

Initiative bridges rural Ohio's digital divide

These days, the small water tower in rural Vinton — population 324 — helps deliver more than water.

Thanks to the Connecting Rural Ohio Wireless Neighborhood Project, a collaborative initiative bringing Internet connectivity to Appalachian communities, a stand of antennas bristling atop the water tank makes the Internet accessible to most Vinton homes.

For residents without a wireless modem at home, there's a community learning center in Town Hall, a former one-room schoolhouse built in 1893. With six new computers, a printer and a wireless network, this southern Ohio community can enter the information superhighway.



Alan Escovitz stands atop the Vinton water tower, holding on to the stand of antennas installed by the Connecting Rural Ohio team.

Up and running since April, the network already has brought change, in the form of online educational opportunities and e-commerce possibilities.

Vinton is only the most recent beneficiary of the technology altruism of the CRO project, which unites partners like Ohio State's Office of the CIO, the Ohio Supercomputer Center and the Governor's Office of Appalachia in bringing broadband access to the region.

The first community was New Straitsville, a village with fewer than 800 residents in southern Perry County, which received its wireless network in 2003. Next came Chesterhill, an enclave of 300 in Morgan County, which was brought online in 2006.

"Each community we've worked in is unique," says Alan Escovitz, external affairs director for the Office of the CIO.

These communities — and many others in Ohio's 29 Appalachian counties — have not fared so well in today's fast-paced, technology-driven world. Employment and education opportunities are limited, and in most of these hilly and out-of-the-way villages, there is no Internet connectivity to speak of. The CRO project aims to provide access to Web-based training and education, stabilize and stimulate the local economy and increase the community's standard of living.

"As a land-grant university, part of Ohio State's mission is outreach," said Bob Dixon, a research engineer who divides his time between the CIO's office and the Ohio Supercomputer Center.

"Typically, the role of outreach has belonged to the academic departments and not to service areas like the computer center. But we realized we have unique skills and abilities to offer these communities, and it's been very rewarding work."

Rewarding, yes, and challenging, says Escovitz. The rolling terrain and thick forestry in the communities they serve make it tricky to engineer wide coverage of the wireless Internet signal. And because they are interested not just in providing the equipment but also in opening up educational and commercial resources, they hold community meetings,

recruit community partners to provide follow-up education and establish technical support networks.

All hardware and software installed at the various locations are provided through grants from groups like the American Distance Education Consortium and the U.S. Department of Agriculture. All the labor and time it takes to install that equipment are donated by folks like Dixon, Escovitz and another OSU engineer, Gabe Moulton. Taken together, the Vinton installation is worth an estimated \$30,000.

With each new community they go into, Moulton says, the team learns a bit more about what to do and how best to do it. "I think the project in Vinton stands to be the best one of the three so far," he says, noting that Columbus-based company Mindleaders is providing 200 free online training courses in topics as varied as personal finance and Microsoft Office.

Moulton says he sees the team as doing a bit of trailblazing: Since the completion of the projects in New Straitsville and Chesterhill, DSL connectivity has been made available to those communities from the commercial sector.

"Before we went there, I think the prevailing opinion in the commercial sector was that these areas had no money or interest in their services. That turns out not to be the case at all," he says.

Now that Vinton is online, the group turns its attention, resources and hardware to the next destination. A recent grant from the Ohio Governor's Office of Appalachia means that up to three more towns can be moved across the digital divide.

"It's not just about connectivity," Escovitz muses. "It's about what kinds of resources and opportunities we're able to bring to a community."

For more information about Connecting Rural Ohio and its partners, go to cro.osc.edu.