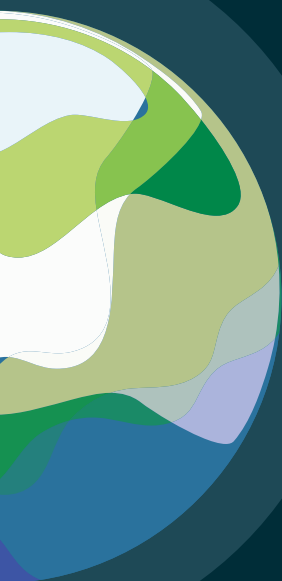


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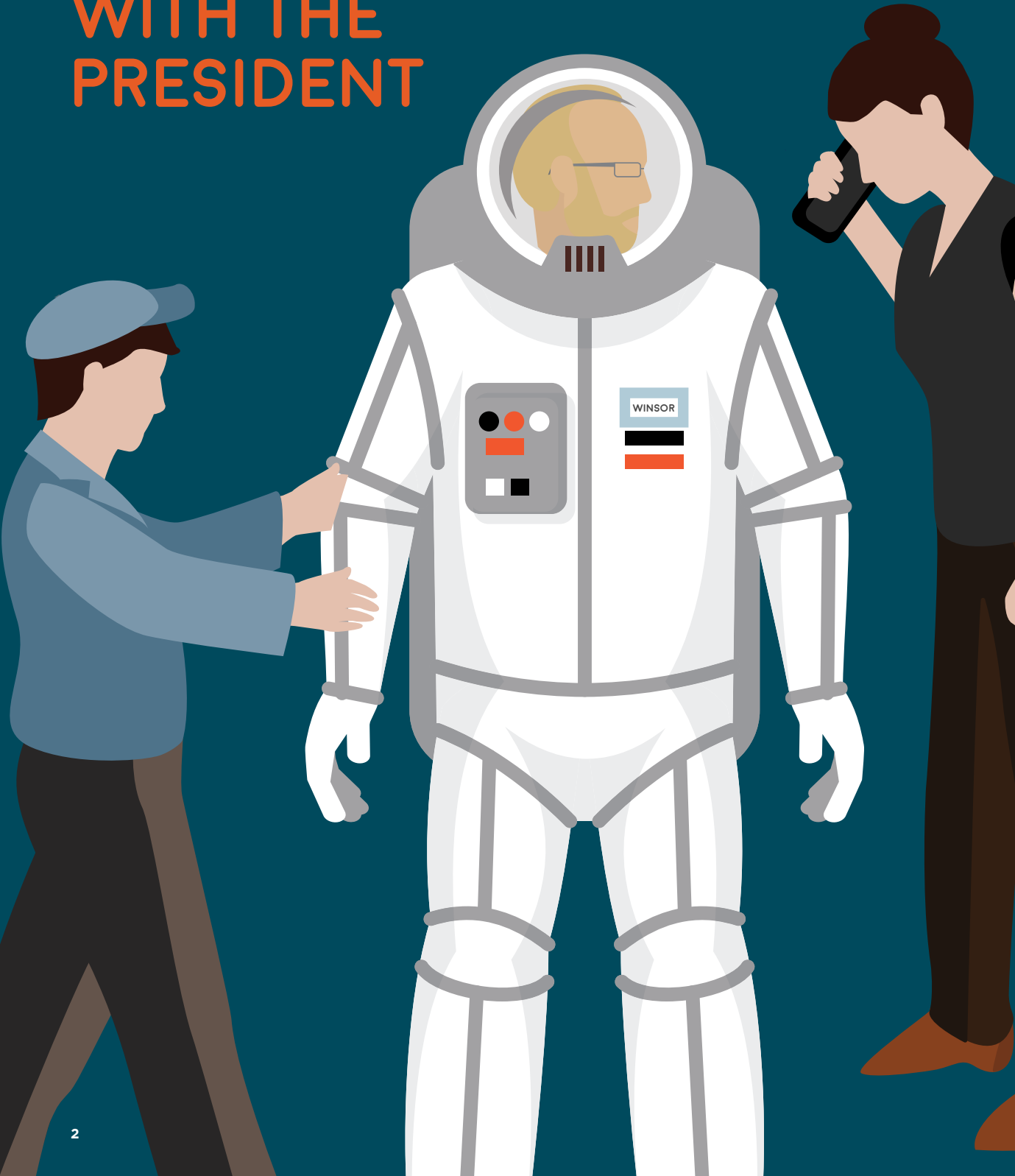


2016-17  
ANNUAL  
REPORT

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# CONVERSATION WITH THE PRESIDENT



What an invigorating year this has been, filled with new projects, new teams, new beginnings! In our 2016-19 strategy, I wrote about several rising technologies – including data science – that we foresee being of great benefit to the public sector. It is Cybera's job to not only maintain and provide access to existing research and innovation technologies in Alberta, but to also test and demonstrate the effectiveness of next-generation tools.

I'm pleased to report that Cybera's data science team has made some great achievements in its first year of deployment. After tackling the question of how broadband speeds compare across the country (hint: Alberta's doesn't compare well), they began several pilot data analytics projects with the Open Government Group at Service Alberta. This proved to be a fantastic collaboration, and one that continues today. We have also been approached by several groups – including educators, First Nations communities, and start-ups – who want our help to discover how data science can improve their ideas and operations.

Another major new achievement has been the ShareIT initiative, a ground-breaking collaborative effort that has brought together almost all post-secondary institutions in Alberta to share their IT procurement. The group has spent the past year identifying hardware needs – and contributing their knowledge and expertise – with the goal of increasing technology capabilities (and cost savings) in Alberta's institutions. The program will officially launch in Spring 2017, and I am thrilled to see the collaborative spirit that has been expressed by everyone involved. It is a great example of Albertans helping each other to create a stronger digital economy!

Looking to the future, we're seeing new approaches to computational science that are allowing people to do things never before thought possible. We can accurately simulate almost anything – from the big bang to the inner workings of an electron – without having to run a physical experiment. Using computational techniques, Alberta researchers are creating exciting new technologies and services, many of which show potential as new businesses. Unfortunately, the digital resources and infrastructure available to them grow scarce when they leave academia to start a new company.

This is an area where we see Cybera playing an increasingly important role.

We want to ensure that all Albertans are supported as they move from campus to commerce. We see the continued utilization of the Rapid Access Cloud (particularly with its new neural networking and digital testing services) as an important step in moving innovators further down the road to success. Our data science support will also play an important part, as will the other transformational tools and techniques we are exploring.

Making computational ideas work in the practical world takes a great deal of effort, but Cybera is there to help. Let's continue to work together to strengthen Alberta innovation!

Robin Winsor  
President & CEO

# CONNECT

In the last fiscal year, Cybera welcomed 13 new members to its community, nine of whom connected to CyberaNet. As well as access to the high-speed Research and Education Network, these organizations are utilizing network services that reduce costs and improve the efficiency of their internet. They are also collaborating on shared networking tools. Cybera's network services, alone, saved members over \$3 million in 2016-17. During this time, our team made great leaps in connecting Edmonton's public sector to better internet. We also initiated what we hope will be the first of many connections to First Nations communities.

## PEERING AND INTERNET BUYING GROUP

Cybera's members continue to utilize the Peering Service and Internet Buying Group to achieve major cost savings. Peering provides direct connections to major content providers (including Google, Akamai and Facebook). The Internet Buying Group is a bulk-buying bandwidth co-op, facilitated by Cybera. In the past fiscal year, we dropped the price of the Internet Buying Group from \$7.50/Mbps to \$3.75/Mbps.

## LINKING DOWNTOWN EDMONTON

Following several years of planning, Cybera and the City of Edmonton completed our "dark fibre" initiative in the city's downtown core. Utilizing existing City fibre, as well as the opportunity to lay fibre in the new underground transit tunnels, CyberaNet has extended its reach in the urban core. We now directly connect to Edmonton's Internet Exchange (YEGIX), as well as the campuses of NAIT, MacEwan University,

NorQuest College, and Concordia University. The connection to YEGIX will enable other members (including Edmonton Public schools) to gain access to CyberaNet, and through it, achieve faster and more efficient internet.

## FIRST NATIONS

As part of our 2016-19 strategic roadmap, Cybera has committed to bringing better internet to more Alberta communities — particularly those that are underserved. To this end, we have begun outreach to First Nations groups in Alberta to discuss possibilities for network connectivity and fostering technology adoption. In November 2016, Cybera connected the Stoney Education Authority to our network. With the new connection in place, Stoney has begun a virtual classroom pilot — something its administrators say they could not have done with their previous bandwidth capabilities.

## INTRODUCING "CY-FI" TO CALGARY START-UPS

In August 2016, Innovate Calgary unveiled a major benefit for its start-up tenants and visitors: one of the fastest internet connections in the city. Located in the University of Calgary's Research Park (across the field from Cybera's Calgary office), the incubator and small business enabler was able to connect to CyberaNet to support high-bandwidth innovation. Innovate Calgary now offers a Wi-Fi connection — nicknamed "CY-Fi" — of up to 400 Megabits per second (Mbps), with the potential to upgrade to over 1 Gigabit per second (Gbps). The goal of this collaboration (part of Cybera's CyberaNet for Innovators program) is to support the growth of new digital enterprises in the province.



## DID YOU KNOW?

According to comScore, Canadians spend more hours online (36.7 per month) than anyone else in the world. Online Canadians are also among the most diverse internet users, seeking out an average of 3,238 unique web pages per month.

# ENABLE

Cybera is exploring next-generation technologies (such as data science tools and services) that we believe will add new capabilities to Alberta's public sector. We also offer cloud infrastructure for innovators and researchers to test their ideas and learn how to use new digital resources.

## RAPID ACCESS CLOUD

Since its inception in 2013, this award-winning resource has helped over 1,000 people test and verify their ideas. Two examples of the varied ways Albertans have used the Rapid Access Cloud in the past year include: (1) A student project on wind mapping (built on Cybera's cloud resources) has now turned into a start-up company employing nine people, and (2) Astronomers at the University of Alberta ran simulations on the Rapid Access Cloud to discover one of the most unusual black hole behaviours ever witnessed (garnering international media attention).

Two resource additions to the Rapid Access Cloud in the past year have greatly expanded its capabilities. Graphics processing units (GPUs) have been made freely available, which will allow users to carry out deep learning and artificial intelligence work involving processing and visualizing massive volumes of data. We also rolled out an "Area 51" region of the cloud to trial experimental services with users, starting with a software defined networking (SDN) solution to create virtual routers and networks.

## DAIR

Since 2011, Cybera has partnered with CANARIE and Compute Canada to manage

the cloud infrastructure for CANARIE's DAIR program. This program provides small-to-medium-sized enterprises with a cloud environment to test, validate, and prove their product or service ideas. In the past year, Cybera's team added GPUs to the DAIR cloud, which will help Canadian businesses develop graphics-centric applications like gaming, video processing, and image recognition. Over 850 Canadian companies now use the DAIR program, 147 in Alberta alone.

## DATA SCIENCE

In the last year, Cybera launched a major new initiative, one that we feel will become a vital component of Alberta's digital ecosystem: a data science team. Our data scientists are encouraging the learning and adoption of data science practices through: (1) Collaborating on data science for social good projects; (2) Democratizing access to data science tools; (3) Advising and widely disseminating their knowledge and use of data products.

One of the first projects carried out by the data science team was a comparison of broadband upload/download speeds across the country, based on different network reports. What they found was surprising: Alberta ranked 10th in the country in average download speeds over the last three years. (More details on this study can be found at: [Cybera.ca/services/data-science/](http://Cybera.ca/services/data-science/))

The team also worked with the Open Government Group at Service Alberta to develop better understandings and capabilities for the province's Enterprise Analytics Strategy. Cybera analyzed datasets made available from four separate government departments, and reported on the insights they found, and how

they achieved those results. This collaborative effort proved so fruitful, the Open Government Group has committed to doing more projects with our data science team.

## JUPYTER 'ALL-IN-ONE' SCIENCE PLATFORM

Part of the mandate for Cybera's data scientists is to investigate and share new analytics tools. One of these is Jupyter, an integrative application that incorporates math, science and engineering tools — along with communication and visualization resources — in one web-based platform. Cybera and the Pacific Institute for the Mathematical Sciences have teamed up to increase the awareness and use of Jupyter. Cybera is hosting the platform on its Rapid Access Cloud, and is offering free access (and advice on how to get started) to Canadians looking to trial this technology.

## CREATING A DUTCH CLOUD

For the last three years, Cybera has built and maintained the OpenStack Cloud environment for The Netherlands' National Research and Education Network, SURFnet. The cloud is being used by staff there for development and testing

of new ideas. The Dutch organization reached out to Cybera for help after seeing staff present at an international OpenStack conference.

## SHARING OUR KNOWLEDGE

Cybera employs some of Canada's top minds when it comes to cloud computing, advanced networking, data science, IT procurement, and policy. This knowledge is made openly available through blog posts, consultations, presentations, and workshops. During the reporting period, Cybera delivered 19 talks at conferences and meetings. These included two workshops held at the 2016 Cyber Summit (on tools and techniques for data science and systems administration), and one cloud computing workshop in The Netherlands.

Our advisory services were also utilized by the Film and Video Arts Society of Alberta (FAVA), who consulted with us on building an app that allows media organizations to easily share videos and services. The FilmReel app has now been successfully put into production, and FAVA credits Cybera for showing them (a group of tech newcomers) how to move from ideation to creation.

## DID YOU KNOW?

According to consultancy firm IDC, the amount of data humans produce doubles every year. Currently, we are only analyzing 0.5% of that data.



# SHARE

## DID YOU KNOW?

70% of the world's developed countries utilize identity federations for research and education.

Sharing services helps Alberta's public sector reduce costs and streamline operations. Cybera has piloted several projects to help members adopt, build, and work collaboratively on IT tools and software.

### SHAREIT

ShareIT is an Alberta-based pilot service, facilitated by Cybera, that is pooling post-secondary institutions' hardware and software purchasing needs, thereby increasing their negotiating powers with third-party providers. In the last fiscal year, the pilot program (which was funded through the Alberta Association in Higher Education for Information Technology) brought together 16 post-secondary institutions to share needs and best practices, and draft vendor proposals for hardware and networking equipment. This work represents a significant collaborative effort by educators in the province, and early signs point to members being able to achieve major cost-savings. The ShareIT service will be officially launched in the 2017-18 fiscal year.

### FEDERATED IDENTITY MANAGEMENT FOR K-12

Federated Identity Management allows members at participating institutions to securely access a central catalogue of services and resources (such as Google Apps for Education) that operate within the same "trust framework". For post-secondaries, such a service is available through CANARIE, which operates the Canadian Access Federation. However, there is no such service available to K-12 schools in Alberta.

In 2015, Cybera engaged Alberta Education to develop an Alberta K-12 Federated Identity Management solution. The objectives of this project are to: (1) Conduct an environmental scan and make recommendations for an Alberta K-12 federation; (2) Develop a prototype federation; (3) Prototype the technical

implementation of this federation. This pilot (which is working with 12 school authorities) is expected to run until November 2017, when an official service will then be launched.

### EDUROAM

Education roaming (eduroam) is a secure, world-wide roaming access service that allows students, researchers and staff from participating institutions to get internet connectivity when visiting other campuses. In the last fiscal year, Cybera has helped two Alberta post-secondaries set up eduroam (the Alberta College of Art and Design and Olds College). This advisory support is available to all members who are looking to get started.

### FIREWALL AS A SERVICE

Firewall as a Service (FaaS) is a network pilot project whose goal is to offer Internet Buying Group members access to a software-based firewall that is hosted on Cybera's Rapid Access Cloud. By utilizing a virtual firewall hosted upstream on Cybera's network gateway, school authorities will save physical resources and eliminate the need to re-invest in costly physical firewall devices. As well, by leveraging a cloud-hosted environment, Cybera will be able to readily scale the service to the needs of all members.

This Alberta Education-funded pilot began in 2016 with several K-12 school participants, and will be rolled out to all members following the pilot's completion in 2017.

### LEARNING MANAGEMENT CLOUD

Following a four-year trial, where a cloud-based learning management system was effectively shared by four post-secondary institutions in Alberta, the Learning Management Cloud project was successfully transitioned to the University of Alberta, whose team will manage it going forward.



# ADVOCATE

As an innovation enabler (that connects and supports over 650,000 students, teachers, researchers, innovators and government decision-makers), Cybera realizes the importance of advising policymakers on the digital needs of Albertans. In the past year, our advocacy efforts have taken us to Ottawa to testify before the CRTC on whether internet should be considered a basic technology need, as well as further afield, as one of our policy team members was named to the Advisory Council of the American Registry for Internet Numbers (ARIN). Our updated *State of Alberta Digital Infrastructure Report* also proved particularly popular with Albertans looking to plan for the province's digital future.

## BROADBAND IS, INDEED, A BASIC NEED

In December 2016, the CRTC ruled that residential fixed broadband and mobile broadband internet access are basic telecommunications services, meaning all Canadians need access to broadband infrastructure to participate in the modern digital economy. This decision was welcomed by Cybera, who had testified to the commission that the CRTC should have a hand in ensuring an affordable base service level is available to all Canadians. The next step will be to determine how to fund rural backbone network infrastructure. We expect to contribute our thoughts on this topic when the next CRTC consultation is called later in 2017.

## ALBERTA'S NETWORKING INFRASTRUCTURE GETS A THOROUGH REVIEW

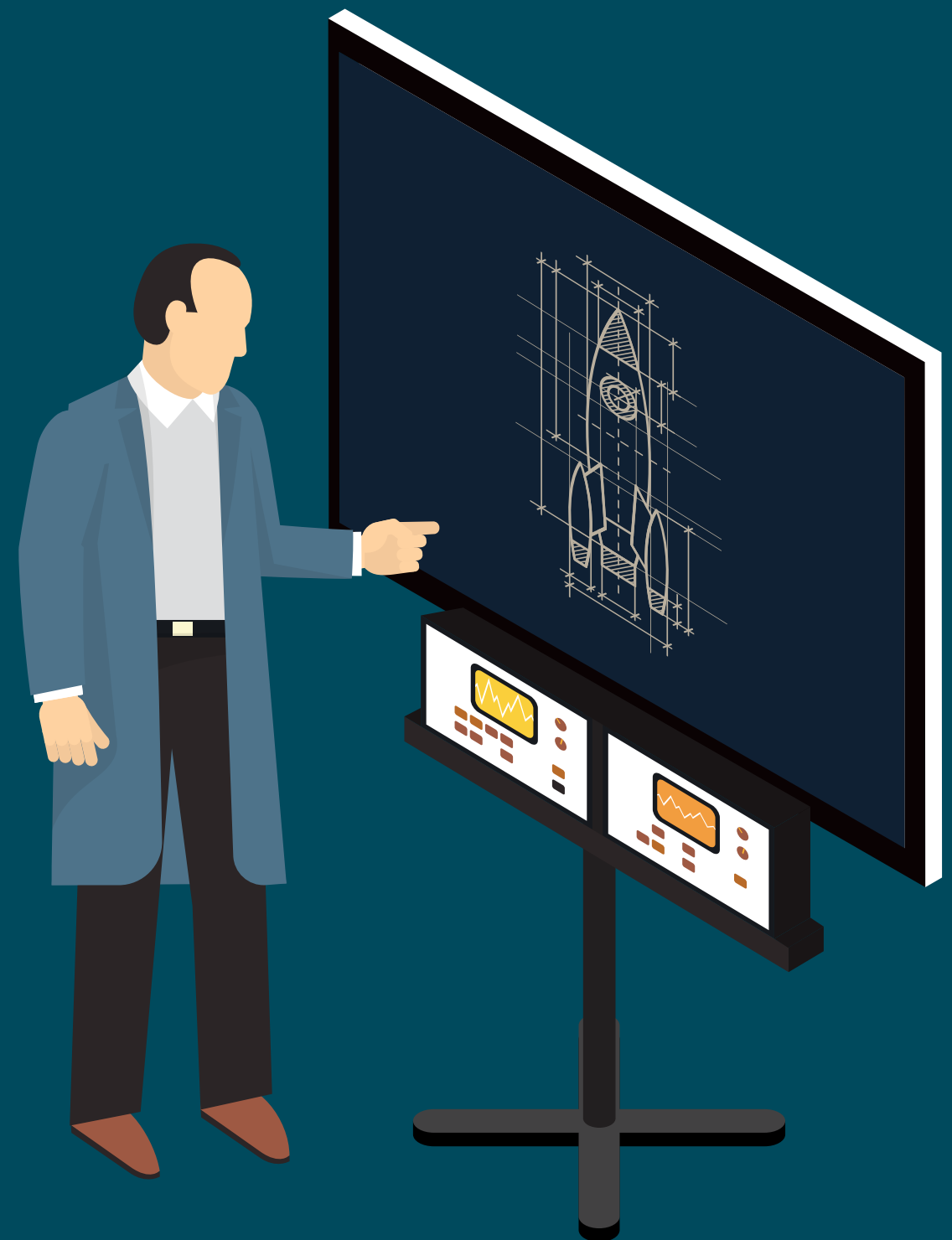
Where are all the fibre networks in Alberta?  
How many free WiFi spots do we have access

to in the province? And how soon until we see internet delivered from low orbit satellites? After a year of researching, Cybera unveiled a comprehensive update to the networking chapter of its 2014 *State of Alberta Digital Infrastructure Report* this past fall. The in-depth review looked at the critical changes in bandwidth capabilities and technologies in the province in recent years, including a review of internet infrastructure and capabilities in Alberta's rural, urban, and First Nations communities. The Wiki version of the networking chapter can be viewed at: [Wiki.cybera.ca/display/DIR](http://Wiki.cybera.ca/display/DIR).

## ACKNOWLEDGING CYBERA'S THOUGHT LEADERSHIP

In September 2016, Cybera was one of 11 Alberta organizations to receive the inaugural KNOVO Award of Distinction for corporate gender diversity. KNOVO was launched in 2015 as an initiative to support the development and advancement of women in Alberta's knowledge economy. Its first-ever Corporate Recognition Award rewards IT businesses that have adopted policies and practices to promote female recruitment, retention, and advancement.

Cybera continues to be called on by all levels of government to consult on digital infrastructure policies. Nationally, Cybera sits on several Research Data Canada committees to drive the conversation on how research data is funded, managed and stored in Canada. In Alberta, Cybera's expertise is being leveraged by the provincial government to develop a broadband strategy to improve connectivity in rural and remote regions. Our relationship with cities is also growing, as Cybera is often consulted on the future role of open data and policies that impact local residents.



## DID YOU KNOW?

33% of rural households in Canada access broadband internet through wireless services (meaning 1/3 of rural residents have no fibre, cable, or DSL access).





# LAUNCHING ALBERTA'S INNOVATION ECOYSTEM

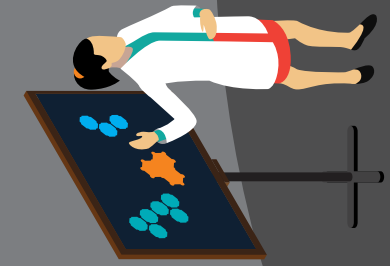


Cybera works alongside hardware and software developers, data analysts, research agencies, and infrastructure providers to make technology more accessible to Albertans.

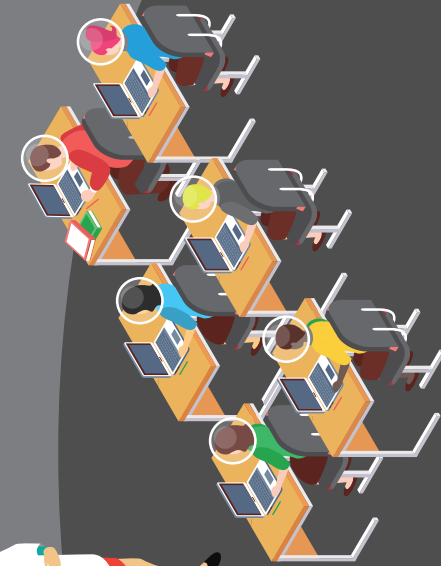
So, how is Cybera supporting innovation?



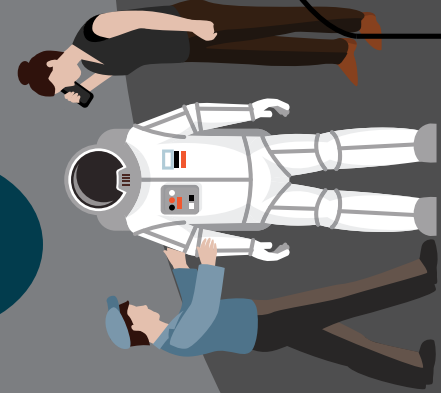
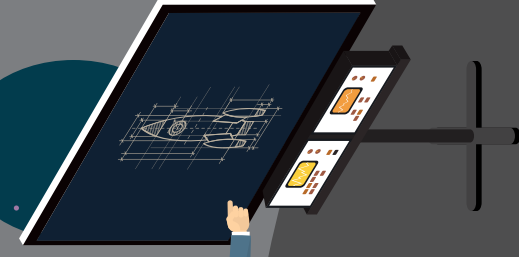
PILOTING CYBER  
SECURITY TECHNOLOGIES  
AND POLICIES, AND  
SHARING BEST-PRACTICES  
WITH THE PUBLIC SECTOR



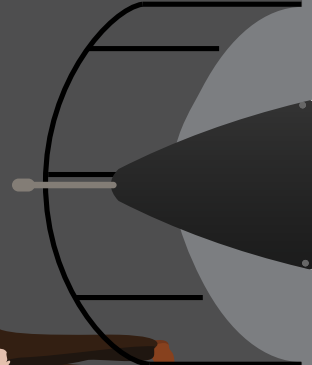
SUPPORTING EDUCATORS  
WITH NEXT-GENERATION  
TECHNOLOGY  
TRAINING TOOLS



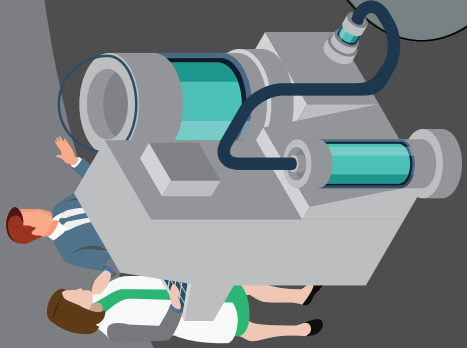
TESTING NEW TECHNOLOGY  
SOLUTIONS, AND SHARING  
OUR EXPERIENCES



EXPLORING ALBERTA  
DATA TO FIND NEW  
LEADS FOR RESEARCHERS  
AND PROFESSIONAL  
ANALYSTS TO EXPLORE



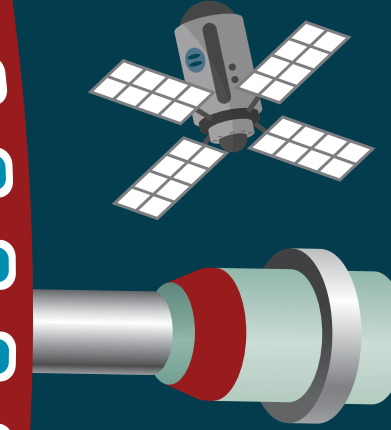
DEVELOPING  
SOLUTIONS WITH  
PUBLIC COMPUTING  
AND NETWORK  
SUPPLIERS TO "BOOST"  
THE TECHNOLOGY  
CAPABILITIES OF  
GOVERNMENT AND  
EDUCATION



GIVING UNBIASED ADVICE AND FREE  
CLOUD RESOURCES TO THOSE  
LOOKING TO ADOPT AND  
TEST NEW TECHNOLOGIES



WORKING WITH INTERNET  
SERVICE PROVIDERS TO  
BUILD BETTER ACCESS TO  
HIGH-SPEED, UNCAPPED  
BANDWIDTH



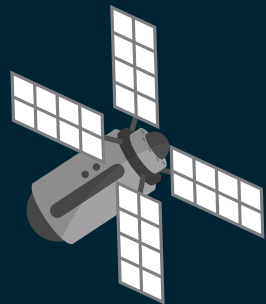
# COMMUNICATIONS

## CYBER SUMMIT 2016

The 2016 Cyber Summit was held in October at the Banff Centre, and once again was run with Cybera's sister networks in the Prairies: SRNET and MRNET. The theme of the event was "Using Technology Responsibly", and focused on the privacy / policy implications of technologies related to open, big data, and the Internet of Things. It featured 27 speakers over three days (including three workshops and 21 sessions), and was well-received by attendees, 90% of whom said they would return to a future Cyber Summit.

## CONTINUING OUR OUTREACH

Cybera remains active in sharing its message on social media, including LinkedIn, Twitter, Facebook and blogs. In the last fiscal year, Cybera's followers on Twitter increased by 12%, and on Facebook by 10%. Cybera also hosts the Tech Radar blog, which featured 27 posts over the course of the year. This blog addresses technologically complex subjects, and is a source of expertise for the IT community. It was visited by nearly 30,000 people over the course of the reporting period.



# BOARD OF DIRECTORS

The Board of Directors met four times during the last fiscal period. Peter Singendonk stepped down from the board, and Darryl Vleeming was elected the new Chair (with Mike MacGregor continuing as Vice Chair). Mark Humphries, from the University of Lethbridge, became the newest member of the board.



## DARRYL VLEEMING (CHAIR)

Darryl Vleeming is the Vice President, Information Systems, and Chief Information Officer at Capital Power.



## MIKE MACGREGOR (VICE CHAIR)

Dr. Mike MacGregor is Vice Provost and AVP of Information Services and Technology (IST), and a Professor in the Department of Computing Science at the University of Alberta.



## PETER GARRETT

Peter Garrett is an electrical engineer and the President of Innovate Calgary.



## DOUG HAWKINS

Doug Hawkins, P. Eng., is the Director of Infrastructure Services for the City of Lethbridge.



## MARK HUMPHRIES

Mark Humphries is the Chief Information Officer at the University of Lethbridge.



## JAYMON LEFEBVRE

Jaymon Lefebvre is the Director of Technology for Wild Rose School Division in Rocky Mountain House, Alberta.



## CHRISTOPHER MACPHEE

Christopher MacPhee is the Superintendent of Canadian Rockies Public School Division and second Vice President for the Board of Directors at the College of Alberta School Superintendents.



## MATT NORTON

Matt Norton is the Director, Information Technology Services, at Lethbridge College.



## SUSAN SKONE

Dr. Susan Skone is an Associate Vice-President (Research) and an Associate Professor in Geomatics Engineering at the University of Calgary.

# MEMBERS







# FINANCIAL STATEMENTS OF CYBERA INC.

YEAR ENDED MARCH 31, 2017

# INDEPENDENT AUDITORS' REPORT

To the Members of Cybera Inc.:

We have audited the accompanying financial statements of Cybera Inc., which comprise the statement of financial position as at March 31, 2017, the statements of operations, changes in net assets and cash flows for the year then ended, and notes, comprising 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.

## AUDITORS' 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 our 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, we consider internal control relevant to the entity'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 entity'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 Cybera Inc. as at March 31, 2017, and its results of operations and its cash flows for the year then ended in accordance with Canadian accounting standards for not-for-profit organizations.

*KPMG LLP*

Chartered Professional Accountants

August 10, 2017  
Calgary, Canada

## STATEMENT OF FINANCIAL POSITION

## MARCH 31, 2017, WITH COMPARATIVE INFORMATION FOR 2016

	2017	2016
<b>ASSETS</b>		
Current Assets:		
Cash and cash equivalents	\$ 903,737	\$ 884,100
Accounts receivable (note 2)	206,677	251,755
Prepaid expenses	57,168	45,080
	<u>1,167,582</u>	<u>1,180,935</u>
Property and equipment (note 3)	78,005	170,870
	<u>\$ 1,245,587</u>	<u>\$ 1,351,805</u>
<b>LIABILITIES AND NET ASSETS</b>		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 93,802	\$ 196,555
Deferred revenue (note 4)	233,921	295,829
	<u>327,723</u>	<u>492,384</u>
Net assets (note 5)	917,864	859,421
Economic dependence (note 6)		
Subsequent event (note 8)		
	<u>\$ 1,245,587</u>	<u>\$ 1,351,805</u>

See accompanying notes to financial statements.

Approved by the Board:

Signed (Darryl Vleeming, *Chair*)Signed (Mike MacGregor, *Vice Chair*)

## STATEMENT OF OPERATIONS

## YEAR ENDED MARCH 31, 2017, WITH COMPARATIVE INFORMATION FOR 2016

	2017	2016
Revenues:		
Grant	\$ 2,475,415	\$ 2,031,985
Project	1,482,528	1,813,071
Membership	508,126	449,607
Other	70,719	50,831
Interest	14,690	16,363
	<u>4,551,478</u>	<u>4,361,857</u>
Expenses:		
Project	1,523,835	1,577,783
Infrastructure	1,460,583	1,494,430
Project and partnership development	603,046	655,036
General and administrative	517,856	502,113
Marketing and communications	294,850	277,263
Depreciation	92,865	126,712
	<u>4,493,035</u>	<u>4,633,337</u>
Excess (deficiency) of revenues over expenses	<u>\$ 58,443</u>	<u>\$ (271,480)</u>

See accompanying notes to financial statements.

## STATEMENT OF CHANGES IN NET ASSETS

## YEAR ENDED MARCH 31, 2017, WITH COMPARATIVE INFORMATION FOR 2016

	2017	2016
Net assets, beginning of year	\$ 859,421	\$ 1,130,901
Excess (deficiency) of revenues over expenses	58,443	(271,480)
Net assets, end of year	<u>\$ 917,864</u>	<u>\$ 859,421</u>

See accompanying notes to financial statements.



## STATEMENT OF CASH FLOWS

## YEAR ENDED MARCH 31, 2017, WITH COMPARATIVE INFORMATION FOR 2016

	2017	2016
Cash provided by (used in):		
Operations:		
Excess (deficiency) of revenues over expenses	\$ 58,443	\$ (271,480)
Add item not affecting cash:		
Depreciation	92,865	126,712
	151,308	(144,768)
Changes in non-cash working capital:		
Accounts receivable	45,078	287,602
Prepaid expenses	(12,088)	(12,793)
Accounts payable and accrued liabilities	(102,753)	(335,118)
Deferred revenue	(61,908)	112,237
	19,637	(92,840)
Investments:		
Purchase of property and equipment	-	(106,639)
Increase (decrease) in cash and cash equivalents	19,637	(199,479)
Cash and cash equivalents, beginning of year	884,100	1,083,579
Cash and cash equivalents, end of year	\$ 903,737	\$ 884,100

See accompanying notes to financial statements.

## NOTES TO FINANCIAL STATEMENTS

## YEAR ENDED MARCH 31, 2017, WITH COMPARATIVE INFORMATION FOR 2016

**General:**

Cybera Inc. ("Cybera") was incorporated on January 12, 1994 under Part II of the Canada Corporations Act as a corporation without share capital as WurcNet Inc. In 1999 it changed its name to Netera Alliance Inc. and in 2007 it changed its name to Cybera Inc. Cybera was continued under the Canada Not-For-Profit Corporations Act on November 27, 2014. Cybera is an Alberta-based, not-for-profit alliance that manages large-scale inter-institutional information and communication technology projects, including research networks, high performance computing resources, digital content projects and collaboration facilities.

The objectives of Cybera are to provide information and communications infrastructure, project management, advocacy and technical expertise to leverage the resources, skills and services of its members, without preference or partiality to any individual member.

As a not-for-profit organization, the income of Cybera is not subject to tax under paragraph 149(1)(l) of the Income Tax Act (Canada).

**1. Significant accounting policies:**

The financial statements have been prepared by management in accordance with Canadian accounting standards for not-for-profit organizations.

**(a) Revenues:**

Revenue from membership dues is recognized evenly over the term of the membership.

Project and grant revenues, which are comprised of contributions towards project and infrastructure costs, is recognized using the deferral method. Under this method, restricted contributions are recognized as revenue when the related project costs are incurred. Restricted contributions received in a period before the related expenses are incurred are accumulated as deferred revenue. Unrestricted contributions are recognized as revenue when received or receivable.

Interest income is recognized when earned.

**(b) Project expenses:**

As part of the development of applications for high speed networks, Cybera provides funding for certain research and development projects. Cybera charges costs incurred on these projects to operations as incurred. Typically, Cybera does not retain ownership rights in the results of these projects, rather, these rights reside with the project participants on a basis defined in the respective project agreements.

**(c) Cash and cash equivalents:**

Cybera considers deposits in banks, certificates of deposit and short-term investments with original maturities of three months or less as cash and cash equivalents.

**(d) Property and equipment:**

Property and equipment is recorded at cost. Depreciation of computer equipment is provided using the straight-line method at a rate of one-third of cost per year.

**(e) Donations of services:**

Cybera receives from its members and others, donations of professional time and services. The value of these donations is not included in these financial statements as the related fair value cannot be reasonably determined.

**(f) Use of estimates:**

The preparation of the financial statements in conformity 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 and disclosure of contingent assets and liabilities at the dates of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Estimates include the valuation of accounts receivable, estimated life of property and equipment and accrued liabilities. Actual results could differ from those estimates.

**(g) Financial instruments:**

Financial instruments are recorded at fair value on initial recognition. Freestanding derivative instruments that are not in a qualifying hedging relationship and equity instruments that are quoted in an active market are subsequently measured at fair value. All other financial instruments are subsequently recorded at cost or amortized cost, unless management has elected to carry the instruments at fair value. Cybera has not elected to carry any such financial instruments at fair value.

Transaction costs incurred on the acquisition of financial instruments measured subsequently at fair value are expensed as incurred. All other financial instruments are adjusted by transaction costs incurred on acquisition and financing costs, which are amortized using the effective interest rate method.

Financial assets are assessed for impairment on an annual basis at the end of the fiscal year if there are indicators of impairment. If there is an indicator of impairment, Cybera determines if there is a significant adverse change in the expected amount or timing of future cash flows from the financial asset. If there is a significant adverse change in the expected cash flows, the carrying value of the financial asset is reduced to the highest of the present value of the expected cash flows, the amount that could be realized from selling the financial asset or the amount Cybera expects to realize by exercising its right to any collateral. If events and circumstances reverse in a future period, an impairment loss will be reversed to the extent of the improvement, not exceeding the initial carrying value.

**2. Accounts receivable:**

Included in accounts receivable are government remittances receivable of \$9,172 (2016 - \$8,609), which include amounts receivable for input tax credits.

**3. Property and equipment:**

	2017		2016	
	Cost	Accumulated amortization	Net book value	Net book value
Computer equipment	\$ 770,356	\$ 692,403	\$ 78,005	\$ 170,870

**4. Deferred revenue:**

Deferred revenue represents restricted contributions received that relate to expenses of future years. Contributions are recorded as deferred revenue until the related expenditures have been incurred.

The components of deferred revenue as at March 31 were as follows:

	2017		2016	
Balance, beginning of year	\$	295,829	\$	183,592
Less amounts recognized as revenue in the year		(295,829)		(183,592)
Add amounts received related to expenses of future periods		233,921		295,829
	\$	233,921	\$	295,829

**5. Net assets:**

In the event of dissolution or winding-up of Cybera, all of its remaining assets, after payment of its liabilities, would be distributed to other not-for-profit organizations by the Board of Directors.

**6. Economic dependence and government assistance:**

Cybera's future operations are dependent on continued funding from the Alberta Government.

Cybera periodically applies for financial assistance under available government incentive programs. Government assistance relating to research and development expenditures is recorded as a reduction of current year expense when the related expenditures are incurred.

**7. Financial instruments and related risks:**

Fair value of financial assets and financial liabilities:

Financial instruments include cash and cash equivalents, accounts receivable and accounts payable and accrued liabilities. The fair value of these financial instruments approximates their carrying value due to their short term nature.

**(a) Credit risk:**

Accounts receivable are subject to minimal credit risk as the majority of the receivables are from government-sponsored institutions. Cash is held at financial institutions that are considered to be creditworthy by Cybera.

**(b) Market risk:**

Cybera is exposed to the following market risk:

**(i) Interest rate risk:**

Interest rate risk arises from the holdings of fixed income securities. For every 0.25% change in interest rates, the annual change in interest income would be approximately \$2,549 (2016 - \$1,898).

**(c) Liquidity risk:**

Liquidity risk is the risk that Cybera will be unable to fulfill its obligations on a timely basis or at a reasonable cost. Cybera is not exposed to significant liquidity risk and manages its liquidity risk by monitoring its operating requirements.

**8. Subsequent event:**

On May 16, 2017, \$2,250,000 operating grant from the Alberta Government was deposited into Cybera's bank account relating to fiscal 2017-2018 funding.

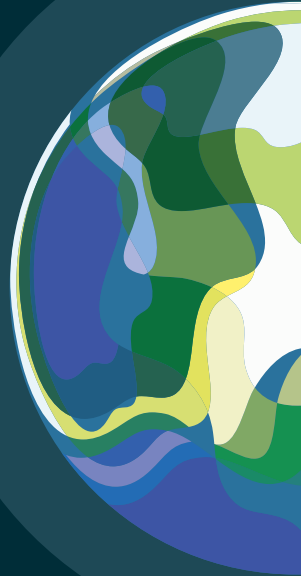
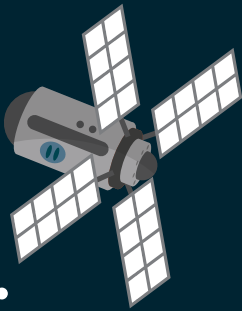
# PART WAY THROUGH OUR THREE-YEAR PLAN

## ROADMAP FOR CYBERA 2016-19: OUR JOURNEY SO FAR

In 2016, Cybera launched its new three-year roadmap, outlining plans to grow Alberta's digital landscape. So how are we doing after year one?



FOCUS AREA	GOAL FOR MARCH 31, 2017	WHAT WE ACHIEVED
CONNECT	• Connect 1 new municipality / REDA	• Began connecting City of Edmonton
	• Connect 75% of K-12 school districts to affordable broadband	• 59% of K-12 school districts connected to CyberaNet
	• Connect 85% of post-secondaries to CyberaNet	• 73% of post-secondaries connected
	• Develop a business plan for a Calgary-Edmonton fibre build	• Began developing value proposition for Calgary-Edmonton fibre build
	• Complete 1 fully redundant network core	• Fully redundant network core achieved
	• Initiate discussions with Alberta First Nations communities	• Met with Treaty 7 Education Authority and connected Stoney Education Authority to CyberaNet
	• Connect 1 new business incubator	• 1 incubator connected
ENABLE	• Start 1 machine learning demo project	• Began planning demo project with health analytics firm eXDee Ltd
	• 800 people using Rapid Access Cloud	• +1,000 users
	• Start 1 advanced research and analytics platform with post-secondaries	• Submitted proposal to CIRA to build a platform to analyze CRTC submissions
SHARE	• Conduct 2 reviews of Internet Buying Group pricing	• 3 reviews and price reductions made
	• Connect 5 school authorities and 2 proof-of-concept services to pilot K-12 Identity Federation	• 5 school authorities and 2 self-service service providers connected
	• Pilot 2 Shared IT procurement projects	• 2 pilot projects started (end-user hardware and networking hardware)
	• Pilot a Firewall-as-a-Service (FaaS) project	• Pilot FaaS project started
	• Expand the use of eduroam and the Canadian Access Federation	• 2 new post-secondaries connected to eduroam
ADVOCATE	• Advise on SuperNet renewal process	• Met with Assistant Deputy Minister of Service Alberta to discuss SuperNet's future
	• Continue advising provincial government on long-term ICT infrastructure plans	• Participated in Broadband Preparedness workshops (led by the Ministry of Economic Development and Trade) as well as Van Horne Institute's Digital Futures Symposium
	• Increase Cybera's visibility through 10 conference / webinar / in-person learning presentations	• 19 presentations delivered



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