Local Officials Find Ways To Boost Broadband

Lively workshops highlighted the fall meeting of the Rural Telecommunications Congress in Arizona.

By Steven S. Ross ■ *Broadband Properties*

A revitalized Rural Telecommunications Congress devoted its fall Rural TeleCon meeting to Broadband for Rural Prosperity, bringing together state and local regulators and economic development officials for two days of free-form workshops in Mesa, Ariz., this November.

The workshops revolved around twin themes, expressed as follows by conference chair Galen Updike, telecommunications development manager for the Arizona Government Information Technology Agency:

- How do we engage local leaders who are not especially interested in development?
- How do we find and pool the resources to do this?

In addition, Updike's message had a clear subtext: How do we improve the business case for broadband providers to move into rural areas?

Some conferees wrestled with the idea of describing services as "broadband," preferring "high-speed Internet" instead. One entire workshop track was devoted to convergence, noting that the definition of broadband had evolved to refer to communications services in general. Officials also showed anxiety about using telecom to bring better health care to rural areas, although other anchor tenants for broadband services – education, government itself (especially public safety) and even farmers – received quite a bit of attention.

Moving beyond siloed systems is key, because providers need to capture revenue from the savings attributable to the smart grid, telemedicine and education and apply them to building networks. This requires regulatory guidance as well as more education of the principal actors. One person noted that his office asked the mayor of Miami for a list of pending infrastructure projects and added telecom infrastructure into all 290 projects on the list.

Galen Updike, conference chair and incoming RTC head, welcomes a crowd of more than 100.

"We should not build silos with the stimulus money, and integration is the key," said a conferee. "Local markets are ignorant about sourcing of equipment and services," said another.

"You'd be amazed how difficult it is to provide electricity for the traffic camera on the bridge," said a third. One proposal was to create a how-to guide for using social media to get the message out.

About the Author

You can contact corporate editor Steve Ross at steve@broadbandproperties.com.

CHONG'S SECRET SAUCE FOR RURAL BROADBAND

Rachelle Chong, special counsel for information and communications technologies in the California Office of the Chief Information Officer, offered 10 ingredients for her rural broadband recipe.

California's Rachelle Chong gives her recipe for rural broadband success.

1. Form a task force on broadband or a state broadband leadership council (the California task force report was summarized in Broadband Properties in 2006). Leadership made the difference in California, where the governor and public utilities commissioners were all champions. Because the movie industry sends big files nationwide, the governor knew firsthand about the need for speed. California listed all the state broadband-using facilities in a database and made it available to providers. The governor ordered the use of VoIP to save money and to demonstrate the technology.

2. Map broadband availability. If you don't know where broadband is, you are at a disadvantage when the state legislature challenges you on spending money to bring broadband to remote areas.

3. Set up a nonprofit whose sole job is to promote broadband and the task force report. The California Emerging Technology Fund (CETF) was set up to narrow the digital divide, and it made $60 million available on a 3:1 match.

4. Set the regulatory table. The Public Utilities Commission helped California by significantly deregulating telcos so they could compete. After the legislature passed a statewide franchise law in 2006, AT&T and Verizon invested heavily in the state.

5. Make sure you have a legislative champion.

6. Create an infrastructure program for broadband. The California Advanced Service Fund was formed and collected $100 million through a 0.25 percent surcharge on intrastate telecom services. The fund was used to cover 40 percent of rural project costs, first in unserved areas and then in underserved areas.

7. Create a broadband infrastructure revolving loan account. California funds a $15 million account out of the surcharge. It was used for initial engineering for ARRA grant proposals.

8. Leverage or build a telehealth network. When the FCC had funds available for telehealth grants, California's regional telehealth groups were told to submit a combined statewide application. The University of California, Davis campus, was the fiscal agent for the 853-site proposal to the FCC. California got FCC funds to set up 10 model communities, which will transform health care in the state. Lives have already been saved with telemedicine connections to urban experts.

9. Leverage tele-education, E-rate, library, 211 (non-emergency help) and digital literacy efforts. Open the school tech center at night. Create school laptop programs for middle-school kids who can't afford them – the kid trains the family. California's E-rate program gives 50 percent of the federal E-rate amount to schools, and its 211 referral service mentions broadband and computer training for anyone who calls for, say, food stamps.

10. The secret sauce: California formed rural regional consortia to achieve specific broadband outcomes with accountability. There are seven rural consortia, each covering six or seven counties. The process included executing detailed fact-finding for the work plan, identifying who should be involved in each county, deciding on the fiscal agent and writing the work plan. All public agency groups and key business sectors/employment groups were surveyed for an aggregation-of-demand report and an outreach and engagement plan for the counties. This was followed by six months negotiating the broadband deployment scenario, including real people with real contact information who said they would subscribe to the network. Then each consortium negotiated an agreement with a broadband provider to actually do it. Every year, CETF brings consortia leaders together to share lessons learned; these leaders feel peer pressure to avoid looking bad in front of the other consortia. Strict annual and quarterly reporting requirements make sure everything gets done. When ARRA funds were available, one of three who applied received grants.

See Chong's complete talk at www.bbpmag.com.

Build two highways at the same time: Don't allow agencies to create silos. Every time you open a trench, put in conduit for fiber.

Greg Laudeman, project manager at Georgia Tech's Enterprise Innovation Institute, said his workshop group did preliminary work on a matrix matching models to communities.

Silo building is an enemy of converged infrastructure. Because right-of-way issues create costly delays, conferees suggested following up with permitting and then deployment and sustainability. "Build two highways at the same time," conferees said. In translation: When you open a trench or hang fiber, do it all. Put in conduit where additional fiber can be added later – which also allows new entrants to be added later. Because permitting can take so much time, use one-stop permits and give local officials a time limit to get the permitting job done. Build with fiber loops for network reliability, instead of spurs and radials. **BBP**

Greg Laudeman gathers advice from workshop participants.

University of Phoenix Grows Into a Powerhouse With Broadband

A private university that operates in 39 states, the University of Phoenix has 25,000 employees, in addition to a teaching staff of 30,000, serving more than 400,000 students, of whom half are online at any time. Obviously, Phoenix could not exist without telecommunications services, but the university president, William Pepicello, noted that the university is bedeviled by having different levels of broadband available to staff and students.

Pepicello talked frankly, saying, "If we are not careful, higher education may go the way of newspapers or the record industry ... and absorb physical campuses into the Internet. Traditionally, we were a cottage industry. The information rested in my classes and I was the master of it. But today, knowledge does not reside in a professor. It is everywhere.

"Much of our experience in life today is virtual. We shop online. My mortgage was issued online. Why shouldn't education be that accessible? Students want that kind of access. … A full 75 percent [of all American students today] are nontraditional – older, working part time. They have a need to integrate higher education into their lives in a way that higher education can no longer do."

Pepicello said, "The students demand engagement, flexibility and support, along with a quality curriculum. Community matters to these students, so they need a social network. They don't care whether they are online or in the classroom." The University of Phoenix College of Business has 160,000 students, and at any time, between 5,000 and 8,000 students are taking Economics 101. The average class size is 15. Students can opt into joining the wider network worldwide of all students taking this course.

The Internet will eventually enable us to democratize education and bring it to a wider audience, including those in rural areas, said Pepicello. He added, "There is nothing magic about Google or Amazon.com that can't be applied to higher education. ... If Amazon can figure out what kind of shoe you like, we ought to be able to find out how to do that for education."

Higher education may become all digital, absorbing physical campuses into the Internet.

BBP vice-chair (and former head of the RUS) Hilda Legg exhorts the crowd to stand up for rural broadband.