

## Maine EPSCoR Receives NSF EPSCoR C2 Award

Maine EPSCoR has just received a \$1M award from NSF EPSCoR for their Inter-Campus and Intra-Campus Cyber Connectivity (RII C2) program. The two-year project, entitled “Maine EPSCoR End-to-End Connectivity for Sustainability Science Collaboration,” will allow Maine to continue to build on the progress it has made over the last few years in enhancing the connectivity of its research, higher education, and K-12 institutions through MaineREN, Maine’s Research and Education Network.

Maine’s cyberinfrastructure efforts to date have focused on building networking and computing power at the state level, with an emphasis on expanding the state’s optical network to overcome basic connectivity limitations. This RII C2 project will leverage those multi-million dollar investments that have already been made for the installation of 1,100 miles of middle-mile fiber optic cable, shared computing resources for high performance computing and cloud computing, the Maine School and Library Network, the Maine Learning Technology Initiative, and high-performance visualization and videoconferencing.

The primary bottleneck still remaining in Maine’s cyberinfrastructure landscape has been the final connection between the fiber backbone and the researchers and students on the university and college campuses. By filling relatively small gaps in cyber-connectivity through this RII C2 project, Maine will be able to make very large gains in the effectiveness of the state’s cyberinfrastructure that will allow researchers to fully utilize the existing multi-million

dollar investments to improve research effectiveness, promote collaboration, improve K-12 interaction, and develop the future workforce of the state.

The specific focus of this RII C2 project is to close those gaps in cyber-connectivity for the Maine EPSCoR Sustainability Science Initiative (NSF EPSCoR RII Track 1) researchers and students at the campuses of the University of Maine system. These gaps are preventing the delivery of true end-to-end connectivity between Maine’s researchers and the advanced networking services provided over MaineREN. By extending the reach of the enhanced MaineREN fiber backbone directly to the individual researchers, the high speed connectivity required to conduct cyber-enabled research and integrated education will allow for advances in discovery and innovation, collaboration, workforce development, and broadened participation.

The research and education focus that will be enabled by this project is the Maine EPSCoR Sustainability Science Initiative (SSI), which is our NSF EPSCoR RII Track 1 project. Based at the University of Maine (UMaine), which is the state’s flagship research and education institution, SSI also includes participation by the other primarily undergraduate campuses of the University of Maine System, plus five private colleges: These are: UMaine at Augusta, Farmington, Fort Kent, and Presque Isle; the University of Southern Maine (USM); Bates, Bowdoin, Colby, and Unity Colleges; and the University of New England.