

# AT & T

AT&T officials gathered for an early rate hearing before the Federal Communications Commission in Atlanta (circa 1920).

Perhaps the reason AT&T is such a common household name is simply that the company is so uncommonly good at what it does.

The world's largest and most sophisticated communications network is a postmodern paradox of sorts. Although AT&T is a high-tech company, consumers using the company's services find it is a comfortable and familiar means of staying in touch for business and personal needs. And while AT&T serves more than 80 million customers in the U.S. alone with 270 million voice, data, and video calls on an average business day, consumers feel their individual calls are handled in what has come to be known as the quality "AT&T" tradition.

The numbers and technology involved in the giant communication company's daily business are mind-boggling. AT&T completes more than 99.99 percent of all U.S. calls on the first attempt.

The company uses 144 4ESS switches to route calls on the mainland over more than 51,000 miles of fiber-optic cable in the United States alone, and transmits all switched traffic in 100 percent digital format.

Within its complex workings, AT&T uses a Real Time Network Routing (RTNR) system to automatically complete U.S. calls on any of 134 possible routes. It uses the FASTAR® and FASTAR II® system to automatically reroute circuits following a failure on the core network. FASTAR II uses SONET ring technology to reroute traffic within 60 milliseconds of a network failure, while the original FASTAR system generally reroutes 95 percent of circuits within two to three minutes of a network failure.

Network operations is just one of the broad range of AT&T businesses located in metropolitan Atlanta. As one of Georgia's

largest employers, with more than 10,000 employees, there are major AT&T offices in midtown, downtown, and northeast Atlanta; Alpharetta; Marietta; Conyers; and Augusta. These locations are responsible for business and consumer customer care, wireless services, and numerous sales, administration, finance, and other staff functions.

Beyond its tremendous market coverage in Atlanta and other parts of the U.S., AT&T has more than 70 years of experience providing communications services to countries around the world. To be exact, AT&T service is available in 250 countries and territories and direct-dial is offered in more than 240.

AT&T gives travelers access to AT&T's



network from more than 150 countries and offers AT&T Direct Service to the United States from all of them. The AT&T Global Calling Card and AT&T Global Corporate Calling Card make it easy for residential and business customers to call from more than 90 countries to more than 200.

As a founding member of the WorldPartners alliance, AT&T offers one-stop shopping for seamless services to multinational companies in 33 countries, including more than 450 of the 1,500 largest firms in the world. AT&T's reach will extend even further with the Global Venture planned between AT&T and British Telecommunications plc (BT). This new business plans to combine the trans-border assets and operations of AT&T and BT, including their international networks, traffic, products for business customers, and multinational accounts in selected industry sectors. The global venture's public network will reach 237 countries and territories, and its managed networks will have 6,000 nodes in 52 countries.

In short, the company spans into even remote corners of the globe, and still AT&T is adding more technology, more connections, and more customers. In 1999, AT&T had already planned to invest more than \$8 billion to add as much capacity as the entire long-distance network had just six years ago, to expand its wireless network, and to introduce a multitude of new services.

One of those new services is broadband cable. Between 1998 and 1999, AT&T made over \$100 billion in cable acquisitions to bring the next communications revolution into homes and businesses throughout America. This change will combine voice, data, and video services and the devices—television, telephone, and PC—that have traditionally transported these services to households and places of work. Internet access is now "always on" and 100 times faster than 28kbps modems with no dial-up needed. Constant and immediate, cable also offers multiple phone lines at lower prices and with fewer wires running to homes and buildings.

AT&T Wireless's national footprint covers more than 130 million people, making AT&T the largest digital wireless service in North America. The company introduced the industry's first national one rate wireless service plan with AT&T Digital One Rate. This plan provides customers a single, all-inclusive rate (with no long-distance or roaming charges) for incoming or outgoing calls made throughout the 50 United States.

Growth and change, however, are nothing new to the telecommunications giant. AT&T has a history of conquering man's most stubborn communication obstacles in either the actual or virtual realities, in high-tech or personal modes, and in foreign and domestic territories.

1925, AT&T installed the 50,000th telephone in Atlanta.



AT&T Corp. was formerly American Telephone and Telegraph Company, which was incorporated on March 3, 1885, to manage and expand the burgeoning long-distance business of American Bell Telephone Company and its licensees.

It continued as the "long-distance company" until December 30, 1899, when it assumed the business and property of American Bell and became the parent company of the Bell System. It remained the Bell System parent, providing the bulk of telecommunications services in the United States, until January 1, 1984, when it divested itself of the Bell operating companies that provided local exchange services.

On September 20, 1995, AT&T announced that it would be splitting into three companies: a "new" AT&T to provide communications services; Lucent Technologies, to provide communications systems and technologies; and NCR Corp., to concentrate on transaction-intensive computing. The strategic restructuring was completed on December 31, 1996.

From the company's start-up to present day, AT&T has left many historically significant marks on the legacy of the nation and the emerging telecommunications industry. In 1927, AT&T was the first company to achieve commercial trans-Atlantic telephone service and the first to employ an electrical digital computer 10 years later. In 1947, it was the first to have a transistor and, that same year, became the first to develop cellular wireless communications technology. In 1957, AT&T was the first to employ a computer modem. Though modems and cellular phones are a common sight in the 1990s and later, it is remarkable that AT&T developed these products and services some 40 to 50 years earlier.

Other firsts for the company include the first use of laser in communications in 1958, the Telstar satellite in 1962, the first commercial lightwave system in 1977, the first Karmarkar linear programming algorithm in 1987, the first commercial ISDN long-distance network service in 1988, and the first optical digital processor in 1990.

And AT&T leads in other areas as well. In 1994, AT&T formally launched the program AT&T CARES, which provides cash grants ranging from \$250 to \$5,000 to nonprofit institutions where AT&T

employees volunteer their time. Two years later, the company began providing one paid workday for employees to use each year in volunteer work at the community organization of their choice. In Atlanta, AT&T employees have given volunteer hours in support of a number of local projects and initiatives, including school clean-up and painting, student tutoring, food sorting at the Atlanta Community Food Bank, and Job Shadow Day in partnership with Junior Achievement. Though AT&T is a high-tech company, it values people.

AT&T WorldNet® hosts some 8,000 business web sites but recognizes that the value of technology goes beyond business as usual. In 1995, AT&T created the AT&T Learning Network, an award-winning education program designed to help families, schools, and communities use technology to enhance teaching and learning. The program offers on-line resources and professional development for teachers, a Web tour on education-related uses of the World Wide Web, and AskLN, an exclusive mentoring program for teachers by teachers. In recognition of the AT&T Learning Network's impact on education through technology, the program was chosen by a panel of national experts to receive the 1997 EdNet HERO Award, recognizing private industry's support of education.

Though AT&T is often thought of as a huge global corporation, and, of course, it is, the impact of the company is oftentimes very personal and direct—especially in terms of educational support. In the metro Atlanta area, AT&T is a major supporter in many communities. The AT&T Mini-Grant Program awards grants to secondary and postsecondary teachers for their creative integration of technology in the curriculum. AT&T is a member and supporter of the TECH CORPS™ Georgia Task Force, a nonprofit group that organizes businesses and education leaders to work to enhance technology in all schools. And AT&T has awarded grants to the following local organizations: Foundations for the Future Forum, Talent Growth Initiative at Clayton College and State University, and the Southern Region Education Board.

For the quality of its many achievements, the company was awarded the Malcolm Baldrige National Quality Award three times, another first—twice in 1992 and once in 1994. AT&T is the recipient of many prestigious awards and citations, but perhaps the most meaningful comes from the companies and individuals who use AT&T products and services every day. It is their continual use of the company over the years that has proved mutually beneficial and brought about extraordinary advancements that many world-wide now enjoy. ☛



▲ AT&T CARES volunteers enjoy giving back to the community. More than 50 AT&T employees volunteered for a gross project at the Atlanta Community Food Bank sorting and boxing food for distribution to local nonprofit organizations.



◀ AT&T CARES volunteers proudly show off a newly planted tree at Adamsville Elementary School. A total of 300 AT&T employees joined in to refurbish and landscape Adamsville Elementary and six other elementary schools in City of Atlanta.