University of Missouri System

BROADBAND INITIATIVE

What is the Broadband Initiative?

The University of Missouri System Broadband Initiative is a coordinated effort to encourage the statewide build-out of **reliable high-speed internet (broadband) infrastructure** and use of broadband-based applications to improve the lives of Missourians around the state's three grand challenges related to:

- Economic opportunity
- ► Educational access and excellence
- Health and well-being

The Broadband Initiative embodies the System's **mission** as a <u>land-grant educational institution</u>. It involves faculty, researchers, staff and resources at all four System's campuses — the University of Missouri-Columbia, University of Missouri-Kansas City, Missouri University of Science and Technology and University of Missouri-St. Louis — and MU Extension faculty and specialists in all 114 counties and the City of St. Louis.

Why broadband?

Cutting-edge technologies— such as <u>internet-based business</u>, <u>precision agriculture</u>, <u>next generation precision healthcare</u>, <u>eLearning</u>, <u>smart infrastructure and smart government</u>, and many more — are key to improving Missourians' lives and opportunities.

These 21st century technologies all require access to **reliable high-speed internet** and a population trained to use them effectively. Yet, many areas of Missouri currently lack the broadband infrastructure necessary to use these new applications. Missouri currently **ranks 41st** among the states in broadband access.

Through the Broadband Initiative, the MU System will partner with state and local governments, businesses and nonprofit stakeholders, sharing knowledge, resources and tools as we work together to build the digital superhighway and increase broadband access across Missouri.

Why is the UM System involved?

Almost a century ago, many Missourians went without essential resources, equipment and services we now take for granted because they lacked reliable, affordable electrical service. Then — as now — land-grant university faculty and researchers on campuses and in the field helped expand access to and opportunities around this key infrastructure need. Similarly, it's our responsibility and privilege to partner with people and communities across Missouri's 114 counties and the City of St. Louis to ensure access to today's essential "utility" — broadband.

The UM System's Broadband Initiative

The UM System will work to find solutions and bring broadband-based applications to local communities by:

- Advising communities, conducting broadband planning and needs assessment
- Introducing communities to opportunities such as digital learning and education, broadband-based healthcare, workforce development and e-business development
- Introducing community stakeholders to legal and financial structures to help fund broadband deployment
- Promoting the use of broadband-based technologies and applications to address the grand challenges
- Evaluating and sharing results, to develop "best practices" for other communities

UM System Broadband Initiative: 2020 Objectives

The University of Missouri Broadband Initiative's long-term objectives are to improve broadband availability and access statewide and to promote the use of broadband-based applications to improve the lives of all Missourians, particularly in areas of greatest challenge: the economy, education and healthcare. In 2020, the Initiative has two interim objectives described below.

The Missouri Broadband Resource Rail

The Missouri Broadband Resource Rail is a **free** web-based resource expected to be available publicly by **July 2020**. This resource will use SourceLink®, proven resource connector software, to encourage the creation of teams devoted to the expansion of broadband and adoption of broadband-based applications in business, agriculture, education, government services and healthcare.

The site will catalogue over 100 current research, community education and service projects related to broadband expansion and development of broadband-based applications involving UM System faculty and staff. It will host government, business and nonprofit resources related to broadband and its applications, as well. The Resource Rail also will feature UM System resources to help communities assess:

- appropriate technologies to meet their broadband infrastructure needs
- available financing and funding resources for broadband projects
- strategies to educate the public on how to use broadband-based applications

The Resource Rail will connect with <u>All Things</u> <u>Missouri</u>, a web-based resource developed by the MU Center for Applied Research and Engagement Systems (CARES), with its databases of geocentric information about broadband access and census data about community education, employment, healthcare and other metrics.

Test Bed "Pilot" Community Projects

In coordination with state and local government, business, nonprofit and community leaders, UM System faculty and researchers will work to develop public-private partnerships that:

- test and evaluate new broadband technologies and applications
- develop best practices for financing and decision making
- create and test education programs to enhance broadband use in select Missouri communities
- develop a template to replicate similar highquality, high-impact projects statewide

Results and lessons learned from these projects will be made available through the Missouri Broadband Resource Rail so that they can be applied in other settings across the state.

Ongoing Broadband Initiative

The UM System Broadband Initiative aligns with the System's land-grant and engagement mission and responsibilities to the citizens of Missouri. Core to our work is sharing university research, science, knowledge and expertise — in this instance, to foster statewide broadband expansion and adoption of broadband-based applications. This initiative and related partnerships will improve Missourians' lives and realize the promise of bold initiatives such as NextGen precision health, eLearning, workforce development and training, precision agriculture, entrepreneurship and business development, and more.

Explore the Missouri Broadband Resource Rail at mobroadband.org