# 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 <u>grand</u> <u>challenges</u> 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</u> <u>generation precision healthcare</u>, <u>eLearning</u>, <u>smart</u> <u>infrastructure and smart government</u>, and many more — are key to improving Missourians' lives and opportunities.

These 21<sup>st</sup> 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. Almost 20% of Missourians — more than 1.2 million citizens — do not have access to high-speed internet at this time.

Through the Broadband Initiative, the MU System partners 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 works 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

**Explore the Missouri Broadband Resource Rail** at <u>mobroadband.org</u>. Learn about more than 100 projects involving UM System faculty and staff, as well as government, business and nonprofit resources and applications, too.

# **UM System Broadband Initiative Objectives**

The University of Missouri Broadband Initiative works 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.

## The Missouri Broadband Resource Rail

The Missouri Broadband Resource Rail is a **free web-based resource.** This resource uses <u>SourceLink®</u>, 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 catalogues 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 hosts government, business and nonprofit resources related to broadband and its applications, as well. The Resource Rail also features UM System resources to help communities assess:

- appropriate technologies to meet 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 connects 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.

## **Community Projects**

UM System faculty and researchers coordinate with state and local government, business, nonprofit and community leaders 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

A 2020 effort to bring affordable and accessible broadband internet to Bollinger County, Missouri, where four out of five residents lack access, serves as a model for broader, actionable efforts to bring high speed internet to rural areas of the state.

Results and lessons learned from projects like this are 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 — with coordination by the UM System Broadband Steering Committee and engagement leaders at each university — 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.

#### Learn more about the UM System Broadband Initiative at <u>www.umsystem.edu/ums/engagement-outreach/impact</u>

#### Explore the Missouri Broadband Resource Rail at <u>mobroadband.org</u>

UM System, MU Office of Extension and Engagement, SourceLink® at the University of Missouri-Kansas City and MU Center for Applied Research and Engagement Systems (CARES).