CRITICAL TO MODERNIZING INFRASTRUCTURE

The Advanced Materials for Sustainable Infrastructure signature area is critical to improving the nation’s infrastructure in an environmentally sustainable manner.

• **Rebuilding bridges.** The 2013 Report Card of the American Society of Civil Engineers assigned a grade of C+ to American bridges. One in nine of the nation’s bridges are rated as structurally deficient.

• **Investing wisely.** To eliminate the nation’s backlog of deficient bridges by 2028, the U.S. would need to invest $20.5 billion annually.

• **Increasing investments.** To replace or repair deficient bridges, the U.S. must increase investments by $8 billion annually to address a $76 billion shortfall.

• **Improving our economic health.** A robust physical infrastructure is essential as a “building block” of American innovation. An investment in restoring transportation infrastructure is fundamental to economic health.

• **Restoration and advancement.** The Grand Challenges for Engineering report (National Academy of Engineers, 2008) calls for the restoration and improvement of urban infrastructure to advance transportation and energy, water and waste systems as the key to creating more sustainable urban environments.

RE-CONSTRUCTING THE NATION’S INFRASTRUCTURE FOR THE 21ST CENTURY

Missouri S&T’s current leadership and resources address this national dilemma.

• In 2013, S&T was named a Tier-1 University Transportation Center, funded by the U.S. Department of Transportation (U.S.DOT).

• In 2012, S&T was awarded $2.5 million by the U.S.DOT for specialized equipment for construction materials research.

• Plans to construct an Advanced Construction Materials Laboratory will further enhance our capabilities.

EXCEPTIONAL FACULTY AND FACILITIES

Missouri S&T faculty are among the nation’s best, and the university is recruiting new faculty members to build upon a strong foundation in this signature area. The university also has state-of-the-art research equipment for the design and testing of novel construction materials, metal casting, composites manufacturing and materials characterization, as well as six interdisciplinary research centers: the Center for Infrastructure Engineering Studies, RE-CAST University Transportation Center, Materials Research Center, Polymer and Coatings Institute in Chemistry, the Polymer Composite Manufacturing and Testing Laboratory in the Mechanical and Aerospace Engineering Department, and the Peaslee Steel Manufacturing Research Center.