEETING COLLABORATION

In 2013, BCNET pre-paid \$88,000 to renew a one-year service contract for Blue Jeans Network that aggregates video conferencing services on behalf of our members. This cloud-based service lets up to 25 people at a time connect to meetings from their desktop, helping improve meeting collaboration, and reduce travel time and costs.

While defining our workstation requirements, participants of the working group discovered our common need for price, flexibility, quality of service and reliability. The discussions were spirited and everyone was free to participate, and share issues equally. Over the course of the meetings, we built trust and agreed on Microserve as the preferred vendor for procuring desktops and laptops.

Michele Morrison Client Services Manager, IT Services, BCIT

#### LOOKING AHEAD

We are planning the development of five new services for 2013-2014

- High-definition video conferencing for distributed teaching and learning
- Email as a service
- Cloud computing
- Dropbox solution
- Survey tool

#### SUPPORTING OUR MEMBERS' SERVICE NEEDS

Throughout the year, BCNET Client Services engages our members to discuss their current and future service requirements, provide support and improve delivery and adoption.

#### **HDVC:** REDUCING TRAVEL TIME **AND COSTS**

17 members used HDVC in 2012-2013

> **HDVC** meetings held this year

Increase in HDVC meetings this year

versus last year

**Participants** in HDVC calls



**UBC** signed up for BCNET procurement services. providing us with the option to participate in all procurements and get the lowest available price. This year, we realized significant cost savings on software licensing without reducing the volume of software purchased.

Michael Thorson Director, Infrastructure Information Technology **UBC** 

There has been a steady influx of users for **BCNET's high**definition video conferencing service at SFU. Faculty and staff use the service for meetings between distant campuses, thesis defence and job interviews. It's simple and easy for IT staff to administer. as users can manage their own meetings and it provides flexible and easy video conferencing from any device.

Corey Kirk Technology Coordinator IT Services, SFU

#### SERVICE USE BY THE NUMBERS

The number of members using BCNET's services has grown this year, even though procurement services were launched later in the fiscal year.

# HOW ARE MEMBERS USING BCNET'S SERVICES?

80%

**PROCUREMENT SERVICES** 

**45%** 

NETAPP HARDWARE PROCUREMENT

2%

**SOFTWARE PROCUREMENT** (launched in 2012)

2%

DATA BACKUP AND STORAGE

05% CLOUD VIDEO CONFERENCING SERVICE

# three

# communicate value

#### WE PROMOTE OPENNESS AND TRUST

BCNET communicates with members throughout the year, sharing our plans, services, progress and value.

- I Blogs 3,477 impressions
- I Social media 612 followers
- I Website 29,000 unique visitors/month

CONFERENCE PROFILE: **PLUGGING INTO HIGHER EDUCATION IT** APRIL 30-MAY 1, 2013

blogs! wiki! bc.net

#### IT MANAGEMENT **PROFESSIONALS**

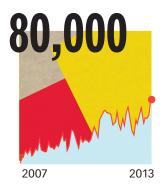
Our 13th annual conference for higher education IT brought together 500 IT management professionals from public post-secondary institutions across the province.

#### SURVEYED **PARTICIPANTS**

said conference was "excellent" or "good".

# four

# improve organizational effectiveness



# BCNET MONTHLY WIKI PAGES VIEWS

80,000 page events viewed in April 2013 alone

#### **POWERING COLLABORATION**

This year we upgraded our BCNET Wiki, a team collaboration software tool, to provide a simpler user editing experience.

#### WE IMPROVED OUR PRIVATE ONLINE CLIENT PORTAL

Over the past year, we revised our legal service agreements to better execute contract renewals with new and existing members. Members use the portal 24/7 to access contracts, service level agreements and network traffic statistics.



# five

# ongoing network operations

#### INTERNET EXCHANGES SUPPORT A THRIVING DIGITAL ECONOMY

Operated by BCNET since 2006, Internet Exchange Points (IXPs) are open, powerful, high-performance network platforms. IXPs are the break-out points for the Advanced Network in Vancouver, Victoria, Kelowna, Kamloops and Prince George.

At each IXP any network can interconnect, peer locally and access a marketplace to buy and sell services. IXPs reduce lag time, increase speed, and foster business development in the cities where they operate.

#### **NEW PARTICIPANTS**

#### Vancouver Internet Exchange

- Hurricane Electric
- Distributel

#### Kelowna Internet Exchange

Provision Data Systems Inc.

#### **SERVICE LEVELS 2012-13**

A consortium of network engineers from campuses across B.C. supports the network and ensures reliability.

#### **COMMERCIAL INTERNET** TRAFFIC DIVERTED

through bilateral peering agreements, reducing costs and improving network performance.

#### **COMMERCIAL INTERNET AVAILABILITY**

Average percentage of time from April 2012–March 2013 that Internet services were available at each Internet Exchange. Internet downtime includes scheduled maintenance, unscheduled outages and periods of uncollected data.

#### **NETWORK SUPPORT**

We leverage resources and services from University of British Columbia's Network Operations Centre to provide continuous network support.

#### **ADVANCED NETWORK** AVAILABILITY

Average percentage of time from April 2012–March 2013 that the CANARIE network was available to BCNET. Downtime includes scheduled maintenance, unscheduled outages and periods of uncollected data. Lightpath connectivity is not included.

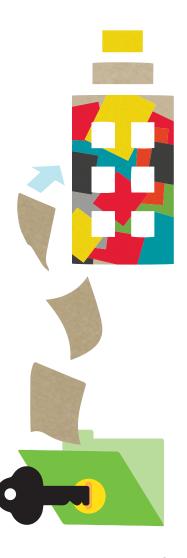
**PEERING AT B.C.'S INTERNET EXCHANGES IS GOOD FOR OUR ECONOMY** 

- Delivers Internet infrastructure that creates positive economic conditions for a thriving digital economy
- Bolsters B.C. and Vancouver as a leadingedge, high-tech hub
- Reduces lag time and increases Internet traffic speed
- Decreases Internet costs and boosts performance



### six

# ongoing IT and shared services operations





eduroam supports access to secure wireless networking on campuses across Canada and the world. Our IT experts oversee the day-to-day operation of BCNET services and provide internal IT support.

#### WE IMPROVED THE STORAGE CAPACITY OF DATA-SAFE

This year, we ordered, installed and tested equipment for our shared data backup service, DATA-SAFE, which is located at Thompson Rivers University. The service is fully operational with 400 terabytes of storage for members to safely store their secondary data outside the earthquake zone.

# WE TRANSITIONED THE OPERATION OF EDUROAM TO CANARIE'S CANADIAN ACCESS FEDERATION

Eduroam provide single sign-on access to campus wireless networks for students, faculty and staff when visiting any eduroam-enabled Canadian, European or Asia Pacific higher education campus. The service allows a user to log on to the Internet simply by using their home institution credentials.

Over the past year, we moved the operation of eduroam to CANARIE's Canadian Access Federation, which supports easy single-identity and single-password access to wireless networks and specialized resources for institutions across Canada.

In 2008, BCNET was the principal organization in Canada that operated the educational roaming service, and our members were the first institutions to join. BCNET's members were the key driving force behind the adoption of eduroam across Canada. As a growing number of Canadian institutions joined eduroam, we transferred the operation of the service to CANARIE's nationally focused organization. Today, there are 61 higher education and research institutions across Canada that use eduroam, and 16 of the users are BCNET members.

# WE IMPROVED STORAGE CAPACITY FOR SHARED SERVICES

This year we planned to purchase and install high-capacity storage equipment at our Internet Exchange Points in Vancouver and Kelowna to improve the storage capacity to deliver shared IT services.

# our people board of directors

#### **CHAIR**

#### Jay Black

Chief Information Officer Simon Fraser University

#### SECRETARY/TREASURER

#### Cliff Neufeld

Vice President Administration and Finance Thompson Rivers University

#### **BOARD MEMBERS**

#### **Eileen Bray**

Vice President Administration and Finance University of Northern **British Columbia** 

#### Dr. Ron Burnett

President and Vice Chancellor **Emily Carr University** of Art + Design

#### **Gregory Condon**

Chief Information Officer University of Northern British Columbia

#### **Lucy Cross**

Senior Director **Product Management and Business Development** 

**Shaw Business** 

#### **Dr. Claire Cupples**

Dean, Faculty of Science Simon Fraser University

#### Dr. Kim Dotto

Dean, Applied Research and Innovation

British Columbia Institute of Technology

#### **Tim Draper**

Vice President

Enterprise Solutions B.C.

**TELUS** 

#### **Steve Grundy**

Vice President

Academic and Provost Royal Roads University

#### Oliver Grüter-Andrew

Chief Information Officer University of British Columbia

#### Michael Hrvbvk

President and CEO

**BCNET** 

#### Jeff Hunter

Chief Information Officer Northern Health Authority

#### **Steve Kinsey**

Vice President Sales and Operations Western Canada Cisco Systems Inc.

#### Stephen Lamb

Chief Information Officer British Columbia Institute of Technology

#### **Brian MacKay**

Associate Vice President and Chief Information Officer Information Technology Services

Thompson Rivers University

#### Dr. Michael Miller

Associate Vice President Research, Computer Science University of Victoria

#### **David Nikolejsin**

Associate Deputy Minister and CIO, BC Ministry of Labour Citizens' Services and Open Government

#### **David Schade**

Principal Research Officer and Group Leader Canadian Astronomy Data Centre, Herzberg Institute of Astrophysics National Research Council

#### **Peter Smailes**

Treasurer

University of British Columbia

#### **Paul Stokes**

**Chief Information Officer** University of Victoria

#### **Yvette Wells**

Associate Partner **Financial Services IBM** Canada

# our people

# advisory committees

#### APPLICATIONS ADVISORY COMMITTEE

#### Paul Stokes, UVic (Chair)

Frances Atkinson, SFU
Steve Beaudry, RRU
Hugh Burley, TRU
Gregory Condon, UNBC
Dean Crawford, BCNET
Dave Cresswell, BCIT
Michael Hrybyk, BCNET
Valerie Irvine, UVic
Michael LeBlanc, UBC
Keir Novik, SFU/BCNET
Corey Scholefield, UVic
Sean Walsh, BCIT

#### AUDIT COMMITTEE

#### Peter Smailes, UBC (Chair)

Gregory Condon, UNBC Lucy Cross, Shaw Business Michael Hrybyk, BCNET Steve Kinsey, Cisco Systems Cliff Neufeld, TRU

## **EXECUTIVE COMMITTEE**

#### Jay Black, SFU (Chair)

Eileen Bray, UNBC
Gregory Condon, UNBC
Gayle Gorrill, UVic
Steve Grundy, RRU
Oliver Grüter-Andrew, UBC
Michael Hrybyk, BCNET
Stephen Lamb, BCIT
Cliff Neufeld, TRU
Paul Stokes, UVic

#### FINANCE COMMITTEE

#### Cliff Neufeld, TRU (Chair)

Jay Black, SFU
Gregory Condon, UNBC
Michael Hrybyk, BCNET
Jeremy Jarvis, BCNET
Stephen Lamb, BCIT
Peter Smailes, UBC
Paul Stokes, UVic

#### IT INFRASTRUCTURE ADVISORY COMMITTEE

# Oliver Grüter-Andrew, UBC (Chair)

Chris Brougham, ECUAD
Wesley Cole, TRU
Lorenzo Costantino, SFU
Jim Cranston, Consultant
Dean Crawford, BCNET
Michael Hrybyk, BCNET
Ron Kozsan, UVic
Kim Lewall, UVic
Jag Madan, VCC
Glen Montgomery, UNBC
Randy Raine, SFU
Michael Thorson, UBC
Sean Walsh, BCIT

#### NETWORK PLANNING ADVISORY COMMITTEE

#### Brian Mackay, TRU (Chair)

Hugh Burley, TRU Stefan Cioata, BCIT Lorenzo Costantino, SFU Mike Edel, Shaw Communications Jim Ghadbane, CANARIE Marilyn Hay, UBC/BCNET Geoffrey Holan, TELUS Michael Hrybyk, BCNET Ron Kozsan, UVic Dave Kubert, UNBC Don McWilliam, UBC/BCNET Parker Moore, BC Hydro Victor Tavares. Juniper Networks Sean Wang, UBC

#### RESEARCH ADVISORY COMMITTEE

#### David Schade, Herzberg (Chair)

Dean Crawford, BCNET Kim Dotto, BCIT Will Garrett-Petts, TRU Norbert Haunerland, SFU Marilyn Hay, UBC/BCNET Mohamed Hefeeda, SFU Michael Hrybyk, BCNET Peter Jackson, UNBC Martin Kirk, UBC Tamara Klein, BCNET Michael Miller, UVic James Rout, ECUAD Alan Wagner, UBC

# industry partners

#### **PLATINUM**



#### GOLD



















#### SILVER





















# financial highlights an overview of the year

This was a successful year. BCNET enhanced its portfolio of shared services while continuing to expand and upgrade the Advanced Network with an additional investment of \$2 million.

The results for the year were close to budget. Unanticipated legal costs associated with arbitration with a provider resulted in a loss of \$119,000.

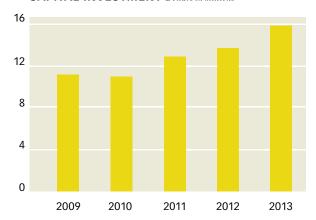
Revenues were stable at \$5 million, 50 per cent of which was provided by BCNET's founding and core members. Remaining revenues were generated in equal part from government grants and other services provided to other members.

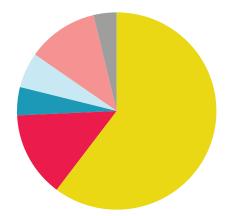
The Advanced Network continues to consume most of BCNET's resources, with 60 per cent of expenditures allocated to network connections, management and equipment. Shared services and transit and applications accounted for 19 per cent of expenditures, while office, management staff and administrative costs were 12 per cent of total expenses. The investment in shared services has been possible in part due to reduced depreciation costs on fully amortized fibre cable.

The organization has a healthy balance sheet, with approximately \$2 million in net cash and investments set aside for committed capital expenditures and investment in service provision over the next few years. Approximately \$12 million is currently invested in the fibre network, 50 per cent of which has been funded by federal and provincial grants.

BCNET is well positioned to manage its expanded membership and mandate.

#### **CAPITAL INVESTMENT** Dollars in millions



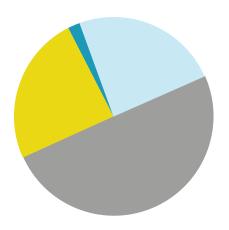


#### **BCNET 2013 EXPENDITURES**

Network	3,149
Transit	732
<ul> <li>Applications &amp; Shared Services</li> </ul>	241
<ul><li>Marketing</li></ul>	303
Office & Administration	604
Other	196

#### **BCNET 2013 REVENUES**

Government Grants	1,222
Core Members	2,544
<ul> <li>Non Core Member Services</li> </ul>	1,239
• Other	101

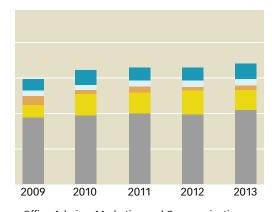


#### **REVENUE TRENDS**



#### • Other income • Grants • Other Services • Members

#### **EXPENDITURE TRENDS**



- Office Admin Marketing and Communications
- Shared Services Transit Network

# financial statements

for the year ended march 31, 2013





#### Management's Responsibility for Financial Reporting

The financial statements and the information contained in the annual report are the responsibility of the management of BCNET. The financial statements have been prepared in accordance with Canadian accounting standards for not-for-profit organizations.

The financial statements include, where appropriate, estimates based on the best judgment of management. Financial and operating data elsewhere in the annual report is consistent with that contained in the accompanying financial statements.

As part of its responsibilities, BCNET maintains systems of internal accounting and administrative controls of high quality, consistent with reasonable cost. Such systems are designed to provide reasonable assurance that the financial information is relevant, reliable and accurate, and that BCNET's assets are appropriately accounted for and adequately safeguarded.

The Board of BCNET carries out its responsibilities with regard to the financial statements mainly through its Audit Committee (the "Committee"). The Committee reviews the annual financial statements and other information contained in the annual report and recommends them to the Board for approval. The Committee meets periodically with management and external auditors. Following these meetings, the Committee meets privately with the auditors to ensure free and open discussion of any subject the Committee or the auditors wish to pursue. The Committee also recommends the engagement or re-appointment of the external auditors, review of scope of audit and approves the fees of the external auditors for audit and non-audit services.

The financial statements, audited by BDO Canada LLP, have been approved by the Board, on the recommendation of the Audit Committee.

Signed by:

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hief Financial Office

Board Chair

Date: June 20, 2013



Tel: 604 688 5421 Fax: 604 688 5132 vancouver@bdo.ca www.bdo.ca BDO Canada LLP 600 Cathedral Place 925 West Georgia Street Vancouver BC V6C 3L2 Canada

#### **Independent Auditor's Report**

# To the Members of BCNET

We have audited the accompanying financial statements of BCNET (the "Corporation"), which comprise the statement of financial position as at March 31, 2013, March 31, 2012 and April 1, 2012 and the statements of operations, changes in net assets and cash flows for the years ended March 31, 2013 and March 31, 2012, and a summary of significant accounting policies and other explanatory information.

#### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian accounting standards for not-for-profit organizations, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Corporation's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Corporation's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of the Corporation as at March 31, 2013, March 31, 2012 and April 1, 2012, and the results of its operations and its cash flows for the year then ended in accordance with Canadian accounting standards for not-for-profit organizations.

500 Canada UP

**Chartered Accountants** 

Vancouver, British Columbia June 20, 2013

BDO Canada LLP, a Canadian limited liability partnership, is a member of BDO International Limited, a UK company limited by guarantee, and forms part of the international BDO network of independent member firms.

# statement of **financial position**

	March 31, <b>2013</b>	March 31, <b>2012</b>	March 31, <b>2011</b>
ASSETS			
Current			
Cash and cash equivalents	3,133,073	1,567,224	2,621,121
Accounts receivable	1,483,786	178,020	92,361
Government remittances receivable	-	424,467	37,743
Prepaid expenses	384,603	389,518	350,887
Current portion of prepaid deposit on fibre (note 3)	33,548	55,890	44,821
	5,035,010	2,615,119	3,146,933
Capital assets (note 5)	7,010,828	6,328,405	5,474,269
Prepaid deposit on fibre (note 3)	214,552	229,099	78,368
	12,260,390	9,172,623	8,699,570
LIABILITIES AND NET ASSETS			
Current			
Accounts payable and accrued liabilities	1,044,513	99,372	264,313
Government remittances payable	50,705	-	-
Current portion of long term debt (note 5)	97,005	92,783	88,745
	1,192,223	192,155	353,058
Long-term debt (note 4)	555,398	652,403	745,186
Deferred grants (note 6)	4,227,389	4,644,121	3,961,786
Deferred revenues (note 7)	3,087,375	367,248	339,196
	9,062,385	5,855,927	5,399,226
Net assets	3,198,005	3,316,696	3,300,344
	12,260,390	9,172,623	8,699,570

Related party transaction (note 10). Commitments (note 11) Contingency (note 12)

Approved:

PETER SMAILES
DIRECTOR, BCNET

MICHAEL HRYBYK DIRECTOR, BCNET

# **statement of operations** for the year ended march 31

	Г	
	2013	2012
REVENUES		
Local metro circuits	1,850,620	1,852,220
Transit	865,485	1,121,601
Grant revenue	1,222,465	1,068,204
Transit exchange	998,194	879,985
Partner and sponsor revenue	60,000	50,000
Interest revenue	30,488	32,060
Installations	68,200	66,660
Eduroam fees	10,800	10,800
	5,106,252	5,081,530
EXPENSES (SCHEDULE)		
Cost of services	2,024,261	2,063,268
Staffing	1,573,939	1,441,772
Equipment and software	1,092,532	1,012,024
Operating expenses	534,211	548,114
	5,224,943	5,065,178
Excess of revenues over expenses for the year	(118,691)	16,352

# statement of changes in net assets for the year ended march 31

	CAPITAL ASSETS NOT FUNDED BY GRANTS (NOTE 8)	INTERNALLY RESTRICTED (NOTE 9)	UNRESTRICTED	2013	2012
NET ASSETS, beginning of year	2,455,073	932,675	(71,052)	3,316,696	3,300,344
Excess (deficiency) of revenues over expenses for the year	(879,832)	(66,667)	827,808	(118,691)	16,352
Acquisition of capital assets	2,083,519	-	(2,083,519)	-	-
Net assets, end of year	3,658,760	866,008	(1,326,763)	3,198,005	3,316,696

# statement of cash flows

# for the year ended march 31

	2013	2012
Cash provided by (used in)		
OPERATING ACTIVITIES		
Cash received from clients	5,509,128	3,533,488
Cash paid for transit and local loop	(1,018,803)	(1,176,977)
Cash paid for hardware and software maintenance	(564,088)	(557,908)
Cash paid for staffing	(1,476,884)	(1,557,226)
Cash paid for operation	(502,894)	(457,556)
Cash received from sponsors	100,440	72,060
Interest paid	(2,014)	(8,287)
	2,044,885	(152,406)
FINANCING ACTIVITIES		
Cash received from grants	963,008	1,676,045
Loan repayment	(92,783)	(88,745)
	870,255	1,587,300
INVESTING ACTIVITIES		
Purchase of fibre	(342,486)	(1,326,210)
Purchase of capital equipment	(1,006,775)	(1,162,581)
	(1,349,261)	(2,488,791)
Cash and cash equivalents movement for the year	1,565,849	(1,053,897)
Cash and cash equivalents, beginning of year	1,567,224	2,621,121
Cash and cash equivalents, end of year	3,133,073	1,567,224
Cash and cash equivalents consist of		
Cash in bank	1,702,607	155,041
Temporary investments	1,430,466	1,412,183
	3,133,073	1,567,224

# notes to the financial statements

march 31, 2013

#### 1. NATURE OF OPERATIONS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### (a) Nature and Purpose of the Organization

BCNET's purpose is to provide its members in the education and research community in British Columbia with cost-effective shared solutions that place them at the forefront of information and communication technology innovation.

BCNET Networking Society was incorporated under the British Columbia Society Act on July 31, 1995 as a not-for-profit organization. BCNET (the "Corporation") was federally incorporated under Part II of the Canada Corporations Act by Letters Patent dated September 29, 2005, and acquired all the assets and liabilities of its predecessor organization BCNET Networking Society as of April 1, 2006.

#### (b) Basis of Accounting

The financial statements have been prepared using Canadian Accounting Standards for Notfor-Profit Organizations ("ASNPO"). These are the Corporation's first financial statements prepared in accordance with ASNPO which have been applied retrospectively. An explanation of how the transition to ASNPO has changed the Corporation's financial position, financial performance and cash flow is set out in Note 2.

#### (c) Cash and Cash Equivalents

Cash and cash equivalents are comprised of the amounts held in the Corporation's bank accounts and mutual funds.

#### (d) Capital Assets and Amortization

Capital assets are recorded at cost. Amortization for general capital assets is provided annually on a straight-line basis using a three-year useful life. Fibre is amortized over a period of ten years. Capital assets not in service are not amortized.

#### (e) Prepaid Deposit on Fibre

Prepaid deposit on fibre is amortized over the term of the service.

#### (f) Revenue Recognition

Revenue from the provision of services is recorded upon completion of performance. Performance is considered complete upon service being provided.

The Corporation follows the deferral method of accounting for revenues and grants.

Restricted funds are recognized as revenue in the year in which related expenses are incurred. Unrestricted revenues and grants are recognized as revenue when received or receivable.

Deferred grants for capital acquisitions are recognized as revenue on the same basis as the acquired assets are amortized.

"Transit" is the Internet traffic purchased by BCNET from internet providers on behalf of its clients.

"Local Metro Circuits" are the dedicated circuits between BCNET clients and the transit exchanges over which network services are delivered.

#### (g) Use of Estimates

The preparation of financial statements in accordance with Canadian accounting standards for Not-for-Profit Organizations requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from management's best estimates as additional information becomes available in the future.

#### (h) Financial Instruments

Financial instruments are recorded at fair value when acquired or issued. In subsequent periods, equities traded in an active market as well as bonds and guaranteed investment certificates are reported at fair value, with any unrealized gains and losses reported in operations. All other financial instruments are reported at cost or amortized cost less impairment, if applicable. Financial assets

are tested for impairment when changes in circumstances indicate the asset could be impaired. Transaction costs on the acquisition, sale or issue of financial instruments are expensed for those items remeasured at fair value at each statement of financial position date and capitalized to the financial instrument for those measured at amortized cost.

#### 2. ADOPTION OF ACCOUNTING STANDARDS FOR NOT-FOR-**PROFIT ORGANIZATIONS**

Effective April 1, 2012, the Corporation adopted the requirements of the new accounting framework, Canadian Accounting Standards for Not-For-Profit Organizations (ASNPO) or Part III of the requirements of the Canadian Institute of Chartered Accountants (CICA) Handbook. These are the Corporation's first financial statements prepared in accordance with this framework. The accounting policies set out in Note 1, Significant Accounting Policies have been applied in preparing the financial statements for the year ended March 31, 2013, the comparative information presented in these financial statements for the year ended March 31, 2012 and the preparation of an opening ASNPO balance sheet at the date of transition of April 1, 2011.

The Corporation issued financial statements for the year ended March 31, 2012 using general accepted accounting principles prescribed by the CICA Handbook, Accounting Part V, Prechangeover Accounting Standards. The adoption of ASNPO resulted in no adjustments to the previously reported assets, liabilities, equity, excess of revenue over (under) expenses and cash flows of the Corporation. As such, there are no charges to net assets at the date of transition of April 1, 2011. Excess of revenue over (under) expenses reported in the Corporation's most

recently issued financial statements is the same as the excess of revenue over (under) expenses under ASNPO for the same period.

#### 3. PREPAID DEPOSIT ON FIBRE

The Corporation has entered into fibre agreements for periods of between ten and twenty years for the use of IRU Fibres to service its members. The Corporation is amortizing these costs over the term of the agreements.

#### 4. LONG-TERM DEBT

Loan advanced from University of Victoria repayable in semi-annual installments of \$62,642 including interest of 4.5% per annum, maturing March 31, 2019 with a provision to pay down without penalty.

Owing	555,398	652,403
Less current portion	97,005	92,783
Loan	652,403	745,186
	2013	2012

The aggregate amount of principal repayments required in the next six years on the above indebtedness is as follows:

	652,403
2019	121,179
2018	115,905
2017	110,860
2016	106,035
2015	101,419
2014	97,005

#### 5. CAPITAL ASSETS

'Fibre' refers to certain dark fibre circuits connecting member organizations that have been purchased or acquired through Indefeasible Right of Use (IRU) and lease agreements.

	•			
Total	15,709,488	8,698,660	7,010,828	6,328,405
Fibre	11,051,696	6,388,556	4,663,140	5,182,569
Capital Assets, General Components	4,657,792	2,310,104	2,347,688	1,145,836
	COST	ACCUMULATED AMORTIZATION	2013 NET BOOK VALUE	2012 NET BOOK VALUE

# notes to the financial statements

march 31, 2013

#### 6. DEFERRED GRANTS

Restricted for the development and support of the Optical Regional Advanced Network.

	4,227,389	4,644,121
Ministry of Advanced Ed.	2,334,589	2,563,531
CANARIE	1,892,800	2,080,590
	2013	2012

#### 7. DEFERRED REVENUES

Restricted for specific purposes and will be amortized into income as expenses are incurred.

Other	2,980,095	210,678
	3,087,375	367,248
Other		
CANARIE	107,280	156,570
	2013	2012

# 8. CAPITAL ASSETS NOT FUNDED BY GRANTS

The Corporation's investment in capital assets is funded either through grants received from CANARIE and from the Ministry of Advanced Education, or internally from revenues generated by the Corporation. The unamortized balance of those assets that are funded internally is segregated to reflect the funds committed to cover their future amortization expense.

#### 9. INTERNALLY RESTRICTED NET ASSETS

On March 31, 2007, an allocation of \$1,000,000 was made to be used for risk contingency and future network enhancements. To date, \$133,912 of the internally restricted funds have been used.

#### 10. RELATED PARTY TRANSACTIONS

During the year, the Corporation entered into the following transactions with its members:

Service revenue in the amount of \$4,502,064 (2012: \$4,428,250) was received in the normal course of operations. The Corporation also paid management fees, networking fees, rent and meeting costs to member associations in the amount of \$1,201,172 (2012: \$1,037,620).

As at March 31, 2013, the Corporation had receivables from its members totaling \$1,386,656 (2012: \$113,849) included in accounts receivable.

As at March 31, 2013, the Corporation had payables to its members totaling \$6,366 (2012: \$21,882) included in accounts payable.

The Corporation acquired capital assets from members totaling \$Nil (2012: \$331,816).

On April 1, 2009 the Corporation received a term loan from a member. In the current year term loan principle and interest payments totaling \$125,284 (2012: \$125,284) were made to a member.

These transactions are in the normal course of operations and are measured at the fair market value established and agreed to by the related parties.

#### 11. COMMITMENTS

The Corporation has operating obligations totaling \$1,611,528 that extend to September 2029.

The annual payments due for the next five years and thereafter are as follows:

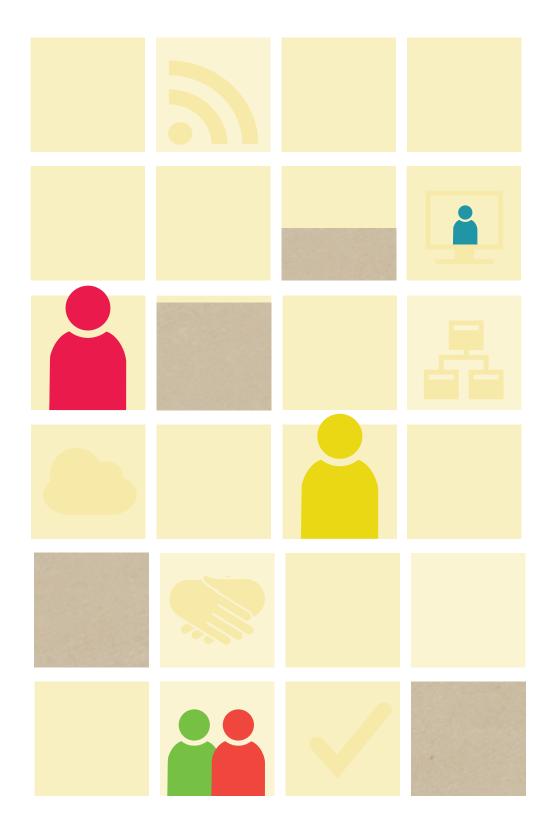
	1,611,528
Thereafter	865,974
2018	45,311
2017	46,125
2016	62,886
2015	127,545
2014	463,687

#### **12. CONTINGENCIES**

During the year, BCNET was engaged in an arbitration with a provider regarding the extension of an IRU agreement on certain fibres. BCNET was successful at the arbitration, however, the provider is seeking permission from a court to appeal the arbitrator's decision. If permission to appeal is granted and the arbitration ruling is overturned by the court, BCNET may incur a contingent loss, the estimated amount of which cannot be determined at this time.

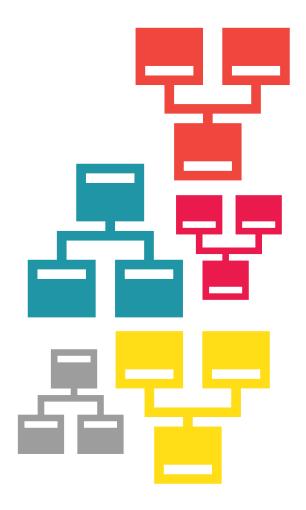
# schedule of expenses for the year ended march 31

	2013	2012
COST OF SERVICES		
Circuit costs	1,108,259	1,026,600
Inter-city connections	179,219	171,779
IT projects	5,215	18,246
Transit	731,568	846,643
	2,024,261	2,063,268
STAFFING		
Administration	83,614	74,216
Client services	178,099	157,636
Consulting	74,353	40,191
Co-op students	44,435	44,597
Green IT	2,415	37,950
IT and applications support	131,346	145,536
Management	187,903	184,332
Shared services	102,320	-
Technical services	769,454	757,314
	1,573,939	1,441,772
EQUIPMENT & SOFTWARE		
Amortization	561,333	606,882
Repairs and Maintenance	531,199	405,142
	1,092,532	1,012,024
OPERATING EXPENSES		
Audit	15,100	16,305
Bad debts	-	30,263
Communications	124,763	113,049
Insurance	26,482	28,200
Interest	32,502	121,039
Legal fees	190,997	112,522
Miscellaneous	5,755	7,958
Office	24,407	22,833
	48,360	46,941
Rent		
Rent Travel and meetings	65,845	49,004









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