

2019/20
ANNUAL REPORT



25

Serving the Education
Community in Manitoba
for 25 Years



Dedicated, centralized services for Manitoba schools.



I've been reflecting recently on all the good work you folks at MERLIN have done over the years that has prepared us for the current situation. The capacity which you have built up for us has been what has enabled us to just about manage. It is much appreciated!

—RYAN REMPEL, DIRECTOR OF
INFORMATION TECHNOLOGY,
CANADIAN MENNONITE UNIVERSITY

CONTENTS

Minister's Letter of Transmittal	5
Deputy Minister's Letter of Transmittal	5
Message from the Chief Operating Officer	5
Agency Profile	
Background	7
Mission and Mandate	7
Services	7
Markets	9
Performance Review	
Performance Targets and Accomplishments	11
Future Outlook	17
Audited Financial Statements	
Management's Responsibility for Financial Reporting	18
Independent Auditor's Report	19
Statement of Financial Position	21
Statement of Operations	22
Statement of Change in Net Debt	23
Statement of Cash Flow	23
Notes to the Financial Statements	24

Staff as at March 31, 2020

Kiley Bender - A/Chief Operating Officer
Alicia Baldwin - Office Manager
Barb Finnimore - Office Administrative Support
Travis Friesen - Consultant, IT Security
Warren Grieder - Consultant, Internet Technologies
Michael Hart - Consultant, Microsoft Technologies
Ryan Hébert - Consultant, Microsoft Technologies
John Hiebert - Consultant, Networking Technologies
Diane Karalash - Provincial Licensing and Software Sales Specialist
Colette Lafond - Communications Coordinator
Brent McCrea - Consultant, Microsoft Technologies
Adam Thompson - Consultant, Infrastructure Services
Rhonda Williams - Controller
Vacant - Manager, Information & Communication Technologies
Vacant - Manager, Partner Programs
Vacant - Media Technician

Affordable technology through great buying power.



As a rural school division, we appreciate the service that MERLIN provides in hosting both our website and email accounts. The customer service that MERLIN provides is commendable. MERLIN is approachable, professional and available to our division. MERLIN also organizes and provides professional development opportunities for both technicians and educators. It is appreciated that we have access to quality professional development opportunities, that we would have difficulty accessing without MERLIN's support. MERLIN's support of educational technology in Manitoba is invaluable.

—PAMELA GARNHAM, ASSISTANT
SUPERINTENDENT, PORTAGE LA
PRAIRIE SCHOOL DIVISION.

LETTER FROM THE MINISTER

Her Honour the Honourable Janice C. Filmon, C.M., O.M.

Lieutenant Governor of Manitoba
Room 235, Legislative Building
Winnipeg, MB R3C 0V8

Your Honour:

It is my privilege to present the Annual Report of the Manitoba Education, Research and Learning Information Networks (MERLIN) for the operational year ended March 31, 2020.

Respectfully submitted,

Original signed by:

Honourable Reg Helwer

LETTER FROM THE DEPUTY MINISTER

The Honourable Reg Helwer
Minister of Central Services
Room 343, Legislative Building
Winnipeg, Manitoba R3C 0V8

Dear Minister Helwer:

I am pleased to submit for your consideration the Annual Report of the Manitoba Education, Research and Learning Information Networks (MERLIN) for the year ended March 31, 2020.

MERLIN has reached a milestone of serving the education community for the past 25 years! I congratulate the Agency in its innovative and collaborative approach in the delivery of technology services that benefit students in learning. Technology has always been an important tool to advance education and it's now an essential part of a modern classroom. MERLIN plays a key role in growing, simplifying technology choices and getting the best value for money for educational organizations in Manitoba.

The Agency provides IT services that include software licensing and purchasing, consulting, Internet access, technical training, hosting and security services. MERLIN is the gateway organization for K-12 school connectivity to very high-speed commercial Internet. More than 200,000 students and educators use MERLIN as their Internet gateway. MERLIN continues to be proactive in monitoring its Internet capacity to ensure the significant growth of cloud-based resources and Internet bandwidth are met.

MERLIN's Partner Programs continue to provide Manitoba schools, colleges and universities substantial cost savings and major benefits. MERLIN successfully renegotiated the K-12 Program effective July 1st, 2019 as well as the Post-secondary Program effective April 1st, 2020. Both are for additional three-year terms.

I would like to thank all staff for their dedication and effort that keeps contributing to MERLIN's success.

Respectfully submitted,

Original signed by:

Scott Sinclair

MESSAGE FROM THE CHIEF OPERATING OFFICER

On behalf of staff, I am pleased to report the achievements of Manitoba Education, Research and Learning Information Networks (MERLIN) for the year ended March 31, 2020. We have had a very successful year in meeting the technology needs of the education community in Manitoba in an efficient, cost-effective, and collaborative approach.

This year highlights MERLIN serving the education sector for 25 years. With the worldwide pandemic, technology has never been more important to the achievements and success of students. Our educational institutions continue to adjust to a very different world and educating students in a new and different way. MERLIN continues to work with schools to provide services for learners during this challenging time.

Our IT service delivery has evolved over time to meet the advanced and imminent changes of technology. It has been a journey looking back at how the Agency has been proactive and innovative to meet the evolution of technology while observing the positive impact it has in students' learning today and over the past two decades.

Finally, I would like to thank our clients and stakeholders who have supported our endeavours over the past year. Your input, suggestions and ideas have created a collaborative environment which supports your technology needs today and into the future in teaching and training students. I also want to thank our professional and dedicated staff for keeping MERLIN focused on important objectives and meeting the needs of the education community.

Original signed by:

Kiley Bender

A/Chief Operating Officer

Fostering cooperative
relationships with
private industry.



AGENCY PROFILE

BACKGROUND

Manitoba Education, Research and Learning Information Networks (MERLIN) was established in 1995 as a special operating agency with the Department of Education and Training. It was formed as a facilitating body to coordinate the delivery of technology services to the education community across Manitoba.

MISSION

To support the use of technology in improving educational services to learners.

MANDATE

- Provide services that support educational institutions in the application of technology tools to enhance and expand program delivery; and
- Provide direction and management in the educational use of networks, acting as a broker of services to meet client needs.

SERVICES

The services provided are allocated into the following sections:

Services	Schools	Dept. of Education	Post-Secondary Institutions	Other Depts./ Agencies
Partner Programs	X		X	
Consulting	X	X	X	
Provincial Licensing and Purchasing	X	X (MSD)*	X	
Shared Services	X	X X (MSD)*	X	X
Technical Training Services	X		X	
General Support for the education community	X	X (MSD)	X	

* Manitoba School for the Deaf

Experts in IT issues and products.



MRnet operates a very high speed private broadband network in Manitoba in support of the Research and Education (R and E) community in the province which includes post secondary, research institutions and K-12.

For many years, MERLIN and MRnet have worked in close collaboration to jointly provide the R and E community with integrated connectivity and network services. This partnership is the Manitoba Regional Advanced Network (RAN); the Manitoba member of the National Research and Education Network, a consortium of RANs in each province and territory which provide connectivity nationally to each other and globally to similar R and E networks in over 100 countries.

The partnership continues to be an integrated seamless approach to the provision of access to local, national and global R and E networking infrastructure and services; access which is critical to collaborative efforts in teaching and research throughout the province.

The MRnet membership recognizes the importance of the services MERLIN offers and the critical nature of continuing MERLIN operations in the future.

Since MRnet is a member driven organization funded by member fees and federal contributions and that as a not for profit, MERLIN offers services well below commercial alternatives. This partnership is an extremely cost-effective means of offering access to advanced R and E networking in Manitoba which is critical to most efforts in that community.

—GERRY MILLER, EXECUTIVE DIRECTOR,
MRnet

PARTNER PROGRAMS:

The Partner Programs are educational specific packages of software and IT services that assists schools and post-secondary institutions in providing a robust, secure and flexible environment to help improve the educational outcomes of learners. These Programs simplify the administration of many licensing and technology services for partners, allowing more resources to be directed at the classroom. The K-12 Partner Program was designed to allow schools to explore online resources and services without adding additional costs or limits on things like Internet bandwidth.

CONSULTING:

This service includes per diem consulting, project consulting and support contracts.

- Design and implementation of on-premise infrastructures
- Design and implementation of Cloud-based technologies like Office 365
- Advice on the selection of technical equipment and services
- Advice on technologies that support distance education delivery
- Network systems management
- IT security services
- Assistance with development and review of educational technology plans

PROVINCIAL LICENSING AND PURCHASING:

MERLIN negotiates province-wide licensing agreements to assist schools and post-secondary institutions with procuring best of breed solutions at pricing that's affordable and equitable across the province regardless of the size of the educational organization. MERLIN also provides licensing consulting and advice that is specifically tailored to schools and other educational institutions in Manitoba.

INTERNET ACCESS:

MERLIN is the Internet gateway for most of the K-12 schools in Manitoba as well as most of the post-secondary institutions. MERLIN manages and maintains, with our partner suppliers, one of the most extensive networks in Manitoba and is consistently one of top three of educational and research networks in terms of data usage in Canada.

HOSTING:

MERLIN collaborates with the education community to offer a wide array of IT hosting services tailored to the individual needs of the organizations. These hosting services save school divisions and post-secondary institutions administrative costs associated with managing and maintaining their own technology infrastructures. MERLIN hosts many different applications from websites to student records systems and firewalls to Infrastructure as a Service.

SECURITY:

MERLIN operates one of the largest security infrastructures in western Canada in order to protect students and staff from a wide range of Internet related threats. All MERLIN's security services are designed and deployed to ensure that students and schools have access to security tools and services that are rated amongst the top solutions in the world.

TECHNICAL TRAINING SERVICES:

Customized training for school divisions helps sustain operations and enhance technology infrastructures. Training services are intended to provide education-specific training in areas where it might not normally be available.

GENERAL SUPPORT TO THE EDUCATION COMMUNITY:

MERLIN continues its 25-year history of being the trusted advisor to schools, universities and colleges in Manitoba for all topics related to educational technologies. MERLIN actively participates with educational organizations in Manitoba including Manitoba Association of Educational Technology Leaders (MAETL), Manitoba Association for Distributed Learning and Training (MADLaT), Manitoba's Regional Advanced Research and Education Network (MRnet), Build Your Teaching Experience (BYTE) Technology Conference, Riding the Wave (RTW) Annual Technology Conference.

MARKETS

PRIMARY

Schools and school divisions (K-12) comprised of 37 school divisions, over 700 public schools, 94 independent schools and over 50 band-operated schools within about 62 First Nations and post-secondary institutions.

SECONDARY

Adult learning centres, educational organizations, Department of Education

TERTIARY

Other government departments and the broader public sector

While MERLIN does not have a monopoly for its services within the province, it does have a unique position in the education community, allowing for the provision of an education-specific component to decision-making, provincial coordination, and advisory services. The Agency attempts to foster cooperative relationships with private industry to benefit the education community.

More than 200,000 students
and educators use MERLIN
as their Internet gateway.

MEMORY 3047110B
STATUS ONLINE
BACKUP 84%
TIME 19:52
POWER
FAN1 * HIGH
FAN2 * MID
FAN3 * LOW

1
CLUSTER
73

PERFORMANCE REVIEW

PERFORMANCE TARGETS AND ACCOMPLISHMENTS

MERLIN made a significant impact in many areas during the Fiscal Year 2019/20. Some examples are highlighted below.

MERLIN PARTNER PROGRAMS

The Partner Programs includes a collection of commonly used technology services bringing major cost savings and benefits to all schools and post-secondary institutions in Manitoba.

MERLIN's K-12 Partner Program is in its first year of the three-year Agreement effective July 1st, 2019. All of Manitoba's school divisions and 70% of funded independent schools participate in the Partner Program. The Agency also has a customized Partner Program for post-secondary institutions that will be renewed for a new three-year Agreement effective April 1st, 2020.

PROVINCIAL LICENSING AND PURCHASING

Microsoft:

- MERLIN negotiates and administrates the Master Agreement for all Microsoft software and services for every educational organization in Manitoba. This provides equity to all organizations regardless of their size and access to the Microsoft suite of software and services for every student, teacher, professor and staff member in Manitoba's educational institutions. This includes Microsoft Cloud-based services like Office 365 and Teams as well as Desktop Operating Systems, database software and other products.
- MERLIN has negotiated a single Master Agreement for all K-12 and post-secondary institutions in Manitoba to achieve the highest level of discount available from Microsoft, enabling Manitoba schools to have the lowest possible pricing for Microsoft products.
- MERLIN has worked with Microsoft to renew the Shape the Future Program for Manitoba schools. This Program provides schools with a discount on OEM desktop licenses.

Adobe:

- MERLIN continues to work with Adobe on educational pricing on Adobe products for K-12 schools and post-secondary institutions. These products include Adobe's Creative Cloud, Acrobat Pro, Photoshop Elements and Premiere Elements.

Trimble SketchUp Pro:

- MERLIN continues to be a facilitator of the Trimble SketchUp Pro K-12 Provincial-Wide License Grant Program providing all publicly funded K-12 schools with access to the latest versions at no cost. SketchUp Pro is a full-featured desktop 3D modeling tool.

CONSULTING

<p>MERLIN provides consulting support for two provincial departments</p>	<p>Department of Central Services - MERLIN facilitates Manitoba Network services for education.</p> <p>Department of Education - MERLIN has a Memorandum of Understanding with the Department of Education which provides a number of consulting and IT-related services.</p>
<p>The Agency has also worked with all public and private schools as well as post-secondary institutions</p>	<p>Design and implementation of:</p> <ul style="list-style-type: none"> • Design and implementation of network security and monitoring solutions • Authentication services including integration with Office 365, G-Suite and other Cloud services • Colaboration services like Email, Instant Messaging, SharePoint and others • Network solutions which include security and virtual private networks (VPN), network management, disaster recovery/backup solutions, desktop deployments, application deployments, virtual infrastructure deployments, network connectivity failover strategies and strategic planning
<p>MERLIN provides fee-for-service consulting for the education community</p>	<p>Some examples:</p> <ul style="list-style-type: none"> • Installed and managed security services • Design and implementation of Office 365 tenant services • Migration of mail from on premises Exchange to Office 365 • Federated authentication with Google 's G-Suite and Office 365 • Reviewed network segmentation and design and implementation of directory services for single user directory • Software security lifecycle review • Network security review • Wide Area Network performance testing and problem resolution • Design and setup of a network monitoring solution • Design and implementation of virtual server infrastructure • MERLIN is frequently called upon to assist school divisions with problem-solving and provides an objective evaluation as well as recommendations. The Agency's goal is to assist school divisions to become self-sufficient in managing their own infrastructures.

INTERNET ACCESS

MERLIN partners with many private sector network providers to provide the best value for money solutions to get schools across the province connected to Internet services. Some of these organizations are:

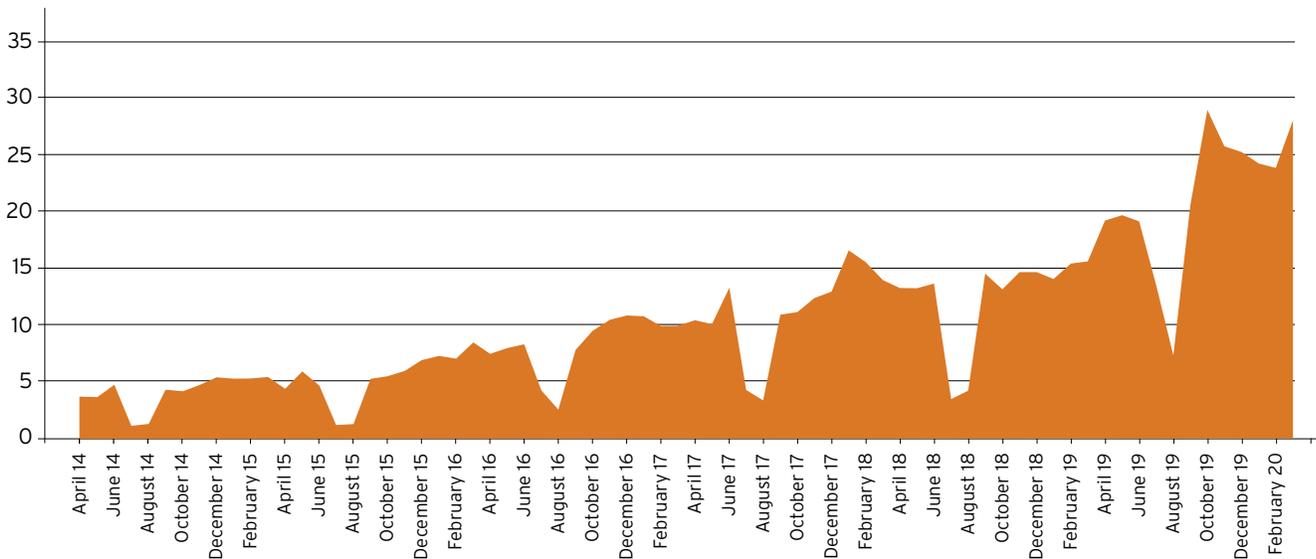
- BellMTS
- MRnet
- Shaw
- Manitoba Hydro
- Netset
- Manitoba Network
- Westman Communication
- Pembina Trails School Division
- Valley Internet Service Provider (VISP)

MERLIN works in very close partnership with MRnet (Manitoba's Regional Advanced Research and Education Network) who is Manitoba's connection to the global high-speed education and research networks through the CANARIE network. In Manitoba, MERLIN is the gateway organization for K-12 school connectivity to CANARIE. This includes approximately 700 schools.

CANARIE provides high-speed access to popular Internet based resources and content providers such as Microsoft, Google, Amazon and others via the CANARIE's Content Delivery Service (CDS). MERLIN is consistently one of the top three largest users of CANARIE's CDS in Canada. Approximately 40% of the traffic from education in Manitoba uses CANARIE's network. This partnership provides significant cost savings as well as shorter, faster paths to services like G-Suite, Office 365, YouTube, Apple and others.

MERLIN works closely with BellMTS as MERLIN's primary supplier of commercial Internet transit. MERLIN is one of the largest volume customers of BellMTS in Manitoba.

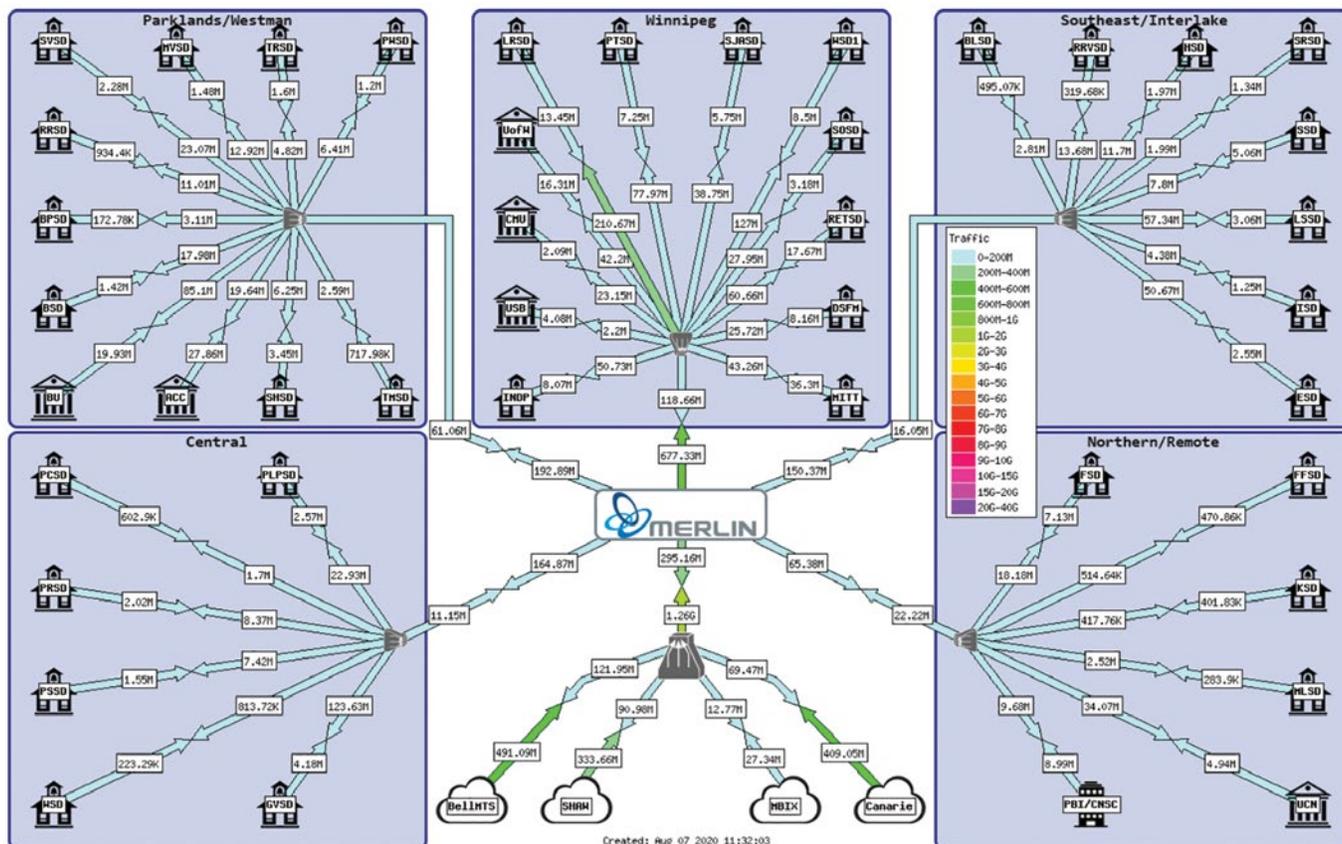
Inbound Traffic Max Gb/s



MERLIN's commercial Internet is currently supplied by BellMTS with connections to two separate points in BellMTS's network, allowing educational institutions to share 20 Gbps of capacity. MERLIN also offers both IPv4 and IPv6 connectivity (the Next Generation Internet Protocol) services as part of its Internet gateway services.

INTERNET WEATHER MAP

MERLIN staff maintains a service called the Internet Weather Map. This tool is a point in time view of school division, post-secondary and Independent school Internet usage across the Province of Manitoba. Usage statistics are updated every five minutes. This can be viewed at <https://observium.merlin.mb.ca/weathermap>.



HOSTING

MERLIN works in partnership with educational institutions in Manitoba to host many different applications and infrastructure components.

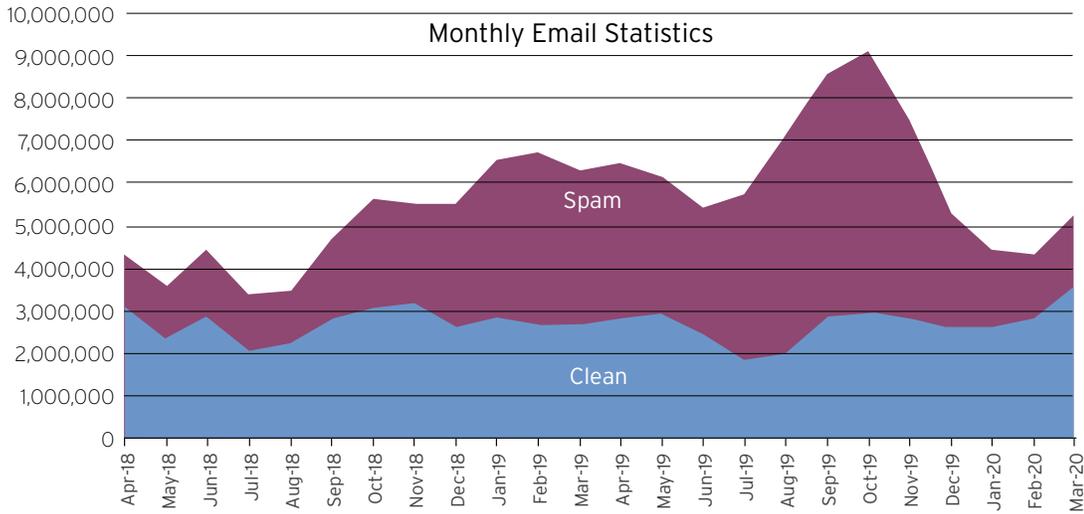
Application and Infrastructure Hosting:

- Email - MERLIN has created and maintains 22,982 email accounts for school staff (up from 22,156 last fiscal year). This includes more than 50 email domains for educational organizations in Manitoba. Microsoft Office 365 and Google email services in the Cloud continue to improve their offerings for education and some organizations have migrated to these Cloud-based services.
- Microsoft SharePoint allows staff to set up websites to share information with others, manage documents from start to finish and publish reports. There are 13 educational institutions using this hosted Microsoft SharePoint service.
- Data Back-up service - This service remotely backs-up server data to MERLIN's Data Centre. Currently, ten educational organizations access this service protecting a total of 37 servers.
- Hosted virtual servers and storage (Infrastructure as a Service (IAAS)) - Benefits to clients include infrastructure and licensing cost-savings and cost efficiencies with redundancy and fault tolerance. MERLIN is currently hosting 538 virtual machines (up from 212 last fiscal year) for 15 educational organizations in MERLIN's infrastructure.
- Hosting websites and domain names - MERLIN hosts 111 websites and 152 primary and 23 secondary domain names.
- Email list server - This electronic mail discussion list gives each mailing list a unique web page and allows users to subscribe, unsubscribe and change their account options over the web. Currently, MERLIN maintains 56 lists.
- Through hosting services for the Department of Education, school divisions also benefit from the following initiatives:
 - Blackboard Learning Environment - Students and school divisions across the province have opportunities to access provincially created distance education courses through MERLIN's hosting of Blackboard. MERLIN staff have assisted the Department of Education in course exports for the transition to the Desire 2 Learn platform for the 2020-2021 school year. Effective July 1st, 2020, the Agency will no longer be hosting Blackboard.
 - Websites - MERLIN has been hosting the Department of Education's website since 1996. This currently includes 6,935 web pages (down from 7,320) web pages and 15,810 PDFs (up from 15,587).
 - Hosted ORME/DREF for the Manitoba Education Library systems and associated databases. Teachers across the province can access these online resources. MERLIN provides ongoing support for the library servers. There are three ORME and four DREF servers in MERLIN's infrastructure available to staff and Manitoba teachers. These are accessible from the Internet as well as from the Managed Environment.

SECURITY

- Anti-spam/Anti-virus Email Filtering Service - All email accounts hosted by MERLIN are scanned for spam and viruses. This service is also available for an annual fee to any school division that runs and maintains its own email server.
- Spam continues to be alive and well, albeit in lower volumes than the Agency has seen in past years. Highly targeted phishing campaigns are the top concern as spammers are utilizing improved techniques for evading IP reputation-based and traditional anti-virus tools. Staff continue to use new and novel methods to keep users from receiving unwanted or malicious email.
- Distributed Denial of Service (DDoS) Mitigation Service - All Internet traffic through MERLIN is protected from DDoS attacks. MERLIN currently sees about 100 Distributed Denial of Service (DDoS) attacks per month. MERLIN leverages a DDoS Mitigation Service from our Internet Service Provider which continues to be very effective.
- Web Content Filtering is the blocking or filtering of undesirable Internet web content. Currently 48 educational organizations are using this service.
- Vulnerability, Anti-virus, and Spyware Protection - MERLIN provides protection from known vulnerabilities, spyware and viruses by utilizing a Palo Alto Networks' firewall. Non-hosted firewall client traffic passes through this firewall and is:
 - Scanned for client and server based vulnerabilities - Vulnerabilities classified as critical and high are blocked.
 - Scanned for viruses - Web, ftp, imap, pop, smtp, and smb traffic are analyzed. Traffic containing viruses is blocked and the connections are reset.
 - Examined for spyware - Spyware categorized as critical and high is blocked and connections are reset.

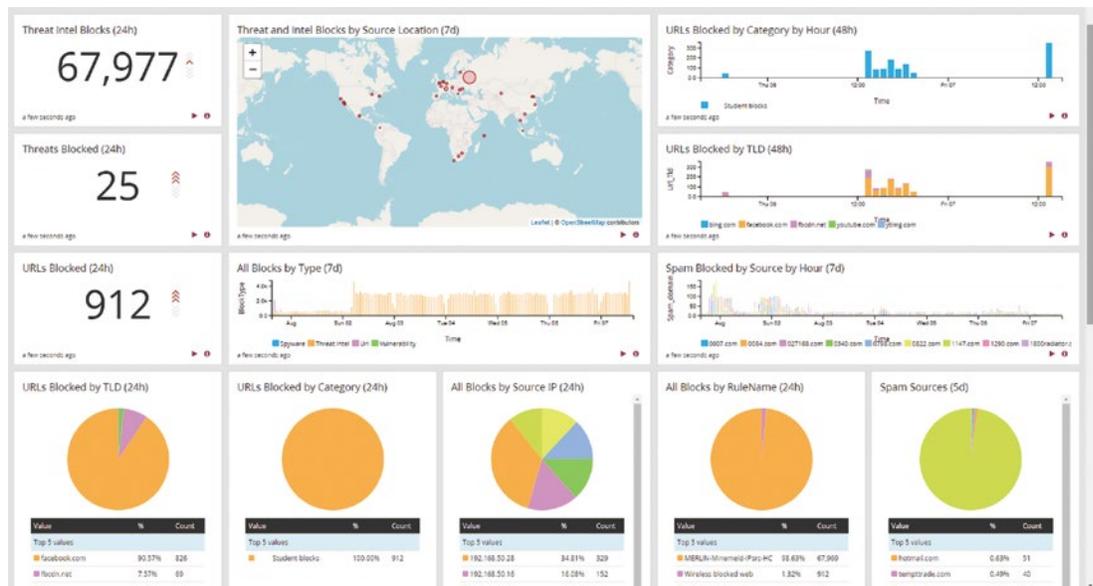
MERLIN also makes use of Palo Alto's Wildfire service for all client traffic. This service uploads unknown executables and portable apps to its Cloud sandbox. Files are executed and all activity is monitored to determine if the file contains malware or behaves in a malicious way. Future downloads of any files identified as malicious are blocked.



This graph illustrates the volume of email and spam that the Agency has processed.

- MERLIN's Hosted Firewall Service is based on a Palo Alto Networks firewall and currently serves 25 MERLIN clients. It includes all the protection of MERLIN's vulnerability protection service and provides the following additional benefits:
 - Layer 7 next-generation firewall technology which provides application visibility. Clients can identify and classify application traffic from applications such as Facebook, YouTube, Dropbox, iTunes, Twitter, FaceTime, Pinterest, Instagram, BitTorrent, and Netflix.
 - User identification through the firewall's User ID functionality. This connects to a division's user directory and provides the ability to apply application control rules to the appropriate users and groups.
 - Application control by user or group which provides flexibility on how, when, and to what destinations they are allowed. Applications can be blocked, allowed, or limited based on the application's category and the educational need.
- Visibility of internal device addresses which increases the client's ability to track down and identify the source of malicious traffic and unwanted applications.
- Content filtering by user or group allowing for multiple unique content filtering profiles within a single school or site.
- Secure VPN access to internal systems for staff.
- In a typical week, MERLIN's vulnerability, anti-virus, and spyware protection and hosted firewall services blocks:
 - 1,537,410,447 connection attempts and known malicious IPs. These are identified via MERLIN's Palo Alto firewall and shared threat Intel
 - 107,675 critical and high threats
 - 76,098,256 blocked URLs from customer identified URL categories. 208,122 of these are malicious

SECURITY THREAT DASHBOARD - MERLIN staff have developed a Security Threat Dashboard. This tool is a point in time overview of all the threats, spam and malicious traffic blocked by MERLIN's security devices and software for school divisions, post-secondary institutions and Independent schools.



TECHNICAL TRAINING

Customized training for school divisions helps them sustain operations and enhance their own technology infrastructures. The following list describes training that MERLIN staff have delivered and/or played a coordinating role in providing technical training to the education community.

SEMINARS AND/OR WORKSHOPS DELIVERED	
Microsoft Security Workshop	May 16, 2019
Microsoft Technical Workshop (Windows 10 + Office 365 setup/deployment + Intune)	Oct. 29, 2019
Microsoft Educator Professional Learning Day (Teacher content focus on Office 365 tools + Teams + Minecraft)	Oct. 29, 2019
Evading commercial anti-virus, or How I learned to stop worrying and love Windows Defender–The Long Con Information Security Annual Conference	Nov. 3, 2019
Microsoft Azure Fundamentals and Azure Administrator (5-day)	Nov. 25-29, '19
Microsoft Technical Workshop (Windows 10 + Office 365 setup/deployment + Intune)	Dec. 2, 2019
Intune for Education Deployment Workshop	Dec. 3, 2019
Microsoft IT Workshop (EDU 2020 Edition, Security and Threat Prevention)	Mar. 2 & 3, '20
Microsoft Educator Workshop (Minecraft, Microsoft Teams, Security, One Note)	Mar. 2 & 3, '20

TECHNICIANS EVENTS

MERLIN continues to facilitate a provincial technicians group to foster collaboration, information sharing and informal technical training. For the past four consecutive years, MERLIN coordinated quarterly events for all technicians in the education community in the Province of Manitoba.

Positive feedback has been received from attendees as these workshops provide a great networking opportunity to hear and learn what other technicians are doing in other school divisions when it comes to technology projects and/or issues. It is a forum to share experiences and technical knowledge.

GENERAL SUPPORT TO THE EDUCATION COMMUNITY

As part of its service portfolio, MERLIN provides general support to the education community, facilitating communication and collaboration and ensuring that the Agency is on track in its service provision. Some of the areas in which MERLIN provides support include:

Partnerships / Affiliations

Educational Organizations

- Manitoba Association of School Superintendents (MASS)
- Manitoba Association of School Business Officials (MASBO)
- Manitoba Association of Education Technology Leaders (MAETL)
- Manitoba First Nations Education Resource Center (MFNERC)

- Manitoba Association of Computing Educators (ManACE)
- Manitoba Learning Resource Center

Information Technology Organizations

- CANARIE
- Manitoba's Regional Advanced Research and Education Network (MRnet)
- The Research and Education Networks Information and Analysis (REN-ISAC)
- Manitoba Internet Exchange (MBIX)
- Canadian Cyber Defense Challenge (CCDC)
- Defence Research and Development Canada
- Canadian Centre for Cyber Security

Education Technology Support

The Agency provides free technical support on educational concerns ranging from Internet access to network and computer hardware issues responding to a large volume of inquiries.

MERLIN has created a mailing list that schools and post-secondary institutions can subscribe to view any planned and unplanned network outages and events along with a Twitter account to communicate these updates.

Presentations, meetings and committee support

Educational Activities

In addition to MERLIN's important role in supporting and providing technology services, MERLIN is also asked to participate on Advisory committees and support educational technology activities (assist in planning conferences, deliver IT presentations and workshops). Some of the events that MERLIN participated in include:

- **MAETL** - Manitoba Association of Educational Technology Leaders - This IT group is committed to supporting and promoting the objectives of its members in the use of ICT in teaching and learning as an integral part of curriculum delivery in the Province of Manitoba. Membership is open to all school divisions and partners with educational organizations (Department of Education, ManACE, MERLIN, etc.) MERLIN staff regularly attend monthly meetings.
- **MRnet** - Manitoba's Regional Advanced Research and Education Network - It is Manitoba's connection for all post-secondary institutions, research centers and K-12 schools to the global high-speed education and research network through the CANARIE Network. MERLIN staff participate on the Executive Committee.
- **MADLaT** (Manitoba Association for Distributed Learning and Training) - MADLaT brings together K-12, post-secondary, business, government and healthcare in the province to work collaboratively on distance education initiatives and professional development. The Agency continues to support the MADLaT Annual Conference by providing listservs to the organization.

- **BYTE** (Build Your Teaching Experience) Annual Conference for K-12 teachers showcases the many excellent activities that are happening within Manitoba classrooms and schools to support Literacy with ICT.
- **RTW** (Riding the Wave of Change Annual Technology Conference) - MERLIN staff participate on the Planning Committee, assist in the registration process and present technical sessions at this event.
- **CCDC** (Canadian Cyber Defense Challenge) - This is a non-profit organization designed to promote and educate awareness of Cyber security. In May 2019, MERLIN helped to write and deliver a full-day Capture The Flag (CTF) style competition for students not only in Manitoba but across Canada.

FUTURE OUTLOOK

Overall, MERLIN's proposal is to continue to forecast increased growth for the FY 2020/21 in the following, but not limited to, technology services that the Agency delivers to the education community:

- Expansion of the managed firewall service - The service makes available a modern, managed firewall platform to participating customers allowing them to more effectively manage IT security within their organizations at a reduced cost. MERLIN provides central management of the platform to ensure that it evolves to meet ongoing requirements.
- Expansion of the Infrastructure as a service (IaaS)- MERLIN runs virtual servers within the Agency's infrastructure for school divisions and post-secondary institutions.
- Expansion of MERLIN's network and Internet service to accommodate the 50% annual growth in demand from our clients.
- Expansion of shared services with post-secondary clients.
- MERLIN will also continue to explore adding new IT services as opportunities arise depending on client needs and Agency capabilities.



MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING

The accompanying financial statements are the responsibility of the management of the Manitoba Education, Research and Learning Information Networks (the "Agency") and have been prepared in accordance with Canadian public sector accounting standards. In management's opinion, the financial statements have been properly prepared within reasonable limits of materiality, incorporating management's best judgment regarding all necessary estimates and all other data available to the date of the audit report.

Management maintains internal controls to properly safeguard the assets and to provide reasonable assurance that the books and records from which the financial statements are derived accurately reflect all transactions and that established policies and procedures are followed.

The responsibility of the external audit is to express an independent opinion on whether the financial statements of the Agency are fairly represented in accordance with Canadian public sector accounting standards. The Independent Auditor's Report outlines the scope of the audit examination and provides the audit opinion.

On behalf of Management of the Agency:

Original signed by:

Kiley Bender, Acting Chief Operating Officer

Original signed by:

Rhonda Williams, Controller

July 14, 2020



Tel: 204 956 7200
Fax: 204 926 7201
Toll-Free: 800 268 3337
www.bdo.ca

BDO Canada LLP/s.r.l./S.E.N.C.R.L.
700 - 200 Graham Avenue
Winnipeg MB R3C 4L5 Canada

Independent Auditor's Report

To the Special Operating Agencies Financing Authority

Opinion

We have audited the financial statements of Manitoba Education, Research and Learning Information Networks, An Agency of the Government of Manitoba (the "Agency"), which comprise the statement of financial position as at March 31, 2020, and the statements of operations, change in net debt, and cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Agency as at March 31, 2020, and its results of operations, its change in net debt and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Agency in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian public sector accounting standards 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.

In preparing the financial statements, management is responsible for assessing the Agency's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Agency or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Agency's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.



As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for expressing an opinion on the effectiveness of the Agency's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Agency's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Agency to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Original signed by: BDO Canada LLP

Chartered Professional Accountants

Winnipeg, Manitoba

July 14, 2020

FINANCIAL STATEMENTS

Statement of Financial Position

(In Thousands)

	March 31	March 31
	2020	2019
Financial Assets		
Cash and cash equivalents (Note 6)	\$ 1,008	\$ 1,101
Accounts receivable	568	567
Portfolio investments (Note 9)	47	47
	<u>1,623</u>	<u>1,715</u>
Liabilities		
Accounts payable and accruals	348	532
Unearned revenue	1,372	1,455
Employee future benefits (Note 7)	145	147
	<u>1,865</u>	<u>2,134</u>
Net debt	<u>(242)</u>	<u>(419)</u>
Non-financial Assets		
Prepaid expenses	594	787
Tangible capital assets (Note 8)	684	622
	<u>1,278</u>	<u>1,409</u>
Accumulated surplus	<u>\$ 1,036</u>	<u>\$ 990</u>

Commitments (Note 10)

The accompanying notes are an integral part of these financial statements.

Statement of Operations

(In Thousands)

For the year ended March 31

	2020	2020	2019
	Budget	Actual	Actual
Revenue			
Fee for goods and services	\$ 5,439	\$ 5,344	\$ 5,501
Other	-	21	105
	<u>5,439</u>	<u>5,365</u>	<u>5,606</u>
Expense			
Advertising and promotion	16	18	13
Amortization of tangible capital assets	350	338	322
Audit and legal fees	14	13	11
Communication and bandwidth	264	221	190
Cost of purchases for resale	2,202	2,088	2,310
Course delivery	50	35	46
Equipment repair and maintenance	384	357	356
Manitoba Network connections	700	841	892
Occupancy	99	108	102
Office and miscellaneous	66	83	73
Professional development	20	3	21
Purchased services	-	43	54
Salaries and benefits	1,254	1,165	1,183
Travel	20	6	8
	<u>5,439</u>	<u>5,319</u>	<u>5,581</u>
Annual surplus	-	46	25
Accumulated surplus , beginning of year	970	990	965
Accumulated surplus , end of year	<u>\$ 970</u>	<u>\$ 1,036</u>	<u>\$ 990</u>

The accompanying notes are an integral part of these financial statements.

Statement of Change in Net Debt

(In Thousands)

For the year ended March 31

	2020	2020	2019
	Budget	Actual	Actual
Annual surplus	\$ -	\$ 46	\$ 25
Tangible Capital Assets			
Acquisition of tangible capital assets	(400)	(400)	(306)
Amortization of tangible capital assets	350	338	322
Net acquisition of tangible capital assets	(50)	(62)	16
Other Non-financial Assets			
(Increase) decrease in prepaid expenses	-	193	(350)
Decrease in net debt	(50)	177	(309)
Net debt , beginning of year	(540)	(419)	(110)
Net debt , end of year	\$ (590)	\$ (242)	\$ (419)

Statement of Cash Flows

(In Thousands)

For the year ended March 31

	2020	2019
Cash provided by (applied to):		
Operating Activities		
Annual surplus	\$ 46	\$ 25
Amortization of tangible capital assets	338	322
	384	347
Changes in:		
Accounts receivable	(1)	(41)
Accounts payable and accruals	(184)	62
Unearned revenue	(83)	(30)
Employee future benefits	(2)	(24)
Prepaid expenses	193	(350)
Cash applied to operating activities	(77)	(36)
Capital Activities		
Acquisition of tangible capital assets	(400)	(306)
Decrease in cash and cash equivalents	(93)	(342)
Cash and cash equivalents , beginning of year	1,101	1,443
Cash and cash equivalents , end of year	\$ 1,008	\$ 1,101

The accompanying notes are an integral part of these financial statements.

Notes to Financial Statements

(In Thousands)

For the year ended March 31, 2020

1. Nature of Organization

Effective April 1, 1995, Manitoba Education, Research and Learning Information Networks (the "Agency") was designated as a Special Operating Agency pursuant to The Special Operating Agencies Financing Authority Act, Cap S185, C.C.S.M. and operates under a charter approved by the Lieutenant Governor in Council. Effective April 1, 2015, Agency operates as part of Finance under the general direction of the Assistant Deputy Minister.

The Agency is financed through the Special Operating Agencies Financing Authority (SOAFA). SOAFA has the mandate to hold and acquire assets required for and resulting from the Agency's operations. It finances the Agency through repayable loans and working capital advances. This financial framework enables the Agency to operate in a business like manner according to public policy expectations.

A Management Agreement between SOAFA and the Minister of Finance assigns responsibility to the Agency to manage and account for Agency related assets and operations on behalf of SOAFA.

The Agency remains bound by relevant legislation and regulations. It is also bound by administrative policy except where specific exemptions have been provided in its charter in order to meet business objectives.

The Agency is economically dependent on the Province of Manitoba as it derives much of its revenue and all of its financing requirements from the Province.

2. Basis of Accounting

The financial statements are prepared in accordance with Canadian generally accepted accounting principles for the public sector as recommended by the Public Sector Accounting Board.

3. Significant Accounting Policies

A. REVENUE

(i) Government Transfers

Government transfers without eligibility criteria or stipulations are recognized as revenue when the transfer is authorized.

Government transfers with eligibility criteria but without stipulations are recognized as revenue when the transfer is authorized and all eligibility criteria have been met.

Government transfers with or without eligibility criteria but with stipulations are recognized as

revenue in the period the transfer is authorized and all eligibility criteria have been met, except when and to the extent that the transfer gives rise to a liability.

(ii) Exchange Transactions

Product revenue is recognized when the goods are shipped or delivered and title and risk of loss pass to the customer. Service revenue is recognized when the rendering of services is completed or substantially completed.

(iii) Other Revenue

All other revenues are recorded on an accrual basis.

B. EXPENSES

(i) Accrual Accounting

All expenses incurred for goods and services are recorded on an accrual basis.

(ii) Government Transfers

Government transfers are recognized as expenses in the period in which the transfers are authorized and all eligibility criteria have been met.

C. FINANCIAL ASSETS

(i) Portfolio Investments

Portfolio investments are short term deposits with original maturities of more than three months. These investments are recognized at cost.

D. LIABILITIES

Liabilities are present obligations as a result of transactions and events occurring prior to the end of the fiscal year. The settlement of the liabilities will result in the future transfer or use of assets or other form of settlement. Liabilities are recorded at the estimated amount ultimately payable.

E. NON FINANCIAL ASSETS

Non financial assets do not normally provide resources to discharge liabilities of the Agency. These assets are normally employed to provide future services.

(i) Prepaid Expenses

Prepaid expenses are payments of goods or services which will provide economic benefit in future periods. The prepaid amount is recognized as an expense in the year the goods or services are consumed.

(ii) Tangible Capital Assets

Tangible capital assets are recognized at cost. Cost includes the purchase price as well as other acquisition costs. The cost of tangible capital assets, less any residual are amortized over their estimated useful lives as follows:

Computer hardware	25%, straight line
Computer software	25%, straight line
Equipment and furniture	20%, straight line
Leaseholds	20%, straight line

F. MEASUREMENT UNCERTAINTY

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingencies at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

4. Financial Instruments and Financial Risk Management

MEASUREMENT

Financial instruments are classified into one of the two measurement categories: (a) fair value; or (b) cost or amortized cost.

The Agency records its financial assets at cost, which include cash and cash equivalents, accounts receivable and portfolio investments. The Agency also records its financial liabilities at cost, which include accounts payable.

The Agency did not incur any remeasurement gains and losses during the years ended March 31, 2020 and 2019.

FINANCIAL RISK MANAGEMENT – OVERVIEW

The Agency has exposure to the following risks from its use of financial instruments: credit risk; liquidity risk; market risk; interest risk; and foreign currency risk.

CREDIT RISK

Credit risk is the risk that one party to a financial instrument fails to discharge an obligation and causes financial loss to another party. Financial instruments which potentially subject the Agency to credit risk consist principally of cash and cash equivalents, accounts receivable, and portfolio investments.

The maximum exposure of the Agency to credit risk at March 31 is:

	<u>2020</u>	2019
Cash and cash equivalents	\$ 1,008	\$ 1,101
Accounts receivable	568	567
Portfolio investments	<u>47</u>	<u>47</u>
Maximum exposure to credit risk	<u>\$ 1,623</u>	<u>\$ 1,715</u>

Cash and cash equivalents, and portfolio investments: The Agency is not exposed to significant credit risk as these amounts are held by the Minister of Finance.

Accounts receivable: The Agency is not exposed to significant credit risk as the balance is due from a large client base, and payment in full is typically collected when it is due. The Agency manages this credit risk through close monitoring of overdue accounts.

The Agency establishes an allowance for doubtful accounts that represents its estimate of potential credit losses. The allowance for doubtful accounts is based on management's estimates and assumptions regarding current market conditions, customer analysis and historical payment trends. These factors are considered when determining whether past due accounts are allowed for or written off.

The allowance for doubtful accounts balance at 2020 was \$5 (\$5 in 2019).

LIQUIDITY RISK

Liquidity risk is the risk that the Agency will not be able to meet its financial obligations as they come due.

The Agency manages liquidity risk by maintaining adequate cash balances and by review from the Province of Manitoba to ensure adequate funding will be received to meet the obligations.

MARKET RISK

Market risk is the risk that changes in market prices, such as interest rates and foreign exchange rates, will affect the Agency's income or the fair values of its financial instruments.

INTEREST RATE RISK

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The interest rate exposure relates to funds on deposit, and portfolio investments.

The interest rate risk on funds on deposit is considered to be low because of their short term nature. The interest rate risk on portfolio investments is considered low as the original deposits are reinvested at rates for investments with similar terms and conditions.

FOREIGN CURRENCY RISK

Foreign currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The Agency is not exposed to significant foreign currency risk as it does not have any financial instruments denominated in foreign currency.

5. Working Capital Advances

The Agency has an authorized line of working capital advances up to \$2.0 million. As at March 31, 2020 working capital advances were \$NIL (\$NIL in 2019). The line bears interest at prime less 1% and is not secured by specific assets.

6. Cash and Cash Equivalents

The Agency invests all surplus cash in short term deposits with the Province of Manitoba, which are made up of term deposits with maturities of up to three months.

7. Employee Future Benefits

	<u>2020</u>	2019
Severance benefits	\$ 126	\$ 129
Sick pay benefits	19	18
	<u>\$ 145</u>	<u>\$ 147</u>

PENSION BENEFITS

Employees of the Agency are eligible for pension benefits in accordance with the provisions of the Civil Service Superannuation Act (CSSA), administered by the Civil Service Superannuation Board (CSSB). The CSSA established a defined benefit plan to provide benefits to employees of the Manitoba Civil Service and to participating agencies of the Government, including the Manitoba Education, Research & Learning Information Network, through the Civil Service Superannuation Fund (CSSF).

Pursuant to an agreement with the Province of Manitoba, the Agency is required to pay to the Province an amount equal to the current pension contributions of their employees. The amount paid for 2020 was \$72 (\$83 in 2019). Under this agreement, the pension liability is the responsibility of the Province, and the Agency has no further pension liability.

SEVERANCE BENEFITS

Effective April 1, 1998, the Agency began recording accumulated severance pay benefits for its employees. The amount of severance pay obligations is based on actuarial calculations. The periodic actuarial valuations of these liabilities may determine that adjustments are needed to the actuarial calculations when actual experience is different from that expected and/or because of changes in actuarial assumptions used. The resulting actuarial gains or losses are amortized over the expected average remaining service life of the related employee group.

SEVERANCE BENEFITS

An actuarial report was completed for the severance pay liability as of March 31, 2017. The report provides a formula to update the liability on an annual basis. The Agency's actuarially determined net liability for accounting purposes as at March 31, 2020 was \$126 (\$129 in 2019), with an actuarial adjustment being amortized over the 15 year expected average remaining service life (EARSL) of the employee group.

Significant long term actuarial assumptions used in the March 31, 2017 valuation, and in the determination of the March 31, 2020 present value of the accrued severance benefit obligation were:

Annual rate of return:	
Discount rate	<u>3.80%</u>
Annual salary increase rates:	
Annual productivity increase	1.00%
Annual general salary increase	<u>2.75%</u>
	<u>3.75%</u>

The severance benefit liability at March 31 includes to following components:

	<u>2020</u>	2019
Accrued benefit liability		
Balance, beginning of year	\$ 165	\$ 194
Benefits accrued	5	5
Interest on accrued benefits	6	8
Severance paid	<u>(17)</u>	<u>(42)</u>
Balance, end of year	159	165
Less unamortized actuarial losses	<u>(33)</u>	<u>(36)</u>
Severance benefit liability	<u>\$ 126</u>	<u>\$ 129</u>

The total expenses related to severance benefits at March 31 includes the following components:

	<u>2020</u>	2019
Interest on obligation	\$ 6	\$ 8
Current period benefit cost	5	5
Amortization of actuarial losses over EARSL	<u>3</u>	<u>2</u>
Total expense related to severance benefit	<u>\$ 14</u>	<u>\$ 15</u>

SICK PAY BENEFITS

The Agency provides sick leave benefits for employees that accumulate but do not vest. The accrued benefit obligation related to sick leave entitlement earned by employees is determined using a valuation model developed by an actuary. The valuation is based on employee demographics, sick leave usage and actuarial assumptions. These assumptions include a 3.60% discount rate and a 3.75% annual salary increase.

8. Tangible Capital Assets

				2020
	Opening Balance	Additions	Disposals	Closing Balance
Cost				
Computer hardware	\$ 2,642	\$ 400	\$ (746)	\$ 2,296
Computer software	132	-	(70)	62
Equipment and furniture	48	-	-	48
Leaseholds	20	-	-	20
	2,842	400	(816)	2,426
Accumulated Amortization				
Computer hardware	2,038	332	(746)	1,624
Computer software	116	6	(70)	52
Equipment and furniture	46	-	-	46
Leaseholds	20	-	-	20
	2,220	338	(816)	1,742
Net book value	\$ 622	\$ 62	\$ -	\$ 684
				2019
	Opening Balance	Additions	Disposals	Closing Balance
Cost				
Computer hardware	\$ 2,336	\$ 306	\$ -	\$ 2,642
Computer software	132	-	-	132
Equipment and furniture	48	-	-	48
Leaseholds	20	-	-	20
	2,536	306	-	2,842
Accumulated Amortization				
Computer hardware	1,725	313	-	2,038
Computer software	107	9	-	116
Equipment and furniture	46	-	-	46
Leaseholds	20	-	-	20
	1,898	322	-	2,220
Net book value	\$ 638	\$ (16)	\$ -	\$ 622

9. Designated Assets

The Agency has allocated \$47 (\$47 in 2019) of its portfolio investments as designated assets for cash received from the Province of Manitoba for the vacation entitlements earned by employees of the Agency prior to its designation as an SOA and the severance pay benefits accumulated to March 31, 1998 for certain of their employees. This amount is held in an interest bearing account until the cash is required to discharge the related liabilities. Any unused balance is reinvested annually.

10. Commitments

The agency has entered into a lease agreement for the rental of the building with The University of Manitoba until March 31, 2022. The estimated minimum lease payments for each of the next two years are as follows:

2021	\$428
2022	455

11. Uncertainty Related to COVID-19 Pandemic

The impact of COVID-19 in Canada and on the global economy increased significantly. As the impact of COVID-19 continue, there could be further impact on the Agency and its major customers, suppliers and related government agencies that could impact the timing and amounts realized on the Agency's assets and future profitability. Management is actively monitoring the effect on its financial condition, liquidity, operations and workforce. Given the daily evolution of the COVID-19 outbreak and the global response to curb its spread, the Agency is not able to fully estimate the effects of the COVID-19 outbreak on its results of operations, financial condition, or liquidity at this time.



Manitoba Education Research and Learning Information Networks (MERLIN), a Special Operating Agency of the Province of Manitoba

100-135 Innovation Drive | Smartpark University of Manitoba | Winnipeg, Manitoba R3T 6A8

Phone: 204-977-6800 | Toll-free: 1-800-430-6404

merlin.mb.ca

