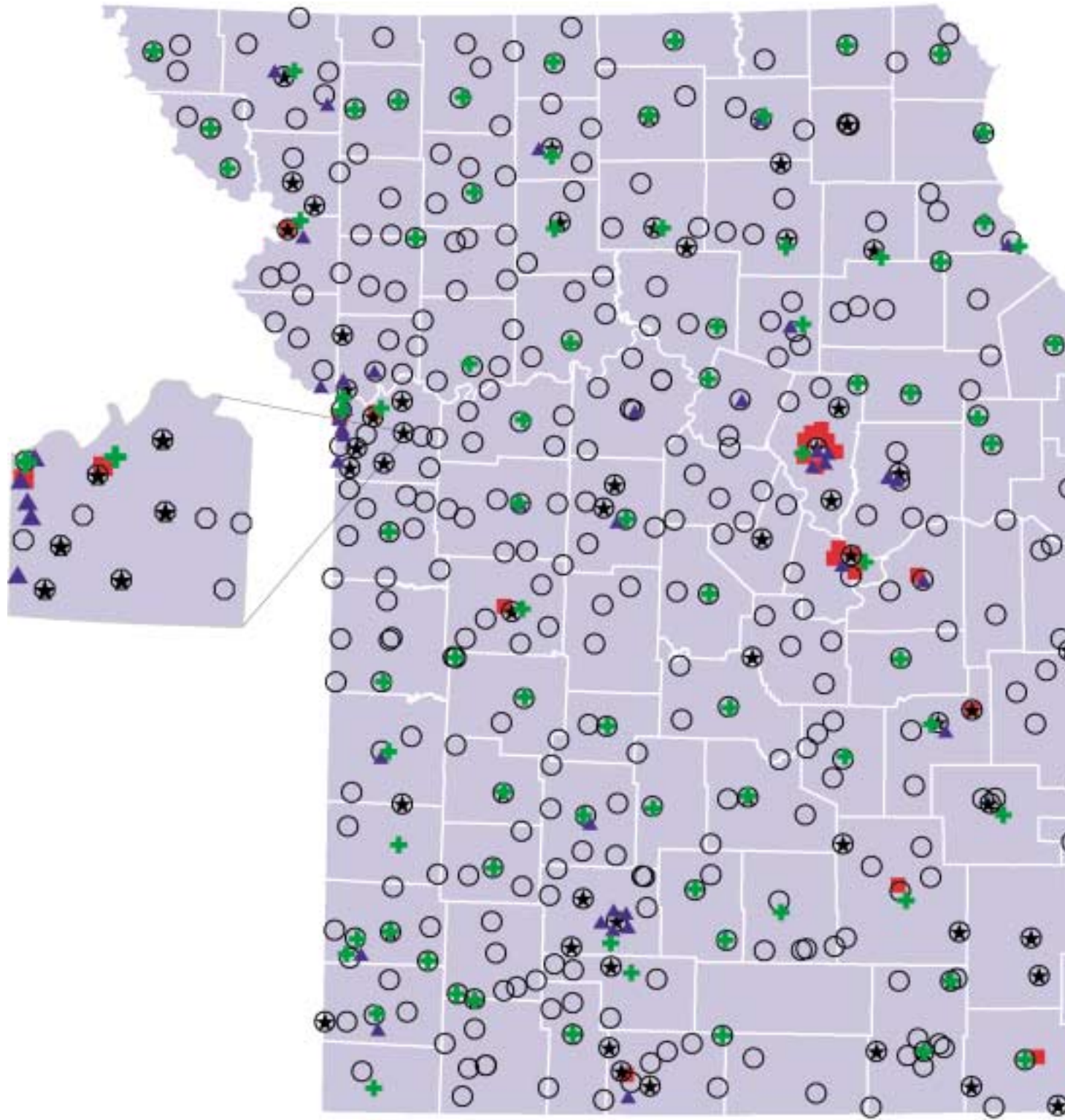


The MOREnet Story

MOREnet will lead Missouri and the nation in the innovative application of information technology for the benefit of the public.

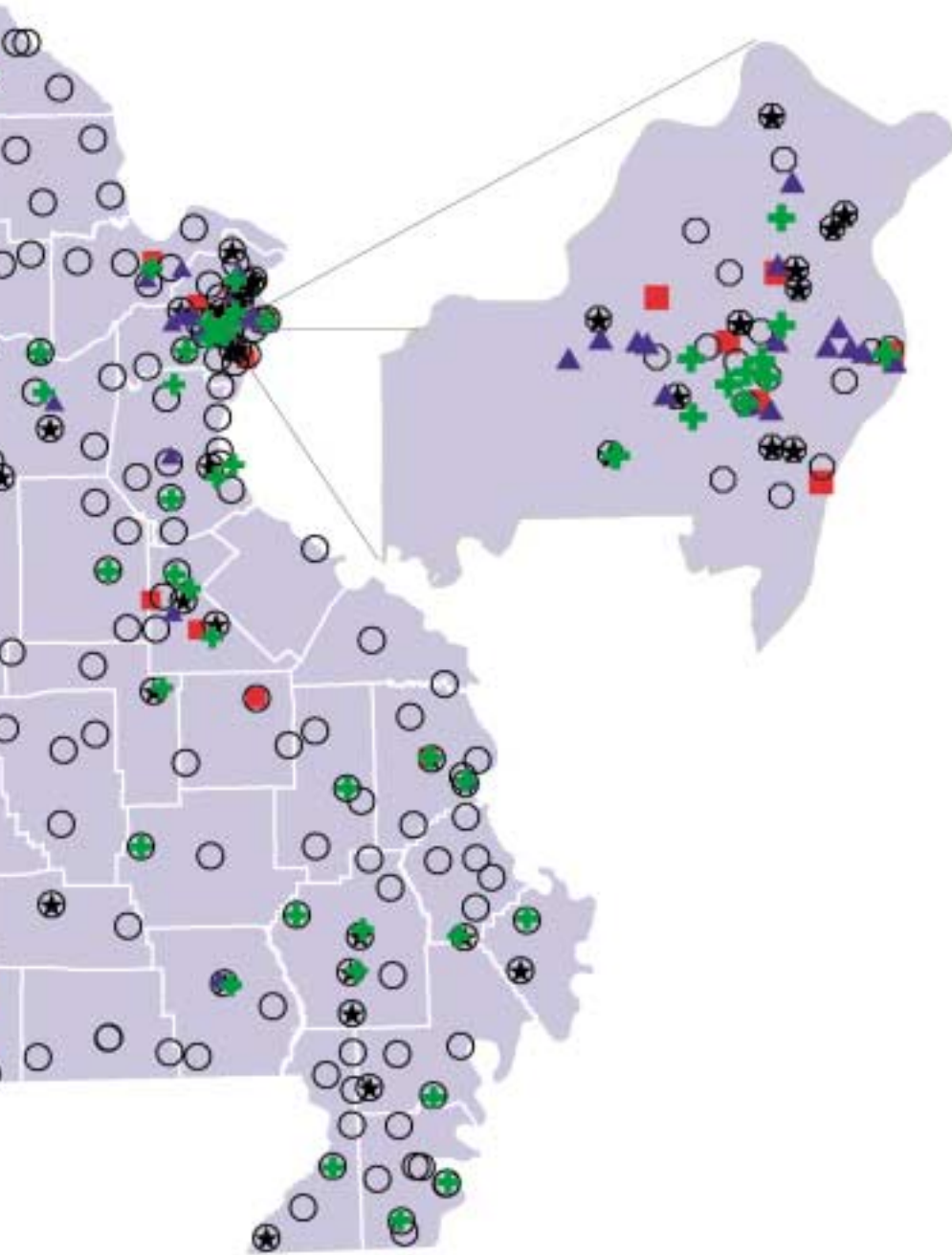




MOREnet Participants

As of June 30, 2001

- Affiliates (31)
- K-12 TNP (512)
- ★ eMINTS/MINTs (88)
- ▲ MERC (63)
- + REAL (121)



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MOREnet

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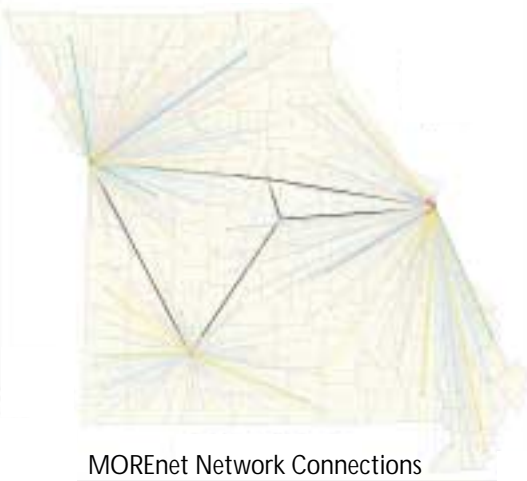
MOREnet is part of the
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<http://www.system.missouri.edu/>

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The Curators of the University of Missouri

published January 2002

Leading Missouri and the Nation

What is MOREnet?



MOREnet Network Connections

MOREnet (Missouri Research and Education Network) provides high-speed, reliable Internet access to the state's public sector. A unit of the University of Missouri System, MOREnet serves Missouri's K-12 schools, colleges and universities, public libraries, state government, teaching hospitals and clinics and other affiliates. In addition to Internet connectivity, MOREnet provides training and technical support needed to make that connection a useful tool. These services ensure that the time MOREnet customers spend with technology is productive and furthers their individual missions.

MOREnet Services: More Than Wires

Beyond Internet connectivity, training and technical support, MOREnet provides many additional services. They include access to online reference resources, opportunities to converse with colleagues in technical and topical discussion lists, security education and assistance, videoconferencing and more.

MOREnet Network: Robust and Reliable

Established in 1991, MOREnet encouraged the state's telecommunications providers to construct a MOREnet-designed, advanced, high-speed, high-bandwidth network throughout Missouri. These connections, managed by MOREnet on behalf of the state's schools and libraries, also laid the groundwork for Internet availability to thousands of rural Missourians.

A single reliable, carrier-class, high-quality network offers economies of scale, as well as more options than several smaller networks. Network sharing allows MOREnet customers access to a broader range of services — giving each organization more than any one could afford alone.

Internet2: Expanding Education and Research

In 2001, MOREnet became one of the first five state education networks admitted to the Internet2 Sponsored Educational Group Participants Program. The Program seeks to introduce the broader educational community to Internet2, an advanced national education and research network, created to avoid the crowded pathways of the current Internet. Internet2 is capable of handling cutting-edge, multimedia applications and collaborative projects.

Previously available only to member universities, Internet2's high-performance network is now available to MOREnet customers.



MOREnet: Leading the Nation

MOREnet is leading the way in the field of educational technology. MOREnet's Executive Director, Bill Mitchell, is one of two leaders of the Internet2 K-20 Initiative. The Initiative facilitates projects that explore ways to extend advanced network applications, services and digital content quickly throughout the education community, to enhance teaching, learning and research.

MOREnet helped initiate the annual Gathering of State Networks and participates in national leadership functions in educational technology organizations such as EDUCAUSE and the Consortium of School Networks (CoSN).

MOREnet Services

- ◆ Conferences
 - ◆ Consulting Services and Support:
 - ◆ IP Address Configuration
 - ◆ LAN/WAN Management
 - ◆ Network Management and Configuration
 - ◆ Operating Systems Assistance
 - ◆ Workstation Connectivity
 - ◆ Domain Name Service
 - ◆ E-rate Assistance
 - ◆ Kinetic Suite
 - ◆ MOREnet Website
 - ◆ Online Resource Databases
 - ◆ Research and Innovation on New Technologies
 - ◆ Security
 - ◆ System Administration
 - ◆ Technical Documentation & Support
 - ◆ Training Courses & Cisco Academies
 - ◆ Usenet Newsfeed
 - ◆ Videoconferencing
-

Customers Come First **Services**

MOREnet has earned a reputation for providing quality customer services. Among the most important are:

Technical Consulting and Support

Having problems with a connection? Need a little help setting up videoconferencing equipment? MOREnet's technical staff is there every step of the way. MOREnet offers technical support, security assistance and monitoring, videoconferencing assistance, E-rate consultation and more.

Training

MOREnet training courses ensure customers get the most out of their technology. Trainers instruct attendees on topics such as HTML, JAVA, networking, security and advanced topics like Windows networking and CISCO certification.

Video Services

MOREnet offers a reliable, dedicated network needed for point-to-point and multipoint videoconferencing. And with Internet2's robust nationwide network, MOREnet customers are ensured higher quality and higher speed video services. MOREnet's video services enable students to learn in expanded, virtual classrooms, taught by professors lecturing from miles away. Videoconferencing makes meetings with attendees located all over the state, nation and world efficient and convenient.

Research and Innovation

What's the next big thing? You can be sure MOREnet is testing it now. MOREnet's Strategic Technologies group conducts research to determine the value of new and emerging technologies for MOREnet's customers. Research findings are made available to customers to guide them in planning and purchasing.

E-mail and Web hosting

Kinetic, an application built by MOREnet, allows customers to provide e-mail services for staff and students, to host websites with special features like interactive calendars and Java applets and more. It offers customers complete freedom from system management and maintenance problems while allowing them to manage their own accounts.

Conferences

MOREnet brings the education and technology communities together in a series of conferences held throughout the year. These events give attendees the opportunity to meet colleagues from other institutions, attend presentations and demonstrations, talk with vendors and consult with MOREnet staff.



In fiscal year 2001:

- ◆ 512 of 524 Missouri public school districts (98 percent) received Internet access via MOREnet.
- ◆ 63 of Missouri's 71 higher education institutions (90 percent), including all public higher education institutions, received Internet access via MOREnet.
- ◆ 121 of Missouri's 145 tax-supported public libraries obtained their Internet access via MOREnet.
- ◆ MOREnet staff responded to a total of 8,011 technical support and consulting calls.
- ◆ MOREnet trainers taught 5,985 training class attendees.
- ◆ MOREnet's professional development conferences saw 2,782 attendees.

Robust and Reliable by Design

Network

Due to the infrastructure's advanced design, MOREnet customers have never experienced a catastrophic failure of the core network.

MOREnet's telecommunications infrastructure is an exemplary state network serving the diverse needs of MOREnet's customers. MOREnet is one of the nation's foremost state networks, leading the way in technology and organizational collaboration. MOREnet is one of the few state networks to accommodate the diverse needs of higher education, elementary and secondary education, public libraries, state government and other organizations in a single, cost-effective network. The network, based on industry standards, was designed to be highly scalable to grow easily with the increasing bandwidth needs of MOREnet's customers and to support current and emerging network technologies.

Design Philosophy

MOREnet's design philosophy for the network was to make it robust and reliable, while providing affordable carrier-class features. The core network uses devices with dual power supplies, dual processors and dual circuit interface cards.

MOREnet's specifications for services secured from telecommunication providers follow the same philosophy. For example, the high-speed circuits (155 Mbps) connecting the five MOREnet network centers are based on fail-safe SONET facilities and data circuits from telecommunication providers, which bundle and deliver the connections from the individual MOREnet customer sites.

Using ATM and TCP/IP standards, MOREnet's network currently provides dedicated bandwidth for video systems, secure communication among sites and access to Internet2. Internet2 effectively establishes a high-speed research corridor in Missouri (see page 20 for more information about Internet2). MOREnet's high-performance network can carry most Internet-standard multimedia applications, including data, voice and video.

Videoconferencing

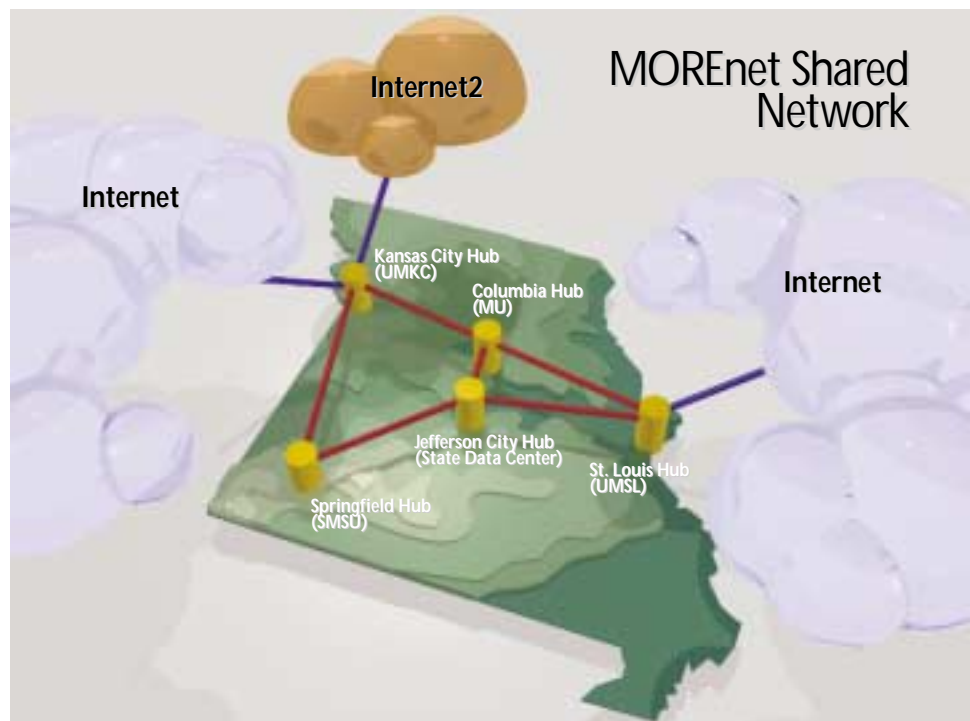
The ability to support videoconferencing services is an integral part of

the infrastructure. Multi-point conferencing units (MCU), centrally located in Columbia, Mo., support a variety of features that enable videoconferencing for multiple independent organizations. Gateway services provide translation between traditional H.320 video equipment and newer, packet-based H.323 video systems that use the Internet.

Monitoring Network Performance

MOREnet's network operations staff is available 24 hours a day, seven days a week. All elements of the network core infrastructure are monitored around the clock, every day of the year — holidays included. Network operations staff members are notified if an out-of-tolerance condition is detected. Network utilization and specialized network health reports are available to all customers at all times via MOREnet's website. Network status updates are available to all customers at all times by subscription to e-mail discussion lists. Any MOREnet customer can enter into a Service Level Agreement to have their circuit monitored after normal service hours.

Through the use of carrier-class features, constant monitoring and a fault tolerant architecture, MOREnet provides a highly stable and highly available network supporting the educational needs of Missouri. As testimony to this philosophy, MOREnet customers have never experienced a catastrophic failure of the core network.



Working Smarter

Performance

MOREnet is working smarter and more efficiently due to major initiatives designed to streamline internal processes and boost organizational effectiveness. Additionally, MOREnet is making sure the network is capable of handling mission-critical applications by prioritizing network traffic.

Quality of Service

Currently, the Internet delivers best-effort service and treats all network traffic equally. Unfortunately, just as there is rush-hour traffic on roads, there is also peak-usage time on the Internet. During these congested times, the performance of key applications can drop to unacceptable levels.

How can this issue be resolved? By making the network smarter. MOREnet's Quality of Service (QoS) project began in fiscal year 2001, with implementation continuing into fiscal year 2002. A QoS-protected statewide backbone network is essential to ensure the unimpeded flow of mission-critical traffic through the network. QoS implementation began on customer-edge routers and priority network applications, such as distance learning videoconferencing via H.323, and ensures that essential traffic has adequate bandwidth.

Strategic Planning

What new services do customers need that must be implemented in the coming year? What technologies are presently in development and likely to become a customer need five years from now? What does MOREnet need to do in the interim to prepare for the future?

Innovation, learning and continuous improvement are our way of life.

- One of MOREnet's Core Values
(page 22)



Each year, MOREnet uses strategic planning to produce fundamental decisions and actions that shape and guide what the organization will do and become over the next three to five years to meet the needs of its stakeholders. The strategic planning process examines MOREnet's environment, explores factors and trends affecting everyday business and identifies how MOREnet meets its mandates to fulfill its Long-Range Directions and Objectives (page 23). The process identifies strategic issues and ways to address these issues by reexamining and reworking organizational mandates, the products and services MOREnet provides, costs and financing, management and organization.

Performance Measures

Is MOREnet doing the best it can? It can always do better. Constantly raising the bar is important to any high-performance organization.

Performance measurement is an organization-wide change process, which provides MOREnet with a strategic, fact-based management system, allowing leadership to view key performance areas at a glance. Management based on performance data ensures MOREnet's leadership focuses on actions that are most important to achieve the organization's Long-Range Directions and Objectives (page 23).

Project Management

What should MOREnet do first, third, 12th, to make a project happen? What were the problems the last time MOREnet did this task?

Project management involves the planning, control, coordination and direction of resources to produce a specific product, service or capability for integration within the organization. Project management establishes the processes and documentation that provide the tools and framework to ensure project success.

Fortifying the Classroom Experience

K-12 TNP

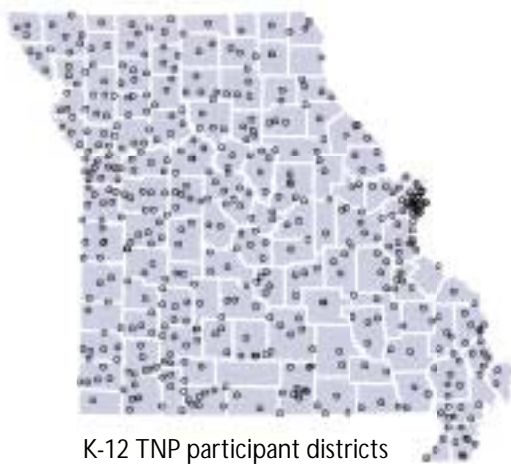
*512 of Missouri's
524 public school
districts (98 percent)
receive Internet
access through
MOREnet.*

The Department of Elementary and Secondary Education sponsors the K-12 Technology Network Program (K-12 TNP). This MOREnet program improves student performance and enhances teaching and learning processes through the effective use of technology in the classroom. K-12 TNP brings Internet connectivity, technical support, online resources, training and other services into Missouri's classrooms. In fiscal year 2001, 512 of Missouri's 524 public school districts (98 percent) participated in the Program.

Extensive collaboration between the Department of Elementary and Secondary Education, the Department of Higher Education, State Library, Office of Administration and MOREnet allows K-12 TNP to offer a dynamic set of services. These include access to a statewide network that provides online resources and robust data and video services, to all participating K-12 school districts.

Other services provided by the K-12 TNP are:

- ◆ High-speed Internet access and necessary network equipment in each school district
- ◆ Technical support and network consulting to maintain district networks that support instruction
- ◆ Training for teachers and district technical staff to support technical needs in each participating school district
- ◆ E-rate Program information and assistance for all of Missouri's 524 school districts
- ◆ Development and collection of online curriculum and resources for classroom use
- ◆ E-mail discussion lists for Missouri's K-12 educators
- ◆ eMINTS coordination, equipment, professional development and support
- ◆ Videoconferencing capabilities for distance learning



K-12 TNP participant districts
As of June 30, 2001

Resources created by and for Missouri's teachers and students

MOREnet makes available a variety of Web resources for Missouri's teachers and students to use in the classroom. These valuable, time-saving resources consist of researched, age-appropriate and child-safe links, organized by topic and grade level.

eThemes

<http://emints.more.net/ethemes/>

An online database of Internet resources compiled by trained Resource Scouts from the University of Missouri College of Education and Southeast Missouri State University. Each resource provides an average of 15 content-rich resources, linked to grade level and Missouri's Show-Me Standards. The eThemes database can be used by anyone, though only eMINTS teachers may submit requests for new eThemes resources.

Internet Resources for K-12 Educators

<http://solutions.more.net:2068/extranet/deseweb/index.jsp>

MOREnet maintains and updates a database of links found and checked by scouts. Resources are divided among 15 topic categories and updated weekly.

WebQuests

<http://www.more.net/projects/dese/resources/webquest/index.html>

WebQuests are inquiry-oriented activities in which most or all of the information used by learners is drawn from the Web. MOREnet offers a WebQuest collection created by Missouri teachers and links to WebQuest resources.



eMINTS Districts

year added	# of districts
MINTs pilot project	6
FY 2000 eMINTS	44
FY 2001 eMINTS	38
FY 2002 eMINTS	38*
Total eMINTS/MINTs districts	126

eMINTS Classrooms

Two eMINTS classrooms per district

year added	# of classrooms
MINTs pilot project	12
FY 2000 eMINTS	88
FY 2001 eMINTS	76
FY 2002 eMINTS	76*
FY 2002 expansion (<i>additional classrooms added in existing eMINTS districts</i>)	50
FY 2001 classrooms added	18^
FY 2000-02 funded by districts	111
Total eMINTS/MINTs classrooms in Missouri	431

* signifies inclusion of Greenwood School, Southwest Missouri State University's Lab School

^ signifies addition of classrooms funded by eMINTS Program in Columbia Parkade School and Gideon School District

21st Century Learners

eMINTS

enhancing Missouri's Instructional Networked Teaching Strategies Program (eMINTS) is a program sponsored by the Missouri Department of Elementary and Secondary Education and administered by MOREnet. It transforms elementary classrooms into places for learning in which teachers and students use multimedia technology to better understand the world, work together and achieve at new and higher levels.

As 21st-century learners, today's students respond best to inquiry-based teaching strategies that help them learn to think critically, use group problem-solving techniques and have confidence in the knowledge they have constructed as active learners. eMINTS creates classrooms that motivate, support and encourage children in this endeavor.

Teachers participate in more than 200 hours of professional development and receive in-classroom coaching, mentoring and technical support as they learn to use advanced multimedia technologies to transform their teaching styles. Teachers find exciting new places for themselves in eMINTS classrooms; they participate in their students' learning adventures in ways

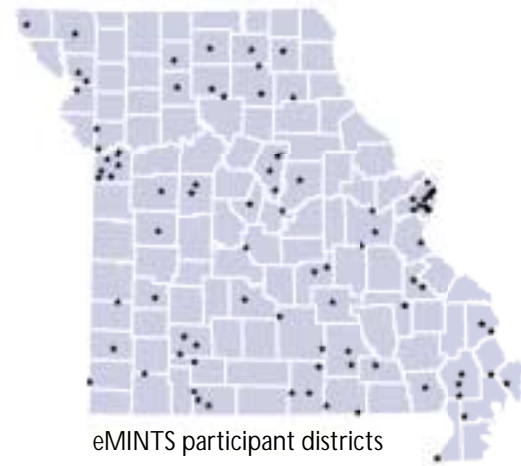


that motivate and sustain them as professionals.

Participating teachers are organized into clusters supported by Cluster Instructional Specialists (CIS) who work with them in the field. Every CIS is a former classroom teacher with extensive experience in the appropriate use of educational technology and inquiry-based learning. CIS are always on-call for consultation, support, facilitation and to help teachers design innovative, inquiry-based instructional experiences for students.

The Office of Social and Economic Data Analysis (OSED) is charged with program evaluation. In addition to collecting data from the Missouri Assessment Program, OSED staff collect attendance and behavior data on eMINTS students. Early results clearly indicate eMINTS improves students' academic achievement and increases their motivation to learn. Participating teachers consistently report significantly increased attendance, reduced discipline problems and abundant student enthusiasm.

Formal reports at: <http://emints.more.net/evaluation/>.



eMINTS participant districts
As of June 30, 2001

Learning Technologies Enhance the Educational Experience

Students and teachers flourish in a technology-rich instructional environment that promotes individualized discovery and collaborative investigation as well as technological skill.

Multimedia learning technologies provided in each eMINTS classroom include:

- ◆ One computer for every two students at their desks
- ◆ Teacher laptop with modem and network card
- ◆ Teacher workstation
- ◆ Interactive whiteboard and high-lumen projector
- ◆ Color printer
- ◆ Digital camera
- ◆ Scanner
- ◆ Desktop videoconferencing equipment
- ◆ Software: Web browser, MS Office, Inspiration, Internet filtering, videoconferencing
- ◆ Internet connectivity (T-1)

eMINTS classrooms also are provided with full technical support and service so that the learning environment is not interrupted by technical difficulties.

Internet Access for Everyone

REAL

*The State Library
funds the shared
Online Resources
available to all
MOREnet
customers.*

Whether they reside in a large metropolitan area or a small, rural agricultural community, all Missouri citizens have MOREnet Internet access through the Remote Electronic Access for Libraries Program (REAL).

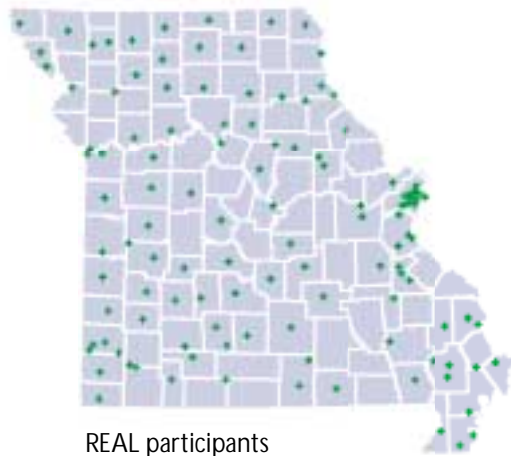
REAL is sponsored by the State Library, an agency of Missouri's Secretary of State, which also funds the shared online reference resources available to all MOREnet customers.

Since its inception in 1994, this Program has provided Missourians the opportunity to use the Internet for research, formal and continuing education, business and recreation at their local library.

REAL reinforces the library's mission to provide information access to the public regardless of education or income level. For many adults, especially those with low incomes and elderly citizens living on a fixed income, this Program offers the only access they have to the Internet.

In fiscal year 2001, 121 of the 145 tax-supported Missouri public libraries obtained their Internet connection through REAL. Through the Program, libraries receive MOREnet technology services that support their efforts to provide quality access to information for Missourians, including:

- ◆ High-speed Internet access and the necessary network equipment at participating public libraries, including 217 branch libraries
- ◆ Technical support and network consulting assistance in maintaining public library networks
- ◆ Technical training to support the networking needs in each participating public library
- ◆ E-rate Program information and assistance for all public libraries
- ◆ Internet e-mail accounts for public library staff
- ◆ E-mail discussion lists for Missouri's librarians



REAL participants
As of June 30, 2001

Online Resources Expand Library Collections Exponentially

All MOREnet customers benefit from shared, statewide licenses for online reference resources. Funded by the State Library, this service delivers valuable resources to Missourians and the state's education community at a significant cost savings to the state and local institutions. Currently, the following online reference resources are available:

- ◆ A comprehensive periodical database of articles from more than 3,000 journals, 1,000 of which are available in full text
- ◆ Full-text database of the *St. Louis Post-Dispatch*, *Kansas City Star* and AP filings from all Missouri daily papers
- ◆ Subject-related reference resources in science, U.S. history and literature for students in grades 7-16, library patrons and teacher curriculum development resources
- ◆ Database of general health-related publications
- ◆ Online periodical database of children's magazines, specifically designed to serve elementary grades
- ◆ Gale's Business and Company Resource Center, providing accurate, up-to-date company and industry intelligence on hundreds of thousands of companies



Higher Education, Higher Tech

MERC

*63 of Missouri's 71
higher education
institutions
(90 percent) receive
Internet access
through MOREnet.*

Ninety percent of Missouri's higher education institutions receive Internet access through MOREnet as participants in the Missouri Education & Research Consortium (MERC). Students, faculty, administration and staff all depend on MOREnet's stable and robust network to do their jobs, conduct research, conduct or take online classes, study and e-mail.

Formed in 1991 as the MOREnet Consortium, the group's original goals were to acquire Internet access for their respective campuses as well as support services and resources for the higher education community. MOREnet was formed to make the dream a reality. On July 1, 2000, the MOREnet Consortium was renamed MERC to reflect the unique identity of the Consortium.

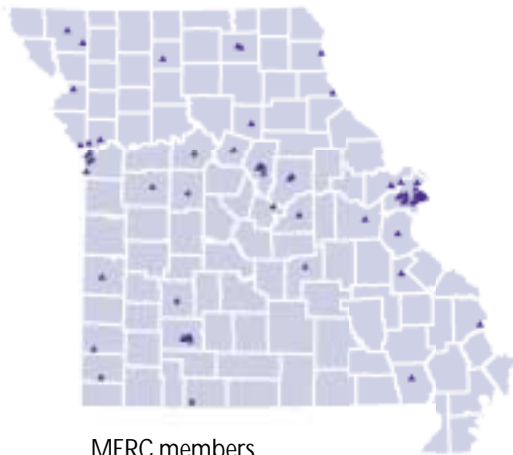
Today, MERC strives to advance the collaborative use of networked technology and applications in higher education, research and public service. The Consortium operates under the philosophy that the cost-effectiveness of shared resources and collaboration advance all beyond what each could accomplish alone.

MERC is currently comprised of not-for-profit higher education institutions, including 13 four-year public, 13 two-year public and 37 private colleges and universities in Missouri.

MOREnet provides MERC members with basic services as well as opportunities for broader use of technology and collaboration. With MOREnet's selection as one of the first five state education networks admitted to the Internet2 Abilene Network (page 20), MERC participants now have unparalleled opportunities to do effective technology research, development and testing.

MOREnet's network supports the efforts of colleges and universities to provide anywhere-anytime learning to individuals who may not have the opportunity to take specific courses at their home institutions. Institutions such as Central Missouri State University and the University of Missouri-Columbia offer Web and video courses and degree programs via the MOREnet network.

Some institutions offer opportunities for dual credit to high school and



MERC members
As of June 30, 2001



vocational school students, giving all students the same opportunity for a higher education head start as those living near college and university campuses.

Videoconferencing technology gives Missourians access to lifelong learning opportunities.

Meetings among institutions that previously required hours of travel can take place online using videoconferencing, conserving time and resources while keeping meetings effective.

HELIX Conference Provides Opportunities for Collaboration

As a co-sponsor of the Higher Education Learning & Information eXchange (HELIX) Conference, Missouri's premiere higher education instructional technology conference, MOREnet ensures individuals and institutions have the opportunity to share experiences and information with colleagues and showcase successes.

Formerly known as the Spring Consortium Conference, HELIX provides the chance for educators to learn about the newest technologies. Professionals also have the opportunity to network with each other, furthering collaboration among individuals and institutions.

Medicine, Military & Moms

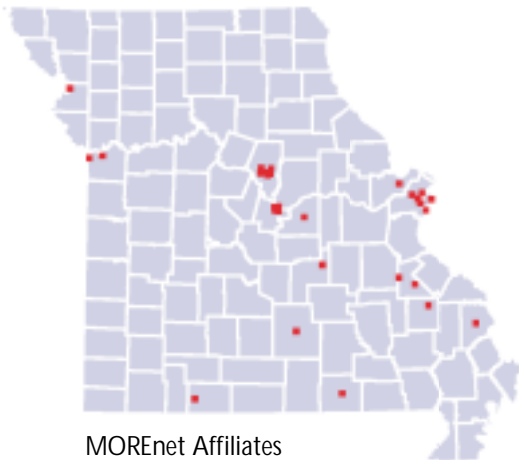
Affiliates

Because of the diverse nature of Affiliates, they present some of MOREnet's most interesting technological challenges.

Doctors collaborating online to diagnose and treat ailments, training for the national guard via videoconference and moms checking online community calendars to plan a Saturday outing — MOREnet's Affiliates Program provides Internet connectivity to organizations that offer all these services and much more.

Because Affiliates differ vastly in size and scope, from State of Missouri government to the smallest non-profit organization, this category presents interesting technological challenges.

University of Missouri Health Care (including the Missouri Telehealth Network), the Missouri National Guard and numerous community information networks are but a few affiliates. Non-profit private schools and non-profit education organizations, such as the Missouri School Boards Association, also receive MOREnet services through the Affiliates Program.



MOREnet Affiliates
As of June 30, 2001

Extending Efficient Healthcare through Wires with Telemedicine

The Missouri Telehealth Network (MTN) allows doctors and patients in remote communities to consult with specialists at University of Missouri Health Care over the Internet. Specialists in areas as diverse as cardiology, endocrinology, neurology, neuropsychology, child health and others have been using MTN's telemedicine network since it began in 1996. Without MTN, many patients would have to travel great distances to consult with healthcare specialists.

MTN is also used for a variety of other purposes, most notably teleradiology, in which University of Missouri Health Care radiologists are able to make diagnoses from radiological data gathered at a remote location, and numerous educational programs.

MOREnet supports the efforts of the Missouri Telehealth Network by providing high-speed, broadband Internet access to more than 20 MTN sites around the state of Missouri, as well as to other University of Missouri Health Care facilities.



Photo courtesy of Missouri Telehealth Network

MOREnet Leads the Way

Internet2

More Information About Internet2

<http://www.internet2.edu>

<http://www.more.net/internet2>

<http://www.internet2.edu/k20>

Internet2 is a consortium led by more than 180 universities to develop and deploy advanced network applications and technologies, thus accelerating the creation of tomorrow's Internet. Abilene is the advanced backbone network that supports these new applications.

MOREnet was one of the first five state education networks in the nation admitted to the Internet2 Sponsored Educational Group Participants (SEGP) Program in March 2001. This provides Internet2 access, previously available only to member universities, to Missouri's elementary schools, secondary schools, community colleges, universities, public libraries and teaching hospitals and clinics through MOREnet connections.

In the mid 1990s, Internet use grew exponentially. That heavy traffic leaves the present Internet — once a research and development hotbed — too clogged and slow to allow effective research, testing and instruction. The partnership among academia, industry and government institutions that created the original Internet, developed Internet2 to address the limitations and challenges of a clogged first-generation Internet.

Unencumbered by commercial use, Internet2 carries advanced network applications that take advantage of fiber optics, gigabit routers and advanced networking protocols through uncongested links. This allows large data sets to move rapidly between sites and enables access to remote shared applications and resources including interactive research collaboration and instruction, advanced videoconferencing, high-fidelity multi-channel audio, real-time access to remote resources, large-scale, multi-site computation and database processing, teleimmersion, remote instrumentation and shared virtual reality.

It's not all about connectivity, however. MOREnet is exploring ways advanced network applications, services and digital content can extend access to education and educational resources and can enhance teaching and learning at all levels. Bill Mitchell, Executive Director of MOREnet and Associate Vice President for telecommunications at the University of Missouri System, is one of two leaders of the Internet2 K-20 Initiative, charged with extending high-performance networking throughout the national education community.



Teachers 'Pioneer' Collaborative, High-Bandwidth Applications

Twenty-five eMINTS teachers are pioneers for the Shadow netWorkspace™ (SNS) pilot project. SNS is a new type of software, developed by Dr. Jim Laffey and Dr. Dale Musser of the University of Missouri-Columbia's College of Education. The project allows teachers and students to build a safe and secure intranet community to collaborate with other teachers and students across the state, country and, eventually, the world. With the expanded bandwidth capabilities of Internet2, collaboration through environments like SNS is possible.

The eMINTS Pioneers and their students will participate in one of three curriculum units developed to take advantage of SNS's unique functions:

Improving I-70: Working with Missouri Department of Transportation (MoDOT) to understand Interstate 70 problems and possible solutions

The "Big Muddy" Dilemma: Working with special maps and learning objects from the Lewis and Clark Expedition to understand how the river has changed since the early 1800s and what can be done to save it

Quake: Working with scientific learning objects related to the possibility of an earthquake in Missouri and our state's disaster preparedness

The Shadow netWorkspace™ tool is open-source (free) and can be downloaded from <http://sns.internetschools.org/>.

Exploring the Past with Technology of the Future

MOREnet is collaborating with the Missouri State Archives, a division of the Office of the Secretary of State, and the University of Missouri-Columbia's Geographic Resources Center as well as the Department of Elementary and Secondary Education to bring high-quality, digital educational resources to K-20 students across the state. This I2 K-20 Initiative project is based upon the Archives' Lewis & Clark Mapping Project and various

activities coinciding with the Lewis & Clark Bicentennial celebration occurring from 2003-2006.

The resources include maps and objects, but it's more than that. The tools created by this project will be much more interesting than turning the pages of a textbook. Aerial photography, information about past and present flora, fauna and people supplement historical resources and put them in context, an expansion

of a data repository that speaks to the past, present and future. Comparing contemporary and historical interpretations of the trail provides a framework for supporting interdisciplinary curricula and contextual documentation. This, combined with interactive technology, offers powerful educational potential and provides a wide range of new opportunities for learners of all ages to explore and investigate within virtual learning environments.

Core Ideology and Principles

We will lead Missouri and the nation in the innovative application of information technology for the benefit of the public.

MOREnet's Core Purpose

MOREnet works with its customers to set and support Missouri's information technology goals and directions. We explore and deliver new ways to enhance learning opportunities to create a better quality of life for all Missourians.

MOREnet's Core Values

- ◆ We provide our customers with the best possible service in all that we do.
- ◆ MOREnet employees are the organization's most important resource.
- ◆ Cooperation and teamwork are essential to our success.
- ◆ Innovation, learning and continuous improvement are our way of life.
- ◆ MOREnet employees demonstrate a personal commitment to the success of MOREnet and conduct themselves with integrity, honesty and openness.

MOREnet's Core Principles

Technology Leadership

As a leader in the innovative application of information technology, MOREnet strives to solve today's challenges and take full advantage of tomorrow's opportunities. MOREnet works with its customers to set strategic technology goals and explore new ways to enhance learning opportunities for Missourians.

Building Partnerships

MOREnet fosters a collaborative and cooperative spirit in its customers. Building partnerships with and among customers allows MOREnet to provide consistent and cost-effective services that would not otherwise be available to many Missourians.

Focus on Learning

MOREnet empowers its customers by helping them expand their knowledge and resources. Employees help customers gain the skills and information necessary to keep pace with technology changes.

Commitment to Employees

MOREnet fosters a positive, open learning environment where employees are treated fairly and with respect, their contributions are recognized and they are given the resources and opportunities they need to do their jobs and grow professionally.

Professional Integrity

MOREnet employees take pride in their work and strive to earn the professional respect of their coworkers and customers. Employees maintain high standards of professional integrity and personal responsibility.

Long-Range Directions and Objectives

1. MOREnet will maximize the value of the investment in Missouri's telecommunications-based delivery system by providing high quality services.

- ◆ Develop and implement an integrated approach for transferring knowledge into customer organizations
- ◆ Deliver a standard set of centralized services
- ◆ Maximize the value of our services by focusing on core competencies and critical services
- ◆ Deliver a robust and reliable state education network for our customers
- ◆ Document, demonstrate and communicate the value of Missouri's telecommunications-based delivery system
- ◆ Develop a systematic and cohesive customer relationship management process
- ◆ Deliver server-based services to MOREnet customers
- ◆ Implement customer-focused information delivery

2. MOREnet will aggressively conduct information technology research to provide innovative solutions that create value.

- ◆ Develop and deploy a research and innovation process
- ◆ Research and deploy technologies supporting "Intelligence at the Origin" – bandwidth management decisions originated by customers
- ◆ Research and deploy technologies which differentiate network services, based on state and local policies
- ◆ Conduct research to determine value of new and emerging technologies to our customers
- ◆ Disseminate research findings to guide customer decisions

3. MOREnet will influence the effective use of technology through collaborative partnerships.

- ◆ Lead, promote and participate in K-20 initiatives
- ◆ Work with vendors, customers and sponsors to reduce digital divide
- ◆ Integrate long-range planning with sponsors

4. MOREnet will be an effective and efficient organization, focused on speed, agility and productivity.

- ◆ Drive productivity via processes, technology, desktop management, project management and performance measures
- ◆ Align MOREnet business practices with UM and/or state
- ◆ Develop and implement framework and tools for decision-making and delegation
- ◆ Develop and implement effective internal business communications practices

5. MOREnet will create a culture of performance built on the talents, skills, commitment, integrity and motivation of its people.

- ◆ Increase leadership and management development and continuity
- ◆ Develop and implement staff development programs for internal business practices, processes, communications tools
- ◆ Refine performance management system including alignment of personal goals and desires with organizational needs
- ◆ Recruit and retain a competent and stable workforce

6. MOREnet will secure and effectively manage funding to support programs projects and services.

- ◆ Develop program and service-based costing strategies tied to plans
- ◆ Develop coherent strategy for increasing revenue
- ◆ Transition accounting information systems to Peoplesoft for complete integration into a centralized system, thereby eliminating or minimizing shadow systems
- ◆ Minimize overhead cost burden of internal services

