



# Bringing Technology Home

AT&T initiatives aim to help bring the digital lifestyle to more consumers.

**A**s the use of Internet protocol-based communications becomes increasingly important to local government and commonplace in our daily lives, AT&T is working to bring high-speed Internet access to as many people and communities as possible.

Extending broadband access to underserved communities is vital to closing the digital divide. IP-based connectivity is integral to keeping pace in today's evolving society. People's lives are becoming tightly linked to IP-based communications. Consumers are no longer passive recipi-

ents of content but want to control how and when information — data, video, news and entertainment — reaches them. Our children's homework assignments are increasingly Web-driven. Our businesses and work routines depend on Web-based communications.

During 2006, AT&T began implementing several initiatives designed to provide new opportunities for people living and working in rural areas and remote communities to take advantage of high-speed connectivity, as well as provide new competitive options for customers in other



areas. In addition, AT&T is collaborating with philanthropic organizations to bring Internet access to thousands of low-income families to help close the digital divide. (See sidebar.)

#### **AT&T's U-verse**

AT&T plans to spend approximately \$4.6 billion to bring its IP network to nearly 19 million homes by the end of 2008 as part of an initial deployment. This expansion of the AT&T fiber network will enable the company to offer IP-based television service, high-speed Internet, and in the future, voice over IP services. These services, which will be marketed under the AT&T U-verse<sup>SM</sup> brand, will enable a new level of integration, speed and control for communications and entertainment services.

AT&T launched U-verse services in San Antonio this year and plans to offer the service in 15 to 20 markets by the end of 2006. The company also affirmed its intent to make U-verse services available within three years to 5.5 million low-income households in its initial U-verse markets,

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making them among the first in the nation to receive these new offerings.

AT&T's switched IP video network works differently from the distribution technology used by traditional cable TV. With traditional cable or satellite, all content constantly flows downstream to each customer, and the customer switches the content at the set-top box. Customers select from among as many choices as the cable or satellite company can fit into the “pipe” flowing into the home.

With a switched IP video network, content remains in the network, and only the content the customer selects is sent to the customer's home. That means content choice is not limited by the size of the pipe into the home. In other words, AT&T U-verse TV has the potential to deliver more

programming choices and functionality than traditional cable and satellite television. With the AT&T U-verse service, viewers can use the digital video recorder to pause live programming, and parental control features help guard against inappropriate content viewing by children.

#### **Pent-Up Demand in Rural America**

Many rural areas today do not have access to broadband options like cable modems or DSL, since it is often cost-prohibitive to deploy these technologies in remote areas. AT&T is working to deliver new options for rural customers, according to Jamie Butcher, assistant vice president of AT&T Rural Marketing.

“Broadband access gives rural Americans access to career and business opportunities, shopping choices and information sources that were not possible before,” Butcher said. “The interesting thing to me is how quickly broadband is adopted in these areas. There's a tremendous pent-up demand for broadband in rural America.”

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## Access for All

*AT&T works together with One Economy and Habitat for Humanity affiliates to bring Internet connectivity to low-income families.*

Low-income Americans remain significantly less likely to be online than middle- or high-income households, according to a study by the Pew Internet and American Life Project. To tackle this aspect of the digital divide, AT&T is devoting nearly \$50 million in grant funds and in-kind services donation to bring hardware, software and Internet access to 50,000 low-income families over the next three years. Working with One Economy Corp., a national nonprofit organization dedicated to providing technology access to low-income families, AT&T will reach 15,000 Habitat for Humanity houses over the three-year life of the program. One Economy will help AT&T reach another 35,000 households through additional developers of multifamily housing, local governments and community-based organizations.

AT&T Pioneers, AT&T's volunteer organization of employees and retirees, will help install the technology packages and provide training.

"AccessAll builds on an existing investment of \$83 million we've made over the last several years in technology for underserved populations," said Laura Sanford, president of the AT&T Foundation. "Past efforts focused on community technology access points. Those might be community technology centers, libraries or computer labs in schools.

"What we really want to do is get access right into the home where it can really enrich the educational achievement of the children in that home and the job prospects of the parents," she said. Adults without Internet access are unaware of many job opportunities because employers increasingly are announcing job openings and accepting applications online.

Enabling in-home Internet access also helps put low-income school children on an equal academic footing with high-income students, she said.

"The higher-income student is able to just go home, go into the den and get the homework assignment done on the Internet," said Sanford. "What we're seeing today with the low-income families is those students are getting handed that same Internet-based assignment and having to try to figure out how to do it in the school computer lab or have a parent or guardian get them to a library or a community technology center to use the computers there."

Sanford said the AT&T AccessAll initiative stands out from other programs because it addresses all aspects of getting low-income families online — hardware, software and Internet access — not just one piece of the equation.

Indeed, AT&T AccessAll helps bring families together with mutual education, she said. As children learn word processing and Internet skills at school, they typically come home every day and help teach their parents.

"It's kind of exciting for children to be in a position to teach their parents a little something," Sanford said. "But then the parents end up immediately motivated because they want to

make sure everything the kids are doing on the Internet is safe and sensible."

AT&T AccessAll also funds community technology centers made for introducing individuals with disabilities to assistive technologies that can help them gain workplace skills.

"We've learned that people with disabilities really embrace the opportunity to have access to assistive technologies within a technology center-type environment. It allows them to test drive the technology and see if it works well for them before they invest in it for home use," Sanford said.

Naturally better job prospects alleviate the isolation many individuals with disabilities face on a daily basis, said Sanford.

Another target for AT&T AccessAll is the elderly population, many of whom are re-entering the work force.

"What jobs are there these days that don't require at least some basic desktop computing skills?" Sanford said. "The focus of our work with seniors is going to be on basic computer desktop training so they learn word processing, Excel spreadsheet, PowerPoint — all those things they would need for pretty much any position they might be applying for."





To bring broadband connectivity to rural and remote areas, AT&T is turning to satellite technology, which is not inhibited by line-of-sight or terrestrial-based technology. The company has a relationship with a vendor to begin using satellite technology to serve customers in many rural and remote areas across the company's traditional 13-state local residential service area.

Another AT&T solution to address the rural broadband deficit is fixed wireless technology.

"Rather than bringing the broadband connection into your home over a pair of copper wires, like traditional telephony,

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Jamie Butcher, assistant vice president, Rural Marketing, AT&T

we see opportunities to use a fixed wireless broadband connection in some rural areas," Butcher said.

Fixed wireless technology is a "line-of-sight" technology. Instead of a copper wireline for the "last mile" connection into the home or business, the recipient mounts an antenna on the house to receive the wireless signal.

"The hope is that fixed wireless technology can allow us to extend broadband service to a larger population and into less densely populated areas than we can do with traditional DSL," Butcher said.

Several rural Texas communities, as well as customers in New Jersey, Georgia

and much of Alaska, already receive broadband from AT&T's fixed wireless technology.

Broadband communication makes telecommuting more practical and acceptable. Employees have the opportunity to create a better balance between their jobs and personal lives, while employers benefit from employees who can be productive even when they're not in the office.

"If you're living outside a metro area and don't have broadband, that really inhibits your ability to work from home, either after hours or during regular business hours," Butcher said. "Expanding broadband access to more rural communities is creating a win-win situation for employers and employees."

#### **Broadband Where You Need It**

The increasingly mobile nature of the American work force is making wireless Internet a necessity of life.

AT&T is working to fill that need with Wi-Fi hotspots wherever a professional is likely to need them. Competitive pricing and demand for anytime, anywhere broadband access makes Wi-Fi hotspots increasing popular.

"Our hotspots are popular in locations ranging from hotels and airports to coffee shops and rental car locations," said Rick Gretsch, director of IP services for AT&T Business Marketing. "We even have our hotspots installed in baseball stadiums, basketball arenas and state parks to help people stay connected and productive."

The broadband culture is moving society toward a new digital reality, and AT&T is doing its part to ensure that no communities are left behind.

For more information visit [www.att.com/stateandlocal](http://www.att.com/stateandlocal)



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