SPEEDY DELIVERY

Telecommunications and information-technology companies use high-speed Internet and cloud services to keep customers connected.

Reaching the rural communities in and around the mountains of North Carolina can be difficult. It's also expensive to link companies there to a broadband Internet connection using wire-bound options. So when Frontier Communications Corp. needed to reach such a customer, it looked to the heavens and found a satellite to bounce in service. It works similar to satellite TV, and it's something the Stamford, Conn.-based company began offering nationwide last fall. It is most appealing in places where traditional Internet access is not feasible or would cost more money than could be recouped in an acceptable period of time, says Dennis Bloss, Frontier's vice president and general manager for North Carolina operations. Finding ways to deliver high-speed Internet access to remote locales is a hurdle worth jumping for the telecommunications and information-technology industries — their customers need to move more data faster for entertainment and business.

"In general, demand for communications services is growing rapidly," says Laurent Therival, AT&T Inc.'s vice president and general manager of mobility and consumer markets in the Carolinas. "Consumers and businesses are especially demanding faster and more robust broadband and mobile broadband features and services." Wireless data traffic on the Dallas-based company's network has at least doubled each year since 2007. Kevin McCarter, vice president and general manager of eastern and central North Carolina operations for Monroe, La.-based CenturyLink Inc., sees a similar trend: "It's booming. As an industry, North Carolina is an important place." Twenty years ago, voice was the only service offered. There wasn't much opportunity for

COMMSCOPE®

Emerging as a pioneer in the early days of cable television, CommScope has evolved into a world leader in the telecommunications industry and has remained at the forefront for nearly 40 years. With our world headquarters and several manufacturing facilities located in the foothills of western North Carolina, we have continued to expand our horizons to meet the needs of the ever-changing, high-tech world in which we live. Our extensive portfolio of products includes end-to-end solutions for broadband, enterprise and wireless communication networks. But as technology continually changes and evolves, our focus and goals have remained the same... to help our customers create, innovate, design and build faster and better systems... at home, at work and on the go.

COMMSCOPE®

www.commscope.com

growth because just about every home and business was wired in. Then came the Internet and its potential, which is still being mined. It created a market for second phone lines, then digital subscriber lines and, today, broadband with connection speeds that facilitate faster music and movie downloads and remote access. A similar evolution happened with cable television providers. They started with TV, then added broadband and have since expanded to voice. McCarter says 90% of Tar Heel State homes have access to video, broadband and voice from at least one provider, so now it's about providing more services.

One such service is data management, which allows telecommunications and IT companies to offer businesses an advantage through broadband. "Large businesses the last two years have really gotten into cloud services. That's the direction telecommunications and IT is moving in particular with larger businesses," says Royster Tucker III, chief operating officer and president of North State Communications Inc. Voice is still a big part of what the High Point-based company provides, but managing data generates most of its growth. Its data centers, including a recent addition in Raleigh, serve the Southeast and East Coast and support cloud services — data and software for payroll, email and other functions hosted off-site and accessed remotely — that help businesses cut costs. For example, they reduce the need for companies to maintain their own computers and servers for data backup. Ken Fitzpatrick, president of New York-based Time Warner Cable Inc. Business Class East Region, says a small company can leverage the technology without a big capital investment. "For a small company, it allows them to act bigger," McCarter says. As companies continue to decrease IT staffs and feel pressure on their bottom lines, there will be more moves toward cloud services, says Joe Marano, executive vice president of operations for Little Rock, Ark.-based Windstream Corp. The company, which has about 1,500 North Carolina employees, acquired Fairport, N.Y.-based Paetec Holding Corp. in 2011 to expand its cloud services.

Once large amounts of data can be moved using broadband, IT companies step in to help capitalize on what the information says about consumers. Charlotte-based The Comdyn Group LLC doesn't even have a particular product, says Chuck Morris, president and chief operating officer of the IT-staffing and software-development company. It starts each project with a blank sheet of paper to make sure each design is tailored to specific needs. That includes developing database-analysis software for clients across the Southeast. Comdyn recently used that process to build a touch-screen interface for Harrisburg-based KEYper Systems, which helps car dealerships keep track of vehicle keys. Comdyn has done similar software development for financial, manufacturing and health-care businesses. Most of the work involves specific ideas that a company believes will create an advantage in its market. Everybody is after business intelligence: data that can be used to predict customer behavior. Then, marketing plans can take advantage of those patterns.

Providing more Internet access and IT services to brick-and-mortar locations and homes meets only a portion of the demand. "Today, approximately one-third of U.S. households have no land line, and that's projected to be at 50% by 2015," Therival says. "Individuals and households are not the only ones who are going wireless. Businesses increasingly depend on wireless service to carry

them through the day. In fact, 65% of small businesses in a recent survey said they could not survive — or it would be a major challenge to — without wireless technology."

Smartphones are used by 55% of U.S. cellphone users. Brad Davis, CEO of Charlotte-based telecommunications-service provider DukeNet Communications LLC, says they are navigating more bandwidth-eating services, such as Facebook, Twitter and Google Maps. "The changes started with the handset. Ten to 15 years ago it wasn't possible to have a mainframe computer in your hand." Comdyn Vice President of Technology Bryan Newsome says it's been a scramble to roll out apps for newer Windows 8-powered tablets and smartphones. "Real-time data is great, whether you are at your house, in your car or your client's office," Morris says. "It's just as you are sitting in your own office." That same remote-access technology is now in refrigerators and thermostats, and Cupertino, Calif.-based Apple Inc. is moving it from your palm to your wrist with a touch-screen watch. Not only is it getting smaller, but it is powering more tasks. AT&T Digital Life enables customers to change lighting, watch live video of their pets or lock the back door, among other jobs, from a smartphone, tablet or personal computer. "This is part of the continuing integration of communications services with nearly all aspects

DukeNet Communications®

Ready to improve efficiency and profitability?

Connecting the Southeast with more than 8,000 route miles of robust, carrier-grade fiber, and backed by two multi-billion dollar companies, DukeNet Communications is your single point of contact and trusted partner for private network services.

We serve some of the biggest names in healthcare, finance, data centers, manufacturing and wireless in the region, and like you, we call the Carolinas home.

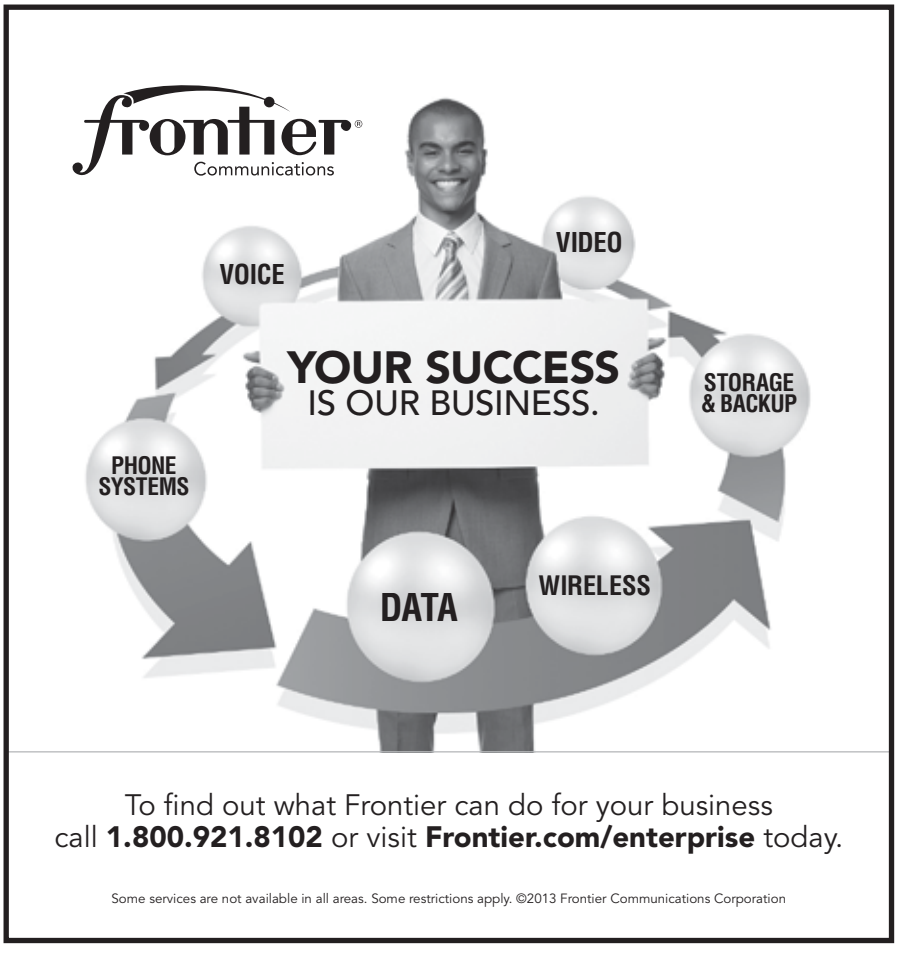
Contact us today to see how DukeNet can be your one stop shop, working with you to create solutions that meet your long-term growth objectives.

- ***Scalable bandwidth to match your changing business network demands***
- ***Carrier Ethernet from 10Mb to 100Gig from the Southeast's data transport experts***
- ***Custom solutions, unique fiber routes***

Moving your business to the cloud at the speed of light.

NEXT GEN NEXT DOOR℠ 1-855-DUKENET | www.dukenet.com

DUKENET COMMUNICATIONS and DUKENET are trademarks and/or service marks of Duke Energy Corporation used under license.
NEXT GEN NEXT DOOR is a trademark and/or service mark of DukeNet Communications, LLC.



To find out what Frontier can do for your business call **1.800.921.8102** or visit **Frontier.com/enterprise** today.

Some services are not available in all areas. Some restrictions apply. ©2013 Frontier Communications Corporation

of daily life and driven by wireless technology," Therival says.

What makes all these services possible is the growing fiber-optic network. Over the last 10 years, fiber optics has grown so important that it is built into most new homes, McCarter says. Its reliability and data capacity is superior to the copper-based infrastructure that's still used today, a century after it was invented. Fiber optics is needed to carry data through traditional networks but also from towers that feed and receive signals from mobile devices. "Broadband is key to a better experience and supporting more devices," Tucker says. "We're putting big investments in networks to support high-speed pipes." Marano says Windstream has invested heavily in infrastructure, $1 billion alone in 2012, including replacing a redundant copper-based system with fiber optics to increase the reliability of broadband service. Time Warner recently spent $30 million in the Carolinas on fiber optics. West Jefferson-based SkyLine Membership Corp. is continuing to add fiber optics to its network as its emphasis shifts beyond voice-based services to broadband and its service offerings, which include security systems and digital television. Bloss says Frontier takes a strategic approach to expansions in rural regions compared with urban regions. In addition to satellite service, the company has created technology that pushes data through available copper systems in amounts and at speeds more in line with fiber optics. "The challenge is the most rural customers who are difficult economically to get to," McCarter says. "They don't desire broadband any less than anyone else does. It's just extremely difficult for us to get the technology to them." CenturyLink received matching funds from

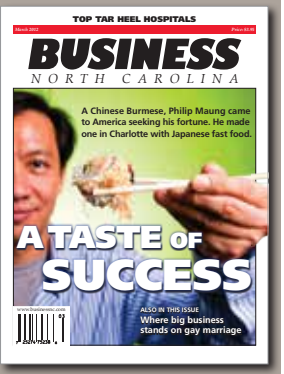
the N.C. Department of Commerce to expand broadband availability, increasing high-speed Internet services in rural Johnston, Lenoir and Rockingham counties. "This is a great example of public-private partnerships accomplishing real and meaningful results that benefit the people of North Carolina."

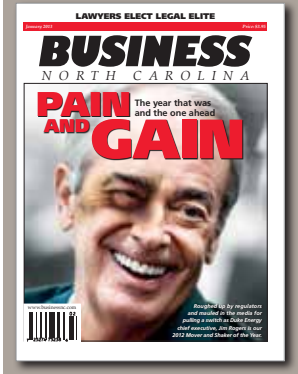
The availability of fiber-optic networks helps communities attract business while also offering less obvious benefits. Davis says large data centers built in the western part of the state by companies such as Disney, Apple and Facebook demand a lot of broadband capacity. "They would be islands without connectivity." Broadband availability at their workers' homes, as well as at their businesses, is one of the items companies look at when considering where to locate, Bloss says. Plus, connectivity opens the door for telecommuting, which can ease vehicle emissions, Fitzpatrick says, and when weather, such as ice, makes travel dangerous, employees can stay safe by working remotely.

Staying on top of technology and services, along with infrastructure, is key for telecommunications and IT companies. Comdyn keeps its temporary workforce primed through continuing education, up-to-date certifications and close ties with industry groups. "It's hard to be ahead of the curve because you can't be in front of the people making the curve," Morris says. But telecommunications and IT companies are perched slightly higher on it than other kinds of businesses, who are starting to take advantage of that. "I had a customer say, 'We're focused on running our business, you are focused on keeping up with technology. We want you to bring that to us.' We are a fresh set of eyes. They don't have time to see what else is out there."

BUSINESS
NORTH CAROLINA

Our name says it all.





The only statewide business magazine.

Subscribe today: www.businessnc.com/subscribe

ALSO AVAILABLE NOW
Digital Edition for iPad

Buy single issues or subscribe. Download today, available in the App Store.

iPad is a registered trademark of Apple Inc.

Copyright of Business North Carolina is the property of Red Hand Media LLC. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.