



## **Shareowner Information**

### **1990 Annual Meeting**

The 105th Annual Shareowners Meeting will be held 9:30 a.m., Wednesday, April 18, 1990 at the Los Angeles Convention Center.

### **Stock and Bond Information**

For information about AT&T common stock; bonds, dividends or interest payments; Dividend Reinvestment and Stock Purchase Plan; and consolidation of multiple accounts call 1 800 348-8288 in the United States or 904 737-1933 from abroad (call collect).

Or write:

AT&T  
c/o American Transtech  
P.O. Box 45048  
Jacksonville, FL 32232-5048

Stock transfers: Certificates and documents should be sent to the address directly above.

Bank and broker services: American Transtech maintains an office at 22 Cortlandt Street, 10th Floor, New York, NY 10007-3170.

### **Shareowner and General Information**

General questions or comments, write to:

Vice President-Law and Secretary  
AT&T  
Room 2500P10  
550 Madison Avenue  
New York, NY 10022-3297

Security analysts and investment professionals may inquire about AT&T's business, market and financial performance by calling Investor Relations, 201 221-2464.

### **Publications and Audio Tapes**

Available without charge from:

Secretary's Department  
AT&T Shareowner Relations  
Room 2500P10  
550 Madison Avenue  
New York, NY 10022-3297

- Form 10-K, AT&T's annual report to the Securities and Exchange Commission
- For sight-impaired shareowners, the AT&T annual report on audio cassette
- AT&T Credit Corporation's annual report

AT&T Foundation  
Room 2700P10  
550 Madison Avenue  
New York, NY 10022-3297

- A report on AT&T philanthropy in 1988 and 1989

### **AT&T Headquarters**

AT&T  
550 Madison Avenue  
New York, NY 10022-3297  
Telephone number:  
212 605-5500



## Financial Highlights

Dollars in millions (except per share amounts)	1989	1988*
<b>Operating Results:</b>		
Total Operating Revenues	\$36,112	\$35,210
Total Costs and Expenses	31,834	38,277
Net Income (Loss)	2,697	(1,669)
<b>Per Common Share:</b>		
Earnings (Loss)	2.50	(1.55)
Dividends declared	1.20	1.20
<b>At year-end:</b>		
Total Assets	37,687	35,152
Employees	283,500	304,700

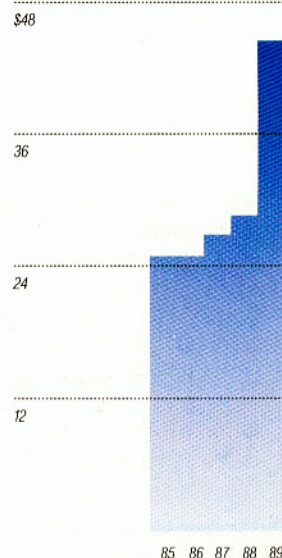
\*Results for 1988 include a one-time charge of \$6.7 billion in total costs and expenses related to rapid conversion of our network to fully digital operation.

### 1989: A Year of Strong Financial Performance

- Revenues reached a post-divestiture high despite stiff competition in all of our markets.
- We continued our progress in controlling costs and expenses this year and took steps to improve our overall cost structure for the future.
- Combined, record revenues and our cost control efforts resulted in record profits.
- Assets increased more than \$2.5 billion, reflecting strategic investments and acquisitions as well as expansion and modernization of the AT&T Worldwide Intelligent Network.
- We reduced our work force as we reshaped our business to become more competitive and customer-focused.

(For details, see the Financial Section beginning on page 19.)

**Five-Year Stock Prices\***  
Market Price per Common Share



\*End-of-year composite closing price

**On the cover:** International markets are important growth areas for AT&T. Working on this high-tech globe, created with advanced graphics technology from AT&T Pixel Machines, are two of its employees, Christina Chang and Edward Shinn.



## Chairman's Message

*Financially, 1989 was a year  
of excellent earnings—our  
strongest since divestiture.*

### ***Dear Shareowners:***

A different kind of AT&T began to take form in 1989.

It is a more responsive AT&T, moving quickly and marketing aggressively in competing for the business of its customers. It is a trimmer AT&T, with more employees selling the company's products and services and fewer doing staff work. And it is a more spirited AT&T, ready to test the skills and imagination of its people in markets that promise growth and profit.

Simply put—a more competitive AT&T.

We are not yet what we want to be—or will be. But good progress is being made in shaping a company suited to the prospects of the 1990s.

**Earnings** Financially, 1989 was a year of excellent earnings, our strongest since divestiture. Profits—\$2.7 billion, or \$2.50 per share—were up 19 percent from last year (excluding the 1988 charge for network modernization). We believe we are well-positioned to continue facing strong competition in what may be a softening economy.

**Accomplishments** There was much to be pleased about in 1989: winning, against stiff competition, multimillion-dollar corporate and government contracts for computer systems and custom-engineered long distance networks; retaining our leadership in highly competitive equipment markets; and capturing, by a wide margin, the allegiance of pay phone location owners required to choose a long distance company.

We were pleased by our acquisitions of Paradyne, which makes data communications equipment, and ISTEEL, an information services company in the United Kingdom—as well as by the strategic alliance reached with Italtel, Italy's state-owned telecommunications equipment company and now a key European partner in AT&T Network Systems International.

The regulation of our long distance profits was replaced by a "price cap" system, enabling us to benefit from cost-saving efficiencies. Our freedom to offer customized network services to large businesses was reaffirmed. In addition, the FCC agreed to reexamine its 1980 designation of AT&T as a dominant carrier, which, in effect, has meant that AT&T alone is regulated in long distance markets.

Another important development in 1989 was the achievement of new three-year labor contracts that address the concerns of employees and the needs of the company. These agreements introduced progressive family care benefits that recognize changes in the lifestyles and priorities of employees.

*Chairman Robert E. Allen*





Our network's response to the communications emergencies created by Hurricane Hugo and the San Francisco earthquake was gratifying, but overshadowed to some degree by the service disruption on Jan. 15, 1990. The network did not live up to our standards for reliability that day. We have taken action to minimize the possibility of any such recurrence.

As 1989 progressed and our new business unit structure took hold, we began developing a better understanding of our markets, our customers, our costs and our competitors. In stride with the change in structure is coming a change in operating style. For example, decisions once made by senior officers are now increasingly being made in the business units, where understanding of customer needs is keenest. In short, we are beginning to manage the business differently.

**Challenges** Looking to 1990 and a new decade, we are confronted by a number of challenges.

With the increased competition for long distance customers that got under way in the 1980s, it was to be expected that AT&T would lose market share in the long distance business. That competition, especially for corporate accounts, grew stronger as the decade ended. We are determined, however, to strengthen our position and win back customers we have lost to competitive offers.

We see as serious challenges a need to increase our sales of network systems equipment in markets outside the United States; to maximize cost savings from our investment in digital network facilities; to continue reducing overhead expenses, and to improve our product profit margins. We also need to convert our technology into products and services more rapidly and more effectively.

In more general terms, we are challenged to further quicken the lively competitive tempo established within the company in 1989, and to put our resources and energies where there are opportunities for revenue and profit growth. It is conceivable, indeed likely, that our current configuration of business units will undergo changes in the 1990s as new market opportunities emerge or the potential for growth in other markets lessens.

Our performance in the decade ahead will turn on our success in engaging the competitive spirit of our employees. Yet these are not easy times for AT&T people. New technology allows us—and competitive forces require us—to offer improved service with fewer people.

**Priorities** As we move into 1990, I have set three priorities for myself and the rest of the company.

First, we will step up our efforts to become a company that is totally committed to quality. I want AT&T quality to be the best in the world.

Second, in managing the business we will keep striving for an operating style and behavior that is characterized by a sharper focus on customer needs.

And third, we will continue to develop into a truly global corporation. It is not sufficient for AT&T to be a U.S. company with aspirations to serve international markets. The concept of globalization must become an ingrained part of the way our people think and view themselves and their work.

The changes we experienced in the 1980s were little short of volcanic as we split apart what was the largest enterprise in the world, the Bell System. We are still changing. But one thing is certain: This isn't a sleeping giant any more. The AT&T of the 1990s will be a leading, customer-focused, marketing-savvy business with a strong technology base—a business that will be successful in an era of global information movement and management.

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Robert E. Allen  
February 8, 1990



## Corporate Profile

### AT&T's Business

AT&T's business is information movement and management, providing quality products, systems and services to diverse markets around the globe.

We offer long distance telecommunications services through our Worldwide Intelligent Network, as well as systems, products and services that combine communications and computers.

Business Units	Presidents	Major Products/Services
<b>Business Communications Services</b> (page 6)	John R. Smart	custom long distance services, such as toll-free numbers, WATS, private lines, ISDN services
<b>Business Communications Systems</b> (page 6)	John P. Bucter	large communications systems, voice messaging and telemarketing systems
<b>AT&amp;T Paradyne</b> (page 7)	John J. Mitcham	data communications products, such as modems, multiplexers and digital products
<b>General Business Systems</b> (page 8)	Paul J. Wondrasch	small communications systems, small PBXs, facsimile machines
<b>AT&amp;T Computer Systems</b> (page 9)	Gordon J. Bridge Richard A. McGinn	networked computer solutions, personal computers, mini-computers, local area networks, software
<b>Synchronous Terminal Products</b> (page 9)	Charles E. Yates	synchronous terminals and intelligent controllers that connect to mainframe computers
<b>UNIX Software Operation</b> (page 10)	Lawrence F. Dooling	UNIX* operating systems and related software
<b>Federal Systems Advanced Technologies</b> (page 10)	William A. Garrett	advanced systems for the federal government
<b>Consumer Communications Services</b> (page 10)	Robert J. Ranalli	domestic basic long distance service, calling cards, special calling plans, operator services
<b>Consumer Products</b> (page 11)	Kenneth M. Bertaccini	communications products and related services, including corded and cordless telephones, and answering systems



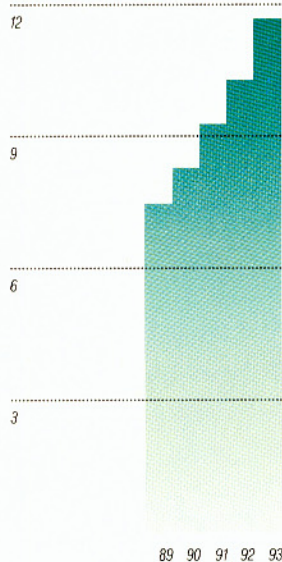
Our mission is to apply the talents, knowledge and skills of our people to make AT&T the global leader in enabling customers to reap the benefits of information technology.

Business Units	Presidents	Major Products/Services
<b>AT&amp;T Microelectronics</b> (page 13)	William J. Warwick	advanced electronic components and sub-systems
<b>Switching Systems</b> (page 13)	Albert L. Basey	digital and analog switching machines and software
<b>Transmission Systems</b> (page 14)	Peter D. Fenner	digital and analog systems for transporting communications
<b>Network Cable Systems</b> (page 14)	Gregory N. Hughes	fiber-optic and copper cable, and associated apparatus
<b>Cellular Systems</b> (page 14)	Tom L. Powers	systems that support cellular telephone networks
<b>Operations Systems</b> (page 14)	Dan C. Stanzione	software and hardware that support network management systems and data networking
<b>International Communications Services</b> (page 15)	John E. Berndt	international long distance services, including direct dial, satellite and custom services
<b>AT&amp;T American Transtech</b> (page 15)	John D. Foster	information and support services for shareowner programs, employee benefits programs, mutual funds and direct marketing
<b>AT&amp;T Credit Corporation</b> (page 15)	Thomas C. Wajnert	equipment leasing and financing of AT&T's and other companies' products



## Focused on Growth

**Projected Industry Growth in  
Data Transmission\***  
in Billions of Dollars



\*U.S. public switched data, private  
line data and value-added networks.  
Source: LINK Resources Corp., NY, NY 1989

## Serving Business Customers

***Business Communications Services was a tough, bold and quick competitor in long distance services in 1989.***

After divestiture, AT&T was reined in by regulation and surrounded by competitors targeting our corporate customers. As a result, we lost market share among big businesses. Now, with innovative and aggressive marketing, we're winning back customers. We're modernizing the network and enhancing the scope and quality of our services. We're focusing on serving corporate customers better than ever.

Innovative, we were the first in the industry to offer a service assurance policy. We guaranteed customers that if they have a problem with our 800 services, we'll get them back on line within one hour—whether the problem is in their equipment or our network. We also offer money-back guarantees on several data transmission services.

Aggressive, we launched new promotions—such as waiving start-up charges on selected services—that reclaimed thousands of customers. Hard-hitting advertisements exploded price misperceptions that caused some to switch in the first place.

Customer-focused, we dedicated nearly 2,000 more people in 1989 to sales and sales support of business communications services.

Although we're still handicapped by regulations that don't apply to competitors, we did win more relief from state and federal regulators. Nearly three dozen states allow us pricing flexibility, and 20 no longer regulate our profits. Foremost, the Federal Communications Commission approved "price caps." Under this plan, the FCC puts a ceiling on our prices instead of limiting our profits, allowing us more pricing flexibility and giving us more incentive to intensify cost cutting.

We've also gained the right to offer special networks to corporate customers. As a result, we won contracts in 1989 with Fortune 500 clients such as MasterCard, Prudential, PaineWebber and Unisys.

Most important, the FCC has decided to review competition in the long distance business to determine whether regulatory restrictions may be further loosened.

***Business Communications Systems introduced a powerful new private office switch that grows as the customer grows.***

In a market where competition is thick and profits are thin, we introduced an innovative PBX (private branch exchange) that can attract and keep new customers. The Definity®75/85 telecommunications system expands to meet a customer's needs—starting with as few as 40 telephone lines and stretching to as many as 30,000 lines. Sophisticated telemarketing and other features can be added as business demands. Designed to avoid obsolescence,



the Definity system is compatible with Integrated Services Digital Network (ISDN) and other advanced technologies. And it's compatible with all of AT&T's existing digital switches.

Business Communications Systems also moved to the forefront of the voice-processing field with higher sales of Audix voice mail, which manages incoming and outgoing voice messages, and Conversant® voice response systems, which enable instant access to computer-stored information by pressing a few telephone buttons.

***AT&T Paradyne emerged this year with the industry's broadest and most extensive line of data communications products.***

In March, an AT&T division merged with the Paradyne Corporation to create this unit. It is a leading designer, maker and marketer of data communications networks for transmitting computer data accurately and efficiently worldwide over telephone circuits. AT&T Paradyne has improved existing models while developing an integrated product line. In 1989, we announced the 6800 Network Management System, the first of these integrated products.

The merger also gave us international marketing strength through direct sales offices in Britain, Canada, Hong Kong and Japan, and through distributorships in 42 countries.

***Digital Disc Clarity***

*Digital technology—the source of a compact disc's crispness and clarity—is the backbone of our network.*

*Ninety-five percent of our domestic switched calls are carried digitally, increasing to 100 percent by year-end 1990. Private lines for business will be largely digital by mid-1990. This modernization improves customer service and reduces our costs.*

*Our long distance services based on Integrated Services Digital Network (ISDN) technology combine voice, data and images on the same telephone line to give customers powerful new capabilities. We increased the number of ISDN installations from 18 in 1988 to 73 in 1989, and plan to have 290 by year-end 1990.*



Communications traffic managers John Dudash (left) and Dennis Massa manage telecommunications traffic at our Network Operations Center in Bedminster, N.J.



### **Phone for Paper**

*Like the VCR and the answering machine before it, the fax machine for many customers suddenly is one of life's necessities.*

*Experts say that in 1992 sales of this "phone for paper" will have tripled to nine million units and revenues from fax transmissions will have doubled to \$9 billion a year.*

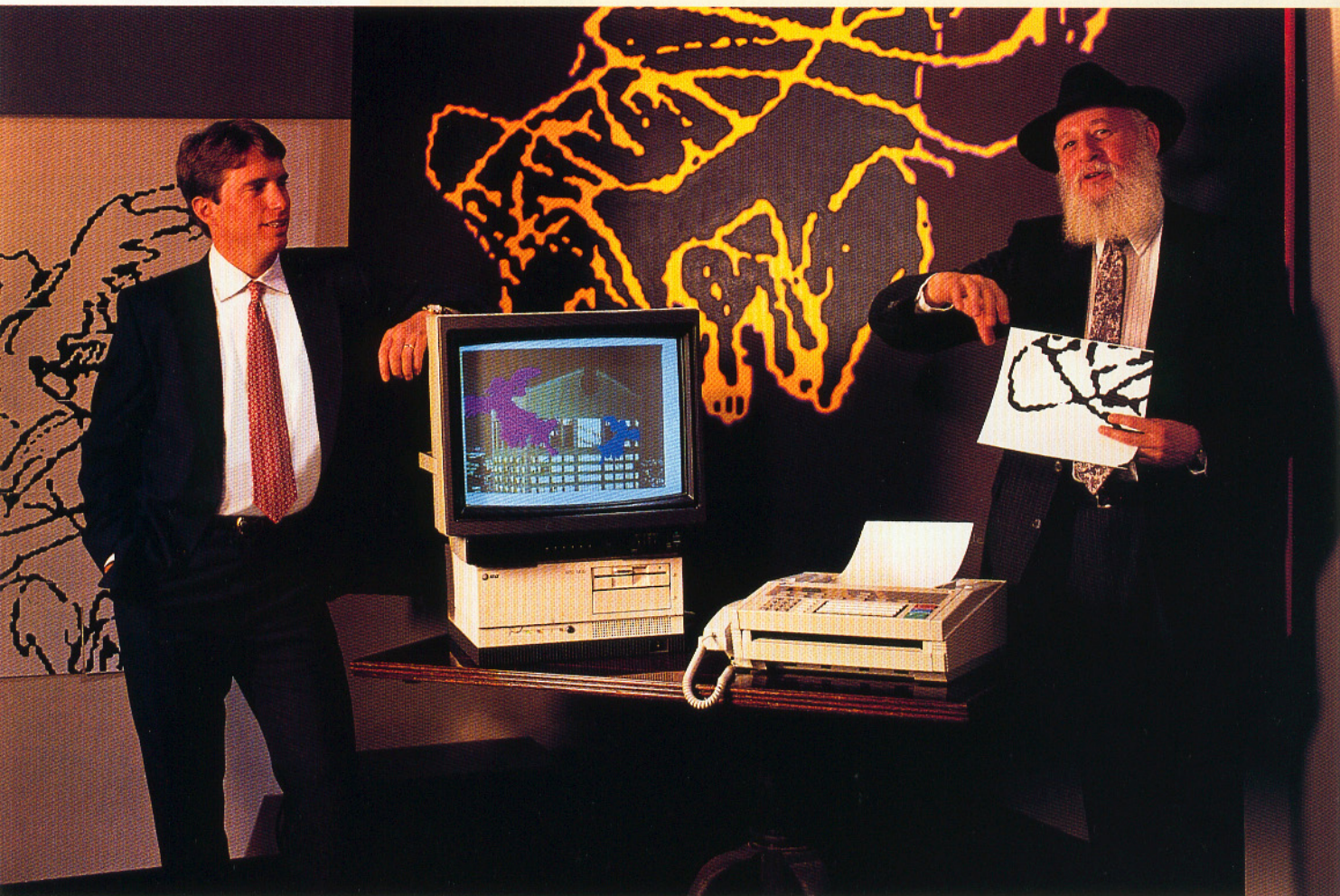
*We have the industry's broadest range of fax products and services. General Business Systems markets 10 models. Computer Systems has a plug-in board for our personal computers to transmit and receive faxes. AT&T Phone Centers offer fax machines and faxing for walk-in customers. And our worldwide network provides enhanced fax services and carries more fax pages than any other—an estimated 3.7 billion a year.*

### **General Business Systems acted forcefully to preserve our leadership in the highly competitive small-business communications equipment market.**

We scored an industry first with the Merlin® cordless telephone for business that extends phone use in offices, factories and warehouses. We introduced five new facsimile machines—including the first to permit simultaneous faxing and phone conversation. And we enhanced our mainstream products, the Merlin communications systems and System 25 PBX.

We expanded exports of our small-business communications systems to Mexico and Thailand. Now 11 nations import these products.

Furthermore, the U.S. government agreed with us that several Asian manufacturers unfairly priced small-business communications products in the United States. The violators will pay higher import tariffs, helping to restore a fair, competitive market for AT&T and the industry.



*Pratt Institute Professor Mel Alexenberg faxed his computer-art image of Rembrandt's angel around the world using our products and services as part of "The Year of Electronic Rembrandt," a trademark of the Cambridge Studio of Art and Technology. Looking on is Tom Wells, our account executive for Pratt.*



***Our computer businesses unveiled a new family of sophisticated computers and widened acceptance of our products and systems solutions.***

More companies—from the Fortune 500 to small businesses—are turning to AT&T Computer Systems for “networked computing,” which seamlessly links hardware and software to substantially improve efficiency and costs.

We landed our largest commercial contract with American Airlines to provide networked computers for its reservation system. We also won large contracts with Firestone, Knight-Ridder, United Parcel Service and other national accounts.

The federal government also has become a major customer. We won a landmark networked computing contract—potentially worth \$850 million—from the Department of Transportation. This eight-year contract may involve up to 40,000 of our computer workstations.

These contracts added to the strong demand for our new personal computers, developed with the Intel Corporation. As a result, we plan to make more by starting up production at our Little Rock, Ark., factory.

Our Synchronous Terminal Products unit emerged from 1989 as the third largest competitor in the market for terminals and intelligent controllers that connect to mainframe computers. We moved up on sales to such

***Communicating Computers***

*Computer networks are becoming as important to businesses as telephone networks are to people.*

*Interpersonal computing, which links people and resources, is growing nearly 40 percent annually and projected to top \$17 billion in the United States by 1992. The burgeoning market and our own strengths in networked computers make this the major growth area of our computer business.*

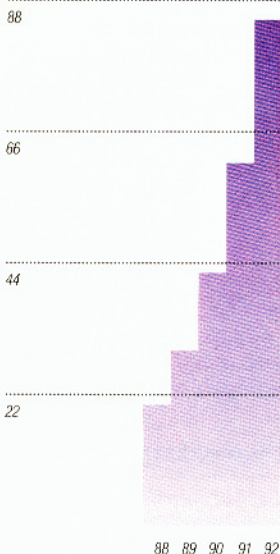
*Our efforts are tightly focused on some key industries—financial services, retail, lodging, health care, education, transportation and government—to best serve customers and build a base for future growth.*

*Pizza Hut Inc. uses AT&T networked computers to automate the order entry process at its carryout and delivery stores.*





**Industry Growth Worldwide in  
Network Computing Sales\***  
in Billions of Dollars



\*Total systems.  
Source: Sanford C. Bernstein & Co., Inc.

companies as American Express, Raytheon and Xerox.

Under the direction of UNIX International, we delivered a new release of the UNIX® operating system, which directs the flow of information in a computer. The UNIX System V, Release 4.0 merged the popular versions of the system, and is compatible with most UNIX system installations. We are working to expand industry commitment worldwide to open computer systems with the UNIX system as the key. As a result, we're considering sharing ownership of our UNIX Software Operation business with industry partners.

## **Serving Government Customers**

### ***Federal Systems Advanced Technologies further strengthened our reputation as a force in the government market.***

Among the contracts we won were several surveillance systems for the Navy, including a \$120 million contract renewal for a high-speed digital computer and a \$300 million contract for research, development and production of undersea lightwave technology.

We broadened our support to the National Security Agency through the sale of an enhanced secure voice and data communications terminal that can operate unattended. In addition, we signed a five-year, \$43 million contract to provide communications services to the Federal Emergency Management Agency.

We also expanded our support to the Federal Aviation Administration with contracts for new communication towers and radio control and other equipment valued at more than \$50 million.

## **Serving Consumers**

### ***Consumer Communications Services offered new and more competitive long distance services, retained most of our pay phone business and branched out into direct marketing.***

Our new advertising won back customers with testimonials from consumers who switched and were sorry. Ads reinforced customer loyalty with the tag line, "Aren't you glad you never left?"

We cut basic long distance prices twice in 1989, and again on Jan. 1, 1990. Over the last five years, we have reduced interstate direct-dialed prices by nearly 40 percent. We enhanced the Reach Out® America calling plan, which has doubled its subscribers in the last two years but now faces new competition. To keep it competitive and to appeal to a wider audience, we introduced a half-hour plan and deeper discounts on our 24-hour plan.

In January 1990 we introduced VoiceMark<sup>SM</sup> Messaging Service, the first in the industry to enable consumers to record and send messages anywhere in the world—even when the called number is busy or there's no



answer. Callers just dial an 800 number and record a message. AT&T delivers it for them.

When public pay phones opened to competition, we succeeded through ads, brochures and sales calls to drive home the message that AT&T means quality. As a result, more than three out of four pay phone location owners chose us. Now we're working to win back those who didn't choose us and asking our customers to dial "10-ATT-0" to reach us from phones that don't use our service.

Helping consumers make the most of limited time, our new direct-mail catalogs and inserts made it simple for them to shop at home. Consumers choose from a wide variety of products and services—resting easy that AT&T backs up delivery.

***Consumer Products continued as the undisputed industry leader, raised quality standards and thereby gained market share in a highly competitive business.***

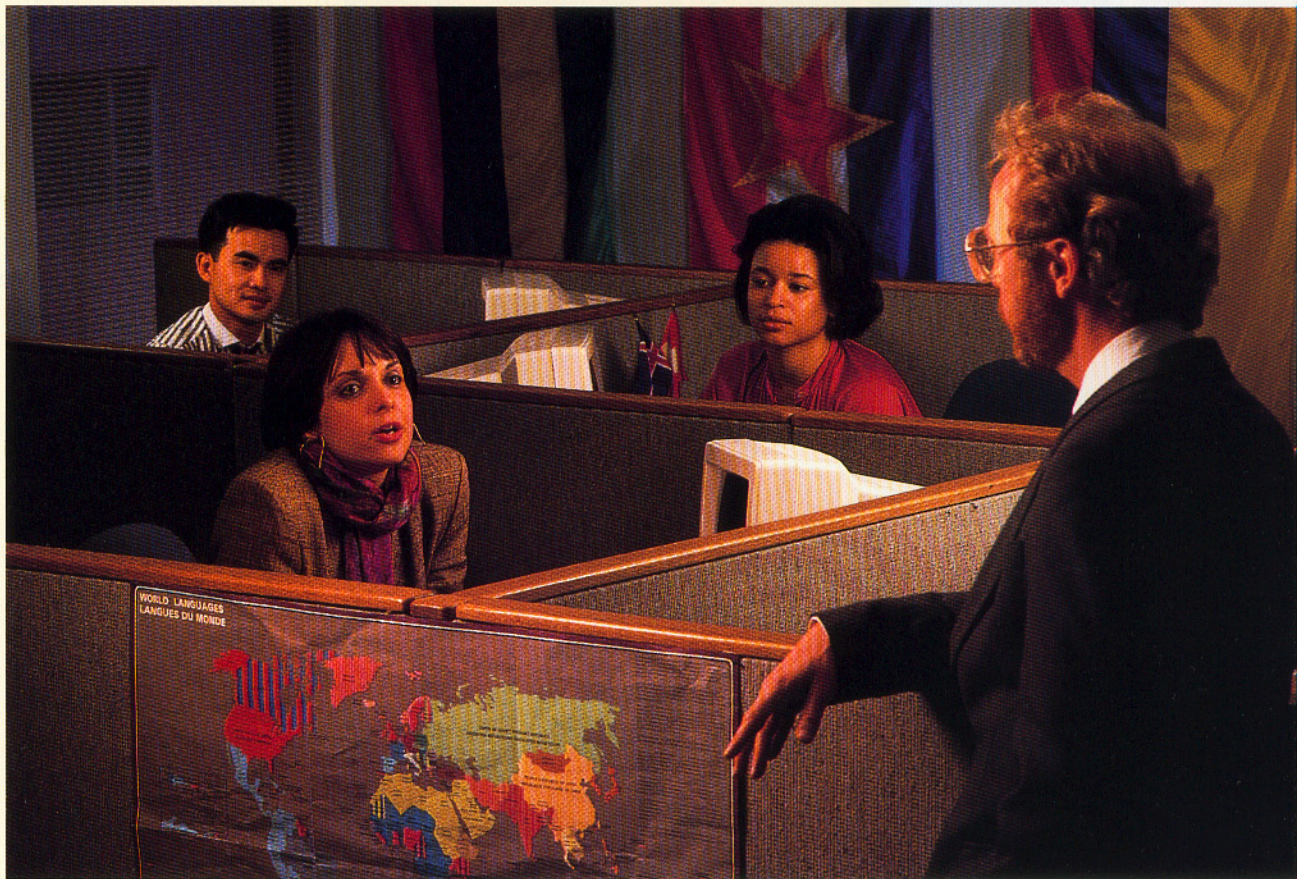
In our main product lines—corded and cordless phones and answering machines—we introduced new models with advanced features that

#### **Languages Unlimited**

*From Arabic and Fijian to Urdu and Zambal—and 136 languages in between—AT&T Language Line™ can translate it.*

*This service of Consumer Communications Services provides on-line translation of phone calls in 140 languages and dialects. We entered the field by acquiring Communications and Language Line, Inc., which specialized in translating for emergency services, such as the police and poison control centers.*

*We plan to expand by courting multinational companies and consumers even as we attract more emergency services. Small now, this business has substantial growth potential in an age of globalization.*



*During training at AT&T Language Line in Monterey, Calif., Valeska Ostrowski poses a question for Jurgen Sottung as Tien Nguyen (left) and Claude Constant listen.*



### **Lightwave Revolution**

*The second wave of the lightwave revolution is under way.*

*Optical fibers—glass threads that carry information as pulses of light—have supplanted copper in long distance cables. Now we're helping local telephone companies and cable TV companies bring the benefits of lightwave systems—from home security systems and remote meter reading to video shopping catalogs and high-definition cable TV—to homes and businesses.*

*By one estimate 17 million homes and small businesses will be "glass houses" by 1999. In 1990 we plan to build 10 times as many lightwave transmitters as in the past year. We expect to sell over half-a-million transmitters by 1995.*

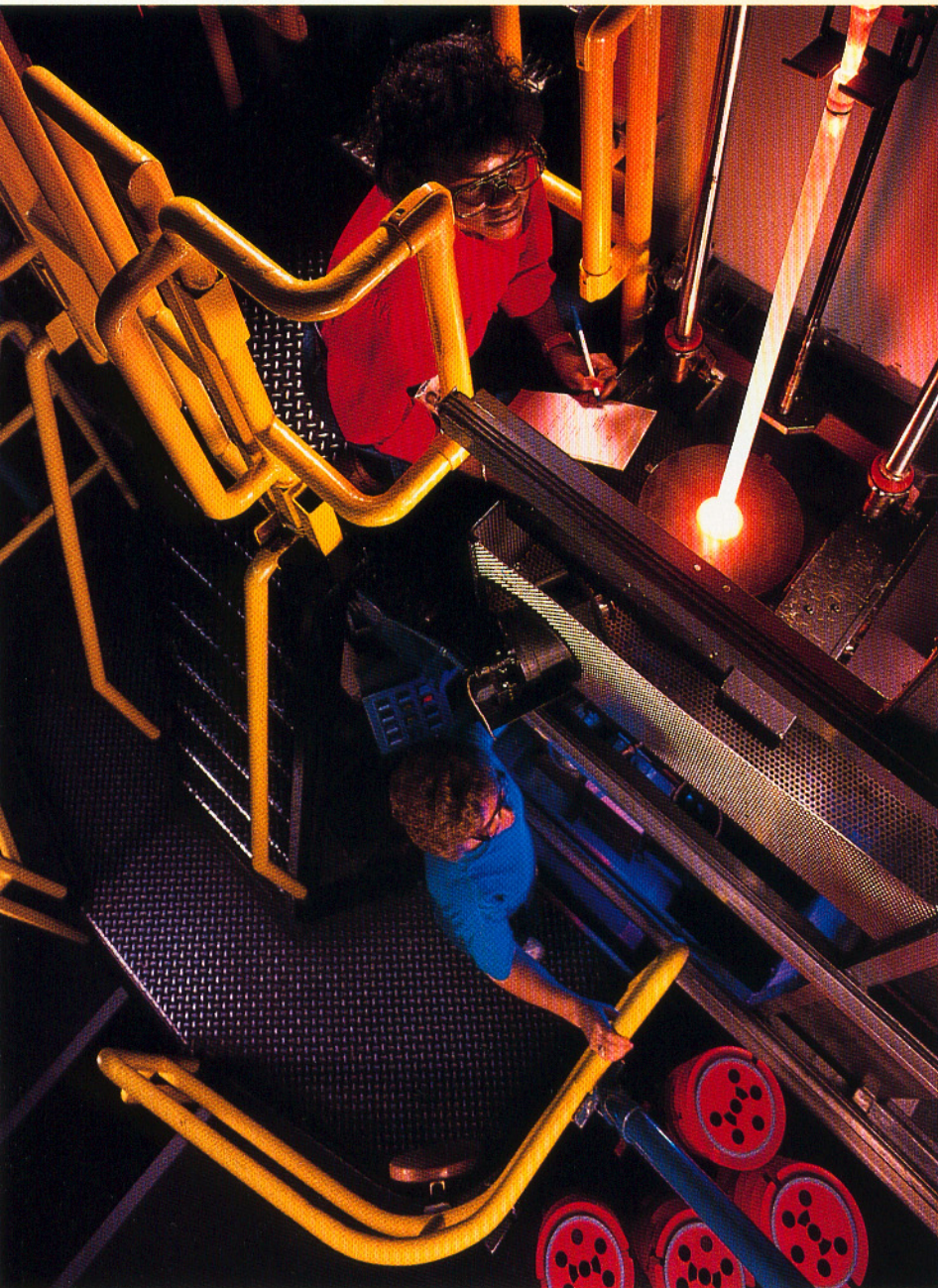
helped to increase our market share.

We set a new standard of quality for cordless telephones with Clarity Plus™ Sound. This technology, which virtually eliminates electronic interference from household appliances, was introduced in our entire 5000 series of cordless phones.

We expanded the choices in our leasing business to include more advanced feature phones, cordless phones and answering machines.

Reflecting our continuing growth, we announced plans to build a factory in Mexico dedicated to producing answering machines, and neared completion of a factory to make corded phones in Bangkok.

Our dedication to quality and service merited a half-dozen awards in 1989 from retailers such as Wal-Mart.



*A fiber draw tower in our Atlanta factory heats a glass rod until thin strands can be pulled from it like taffy. Operator Cherry Holiday records measurements while Opal Hanson assists.*



## ***Serving Electronics Customers***

***AT&T Microelectronics continued to raise its industry profile through strategic alliances with electronics manufacturers.***

Helping to lead the industry, we reached agreements with Hewlett-Packard, Siemens, Du Pont and others to encourage new products based on industry standard components.

Although at a slower rate than in 1988, our external sales increased significantly. Sales to original equipment manufacturers, such as a design and manufacturing agreement with Xerox, were up 45 percent.

We opened a new marketing and design center in Tokyo, and introduced our first two products for the Japanese market. And we introduced a new device to the European market for cellular phone systems.

## ***Serving Telecommunications Equipment Customers***

***Our network systems business units tapped new markets in the United States while expanding around the world to offset slowing U.S. demand for telephone switches.***

U.S. demand for network equipment is slow because the dramatic conversion from electro-mechanical to electronic switches over the last decade is nearly over. But there's still a large global market for telecommunications equipment—\$60 billion a year—and as a world leader we expect to continue increasing our revenues.

We moved marketing staff into field offices to better serve the former Bell System telephone companies, and formed a national sales organization to meet the needs of independent telephone companies. Our Switching Systems unit introduced new software for the 5ESS® switch that makes possible new local telephone services and international ISDN networks. We

### ***Picture Perfect***

*Television images with five times the clarity of standard TV.*

*That's the promise of high-definition television (HDTV). Some industry experts say the market for HDTVs and high-definition VCRs could be as much as \$40 billion a year worldwide by 2010.*

*AT&T Microelectronics is partnered with Zenith to develop microchips to make HDTV picture perfect. We'll design and produce the chips, supported by our technical experts at AT&T Bell Laboratories. The resulting technology may also prove valuable in telecommunications, education and training, and for the federal government.*

*AT&T researchers Eric Petajan (left) and Kim Matthews are working on squeezing more video signal information into broadcast channels as part of our effort to commercialize high-definition television.*





provided "smart" optical transmission systems for local telephone companies to bring futuristic services to homes and businesses on high-capacity fiber-optic cable. And sales of our cellular systems continued to grow.

AT&T formed an important strategic alliance with Italtel, Italy's state-owned telecommunications equipment manufacturer, that should boost both companies' sales. As a result, Italtel joined N.V. Philips as an equity partner in Netherlands-based AT&T Network Systems International, strengthening our position as a European company.

Network Systems International—our cornerstone for international product sales—sold its one millionth line of digital switching equipment to the Dutch telephone authority. Its Spanish joint venture became an important supplier to Spain's telephone company and established the second manufacturing center for our 5ESS digital switch in Europe. And Network Systems International played a vital role in developing our new global family of lightwave transmission equipment.

Transmission Systems significantly expanded our business with Japan's Nippon Telephone and Telegraph, winning a \$154 million contract for a new lightwave system. Cellular Systems made its first sale outside the United States, winning a \$17 million contract with the Republic of Korea. In Taiwan we announced the first international ISDN application of our 5ESS switch. And Operations Systems doubled its sales of automated support systems for networks in Europe and Asia.

### **Global Messaging**

*With the world shrinking and information expanding, our Global Messaging services help far-flung companies manage their time, money and needs efficiently.*

*Global Messaging includes enhanced fax services, electronic mail among personal computers, high-volume data exchange and, in the future, voice messaging.*

*Time zones will be overcome with scheduled transmission of faxes to points around the globe. Data can be sent after business hours—the least-cost time to transmit—to arrive during the workday a continent away. And, one day, users will convert faxed text into voice messages and voice into text through an electronic mailbox that's accessible anywhere in the world.*



*We formed a consortium with Japanese companies to develop electronic mail service in that country. Trainees show that learning AT&T's electronic mail can also be fun.*



## ***Serving International Calling Customers***

### ***International Communications Services capped a successful year by acquiring a British information services company.***

We bought ISTEEL, an innovative young company that already operates one of the largest private networks in Europe. ISTEEL is expected to become a gateway for our electronic messaging services and computer products to the United Kingdom and other international markets.

Our international long distance calling revenues grew significantly because of a booming global economy and our own efforts to expand. To keep up with demand, we inaugurated the first trans-Pacific fiber-optic cable in 1989.

Our relationships with telecommunications companies and agencies abroad as well as our technology help us deliver the custom services that multinational companies need. Working with overseas telephone companies, we began creating a global private network for GE that ultimately will link offices in 25 countries over six continents. With Japanese long distance and local telephone companies, we helped Illinois Bell place its first international ISDN call from Chicago to Tokyo. International fax transmission and USA Direct® service, which connects callers overseas to AT&T operators in the United States, also are growing fast.

## ***Serving Customers' Financial Needs***

### ***AT&T American Transtech strengthened its shareowner, benefit plan and telemarketing services while diversifying into mutual fund administration.***

By acquiring Boston-based Advanced Information Services, American Transtech began offering fund transfer and recordkeeping services to the mutual fund industry. We also expanded our telemarketing operations and launched our marketing survey business.

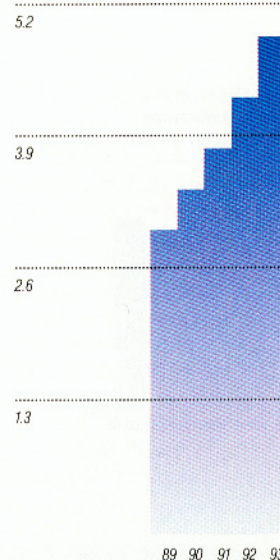
To improve efficiency and customer service, American Transtech continued to use the latest AT&T technology, such as the Conversant voice response system, which answers the benefits questions of our customers' employees 24 hours a day.

### ***AT&T Credit Corporation substantially increased its profits and assets in its fifth consecutive year of growth.***

Today this business unit owns \$3 billion in assets, and is recognized as a leader in the leasing field. As part of its strategy for future growth, AT&T Credit Corporation purchased the Eaton Financial Corporation to expand our small-ticket leasing operations and acquired a minority interest in Encore International to expand our computer leasing operations.

Branching out, Credit Corporation also announced it will offer a vehicle leasing program to AT&T employees, retirees and their families in 1990.

**Industry Growth in International Telecommunications Services\***  
in Billions of Dollars



\*Projected from 1987 actual revenues (excludes Canada and Mexico). Includes message telephone service and private lines.  
Source: LINK Resources Corp., NY, NY 1989



## ***Focusing on Quality and the Environment***

***AT&T has a deep commitment to using the principles of quality to preserve our environment and improve work processes in every corner of our business.***

Applying the principle that a problem should be attacked at the source, we were the first in our industry to announce a goal that over the next five years we'll completely phase out emissions of ozone-depleting chlorofluorocarbons (CFCs) used in manufacturing. Bell Labs is developing environmentally safe alternatives to CFCs—including one derived from orange peels and wood pulp. We're recycling, too. Haulers take away 25 tons of paper daily, paying or saving us more than \$1 million annually. The waste we recycled in 1989 could fill a stadium.

Every business unit now includes well-defined quality objectives in its annual plans. Behind the push for quality are two simple principles: satisfy the customer and continuously improve quality. The words are supported by quality training throughout the company. More than 30,000 AT&T employees were trained this year alone; our goal is to train every employee.

This dedication is paying off financially and in customer satisfaction. For example, a Business Communications Services team simplified a complex reporting system and introduced bar codes and computer technology that are expected to save \$12 million over the next three years. Bell Labs staffers in Denver devised a way to test special circuit packs during product development and caught design errors that would have cost as much as six months in time and \$300,000 in overruns. And AT&T fax machines were top rated in a "Best of Everything" survey by Financial World magazine.

Improving quality is a continuous process. Bell Labs—already a world leader in quality—has a goal of increasing quality tenfold in five years. And we continue to improve quality in our factories, where just-in-time delivery and other quality processes ferret out and eliminate error and waste.

## ***Developing Leading Technologies***

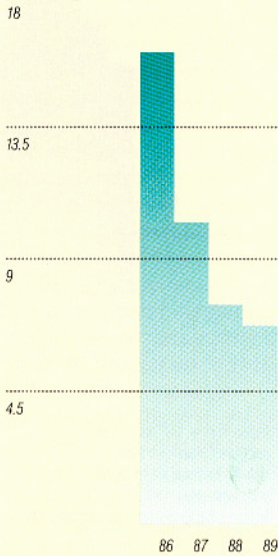
***AT&T Bell Laboratories developed a variety of new products and services while exploring promising new technologies in emerging areas of science.***

AT&T's research and development arm, Bell Laboratories, invested \$2.8 billion in 1989 on projects directly funded by specific business units and on research funded by all of AT&T.

Bell Laboratories made significant contributions in satisfying customers' communications needs. Developers merged the best features of our System 75 and 85 PBXs to create our Definity system, which delivers ISDN technology to the customer's desktop. Bell Labs technology in our cordless Merlin phones gives business customers multiple phone lines as well as the

### ***AT&T's Cost of Quality\****

*Percent of Manufactured Product Sales*



\*Cost of quality includes scrap and rework as well as costs associated with defect prevention and product failure.



freedom of movement that consumers enjoy with cordless phones. The Bell Labs-developed C++ computer language has become a standard for more economical and manageable programming.

Our researchers were innovators in speech recognition technology, developing a robot arm that responds to spoken commands and designing an experimental computer that dials a spoken telephone number as accurately as a person pushing phone buttons. We advanced materials technology with new plastics possessing unique properties and by making clusters of as few as 100 atoms that one day could lead to smaller computers. We achieved breakthroughs in electronics research with a multi-state transistor which may open up new computer architectures and by helping to develop the world's smallest laser for high-speed fiber-optic communications. And in video communications, we built experimental hardware capable of squeezing a full-motion video conference call onto a standard telephone line.

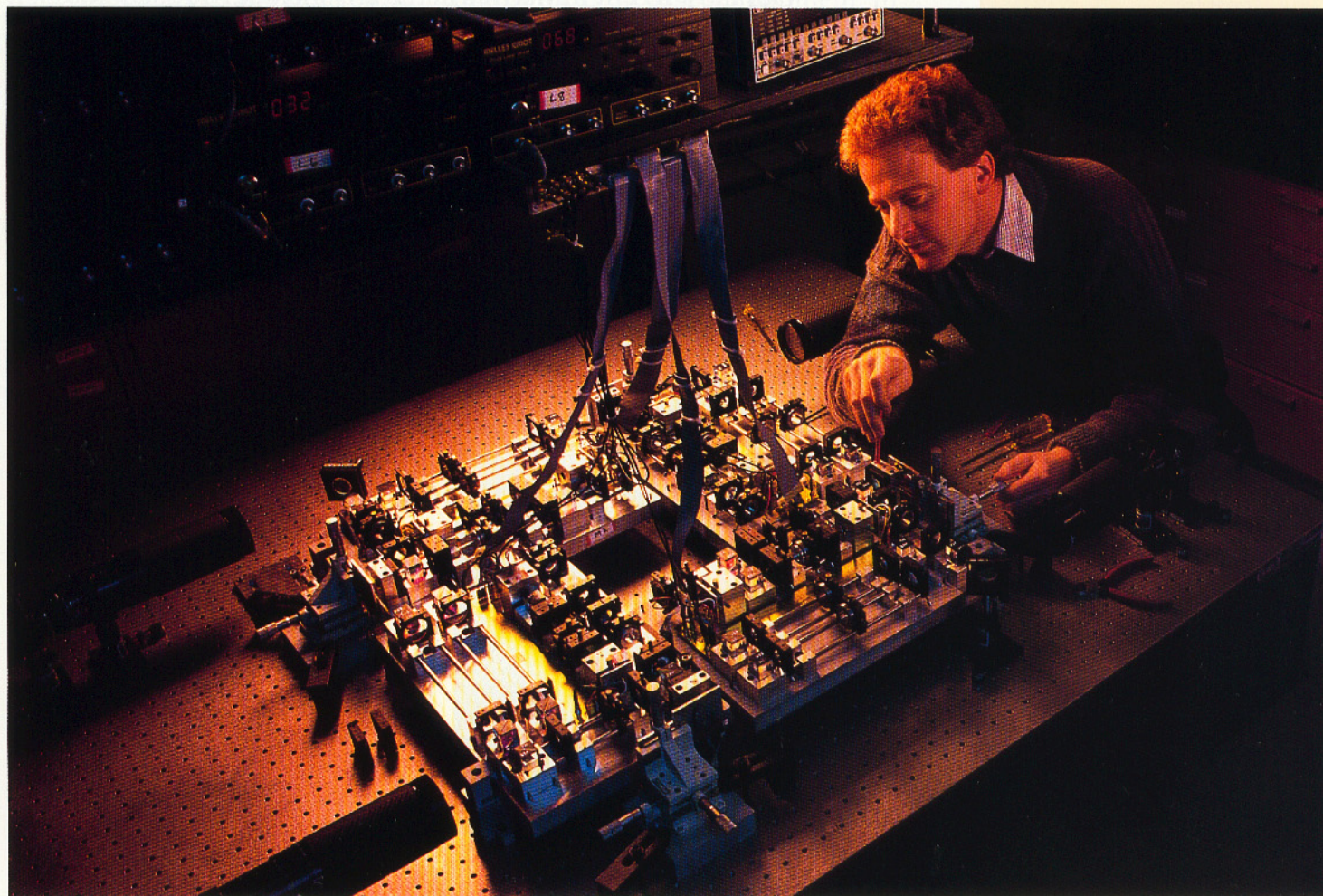
Bell Labs people received nearly 400 patents in 1989, authored more than 5,000 talks and papers, and received major awards including Japan's C&C and Kyoto prizes for computers and communications technology.

### **Bright Light**

*AT&T scientists have built the first digital optical processor, which processes information with light rather than electricity.*

*This experimental machine may lead to computers that theoretically could operate 1,000 to 10,000 times faster than today's electronic computers. A problem that now takes 10 hours to solve could be solved in less than a minute.*

*While this model of lasers, lenses and special processing devices is no speedier than a personal computer, it blazes a path for a new generation of ultra-smart, ultra-fast machines. With more research and development, such bright lights may one day switch billions of telephone calls a minute or solve a wide range of computing problems in which time is critical.*



*A team of Bell Labs researchers, including Michael Prise, have built the first digital optical processor.*



## Meeting Community Needs

***We gave financial and volunteer support for education, for the arts and for individuals in need.***

With a focus on science and engineering, we supported education with cash grants of almost \$15 million, computer donations valued at \$40 million and loans of Bell Labs experts as visiting professors. We funded programs to widen opportunities for minorities and to improve urban schools.

We ensured the rights of employees with AIDS and provided grants and volunteers to assist critically affected communities. And we committed to provide \$3 million to support development of low-cost housing in New York and Chicago.

Employees supported the United Way with nearly \$30 million in gifts, supplemented by \$6.7 million in company donations. We also continued to provide generous financial support for the Telephone Pioneers of America, a volunteer group of regular and retired employees from AT&T and other sponsoring companies. In 1989, Pioneers contributed more than 25 million volunteer hours as well as more than \$11 million in food, clothing, devices for the handicapped and other donations.

Our most recent initiatives in the arts include *AT&T: OnStage*, which promotes regional theaters that perform bold new plays and musicals; international visual arts programs, which spotlight diverse artists; and *AT&T Dance Tour*, which sponsors vanguard dance troupes that tour the country.

### ***Mothers and Daughters***

*Like daughter, like mother. The old saying got a turnabout in a program we sponsor to expand educational opportunities among Hispanic women.*

*AT&T is funding an Arizona State University program that starts in the eighth grade to encourage young Hispanic women—the minority least represented in higher education—to remain in high school and go on to college. For family support, each student's mother is included in courses and counseling.*

*The program began five years ago with 18 young women. Thirteen have graduated high school. Ten have gone on to college. And so have four of their mothers. The program now sponsors 60 mother-daughter teams annually.*



*Genevieve Perez (center) and her daughter, Cathy, are participants in a mothers and daughters educational program. They're on the Arizona State University campus talking with Ted Trujillo, an AT&T manager who is active in the program.*



***Strategic investments, aggressive cost reduction and a heightened focus on customers in 1989 make us more competitive for 1990 and beyond.***

In 1989 we set post-divestiture records with net income of \$2.697 billion or \$2.50 per share and total operating revenues of \$36.112 billion. We also made improvements in many areas of our business in 1988, although a one-time charge related to rapid conversion of our network to fully digital operation reduced earnings after taxes by \$3.9 billion or \$3.66 per share, producing a net loss of \$1.669 billion or a negative \$1.55 per share. Without the charge, net income would have increased in comparison with 1987 to \$2.266 billion or \$2.11 per share on revenues of \$35.210 billion. Revenues and earnings growth were achieved under difficult competitive conditions and reflect our actions to stimulate revenues and to increase our control over costs and expenses.

Since divestiture we have improved our operating efficiency throughout the business. We restructured our business, consolidating facilities and reducing and realigning our work force, and modernized our network and our manufacturing and support facilities. We expect additional savings from these actions and from our continuing focus on cost containment. In 1989 we announced a special retirement option that enabled 12,500 managers to retire in December with improved pension benefits. Our realignment into business units and support divisions will help managers to better assess their resource needs and use that information to further improve the efficiency of their operations.

Revenues and earnings growth will also depend on competing effectively in the markets we're in and penetrating new markets worldwide. We improved our competitive position in 1989 with strategic acquisitions and investments. We acquired Paradyne Corporation, a U.S. maker of data communications equipment such as modems, and ISTEEL Group Ltd., an information technology services company in the United Kingdom. We also acquired an interest in Italtel S.p.A., a manufacturer of telecommunications systems in Italy with which we will jointly pursue network equipment contracts. In addition, we are currently spending over \$2.5 billion on research and development and more than \$3 billion on capital improvements each year to deliver new and improved products and services to our customers.



## Results of Operations and Financial Condition

The following discussion and analysis explains trends in AT&T's results of operations and financial condition in 1989 compared with prior years. It is intended to help shareowners and other readers understand the dynamics of our business and the factors underlying our financial results. Where possible, we have identified factors that may affect future results.

### Operating Revenues

Total operating revenues rose 2.6 percent in 1989 after increasing 4.3 percent in 1988. Our revenue growth has been achieved in intensely competitive markets characterized by rapid changes in technology and in economic and business conditions. To stimulate further growth in revenues, we are pursuing opportunities for investment or expansion in U.S. and overseas markets while improving the quality and expanding the range of services to existing customers.

Growth in sales of services of 6.2 percent in 1989 and 5.1 percent in 1988 was due primarily to higher net sales of telecommunications services. Service revenues from product installation and maintenance operations and from equipment financing also contributed to the growth. Absent a recession or fundamental changes in these markets, management anticipates a continuation of growth in these services, and the addition of revenues from acquisitions such as the ISTEEL Group Ltd. and from new service offerings.

Sales of products increased 1.7 percent in 1989. Growth in revenues in some markets, such as international sales of telecommunications network systems products, microelectronics components sold to original equipment manufacturers, telephone sets and answering machines sold to consumers, special design products sold to the federal government and data

### Six-Year Summary of Selected Financial Data

(unaudited)

Dollars in millions (except per share amounts)	1989	1988*	1987	1986*	1985	1984	Jan. 1, 1984
<b>Results of Operations:</b>							
Total operating revenues . . . . .	\$36,112	\$35,210	\$33,768	\$34,213	\$34,496	\$33,187	
Total operating costs and expenses . . .	31,834	38,277	30,252	33,848	31,477	30,893	
Net income (loss) . . . . .	2,697	(1,669)	2,044	139	1,557	1,370	
Dividends on preferred shares . . . . .	0	1	23	86	110	112	
Income (loss) applicable to common shares . . . . .	2,697	(1,670)	2,021	53	1,447	1,258	
Earnings (loss) per common share . . .	2.50	(1.55)	1.88	0.05	1.37	1.25	
Dividends declared per common share . . . . .	1.20	1.20	1.20	1.20	1.20	1.20	
<b>Assets and Capital:</b>							
Property, plant and equipment—net . .	\$15,919	\$15,280	\$20,808	\$21,101	\$22,262	\$21,343	\$20,569
Total assets . . . . .	37,687	35,152	39,473	39,534	40,688	39,773	35,545
Long-term debt including capital leases . . . . .	8,144	8,128	7,917	7,660	7,794	8,718	9,137
Preferred shares subject to mandatory redemption . . . . .	0	0	82	912	1,457	1,494	1,523
Common shareowners' equity . . . . .	12,738	11,465	14,455	13,550	14,633	13,763	12,368
Net capital expenditures** . . . . .	3,391	3,887	3,467	3,587	4,031	3,424	
<b>Other Information:</b>							
Operating income (loss) as a percent of operating revenues . . . . .	11.8%	(8.7)%	10.4%	1.1%	8.8%	6.9%	
Net income (loss) as a percent of operating revenues . . . . .	7.5%	(4.7)%	6.1%	0.4%	4.5%	4.1%	
Return on average common equity . . .	22.2%	(11.3)%	14.4%	0.3%	10.1%	9.5%	
Market price per share (year-end except 1/84) . . . . .	\$45.50	\$28.75	\$27.00	\$25.00	\$25.00	\$19.50	\$17.875
Book value per common share (year-end except 1/84) . . . . .	\$11.84	\$10.68	\$13.46	\$12.64	\$13.68	\$13.26	\$12.81
Debt ratio (year-end except 1/84)*** . .	45.3%	44.7%	38.0%	37.5%	36.9%	38.5%	45.3%
Employees (year-end except 1/84) . . .	283,500	304,700	303,000	316,900	337,600	365,200	373,000

\*1988 data were significantly affected by a charge for accelerated digitization program costs. 1986 data were significantly affected by major charges for business restructuring, an accounting change and other charges.

\*\*Net capital expenditures for 1988 and 1987 have been restated to conform to current presentation.

\*\*\*Excluding the debt of AT&T Credit Corporation, the debt ratio was 38.7% for 1989, 41.0% for 1988, 35.2% for 1987, 35.8% for 1986 and 36.2% for 1985.



systems products, was largely offset by declining revenues from U.S. sales of telecommunications network systems products and small-business communications equipment. The 11.1 percent increase in sales of products in 1988 was led by increases for telecommunications network systems products worldwide and consumer products. Management anticipates mixed trends in product sales for 1990, with growth in some markets and possible declines in others but overall positive growth. Factors and trends are discussed in connection with our major revenue streams.

Rental revenues for both residence and business customers continued to decline as expected over the two-year period. Rental revenues now provide less than 7 percent of total operating revenues and are expected to continue declining and to provide a smaller portion of future revenues.

### Major Revenue Streams

AT&T operates predominantly in the global information movement and management industry, providing long distance telecommunications services, as well as systems, products and services that combine communications and computers. We are also engaged in several activities outside of this industry, including the furnishing of shareholder services, the provision of financing for non-AT&T products and the distribution of computer equipment through retail outlets.

The accompanying table displays our major revenue streams, which are summarized as sales of services, sales of products and rental revenues in the consolidated statements of income. These revenue streams represent the combined sales efforts of our various business units.

### Telecommunications Services

Local telephone companies charge us for providing access to our customers through their local telephone networks. These "access charges" are collected from customers in our prices. Because the charges essentially are collected on behalf of the local telephone companies, sales of services are reported net of access charges on our income statement. Over the last few years, local telephone companies have reduced access charges substantially and we passed on the savings to customers by reducing our prices. In 1989, we made interstate price reductions of \$778 million annually, following reductions of \$1.5 billion in 1988 and \$2.5 billion in 1987.

Competition in telecommunications services markets is intense. In 1989, our competitors focused increasingly on residential customers and continued aggressive sales efforts targeted on business customers. Although we continue to be the market leader, our competitors have captured significant market shares and are growing more rapidly than we are. In recognition of the changed market conditions, the Federal Communications Commission adopted a new form of regulation in 1989, replacing controls on our profits with upper and lower limits on our prices. This change gives us greater flexibility to respond to customers and offers us the same incentives as our competitors to increase profits by reducing costs and introducing new and enhanced services. The limits on prices will be adjusted for productivity gains and inflation. Since the adoption of the new form of regulation, we have continued to reduce interstate prices, including an interstate price reduction of \$300 million annually on January 1, 1990. We remain more constrained by regulation than our competitors and continue to seek more flexibility to respond to competition as well as a reduction in costly and time-consuming regulatory requirements.

Net sales of telecommunications services increased 5.4 percent in 1989 and 5.6 percent in 1988 primarily because of higher service volumes on the AT&T switched network. Billed minutes increased at an annual rate of 6 percent in 1989, led by growth in international and

### Revenues

Dollars in millions	1989	1988	1987
<i>Telecommunications Services</i>			
AT&T Switched Network	\$29,933	\$30,428	\$30,302
Private Line	4,457	4,861	4,845
Less: Access Charges	14,864	16,764	17,611
	19,526	18,525	17,536
<i>Business, Data and Consumer Products</i>			
Sales	3,575	3,409	3,155
Services	1,675	1,491	1,439
Rentals	2,388	3,016	3,728
	7,638	7,916	8,322
<i>Telecommunications Network Systems</i>	6,782	6,827	6,179
<i>Other Revenues</i>			
Sales	1,168	1,098	872
Services	926	817	855
Rentals	72	27	4
	2,166	1,942	1,731
<b>Total Revenues</b>	<b>\$36,112</b>	<b>\$35,210</b>	<b>\$33,768</b>



inbound and outbound business services. Billed minutes increased 5 percent in 1988, led by international and residence services.

Gross revenues for switched services (that is, before deducting access charges) declined in 1989 because of our price reductions in December 1988 and during 1989. Volume growth in 1988 more than offset the impact from price reductions, leading to an increase in gross revenues that year. Increased customer demand for switched services that can substitute for private lines reduced private line revenues in 1989 after a slight increase in 1988. Reduced demand from other long distance companies that lease our facilities also contributed to the decline.

Our status as a major provider of telecommunications services to the federal government was reaffirmed in 1988, when we were awarded 60 percent of the contract to supply the federal telecommunications system.

We are competing vigorously in this core business by introducing new and enhanced services. We assigned additional employees to sales and customer support for telecommunications services in the last two years. An aggressive advertising campaign has begun to correct customer misperceptions about our prices compared with our competitors' prices. Because of these and other actions and growth in the market as a whole, we expect continued growth in net sales of telecommunications services in 1990.

### ***Business, Data and Consumer Products***

Sales of business, data and consumer products increased 4.9 percent in 1989 after an 8.1 percent increase in 1988. The increase in 1989 was led by higher sales of consumer products and data communications products, and the increase in 1988 was also led by higher sales of consumer products. The increase in sales of data communications products in 1989 was due primarily to our acquisition of Paradyne Corporation (Paradyne) in the first quarter. Paradyne, a maker of modems and other data communications products, was combined with our existing data communications equipment operations.

Sales of consumer products continued to increase in 1989 even after two years of exceptionally strong growth. Growth in revenues and sales occurred across the product line, with the strongest gain in sales of cordless telephones. Sales and revenues were also very strong for telephone answering machines. New product introductions, distribution agreements with major national and regional retail chains, and a redesign of our AT&T Phone Centers have all contributed to sales growth. These factors also position us for continued growth in 1990.

Revenues from sales of large-business communications equipment were level in 1989 after a small increase the year before. Revenues from sales of small-business communications equipment declined in 1989 after remaining approximately level the year before. We made price decreases in response to stiff competition for both large-business and small-business communications equipment over the last two years. The International Trade Commission determined that some Far Eastern manufacturers were dumping small-business communications equipment in the United States; violators will pay higher import tariffs, producing a fairer market and making our U.S.-manufactured equipment more competitive. Markets for business communications equipment are fiercely competitive and we anticipate continuing pressure on prices, making future growth in revenues uncertain.

Revenues from data systems products increased in 1989 after remaining approximately level the year before. Markets for data systems products are characterized by very rapid changes in technology and intense competition among well-established competitors. We expect progress despite these conditions, aided by major contracts with the U.S. Air Force, the U.S. Department of Transportation, American Airlines, Firestone and other national accounts. The contract with the U.S. Department of Transportation was awarded in December 1989 and potentially will generate \$850 million in revenues over eight years. The contract with the U.S. Air Force was awarded in October 1988 and potentially will generate more than \$900 million in revenues over eight years. These two contracts include services and special design products supplied by our Federal Systems unit in addition to sales of data systems products.

One of the key trends in data systems markets is the growing importance of the UNIX® operating system. We are now considering sharing ownership of our UNIX Software Operation to encourage industry commitment to open computer systems based on UNIX.



Installation, maintenance and other services for data systems, data communications and business communications equipment increased 12.3 percent in 1989 and 3.6 percent in 1988. Demand for these services increased along with the expansion in installed equipment and because of our greater emphasis on sales and service to established customers.

Rental revenues from business and residence customers continue to decline primarily because aggressive industry pricing of business and consumer products has made purchasing more economical for most customers.

### **Telecommunications Network Systems**

Revenues from telecommunications network systems products decreased in 1989 after increasing in 1988. Reduced demand for switching equipment among local telephone companies, after the peak of the thrust to provide equal access arrangements to all long distance companies passed, and stiff price competition led to the decline. Partially offsetting declining U.S. sales of switching equipment during the year were increasing international sales for switching and transmission equipment and higher U.S. sales of cable systems products and cellular systems.

Growth in U.S. markets for telecommunications network systems products is expected to be slow in 1990 because of the same factors that affected 1989. However, we continue to broaden the customer base for these products and we are aggressively pursuing growth in international markets. Our export sales and sales from foreign-based operations increased more than 30 percent in 1989 to more than \$1 billion. We signed an agreement with Italtel S.p.A. in 1989 to jointly develop a digital switch and other equipment in support of Italy's \$28 billion telecommunications modernization effort. In the first major purchase of a U.S.-manufactured optical system by a Japanese company, Nippon Telephone and Telegraph entered into a contract that is expected to generate more than \$150 million in revenues to AT&T over four years. We are also increasing sales to building contractors and independent telephone companies.

### **Other Revenues**

Revenues from sales of microelectronics products to original equipment manufacturers and of special design products to the federal government increased over the past two years on higher volumes. Because of slower than expected growth in sales of AT&T products that use microelectronics components, we plan to reduce manufacturing capacity in 1990 and to resize management and research and development staffs devoted to these markets. The future rate of growth in our sales of microelectronics components is uncertain.

Service revenues increased in 1989 after declining in 1988 as a result of growth in equipment financing and other financial services, and the acquisition of ISTEEL Group Ltd. in the fourth quarter of 1989. Growth in these areas offset the continuing decline in revenues from leasing telephone equipment to local telephone companies under Shared Network Facilities Agreements (SNFA) begun at divestiture. Revenues from equipment leasing and other financial services revenues are expected to continue growing strongly and SNFA revenues are expected to continue to decline as the leases are gradually phased out.

### **Costs and Expenses**

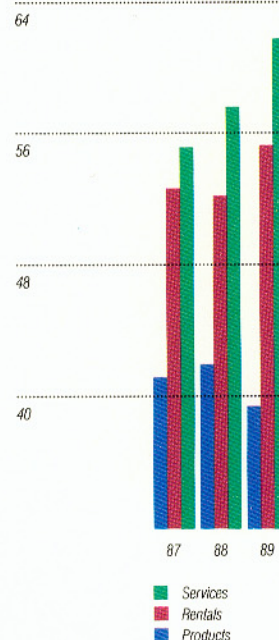
AT&T non-management employees are largely represented by unions. In May of 1989, we negotiated a new three-year contract with the unions that provided for base wage increases, profit sharing and enhanced family care benefits. Non-management employees not working in factories received a 4 percent base wage increase at ratification and will receive base wage increases of 2.5 percent in 1990 and 2.25 percent in 1991. Factory workers received a one-time 8 percent payment and no increase in base wages in 1989 and the same base wage increases as other workers in 1990 and 1991.

Recurring operating costs for telecommunications services (that is, costs other than the accelerated digitization program costs) have declined over the last two years, primarily as a result of improved operating efficiency in the AT&T Worldwide Intelligent Network. Because of the modernization program and technological and other advances, we have increased network capacity and are handling more traffic while reducing network operating and maintenance costs.

In 1988, we recorded \$6.7 billion of accelerated digitization program costs to write down the value of obsolete telecommunications equipment and for other actions related to our decision to accelerate the conversion of the network to fully digital operation. Our operating efficiency will continue to increase as we modernize. Depreciation on the network decreased by approximately \$90 million in 1989 compared with 1988. The reduction in depreciation due to the writedown was largely offset by the depreciation effects of accounting changes implemented on January 1, 1989 and network additions. The accounting changes included an accelerated depreciation method, shortened depreciable lives and reduced net salvage on certain network equipment to reflect the rapid changes occurring in technology and customer requirements. (See also Note (C).)

Costs of services for installation, maintenance and other services for business and data products have increased over the last two years along with the rise in sales. However, our efficiency in the delivery of these services has improved, reducing the ratio of costs to revenues. Costs of financial services also increased along with the increase in revenues.

**Gross Margin Percentages**  
Based on Recurring Operating Costs





Gains in operating efficiency throughout our services operations and lower depreciation on the network combined to increase the gross margin percentage on total services to 61.7 percent in 1989 from 57.6 percent in 1988, based on recurring operating costs, and 55.2 percent in 1987. Although network depreciation is expected to increase because of capital additions, management expects that force reductions and other steps to reduce costs will lead to additional efficiency gains in 1990 and beyond.

Cost of products has increased over the last two years primarily because of higher unit volumes. Also adding to cost of products in 1989 was a one-time payment to manufacturing employees of approximately \$100 million as negotiated in the labor contract. In 1988, we recorded higher inventory-related charges compared with both 1987 and 1989, primarily for reducing older equipment to fair market value and for disposals of excess maintenance stocks.

Intense price competition over the last two years has caused us to lower product prices, reducing product margins. The gross margin percentage on products declined to 39.5 percent in 1989, after increasing to 42.0 percent in 1988 from 41.2 percent in 1987. Offsetting some of the pricing pressure on margins were improvements in manufacturing efficiency due to facility consolidations, new manufacturing techniques and continuing cost controls.

With increasing productivity and slower than expected growth in sales creating excess capacity in our manufacturing facilities, and a continuation of competitive pricing pressures reducing product margins, managers in our business units are constantly evaluating their resource needs and considering further steps to reduce costs. Those steps may include additional facility consolidations, disposals of assets, operational resizing, or exiting from markets that do not contribute to our corporate strategy or profitability.

The decline in cost of rentals over the past two years was primarily the result of the decreasing rental base. The gross margin percentage for rentals was 55.3 percent in 1989 as compared with 52.2 percent in 1988 and 52.7 percent in 1987.

Selling, general and administrative expense increases over the last two years were primarily due to an expansion of direct marketing and sales efforts and increased sales support activities. We redeployed more than 2,000 staff employees to sales in 1988 and assigned an additional 2,000 employees to business telecommunications services sales in 1989. We also increased expenditures for advertising and promotions. In 1988, expenses also increased for our customer account service, billing and inquiry systems.

While expenses will continue to increase for sales and customer support activities, we have reduced expenses in administrative functions. The realignment of operating units in 1989 will enable management in those units to monitor expenses better and take steps to reduce expenses further. Headquarters and support organizations continue to reduce expenses and we have retained controls on new hiring.

Research and development expenses increased \$80 million or 3.1 percent in 1989 and \$119 million or 4.9 percent in 1988 primarily because of projects focused on international markets.

In the fourth quarter of 1989, we amended our management pension plan to make more managers service pension-eligible with improved pension benefits. For managers with five or more years of service as of December 30, 1989, the amendment added five years of age and service to determine service pension-eligibility as well as a frozen minimum pension benefit. The changes apply until pensions calculated using actual age and service are higher. We also offered a special retirement option which further increased pension payments for all managers who chose to retire on December 30, 1989. The 12,500 managers who elected to retire on that date will receive an additional 15 percent pension benefit for five years or until age 65, whichever is earlier. This option was accounted for as a termination payment and increased total costs and expenses for the fourth quarter and 1989 by \$163 million. Payments will be made from pension plan assets. Our future pension fund contributions will be higher because of the plan amendment and the special retirement option. (See also Note [M].)

Increases in total costs and expenses over the past two years also came from higher expenditures for employee and retiree health care benefits. To control growth in this area, we established a cap on the health care insurance premiums we will pay on behalf of employees who retire on or after March 1, 1990. The cap may require those retirees to contribute to health care costs for themselves and their dependents beginning July 1, 1995.

The Financial Accounting Standards Board has issued an exposure draft of a new standard on accounting for postretirement benefits other than pensions. The standard is expected to be issued in 1990 and, beginning in 1992, would require companies to accrue postretirement expenses during the years employees are working. Presently, AT&T and most other American businesses expense these benefits as the costs are incurred by retirees. The effect of the new standard would be to increase reported expenses when adopted.



AT&T's operations, like those of other companies in similar businesses, involve the use, disposal and cleanup of substances regulated under environmental protection laws. It is difficult to estimate the future impact of actions regarding environmental matters, including potential liabilities to AT&T. However, management believes that costs related to environmental proceedings under present laws will not have a material effect on our future expenditures, earnings or competitive position.

#### **Other Income and Interest Expense**

Other income-net increased in 1989 primarily because of gains on transactions and asset sales and other miscellaneous income. We realized a \$69 million gain from exchanging our holdings of common stock in Ing. C. Olivetti & C., S.p.A. (Olivetti) for newly issued shares of Compagnie Industriali Riunite S.p.A., an Italian investment holding company. Other income-net decreased in 1988 primarily because of lower interest income. (See also Note (E).)

Interest expense includes interest on debt and interest on other accrued liabilities. It excludes interest expense for providing financial services, which is included in cost of services, and interest expense for our construction program, which is capitalized as a cost of installing equipment and depreciated along with the associated plant. Interest expense increased in 1989 due to higher interest for accrued liabilities unrelated to financing activities, higher interest expenses for short-term financing needs and lower capitalization of interest expense. Interest expense decreased in 1988 primarily because a greater amount of interest was capitalized. (See also Note (J).)

#### **Provision for Income Taxes**

Income tax expense increased in 1989 primarily because of higher income before income taxes. Income taxes are reflected at the statutory income tax rates applied to income before income taxes, adjusted for certain credits. The statutory federal income tax rates enacted in the 1986 Tax Reform Act were 34 percent for 1989 and 1988 and 40 percent for 1987. The effective tax rate (that is, the ratio of the provision for income taxes to income before income taxes) increased in 1989 compared with 1988 excluding the accelerated digitization program costs. We expect a further increase in the effective tax rate in 1990 due principally to the effects of previously enacted tax law changes.

Although the total provision for income taxes was negative in 1988, we did pay income taxes for that year. We paid \$601 million in income taxes in 1989 compared with \$657 million in 1988 and \$559 million in 1987.

In 1987, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards No. 96, "Accounting for Income Taxes," which would significantly change the method of accounting for income taxes. Among other provisions, the standard requires deferred tax balances to be determined using the enacted income tax rates for the years in which the taxes will actually be paid or refunds received. Currently, AT&T's deferred tax accounts reflect the statutory rates that applied when the deferrals were initiated. As a result, management expects a significant increase in net income when we adopt the standard. Once adopted, further changes in statutory income tax rates could significantly affect net income. The FASB currently is considering changes to the standard, and the deadline for adoption has been deferred to January 1, 1992. AT&T does not plan to adopt the standard before the FASB makes its final determinations about the standard's provisions. Consequently, the impact of our adoption of the standard cannot reasonably be estimated at this time. (See also Note (F).)

#### **Financial Position, Working Capital and Liquidity**

In 1989, we used a substantial amount of cash on hand in addition to cash provided by operating activities in our investing and financing activities, causing cash and temporary cash investments to decline to \$1.2 billion at December 31, 1989 from \$2.0 billion at the end of 1988.

Working capital, defined as current assets less current liabilities, decreased \$1.3 billion in 1989. The decline reflected the decrease in cash and an increase in debt maturing within one year, offset in part by lower accounts payable. Accounts receivable increased as a result of higher sales levels in 1989. In addition, finance receivables have different collection patterns. Inventories were reduced because of improved coordination of manufacturing and sales plans. Accounts payable decreased primarily as a result of the lower access rates in effect during 1989. The increase in debt maturing within one year reflects short-term financing activity for financial services and scheduled maturities for long-term debt. (See also Note (J).)

The level of deferred taxes fluctuated between 1987 and 1989 primarily due to the tax effects of the 1988 network digitization charge. The 1988 increase in other liabilities was largely related to force reduction activities in connection with our network digitization program.

Total assets increased to \$37.7 billion at year-end as increases in net plant, investments and other assets more than offset a decline in current assets. The increase in property, plant and equipment, net of accumulated depreciation, was due to capital expenditures exceeding depreciation, primarily because of our network modernization program. Total investments increased as a result of the activity described on page 26. Other assets increased because of higher non-current finance receivables, additions to prepaid pension costs and goodwill associated with our acquisitions.



### Cash Flow Provided by Operating Activities

Net cash provided by operating activities was \$4.8 billion in 1989 compared with \$5.1 billion in 1988 and \$5.6 billion in 1987. The decline over the last two years was primarily the result of net increases in operating assets and liabilities.

For the past three years, cash flow provided by operating activities and cash on hand have been adequate for capital expenditures and the payment of dividends, which were our two largest uses of cash. Management anticipates that cash flow provided by operating activities will be adequate to finance capital expenditures internally and to pay dividends in 1990.

### Investing Activities

Capital expenditures include large outlays for expanding and modernizing the AT&T Worldwide Intelligent Network. Net expenditures on the network were approximately \$2.9 billion in 1989, \$3.0 billion in 1988 and \$2.7 billion in 1987. Capital requirements for network modernization are expected to decline in 1990. We also made additions to the non-AT&T equipment used in the leasing operations of AT&T Credit Corporation (AT&T Credit). These capital requirements are expected to increase in 1990.

We also made substantial investments and acquisitions in 1989 to enhance future growth in revenues and earnings. Our presence and prospects for growth in Europe were aided particularly by investments in Italy and the United Kingdom. (See also Notes (B) and (I).)

In the first quarter, we entered into a joint venture with GTE Corporation to develop new technology and capabilities for GTE's digital switching systems. AT&T has a 49 percent interest in the new company, called AG Communications Systems Corporation, acquired at a cost of approximately \$112 million. Under the agreement, we will increase our ownership to 80 percent in five years and to 100 percent in fifteen years. We also acquired all of the issued and outstanding common stock of Paradyne Corporation (Paradyne) for approximately \$250 million and exchanged approximately 2 million shares of our common stock for all of the outstanding shares of Eaton Financial Corporation (Eaton). Paradyne is engaged principally in developing, manufacturing and servicing data communications equipment and Eaton is an equipment financing company.

In the second quarter, we acquired a 20 percent interest in Italtel S.p.A. (Italtel), a manufacturer of public and private telecommunications systems based in Italy, in exchange for a 20 percent interest in AT&T Network Systems International B.V. and \$135 million cash. AT&T and Italtel will jointly pursue contracts to supply network equipment in and outside of Italy.

In the fourth quarter, we acquired all of the issued and outstanding shares of ISTEEL Group Ltd., an information technology services company based in the United Kingdom, for approximately \$285 million and exchanged our equity investment of 100 million shares of Olivetti for newly issued shares of Compagnie Industriali Riunite S.p.A. (CIR). CIR is an Italian holding company with investments in information technologies, publishing, financial services and automotive components.

In January 1988, we agreed to purchase up to a 20 percent interest in Sun Microsystems, Inc. (Sun) over three years. During 1989, we purchased 6.6 million more shares of Sun common stock, raising our ownership to 16.4 percent.

In January 1990, AT&T Credit purchased approximately \$450 million of assets from a subsidiary of Pacificorp Financial Services as part of our continuing expansion in providing financial services. The purchase was financed principally with debt, and with preferred stock of a subsidiary of AT&T Credit.

### Financing Activities and Capitalization

The continuing expansion of AT&T Credit over the last two years and the 1989 acquisition and consolidation of Eaton Financial Corporation, which became a subsidiary of AT&T Credit, were largely responsible for the increase in long-term debt outstanding and accounted for the majority of our financing activity.

The ratio of total debt to total capital increased to 45.3 percent at December 31, 1989 from 44.7 percent at December 31, 1988. Excluding the debt of AT&T Credit, our debt ratio declined to 38.7 percent at December 31, 1989 from 41.0 percent at December 31, 1988.

In January 1990, we announced plans to set up a trust to borrow approximately \$550 million through a private placement that will be used to purchase AT&T common shares for future contributions to our existing nonmanagement savings plan. We may issue new stock or purchase shares in the open market for the trust.

Additional external financing is planned in 1990 to finance financial services and potential investments.

Return on average common equity improved to 22.2 percent in 1989 from a negative 11.3 percent, or 15.1 percent computed without the digitization charge, in 1988. The improvement reflects higher earnings and lower average common equity in 1989.

#### 1989 Investing Activities

##### Acquisitions

ISTEL Group, Ltd.  
Paradyne Corporation  
Eaton Financial Corporation

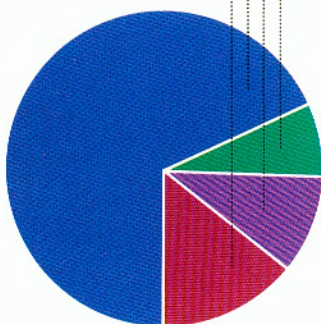
##### Investments

Italtel S.p.A.  
Compagnie Industriali Riunite S.p.A.  
AG Communications

##### Capital Expenditures

AT&T Worldwide Intelligent Network  
Manufacturing  
Selling and Support

##### Leasing and Other





# Consolidated Statements of Income

Years Ended December 31

AT&T and Subsidiaries

Dollars in millions (except per share amounts)	1989	1988	1987
<b>Sales and Revenues</b>			
Sales of services, net of access charges (A) .....	\$22,127	\$20,833	\$19,830
Sales of products .....	11,525	11,334	10,206
Rental revenues .....	2,460	3,043	3,732
<b>Total operating revenues</b> .....	<b>36,112</b>	<b>35,210</b>	<b>33,768</b>
<b>Operating Costs and Expenses</b>			
Cost of services (C) (D)			
Recurring operating costs .....	8,474	8,826	8,885
Accelerated digitization program costs .....	—	6,724	—
	8,474	15,550	8,885
Cost of products (A) .....	6,973	6,571	6,000
Cost of rentals .....	1,100	1,454	1,766
Selling, general and administrative expenses .....	12,635	12,130	11,148
Research and development expense .....	2,652	2,572	2,453
<b>Total operating costs and expenses (M) (N)</b> .....	<b>31,834</b>	<b>38,277</b>	<b>30,252</b>
<b>Operating income (loss)</b> .....	<b>4,278</b>	<b>(3,067)</b>	<b>3,516</b>
Other income—net (E) .....	405	269	303
Interest expense (I) .....	691	584	634
<b>Income (Loss) before income taxes</b> .....	<b>3,992</b>	<b>(3,382)</b>	<b>3,185</b>
Provision for income taxes (F) .....	1,295	(1,713)	1,141
<b>Net Income (Loss)</b> .....	<b>2,697</b>	<b>(1,669)</b>	<b>2,044</b>
Dividends on preferred shares .....	—	1	23
<b>Income (Loss) applicable to common shares</b> .....	<b>\$ 2,697</b>	<b>\$ (1,670)</b>	<b>\$ 2,021</b>
Weighted average common shares outstanding (millions) ...	1,077	1,075	1,073
<b>Earnings (Loss) per Common Share</b> .....	<b>\$ 2.50</b>	<b>\$ (1.55)</b>	<b>\$ 1.88</b>

The notes on pages 30 through 35 are an integral part of the financial statements.



# Consolidated Balance Sheets

At December 31

AT&T and Subsidiaries

Dollars in millions (except per share amounts)

	1989	1988
<b>Assets</b>		
<i>Current Assets</i>		
Cash and temporary cash investments (L) . . . . .	\$ 1,183	\$ 2,021
Receivables less allowances of \$442 and \$466 (H) . . . . .	9,555	8,907
Inventories (A) . . . . .	3,206	3,392
Deferred income taxes . . . . .	942	1,162
Other current assets . . . . .	405	120
<i>Total current assets</i> . . . . .	<u>15,291</u>	<u>15,602</u>
Property, plant and equipment—net (G) (H) . . . . .	15,919	15,280
Investments (B) (I) . . . . .	1,187	859
Other assets (B) (H) (M) . . . . .	5,290	3,411
<i>Total Assets</i> . . . . .	<u>\$37,687</u>	<u>\$35,152</u>
<b>Liabilities and Shareowners' Equity</b>		
<i>Current Liabilities</i>		
Accounts payable . . . . .	\$ 4,763	\$ 4,948
Payroll and benefit-related liabilities . . . . .	2,571	2,435
Debt maturing within one year (J) . . . . .	2,426	1,139
Dividends payable . . . . .	323	322
Other current liabilities . . . . .	2,154	2,381
<i>Total current liabilities</i> . . . . .	<u>12,237</u>	<u>11,225</u>
<i>Other Liabilities and Deferred Credits</i>		
Long-term debt including capital leases (H) (I) . . . . .	8,144	8,128
Other liabilities . . . . .	1,390	1,462
Deferred income taxes . . . . .	2,070	1,653
Unamortized investment tax credits . . . . .	819	883
Other deferred credits . . . . .	289	336
<i>Total other liabilities and deferred credits</i> . . . . .	<u>12,712</u>	<u>12,462</u>
<i>Shareowners' Equity (K) (O)</i>		
Common shares—par value \$1 per share . . . . .	1,076	1,074
Authorized shares: 1,500,000,000		
Outstanding shares: 1,075,798,000 at December 31, 1989;		
1,073,665,000 at December 31, 1988		
Additional paid-in capital . . . . .	8,700	8,613
Retained earnings . . . . .	2,962	1,778
<i>Total shareowners' equity</i> . . . . .	<u>12,738</u>	<u>11,465</u>
<i>Total Liabilities and Shareowners' Equity</i> . . . . .	<u>\$37,687</u>	<u>\$35,152</u>

The notes on pages 30 through 35 are an integral part of the financial statements.



# Consolidated Statements of Cash Flows

AT&T and Subsidiaries

Years Ended December 31

Dollars in millions	1989	1988*	1987*
<b>Cash Flows from Operating Activities</b>			
Net income (loss) .....	\$ 2,697	\$(1,669)	\$ 2,044
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation .....	3,366	3,690	3,754
Net (increase) decrease in operating assets and liabilities, detailed below .....	(1,246)	(3,030)	(312)
Accelerated digitization program costs associated with plant assets .....	—	6,196	—
Other adjustments for non-cash items .....	(52)	(111)	153
Net cash provided by operating activities .....	4,765	5,076	5,639
<b>Cash Flows from Investing Activities</b>			
Capital expenditures net of proceeds from sale or disposal of property, plant and equipment of \$71, \$86 and \$42 .....	(3,391)	(3,887)	(3,467)
Net lease equipment purchases .....	(1,833)	(1,071)	(316)
Lease related receipts, net of amounts included in income .....	1,205	686	213
(Increase) decrease in investments—net .....	(518)	(230)	110
Acquisitions of subsidiaries, net of cash acquired** .....	(383)	(8)	—
Other investing activities—net .....	(92)	63	13
Net cash used in investing activities .....	(5,012)	(4,447)	(3,447)
<b>Cash Flows from Financing Activities</b>			
Proceeds from long-term debt issuance .....	829	463	543
Retirements of long-term debt .....	(630)	(435)	(601)
Issuance of common shares .....	52	8	63
Redemption of preferred shares .....	—	(60)	(864)
Dividends paid .....	(1,290)	(1,290)	(1,320)
Increase (decrease) in short-term borrowings—net .....	577	(78)	182
Other financing activities—net .....	(129)	(3)	(11)
Net cash used in financing activities .....	(591)	(1,395)	(2,008)
Increase (decrease) in cash and temporary cash investments .....	(838)	(766)	184
Cash and temporary cash investments at beginning of year (L) .....	2,021	2,787	2,603
Cash and temporary cash investments at end of year (L) .....	\$ 1,183	\$ 2,021	\$ 2,787
<b>Operating Assets and Liabilities Components**</b>			
(Increase) decrease in net receivables .....	\$ (255)	\$ (517)	\$ 53
(Increase) decrease in inventories .....	178	(19)	362
(Increase) decrease in other current assets and other assets .....	(1,142)	(566)	(664)
Increase (decrease) in accounts payable .....	(216)	244	21
Increase (decrease) in payroll and benefit-related liabilities .....	122	102	(166)
Increase (decrease) in other current liabilities .....	(303)	(363)	(439)
Increase (decrease) in deferred income taxes and investment tax credits .....	573	(2,260)	610
Increase (decrease) in other liabilities and other deferred credits .....	(203)	349	(89)
Net (increase) decrease in operating assets and liabilities .....	\$(1,246)	\$(3,030)	\$ (312)

\*1988 and 1987 amounts have been restated to conform to current presentation.

\*\*The non-cash operating assets and liabilities that were consolidated as a result of the Company's acquisitions in 1989 and 1988 are shown in Note (L).

The notes on pages 30 through 35 are an integral part of the financial statements.



## Notes to Consolidated Financial Statements

Dollars in millions (except per share amounts)

### (A) Summary of Significant Accounting Policies

#### Consolidation

The consolidated financial statements include the accounts of AT&T and all its significant majority-owned subsidiaries. Investments in 20%- to 50%-owned companies and joint ventures are accounted for using the equity method. Other investments are accounted for using the cost method.

#### Industry Segmentation

AT&T operates predominantly in a single industry segment, the information movement and management industry. This segment constitutes more than 90% of AT&T's total operating revenues, operating income and identifiable assets. AT&T is also engaged in other activities that are not material in the aggregate and, as such, are not reported as separate segments. These activities include the furnishing of shareholder services, the provision of financing for non-AT&T products and the distribution of computer equipment through retail outlets.

#### Access Charges

Local telephone companies charge for access to their local telephone networks. Access charges are collected from customers in the prices charged by AT&T. Because these charges essentially are collected by AT&T on behalf of the local telephone companies, they are not included in AT&T's reported operating revenues. Access charges amounted to \$14,864 in 1989, \$16,764 in 1988 and \$17,611 in 1987.

#### Research and Development

Research and development expenditures are charged to expense as incurred. The development costs of software that is to be marketed are charged to research and development expense until technological feasibility is established. After that time, the remaining software production costs are capitalized as other assets and amortized to product costs over the estimated period of sales. Such amortization amounted to \$182 in 1989, \$182 in 1988 and \$110 in 1987. Unamortized software production costs were \$406 and \$345 at December 31, 1989 and 1988, respectively.

#### Investment Tax Credits

For financial reporting purposes, AT&T amortizes the investment tax credit (ITC) as a reduction to income tax expense over the useful life of the property that produced the credit. See also Note (F).

#### Inventories

Inventories are stated at the lower of cost or market. Cost is determined on a first-in, first-out (FIFO) basis principally, and on an average cost basis.

At December 31	1989	1988
Completed goods . . . . .	\$1,774	\$1,833
In process . . . . .	1,040	1,147
Raw materials and supplies . . . . .	392	412
Total . . . . .	<u>\$3,206</u>	<u>\$3,392</u>

#### Plant and Equipment

Commencing in 1984, investment in plant and equipment is recorded at cost excluding intercompany profits. Rate regulated plant assets acquired prior to 1984 are recorded at cost including reasonable intercompany profits, in accordance with regulated accounting practices. At divestiture, the carrying value of these assets was significantly reduced by increasing accumulated depreciation to the level believed appropriate in a competitive environment. The carrying value was further reduced in 1988, by increasing accumulated depreciation, because of the accelerated digitization program. (See also Note (D).)

Beginning in 1986, the gain or loss on sale of factory machinery and laboratory equipment in the normal course of AT&T's business is reflected in operating results. As other depreciable plant is retired, the original cost is removed from the plant account and from accumulated depreciation. (See also Note (G).)

#### Depreciation

Depreciation is calculated using either the group or unit method. The unit method is used primarily for factory machinery, laboratory equipment, large computer systems, and certain international earth stations and submarine cables. Factory facilities placed in service subsequent to December 31, 1979, electronic switching equipment placed in service subsequent to December 31, 1988, digital circuit equipment, digital operator services equipment and radio equipment are all depreciated on an accelerated basis. All other plant and equipment are depreciated on a straight line basis. (See also Note (C).)

#### Goodwill

The excess of the purchase price over the fair value of net assets acquired in acquisitions accounted for using the purchase method is treated as goodwill. These amounts are amortized on a straight line basis over the periods benefited, principally in the range of 10 to 15 years.

### (B) Acquisitions and Investments

*Paradyne Corporation (Paradyne)*—In the first quarter of 1989, the Company acquired all of the issued and outstanding common stock of Paradyne for approximately \$250. Paradyne is engaged principally in developing, manufacturing and servicing data communications equipment. The acquisition was accounted for using the purchase method, with the assets and liabilities of Paradyne recorded at their



estimated fair values at the acquisition date. The approximate \$165 excess of the total acquisition cost over the fair value of the net assets acquired was treated as goodwill and is being amortized on a straight line basis over 15 years. The results of operations and net assets of Paradyne are included in the consolidated financial statements as of January 1, 1989 and are not material in relation to the current or prior year.

**Eaton Financial Corporation (Eaton)**—In the first quarter of 1989, the Company exchanged approximately 2 million shares of its common stock for all of the outstanding shares of Eaton, an office equipment financing company. The acquisition was accounted for as a pooling-of-interests; however, prior year results were not restated due to immateriality. Eaton became a subsidiary of AT&T Credit Corporation. The results of operations and net assets of Eaton are included in the consolidated financial statements as of January 1, 1989 and are not material.

**AG Communications Systems Corporation**—In the first quarter of 1989, AT&T entered into a joint venture with GTE Corporation (GTE) to develop new technology and capabilities for GTE's digital switching systems. Under the agreement with GTE, AT&T has a 49% interest in the joint venture, acquired at a cost of approximately \$112, and will increase its ownership to 80% in 5 years and to 100% in 15 years.

**Italtel S.p.A. (Italtel)**—In the second quarter of 1989, AT&T acquired a 20% interest in Italtel in exchange for a 20% interest in AT&T Network Systems International B.V. (AT&T NSI) plus \$135 in cash. No gain or loss was recorded on the exchange. Italtel is a manufacturer of public and private telecommunications systems based in Italy. The results of operations of Italtel and the minority interest given up in AT&T NSI are not material in relation to the current or prior year.

**Compagnie Industriali Riunite S.p.A. (CIR)**—In the fourth quarter of 1989, AT&T received 91.25 million ordinary (voting) shares and 91.25 million savings (non-voting) shares of CIR, both newly issued, in exchange for its interest in Ing C. Olivetti & C., S.p.A. (Olivetti). CIR is an Italian holding company with investments in information technologies, publishing, financial services and automotive components. The ordinary shares are stated at cost and the savings shares are stated at the lower of cost or market. The fair value of the CIR shares at the date of the exchange was \$492. In accordance with the terms of the acquisition agreement, the Company will retain its 17.3% ownership of ordinary shares for a period of at least five years. (See also Note (E).)

**ISTEL Group Ltd. (ISTEL)**—In the fourth quarter of 1989, AT&T acquired all of the issued and outstanding common stock of ISTEL, an information technology services company based in the United Kingdom. The purchase price of approximately \$285 consisted of \$181 cash and \$104 in six-year notes to ISTEL shareholders. The acquisition was accounted for using the purchase method, with the assets and liabilities of ISTEL recorded at their estimated fair values at the acquisition date. The approximate \$267 excess of the total acquisition

cost over the fair value of the net assets acquired was treated as goodwill and is being amortized on a straight line basis over 10 years. The results of operations and net assets of ISTEL are included in the consolidated financial statements as of November 1, 1989 and are not material in relation to the current or prior year.

**Sun Microsystems, Inc. (SUN)**—In January 1988, the Company agreed to purchase up to a 20% interest in SUN, a computer company, over three years. During 1989, AT&T raised its ownership of SUN to 16.4%. AT&T expects to raise its ownership to 20% by the end of 1990. This investment is stated at the lower of cost or market and amounted to \$285 and \$150 at December 31, 1989 and 1988, respectively.

### (C) Accounting Changes

Effective January 1, 1989 for certain network equipment, the Company changed its method of depreciation from straight line to sum-of-the-years' digits, shortened the estimated depreciable lives, and decreased the estimated net salvage. These changes were implemented to better match revenues and expenses because of rapid technological changes occurring in response to customer requirements and competition. The new method was applied retroactively to all digital circuit, digital operator services and radio equipment and was also applied to electronic switching equipment placed into service after December 31, 1988. Other network equipment, principally lightguide cable and central office buildings, continue to be depreciated on a straight line basis. The changes in depreciable lives and net salvage estimates were made prospectively. The effect of these changes on 1989 results was to decrease net income by approximately \$393 or \$.36 per share. The cumulative prior years' effect of the change in depreciation method and the effect on prior years presented were not material. (See also Note (D).)

### (D) Accelerated Digitization Program Costs

In 1988, the Company accelerated the digitization of its long distance network. As a result, older analog plant and equipment became impaired. Accordingly, a charge was recorded in cost of services. The charge consisted of the following components: \$4,965 for the writedown of network analog telecommunications plant, \$614 for the writedown of support assets and \$699 for the estimated net asset removal cost. Expenses totaling \$446 were also recorded for the force reductions associated with the accelerated digitization program. These actions reduced net income by \$3,935 or \$3.66 per share in 1988.

Reserves for net asset removal cost will be utilized largely in future years as the obsolete plant is physically removed. As of December 31, 1989, \$658 remained of reserves for net asset removal cost and \$304 remained of reserves for force reductions associated with the accelerated digitization program.

### (E) Other Income—Net

	1989	1988	1987
Interest, royalties and dividends. . . . .	\$233	\$239	\$266
Equity earnings from unconsolidated entities. . . . .	(10)	48	24
Miscellaneous—net. . . . .	182	(18)	13
Total. . . . .	\$405	\$269	\$303

Miscellaneous—net in 1989 includes a \$69 gain from the exchange of the Company's equity investment of 100 million shares of Olivetti for newly issued shares in CIR. (See also Note (B).)



## (F) Income Taxes

The principal reasons for the differences between federal income tax expense computed at the federal statutory rate and AT&T's provision for income taxes are explained below:

	1989	1988	1987
Statutory federal income tax rate . . . .	34%	34%	40%
Federal income tax at statutory rate . . .	\$1,357	\$(1,150)	\$1,274
Amortization of investment tax credits . . . . .	(256)	(583)	(330)
State and local income taxes, net of federal income tax effect . . . . .	190	(134)	143
Research credits . . . . .	(42)	(24)	(20)
Other differences . . . . .	46	178	74
Provision for income taxes . . . . .	<u>\$1,295</u>	<u>\$(1,713)</u>	<u>\$1,141</u>

The provision for income taxes consists of the following components:

	1989	1988	1987
Current			
Federal . . . . .	\$ 481	\$ 507	\$ 422
State and local . . . . .	194	111	126
Foreign . . . . .	16	13	12
	<u>691</u>	<u>631</u>	<u>560</u>
Deferred			
Federal . . . . .	573	(1,573)	551
State and local . . . . .	95	(313)	112
Foreign . . . . .	—	1	1
	<u>668</u>	<u>(1,885)</u>	<u>664</u>
Deferred investment tax credits—net*	(64)	(459)	(83)
Provision for income taxes . . . . .	<u>\$1,295</u>	<u>\$(1,713)</u>	<u>\$1,141</u>

\*Net of amortization of \$256 in 1989, \$583 in 1988 and \$330 in 1987.

Deferred taxes, resulting from timing differences in the recognition of revenue and expense items for tax and financial reporting purposes, were as follows:

	1989	1988	1987
Property, plant and equipment . . . . .	\$146	\$(2,387)	\$(201)
Business restructuring, force and facility consolidation . . . . .	214	230	491
Pensions and other benefits . . . . .	270	219	104
Utilization of tax credits carried forward . . . . .	—	—	94
Inventory valuation . . . . .	—	—	96
Other timing differences . . . . .	38	53	80
Total . . . . .	<u>\$668</u>	<u>\$(1,885)</u>	<u>\$ 664</u>

In 1987, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (FAS) No. 96, "Accounting for Income Taxes". Among other provisions, the standard requires deferred tax balances to be determined using the enacted income tax rates for the years in which the taxes will actually be paid or refunds received. Currently, the Company's deferred tax accounts reflect the statutory rates in effect when the deferrals were initiated. As a result, FAS No. 96 is expected to significantly increase net income in the year of adoption. The FASB currently is considering changes to the standard and the deadline for adoption has been deferred to January 1, 1992. Consequently, the impact from our adoption of the standard cannot reasonably be estimated at this time.

## (G) Property, Plant and Equipment

At December 31	1989	1988
Land and improvements . . . . .	\$ 592	\$ 530
Buildings and improvements . . . . .	7,438	6,943
Machinery, electronic and other equipment . . . .	<u>32,800</u>	<u>33,427</u>
Total property, plant and equipment . . . . .	<u>40,830</u>	<u>40,900</u>
Less: Accumulated depreciation* . . . . .	<u>24,911</u>	<u>25,620</u>
Property, plant and equipment—net . . . . .	<u>\$15,919</u>	<u>\$15,280</u>

\*See also Notes (C) and (D).

## (H) Leases

**As Lessor:** The Company leases equipment to others through operating leases; the majority of these are cancelable. The minimum future rentals on noncancelable leases are \$301 in 1990, \$151 in 1991, \$57 in 1992, \$9 in 1993, \$3 in 1994 and \$7 in later years. AT&T's net investment in equipment used to support leasing operations, included in property, plant and equipment, was as follows:

At December 31	1989	1988
Machinery, electronic and other equipment . . . .	\$2,978	\$2,839
Less: Accumulated depreciation . . . . .	<u>1,875</u>	<u>1,666</u>
Net investment . . . . .	<u>\$1,103</u>	<u>\$1,173</u>

AT&T also provides direct financing and other leasing programs for its products and those of other companies and leases its products to others under sales-type leases. The Company's net investment in finance assets arising from these leasing arrangements amounted to \$2,145 and \$1,393, including residual values of \$306 and \$144 and is reflected net of unearned income of \$656 and \$387, in 1989 and 1988, respectively. Finance service revenues are recognized over the life of the respective leases using the interest method and are included in sales of services. The future maturities of these finance assets are \$836 in 1990, \$641 in 1991, \$441 in 1992, \$248 in 1993, \$99 in 1994 and \$79 in later years.

**As Lessee:** AT&T leases land, buildings and equipment through contracts that expire in various years. Future minimum lease payments at December 31, 1989 are as follows:

	Capital Leases	Operating Leases
1990 . . . . .	\$136	\$ 531
1991 . . . . .	106	392
1992 . . . . .	58	281
1993 . . . . .	49	199
1994 . . . . .	35	157
Later years . . . . .	92	669
Total minimum lease payments . . . . .	<u>476</u>	<u>\$2,229</u>
Less: Estimated executory cost . . . . .	1	
Imputed interest . . . . .	<u>144</u>	
Present value of net minimum lease payments . .	<u>\$331</u>	

Rental expense for operating leases was \$1,114 in 1989, \$1,106 in 1988 and \$887 in 1987.



### (I) Investments

#### Investment in Wholly Owned Finance Subsidiary

The following table provides summarized consolidated financial information for AT&T Credit Corporation (AT&T Credit), which is included in the AT&T consolidated financial statements.

AT&T Credit	1989	1988	1987
Revenue, principally finance income . . .	\$ 442	\$ 228	\$ 175
Interest and other expenses . . . . .	393	190	147
Net income . . . . .	42	30	19
At December 31	1989	1988	
Net investment in finance assets . . . . .	\$2,556	\$1,832	
Other assets . . . . .	1,161	309	
Total assets . . . . .	\$3,717	\$2,141	
Debt maturing within one year . . . . .	\$1,380	\$ 511	
Other liabilities . . . . .	690	442	
Long-term debt* . . . . .	1,290	957	
Shareowner's equity . . . . .	357	231	
Total liabilities and shareowner's equity . . . . .	\$3,717	\$2,141	

\*Includes \$125 due AT&T.

AT&T Credit is principally engaged in offering financing programs, primarily for products sold by AT&T to customers. AT&T Credit purchased sales-type lease receivables, net of unearned interest income, from AT&T of \$128 in 1989, \$134 in 1988 and \$201 in 1987.

In January 1990, AT&T Credit purchased approximately \$450 of assets from a subsidiary of Pacificorp Financial Services.

#### Other Investments

AT&T's equity investments were \$520 and \$670 at December 31, 1989 and 1988, respectively. Dividends received from equity investments were \$1 in 1989 and \$27 in 1988. Investments accounted for using the cost method were \$660 at December 31, 1989, principally SUN and the ordinary shares of CIR, and \$183 at December 31, 1988, principally SUN. (See also Note (B).)

### (J) Debt Obligations

Outstanding long-term debt obligations were as follows:

Interest Rates	Maturities	At December 31, 1989	1988
Debentures:			
3 <sup>7</sup> / <sub>8</sub> % to 4 <sup>3</sup> / <sub>4</sub> % . . . . .	1990-1999	\$1,550	\$1,550
5 <sup>1</sup> / <sub>8</sub> % to 7 <sup>1</sup> / <sub>4</sub> % . . . . .	1990-2003	1,858	1,850
7 <sup>1</sup> / <sub>2</sub> % to 9% . . . . .	1989-2026	2,559	2,516
Notes:			
5% to 7 <sup>3</sup> / <sub>4</sub> % . . . . .	1989-2003	786	1,023
7 <sup>1</sup> / <sub>8</sub> % to 8 <sup>19</sup> / <sub>20</sub> % . . . . .	1989-1995	736	439
9% to 12 <sup>7</sup> / <sub>8</sub> % . . . . .	1989-2003	1,195	812
13% to 14 <sup>1</sup> / <sub>4</sub> % . . . . .	1990-1992	142	—
		8,826	8,190
Long-term lease obligations . . . . .		331	403
Other . . . . .		168	69
Less: Unamortized discount—net . . . . .		32	32
		9,293	8,630
Less: Current portion			
Long-term debt . . . . .		1,031	386
Long-term lease obligations . . . . .		116	112
Other . . . . .		2	4
Total long-term obligations . . . . .		\$8,144	\$8,128

The future maturities of long-term debt are \$1,031 in 1990, \$432 in 1991, \$619 in 1992, \$350 in 1993, \$666 in 1994, and \$5,728 in later years.

The remaining portion of debt maturing within one year consisted principally of commercial paper, which amounted to \$1,214 and \$486 at December 31, 1989 and 1988, respectively.

Interest expense consists of interest on short-term and long-term debt and interest on accrued liabilities. The Company capitalized interest costs of \$89 in 1989, \$116 in 1988 and \$73 in 1987. Interest costs related to finance service operations are included in cost of services and amounted to \$167 in 1989, \$96 in 1988, and \$65 in 1987.

In January 1990, the Company announced plans to set up a trust to borrow \$550 through a private placement that will be used to purchase AT&T common shares for future contributions to the existing nonmanagement savings plan. The anticipated interest rate is 7.43% and maturities are \$31 in 1990, \$57 in 1991, \$55 in 1992, \$52 in 1993, \$50 in 1994, and \$305 in later years.

### (K) Shareowners' Equity

	Common Stock	Additional Paid-in Capital	Retained Earnings
Balance at December 31, 1986 . . . . .	\$1,072	\$8,544	\$ 3,934
Net income in 1987 . . . . .	—	—	2,044
Dividends declared . . . . .	—	—	(1,305)
Shares issued under employee plans . .	2	61	—
Translation adjustments . . . . .	—	—	148
Other changes . . . . .	—	—	(45)
Balance at December 31, 1987 . . . . .	\$1,074	\$8,605	\$ 4,776
Net loss in 1988 . . . . .	—	—	(1,669)
Dividends declared . . . . .	—	—	(1,289)
Shares issued under employee plans . .	—	8	—
Translation adjustments . . . . .	—	—	(59)
Other changes . . . . .	—	—	19
Balance at December 31, 1988 . . . . .	\$1,074	\$8,613	\$ 1,778
Net income in 1989 . . . . .	—	—	2,697
Dividends declared . . . . .	—	—	(1,291)
Shares issued under employee plans . .	3	92	—
Translation adjustments . . . . .	—	—	(93)
Shares repurchased . . . . .	(3)	(27)	(100)
Other changes . . . . .	2	22	(29)
Balance at December 31, 1989 . . . . .	\$1,076	\$8,700	\$ 2,962

The Company has 100,000,000 authorized shares of preferred stock at \$1 par value, of which none are currently outstanding.

### (L) Cash Flow Information

For cash flow reporting purposes, the Company considers all highly liquid temporary cash investments with maturities generally of three months or less to be cash equivalents.

Net cash flow from operating activities reflects cash payments for interest and income taxes as follows:

	1989	1988	1987
Interest paid, net of amounts capitalized . . . . .	\$765	\$681	\$647
Income taxes paid . . . . .	601	657	559

Non-cash investing and financing activities excluded from the Consolidated Statements of Cash Flows consist primarily of the acquisition of machinery and equipment under capital lease obligations amounting to \$90 in 1989, \$167 in 1988 and \$112 in 1987.



In addition, the following table displays the non-cash assets, liabilities and equity that were consolidated as a result of the Company's acquisitions of Paradyne, Eaton and ISTEL in 1989 and of AT&T NSI in 1988. (See also Note (B).)

	1989	1988
Non-cash assets (liabilities and equity):		
Net receivables	\$ 236	\$ 205
Inventories	58	216
Other current assets and other assets	557	28
Property, plant and equipment	139	174
Accounts payable	(31)	(70)
Other current liabilities	(77)	(146)
Payroll and benefit-related liabilities	(14)	—
Short- and long-term debt	(333)	(207)
Other long-term liabilities	(24)	(9)
Net non-cash assets consolidated	511	191
Less: Decrease in investments	—	64
Increase in other liabilities	—	119
Issuance of common shares	24	—
Increase in debt maturing in one year	104	—
Net cash investing activity	\$ 383	\$ 8

#### (M) Employee Benefit Plans

##### Pension Plans

The Company sponsors non-contributory defined benefit plans covering substantially all management and non-management employees. Benefits for management employees are based on a career average pay plan; benefits for non-management employees are based on a plan that is not directly pay-related.

The Company's pension contributions are made to trust funds that are held for the sole benefit of pension plan participants. Contributions are determined using the aggregate cost method, an acceptable funding method under the Employee Retirement Income Security Act of 1974, and in accordance with appropriate Internal Revenue Service regulations.

Pension cost is computed using the projected unit credit method in accordance with FAS No. 87, "Employers' Accounting for Pensions."

Pension cost includes the following components:

	1989	1988	1987
Service cost—benefits earned during the period	\$ 415	\$ 425	\$ 447
Interest cost on projected benefit obligation	1,583	1,438	1,356
Amortization of unrecognized prior service costs*	73	39	22
Credit for expected return on plan assets†	(2,072)	(1,785)	(1,651)
Amortization of transition asset	(480)	(480)	(480)
Charge for special retirement option	163	—	—
Net pension cost (credit)	\$ (318)	\$ (363)	\$ (306)

\*These costs pertain to plan amendments in 1989 and prior years and are amortized on a straight line basis over the average remaining service period of active employees.

†The actual return on plan assets was \$5,871, \$3,363, and \$1,499 in 1989, 1988 and 1987, respectively.

The funded status of the plan was as follows:

At December 31	1989	1988
Actuarial present value of accumulated benefit obligation, including vested benefits of \$19,325 and \$15,260, respectively	\$21,395	\$17,146
Plan assets at market value	\$33,397	\$28,477
Less: Actuarial present value of projected benefit obligation	21,988	18,315
Excess of assets over projected benefit obligation	11,409	10,162
Unrecognized prior service costs	1,537	663
Unrecognized transition asset	(5,718)	(6,198)
Unrecognized net gain	(5,120)	(3,255)
Adjustment to recognize minimum liability for non-qualified plan	(41)	—
Prepaid pension cost in balance sheet	\$ 2,067	\$ 1,372

The projected benefit obligation was determined using discount rates of 8.25% and 8.75% at December 31, 1989 and 1988, respectively, and an assumed long-term rate of compensation increase of 5.0%. The expected long-term rate of return on plan assets used in determining pension cost was 8.5% for 1989 and 8.0% for 1988 and 1987. The unrecognized transition asset is being amortized over 15.9 years. Plan assets consist primarily of listed stocks, corporate and governmental debt, and real estate investments.

In October 1989, the Company amended its management pension plan to make more managers service pension-eligible with improved pension benefits. For all management employees with at least five years service as of December 30, 1989, the amendment adds five years of age and service to determine service pension-eligibility as well as a frozen minimum pension benefit. The changes apply until pensions calculated using actual age and service are higher. The Company also offered a special retirement option for employees eligible to retire on December 30, 1989. Those employees who elected to retire on that date will receive an additional 15% benefit as part of their monthly pension for five years or until age 65, whichever is earlier. The special retirement option was accounted for as a termination benefit in accordance with FAS No. 88, "Employers' Accounting for Settlements and Curtailments of Defined Benefit Pension Plans and for Termination Benefits". Accordingly, pension cost for fourth quarter 1989 included a one-time charge of \$163 million. Payments will be made from pension plan assets.

##### Savings Plans

The Company sponsors savings plans for substantially all employees. These plans allow employees to contribute a portion of their pretax or after-tax income in accordance with specified guidelines. AT&T matches a percentage of these contributions up to certain limitations. Such costs amounted to \$277 in 1989, \$274 in 1988 and \$248 in 1987.

##### (N) Postretirement Benefits

The Company's benefit plan for retirees includes health care benefits and life insurance coverage.

Health care benefits are provided through insurance company contracts. The annual cost of health care benefits for retirees is the total of claims incurred in their behalf. This cost was \$319, \$273 and \$229 for approximately 102,200, 97,100 and 91,400 retired employees in 1989, 1988 and 1987, respectively.



The FASB has issued an exposure draft of a new standard on accounting for postretirement benefits other than pensions. The standard is expected to be issued in 1990 and, beginning in 1992, would require companies to accrue postretirement benefits during the years employees are working. Presently, the Company expenses these benefits as the costs are incurred by retirees. The effect of the standard would be to increase reported expenses when adopted.

The cost of providing postretirement life insurance benefits to employees who meet certain age and service requirements is determined and funded under the aggregate cost method. This cost was \$28 for 1989, \$25 for 1988 and \$23 for 1987.

Under the terms of the Divestiture Plan of Reorganization, AT&T reimburses the divested Bell System operating telephone companies for a portion of their costs to provide health care benefits and increases in pensions to pre-divestiture retirees. These costs were expensed as incurred and were \$91 in 1989, \$101 in 1988 and \$85 in 1987.

#### (D) Stock Options

The AT&T 1987 Long-Term Incentive Program (Plan), which became effective on July 15, 1987, provides for the granting of stock options, stock appreciation rights (SARs) either in tandem with stock options or free-standing, and other awards. Under the Plan, 0.6% of the outstanding shares of the Company's common stock as of the first day of each calendar year is available for grant in such year. All shares available in any year that are not granted under the Plan are available for grant in subsequent years. The exercise price of any stock option shall not be less than 100% of the fair value of the stock on the date of a grant of such option. Under the Plan, exercise of either a related option or a related SAR cancels the other to the extent of such exercise.

Prior to July 15, 1987, stock options were granted under the AT&T 1984 Stock Option Plan. No new options can be granted under this plan. Under the plan, a maximum of 20,000,000 shares of the Company's common stock were available for grant at fair market value on the date of grant.

Option transactions during 1989, 1988 and 1987 are shown below:

Number of Shares	1989	1988	1987
Balance at January 1 . . . . .	13,339,123	6,450,232	4,910,201
Options granted . . . . .	205,675	7,523,270	2,125,105
Options and SARs exercised . . . . .	(3,308,114)	(479,280)	(352,171)
Average price . . . . .	\$23.72	\$20.06	\$19.47
Options forfeited . . . . .	(41,454)	(155,099)	(232,903)
At December 31:			
Options outstanding . . . . .	10,195,230	13,339,123	6,450,232
Average price . . . . .	\$26.44	\$25.54	\$22.35
Options exercisable . . . . .	10,033,355	5,964,931	4,529,087
Shares available for grant	10,292,496	4,814,358	6,328,878

During 1989, SARs were granted for 385,921 shares for an average exercise price of \$26.13, and 234,884 SARs were exercised. As of December 31, 1989, 1,436,591 SARs remained unexercised, of which 1,050,670 were exercisable.

In addition, 206,139 stock options were assumed in connection with an acquisition in 1989. During 1989, 46,361 of these options were exercised at prices of \$10.31 to \$34.11 per share, 25,894 options were forfeited and 133,884 options remained outstanding at prices of \$12.89 to \$34.11 per share as of December 31, 1989.

#### (P) Contingencies

With respect to lawsuits, proceedings, and other claims pending at year-end, including proceedings under government laws and regulations related to environmental and other matters, it is the opinion of management that after final disposition, any monetary liability or financial impact to AT&T beyond that provided at year-end would not be material to the consolidated financial position of the Company.

#### (Q) Quarterly Information (unaudited)

Quarters	First	Second	Third	Fourth	Total
<b>1989</b>					
Operating revenues . . . . .	\$8,659	\$9,256	\$8,896	\$9,301	\$36,112
Operating costs and expenses . . . . .	7,682	8,033	7,765	8,354	31,834
Net income . . . . .	594	699	699	705	2,697
Earnings per common share . . . . .	.55	.65	.65	.65	2.50
<b>1988</b>					
Operating revenues . . . . .	\$8,389	\$8,802	\$8,812	\$9,207	\$35,210
Operating costs and expenses . . . . .	7,575	7,823	7,854	15,025	38,277
Net income (loss) . . . . .	492	594	587	(3,342)	(1,669)
Earnings (loss) per common share . . . . .	.46	.55	.55	(3.11)	(1.55)

1988 Fourth Quarter: Includes an increase in operating costs and expenses of \$6,724 and a decrease in net income of \$3,935 (\$3.66 per share) due to the charge for the accelerated digitization program. See Note (D).

#### Market and Dividend Data (unaudited)

AT&T common stock is traded on the New York, Philadelphia, Boston, Midwest and Pacific stock exchanges. It also trades on the London, Tokyo and other foreign stock exchanges. The prices shown in the accompanying table were obtained from the Composite Tape encompassing the trading on all the above U.S. exchanges and trades reported by the National Association of Securities Dealers and Instinet. Common shareowners of record totaled 2,552,104 as of December 31, 1989. The payment of common dividends will depend upon the Company's earnings and financial requirements and other factors. For details of shareowners' equity see Note (K) to the financial statements.

Calendar Quarter	Market Price		Dividends Declared
	High	Low	
<b>1989</b>			
1st . . . . .	<b>\$33</b>	<b>\$28<sup>1</sup>/<sub>8</sub></b>	<b>\$.30</b>
2nd . . . . .	<b>37<sup>1</sup>/<sub>8</sub></b>	<b>30<sup>1</sup>/<sub>4</sub></b>	<b>.30</b>
3rd . . . . .	<b>44<sup>5</sup>/<sub>8</sub></b>	<b>34<sup>1</sup>/<sub>2</sub></b>	<b>.30</b>
4th . . . . .	<b>47</b>	<b>37</b>	<b>.30</b>
<b>1988</b>			
1st . . . . .	<b>\$30<sup>1</sup>/<sub>4</sub></b>	<b>\$26<sup>1</sup>/<sub>2</sub></b>	<b>\$.30</b>
2nd . . . . .	<b>28<sup>1</sup>/<sub>4</sub></b>	<b>25<sup>3</sup>/<sub>4</sub></b>	<b>.30</b>
3rd . . . . .	<b>27<sup>1</sup>/<sub>8</sub></b>	<b>24<sup>1</sup>/<sub>8</sub></b>	<b>.30</b>
4th . . . . .	<b>30<sup>3</sup>/<sub>8</sub></b>	<b>25<sup>5</sup>/<sub>8</sub></b>	<b>.30</b>



## **Report of Management**

Management is responsible for the preparation, integrity and objectivity of the financial statements and all other financial information included in this report. Management is also responsible for maintaining a system of internal controls as a fundamental requirement for the operational and financial integrity of results.

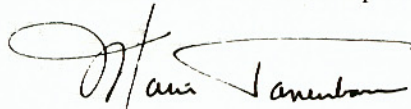
The financial statements, which reflect the consolidated accounts of AT&T and its subsidiaries, and other financial information shown were prepared in conformity with generally accepted accounting principles. Estimates included in the financial statements were based on judgments of qualified personnel.

To maintain its system of internal controls, management carefully selects key personnel and establishes the organizational structure to provide an appropriate division of responsibility. In addition, informational programs are designed and used to ensure that policies, standards and managerial authorities are understood throughout the organization. Our internal auditors monitor compliance with the system of internal controls by means of an annual plan of internal audits. On an ongoing basis, the system of internal controls is reviewed, evaluated and revised as necessary in light of the results of constant management oversight, internal and independent audits, changes in the Company's business and other conditions.

Management believes that the system of internal controls, taken as a whole, provides reasonable assurance that (1) financial records are adequate and can be relied upon to permit the preparation of financial statements in conformity with generally accepted accounting principles, and (2) access to assets occurs only in accordance with management's authorizations.

The Audit Committee of the Board of Directors, which is composed of Directors who are not employees, meets periodically with management, the internal auditors and the independent auditors to review the manner in which these groups of individuals are performing their responsibilities and to carry out the Audit Committee's oversight role with respect to auditing, internal controls and financial reporting matters. Periodically, both the internal auditors and the independent auditors meet privately with the Audit Committee. These auditors also have access to the Audit Committee and its individual members at any time.

The financial statements in this annual report have been audited by Coopers & Lybrand, Independent Accountants. Their audits were conducted in accordance with generally accepted auditing standards and include a consideration of the internal control structure and selective tests of transactions. Their opinion is printed below.



Morris Tanenbaum  
Vice Chairman and Chief Financial Officer



Robert E. Allen  
Chairman of the Board and Chief Executive Officer

## **Report of Independent Accountants**

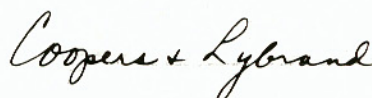
To the Shareowners of American Telephone and Telegraph Company:

We have audited the accompanying consolidated balance sheets of American Telephone and Telegraph Company and subsidiaries at December 31, 1989 and 1988, and the related consolidated statements of income and cash flows for the years ended December 31, 1989, 1988 and 1987. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of American Telephone and Telegraph Company and subsidiaries at December 31, 1989 and 1988, and the consolidated results of their operations and their cash flows for the years ended December 31, 1989, 1988 and 1987, in conformity with generally accepted accounting principles.

As discussed in Note C to the consolidated financial statements, the Company changed its method of accounting for depreciation in 1989.



1251 Avenue of the Americas  
New York, New York  
February 8, 1990



### **Board of Directors**

Robert E. Allen  
Chairman of the Board  
and Chief Executive Officer, AT&T

M. Kathryn Eickhoff  
President, Eickhoff  
Economics Inc.

Walter Y. Elisha  
Chairman and Chief Executive  
Officer, Springs Industries, Inc.

James H. Evans  
Retired Chairman and Chief  
Executive Officer,  
Union Pacific Corp.

Philip M. Hawley  
Chairman and Chief Executive  
Officer, Carter Hawley Hale  
Stores, Inc.

Edward G. Jefferson  
Retired Chairman and Chief  
Executive Officer, E. I.  
du Pont de Nemours and Co.

Belton K. Johnson  
Owner, Chaparrosa Ranch

Juanita M. Kreps  
Economist, Educator and former  
U.S. Secretary of Commerce

Drew Lewis  
Chairman and Chief  
Executive Officer,  
Union Pacific Corp.

Donald F. McHenry  
President, IRC Group, Inc.,  
Educator and former Ambassador  
to the United Nations

Donald S. Perkins  
Retired Chairman and Chief  
Executive Officer,  
Jewel Companies, Inc.

Henry B. Schacht  
Chairman and Chief Executive  
Officer, Cummins Engine Co., Inc.

Michael I. Sovern  
President, Columbia University

Morris Tanenbaum  
Vice Chairman of the Board and  
Chief Financial Officer, AT&T

Franklin A. Thomas  
President, The Ford Foundation

Randall L. Tobias  
Vice Chairman of the Board, AT&T

Rawleigh Warner, Jr.  
Retired Chairman and Chief  
Executive Officer, Mobil Corp.

Joseph D. Williams  
Chairman and Chief Executive  
Officer, Warner-Lambert Co.

Thomas H. Wyman  
Chairman, United Biscuits  
(Holdings) U.S. Ltd. and former  
Chairman and Chief Executive  
Officer, CBS Inc.

### **Executive Committee**

Robert E. Allen  
Chairman of the Board and  
Chief Executive Officer

W. Frank Blount  
Group Executive  
Communications Products

Harold W. Burlingame  
Senior Vice President  
Human Resources

Robert M. Kavner  
Group Executive  
Data Systems and  
Federal Systems

Marilyn Laurie  
Senior Vice President  
Public Relations

William B. Marx  
Group Executive  
Network Systems

Victor A. Pelson  
Group Executive  
Communications Services

Ian M. Ross  
President  
AT&T Bell Laboratories

Morris Tanenbaum  
Vice Chairman of the Board  
and Chief Financial Officer

Randall L. Tobias  
Vice Chairman of the Board

Sam R. Willcoxon  
Group Executive  
International

John D. Zeglis  
Senior Vice President  
General Counsel and  
Government Affairs

---

C. Perry Colwell  
Senior Vice President  
Financial Management

Roger F. Davis  
Vice President and  
Controller

S. Lawrence Prendergast  
Vice President and  
Treasurer

Robert E. Scannell  
Vice President—  
Law and Secretary

Business Unit Presidents are  
listed on pages 4 and 5





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