ShorT-Circ

The high-speed telecom conflict between US West and Rural Colorado won't end anytime soon.

By M. Eastlake Stevens

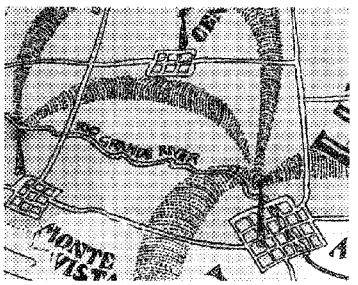
Bula Inc. couldn't get a coveted high-speed T1 digital line anywhere in Durango. The town's capacity was maxed out, its phone company exchange handling all the high-speed business it could. For now, the T1 was an unattainable commodity, and the apparel manufacturer's dreams of connecting its out-of-state offices with wide-area network technology were gone.

US West flatly told the company "There are no T1s available" and wouldn't be until after 1999, said Kathie Close, Bula network manager. Bula's offices would continue to connect over the Internet and e-mail services — but not on its own private wide-area network.

Bula was left languishing in too-low tech, and its WAN was canned for at least a year.

But Bula's been there, done that. It ran into a similar situation a couple of years ago, when it wanted a high-speed line for a local WAN. The situation brewed, complete with angry management and talk of lawsuits — until another company moved on and gave up its line, which Bula promptly grabbed. But now it needs another line, and can't get it.

Bula was lucky. At least Durango is wired. Others can't get even that far.



Stuck in the technological Back 40, often with only a 2.4 Kilobit data transmission speed, Colorado's rural leaders want better than the most basic technology, and can't get it or even pay for it. Frustrated and angry with US West's long waits and prohibitive costs, and prompted by a fear that US West will move out of the rural market altogether, they're desperately looking for alternatives until the issue's either resolved or evolved. So far their efforts to get around US West's technological stranglehold have met with minimal success, while US West argues that it is stuck between a regulatory rock and hard place.

Until then, "Someone at US West told me (it) makes more profit on Park Meadows Mall than the whole Durango exchange," said Ed Morlan, executive director of Region 9 Economic Development District of Southwest Colorado in Durango, a state economic development office.

Basically, rural Colorado blames US West for the fix it's in. Rural markets cost the phone company much more than urban ones do. As a business in a competitive market, US West goes where the money is — mainly the Front Range metro areas. As provider of last resort, however, rural people think US West could try a bit harder to focus on supplying faster kilobits to less profitable areas.

"US West historically hasn't put money into rural infrastructure," said Ken Swinehart, president and CEO of Alamosa-based Amigo.net, one of a few Internet Service Providers in the San Luis Valley.

But the phone company "will never tell you that," said Jim Leist, executive director of Alamosa-based El Telar (Spanish for "Internet"). "They'll tell you they're doing what the laws require them to provide."

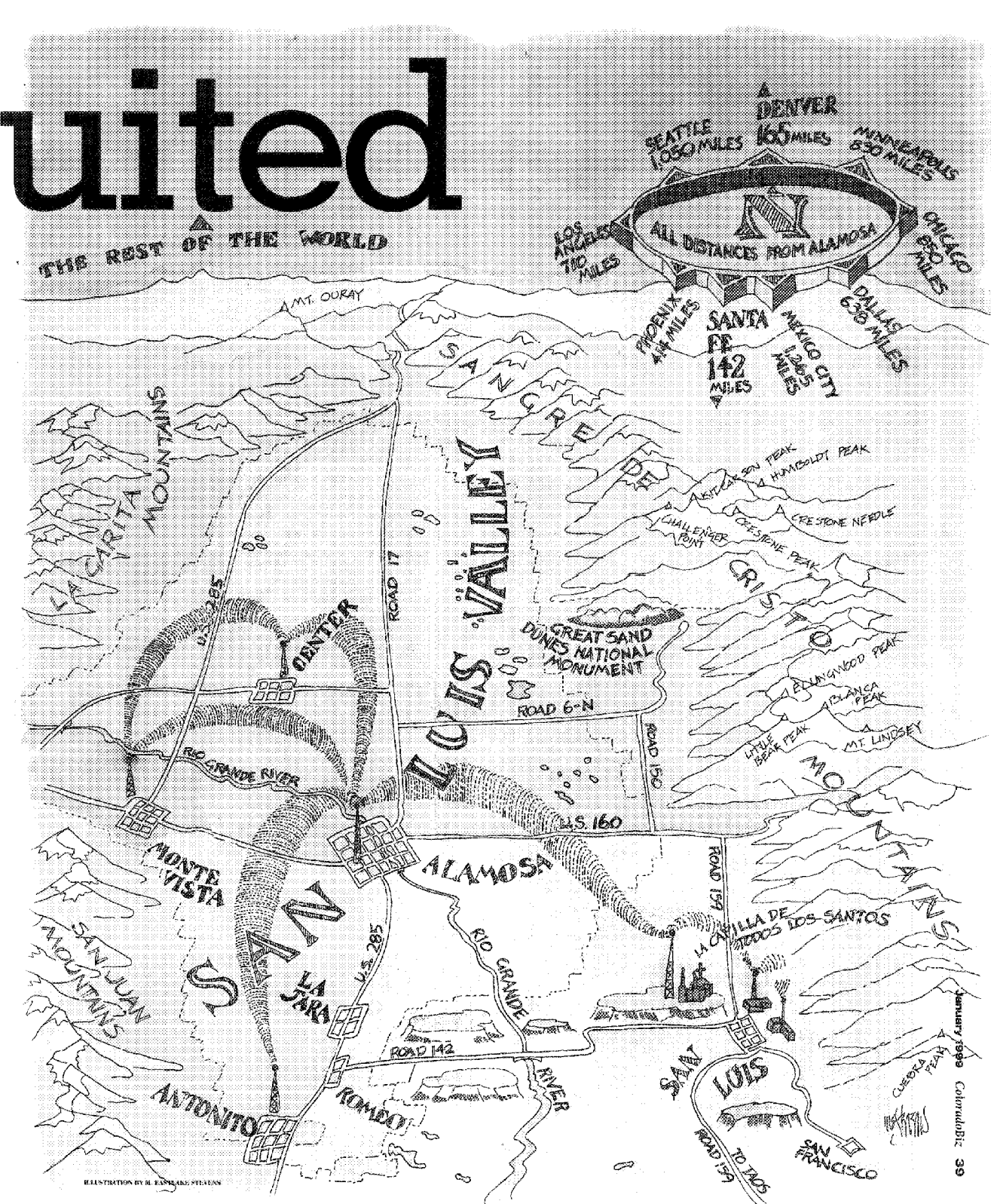
The phone company argues with that. US West invested $400 million in the early '90s to change rural phone systems from party lines to private ones, said Bonnie Pehl-Petersen, area manager for US West's western and northern markets in Grand Junction.

A 1992 state law required US West to switch the state's 50,000 to 70,000 party lines to single party lines by 1995, said Bruce Smith, director of the Public Utilities Commission.

But rural Coloradans are frustrated with their voice lines and 2.4 Kilobit data-transmission speeds — the basic service US West is required to provide — in a business world of 56 K and faster.

Who can attract business or train local workers with obsolete technology? they want to know. The San Luis Valley wants to market its tourism potential and its locally made products over the Internet. The valley wants to attract telecommuters, but 2.4 kb. is too slow to support it. It's also too slow for interactive business needs such as e-commerce, electronic data interchange, video transmission or today's sophisticated graphics.

Rural Colorado isn't just trying to be trendy. Stuck in a Catch-22, it needs business-quality, high-speed lines to attract business, which these days "telecom-shops" when looking for new locations, Swinehart said.



Short-Circuited

The situation won't change until basic service gets redefined or an alternative is found. For now, between US West and independent phone company charges, customers can pay as much as $1,700 to $2,000 per month for advanced data transmission services, depending on their distance from the hub and their location.

Rural areas are usually poor, however — the San Luis Valley has two of the state's poorest counties — with few high-tech workers. They can't afford high-speed lines without more businesses, and can't attract more business without high-speed lines. And US West isn't about to make such a huge investment.

But then, it isn't required to provide more than basic service at an affordable price. Today that means voice service and 2.4 kb. data transmission — "the Dark Ages," Smith said. To go to 14.4 kb. would cost all Colorado phone customers an extra 30 cents to 50cents a month.

And faced with diminishing urban market share, US West isn't exactly enthusiastic about the costs of rural advanced high-speed lines — especially given technology's distance- and density-driven nature.

The principle is simple: The farther one is from the lines' hub, the more it costs to wire and use. By definition, rural areas have fewer people per square mile — San Luis Valley has 16 per square mile — so costs to users and providers go up, and are hard to justify, Petersen said. In some cases, customers could end up paying $150 a month for service, although Petersen said US West wouldn't be allowed to charge that much.

Rural Colorado doesn't empathize much with phone company finances, though.

"It's very frustrating because you go and put the order in (and) they take the order," Close said. But when the appointed time arrives, it's been indefinitely postponed.

Swinehart's Amigo.net resells US West dial tone now, but plans to compete with it in rural areas. He credits the indefinite postponement of installation to a rumored US West hold on T1 and other high-speed line installations.

"They aren't going to install high-speed lines," he said. "They aren't canceling orders. Then they have to report it to the PUC. They said there's no more money to put (T1 in)."

Rather, Swinehart sees US West's apparent gamesmanship as a step toward its sell-off of rural service areas to smaller phone companies. The telephone giant must wait until after 2000 to sell out for depreciation purposes, he said. "If they sold now, it would look like a heavy loss" on the balance sheets. After 2000, "It would be a bookkeeping entry."

US West disputes that claim.

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San Luis Stopgap

People in the San Luis Valley are angry about US West's service, or lack of it. Dave Hughes is angrier than most.

"US West wants it both ways," he said of his spread spectrum radio service. "They do not want the (federal) Universal Service Fund (subsidies) paying for no-cost wireless connectivity — spread spectrum or even microwave radio. They want to charge whatever they feel like for those same schools. And they admit they will not even provide data lines to many rural places. They don't want the competition from no-cost wireless to grow. They want it all."

In 1996 and 1997, Hughes, a highly decorated 23-year Army veteran, connected valley schools to the Internet with spread spectrum radio and grants from the Colorado Advanced Technology Institute and the National Science Foundation.

As a low-frequency wireless connection, it uses strategically placed antennae to connect certain valley schools to Alamosa Internet Service Provider Amigo.net. Its costs are low — a $20,000 one-time charge compared with a monthly $1,700 for high-speed lines.

But Hughes "worked a long time to get that sucker just right so (it) would connect," said Gary Theimer, coordinator for technical services at the Valley Campus for Trinidad State Junior College in Alamosa. "He was pushing those radios to the ragged edge."

The radio signals are susceptible to weather, he said. But, "Dave was good enough to help us out," while the valley worked on phone company politics.

"We give it an 85 percent," said Alan McFadden, technology coordinator for Monte Vista School District. "He's really stretched the capabilities. It's a test bed."

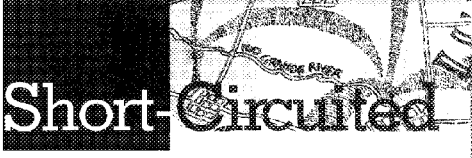
But, said Ken Swinehart, president and CEO of Amigo.net, "If someone was having a heart attack and transferring information from one doctor to another, I wouldn't want to depend on spread spectrum radio. What Dave is doing is for less critical applications."

Hughes, who also has installed the system in Montana and Mongolia, and worked as a National Science Foundation investigator, said it ultimately can replace wire services, and that US West uses it, too.

"Secretly, behind the scenes, US West has, in limited ways, used spread spectrum wireless radios to substitute for wired solutions. And charged their normal tariffed rates, even though they save money using it," he said.

That may be the case, said Bonnie Pehl-Petersen, area manager for US West's western and northern markets. "Regardless of how (service) is delivered, we are required to charge tariffed rates."

— *M. Eastlake Stevens*



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"To my knowledge, we don't have anything going on right now with regard to that," US West's Petersen said. Installations are put off until after 1999 because that's when the budget will cover them. She added that it isn't out of the question for the company to sell rural exchanges. But, "There's nothing definitive that says we're selling anything at this time. It would be news to me."

Some people are frustrated with long waits for high-speed line installation. Others are frustrated with the old dial-up lines' speed, or lack of it.

"I live in Del Norte (in the San Luis Valley)," said El Telar's Leist. "The best that I can connect (to the Internet) at is 1.2 kb. It's as low as you can go and still get it to communicate."

El Telar is a 3-year-old technology development group started over coffee in a local cafe on the premise that, "Technology was a black hole in the San Luis Valley," Leist noted.

The pent-up frustration has prompted talk of lawsuits against US West. Close said Bula threatened a lawsuit two or three years ago, when the company wanted a local WAN, was promised the lines and then was put off by US West. But Bula picked up a line someone else had dropped and the lawsuit talk "sort of fizzled out," Close said.

Swinehart said Morlan had filed a lawsuit against US West, but couldn't elaborate. Neither would Morlan.

"I don't want to comment about that," he said. "They're (US West) the ones we deal with now." Petersen said she had not heard of a lawsuit.

Region 9 is talking with "a couple of different companies" regarding area phone services, though Morlan didn't expect anything definite until early this year.

US West says its competitors aren't required to go into rural areas, and so they don't. Instead those competitors are grabbing urban market share from US West and ultimately upsetting the subsidy system. Competitors' money goes to profit, not subsidies, said David Beigie, spokesman for the phone company's Denver office.

PUC's power is limited beyond enforcing the law, a "gnarly issue," Smith said. Like

Swinehart and other rural progress proponents, he suggests not waiting on US West or any other subsidies.

US West's performance "shows us we'd better come up with our own strategy," Swinehart said. "Rural communities should come up with a plan for themselves."

Which they do — regularly. Ideas are tossed around, from ad hoc groups to full-blown conferences. Some key efforts:

■ The PUC is holding meetings in rural areas through January to see how citizens would redefine basic service. PUC is required to check every three years. The most likely change will be increasing the 2.4 kb. transmission speed, Smith said. That would mean paying higher rates for the faster lines, which phone customers would be required to accept.

■ The state, through the Colorado Advanced Technology Institute, has proposed jump-starting rural technology efforts by bringing high-speed lines to small-town public buildings. The "Beanpole Bill" grants $30 million over three years to wire public buildings for communities matching the funds. The idea is to start and build co-ops big enough to create a market for US West, says Jeff Richardson, CATI director of Information Technology Programs.

The funds also help educate rural residents, many of whom have never tried going online or using a computer.

CATI has also granted seed money to technology/economic development projects through rural Colorado (see sidebar).

■ Rural TeleCon, a four-day forum for rural community leaders, is held each October in Aspen to go over rural telecom problems and solutions. Sponsored in part by CATI, it draws local as well as international attendees and speakers. The conference is part of an overall effort to raise awareness among local leaders and educate them on what telecom can do for their towns — even if it makes their eyes glaze over, Richardson said.

Until an alternative is found, even local telephone companies are dependent on US West for feeds, Leist said. "Until US West replaces copper with something else, it will be the same."

One thing is clear, he added. "The growing disparity between the economic haves and have-nots is the ability to apply technology."