INFORMATION & IMPACT

2019–2020

MOREnet

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Member Statistics

As a department within the University of Missouri System, the Missouri Research and Education Network (MOREnet) maintains a statewide fiber network spanning more than 3,600 route miles, providing robust and secure Internet connectivity as well as essential technical services to more than 700 Missouri organizations.

the MOREnet network connects members to other Missouri entities and the Internet

MOREnet's technical services include cybersecurity, network consulting, videoconferencing, technical training, help desk support and access to online resource databases

Higher Education

58 public and independent higher education institutions serving more than 263,000 students

55% connect to MOREnet network

100% subscribe to our technical services

K–12 Schools

493 public and private K-12 schools serving more than 862,000 students

71% connect to MOREnet network

98% subscribe to our technical services

Libraries

121 public libraries that serve nearly 3 million Missourians

85% connect to MOREnet network

99% subscribe to our technical services

Government, Health Care & Nonprofit

28 state/local government, health care or nonprofit entities utilize MOREnet connectivity and/or technical services as they support their users and local communities.

In the course of providing connectivity to our members, nearly 60% of our annual expenditures are spent directly with telecommunications services from companies doing business in Missouri; this centralized purchasing saves our members time and resources and stimulates local economic development.
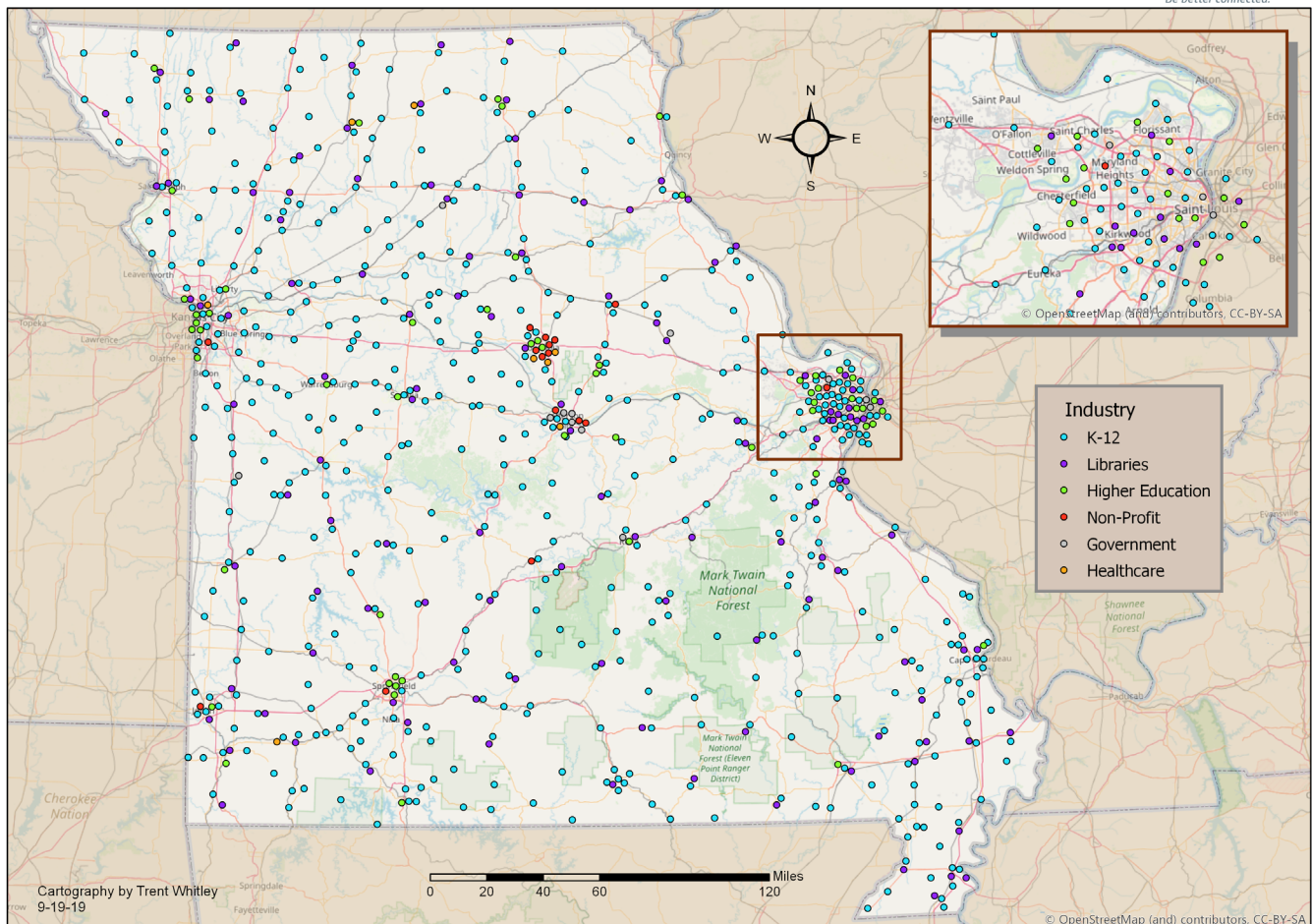
MOREnet Membership

MOREnet Consortium members have access to a broad spectrum of technology solutions, subject matter experts for consulting and help desk support, as well as professional development.

There are two ways to become a member of the MOREnet Consortium: either by connecting to our unparalleled and robust fiber network or by purchasing a Membership Service Package. Most members choose to take advantage of both to be better connected to the technology and services they require and have come to expect from MOREnet.

All Membership Service Packages include a base amount of our most popular services: online research resources, network consulting, videoconferencing, training and access to consortium discounts. Members can also choose to upgrade to a Full Membership Service Package and receive access to ZOOM videoconferencing accounts, unlimited network consulting, technical support, and technical training.

Exclusively for local government and nonprofit entities, the Nonprofit/Agency Membership Package includes unique and valuable services such as ZOOM, LearningExpress Library, a network assessment and cybersecurity resources.

MOREnet Members

Cartography by Trent Whitley
9-19-19

Industry
- K-12
- Libraries
- Higher Education
- Non-Profit
- Government
- Healthcare

Internet Connectivity

Worry Free Connection

We believe our members should be able to focus on their primary missions and shouldn't have to worry about their connectivity. For all connections, members purchase a bundled set of value-added services. Through a bandwidth-based service fee, members receive a variety of services. With continued growth, MOREnet has been able to steadily reduce this service fee over the years. We continue to drive costs down to ensure our members benefit from this valuable set of reliable services at the best possible price.

SERVICES ADDED WITH A MOREnet CONNECTION

- PROACTIVE NETWORK MONITORING
- THREAT MONITORING
- BLOCKING KNOWN MALWARE SITES
- CONNECTION MANAGEMENT
- E-RATE ASSISTANCE & FILING (IF ELIGIBLE)
- NETWORK UTILIZATION
- CYBERSECURITY SUPPORT
- INCIDENT RESPONSE SERVICES
- TECHNICAL SUPPORT
- TROUBLESHOOTING ASSISTANCE

Value-Added Services

Connectivity into the MOREnet 100 Gigabit per second (Gbps) fiber backbone includes:

- Robust Internet access
- Network and cybersecurity services and support
- Distributed Denial of Service attack mitigation
- Connectivity procurement services including bid development and vendor negotiations
- Vendor relations and repair coordination
- Domain Name Systems
- Domain Name System malicious domain blocking
- Router and router management
- 24/7 connection monitoring
- Technical help desk support
- Internet connectivity E-rate filing and support
- Filing and support for the Healthcare Connect Fund (HCF) program
- Access to Internet2, the national research and education network

Internet Connectivity

E-rate

On behalf of our schools and libraries, MOREnet files as a consortium for E-rate funding. We work to ensure our members with eligible Internet connectivity services receive the benefit of federal funding to help lower their broadband costs. Circuit pricing varies by provider, bandwidth speed and technology through which it is delivered. Based on our contracts with local providers and our ability to leverage economies of scale, we typically see improved per megabit pricing year over year.

Five-year E-rate Reimbursement*	Avg. E-rate Discount 2019
K-12: $ 27,164,327	K-12: 79.70%
Library: $ 7,528,819	Library: 79.13%

Fiber Readiness

The Federal Communications Commission (FCC) has adopted an Internet Readiness access goal of 100 kilobits per second (kbps) per student as the minimum threshold that all schools should achieve in order to implement digital learning. 92% of Missouri K-12 districts connected to MOREnet have met or exceeded that goal.

The FCC's goal is for every school to have a broadband connection capable of scaling to 10 Gbps. Today, only fiber optic connections are capable of meeting that goal. 99% of MOREnet connected schools have a fiber connection. In addition to a reliable connection, we ensure full, committed bandwidth, technical support and security monitoring.

Internet Readiness access goal:
100 kbps
per student

92%
of Missouri K-12 districts connected to MOREnet have met the goal

Broadband connection capability:
10 Gbps

99%
of MOREnet schools have a fiber connection

	Unit of Measurement	K-12	Higher Education	Libraries	Government	Health Care	Nonprofit	TOTAL
Members[1]	Participants	493	58	116	5	8	15	700
Member Tail Circuits[2]	Circuits	374	49	211	5	8	4	632
Tail Circuit Bandwidth	Gbps	117,979	34,675	5,993	2,710	590	50	161,997
Member Enterprise (WAN) Circuits	Circuits	15	4	0	2	1	0	22
Enterprise (WAN) Bandwidth	Gigabits per Second (Gbps)	9,240	4,000	0	100	1,000	0	14,340
Help Desk Cases	Cases Created	2,321	866	633	98	90	156	4,164
Training[3]	Registered Attendees	1,805	172	133	11	1	21	2,143
	Deliverable Hours[4]	10,015	514	312	37	6	139	11,203
Videoconferencing	Events[5]	3,320	20,266	0	0	84	445	24,115
Annual Conference	Registered Attendees	460	33	45	4	0	25	567
Online Resources	Heritage Quest Searches	12,759	14,038	598,796	3,137	151	0	628,881
	Learning Express Tests	26,774	5,484	7,810	18	0	11	40,097
	EBSCO Searches	12,059,090	71,880,078	14,934,504	0	3,135	17	98,876,824

1. Member: Members include eligible organizations that receive services from MOREnet and that have an active Participation Agreement in place. These organizations may have multiple sites.

2. Member Tail Circuits: An Internet connection is a standard, but optional, MOREnet service offering. MOREnet provides its member sites with a router and circuit for access to the secure and reliable MOREnet statewide fiber network and the Internet. Circuits are the physical circuits between the telecommunications company and the participating organizations' sites that connect to the MOREnet backbone.

3. Individuals attending multiple training sessions within the fiscal year are counted in the "Total Number of Training Attendees" each time they attended a session.

4. A contact hour is computed as the total delivery time for each course, multiplied by the number of attendees in each course. For example, a five (5) hour course with 14 attendees totals 70 contact hours. Total contact hours for all completed training classes are shown.

5. Total videoconferencing events include video events where an organization joined as a host or as a site participant.

Data is current as of June 30, 2019

Financials

Year-to-date for period ending June 30, 2019

Revenues

K-12	10,430,859
Higher Education	2,438,834
Government, Health Care & Nonprofits	1,433,846
Libraries	914,399
State Contracts - HB12 & Other	2,000,002
Federal E-rate & RHC Reimbursements	7,688,890
Investment Income	40,617
Other Fees and Miscellaneous	2,253,684
Sponsorship Revenue	31,000
Revenue Transfers	-
Total Revenue	**27,232,131**

Expenses
Direct Expenses

Internet Access	273,124
Aggregation Circuits	574,611
Backbone, I2, Other Network	1,903,881
Maintenance	1,529,478
Network Related Travel	2,700
Total Network Related Expense	**4,283,794**
Connection Data Lines	8,362,009
Connection Equipment	83,220
Connection Equipment Maintenance	49,336
Total Connection Expense	**8,494,565**
Member Training	7,438
Conferences/Member Meetings	123,243
Member Related Travel	24,376
Online Resources	998,756
Product Development	-
Membership Related Services	199,779
Fee-for-Service Related	1,661,869
Total Other Expenses	**3,015,461**
Direct Salaries and Benefits	**4,179,957**
Total Direct Expenses	**19,973,777**

G&A Expenses

Staff Dev., Travel and Meeting Expense	128,175
Member Outreach	77,681
Telephone	39,538
Office Supplies and Expense	21,511
Equipment, Software and Accessories	37,659
Maintenance for Equipment and Software	98,200
Professional Services	113,369
Rent, Utilities, Janitorial, and Security	277,826
Total Operating Expenses	**793,959**
G&A Salaries and Benefits	**3,087,846**
Total G&A Expenses	**3,881,805**
Indirect Expense (For Contracts)	-
Total Expenses	**23,855,582**
Revenue over Expenses	**3,376,549**
Capital Transfer	(3,376,549)
Fund Balance, End of Period	**-**

Member Satisfaction Statistics

We measure membership satisfaction from three sources:
1. Annual Customer Satisfaction Surveys
2. Case Surveys
3. Training Evaluations

"We're proud to partner with MORE.net and receive industry-leading services and excellent support."

Annual Customer Satisfaction Surveys

Overall Satisfaction

92%

responded they were satisfied or very satisfied with MOREnet.

Overall Service Offerings

95%

responded they were satisfied or very satisfied with the service offerings from MOREnet.
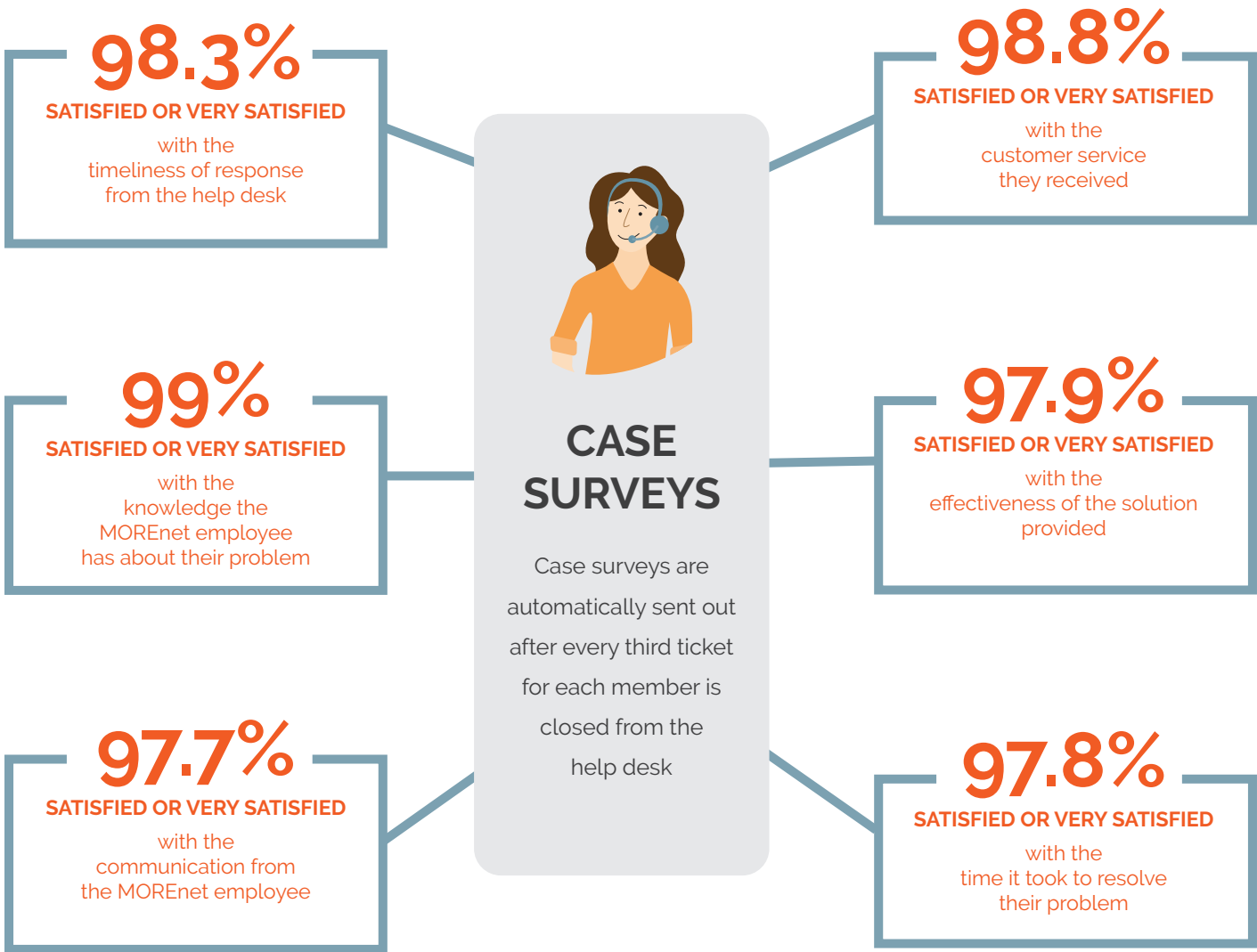
Value for Price

84%

responded they were satisfied or very satisfied with the value for the price from MOREnet.

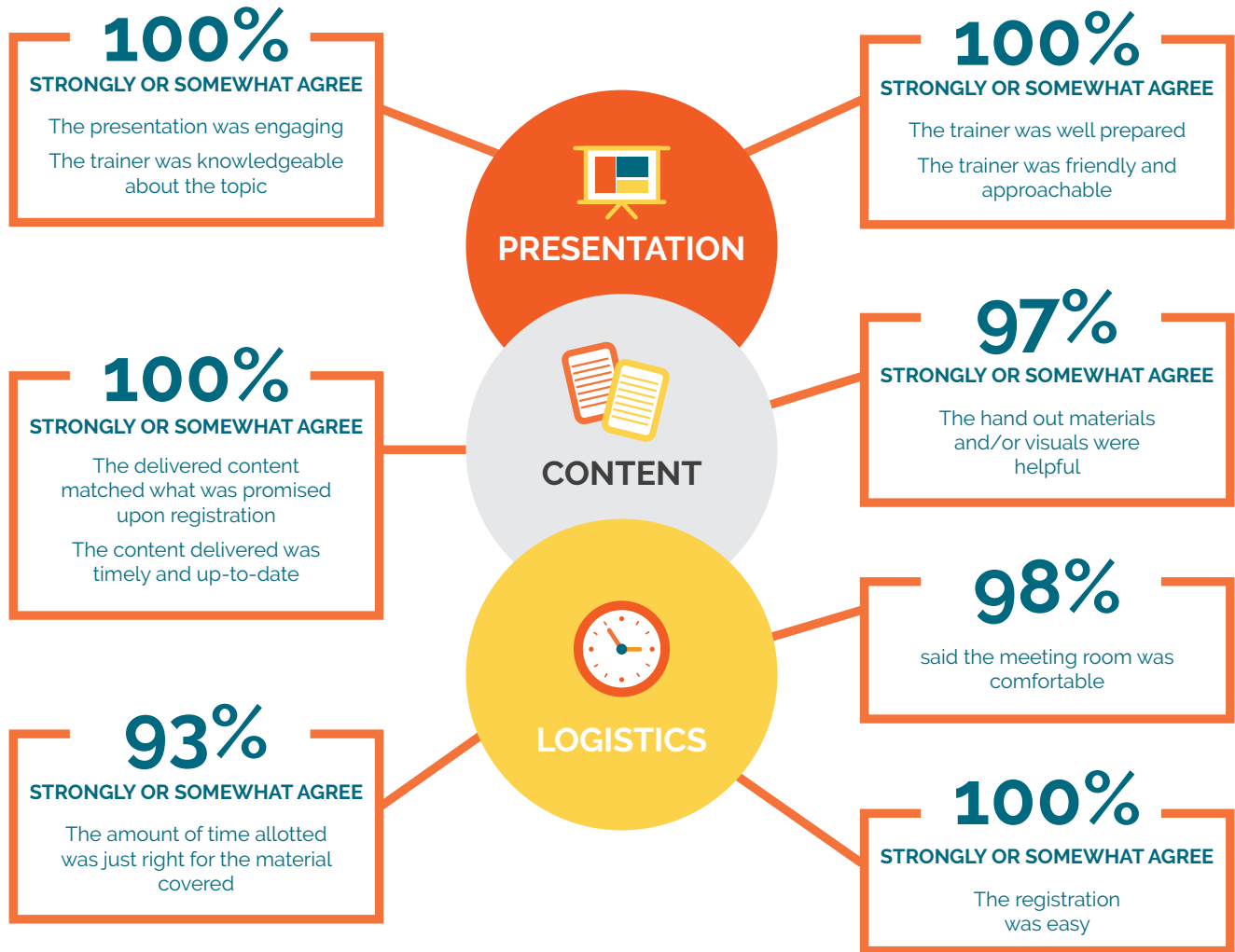**Overall Customer Satisfaction has been at or above**

92%

for the last 10 years.

Case Surveys

98.3%
SATISFIED OR VERY SATISFIED
with the
timeliness of response
from the help desk

98.8%
SATISFIED OR VERY SATISFIED
with the
customer service
they received

99%
SATISFIED OR VERY SATISFIED
with the
knowledge the
MOREnet employee
has about their problem

97.9%
SATISFIED OR VERY SATISFIED
with the
effectiveness of the solution
provided

CASE SURVEYS

Case surveys are automatically sent out after every third ticket for each member is closed from the help desk

97.7%
SATISFIED OR VERY SATISFIED
with the
communication from
the MOREnet employee

97.8%
SATISFIED OR VERY SATISFIED
with the
time it took to resolve
their problem

"The best asset you have at MOREnet is your talented staff members. I was going to mention a few by name but it has been my experience that all the staff I approach, respond to my needs in a professional, timely manner."

Training Satisfaction

100%

STRONGLY OR SOMEWHAT AGREE

The presentation was engaging

The trainer was knowledgeable about the topic

100%

STRONGLY OR SOMEWHAT AGREE

The trainer was well prepared

The trainer was friendly and approachable

PRESENTATION

CONTENT

97%

STRONGLY OR SOMEWHAT AGREE

The hand out materials and/or visuals were helpful

100%

STRONGLY OR SOMEWHAT AGREE

The delivered content matched what was promised upon registration

The content delivered was timely and up-to-date

98%

said the meeting room was comfortable

LOGISTICS

93%

STRONGLY OR SOMEWHAT AGREE

The amount of time allotted was just right for the material covered

100%

STRONGLY OR SOMEWHAT AGREE

The registration was easy

THE BOTTOM LINE

100%

SOMEWHAT OR EXTREMELY LIKELY

to recommend this training to a friend or colleague

Assisting Westminster to go Digital Blue

Westminster College in Fulton, Missouri has been working toward a new initiative, Digital Blue, since 2014. They want every student at the college to be given an iPad for course work, but to also use as a tool for creativity and productivity. In order for Digital Blue to reach its full potential, the college needed to not only figure out the financial and logistical aspect but also gain faculty buy-in.

MOREnet came alongside Westminster and Digital Blue Coordinator, Barri Bumgarner, to assist in training for students and teaching faculty. The teaching faculty attended the training to learn the nuances of the iPad, to get a basic training on what it can do, and to learn the essential IOS functionality. Over the course of six training events, the MOREnet trainers provided sessions on individual tools like Notes, Pages, Keynote, iMovie and Nearpod, as well as basic iPad tools and settings.

So far, Digital Blue has been a success. The faculty and students have set up Tech Tuesday twice a month to extend the training and learning. Many of the stations are student led and that has empowered future teachers to use technology and to teach. Students are benefitting tremendously from a uniform device, both as a teaching

and a learning device. They are sharing ideas, lessons, and videos. They frequently use the AirPlay and AirDrop features to avoid emailing and printing and a significant percentage of students are using Notability to take notes in classes. Overall, it has been a tremendous success so far!

"[MOREnet] was so instrumental in confirming the power of the iPad, sharing what it could do both as a faculty member for advising, grading, etc, but also as a progressive teacher in the classroom."

-Barri Bumgarner

Making the Poplar Bluff Staff Cybersecurity Aware

As a G-Suite for Education customer, Poplar Bluff School District would occasionally receive security notices that a user's account has been compromised or their credentials had been published somewhere on the web. It didn't take too many notices before they realized the efforts they had been investing in for training and security awareness weren't as effective as they had hoped.

With no way to gauge their user's specific susceptibility and determine their individual needs, they were just throwing out information on security awareness and hoping something would stick.

Poplar Bluff's technology director, Aaron Badgley, began piloting and trying some open source phishing simulators but never found a solution that completely fit their needs. In 2017,

they jumped at the opportunity to partner with MOREnet and began using the SANS Phishing Simulation tool. In late 2018, they switched over to the Cofense platform.

"We knew from our previous experience with MOREnet partners and consortium agreements that the vetting had been done for us - we knew we'd get a solid product."

The setup on the Cofense site was simple and straightforward. Within minutes of his initial training call, Aaron had his user list imported and the first scenario scheduled. Their implementation was simple. They let their users know upfront that they were starting to intentionally send phishing messages and that they would use the information to help them.

"The Cofense platform checks every box for us - it's easy to use, has customizable simulations, and reports the exact data we need to offer our users individualized and targeted professional development."

Aaron and his team have seen some positive results from their efforts. They have seen that the users are much more aware and willing to report potential phishing messages after using the Cofense platform.

"I receive several calls and emails each week with folks simply checking before they act on an email they received. It's a good feeling to have a user call and tell me that the URL in the link doesn't seem right."

The team plans to keep rolling out new phishing campaigns throughout the year. First they started with an obvious, click-only message and will then gradually increase to more challenging campaigns throughout the year. They also set up a dynamic group of "repeat offenders" that get a few extra messages throughout the year.

"Every campaign we send out is full of surprises! The reactions and feedback we've received from our users has ranged from appreciation to irritation. I have had emails from teachers thanking me for taking the time to help them learn to spot phishing and I've had teachers call me an evil cyberbully. Fortunately, I know both reactions mean that our efforts are working."
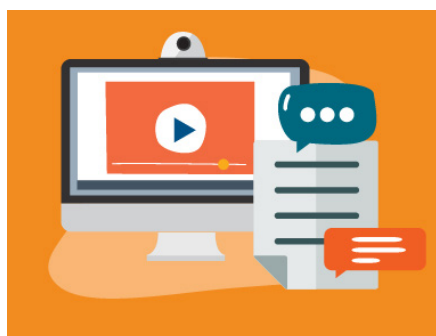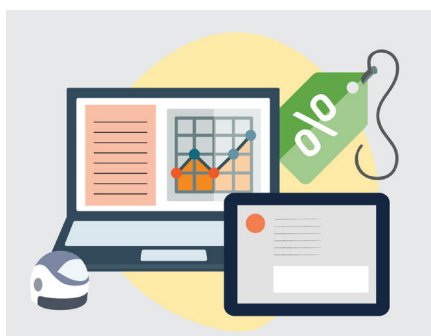
MOREnet SERVICES

CONNECTIVITY

PROFESSIONAL DEVELOPMENT

CYBERSECURITY

TOOLS & RESOURCES

CONSORTIUM DISCOUNTS

NETWORK SERVICES

Key Contacts

The primary function of the MOREnet Council is to direct and oversee planning and budgeting for the MOREnet infrastructure including the technical support required for the future growth and success of programs sponsored by Council members.

MOREnet EXECUTIVE STAFF

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Lynn Burgan
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FY2019 MOREnet COUNCIL MEMBER REPRESENTATIVES

Organization Type	Name
Higher Education	John Bax - Lincoln University **Donna Liss, Chair – Truman State University** Gary Stanowski - Columbia College
Libraries	Carrie Cline - Neosho Newton County Library Sue Lightfoot - Carrollton Public Library Michael Davis - Camden County Library
Public K-12 Schools	**Steve Klotz, Vice Chair – Maryville R-II School District** Tom Schreiner - Jackson R-II School District Ryan Gooding - Raymore-Peculiar School District
Others	Robin Westphal - Missouri State Library Mara Woody - Missouri Department of Higher Education Jeff Falter - Missouri Department of Elementary and Secondary Education Steve Siegler - Office of Administration Information Technology Services Beth Chancellor - University of Missouri System Natasha Angell - MOREnet