Reprinted from the Chicago Tribune, April 5, 1999

Notes from a wired community

By Andrew Zajac, Tribune Staff Writer

Sometime around May 1, a group of business, political and university leaders in Evanston will pick a team of telecommunications companies to stitch together the wires intended to provide every home and business in the North Shore community with a high-speed Internet connection.

The bet is that with universal fast access to the Internet, home-based businesses will thrive, civic involvement will increase, local startups will proliferate, and Evanston, with Northwestern University supplying the intellectual horsepower, will become an engine of the information economy.

But in these still-early days of the Internet, what is the reality of wired communities?

As much as any town, Blacksburg, Va., has offered itself as a guinea pig for an experiment in cyber-communion.

An estimated 83 percent of the town of 37,000, including 23,000 students at Virginia Tech, has Internet access. About 272 out of 350 businesses have a Web page and the Blacksburg Electronic Village (www.bev.net) has garnered international attention as a model on-line community.

A business park on the edge of the Virginia Tech campus is slowly filling up with high-tech startups drawn to the area by its unlikely combination of technological sophistication and an ambling pace of life amid the raw beauty of the Blue Ridge mountains.

"Big city people don't expect to come to southwest Virginia and find high tech," said Virginia Tech Corporate Research Center President Joe Meredith, adding that once a prospect visits the area and samples its amenities, a relocation deal becomes much easier to close.

But amid the impressive expansion of networking and unbridled optimism that suffuses the conversation of village leaders, there are cautionary notes in the Blacksburg experience as the project pushes past the novelty phase and tries to make the Internet an everyday instrument of government and commerce, like the postal service or telephone.

Like Technopolis Evanston, as the cyber-community project is called, the impetus for Blacksburg's embrace of the networked lifestyle springs from academia, in this case Virginia Tech.
In 1993, the university, working with the town, offered Internet access to every resident through the university's voice/data network. Bell Atlantic, the local phone company, accelerated a planned overhaul and spent about $7 million upgrading switching equipment and installing a fiber-optic backbone.

A year later, high-speed access, in the form of Ethernet and ISDN, became available, though most people in town use conventional modems to enter the Internet.

The press has taken note, churning out story after story about the heretofore little-known university town on the bleeding edge of the information revolution. Even the National Enquirer ran a story about the "computer crazed" town.

While car-clogged Northern Virginia peddles its critical mass of tech heavyweights, such as America Online and Network Solutions Inc., Blacksburg, 250 miles away, sells a negligible crime rate, good schools, the cultural amenities of a large university and the recreational opportunities of the mountains.

That positioning has resulted in the steady growth of the corporate research center, a 120-acre site on the edge of town populated with 85 businesses employing about 1,200 people. Most of the 11 brick offices are occupied by innovative startups spun off from Virginia Tech or drawn to the region by a tech-savvy workforce and fresh air.

The research center is served by a pair of T1 lines delivering a combined 3 megabits of bandwidth--up to 60 times speedier than a dial-up connection. Meredith's tenants include a firm that has developed birth control pills for cockroaches, another that has formulated a non-toxic substitute for mercury, and a third, Blue Ridge Interactive, has built a Web site, Dr. Mag., with ambitions to become the amazon.com of on-line magazine sales.

"It's a marvelous, supportive atmosphere," said Blue Ridge CEO Dr. Harry Sova, who relocated his company, which now has 12 full-time employees, about a year and a half ago from Virginia Beach. "There's a whole attitude of looking toward the future. . . . The attitude here is can-do."

Back in town, about 180 older residents have signed up for a listserv catering to their interests and the town senior center boasts 10 computers. A dozen more computers offer free Internet access at the public library.

Several residents have used the Web to set up businesses or augment brick-and-mortar outlets. Peg Fisher parlayed an interest in gardening into Green Dreams (www.usit.com/recycler/garden.html), an on-line store selling herb-flavored vinegars from her one-bedroom apartment. Roger Hjulstrom, the owner of Past Pages, the town's only used bookstore, now does 75 percent of his business on-line.

Though there's no shortage of testimonials like Sova's and stories of Web-enabled small businesses taking flight, some of what Blacksburg touts has a preaching-to-the-choir feel to it.

Without students, the town shrinks to less than 15,000, a small audience and one already relatively computer literate because of its connection to Virginia Tech.
Evanston, far larger with 75,000 people, not counting about 11,600 Northwestern students, would seem to face a more daunting task educating its public about such a project.

Even with its smaller size, Blacksburg and the surrounding mostly rural Montgomery County have wrestled with the question of supplying access to people who can afford neither a computer nor a monthly Internet connection fee.

Roger Ehrich, a Virginia Tech computer science professor, is tracking what happens to children and their families in the county school system when they are supplied with computers and receive training in navigating the Internet.

Ehrich recommends pushing the Internet through the school system. "They (Evanston) really ought to use the schools. There needs to be people working with the economically disadvantaged to help them climb on board," he said.

Blacksburg has found, though, that it's not just the poor who are price sensitive.

Virginia Tech recently turned over delivery of Ethernet service to off-campus apartments to a private business.

Most of Blacksburg hooks into the Internet via modems and phone lines, but a number of landlords outfitted their apartments with Ethernet connections for high-speed access, taking advantage of subsidized service from the university.

A high-speed connection is an amenity coveted by students and telecommuting technology workers. Apartments equipped with connections soon had long waiting lists.

But privatization meant a big uptick in monthly rates, from about $20 at the subsidized university rate, to $38.95.

While there's still a waiting list for specially equipped apartments, demand has slackened because of the higher cost.

In Evanston, Patricia Widmayer, the Northwestern University liaison to Technopolis, said planners think they can charge between $60 and $70 per month for high-speed service that will deliver both the Internet and cable TV.

Widmayer noted that the contemplated figure is roughly equivalent to the current, separately delivered costs of those services.

But, she acknowledged, Technopolis has yet to figure out how to make Net connections available to residents of modest means.

"About $40,000 (in annual income) is where you start losing people," she said.

Meanwhile, in Blacksburg, hoped-for efficiencies in town government have been slow in coming.
An April 1995 Washington Post story noted that "within a year" the town was planning on allowing residents to pay utility and tax bills on-line.

It's four years later, and on-line bill paying still isn't a reality. Assistant town manager Bonnie Svcek said the plan now is for bill paying, vehicle registration, dog licensing and other transactions to be Web-enabled in six to eight months. "We've been a little slow getting there," mainly because the town's resources were diverted to other projects, including a change in an accounting system, she said.

Although the town aspires to offer time-saving features, at the moment, "We use it (the Internet) very simply as an additional information tool," Svcek said.

The municipal government's financial contribution has been modest, about $90,000, to upgrade its own computers and to teach small businesses how use the Internet and build Web sites, according to Svcek.

Indeed, director of the electronic village, Andrew Cohill, said he wishes he'd spent more time getting public officials on board.

"I missed the boat on political leadership," Cohill said. While local leaders haven't opposed the electronic village, Cohill figures they haven't been as enthusiastic as they might because they haven't understood the technology well enough to become cheerleaders.

Cohill said political enthusiasm is important because a successful on-line community needs government to migrate public information to the Web, keep up with public debate in on-line forums, and provide financial backing.

In Evanston, local government's role in Technopolis already is a key issue, in part, says Northwestern's Widmayer, because from a political perspective the early stages of expensive, unproven civic projects have little immediate pay-off for an elected official.

Widmayer summed up the prevailing attitude as, "We've got other things we've got to worry about. Please tell us it's not going to be a big draw on public resources."

Backers are framing the project to minimize the downside. "There's no high rise going up," Widmayer pointed out. "This doesn't disturb anybody's neighborhood. It's going to be personal choice."

Still, Widmayer brims with enthusiasm, suggesting that the telecom team picked to wire the town may want to subsidize the cost of the project to showcase the benefits of state-of-the-art connectivity.

"It is an opportunity for them to show what they can do," she said.