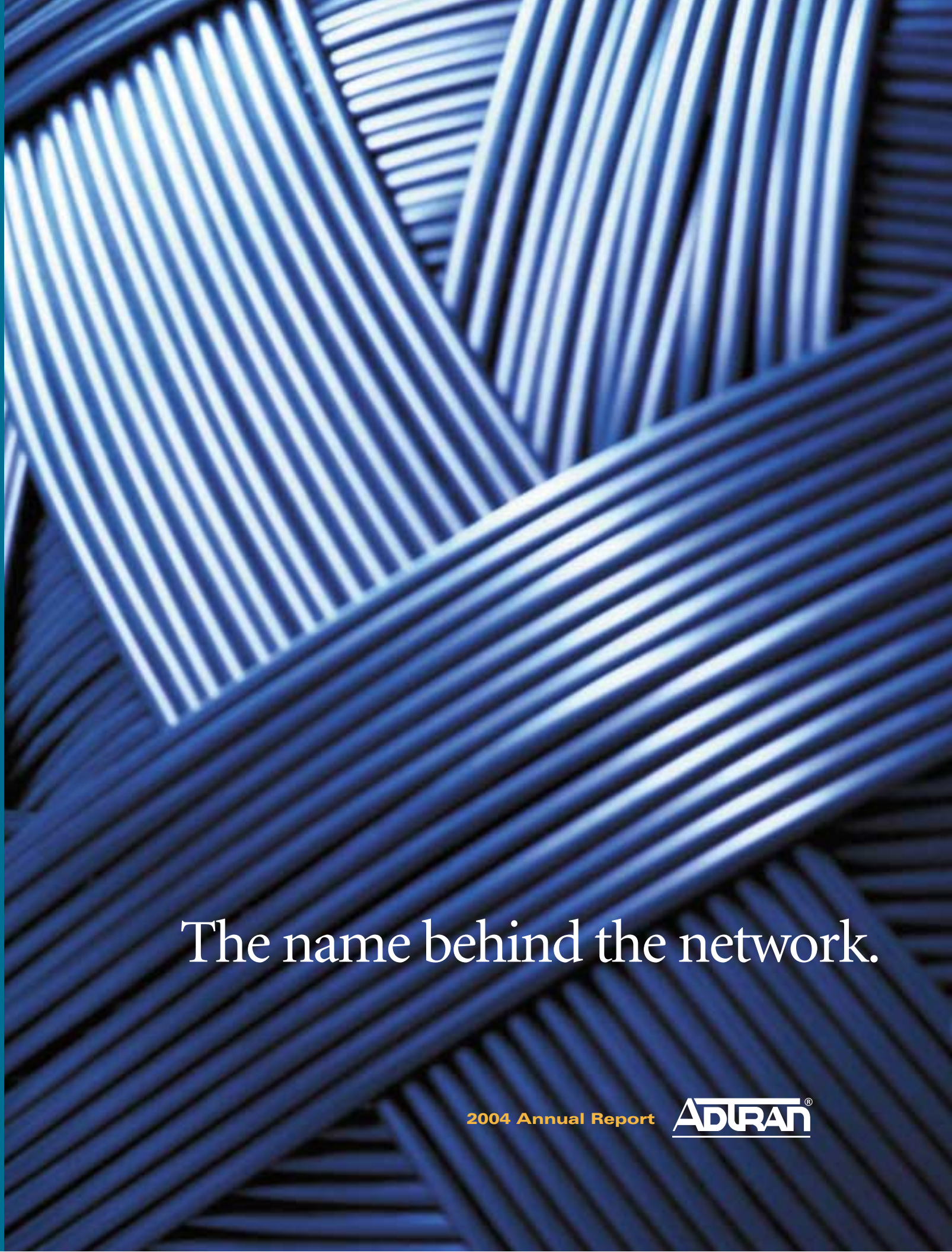
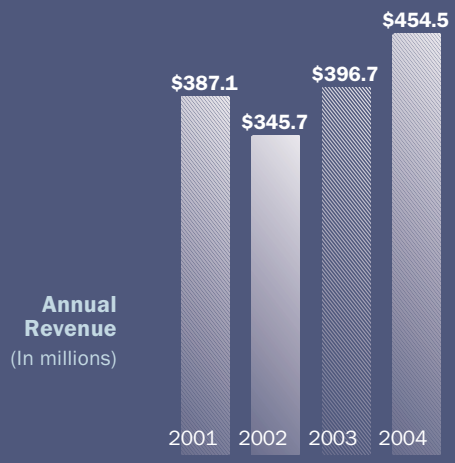

The name behind the network.
2004 Annual Report
ADTRAN®

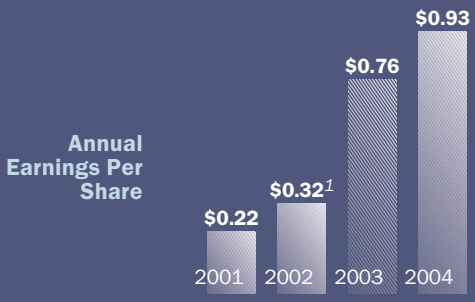
**Networking is now an integral part of our culture, and ADTRAN® is deeply entrenched in the business.** Our solutions are extensively deployed in the first/last mile of the access network, where millions of people transact each day. Every major service provider in the U.S., and many international ones, as well as thousands of enterprise and government organizations worldwide use ADTRAN solutions to enable voice, data, video, or Internet communications. As a result, it is highly probable that some part of your daily communications pass through an ADTRAN-enabled network.

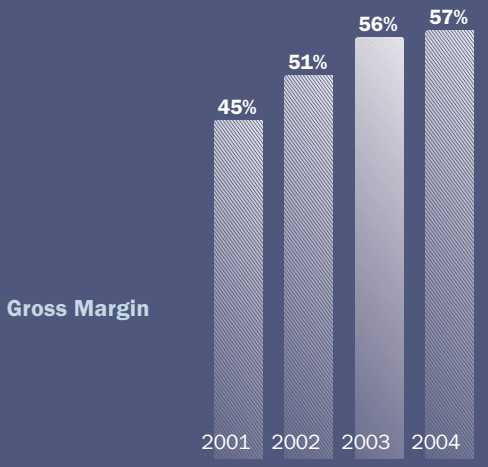
**NASDAQ: ADTN**

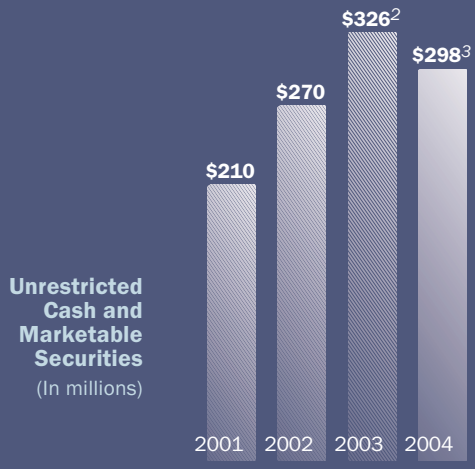
### Glossary of terms

**ADSL** Asymmetric Digital Subscriber Line
**AOS** ADTRAN Operating System
**ATM** Asynchronous Transfer Mode
**CO** Central Office
**CSU** Channel Service Unit
**DDS** Digital Data System
**DS3** Digital Signal Level 3
**DSL** Digital Subscriber Line
**DSLAM** Digital Subscriber Line Access Multiplexer
**DSU** Data Service Unit
**E1** International equivalent of T1
**EMS** Element Management System
**FCC** Federal Communications Commission
**FTTN** Fiber to the Node/Neighborhood
**Gbps** Gigabits per second
**HDSL** High-bit-rate Digital Subscriber Line
**HDTV** High-Definition Television
**IAD** Integrated Access Device
**ILEC** Incumbent Local Exchange Carrier
**IP** Internet Protocol
**IPTV** Internet Protocol Television
**ISDN** Integrated Services Digital Network
**IT** Information Technology
**LAN** Local Area Network
**M13** Multiplex 1-to-3
**Mbps** Megabits per second
**OC-3** Optical Carrier Level 3
**OC-12** Optical Carrier Level 12
**OC-48** Optical Carrier Level 48
**OSP** Outside Plant
**PBX** Private Branch eXchange
**PoE** Power over Ethernet
**QoS** Quality of Service
**SHDSL** Symmetric High-bit-rate Digital Subscriber Loop
**SMB** Small-to-Medium Business
**SONET** Synchronous Optical NETwork
**STS-1** Synchronous Transport Signal Level 1
**T1** Trunk Level 1
**T3** North American standard for DS3
**TDM** Time Division Multiplex
**VPN** Virtual Private Network
**VoIP** Voice over Internet Protocol
**WAN** Wide Area Network




## Consolidated Statements of Income Data

(In thousands, except per share amounts)

| Years Ended December 31 | 2004 | 2003 | 2002 | 2001 |
|---|---|---|---|---|
| Total sales | $454,517 | $396,676 | $345,725 | $387,081 |
| Income before provision for income taxes | $110,016 | $88,830 | $32,177 | $23,737 |
| Net income | $75,141 | $61,515 | $24,776 | $17,329 |
| Earnings per common share | $0.93 | $0.76 | $0.32 | $0.22 |

## Consolidated Balance Sheets Data

(In thousands)

| Years Ended December 31 | 2004 | 2003 | 2002 | 2001 |
|---|---|---|---|---|
| Working capital[4] | $266,371 | $220,069 | $203,511 | $217,387 |
| Total assets | $559,942 | $592,309 | $521,213 | $522,537 |
| Stockholders' equity | $466,637 | $493,821 | $435,212 | $437,628 |

*[1] Includes investment impairment charges of $7.4 million net of tax*

*[2] Net of $89 million in special and quarterly dividends paid in 2003*

*[3] Net of $81 million in stock repurchases and $25 million in dividend payments during 2004*

*[4] Working capital consists of current assets less current liabilities*

# Letter to Shareholders

**We are pleased to report that improved earnings, revenue, and margins once again positioned ADTRAN® among the best performing telecommunications equipment suppliers.** Looking back, we achieved considerable success in 2004, despite market dynamics that somewhat moderated our expectations for the year as it drew to a close.

Perhaps of more strategic importance to our shareholders, we believe our 2004 product development and marketing programs have positioned us to take full advantage of the impending wave of investment anticipated from our largest customers—U.S. service providers. Through public statements, these important customers have now confirmed their commitment to introduce next-generation services built on next-generation network architectures. These announcements have been encouraged by recent FCC rulings that have allayed many of their investment concerns. Next-generation access equipment, like ours, has also made it practical for them to deliver on-demand broadband services tailored to subscriber needs, while sharply reducing operating costs. We believe our position as the second largest supplier of broadband access equipment in the U.S. will serve as a major advantage as service provider spending accelerates.

## Sound financial results and growth

Year over year, ADTRAN's revenue increased 14.6 percent to $454.5 million, up from $396.7 million in 2003. We attribute the increase to growing acceptance of our DSL access multiplexers (DSLAMs), optical multiplexers, NetVanta® routers and switches, and to increasing market share gains in both traditional and packet-based DSL technologies. We were especially pleased with the acceptance of our new Total Access® Outside Plant (OSP) DSLAMs, introduced in late 2003. Two of the largest service providers in the U.S. have now adopted our OSP technology, with others expected to follow in 2005.

Earnings improved significantly in 2004, rising to $75.1 million for the year compared to $61.5 million for 2003, an increase of 22.1 percent. Fully diluted earnings per share grew from $0.76 in 2003 to $0.93 in 2004. Gross margins improved throughout the year, reaching a record 57.4 percent, up from 56.0 percent in 2003, and up from 50.6 percent in 2002. We were particularly pleased with the success of our continued attention to product cost reduction and to supply chain modernization efforts.

Net cash provided by operating activities was a healthy $85.8 million for the year. After dividend payouts of $25.1 million and stock repurchases of $81.0 million, unrestricted cash and marketable securities ended the year at a strong $298.0 million. With these resources, we remain solidly positioned to fund an aggressive product development agenda, as well as to fund future working capital needs that may arise with sustained growth.

## Adhering to strict policies of corporate governance

We are continuing with a disciplined program of compliance with the standards mandated by the Sarbanes-Oxley Act, including the Section 404 requirement that we document and test key internal controls over financial reporting, and also including our strict Code of Business Conduct and Ethics adopted in 2003. In our view, both measures are a reaffirmation of the high standards of ethical conduct we have enforced since our founding 19 years ago.

## Our operating divisions

Both of our operating divisions are focused upon delivering superbly engineered access equipment for network service providers and their enterprise customers. In 2004, both divisions invested aggressively in new product programs, responding to market drivers that are dramatically reshaping the network core, as well as its access nodes. Now in its very early stages, this transformation has presented us with some of the largest and most exciting opportunities in our history. We believe we have properly anticipated these opportunities and are well prepared to take advantage of them as a catalyst for growth in the future.

ADTRAN continued its long history of profitability in 2004, with a 22 percent increase in earnings to $0.93 per share.

## Carrier Networks Division

In our Carrier Networks Division (CN), our Total Access OSP DSLAMs have become an unchallenged market leader. They are essential to a network build-out that brings access nodes closer to subscribers, facilitating delivery of multiple channels of video (high-definition and standard TV), as well as voice and data. They are specifically designed to smooth the network's transition to Ethernet as its native transmission and switching technology. Already, this product line employs next-generation ADSL2+ technology that is capable of delivering service at rates up to 24 Mbps, more than enough for voice, data, and multiple channels of video.

With our success in the broadband access equipment market, we believe we are well positioned to support the network's transition to Ethernet, with minimal disruption of the existing network infrastructure. This includes appropriate accommodations in our highly regarded Total Access® Element

## ADTRAN At-A-Glance

**ADTRAN is a network access company.** We develop products and services that connect business and residential subscribers to high-speed communications networks supporting today's voice, data, video and Internet applications.

Our **Carrier Networks** Division supplies service providers with the equipment they need to deliver broadband services to business and residential subscribers. Service providers use our "access equipment" to connect central offices or remote terminals directly to the subscriber's terminating equipment.

- Broadband Access Platforms
- CO/Remote/OSP DSLAMs
- ATM/TDM Aggregation
- Fiber Access Platforms
- Fiber Add/Drop Multiplexers
- M13/STS-1 Multiplexers
- HDSL2/4 Technologies
- SHDSL and ADSL Technologies
- Integrated Access Devices
- Narrowband Access Platforms

Our **Enterprise Networks** Division supplies businesses, schools, government agencies, and other organizations with the internetworking equipment they need to create sophisticated local and wide area networks. These networks connect remote offices and mobile workers—enabling Internet access, telecommuting, and videoconferencing within an organization.

- Fast Ethernet/PoE Switches
- Gigabit Ethernet Switches
- Integrated Switch-Routers
- T1/Multi-T1/Dual DS3 Access Routers
- VPN/Firewall Devices
- Integrated Access Devices
- Fixed Wireless Radios
- Fiber Optic Connectivity
- T3/T1/E1 DSU/CSUs
- T3/T1/E1 Multiplexers

*ADTRAN's next-generation access equipment makes it practical for service providers to deliver on-demand broadband services tailored to subscriber needs, while lowering operating costs.*

Management System (EMS), now employed by six of the top seven service providers in the U.S. for real-time management of their access networks.

The CN Division has also become an important supplier of fiber optic products that facilitate the build-out of new network architectures in an incremental fashion. In 2004, we enhanced our fiber products to include OC-12 capability, Ethernet delivery, and ring support. As with our DSLAMs and other access equipment, our fiber products are engineered to fit seamlessly into today's network infrastructure and to facilitate its transition to Ethernet. In the future, we fully intend to be positioned among the leaders as fiber pushes relentlessly outward from the core to the subscriber's premises.

In 2004, we aggressively addressed the two most significant trends in networking today — the need for greater bandwidth and IP migration — with numerous, strategic product introductions.

**Enterprise Networks Division**

Throughout the year, the Enterprise Networks Division (EN) took advantage of its dominant share in traditional WAN connectivity market segments to fund its aggressive development of a broad, new family of internetworking products. With a multi-tier reseller channel numbering in the thousands, the EN Division is well prepared to expand sales of its internetworking product family to a loyal base of small-to-medium businesses (SMBs). Interestingly, our initial set of internetworking products has been found attractive by network service providers as well. For example, one overseas service provider is rolling out nationwide IP service from more than a thousand ADTRAN®-equipped exchanges, using internetworking gear from the EN Division.

EN Division products of note delivered in 2004 include our first Voice over IP (VoIP) access device. In the coming year, we intend to expand our presence in this market dramatically, including single, integrated units that are fully featured to render multi-box solutions a relic of the past.

All of the EN Division's internetworking products are now built upon a single, modern software code base: the ADTRAN Operating System (AOS). Now field-proven and robust, AOS is an increasingly valuable competitive advantage that can be deployed very favorably against incumbent suppliers. It enables much lower-cost solutions and adapts quickly to the new product configurations our customers seek. Our NetVanta® 1224R is a good example of that advantage. Designed to be a "network-in-a-box" for small and branch office applications, it is the industry's first integrated Ethernet switch, router, firewall, and CSU/DSU product that also offers optional VPN and dial backup capabilities.

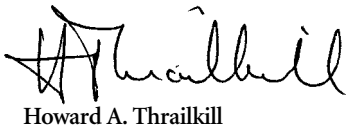
Sales of the EN Division's internetworking products quickened during the year, including wins at accounts equipping hundreds of network nodes. With a mature AOS software code base to build upon, and an accomplished engineering team, the EN Division looks forward to the grand challenge of displacing an entrenched competitor.

**The people of ADTRAN**

No annual report would be complete without acknowledging the many contributions of the people that have made ADTRAN a name respected by customers, suppliers, competitors, and the community that we share. We salute their dedication to ADTRAN's mission and their unwavering commitment to excellence.

Sincerely,

**Mark C. Smith**
Chairman and CEO



**Howard A. Thrailkill**
President and COO

# Meeting the need for speed in today's networks

*One of the most universal trends in networking today is a growing demand for bandwidth.* Increased dependency on the Internet as an informational and business tool, combined with the availability of new, content-rich applications, is forcing service providers to find ways to increase the capacity of their networks as demand from business and residential consumers grows. In 2004, our efforts were focused on helping customers expand their networks to handle ever-increasing loads of data, video, and voice traffic.

**Pushing broadband deeper in the network**

As a counter to cable and other competitive methods of broadband access, wireline service providers are launching aggressive campaigns to increase the capacity of their networks over the last mile. Most service providers are opting for a "deep fiber" strategy, where fiber is pushed far into the network, then high-speed DSL technologies are deployed over existing copper loops to the customer premises. In some networks, fiber is delivered directly to the home.

We believe ADTRAN is strongly positioned to benefit from this shift in deployment strategies. Our Total Access platforms are designed to support fiber strategies by allowing both copper and fiber connectivity. Furthermore, our systems are scalable to support service delivery in both rural and urban areas.

**DSL standards push copper to new limits**

In 2004, we introduced the second generation of our Total Access mini-and OSP DSLAMs. These devices are now equipped to support the new ADSL2+ standard, and effectively double the density of their predecessors. ADSL2+ is a DSL transport technology that achieves rates

*In some larger metropolitan areas, network utilization rates are approaching 70 percent, typically the threshold at which service providers invest in their networks.*

*TIA 2004 Telecommunications Market Review and Forecast*

of up to 24 Mbps, offering a broad range of new applications. Our DSLAMs can be optical- or fiber-fed, and allow for easy migration to Ethernet. These solutions are suited for extending broadband from the node to the customer premises in deep fiber deployment scenarios.

**Benefiting from growth in the wireless industry**

The high-speed wireless communications business continues to increase demand for ADTRAN® networking products. The growing usage of cell phones, pagers, and other personal communications services is resulting in increased demand for copper and fiber transport to and from cell sites.

ADTRAN's Total Access® System positions a network for cost-effective delivery of today's high-speed Internet services, while offering a clear cut path to the premium service offerings of the future.

To accommodate larger numbers of subscribers and higher speed voice/data services, wireless providers are migrating their networks to a standard known as third generation (3G). The typical high-speed 3G cell site can require up to four times the bandwidth of traditional sites. In 2004, as a result of increased demand for bandwidth in wireless markets, we saw increased demand in our traditional products, as well as newly developed optical products.

In 2004, several first-tier wireless service providers deployed our TRACER® license-free, fixed radios in their networks. These radios enable carriers to quickly and cost-effectively deploy temporary or permanent line-of-sight microwave connections at distances up to 30 miles. We expanded this product line significantly in 2004 and early 2005, increasing bandwidth and introducing a new line of user-configurable modular radios to support IP-based applications.

**Making optical access more affordable**

Fiber continues to permeate the network as wireless and wireline service providers expand network capacity in the last mile. Demand for our OPTI-6100™ fiber access multiplexer, introduced in 2003, increased this year as service providers continued to recognize its price/performance benefits in backhaul and transport applications.

OPTI-6100 is a compact, next-generation optical access platform. It offers service providers an extremely cost-effective solution to address current and emerging fiber applications. OPTI-6100 addresses the real needs of service providers seeking to expand service capacity and maximize backhaul efficiency. This solution is particularly effective for wireless and wireline providers wishing to offer their customers next-generation services with minimum capital outlay and maximum density.

New capabilities added to the OPTI-6100 in 2004 simplified interoperability with high-speed optical metro/regional rings, allowing service providers to easily and inexpensively connect more subscribers to their infrastructure. We also increased the network bandwidth of the OPTI-6100 to OC-12 (622 Mbps). We plan to continue our aggressive investment in optical access technologies in coming years.

**Enabling more profitable high-speed Internet services**

While the transition to premium services is taking place, reliable, high-speed DSL Internet service remains a cornerstone of data revenue for most service providers. Our Total Access DSLAMs support these service deployments to business and residential con-

## Engineering high-speed, business-class service offerings

**Widespread Internet usage and other bandwidth-intensive applications are driving business demand** for higher-speed, lower-cost network services. Incumbent and competitive providers alike are competing aggressively for this market by offering new, high-speed business services.

**Market conditions spur competition**
With competition increasing in primary market segments, many service providers are launching new service initiatives based on the ADTRAN Total Access platform These initiatives are typically designed to retain existing customers, attract new ones, and combat competitive threats. Our Total Access platform is flexible enough to provide quick response under competitive market conditions; in many cases improving competitive posture almost immediately.

**Jointly engineered solutions produce cost-savings**
In some cases, we are actively engaged in the engineering of the new high-speed service offerings, working in close partnership to develop the best possible solution based on the provider's existing network infrastructure.

In most cases, our off-the-shelf Total Access DSLAMs provide a viable, low-cost solution for deploying today's most popular high-speed services. When necessary, the Total Access platform can be customized to accommodate unique network characteristics. Because of the flexible architecture of the Total Access platform, we are often able to deliver a custom engineered solution in a matter of weeks rather than months. Our goal, in every case, is to engineer an innovative approach that provides reliable, end-to-end connection between the exchange and customer premises, while lowering operating costs.

sumers in a more cost-efficient manner than is possible with other solutions. In order to maintain profitability on lower-cost DSL service offerings, providers need a solution that accommodates different types of technologies, lowers upfront costs, and accommodates incremental growth. Total Access DSLAMs meet this criteria.

Total Access DSLAMs are now being used by most of the largest service providers in the U.S. With models for central office, remote terminal, and outside plant installation, Total Access DSLAMs are being adopted for use in a wide range of deployment scenarios across incumbent, competitive, and independent service provider networks. During 2004, we believe our company moved into the number two market position in broadband deployment in the U.S.

### Extending service footprints

Our second-generation Total Access mini- and OSP DSLAMs are critical to service providers trying to reach a greater percentage of potential broadband subscribers. Designed for installation in compact and non-traditional outside plant locations, these platforms enable DSL delivery to subscribers previously viewed as unreachable or uneconomical to service, at a cost that protects service provider profitability.

During 2004, ADTRAN remained the leading supplier of environmentally sealed, line-powered OSP DSLAMs to satisfy extended reach DSL connectivity needs in an economically feasible package. At year-end, this product line had been widely adopted by service providers across the U.S.

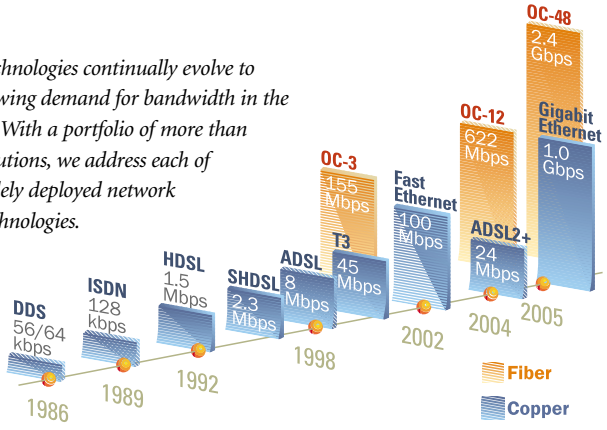
### Delivering world-class business services

In countries outside of North America, our Total Access DSLAM with SHDSL is being adopted as an economical way to meet strong demand for E1 (2.048 Mbps) business services over a single copper pair. SHDSL has a capacity of up to 2.3 Mbps per pair; making it a worldwide solution for more effective delivery of E1 services. In 2004, we added enhanced SHDSL support to our portfolio, allowing us to position our product sets for this universally accepted service.

### Leading the market in broadband-to-business equipment

T1/HDSL is the primary transmission technology behind dedicated voice and data services to businesses. Our solutions in this technology category continued to contribute significantly to revenue in 2004. We maintained our strong leadership position in this market, with products currently in use by

*Access technologies continually evolve to meet growing demand for bandwidth in the network. With a portfolio of more than 1,300 solutions, we address each of these widely deployed network access technologies.*



## Preparing networks for VoIP, IPTV, and other premium services

**Faced with increasing competition from cable and other broadband media**, wireline service providers are aggressively upgrading their networks to accommodate the delivery of high-speed, IP-based broadband services to business and residential subscribers. This initiative is expected to require capital investment in excess of $9 billion over the next three years.

**New applications demand data-centric networks**
Widespread use of the Internet and adoption of high-definition television (HDTV) and other data services continues to increase demand for high-speed, low-cost broadband services. Since data traffic already outweighs voice in terms of bits, and data applications are growing faster than voice, service providers are shifting to IP-centric architectures to optimize their networks for data transport. Today's typical wireline provider offers DSL service at approximately 1.5 Mbps. New architectures will enable the delivery of data services at rates ranging from 10 to 30 Mbps.

**New DSLAM capability enables IP deployments**
ADTRAN offers a cost-effective solution for delivering high-speed data services over IP architectures. In 2004, we enhanced our Total Access® DSLAM product line to accommodate IP service delivery. Highly suitable for fiber-to-the-node (FTTN) deployment strategies, these devices serve as the connection point between the fiber feed from the central office and the high-speed copper line to the customer premises. Offering numerous interfaces and service delivery methods, Total Access DSLAMs position a network for cost-effective delivery of today's high-speed Internet services, while offering a clear-cut path to VoIP, IPTV, and other premium service offerings.

every major ILEC and numerous independent and competitive providers. More cost-efficient versions of our HDSL2 and HDSL4 technologies, introduced in 2003, fueled growth in these profitable, high-volume product lines during 2004.

Our NetVanta® internetworking product set addresses the needs of today's cost-conscious IT professional by lowering initial equipment costs, and over the longer term, lowering total cost of ownership.

### Building value into the SMB network

In 2004, we continued to address the value-oriented enterprise customer with our NetVanta internetworking solutions. Our mission in this market is to provide the complete internetworking product set required to implement more cost-efficient, high-speed remote office and SMB networks. In line with that strategy, in 2004 we introduced numerous new products, including a line of managed Ethernet switches, a network-in-a-box access platform, higher bandwidth routers, and a new generation of Internet security appliances.

We lead the internetworking market in terms of value offered in this product series. In addition to very attractive pricing (typically half the price of competing brand name solutions), NetVanta solutions compete effectively on issues such as warranty, technical support, maintenance upgrades, and add-on options.

### Satisfying the demand for higher enterprise bandwidth

Until 2004, our NetVanta IP access router line included models to support up to two T1s (up to 3 Mbps) of bandwidth in enterprise and carrier applications. We expanded this product line in 2004 to include higher capacity models to support dual DS3 (up to 90 Mbps aggregate) and multi-T1 (up to 16 Mbps) applications.

Also in 2004, we addressed the need for a business-class DSL device to support higher speed Internet access from small branch or home offices. By adding ADSL/ADSL2/ADSL2+ (up to 24 Mbps) capability into our NetVanta router line, we introduced a solution that offers business-class functionality, at a cost that compares favorably with low-end, low-function ADSL modems. We anticipate market acceptance by IT managers seeking to enforce corporate IT policies at small branch and home offices, and by service providers using ADSL routers in bundled DSL services.

# Powering the revolution in IP access

*As networks migrate toward integrated communications and entertainment services*, one transport technology is emerging as the clear winner—Internet Protocol or IP. Motivated by constant pressure to lower the cost of telecommunications offerings, service providers and businesses alike are transitioning their networks to packet-based IP technologies. This transition gained significant momentum in 2004.

**Anticipating the shift to data-centric networks**

For years, voice was the dominant type of traffic in the network, and networks were engineered to carry voice first, then integrate data (such as fax machines and dial-up Internet) into that architecture as necessary. Over the past few years, networks have shifted from a voice-centric mix to a data-centric mix. Today, data is the dominant type of traffic, and networks are changing to carry data first, then integrate voice into the data architecture. The result is Voice over IP (VoIP).

Transporting voice over data-centric networks requires changes in the network architecture. Main components of the VoIP model from the desktop to the central office include: IP phones, IP servers, voice-enabled routers and switches, and IP-enabled DSLAMs—equipment capable of maintaining the quality of voice as it passes through devices originally designed for data. The VoIP network must guarantee different qualities of service (QoS) for different applications in order to maintain the integrity of voice, data, video, and other mission-critical applications.

This trend is producing high demand for a wide range of IP-capable, QoS-enabled products across enterprise and service provider networks.

*Growth in Ethernet networking is causing fundamental changes in the access network — a blending between the last mile and the first. ADTRAN is one of the few companies in North America best positioned to capture this business.*

In 2004, we introduced a number of products to support the deployment of IP-based services, including carrier-class DSLAMs, optical multiplexers, fixed-wireless radios, IADs, and enterprise-class switches and routers.

**Accommodating Ethernet in the first mile**

The most popular method of delivering IP service is Ethernet, a standard already used extensively in local area networks at the customer premises. Because of its broad acceptance, lower deployment costs, and higher bandwidth capacity, Ethernet is now migrating into the first mile of the service providers' network as an alternative to traditional transport technologies.

Ethernet-enabled DSLAMs are a critical component of the IP network model. In 2004, we enhanced our Total Access® DSLAM portfolio by adding Gigabit Ethernet functionality. These products are now equipped to support next-generation IP applications, and to provide an evolutionary path to higher bandwidth switching and multicast video applications. Service providers with an installed base of Total Access DSLAMs can easily upgrade to IP functionality. We also added Ethernet over SONET functionality to our OPTI-6100™ optical multiplexer.

**Using VoIP to enhance competitive position**

In order to retain and expand their customer base, providers constantly seek to add new, more attractive service offerings. VoIP represents such an opportunity for most service providers. In 2004, we added VoIP capability to our Total Access IAD product line. The addition of this functionality creates a single, cost-effective platform for extending hosted PBX and other VoIP services to new customers, without replacing existing phones (a major cost savings for the customer).

Total Access IADs are widely deployed by competitive and Internet service providers. We currently hold majority market share positions in both TDM and packet-based versions of this technology. With this new capability, our large installed customer base can readily upgrade their networks to enable VoIP deployment to thousands of existing subscribers, immediately improving their competitive posture.

**Reducing connectivity costs using VoIP**

Today, many businesses are migrating their networks to VoIP in an effort to reduce the cost of connectivity. VoIP presents a compelling business case for most organizations, offering benefits such as significantly reduced circuit costs, integrated communications, greater empowerment of users, and reduced IT support.

Our NetVanta® internetworking series targets a significant market opportunity, where even small market share gains would represent meaningful revenue increases to our company.

We offer a full suite of internetworking solutions marketed under the NetVanta umbrella to enable VoIP in the enterprise segment of the network. Our switches, routers, and integrated switch-routers are fully VoIP-ready devices. Many of our development efforts in the Enterprise Networks Division over the course of 2004 focused on strengthening VoIP functionality. Improvements to the operating system governing these products in 2004, as well as the introduction of Power over Ethernet switches in early 2005, strongly position this line for widespread deployment in VoIP networks.

**Securing market position in internetworking**

Our NetVanta internetworking product portfolio is now firmly established in the enterprise local and wide area networking market as a viable alternative to competing brand name products. As first evidence of our success, in the second quarter of 2004, our routers moved into the

## Converging standards enhance global positioning

**In the past, most of the standards governing telephony and data services in the U.S. were separate** from the standards governing these same activities worldwide. T1/HDSL, the predominant data services technology in the U.S., is unique to the U.S. and certain other areas of the world. This standard and others were applied regionally; thus, technologies varied from country to country. With the advent of the Internet, and the subsequent need to develop standards to support packetized data transport, more "globalized" standards have evolved.

**Rapid adoption of global standards**
Today, ADSL, SHDSL, Ethernet, and other global standards are being rapidly adopted as service providers migrate revenue-generating telephony services to the new end-to-end IP services now in high demand. These standards ensure that thousands of different networks will work together seamlessly and transparently. In spite of its technical complexity, this new infrastructure will be customer friendly and as easy to use as the "plain old telephone service" that has been in place for decades.

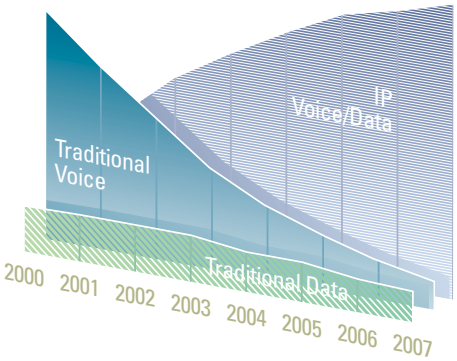
**Global application of new products**
The globalization of standards simplifies our efforts to conduct business outside of North America. In the past, products initially developed for U.S. deployment required modification in order to comply with varying standards around the world. With the emergence of global standards in both service provider and enterprise networks, our full portfolio of solutions becomes readily available to a significantly greater number of markets worldwide.

number two market position for less-than-1-Gbps access routers based on number of units sold worldwide.* In addition, revenue in this product portfolio nearly doubled year over year.

With new product introductions during 2004, our NetVanta lineup now includes Ethernet switches, integrated switch-routers, low-, medium-, and high-speed access routers, and VPN/Internet security appliances. Each product line offers ways to lower equipment acquisition costs, lower recurring monthly service costs, or both. Given today's price-sensitive atmosphere, we believe the strong value case surrounding these products—low purchase price, low cost of ownership, rich feature set, and high-touch technical support from an established and reputable supplier—represent a strong business opportunity for the future.

### Improving time-to-market for internetworking lines

In 2004, we solidified the integration of the ADTRAN® Operating System (AOS) into our NetVanta internetworking product lines. A common operating system simplifies product development efforts and shortens time to market for new products and features. It also offers the highest possible level of LAN-to-WAN integration for the enterprise IT manager. AOS now boasts an impressive list of features and functionality, and is scheduled for regular enhancement three times each year. We believe our investment in AOS over the past two years strongly positions our company for the timely release of new products to aggressively address the SMB internetworking market.




*Integrated services over IP will eventually result in converged Internet access, mail services, voice, and video—all simultaneously transported over Ethernet. By 2007, IP traffic will represent 83 percent of all network traffic in the U.S.*

Source: RHK Telecom Economics

### Entering the Ethernet switch market with an aggressively priced portfolio

In April 2004, with the launch of the NetVanta 1000 Series, we officially entered the Layer 2 Ethernet switch market focused on managed SMB applications. The market for this class of Ethernet switch is estimated to be approximately $5.1 billion† in 2005. We entered this market with the intention of offering a value-oriented alternative to the large incumbent supplier dominating this space.

The first products introduced in this portfolio included business-class, managed Layer 2 Ethernet switches. Shortly thereafter, we launched the NetVanta integrated switch-router, a unique interpretation of this technology that combines everything needed for branch office connectivity in a single chassis. Early in 2005, with the introduction of our Power over Ethernet (PoE) versions of these products, we improved our price advantage on this lineup to more than 50 percent.

The introduction of the NetVanta 1000 Series is another step in our commitment to supply a full line of products to address WAN-to-the-desktop connectivity in the SMB network.

*Source: Dell 'Oro Group, 2004
†IDC, *Worldwide LAN Switch 2004-2008 Forecast Update*, July 2004

# Financial Results



**Forward-Looking Statements**

This annual report contains forward-looking statements which reflect management's best judgment based on factors currently known. However, these statements involve risks and uncertainties, including the successful development and market acceptance of new products, the degree of competition in the market for such products, the product and channel mix, component costs, manufacturing efficiencies, and other risks discussed in this annual report under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations" and detailed in our annual report on Form 10-K for the year ended December 31, 2004, and in our other filings with the Securities and Exchange Commission. These risks and uncertainties could cause actual results to differ materially from those in the forward-looking statements included in this annual report.

While we are not incorporating anything on our website by reference into this annual report, more information about ADTRAN and copies of our filings with the Securities and Exchange Commission can be found at *www.adtran.com*