stock outstanding as of March 1, 2004.

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D. C. 20549

FORM 10-K

FOR ANNUAL AND TRANSITION REPORTS PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

X	ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934	
	For the Fiscal Year Ended December 31, 2003	
	TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934	
	For the Transition Period fromto	
	Commission file number 0-24612	
	ADTRAN, Inc. (Exact name of registrant as specified in its charter)	
	Delaware (State of Incorporation) (State of Incorporation) (I.R.S. Employer Identification Number)	
	901 Explorer Boulevard, Huntsville, Alabama 35806-2807 (Address of principal executive offices, including zip code)	
	(256) 963-8000 (Registrant's telephone number, including area code)	
	Securities registered pursuant to Section 12(b) of the Act: None	
	Securities registered pursuant to Section 12(g) of the Act: Common Stock, \$.01 par value	
of 19	cate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange A 934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subjuct filing requirements for the past 90 days. Yes \boxtimes No \square	
cont	cate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be ained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this n 10-K or any amendment to this Form 10-K.	
Indi	cate by check mark whether the registrant is an accelerated filer (as defined in Exchange Act Rule 12b-2). Yes 🗵 No 🗆	

DOCUMENTS INCORPORATED BY REFERENCE

\$1,658,937,672 based on a closing market price of \$25.81 as quoted on the Nasdaq National Market. There were 79,564,064 shares of common

The aggregate market value of the registrant's outstanding common stock held by non-affiliates of the registrant on June 30, 2003 was

ons of the Proxy Stat	ement for the Annual I	Meeting of Stockh	olders to be held	on April 15, 2004	are incorporated	herein by referenc	e in

ADTRAN, Inc. Annual Report on Form 10-K For the Fiscal Year Ended December 31, 2003

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PART I

ITEM 1. BUSINESS

Introduction

ADTRAN®, Inc. develops products and services that simplify access to today's telecommunications networks. Our high-speed, digital transmission products improve the operation of, and reduce the costs associated with, building and using communications networks. Small and large telephone companies, long-distance service providers, and other network service providers use our products to deliver high-speed data, voice, video, and Internet services to their customers in a cost-efficient manner. Businesses, schools, and government agencies use our products to connect facilities, remote offices, and mobile workers, enabling corporate information services, Internet access, telecommuting, and videoconferencing within their organizations.

We were incorporated under the laws of Delaware in November 1985, and commenced operations in January 1986. We are headquartered in Cummings Research Park in Huntsville, Alabama. The mailing address at our headquarters is 901 Explorer Boulevard, Huntsville, Alabama, 35806. The telephone number at that location is (256) 963-8000.

Products and Services

We maintain two operating divisions based on our product and service offerings: the Carrier Networks Division and the Enterprise Networks Division. While many of the technologies we develop can be used to build products for both divisions, the divisions serve two distinct markets. These divisions support sales in the United States and in other countries around the world, and operate as two reportable segments. In 2003, sales of Carrier Networks products accounted for 67.4% of revenue, while sales of Enterprise Networks products accounted for 32.6%. Sales to countries outside of North America are included in these aggregate divisional figures, but when accounted for separately, comprise 4.9% of total revenue. For more financial information about these divisions and geographic areas, see Note 9 to the consolidated financial statements included in this report.

Our product portfolio consists of approximately 1,300 different high-speed telecommunications devices. In both service provider and enterprise networks, these products are used primarily in the "last mile," or local loop, of the telecommunications network. The last mile is that segment of the network that connects end-user subscribers to a service provider's closest facility. Our products typically connect two ends of a telecommunications circuit, and serve to transmit, route, and switch the data, voice, and video traffic traveling across that circuit. The bandwidth of the circuit, along with the type of transmission format being used, determines the type of equipment needed.

We develop, market, and support high-speed digital transmission products, including those used to upgrade slower, established networks, and those used to deploy new broadband networks. Our products may be used in copper, fiber, or wireless networks both in the United States and abroad.

We classify our products into three separate categories:

- Systems
- High bit-rate Digital Subscriber Line (HDSL)/T1
- Digital Business Transport (DBT)

Our Systems category includes a broad range of products that deliver network access from the service provider's central office to the desktop of the user. Products in this category include broadband access platforms, narrowband access platforms, optical access multiplexers and service units, M13/STS-1 multiplexers, central office and remote DSLAMs, IMA concentrators, integrated access devices (IADs), Internet security/firewall appliances, access routers, Ethernet switches, and wireless radios.

Our HDSL/T1 category includes a wide variety of Time Division Multiplex (TDM) products used to deploy T1/E1, fractional T1/E1, and Symmetrical HDSL (SHDSL) services to businesses over dedicated, leased-line copper. Products in this category include carrier-based HDSL, HDSL2, and HDSL4 solutions for the central office, outside plant, and customer premises, global TDM-based SHDSL solutions, as well as enterprise-based T1 and T3 Data Service Units/Channel Service Units (DSU/CSUs) and multiplexers.

Our DBT category includes legacy products used to deploy Integrated Services Digital Network (ISDN), Digital Data Service (DDS), and Frame Relay services. Products include our market-leading range-extension DDS and ISDN (Total Reach®) technologies, as well as legacy four-wire DDS and ISDN.

Carrier Networks

Our Carrier Networks Division specializes in system-based solutions that domestic and global service providers use to meet demand for a variety of data, voice, and Internet services, while reducing the cost of initial deployment and ongoing operations. These products are typically installed throughout the service provider's network in locations such as central offices or network operations centers, remote terminals, pole-mounted cabinets, telephone poles or cross boxes, and the customers' premises.

In the late 1990s, service providers concentrated capital expenditures on expanding and updating core switching facilities. Originally built to handle primarily voice applications, these facilities have been modified to accommodate large volumes of Internet and other high-speed, bandwidth-intensive data. The high-volume switching and transmission products used in a service provider's core network are typically supplied by larger, integrated systems equipment suppliers, such as Lucent, Nortel, and Alcatel. With the core network in place, service providers are now trying to generate additional revenue by connecting greater numbers of customers to that infrastructure by offering broadband digital services. Our Carrier Networks Division supplies the network access products service providers require to connect their customers to core transmission and switching networks.

The flagship product line produced by our Carrier Networks Division is the Total Access® System. Our multi-function access systems offer service providers platforms that can accommodate demand for a variety of high-speed Internet, voice, data, and video services for business and some residential applications. The Total Access system consists of many different products that can be used separately or in tandem to reach more customers, offer a greater number of services, offer higher-speed services, and make better use of network resources. These products connect to copper and fiber optic network backbones, making them suitable for installation in many parts of the network, and enabling deployment of a wide range of voice, data, and video services around the world.

Total Access features a distributed architecture that fits the decentralized networking model most carriers are using today both in the United States and abroad. This modular, scalable, and geographically distributed system offers advantages such as lower start-up costs, more flexible service deployment, greater network interface options, increased bandwidth, grow-as-you-go modularity, and centralized network management.

T1/HDSLx Access

The transmission method behind many dedicated, leased-line voice and data services to businesses is T1, which defines a method to transmit data and voice at 1.544 megabits per second, or Mbps, and E1, the European equivalent, which transmits at 2.048 Mbps. T1 and E1 are widely deployed in most business networks used today. High bit-rate Digital Subscriber Line, or HDSLx, is a local loop transmission technology that simplifies the provisioning of T1/E1 services over these circuits. We are the industry's leading supplier of T1/HDSLx technology in the United States, with equipment in use by every incumbent local exchange carrier, or ILEC, and many independents and competitive service providers.

Our HDSL/HDSL2/HDSL4 products implement T1/E1 over two-wire or four-wire transport facilities at extended distances. Our T1/HDSLx and E1/HDSLx products are available in form factors to fit our Total Access System, as well as other equipment shelves commonly deployed by ILECs and other service providers.

Packet-Based DSL Access

To meet residential demand for high-speed Internet access, and to meet the corresponding business demand to deliver high-speed Internet content, service providers are deploying packet-based varieties of DSL transport technologies. Our Total Access DSL Access Multiplexer, or DSLAM, helps ILECs, competitive service providers, local and regional independent telephone companies, and global communications companies deliver Asymmetric DSL, or ADSL, a technology that permits faster downloads and slower uploads to accommodate Internet usage for residential and small business environments; and Symmetrical HDSL, or SHDSL, a technology that offers businesses high-speed symmetrical network access.

In recent years, service providers have progressively outfitted their networks for the delivery of more complex DSL services over the copper pair, especially in highly populated areas. During 2003, primarily in response to competitive pressure, many service providers turned their attention to reaching a greater percentage of potential subscribers in less densely populated areas.

We began addressing lower density market requirements in 2002 with our Total Access 1200 Series of Mini-DSLAMs. These devices require a low initial investment, but accommodate growth as subscribers are added, making DSL more affordable to deploy. Our products for this application gained wide acceptance in 2003 as service providers began realizing their price/performance benefits.

In 2003, we expanded our DSLAM portfolio to include models with the ability to deliver IP packets toward the network. Commonly used in local area networks (LANs) at the customer premises, IP is now migrating into the last mile of the service providers' network as an alternative to ATM (Asynchronous Transfer Mode), the traditional DSL transport protocol. To further assist service providers in reaching DSL coverage goals, ADTRAN introduced the Total Access 1124, an environmentally sealed, line-powered DSLAM designed for outdoor environments such as pedestals, telephone poles, and cross-boxes. These devices allow service providers to reach a portion of their potential subscriber base that was previously unfeasible due to economics or reach.

Because major service providers are deploying high volumes of new DSL products each day, and because packet-based technologies often fall outside the scope of the service providers' legacy operating systems, many service providers require a separate automated provisioning and management tool for these deployments. To satisfy this need, we offer the Total Access Element Management System, a high-performance network management system supporting our Total Access DSLAM platforms.

Also in 2003, we introduced the Total Access HDX, a new high-density architecture for our Total Access DSLAMs. With this new offering, Total Access DSLAMs can now be configured to accommodate up to 1,400 ADSL subscribers on a single network uplink, a metric that improves the competitive position of this product in the larger central offices of metropolitan service areas.

In countries outside of North America, our Total Access SHDSL solution is being adopted as an economical way to meet strong demand for E1 business services over a single pair of copper wires. SHDSL has a capacity of up to 2.3 Mbps per pair, making it a global symmetrical standard that accommodates E1 signaling rates. ADTRAN was a primary contributor to the international SHDSL standardization effort that concluded in 2001, and the first to introduce a SHDSL product.

Optical Access Multiplexing

Multiplexers are products that combine individual communications channels into a common band or stream for transmission. In 2003, we expanded our optical access product line with the introduction of the OPTI-MX [™], a higher density, higher capacity companion to the OPTI-3 [™] fiber multiplexer we introduced in December 2001. The OPTI-MX increases the network bandwidth of our optical offering to OC-12 (622 Mbps), and supports the widest range of customer services we have offered to date, including Ethernet over SONET. This functionality is packaged in an extremely compact chassis, overcoming many of the size and cost issues associated with traditional optical access equipment.

Our OPTI-3 multiplexer aggregates three copper DS3 channels onto a fiber OC-3 feed. DS3 is a digital signal level that supports transmission of 672 individual digital signals at 45 Mbps, and OC-3 is an optical carrier standard that transmits data at 155 Mbps. The OPTI-3 offers service providers a smaller, more cost-effective alternative to traditional devices used for this purpose.

Both the OPTI-3 and the OPTI-MX are non-proprietary devices that comply with the SONET optical interface standard governing the interworking of optical transmission products. As a result, both devices work with other SONET multiplexers in existing installations, and supply important environmental alarms and network management information to the operations center or central office.

M13/STS-1 Multiplexing

In response to demand for improved space and network efficiency in copper networks, in February 2003, we introduced the MX2820 $^{\text{\tiny TM}}$, an evolution of our MX2800 $^{\text{\tiny TM}}$ and MX2810 $^{\text{\tiny TM}}$ multiplexers. This product offers innovations previously unavailable in this category, such as advanced cable management, one-to-one redundancy, and simplified network management. While this product performs the very commonplace function of merging multiple smaller circuits onto a single larger circuit for transport to the central office, it does so in less space and at a lower cost than was previously available.

Our MX2800/2810 M13 multiplexers aggregate multiple T1 or E1 channels into a single larger channel, such as DS3 in copper applications, or Synchronous Transport Signal Level 1 (STS-1). The MX2800/2810 offers service providers a smaller, more cost-effective alternative to traditional devices used for this purpose.

IMA Aggregation

Inverse Multiplexing over ATM, or IMA, is a method of aggregating DSL traffic from multiple subscribers onto a single circuit for transport to the central office switch. By moving the consolidation point closer to the subscriber, the service provider reduces the cost of backhauling this traffic. In addition, by consolidating ATM traffic into fewer, more efficiently utilized interfaces, the service provider conserves valuable switch ports. This capability is available in our Total Access 3000 DSLAM.

POTS/DLC Services

Our Total Access System includes solutions for deploying narrowband (from 64 Kilobits per second, or Kbps, to 1.544 Mbps) services, including Plain Old Telephone Services (POTS) for voice, and special services, such as analog data or foreign exchange. Service providers use Digital Loop Carriers (DLCs), or remote cabinets, to consolidate large volumes of voice lines close to the customer origin. Our high-density platforms for POTS deployment through a DLC increase the number of customers that can be served through the same facilities.

An important part of the distributed DLC concept is the ability to move voice traffic from narrow-bandwidth circuits, originating at the customer's site, onto broader bandwidth circuits traveling back to the central office. Our products provide the concentration and multiplexing technologies needed to consolidate narrowband signals, where most of the service providers' demand resides, into higher level bandwidth signals for backhaul to the switching facilities.

Loop Deployment

We offer a comprehensive line of plug-in transmission, repeater, extension, and termination devices for T1, E1, Frame Relay, ISDN, and DDS services in a variety of form factors to fit our customers' needs. Our Total Reach ISDN and DDS products extend digital services over one twisted pair of copper wires, and resolve deployment issues related to extensive repeater engineering, bridged tap determination and removal, and power requirements.

Network Management

We develop and support sophisticated systems to centralize the configuration, provisioning, and management of our network access products. The Total Access Element Management System is a web-based, Java application used to configure, monitor, and control Total Access equipment installed on local loop circuits. This high-performance system ensures smooth communication with the service provider's central management system to minimize truck rolls and reduce operating costs.

Technical Services and Support

Carrier Network products sold in the United States carry up to a 10-year return-to-factory warranty, pre- and post-sales telephone technical support, and certain training options. Warranty and support options vary in countries outside of the United States. Customers seeking additional support, or a complete turnkey solution, may choose to contract our professional services group for configuration, pre-assembly, and installation of their system.

Enterprise Networks

Our Enterprise Networks Division specializes in internetworking solutions to help IT professionals implement reliable, high-speed voice, data, Internet, and video connectivity over diverse wide and local area networks, while keeping costs in check. Domestic and global business enterprises, academic organizations, and government agencies use these products to implement reliable, high-speed communications between geographically dispersed locations or employees. These products are typically installed in equipment rooms, switching closets, or on desktops of users, and help to connect headquarters, branch offices, telecommuters, and mobile users to corporate information resources.

Our enterprise network products physically connect the user's equipment – telephones, PBXs, fax machines, computers, and videoconferencing gear – to the local or wide area network. We address all of the commonly used networking technologies, at speeds ranging from 56/64 Kbps to 1 gigabyte (GB) over wireline, fiber, and wireless facilities. Products range from simple, single-circuit termination units to more complex integrated access devices, Ethernet switches, access routers, multiplexers, Virtual Private Network devices, firewalls, Frame Relay bandwidth management platforms, and license-free wireless radios. Functionality ranges from low-cost, unmanaged devices to modular, remotely-manageable devices. Emergency service restoral is offered for a number of platforms.

Our broad range of equipment permits customers to satisfy their applications (data, voice, videoconferencing, or combined data/voice) using the most cost-efficient solution possible. In wide area networks using multiple transmission technologies to support different geographic locations, the customer can usually obtain all the necessary equipment from us. Many of the products available from the Enterprise Networks Division have applications in service provider networks as well, especially service providers outside of North America. These products are typically installed by the service provider at the customer premises as part of a bundled service package.

In the enterprise networks market, the need for expanded communications services, combined with level budgets or diminished budgets, has led to an unprecedented interest in value as opposed to bleeding-edge technology. A more cautious attitude has resulted in a greater reliance on established technologies and an increased willingness to consider lower cost service and equipment alternatives.

ADTRAN is addressing this value-oriented enterprise networking market with a line of internetworking equipment that now includes access routers, Ethernet switches, firewall/Internet security appliances, Frame Relay bandwidth management, and integrated access devices. These products function as the cornerstone of today's cost-conscious network architectures, and form the basis for growth in enterprise networks in the future. Each internetworking product line offers ways to lower equipment acquisition costs, lower recurring monthly service costs, or both.

Ethernet Switching

The introduction of our new NetVanta ™ 1000 Series of managed Ethernet switches in 2003 further strengthened our internetworking portfolio, and firmly established us in the internetworking space between the wide area circuit and the user's desktop. The first products in this series are standards-compliant, fully managed Layer 2 switches with Virtual Local Area Network (VLAN) support, Quality of Service (QoS) capability, Wide Area Network (WAN) interface, and Gigabit uplink capability. These switches include functionality to support the newest IP telephony applications, such as voice and video over IP. Available at a price point traditionally associated with low-end, low-function switches, NetVanta 1000 switches represent an extremely competitive entry in this market. All NetVanta Series products are built around the ADTRAN Operating System (OS), a common software base that allows scalability and flexibility as product lines expand.

IP Access Routing

Our NetVanta 3000 Series of Internet Protocol, or IP, access routers serve the purpose of providing Internet access or interconnecting corporate locations over IP, Frame Relay, or leased-line infrastructures, then routing data to its destination computer. These devices include features to secure the network against cyber attacks; to secure the privacy of data as it is transported across the Internet, and to restore communications in the event of equipment failure. These devices may be used by businesses or service providers in both domestic and global installations. In 2003, we expanded our single T1 access router line to include a model with dual T1 network interfaces and dual local area network interfaces. Following in the footsteps of its predecessors, this dual-T1 model is engineered to sell at a price point significantly below that of leading brand name routers, offering customers a viable router alternative backed by an established and reputable supplier.

Internet Security

Our NetVanta 2000 Series is a family of products that combines firewall, Virtual Private Networking (VPN), and switching technologies to secure the transport of data over the Internet and private IP networks. The product line includes models to connect mobile workers, remote offices, and regional office/corporate headquarters, without the security concerns normally associated with shared networks. VPN is a service that provides customers with the attributes of a private network and is a cost-effective replacement for private leased-line networks.

Frame Relay, Performance Monitoring, and Traffic Shaping

We offer a comprehensive line of Frame Relay connectivity products. Frame Relay is the most popular networking technology used by businesses today. Basic connectivity products support data, converged voice and data, routing, and disaster recovery at speeds ranging from 56 Kbps to 2.3 Mbps. In the IQ $^{\text{TM}}$ series, more advanced functionality lets network operators or service providers identify and classify traffic types (including e-mail, file transfer, and music downloads), allocate bandwidth to certain applications, and quantify the quality of service delivered on these Frame Relay circuits.

Integrated Access

Integrated access devices are a product class commonly used to reduce telecommunications costs by collapsing multiple voice and data circuits into a more streamlined and less expensive topology. Convergence also simplifies network administration and enables new features and services. We offer the ATLAS ™, Total Access 600 Series, Total Access 750/850, and TSU Series of integrated access devices to accommodate both enterprise and service provider applications. Product architectures are scalable, and various models offer a wide range of features and capacities. These solutions enable service providers to address small and medium-sized business customers with a high-speed, integrated voice, data, and Internet solution.

In 2003, we continued to win market share with these industry-leading lines of IADs. Bundling agreements with ILECs and major IXCs contributed to our increase in market share, along with new feature releases that expanded our market opportunity in TDM, ATM, and IP networks. We also launched the next generation of two of our most popular IADs, reducing cost and improving margin.

Fiber Connectivity

Our optical transport products for the enterprise support (1) point-to-point dark fiber termination, where the customer seeks to connect intracampus buildings over a fiber optic cable; and (2) copper-to-fiber conversion, where the customer seeks to connect existing copper-wired buildings to fiber optic cable.

Leased-Line Connectivity

Leased-line networks, which provide dedicated point-to-point circuits leased from the service provider, are widely deployed in business. Circuits are available for DDS at speeds of 56 Kbps, ISDN at 128 Kbps, T1 at 1.544 Mbps, E1 at 2.048 Mbps, and T3 at 45 Mbps. ADTRAN supplies equipment in each of these technology categories for data, voice, and video applications. Models range from economy to full-featured with options for routing, network management, and emergency service restoral.

Broadband Fixed Wireless

We compete in a portion of the wireless communications market known as license-free fixed wireless. License-free fixed wireless installations are permanent or temporary point-to-point microwave radio links classified as unlicensed by the FCC. Our TRACER ® Series radios support voice and data over broadband DS3; dual, quad, and octal T1; single and dual E1; and Ethernet networks. Installed by a service provider or a business, fixed wireless links serve to overcome geographic barriers, establish emergency communications, or improve the efficiency of service providers' backhaul operations.

Network Management

We develop and support sophisticated systems to centralize the configuration and management of our wide area connectivity and internetworking products. Our N-Form ™ Network Management Software Suite, a web-enabled product, allows network operators to monitor network activity, modify equipment settings, and isolate problems from a remote location using a variety of popular management interfaces.

Installation and Maintenance Services

We offer a comprehensive and flexible installation and maintenance services program designed to protect customers' networks from unnecessary downtime. ADTRAN Custom Extended Services (ACES) guarantees priority access to technical support engineers, with 30-minute call back and on-site product replacement in as few as four hours, depending on the service plan selected.

Technical Services and Support

Each enterprise network product sold in the United States carries a five-year return-to-factory warranty, pre- and post-sales telephone technical support, and certain training options. Warranty and support options vary in countries outside of the United States. Customers seeking additional support may choose to purchase our extended installation and maintenance service plans and/or fee-based training classes.

Customers

Customers of our Carrier Networks Division in the United States include all of the major regional telephone companies, also known as ILECs or RBOCs (Regional Bell Operating Companies); large and small independent telephone companies; competitive service providers; Internet service providers or ISPs; long distance service providers (known as Interexchange Carriers or IXCs); and wireless service providers. Worldwide, this division also serves incumbent carriers and competitive service providers in selected regions.

ILECs and most other service providers require product approval prior to adopting a vendor's products for use in their networks. Therefore, we are involved in a constant process of submitting new and succeeding generations of products for approval. In the past, we have been successful in obtaining such approvals, and our products are widely deployed in service provider networks. However, we cannot be certain that we will obtain such approvals in the future, or that sales of such products will continue to occur. Further, any attempt by an ILEC or other service provider to seek out additional or alternative suppliers, or to undertake, as permitted under applicable regulations, the production of such products internally, could have a material adverse effect on our operating results.

End users of our Enterprise Networks Division include a large number of private and public organizations in numerous vertical markets, including finance, retail, food service, government, education, healthcare, manufacturing, military, transportation, hospitality, and energy/utility. However, because the majority of the products from this division are sold through channels, we reach those end customers through a network of partners comprised of several large technology distributors and numerous value added resellers as described in "Distribution, Sales and Marketing" below.

The major customers of ADTRAN include the following:

Alltel Corporation AT&T Corp. BellSouth Corporation Ingram Micro, Inc. Qwest Communications International SBC Communications, Inc.
Sprint Corporation
Tech Data Corporation
Telstra Corporation
Verizon Communications, Inc.

Single customers comprising more than 10% of our revenue in 2003 include SBC Communications, Inc. at 22.9%, Verizon Communications, Inc. at 15.0%, and Sprint Corporation at 13.8%. No other customer accounted for 10% or more of our sales in 2003.

Distribution, Sales and Marketing

We sell our Carrier Networks products in the United States to our major customers through a combination of a direct sales organization and a non-exclusive distribution network. The direct sales organization supports ILEC customers and has offices located throughout the country. Sales to most competitive service providers and independent telephone companies are fulfilled through several major technology distribution companies.

Sales to service providers involve lengthy product qualification and standardization processes that can extend for several months or years. Subsequent orders, if any, are typically placed under single or multi-year supply agreements that are generally not subject to minimum volume commitments. Service providers generally prefer having two or more suppliers for most products, so individual orders are generally subject to competition based on some combination of total value, service, price, delivery, and other terms.

The majority of Enterprise Networks products are sold in the United States through a non-exclusive distribution network which consists, at the top level, of several major technology distributors and system integrators, such as Tech Data, Ingram Micro, and Sprint North Supply. These large distribution organizations then sell to an extensive network of value-added resellers or system integrators.

Value added resellers and system integrators may be affiliated with us as a channel partner, or they may purchase from the distributor in an unaffiliated fashion. Affiliated partners participate with us at one of three levels based on sales volume and other factors to receive benefits such as product discounts, co-op funds, technical support, and training. We maintain field offices nationwide to support both distributors and value added resellers and system integrators. The Enterprise Networks Division also maintains a direct sales organization to generate demand within large, national accounts.

Outside of the United States, both carrier and enterprise products are sold through distribution arrangements customized for each region. Each region is supported by an ADTRAN field office that offers sales and support functions, and in some cases, warehousing and manufacturing support.

Our field sales organizations and distributors receive support from headquarters-based marketing, sales, and customer support groups. Under certain circumstances, other headquarters personnel may become involved in sales and other activities.

Research and Development

Rapidly changing technologies, evolving industry standards, changing customer requirements, and continuing developments in telecommunications service offerings characterize the markets for our products. Our continuing ability to adapt to these changes, and to develop new and enhanced products, is a significant factor in maintaining or improving our competitive position and our prospects for growth. Therefore, we continue to make significant investments in product development.

During 2003, 2002, and 2001, product development expenditures totaled \$58.1 million, \$56.3 million, and \$58.9 million, respectively. Because our product development activities are an important part of our strategy and because of rapidly changing technology and evolving industry standards, we expect to sustain, and possibly increase, product development activities in 2004. To date, all product development expenses have been charged to operations as incurred.

We strive to deliver innovative digital network access solutions that lower the cost of deploying services, increase the level of performance achievable with established infrastructures, reduce expense for our customers, increase network bandwidth and functionality, and extend network reach. Our development process is conducted in accordance with ISO 9001 and TL 9000, which are the international standards for quality management systems for design, manufacturing, and service.

We develop most of our products internally, although we sometimes license intellectual property rights for use in certain products. Internal development gives us more control over design and manufacturing issues related to our products, and therefore, closer control over product cost. Our ability to continually reduce product costs is an important part of our overall business strategy. Our product development efforts are often centered on entering a market with improved technology, with products offered at a price point lower than established market price. We then compete for market share. We continually re-engineer successive generations of the product to improve margin. In the extremely competitive markets characteristic of 2001, 2002 and 2003, this strategy has allowed us to meet customers' stringent price requirements, while remaining profitable.

To maintain or increase our revenues and margins while continuing this strategy, we must continue, in some combination, to increase unit sales volumes of existing products, introduce and sell new products, or reduce our per unit costs. Per unit costs must be reduced at rates sufficient to compensate for the reduced revenue effect of continuing reductions in average sales prices. While we cannot be certain that we will be able to maintain or increase revenues or margins by increasing unit sales volumes of our products, introducing and selling new products, or reducing our per unit costs, our approach has been generally successful in the past.

Product development activities center on products to support both existing and emerging technologies in the telecommunications industry in segments of our markets that we consider being viable revenue opportunities. We are actively engaged in developing and refining technologies to support data, voice, and video transport over TDM, ATM, and IP network architectures. Our work includes fiber optic transport, edge routing, integrated access, ADSL, SHDSL, HDSL4, Ethernet, network security, and network management and services.

A centralized research function supports product development efforts company-wide. This group provides guidance to our various product design and engineering teams in digital signal processing technologies, computer simulation and modeling, CAD/CAM tool sets, custom semiconductor design, industry standards, and technological forecasting.

Many telecommunications issues, processes, and technologies are governed by standards development organizations (SDOs). These SDOs consist of representatives from various manufacturers, service providers, and testing laboratories working to establish specifications and compliance guidelines for emerging telecommunications technologies. We are an active participant in several SDOs, and have been instrumental in driving worldwide standards development in many technologies, especially DSL. A significant contributor to both HDSL2 and SHDSL standards, we developed much of the technology incorporated into these standards.

We are also involved in other standards development efforts related to maximizing the bandwidth potential of the copper pair to enable new applications. We have led the effort to provide higher rates with SHDSL, which has recently been approved by the International Telecommunication Union-Telecommunications Standards Section (ITU-T); and are playing a key role in the development of an ATM-based loop bonding standard for increasing the rates delivered by ADSL. We are also continuing work in the Institute of Electrical and Electronics Engineers (IEEE) committee defining the guidelines for Ethernet in First Mile, which we expect to reach completion later this year.

Manufacturing

The principal steps in the manufacturing process are the purchase and management of materials, assembly, testing, final inspection, packing, and shipping. In 2003, we continued to purchase parts and components for the assembly of some products from a large number of suppliers through a worldwide sourcing program. In addition, we have begun to shift to a process of allowing contract manufacturers to purchase the materials that they use in the assembly of our products. Certain key components used in our products are currently available from only one source, and other key components are available from only a limited number of sources. In the past, we have experienced delays in the receipt of certain key components, which has resulted in delays in related product deliveries. We attempt to manage such risks through developing alternative sources, through engineering efforts designed to obviate the necessity of certain components, and by maintaining close personal contact and building long-term relationships with each of our suppliers.

We rely on subcontractors in Mexico and China for assembly of printed circuit board assemblies, sub-assemblies, chassis, enclosures and equipment shelves, and, more recently, also to purchase the raw materials used in and for such assembly. Beginning in 2001, we transitioned our manufacturing of low-volume, high-mix, or complex printed circuit board assemblies to our manufacturing site in Huntsville, Alabama. We continue to build and test all new product prototypes and initial production units for all products in Huntsville, then later transfer the production of high-volume, low-mix printed circuit board assemblies to our subcontractors. We plan to continue to transition the purchasing of materials for assembly and final testing of a significant portion of our lower-priced products to subcontractors in Mexico or China. Such assembly typically can be done by subcontractors at an equal or lower cost than if we assembled such items internally, which furthers our goal of being a low-cost, high-quality provider in the industry. Subcontract assembly operations can contribute significantly to production cycle times, but we believe we can respond more rapidly to uncertainties in incoming order rates by selecting assembly subcontractors having significant reserve capacity and flexibility. We have consolidated our subcontractors to a few whose proven flexibility and quality meet our requirements.

The reliance on third-party subcontractors for the assembly of our products involves several risks, including the unavailability of, or interruptions in access to, certain process technologies and reduced control over product quality, delivery schedules, manufacturing yields, and costs. These risks may be exacerbated by economic or political uncertainties, terrorist actions, or by natural disasters in foreign countries in which our subcontractors may be located. We currently have limited foreign exchange risks, as we conduct the majority of all transactions with foreign vendors or customers in United States dollars.

Shipment of products to customers occurs from our facilities in Huntsville, Alabama. Our facilities are certified pursuant to ISO 9001:2000, TL 9000 Release 3.0, and certain other telephone company standards, including those relating to emission of electromagnetic energy and safety specifications.

Competition

We compete in markets for networking and communications equipment for service providers and businesses, government agencies, and other commercial enterprises worldwide. Our products and services support the transfer of data, voice, and video across service providers' copper, fiber, and wireless infrastructures, and across wide area networks, local area networks, and the Internet.

The markets for our products are intensely competitive. Numerous competitors exist in each of our product segments. New manufacturers have entered the markets in recent years offering products that compete with ours. Under the intensely competitive conditions of the past two years, some of our competitors have consolidated or ceased operation. In addition, certain companies have, in recent years, increased consumer acceptance of alternative communications technologies, such as coaxial cable and cellular-based services. Competition might further increase if new companies enter the market, or existing competitors expand their product lines.

For our Carrier Networks Division, factors influencing the markets in which we currently compete or may compete in the future include:

- The ability to help the customer solve networking problems within the confines of restrained capital budgets;
- The ability to deliver solutions that fit the distributed networking model being deployed by most service providers;
- The ability to deliver solutions at attractive price points;
- The ability to deliver reliability and redundancy, especially for higher bandwidth products;
- The ability to adapt to new network technologies as they evolve;
- The ability to compete effectively with large firms with greater resources;
- The ability to deliver products when needed by the customer;
- The ability to deliver responsive customer service, technical support, and training; and
- The ability to assist customers requiring pre-assembled, turnkey systems.

Competitors in the carrier networks arena include large, established firms such as Fujitsu Limited, Nortel Networks, Alcatel, Siemens, and Cisco Systems, Inc., as well as a number of smaller, specialized firms such as Carrier Access Corporation and ADC Telecommunications.

For our Enterprise Networks Division, factors influencing the markets in which we currently compete or may compete in the future include:

- The ability to satisfy the customer's need for a cost-efficient alternative to established internetworking suppliers;
- The ability to satisfy the customer's need to utilize the most cost-effective combination of transmission technologies to connect geographically dispersed locations;
- The ability to increase network performance and lower the customer's cost for communications services and equipment;
- The ability to add capacity and migrate to new or different technologies without a major system upgrade;
- The ability to continue to develop and support established platforms, and to offer products to address new networking technologies in a timely manner;
- The ability to deliver reliability and system backup, especially for higher bandwidth products;
- The ability to adapt to new network technologies as they evolve;
- The ability to deliver products when needed by the customer;
- The ability to deliver responsive customer service, technical support, and training; and
- The ability to assist customers requiring hands-on installation and maintenance.

Competitors in the enterprise networks area include Nortel Networks, Netopia, Inc., Siemens, Enterasys Networks, Kentrox, Paradyne, Quick Eagle Networks, Carrier Access Corporation, Larscom, Visual Networks, Inc., Cisco Systems, Inc., SonicWALL, Inc., WatchGuard, and NetScreen Technologies, Inc. Some of these companies compete in a single product segment, while others compete across multiple product lines.

Our company has been able to achieve leading market share positions in wide area connectivity solutions for integrated access devices, and for T1 and DDS DSU/CSU (Data Service Units/Channel Service Units).

Backlog and Inventory

A substantial portion of our shipments in any fiscal period relate to orders received in that fiscal period and firm purchase orders released in that fiscal period by customers under agreements containing non-binding purchase commitments. Further, a significant percentage of orders require delivery within 48 hours. These factors result in very little order backlog. We believe that because we fill a substantial portion of customer orders within the fiscal quarter of receipt, our backlog is not a meaningful indicator of actual sales for any succeeding period.

To meet this type of demand, we maintain a substantial finished goods inventory. We have implemented advanced supply chain management systems to manage the production process. Our practice of maintaining sufficient inventory levels to assure prompt delivery of our products increases the amount of inventory that may become obsolete. The obsolescence of such inventory may require us to write down the value of the obsolete inventory, which may have an adverse effect on our operating results.

Employees

As of December 31, 2003, we had 1,574 full-time employees in the United States and 29 full-time employees in our international subsidiaries, located in Canada, China, Europe, and Australia. Of our total employees, 268 were in sales, marketing and service; 390 were in research and development; 839 were in manufacturing operations and quality assurance; and 106 were in administration. None of our employees are represented by a collective bargaining agreement, nor have we ever experienced any work stoppage. We believe that our relationship with our employees is good.

Proprietary Rights

The ADTRAN corporate logo is a registered trademark of ADTRAN. The name "ADTRAN" is a registered trademark of ADTRAN. A number of our product identifiers and names are also registered. We also claim rights to a number of unregistered trademarks.

We have ownership of at least 116 patents related to our products and have an additional 122 patents pending. We will continue to seek additional patents from time to time related to our research and development activities. We do not derive any material amount of revenue from the licensing of our patents.

We protect our intellectual property and proprietary rights in accordance with good legal and business practices. We believe, however, that our competitive success will not depend on the ownership of intellectual property, but instead primarily on the innovative skills, technical competence, and marketing abilities of our personnel.

The telecommunications industry is characterized by the existence of an ever-increasing number of patent litigation and licensing activities. While there are currently no intellectual property lawsuits existing or pending by or against ADTRAN, it is possible that third parties may initiate litigation against us in the future, resulting in costly litigation and/or judgments. Any intellectual property infringement claims, or related litigation against or by us, could have a material adverse effect on our business and operating results.

Available Information

A copy of this Annual Report on Form 10-K, as well as our Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and any amendments to these reports, are available free of charge on the Internet at our web site, www.adtran.com, as soon as reasonably practicable (generally, within one day) after we electronically file these reports with, or furnish these reports to, the Securities and Exchange Commission. The reference to our web site address does not constitute incorporation by reference of the information contained on the web site, which information should not be considered part of this document.

Risk Factors

The Private Securities Litigation Reform Act of 1995 provides a safe harbor for forward-looking statements made by or on behalf of ADTRAN. ADTRAN and its representatives may from time to time make written or verbal forward-looking statements, including

statements contained in this report and our other filings with the SEC and in our reports to our stockholders. Generally, the words, "believe," "expect," "intend," "estimate," "anticipate," "will," "may," "could" and similar expressions identify forward-looking statements. We caution you that any forward-looking statements made by or on our behalf are subject to uncertainties and other factors that could cause such statements to be wrong. Some of these uncertainties and other factors are listed below (many of which we have discussed in prior SEC filings). Though we have attempted to list comprehensively these important factors, we caution investors that other factors may prove to be important in the future in affecting our operating results. New factors emerge from time to time, and it is not possible for us to predict all of these factors, nor can we assess the impact each factor or combination of factors may have on our business.

You are further cautioned not to place undue reliance on those forward-looking statements because they speak only of our views as of the date the statements were made. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

The following are some of the risks that could affect our financial performance or could cause actual results to differ materially from those expressed or implied in our forward-looking statements:

We must continue to update and improve our products and develop new products in order to compete and to keep pace with improvements in telecommunications technology.

The markets for our products are characterized by rapidly changing technology, evolving industry standards, and continuing improvements in the telecommunications service offerings of common service providers. If technologies or standards applicable to our products, or common service provider offerings based on our products, become obsolete or fail to gain widespread commercial acceptance, our existing products under development may become obsolete or unmarketable.

Moreover, the introduction of products embodying new technologies, the emergence of new industry standards, or changes in common service provider offerings could adversely affect our ability to sell our products. For instance, we offer a large number of products that apply primarily to the delivery of high-speed digital communications over the local loop over copper wire. We compete favorably with our competitors by developing a high-performance line of these products. Recently, we have begun marketing products that apply to fiber optic transport in the local loop. We expect, however, that deployment of coaxial cable and cellular transport in the local loop will increase. Also, non-traditional providers, such as cable television companies, are increasing their presence in the local loop. To meet the requirements of these new delivery systems and to maintain our market position, we may have to develop new products or modify existing products.

Our sales and profitability in the past have resulted to a significant extent from our ability to anticipate changes in technology, industry standards and common service provider offerings, and to develop and introduce new and enhanced products. Our continued ability to adapt will be a significant factor in maintaining or improving our competitive position and our prospects for growth. We cannot assure you that we will be able to respond effectively to changes in technology, industry standards, common service provider offerings or new product announcements by our competitors. We also cannot assure you that we will be able to successfully develop and market new products or product enhancements, or that such products or enhancements will achieve market acceptance. Any failure by us to continue to anticipate or respond in a cost-effective and timely manner to changes in technology, industry standards, common service provider offerings, or new product announcements by our competitors, or any significant delays in product development or introduction, could have a material adverse effect on our future profitability and our ability to market our products on a timely and competitive basis.

We do not engage in long-term research and development processes, and as a consequence may miss certain market opportunities enjoyed by larger companies with substantially greater research and development efforts.

Our research and development efforts are focused primarily on the refinement and redefinition of transmission technologies, which are currently accepted and commonly practiced. Most of our research and development efforts result in improved applications of technologies for which demand already exists or is latent. We do not, for the most part, engage in long-term speculative research projects, which represent a vast departure from the current business practices of our key customers. This includes pioneering new services and participating in advance field trials or demonstration projects for new technologies. Our strategy, while producing a more predictable revenue stream, could result in lost opportunity should a new technology achieve rapid and widespread customer acceptance.

Our dependence on a limited number of suppliers may prevent us from delivering our products on a timely basis, which could have a material adverse effect on customer relations and operating results.

Certain raw materials and key components used in our products are currently available from only one source, and others are available from only a limited number of sources. The availability of these raw materials and supplies is subject to market forces beyond our control. From time to time, there may not be sufficient quantities of raw materials and supplies in the marketplace to meet customer demand. Many companies utilize the same raw materials and supplies as we do in the production of their products. Companies with more resources than our own may have a competitive advantage in obtaining raw materials and supplies due to greater buying power. These factors can result in reduced supply, higher prices of raw materials, and delays in the receipt of certain of our key components, which in turn may generate increased costs, lower margins, and delays in product delivery, with a corresponding adverse effect on sales, customer relationships, and revenue. Furthermore, due to general economic conditions in the U.S. and globally, our suppliers may experience financial difficulties, which could result in increased delays, additional costs, or loss of a supplier. We attempt to manage these risks through developing alternative sources, through engineering efforts designed to obviate the necessity of certain components, and by building long-term relationships and close personal contact with each of our suppliers. However, we cannot assure you that delays in or failures of deliveries of key components, either to us or to our contract manufacturers, and consequent delays in product deliveries, will not occur in the future.

Our dependence on subcontractors may result in reduced control over product quality, delayed delivery of products and/or increased manufacturing costs, each of which could negatively affect customer relations and operating results.

We rely on subcontractors in Mexico and China for the assembly of printed circuit board assemblies, subassemblies, chassis, enclosures and equipment shelves, and, more recently, also to purchase the raw materials used in and for such assembly. We are heavily dependent on two of these subcontractors. This reliance on third-party subcontractors for the assembly of our products involves several risks, including the unavailability of or interruptions in access to certain process technologies and reduced control over product quality, delivery schedules, transportation interruptions, manufacturing yields, and costs. These risks may be exacerbated by economic or political uncertainties or by natural disasters in foreign countries in which our subcontractors may be located. To date, we believe that we have successfully managed the risks of our dependence on these subcontractors through a variety of efforts, which include seeking and developing alternative subcontractors while maintaining existing relationships. However, we cannot assure you that delays in product deliveries will not occur in the future because of shortages resulting from this limited number of subcontractors or from the financial or other difficulties of such parties. The inability to develop alternative subcontractors if and as required in the future, or the need to undertake required retraining and other activities related to establishing and developing a new subcontractor relationship, could result in delays or reductions in product shipments which, in turn, could have a negative effect on our customer relationships and operating results.

We compete in markets that have become increasingly competitive, which may result in reduced gross profit margins and market share.

The markets for our products are intensely competitive. Additional manufacturers have entered the markets in recent years to offer products in competition with us. Additionally, certain companies have, in recent years, developed the ability to deliver coaxial cable and cellular transmission, especially in high-density metropolitan areas. Competition would further increase if new companies enter the market or existing competitors expand their product lines. Some of these potential competitors may have greater financial, technological, manufacturing, sales and marketing, and personnel resources than we have. As a result, these competitors may be able to respond more rapidly or effectively to new or emerging technologies and changes in customer requirements, withstand significant price decreases, or devote greater resources to the development, promotion, and sale of their products than we can. In addition, our present and future competitors may be able to enter our existing or future markets with products or technologies comparable or superior to those that we offer. An increase in competition could cause us to reduce prices, decrease our market share, require increased spending by us on product development and sales and marketing, or cause delays or cancellations in customer orders, any one of which could reduce our gross profit margins and adversely affect our business and results of operations.

We depend heavily on sales to certain customers; the loss of any of these customers would significantly reduce our revenues and net income

Historically, a large percentage of our sales have been made to ILECs (also formerly known as RBOCs) and major independent telecommunications companies. In 2003, these customers continued to comprise a large percentage (approximately 59.8%) of our revenue. As long as the ILECs and other service providers represent such a substantial percentage of our total sales, our future success will significantly depend upon certain factors which are not within our control, including:

• the timing and size of future purchase orders, if any, from these customers;

- the product requirements of these customers;
- the financial and operational success of these customers;
- the impact of legislative and regulatory changes on these customers;
- the success of these customers' services deployed using our products; and
- the impact of work stoppages at these customers.

Sales to our large customers have, in the past, fluctuated and may fluctuate significantly from quarter to quarter and year to year. The loss of, or a significant reduction or delay in, sales to any such customer or the occurrence of any such sales fluctuations could have a material adverse effect on our business and results of operations. Further, any attempt by an ILEC or other service provider to seek out additional or alternative suppliers or to undertake, as permitted under applicable regulations, the production of such products internally, could have a material adverse effect on our operating results.

The lengthy approval process required by ILECs and other service providers could result in fluctuations in our revenues.

In the industry in which we compete, a supplier must first obtain product approval from an ILEC or other service provider to sell its products to them. This process can last from six to 18 months depending on the technology, the service provider, and the demand for the product from the service provider's subscribers. Consequently, we are involved in a constant process of submitting for approval succeeding generations of products, as well as products that deploy new technology or respond to new technology demands from an ILEC or other service provider. We have been successful in the past in obtaining such approvals. However, we cannot be certain that we will obtain such approvals in the future or that sales of such products will continue to occur. Furthermore, the delay in sales until the completion of the approval process, the length of which is difficult to predict, could result in fluctuations of revenue and uneven operating results from quarter to quarter or year to year.

Consolidation and deterioration in the competitive service provider market could result in a significant decrease in our revenue.

We sell a moderate volume of products to competitive service providers, relative newcomers to the telecom industry, who compete with the established ILECs. The competitive service provider market is overbuilt, and is experiencing a process of consolidation and closure. Many of our competitive service provider customers do not have a strong financial position and have limited ability to access the public financial markets for additional funding for growth and operations. If one or more of these competitive service providers fail, we could face a loss in revenue and an increased bad debt expense, due to their inability to pay outstanding invoices, as well as the corresponding decrease in customer base and future revenue. Furthermore, significant portions of our sales to competitive service providers are made through independent distributors. The failure of one or more competitive service providers could also damage a distributor to the point that the distributor could also experience business failure and/or default on payments to us.

Increased sales volume in international markets could result in increased costs or loss of revenue due to factors inherent in these markets.

We are in the process of expanding into international markets, which currently represent 4.9% of our net sales, and we anticipate increased sales from these markets. We currently maintain regional and sales offices outside of North America in Dublin, Ireland; Melbourne, Australia; Beijing, Guangzhou, and Hong Kong, China; and Bad Homburg, Germany. A number of factors inherent to these markets expose us to significantly more risk than domestic business, including:

- local economic and market conditions;
- exposure to unknown customs and practices;
- potential political unrest;
- foreign exchange exposure;
- unexpected changes in or impositions of legislative or regulatory requirements;

- less regulation of patents or other safeguards of intellectual property; and
- difficulties in collecting receivables and inability to rely on local government aid to enforce standard business practices.

Any of these factors, or others, of which we are not currently aware, could result in increased costs of operation or loss of revenue to us.

Our success depends on our ability to reduce the selling prices of succeeding generations of our products.

Our strategy is to attempt to increase unit sales volumes and market share each year by introducing succeeding generations of products having lower selling prices and increased functionality as compared to prior generations of products. To maintain or increase our revenues and margins while continuing this strategy, we must continue, in some combination, to increase sales volumes of existing products, introduce and sell new products, or reduce our per unit costs at rates sufficient to compensate for the reduced revenue effect of continuing reductions in the average sales prices of our products. We cannot assure you that we will be able to maintain or increase revenues or margins by increasing unit sales volumes of our products, introducing and selling new products, or reducing our per unit costs.

Our failure to maintain rights to intellectual property used in our business could adversely affect the development, functionality, and commercialization of our products.

Our future success depends in part upon our proprietary technology. Although we attempt to protect our proprietary technology by contract, trademark, copyright and patent registration, and internal security, these protections may not be adequate. Furthermore, our competitors can develop similar technology independently without violating our proprietary rights. From time to time we receive and may continue to receive notices from third parties, including some of our competitors, claiming that we are infringing upon third-party patents or other proprietary rights. We cannot predict whether we will prevail in any litigation over third-party claims, or whether we will be able to license any valid and infringed patents on commercially reasonable terms. Any of these claims, whether with or without merit, could result in costly litigation; divert our management's time, attention, and resources; delay our product shipments; or require us to enter into royalty or licensing agreements. A third party may not be willing to enter into a royalty or licensing agreement on acceptable terms, if at all. If a claim of product infringement against us is successful and we fail to obtain a license or develop or license non-infringing technology, our business, financial condition, and operating results could be affected adversely.

Our success depends on attracting and retaining key personnel.

Our business has grown significantly since its inception. Our success is dependent in large part on the continued employment of our executive officers, including Mark C. Smith, our Chairman of the Board and Chief Executive Officer; Howard A. Thrailkill, our President, Chief Operating Officer and a director; Thomas R. Stanton, our Senior Vice President and General Manager, Carrier Networks; Danny Windham, our Senior Vice President and General Manager, Enterprise Networks; and other key management personnel. The unplanned departure of one or more of these individuals could adversely affect our business. In addition, for ADTRAN to continue as a successful entity, we must also be able to attract and retain key engineers and technicians whose expertise helps us maintain competitive advantages. We do not have employment contracts or non-compete agreements with any of our employees. We believe that our future success will depend, in large part, upon our ability to continue to attract, retain, train, and motivate highly-skilled employees who are in great demand. Properly managing our continued growth, avoiding the problems often resulting from such growth and expansion, and continuing to operate in the manner which has proven successful to us to date will be critical to the future success of our business.

Two stockholders own or may influence a significant amount of our common stock and may continue to have significant influence on our affairs.

Mark C. Smith, our Chief Executive Officer and Chairman of the Board of Directors, and Lonnie S. McMillian, our Director Emeritus, who along with Mr. Smith is a co-founder of ADTRAN, together with certain of their family members, currently beneficially own approximately 18.9% of our common stock. As a result, these individuals may have a significant influence over the election of our Board of Directors and in all likelihood will continue to have significant influence over all matters requiring approval by our stockholders.

The price of our common stock has been volatile and may continue to fluctuate substantially.

Our common stock is traded on the Nasdaq National Market under the symbol ADTN. Since our initial public offering in August 1994, there has been and may continue to be significant volatility in the market for our common stock, based on a variety of factors, some of which are beyond our control, including the following:

• actual or anticipated fluctuations in our quarterly or annual operating results;

- the gain or loss of significant contracts by us or our competitors;
- the entry of new competitors (potentially including the ILECs) into our markets;
- changes in management or additions or departures of key personnel;
- announcements of technological innovations, new products, changes in product pricing, acquisitions, strategic partnerships, joint ventures, or capital commitments by us or our competitors;
- changes in financial estimates or investment recommendations by securities analysts or our failure to perform in line with analysts' expectations;
- legislative or regulatory changes; and
- other events and circumstances beyond our control.

In addition, the stock market has recently experienced significant price and volume fluctuations, which have particularly affected the share price of many high technology companies like ADTRAN. These fluctuations may be unrelated to the operating performance of these companies.

ITEM 2. PROPERTIES

Our headquarters and principal administrative, engineering and manufacturing facilities are located on an 80-acre campus in Cummings Research Park in Huntsville, Alabama. Two office buildings contain 440,000 and 600,000 square feet, respectively. These facilities are projected to accommodate a total of 3,000 employees, serving both our Carrier Networks and Enterprise Networks divisions. We also have a 13,000 sq. ft. engineering facility in Phoenix, Arizona that is used by our Carrier Networks division.

In addition to our facilities listed above, we lease additional office space in the United States and abroad, providing sales and service support for both of our divisions. The United States offices are located in Akron, OH; Chesterfield, MO; Overland Park, KS; Clearwater, FL; Highlands Ranch, CO; Herndon, VA; Houston, TX; Huntsville, AL; Irvine, CA.; Irving, TX; Milford, CT; San Antonio, TX and Wheaton, IL. We also lease one office in Toronto, Canada; one in each of Hong Kong, Beijing, and Guangzhou, China; one in Melbourne, Australia; one in Bad Homburg, Germany and one in Dublin, Ireland. These cancelable and noncancelable leases expire at various times between 2004 and 2008. For more information, see Note 10 of the Notes to Consolidated Financial Statements included in this report.

We also have 40 home-based offices serving both our Carrier Networks and Enterprise Networks divisions, of which 39 are located within the United States and one in London, United Kingdom. In the United States, our home-based offices are located in and around the following locations: Albany, NY; Akron, OH; Atlanta, GA; Austin, TX; Babylon, NY; Baltimore, MD; Charleston, WV; Chicago, IL; Cincinnati, OH; Columbus, OH; Concord, NH; Dallas, TX; Denver, CO; Fort Lauderdale, FL; Hartford, CT; Harrisburg, PA; Houston, TX; Huntsville, AL; Indianapolis, IN; Irvine, CA; Lincoln, NE; Los Angeles, CA; Minneapolis, MN; Nashville, TN; Phoenix, AZ; Pittsburgh, PA; Providence, RI; Raleigh, NC; Richmond, VA; Roanoke, VA; San Antonio, TX; San Diego, CA; San Francisco, CA; San Jose, CA; Seattle, WA; St. Petersburg, FL; Towaco, NJ; Wilkes-Barre, PA; and Windsor, MI.

ITEM 3. LEGAL PROCEEDINGS

We have been involved from time to time in litigation in the normal course of our business. We are not aware of any pending or threatened litigation matters that could have a material adverse effect on us.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

No matter was submitted by ADTRAN to a vote of security holders during the fiscal quarter ended December 31, 2003.

ITEM 4(A). EXECUTIVE OFFICERS OF THE REGISTRANT

Set forth below, in accordance with General Instruction G(3) of Form 10-K and Instruction 3 of Item 401(b) of Regulation S-K, is certain information regarding the executive officers of ADTRAN. Unless otherwise indicated, the information set forth is as of December 31, 2003.

Mark C. Smith 1995 to present 1986 – 1995	Age 63 Mr. Smith is one of the co-founders of ADTRAN Chairman of the Board and Chief Executive Officer Chairman of the Board, Chief Executive Officer and President
Howard A. Thrailkill 1995 to present 1992 – 1995	Age 65 President, Chief Operating Officer and Director Executive Vice President and Chief Operating Officer
James E. Matthews 2001 to present 1999 – 2001 1998 – 1999 1995 – 1998 1992 – 1995	Age 47 Senior Vice President – Finance, Chief Financial Officer and Treasurer Chief Financial Officer, Home Wireless Networks, Inc. Chief Executive Officer, Miltope Group, Inc. Vice President Finance and Chief Financial Officer, Miltope Group, Inc. Controller, Hughes Training, Inc.
Thomas R. Stanton 2001 to present 1999 – 2001 1995 – 1999 1995 1994 – 1995 1993 – 1994	Age 39 Senior Vice President and General Manger – CN Vice President and General Manager – CN Vice President – CN Marketing VP – Marketing & Engineering, Transcrypt International, Inc. Sr. Director, Marketing, E.F. Johnson Company Director, Marketing, E.F. Johnson Company
Peter C. Voetsch 2001 to present 1996 – 2001 1987 – 1996	Age 51 Senior Vice President – Operations Plant Manager, DaimlerChrysler Corporation Business Manager, Electronics Division, DaimlerChrysler Corporation
Danny J. Windham 2001 to present 1999 – 2001 1995 – 1999 1994 – 1995 1989 – 1994 1986 – 1989	Age 44 Senior Vice President and General Manager – EN Vice President and General Manager – EN Vice President – EN Marketing Director of Marketing Manager of Product Management Vice President and Co-Founder, PTT, Inc.
Robert A. Fredrickson 1996 to present 1996 1991 – 1996	Age 53 Vice President – CN Sales Vice President, Broadband Business Development, DSC Communications Corporation Senior Director, Access Products, DSC Communications Corporation
Steven L. Harvey 2002 1999 – 2001 1996 – 1999 1995 – 1996 1991 – 1995	Age 43 Vice President – EN and Competitive Service Provider Sales Vice President – Competitive Service Provider Sales Vice President – EN Sales Executive Vice President, Data Processing Sciences Corporation Vice President, Data Processing Sciences Corporation

1992 - 1996

P. Steven Locke 2000 to present 1999 – 2000 1997 – 1999 1993 – 1997	Age 55 Vice President – CN Marketing Vice President, Sprint Local Division Sales for Lucent Technologies Senior Director of Sales, ADTRAN, Inc. Vice President and General Manager, Business Network Group, Sprint North Supply
Everette R. Ramage 1999 to present 1993 – 1999 1990 - 1993	Age 56 Vice President – EN Engineering Engineering Manager, EN DDS Group Engineering Manager, CPE Group
Kevin W. Schneider 2003 – present 1999 – 2003 1996 – 1999	Age 40 Vice President – Chief Technology Officer Vice President – Technology Chief Scientist

There are no family relationships among the directors or executive officers.

Staff Scientist

All officers are elected annually by and serve at the pleasure of the Board of Directors of ADTRAN.

PART II

ITEM 5. MARKET FOR THE REGISTRANT'S COMMON STOCK AND RELATED STOCKHOLDER MATTERS

ADTRAN's common stock has been traded on the Nasdaq National Market under the symbol ADTN since our initial public offering of common stock in August 1994. Prior to the initial public offering, there was no established trading market for our common stock. As of January 31, 2004, ADTRAN had 344 stockholders of record and approximately 15,500 beneficial owners of shares held in street name. On October 13, 2003, our board of directors declared a two-for-one stock split, effected in the form of a dividend of one share of common stock on each outstanding share of common stock held of record on December 1, 2003. The stock dividend was payable on December 15, 2003. The following table shows the high and low closing prices per share for the common stock as reported by Nasdaq for the periods indicated with all share and per share amounts restated to reflect the stock split.

Common Stock Prices

(In \$)

2003 Quarters	High	Low
First	\$20.18	\$14.78
Second	\$27.63	\$18.04
Third	\$34.63	\$22.65
Fourth	\$37.48	\$30.43
2002 Quarters	High	Low
2002 Quarters	High	Low
2002 Quarters First	#igh \$14.44	
		\$11.81 \$ 9.41
First	\$14.44	\$11.81

On July 14, 2003, the board of directors declared a special cash dividend of \$1.00 per common share and a quarterly cash dividend of \$0.075 per common share, payable on August 29, 2003, to stockholders of record at the close of business on July 31, 2003. Prior to July 14, 2003, ADTRAN had not declared any cash dividends on its common stock. On October 13, 2003, the board of directors declared a quarterly cash dividend of \$0.075 per common share, payable on November 17, 2003 to stockholders of record at the close of business on October 31, 2003. On January 20, 2004, the board of directors declared a quarterly cash dividend of \$0.08 per common share, payable on February 17, 2004, to stockholders of record at the close of business on February 3, 2004.

The board of directors presently anticipates that it will declare a regular quarterly dividend so long as the present tax treatment of dividends exists and adequate levels of liquidity are maintained.

ITEM 6. SELECTED FINANCIAL DATA

The following selected consolidated financial data for, and as of the end, of each of the years in the five-year period ended December 31, 2003, are derived from the financial statements of ADTRAN, which have been audited by PricewaterhouseCoopers LLP, independent accountants. The selected financial data are qualified in their entirety by the more detailed information in the financial statements, including the notes thereto. The financial statements of ADTRAN as of December 31, 2003 and 2002 and for each of the years in the three-year period ended December 31, 2003, and the report of PricewaterhouseCoopers LLP thereon, are included elsewhere in this report.

Income Statement Data (In thousands, except per share amounts)

Year Ended December 31,	2003	2002	2001	2000	1999
Sales					
Carrier Networks Division	\$267,563	\$218,912	\$238,367	\$315,228	\$230,967
Enterprise Networks Division	129,113	126,813	148,714	147,721	136,240
Total sales	396,676	345,725	387,081	462,949	367,207
Cost of sales	174,681	170,789	213,760	233,430	178,629
Gross profit	221,995	174,936	173,321	229,519	188,578
Selling, general and administrative expenses	83,234	81.217	95,954	87,116	71,735
Research and development expenses	58,144	56,295	58,935	50,628	42,018
Operating income	80,617	37,424	18,432	91,775	74,825
Interest income	8,912	9,113	8,077	9,025	5,350
Interest expense	(2,534)	(2,572)	(2,069)	(1,802)	(2,312)
Other income (expense)	1,609	234	(29)	(4)	(673)
Net realized investment gains (losses)	226	(12,022)	(674)	84,040	0
Income before provision for income taxes	88,830	32,177	23,737	183,034	77,190
Provision for income taxes	27,315	7,401	6,408	62,232	26,244
Net income	\$ 61,51 5	\$ 24,776	\$ 17,329	\$120,802	\$ 50,946
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Earnings per common share-basic	\$ 0.80	\$ 0.33	\$ 0.22	\$ 1.56	\$ 0.66
Earnings per common share assuming dilution (1)	\$ 0.76	\$ 0.32	\$ 0.22	\$ 1.52	\$ 0.66
Weighted average shares outstanding-basic	76,942	76,090	77,135	77,294	76,670
Weighted average shares outstanding assuming dilution (1)	80,739	76,443	77,353	79,408	77,662
Balance Sheet Data (In thousands)					
At December 31,	2003	2002	2001	2000	1999
Working capital (2)	\$ 220,069	\$ 203,511	\$ 217,387	\$ 262,778	\$ 181,147
Total assets	\$ 593,900	\$ 521,213	\$ 522,537	\$ 546,336	\$ 556,296
Deferred income tax liabilities	\$ 8,882	\$ 3,955	\$ 8,284	\$ 15,342	\$ 80,265
Total debt	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Stockholders' equity	\$ 493,821	\$ 435,212	\$ 437,628	\$ 434,425	\$ 400,052

⁽¹⁾ Assumes exercise of dilutive stock options calculated under the treasury stock method. See Notes 1 and 11 of Notes to Consolidated Financial Statements.

On October 13, 2003, the board of directors declared, effective December 15, 2003, a two-for-one stock split to be effected in the form of a stock dividend of one share of common stock for each outstanding share of common stock for stockholders of record on December 1, 2003. Share and per share amounts, including stock options, in the accompanying Consolidated Statements of Income and Notes to Consolidated Financial

⁽²⁾ ADTRAN's working capital consists of current assets less current liabilities.

Statements have been retroactively adjusted to reflect our stock split.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS Overview

ADTRAN, Inc. designs, develops, manufactures, markets, and services a broad range of high-speed network access products utilized by providers of telecommunications services and enterprise end users. We currently sell our products to a large number of service providers, including all Regional Bell Operating Companies (RBOCs), and to private and public enterprises worldwide.

Sales increased this year compared to last year due to our strategy of increasing unit volume and market share through the introduction of new products and succeeding generations of products having lower selling prices and increased functionality as compared to both the prior generation of a product and to the products of competitors. An important part of our strategy is to reduce the cost of each succeeding product generation and then to lower the product's selling price based on the cost savings achieved. As a part of this strategy, we seek in most instances to be a high-quality, low-cost provider of products in our markets. Our success to date is attributable in large measure to our ability to design our products initially with a view to their subsequent redesign, allowing both increased functionality and reduced manufacturing costs in each succeeding product generation. This strategy enables us to sell succeeding generations of products to existing customers, while increasing our market share by selling these enhanced products to new customers.

The year-over-year increase in our Systems revenue is primarily attributable to increasing sales of new products comprised of Digital Subscriber Line Access Multiplexers (DSLAMs), optical access products, and NetVanta products. Our DSLAMs, consolidate broadband traffic together in one place, and provides the technology that allows phone companies to compete with cable companies in the high-speed Internet service market.

The year-over-year decrease in High-bit-rate Digital Subscriber Line (HDSL)/T1 revenue is primarily attributable to declining Enterprise Networks sales of Channel Service Units/ Data Service Units (CSU/DSU) products, partially offset by increasing Carrier Networks sales of HDSL-based Total Access 3000 broadband platform products. The industry has integrated the functionality of CSU/DSUs into access routers, thereby reducing the requirement for a standalone CSU/DSU. The increase in HDSL revenue is the result of migration from non-intelligent legacy hardware to intelligent remote monitoring access hardware, and a result of market share gains.

The year-over-year decrease in Digital Business Transport (DBT)/Total Reach sales is the result of newer and higher-speed technologies replacing the lower-speed technology of ISDN and DDS products. Our overall market share in DBT/Total Reach has been maintained and we continue to take advantage of market opportunities for these products where speed is not the main consideration. However, DBT/Total Reach is a declining market, which is being cannibalized by higher-speed DSL technology.

During the latter half of 2003, our results reflected what we believe to be an improving enterprise spending environment. We have seen indications of increasing activity levels across our customer base and across our product categories. On a sequential quarterly basis, HDSL/T1 revenues increased 23% from the third to the fourth quarter of 2003. This increase is primarily attributable to an increase in enterprise spending, market share gains, and T1 line growth.

On October 13, 2003, the board of directors declared, effective December 15, 2003, a two-for-one stock split to be effected in the form of a stock dividend of one share of common stock for each outstanding share of common stock for stockholders of record on December 1, 2003. Share and per share amounts, including stock options, in the accompanying Consolidated Statements of Income and Notes to Consolidated Financial Statements have been retroactively adjusted to reflect our stock split.

Our operating results have fluctuated on a quarterly basis in the past, and operating results may vary significantly in future periods due to a number of factors. We normally operate with very little order backlog. The majority of our sales in each quarter result from orders booked in that quarter and firm purchase orders released in that quarter by customers under agreements containing non-binding purchase commitments. Furthermore, many of our customers require prompt delivery of products. This results in a limited backlog of orders for these products and requires us to maintain sufficient inventory levels to satisfy anticipated customer demand. If near-term demand for our products declines, or if potential sales in any quarter do not occur as anticipated, our financial results could be adversely affected. Operating expenses are relatively fixed in the short term; therefore, a shortfall in quarterly revenues could significantly impact our financial results in a given quarter. Further, maintaining sufficient inventory levels to assure prompt delivery of our products increases the amount of inventory which may become obsolete and increases the risk that the obsolescence of such inventory may have an adverse effect on our business and operating results.

Our operating results may also fluctuate as a result of a number of other factors, including increased competition, customer order patterns, changes in product mix, timing differences between price decreases and product cost reductions, product warranty returns, and announcements of new products by us or our competitors. Accordingly, our historical financial performance is not necessarily a meaningful indicator of future results, and, in general, management expects that our financial results may vary from period to period. See Note 12 of Notes to Consolidated Financial Statements.

Critical Accounting Policies

We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our financial statements. These policies have been consistently applied across our two reportable segments: (1) Carrier Networks Division and (2) Enterprise Networks Division.

• We review customer contracts to determine if all of the requirements for revenue recognition have been met prior to recording revenues from sales transactions. We generally record sales revenue upon shipment of our products, net of any discounts, since: (i) we generally do not have significant post-delivery obligations, (ii) the product price is fixed and determinable, (iii) collection of the resulting receivable is probable, and (iv) product returns are reasonably estimable. We generally ship products upon receipt of a purchase order from a customer. We evaluate shipping terms and we record revenue on products shipped in accordance with the applicable terms of each respective contract. We participate in cooperative advertising and market development programs with certain customers. We use these programs to reimburse customers for certain forms of advertising, and in general, to allow our customers credits up to a specified percentage of their net purchases. Our costs associated with these programs are estimated and accrued at the time of sale and are included in marketing expenses in our consolidated statements of income. We also participate in rebate programs to provide sales incentives for certain products. Our costs associated with these programs are estimated and accrued at the time of sale, and are recorded as a reduction of sales in our consolidated statements of income. Sales returns are accrued based on historical sales return experience, which we believe provides a reasonable estimate of future returns. Product returns are generally only permitted by customers who purchase our products under specific sales agreements that govern their rights of return.

Prior to accepting a new customer, we perform a detailed credit review of the customer. Credit limits are established for each new customer based on the results of this credit review. Payment terms are established for each new customer, and collection experience is reviewed periodically in order to determine if the customer's payment terms and credit limits need to be revised. We maintain allowances for doubtful accounts for losses resulting from the inability of our customers to make required payments. If the financial conditions of our customers were to deteriorate, resulting in an impairment of their ability to make payments, we may be required to make additional allowances. If circumstances change with regard to individual receivable balances that had previously been determined to be uncollectible (and for which a specific reserve had been established), a reduction in our allowance for doubtful accounts may be required. Our allowance for doubtful accounts was \$1.7 million and \$2.5 million at December 31, 2003 and 2002, respectively. We recorded \$0, \$2 million and \$3.3 million of bad debt expense during the years ended December 31, 2003, 2002 and 2001, respectively. In addition, improving financial conditions in the telecom industry allowed us to reduce our allowance for doubtful accounts by \$0.7 million.

- We carry our inventory at the lower of cost or market, with cost being determined using the first-in, first-out method. We use standard costs for material, labor, and manufacturing overhead to value our inventory. Our standard costs are updated on a monthly basis and any variances are expensed in the current period. Therefore, our inventory costs approximate actual costs at the end of each reporting period. We write-down our inventory for estimated obsolescence or unmarketable inventory by an amount equal to the difference between the cost of inventory and the estimated market value based upon assumptions about future demand and market conditions. If actual future demand or market conditions are less favorable than those projected by management, we may be required to make additional inventory write-downs. Our reserve for excess and obsolete inventory was \$3.1 million and \$4.4 million at December 31, 2003 and 2002, respectively. Inventory write-downs charged to the reserve were \$1.6 million, \$5.7 million and \$4.4 million for the years ended December 31, 2003, 2002 and 2001, respectively.
- The objective of our short-term investment policy is to preserve principal and maintain adequate liquidity with appropriate diversification, while emphasizing market returns on our monetary assets. The objective of our long-term investment policy is to emphasize total return; that is, the aggregate return from capital appreciation, dividend income, and interest income. This is achieved through investments with appropriate diversification in fixed and variable rate income, public equity, and private equity portfolios. During 2002, we changed our fixed income investment policy, shortening the maximum maturity from 15 years to five and one-half years, with consistent dollar maturities, year-to-year. We have experienced significant volatility in the market prices of our publicly traded equity investments. These investments are recorded on the consolidated balance sheets at fair value with unrealized gains and losses reported as a component of accumulated other comprehensive income (loss), net of tax. The ultimate realized value on these equity investments is subject to market price volatility until they are sold.

We review our investment portfolio for potential "other-than-temporary" declines in value on an individual investment basis. We assess, on a quarterly basis, significant declines in value which may be considered other-than-temporary and, if necessary, recognize and record the appropriate charge to write-down the carrying value of such investments. In making this assessment, we take into consideration a wide range of objective and subjective information, including but not limited to the following: the magnitude and duration of historical decline in market prices, credit rating activity, assessments of liquidity, public filings, and statements made by the issuer. We generally begin our identification of potential other-than-temporary impairments by reviewing any security with a market value that has declined from its original or adjusted cost basis by 25% for more than six months. We then evaluate the individual security based on the previously identified factors to determine the amount of the write-down, if any. Actual losses, if any, could ultimately differ from these estimates. Future adverse changes in market conditions or poor operating results of underlying investments could result in additional losses that may not be reflected in an investment's current carrying value, thereby possibly requiring an impairment charge in the future. For 2003, 2002 and 2001, we recorded other-than-temporary write-downs of our marketable equity investments of \$0, \$9.6 million and \$0, respectively. These write-downs are included in net realized investment gains (losses) in the accompanying consolidated statements of income.

We also invest in privately held entities and record our investments in these entities at cost. We review our investments in these entities periodically in order to determine if circumstances (both financial and non-financial) exist that indicate that we will not recover our initial investment. Impairment charges are recorded on investments having a cost basis that is greater than the value that we would reasonably expect to receive in an arm's length sale of the investment. For 2003, 2002 and 2001, we recorded write-downs of our cost basis investments of \$0, \$2.0 million and \$5.5 million, respectively. These write-downs are included in net realized investment gains (losses) in the accompanying consolidated statements of income.

- We estimate our income tax provision or benefit in each of the jurisdictions in which we operate, including estimating exposures related to examinations by taxing authorities. We must also make judgements regarding the realization of deferred tax assets. The carrying value of our net deferred tax assets is based on our belief that it is more likely than not that we will generate sufficient future taxable income in certain jurisdictions to realize these deferred tax assets. A valuation allowance has been established for deferred tax assets which we do not believe meet the more-likely-than-not criteria established by SFAS No. 109 *Accounting for Income Taxes*. Our estimates regarding future taxable income and income tax provision or benefit may vary due to changes in market conditions, changes in tax laws, or other factors. If our assumptions, and consequently our estimates, change in the future, the valuation allowances we have established may be increased or decreased, impacting future income tax expense.
- We estimate our cost to repair or replace defective products at the time revenue is recognized and include this cost in cost of goods sold in our consolidated statement of income. Our products generally include warranties of one to 10 years for product defects. The liability for warranty returns totaled \$1.5 million and \$1.4 million at December 31, 2003 and 2002, respectively. These liabilities are included in accrued expenses in the accompanying consolidated balance sheets. Our estimates regarding future warranty obligations may change due to product failure rates, shipment volumes, and other rework costs incurred in correcting a product failure. If our estimates change in the future, the liability for warranty returns we have established may be increased or decreased, impacting future cost of goods sold expense.

Results of Operations

The following table presents selected financial information derived from our consolidated statements of income expressed as a percentage of sales for the years indicated.

(Stated as % of sales)

Years Ended December 31,	2003	2002	2001
Sales			
Carrier Networks Division	67.4%	63.3%	61.6%
Enterprise Networks Division	32.6	36.7	38.4
Total sales	100.0	100.0	100.0
Cost of sales	44.0	49.4	55.2
Gross profit	56.0	50.6	44.8
Selling, general and administrative expenses	21.0	23.5	24.8
Research and development expenses	14.7	16.2	15.2
Operating income	20.3	10.9	4.8
Interest income	2.3	2.6	2.2
Interest expense	(0.6)	(0.7)	(0.5)
Other income (expense)	0.4	0.0	(0.1)
Net realized investment gains (losses)	0.1	(3.5)	(0.2)
Income before provision for income taxes	22.4	9.3	6.2

Provision for income taxes	6.9	2.1	1.7
Net income	15.5%	7.2%	4.5%

2003 Compared to 2002

Sales

ADTRAN's sales increased 14.7% from \$345.7 million in 2002 to \$396.7 million in 2003. The increase is primarily the result of increasing unit volume and market share gains in the Carrier Networks Division. In particular, the increase in overall sales is attributable to an increase in sales of our Systems products, partially offset by decreased sales of our Digital Business Transport (DBT)/Total Reach® and High-bit-rate Digital Subscriber Line (HDSL)/T1 products. The increase in Systems revenue is attributable to sales of new products comprised of DSLAMs, optical access and NetVanta products. The decrease in HDSL/T1 revenue is primarily attributable to a decrease in Enterprise Networks Division sales of T1 CSU/DSU products, partially offset by an increase in Carrier Networks Division sales of HDSL products.

Carrier Networks sales increased 22.2% from \$218.9 million in 2002 to \$267.6 million in 2003. Carrier Networks sales, as a percentage of total sales, increased from 63.3% in 2002 to 67.4% in 2003. The increase in Carrier Networks sales is primarily attributable to an increase in sales of DSLAMs, optical access, and HDSL-based Total Access 3000 broadband platforms.

Enterprise Networks sales increased 1.8% from \$126.8 million in 2002 to \$129.1 million in 2003. The increase in Enterprise Networks sales is primarily related to an increase in sales of Total Access integrated access devices and NetVanta products, partially offset by a decrease in CSU/DSU sales, which is a hardware unit that terminates carrier services at the enterprise location. The industry has integrated the functionality of CSU/DSUs into access routers, thereby reducing the requirement for a standalone CSU/DSU. Enterprise Networks sales, as a percentage of total sales, decreased from 36.7% in 2002 to 32.6% in 2003.

Foreign sales decreased 3.4% from \$20.3 million in 2002 to \$19.6 million in 2003. The decrease in foreign sales is attributable to market challenges in the European and Asia/Pacific regions. We are still in the process of developing business relationships and expanding our sales base in these regions.

Cost of Sales

Cost of sales, as a percentage of sales, decreased from 49.4% in 2002 to 44.0% in 2003. The decrease is primarily related to manufacturing efficiencies, the timing differences between the recognition of cost reductions and the lowering of product selling prices, and the sales of higher margin new products. In addition, the decrease resulted from improvements in supply chain management, due to the implementation of an advanced planning system and a web-based procurement process, which has reduced cycle times and increased our manufacturing flexibility. We anticipate continued deployment of supply chain applications augmented with process improvement strategies will result in further cost reductions, which we believe will provide a continued competitive advantage. Carrier Networks cost of sales, as a percent of division sales, decreased from 51.9% in 2002 to 45.8% in 2003. Enterprise Networks cost of sales, as a percent of division sales, decreased from 45.1% in 2002 to 40.4% in 2003.

An important part of our strategy is to reduce the product cost of each succeeding product generation and then to lower the product's price based on the cost savings achieved. This strategy, as described above, sometimes results in variations in our gross profit margin due to timing differences between the recognition of cost reductions and the lowering of product selling prices. In view of the rapid pace of new product introductions by our company, this strategy may result in variations in gross profit margins that, for any particular financial period, can be difficult to predict.

Selling, General and Administrative Expenses

Selling, general and administrative expenses increased 2.5% from \$81.2 million in 2002 to \$83.2 million in 2003. This increase is primarily related to an increase in sales and the rescission in September 2002 of salary reductions implemented in the second half of 2001 as a cost control mechanism, instead of extensive staff reductions generally imposed throughout the telecommunications industry. The increase in selling, general and administrative expenses is partially offset by \$2.0 million of bad debt expense that was recorded in 2002, compared to \$0 of bad debt expense that was recorded in 2003. In addition, improving financial conditions in the telecom industry allowed us to reduce our allowance for doubtful accounts by \$0.7 million in the latter half of 2003. Selling, general and administrative expenses as a percentage of sales decreased from 23.5% in 2002 to 21.0% in 2003. Selling, general and administrative expenses include personnel costs for administration, finance, information systems, human resources, sales and marketing and general management, as well as rent, utilities, legal and accounting expenses, bad debts, advertising, promotional

material, gains or losses on the disposal of property, plant, and equipment occurring in the normal course of business, trade show expenses, and related travel costs. The decrease in selling, general and administrative expenses as a percentage of sales is due to our continued control of discretionary spending. Selling, general and administrative expenses as a percent of sales will generally fluctuate whenever there is significant fluctuation in revenues during the periods being compared.

Research and Development Expenses

Research and development expenses increased 3.2% from \$56.3 million in 2002 to \$58.1 million in 2003. The increase in research and development expenses is primarily related to the rescission of salary reductions in September 2002 and an increase in product approval costs. As a percentage of sales, research and development expenses decreased from 16.2% in 2002 to 14.7% in 2003. The decrease in research and development expenses as a percent of sales is due to our continued control of discretionary spending in areas such as travel, contract labor and training. Research and development expenses as a percentage of sales will fluctuate whenever there is a significant fluctuation in revenues during the periods being compared.

We continually evaluate new product opportunities and engage in intensive research and product development efforts. We frequently invest heavily in up-front new product development efforts prior to the actual commencement of sales of a major new product. To date, we have expensed all product research and development costs as incurred. As a result, we may incur significant research and development expenses prior to the receipt of revenues from a major new product group. We are presently incurring research and development expenses in connection with new products and expansion into international markets. In today's challenging industry environment, we have maintained our level of investment in research and development during a period when many competitors have significantly reduced their investments in this area. This investment has provided for continued new product development, enhancement of current products, and product cost reductions.

Interest and Dividend Income

Interest and dividend income decreased 2.2% from \$9.1 million in 2002 to \$8.9 million in 2003. This decrease is primarily related to lower interest rates and shorter maturities on our fixed income investments, partially offset by an increase in interest producing assets.

Interest Expense

Interest expense on our taxable revenue bond decreased slightly from \$2.6 million in 2002 to \$2.5 million in 2003. See Note 5 of Notes to Consolidated Financial Statements for additional information on our revenue bond.

Net Realized Investment Gain (Loss)

Net realized investment gain (loss) changed from a net loss of \$12.0 million in 2002 to a net gain of \$0.2 million in 2003. This change is primarily related to an impairment charge for other-than-temporary declines in the market value of investments that was recognized in the second and third quarters of 2002, compared to transactional-based gains and losses realized in 2003. We assess, on a quarterly basis, significant declines in investment value which may be considered other-than-temporary and, if necessary, recognize and record the appropriate charge to write-down the carrying value of such investments. Accordingly, during 2002, we recorded \$9.6 million of other-than-temporary investment impairment charges related to 19 marketable equity securities investments. The remaining \$2.4 million of net realized investment loss was related to write-downs of private securities and realized transactional gains and losses in 2002.

Other Income (Expense)

Other income increased from \$0.2 million in 2002 to \$1.6 million in 2003. This increase is primarily related to net recoveries from former customers, realized foreign currency gains and scrap material sales.

Income Taxes

Our effective tax rate increased from 23.0% in 2002 to 30.7% in 2003. This increase is primarily related to a higher mix of taxable income, and lower research and development tax credits as a percent of taxable income, partially offset by the settlement of tax contingencies during 2003. During the year ended December 31, 2003, we resolved certain tax contingencies resulting in the reduction of our effective tax rate from 31.5% to 30.7%.

Net Income

As a result of the above factors, net income increased from \$24.8 million in 2002 to \$61.5 million in 2003. As a percentage of sales, net income increased from 7.2% in 2002 to 15.5% in 2003.

2002 Compared to 2001

Sales

ADTRAN's sales decreased 10.7% from \$387.1 million in 2001 to \$345.7 million in 2002. The decrease was primarily the result of decreased spending by our customers, which we believe to be a result of both economic and industry-wide factors. In particular, the decrease in overall sales is attributable to a decrease in sales of our DBT/Total Reach and HDSL/T1 products, partially offset by increased sales of our Systems products. Carrier Networks sales decreased 8.2% from \$238.4 million in 2001 to \$218.9 million in 2002. Carrier Networks sales, as a percentage of total sales, increased from 61.6% in 2001 to 63.3% in 2002. Enterprise Networks sales decreased 14.7% from \$148.7 million in 2001 to \$126.8 million in 2002. Enterprise Networks sales, as a percentage of total sales, decreased from 38.4% in 2001 to 36.7% in 2002. Foreign sales increased 14.7% from \$17.7 million in 2001 to \$20.3 million in 2002. The increase in foreign sales is attributable to market acceptance of the Carrier Networks Division's Total Access System, which includes the Total Access 3000 and SHDSL (Symmetrical HDSL).

Cost of Sales

Cost of sales decreased 20.1% from \$213.8 million in 2001 to \$170.8 million in 2002. The cost of sales decrease is primarily related to the decrease in revenues in each respective period and product cost reductions in 2002. As a percentage of sales, cost of sales decreased from 55.2% in 2001 to 49.4% in 2002 and is primarily attributable to product cost reductions in excess of sales price reductions in the Carrier Networks Division. Carrier Networks cost of sales, as a percent of division sales, decreased from 60.7% in 2001 to 51.9% in 2002. Enterprise Networks cost of sales, as a percent of division sales, decreased from 46.4% in 2001 to 45.1% in 2002.

An important part of our strategy is to reduce the product cost of each succeeding product generation and then to lower the product's price based on the cost savings achieved. This strategy, as described above, sometimes results in variations in our gross profit margin due to timing differences between the recognition of cost reductions and the lowering of product selling prices. In view of the rapid pace of new product introductions by our company, this strategy may result in variations in gross profit margins that, for any particular financial period, can be difficult to predict.

Selling, General and Administrative Expenses

Selling, general and administrative expenses decreased 15.4% from \$96.0 million in 2001 to \$81.2 million in 2002. This decrease is a result of a reduction in force, salary reductions, and other cost reductions implemented in the second half of 2001. In the second half of 2002, our operating margins returned to normal levels, allowing the rescission of the mandatory salary reductions, effective September 1, 2002. Selling, general and administrative expenses as a percentage of sales decreased from 24.8% in 2001 to 23.5% in 2002. Historically, we have experienced very little bad debt expense; however, due to the recent financial difficulties in the telecommunications industry, bad debt expense was \$2.0 million and \$3.3 million in 2002 and 2001, respectively. Selling, general and administrative expenses as a percent of sales will generally fluctuate whenever there is significant fluctuation in revenues during the periods being compared.

Research and Development Expenses

Research and development expenses decreased 4.4% from \$58.9 million in 2001 to \$56.3 million in 2002. As a percentage of sales, research and development expenses increased from 15.2% in 2001 to 16.2% in 2002. We continually evaluate new product opportunities and engage in intensive research and product development efforts. To date, we have expensed all product research and development costs as incurred. Additionally, we frequently invest heavily in up-front new product development efforts prior to the actual commencement of sales of a major new product. As a result, we may incur significant research and development expenses prior to the receipt of revenues from a major new product group. We are presently incurring research and development expenses in connection with new products and expansion into international markets. In today's challenging industry environment, we have maintained our level of investment in research and development during a period when many competitors have significantly reduced their investments in this area. This investment has provided for continued new product development, enhancement of current products, and product cost reductions. Research and development expenses as a percentage of sales will fluctuate whenever there is a significant fluctuation in revenues during the periods being compared.

Interest and Dividend Income

Interest and dividend income increased 12.3% from \$8.1 million in 2001 to \$9.1 million in 2002. This increase is primarily related to an increase in fixed income investments and related investment income and an increase in the interest rate earned on the collateral deposit associated with our \$50.0 million revenue bond.

Interest Expense

Interest expense increased 30.0% from \$2.0 million in 2001 to \$2.6 million in 2002. This increase is primarily related to an increase in the interest rate on our \$50.0 million revenue bond. See Note 5 of Notes to Consolidated Financial Statements for additional information on our revenue bond.

Other Income (Expense)

Other income (expense) increased from an expense of (\$0.1) million in 2001 to income of \$0.2 million in 2002. This increase is primarily related to an increase in realized foreign currency gains and scrap material sales.

Net Realized Investment Losses

Net realized investment losses increased from \$0.7 million in 2001 to \$12.0 million in 2002. This increase is primarily related to an impairment charge for other-than-temporary declines in the market value of investments. We recorded an impairment charge of \$9.6 million of other-than-temporary investment impairment charges related to 19 marketable equity security investments. The remaining \$2.4 million of net realized investment loss was related to write-downs of private securities and realized transactional gains and losses in 2002.

Income Taxes

Our effective tax rate decreased from 27.0% in 2001 to 23.0% in 2002. Pre-tax income for financial reporting purposes was substantially lower through 2002 due to the other-than-temporary declines in the market value of certain investments. The higher mix of non-taxable income, and higher research and development tax credits and economic incentive credits as a percent of taxable income resulted in a substantially lower effective tax rate.

Net Income

As a result of the above factors, net income increased 43.3% from \$17.3 million in 2001 to \$24.8 million in 2002. As a percentage of sales, net income increased from 4.5% in 2001 to 7.2% in 2002.

Liquidity and Capital Resources

Fifty million dollars of the expansion of Phase III of our corporate headquarters was approved for participation in an incentive program offered by the Alabama State Industrial Development Authority (the "Authority"). The incentive program enables participating companies to generate Alabama corporate income tax credits that can be used to reduce the amount of Alabama corporate income taxes that would otherwise be payable. We cannot be certain that the state of Alabama will continue to make these corporate income tax credits available in the future, and therefore, we may not realize the full benefit of these incentives. Through December 31, 2003, the Authority had issued \$50.0 million of its taxable revenue bonds pursuant to the incentive program and loaned the proceeds from the sale of the bonds to ADTRAN. We are required to make payments to the Authority in the amounts necessary to pay the principal of and interest on the Authority's Taxable Revenue Bond, Series 1995, as amended, currently outstanding in the aggregate principal amount of \$50.0 million. The bond matures on January 1, 2020, and bears interest at the rate of 5%. Included in long-term investments are \$50.0 million of restricted funds, which is a collateral deposit against the principal amount of this bond. In conjunction with this program, we are eligible to receive certain economic incentives from the state of Alabama that reduce the amount of payroll withholdings that we are required to remit to the state for those employment positions that qualify under the program. Our economic incentives realized for the years ended December 31, 2003, 2002 and 2000 were \$1.5 million, \$1.2 million and \$1.3 million, respectively.

In July 2003, the board of directors determined to begin declaring quarterly dividends on our common stock, and presently anticipates that it will declare a regular quarterly dividend so long as the present tax treatment of dividends exists and adequate levels of liquidity

are maintained. On July 14, 2003, the board declared a special and quarterly cash dividend of \$1.00 and \$0.075 per common share, respectively, to be paid to stockholders of record at the close of business on July 31, 2003. The special and quarterly dividend payment, which was paid on August 29, 2003, totaled \$83.0 million. On October 13, 2003, the board declared a second quarterly cash dividend of \$0.075 per common share to be paid to stockholders of record at the close of business on October 31, 2003. The quarterly dividend payment was approximately \$5.9 million and was paid on November 17, 2003. The board declared a third quarterly cash dividend on January 20, 2004. The quarterly cash dividend was \$0.08 per common share to be paid to holders of record at the close of business on February 3, 2004, with a payment date of February 17, 2004. The quarterly dividend payment was approximately \$6.3 million.

On October 13, 2003, we announced that our board of directors declared, effective December 15, 2003, a two-for-one stock split to be effected in the form of a stock dividend of one share of common stock for each outstanding share of common stock for stockholders of record on December 1, 2003. Share and per share amounts, including stock options, in the accompanying Consolidated Statements of Income and Notes to Consolidated Financial Statements have been retroactively adjusted to reflect our stock split.

Our working capital, which consists of current assets less current liabilities, increased 8.2% from \$203.5 million as of December 31, 2002 to \$220.1 million as of December 31, 2003. The quick ratio, defined as cash, cash equivalents, short-term investments, and net accounts receivable, divided by current liabilities, decreased from 5.73 as of December 31, 2002 to 4.87 as of December 31, 2003. The current ratio, defined as current assets divided by current liabilities, decreased from 7.35 as of December 31, 2002 to 6.46 as of December 31, 2003. The decrease in liquidity ratios is primarily a result of the special and quarterly dividend payments and a movement of monetary assets from cash and cash equivalents to long-term investments, partially offset by an increase in accounts receivable.

As of December 31, 2003, we had an income tax receivable of \$11.6 million. This receivable was generated in the fourth quarter of 2003 from the tax benefit associated with the exercise of non-qualified stock options. We receive an income tax deduction for the difference between the exercise price and the market price of a non-qualified stock option upon exercise by the employee. We recorded \$23.6 million during the year ended 2003 as an income tax deduction for the difference between the exercise price and the market price of non-qualified stock option exercises.

At December 31, 2003, our cash on hand of \$132.1 million and short-term investments of \$11.9 million placed our short-term liquidity in cash, cash equivalents, and short-term investments at \$144.0 million. At December 31, 2002, cash on hand was \$125.1 million and short-term investments were \$19.7 million, which placed our short-term liquidity at \$144.8 million. This decrease is primarily attributable to the \$88.9 million of special and quarterly dividend payments and a movement of monetary assets from cash and cash equivalents to long-term investments, partially offset by our ability to generate cash from operations and proceeds received from the exercise of employee stock options.

At December 31, 2003, our long-term investments increased by 32.6% to \$233.7 million from \$176.3 million at December 31, 2002. This increase is primarily attributable to our ability to generate cash from operations, the investment of proceeds from stock option exercises, and increases in market value of long-term available-for-sale securities. The decrease in deferred tax assets and the increase in deferred tax liabilities is attributable to the increase in market value of our long-term investments. Long-term investments at December 31, 2003, and December 31, 2002, include a restricted balance of \$50.0 million related to our revenue bonds, as discussed above. We intend to finance our operations in the future with cash flow from operations and our remaining borrowed taxable revenue bond proceeds. We believe these available sources of funds to be adequate to meet our operating and capital needs for the foreseeable future.

Accounts receivable increased 34.7% from December 31, 2002 to December 31, 2003. Quarterly accounts receivable days sales outstanding increased one day from 41 days as of December 31, 2002 to 42 days as of December 31, 2003. This increase in accounts receivable is caused by increased sales. Other receivables increased 56.7% from December 31, 2002 to December 31, 2003, primarily resulting from an increase in shipments of components to subcontractors, due to an increase in business activity. Even with a 14.7% increase in sales, inventory remained relatively stable from December 31, 2002 to December 31, 2003. Quarterly inventory turnover increased from 3.93 turns as of December 31, 2002 to 4.86 turns as of December 31, 2003. The increase in inventory turnover is attributable to our continued efforts to streamline our production process, work closely and efficiently with our subcontractors, and increase manufacturing velocity. In addition, improvements in supply chain management due to the implementation of an advanced planning system and a web-based procurement process have reduced cycle times and increased our manufacturing flexibility. The deployment of these supply chain applications and initiatives has resulted in better inventory control and increased inventory turnover.

Accounts payable increased 57.3% from December 31, 2002 to December 31, 2003. Accrued expenses increased 43.6% from December 31, 2002 to December 31, 2003. These increases are primarily related to the variations of timing of payments, increased business activity, and a net increase in our warranty reserve related to the expanding base of ADTRAN products in the field under warranty. Capital expenditures totaled approximately \$6.8 million, \$2.6 million and \$13.2 million for the years ended December 31, 2003, 2002 and 2001, respectively. These expenditures were primarily used to purchase computer hardware and software, manufacturing and test equipment, and in 2001 to expand our corporate headquarters.

In July 2001, the board of directors approved the repurchase of 2,000,000 shares of ADTRAN common stock on a pre-split basis. As of December 31, 2003, we had repurchased 1,676,522 shares of our common stock on a pre-split basis (3,353,104 shares post-split) at a total cost of \$31.7 million and had the authority to purchase an additional 323,448 shares. No shares were purchased during the year ended December 31, 2003. We issued 4,125,242 shares of treasury stock and 404,029 newly issued shares of common stock for \$55.1 million during the year ended December 31, 2003, to accommodate employee stock option exercises. During 2002 and 2001, we issued 375,500 and 73,340 shares of treasury stock, respectively, to accommodate employee stock option exercises.

We have used, and expect to continue to use, the cash generated from operations for working capital, dividend payments, and other general corporate purposes, including (i) product development activities to enhance our existing products and develop new products and (ii) expansion of sales and marketing activities.

We have various contractual obligations and commercial commitments. The following table sets forth, in millions, the annual payments, exclusive of interest payments, we are required to make under contractual cash obligations and other commercial commitments at December 31, 2003.

Contractual Obligations

							After 2008
(In millions)	Total	2004	2005	2006	2007	2008	
Long-term debt	\$50.0						\$ 50.0
Investment commitments	\$ 6.0		\$ 1.7	_	\$ 4.3	_	
Operating lease obligations	\$ 2.2	\$ 0.7	\$ 0.5	\$ 0.4	\$ 0.4	\$ 0.2	
Purchase obligations	\$27.9	\$27.9					_
Totals	\$86.1	\$28.6	\$ 2.2	\$ 0.4	\$ 4.7	\$ 0.2	\$ 50.0

We do not have off-balance sheet financing arrangements and have not engaged in any related party transactions or arrangements with unconsolidated entities or other persons that are reasonably likely to materially affect liquidity or the availability of or requirements for capital resources. See Notes 5 and 10 of Notes to Consolidated Financial Statements for additional information on our revenue bond and operating lease obligations, respectively. We have committed to invest an aggregate of \$7.9 million in two private equity funds, of which \$1.9 million has been invested to date. The duration of each of these commitments is five years with \$2.9 million expiring in 2005 and \$5.0 million expiring in 2007. At December 31, 2003, we had outstanding purchase agreements with vendors of approximately \$27.9 million to purchase materials and services.

Effect of Recent Accounting Pronouncements

In May 2003, the FASB issued SFAS No. 150, Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity ("SFAS 150"). SFAS 150 establishes how an issuer classifies and measures certain freestanding financial instruments with characteristics of both liabilities and equity and requires that such instruments be classified as liabilities. SFAS 150 was effective for financial instruments entered into or modified after May 31, 2003, and otherwise is effective at the beginning of the first interim period beginning after June 15, 2003 for those existing financial instruments subject to its provisions. We have not entered into any financial instruments within the scope of SFAS 150 since May 31, 2003. Accordingly, SFAS 150 had no impact on our consolidated financial statements for the year ended December 31, 2003.

In January 2003, the FASB issued FIN 46, Consolidation of Variable Interest Entities. In December 2003, the FASB issued FIN 46R (revised December 2003), which replaces FIN 46. FIN 46R clarifies the application of Accounting Research Bulletin No. 51, Consolidated Financial Statements, to certain entities in which equity investors do not have the characteristics of a controlling financial interest or do have sufficient equity at risk for the entity to finance its activities without additional subordinated support from other parties. FIN 46R is required to be applied to entities that are considered special-purpose entities no later than as of the end of the first reporting period that ends after December 15, 2003. Since we do not have any special-purpose entities, the accompanying consolidated financial statements for 2003 were not affected by FIN 46R. FIN 46R is required to be applied by March 31, 2004 to entities not considered to be special-purpose entities. We are currently evaluating this impact of FIN 46R and do not anticipate a material impact from such entities on our financial position, results of operations, or cash flows.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

ADTRAN has not conducted transactions, established commitments or entered into relationships requiring disclosures beyond those provided elsewhere in this Form 10-K.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The following consolidated financial statements are contained in this report.

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Report of Independent Auditors

To the board of directors and stockholders of ADTRAN, Inc.:

In our opinion, the consolidated financial statements listed in the accompanying index present fairly, in all material respects, the financial position of ADTRAN, Inc. and its subsidiaries at December 31, 2003 and 2002, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2003 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the accompanying index presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. These financial statements and financial statement schedule are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which 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, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP PricewaterhouseCoopers LLP Birmingham, Alabama February 16, 2004

Financial Statements

ADTRAN, INC.

Consolidated Balance Sheets

December 31, 2003 and 2002

(In thousands, except per share amounts)	2003	2002
ASSETS		
Current assets		
Cash and cash equivalents	\$132,072	\$125,092
Short-term investments	11,865	19,747
Accounts receivable, less allowance for doubtful accounts of \$1,746 and \$2,472 in 2003 and 2002,		
respectively	52,384	38,883
Other receivables	6,988	4,460
Income tax receivable	11,586	_
Inventory, net	39,975	39,926
Prepaid expenses	2,127	2,650
Deferred tax assets	3,381	4,799
Total current assets	260,378	235,557
Property, plant and equipment, net	97,667	106,174
Other assets	493	469
Deferred tax assets	1,628	2,682
Long-term investments	233,734	176,331
Total assets	\$593,900	\$521,213
Total discus	ψ575,700	φ321,213
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
	\$ 24,821	\$ 15,555
Accounts payable Unearned revenue	3,209	2,234
Accrued expenses	2,476	2,234
Accrued expenses Accrued payroll	9,658	6,257
Income tax payable	9,036	5,807
Other liabilities	145	3,807
Other habilities	143	
Total current liabilities	40,309	32,046
Deferred tax liabilities	8,882	3,955
Other non-current liabilities	888	
Bonds payable	50,000	50,000
Total liabilities	100,079	86,001
Commitments and contingencies (see Note 10)		
Stockholders' equity		
Common stock, par value \$0.01 per share; 200,000 shares authorized; 79,294 and 39,445 shares issued in		
2003 and 2002, respectively	793	394
Additional paid-in capital	135,814	96,982
Accumulated other comprehensive income	10,012	3,097
Retained earnings	347,202	375,010
Less treasury stock at cost: 4,125 shares in 2002	_	(40,271)
Total stockholders' equity	493,821	435,212
Total liabilities and stockholders' equity	\$593,900	\$521,21 3
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The accompanying notes are an integral part of these consolidated financial statements.

ADTRAN, INC.

Consolidated Statements of Income Years ended December 31, 2003, 2002 and 2001

(In thousands, except per share amounts)	2003	2002	2001
Sales	\$396,676	\$345,725	\$387,081
Cost of sales	174,681	170,789	213,760
Gross profit	221,995	174,936	173,321
Selling, general and administrative expenses	83,234	81,217	95,954
Research and development expenses	58,144	56,295	58,935
Operating income	80,617	37,424	18,432
Interest and dividend income	8,912	9,113	8,077
Interest expense	(2,534)	(2,572)	(2,069)
Other income (expense)	1,609	234	(29)
Net realized investment gains (losses)	226	(12,022)	(674)
Income before provision for income taxes	88,830	32,177	23,737
Provision for income taxes	27,315	7,401	6,408
Net income	\$ 61,515	\$ 24,776	\$ 17,329
Weighted average shares outstanding	76,942	76,090	77,135
Weighted average shares outstanding assuming dilution (1)	80,739	76,443	77,353
Earnings per common share – basic	\$ 0.80	\$ 0.33	\$ 0.22
Earnings per common share – assuming dilution (1)	\$ 0.76	\$ 0.32	\$ 0.22

⁽¹⁾ Assumes exercise of dilutive stock options calculated under the treasury stock method.

The accompanying notes are an integral part of these consolidated financial statements.

ADTRAN, INC.

Consolidated Statements of Changes in Stockholders' Equity Years ended December 31, 2003, 2002 and 2001

(In thousands)	Common Shares	nmon tock	Additional Paid-In Capital	Retained Earnings	Treasury Stock	Comp	mulated other rehensive ne (Loss)	Total Stockholders' Equity
Balance, December 31, 2000	39,445	\$ 394	\$ 96,707	\$332,905	\$(15,452)	\$	19,870	\$ 434,425
Net Income				17,329				17,329
Change in unrealized gain on marketable securities (net of deferred tax of \$4,077)				,			(7,220)	(7,220)
Reclassification adjustment for amounts included in net income (net of income tax of \$1,849)							(3,276)	(3,276)
Stock options exercised:							(3,270)	(3,270)
Various prices per share			(340))	793			453
Purchase of treasury stock: 215 shares			(2.10)		(4,100))		(4,100)
Income tax benefit from exercise of non-qualified stock options			17		(,,			(, ,
Balance, December 31, 2001	39,445	\$ 394	\$ 96,384	\$350,234	\$(18,759)	\$	9,375	\$ 437,628
Net Income				24,776				24,776
Change in unrealized gain on marketable securities (net of deferred tax of \$4,002)							(7,088)	(7,088)
Reclassification adjustment for amounts included in net income (net of income tax of \$457)							810	810
Stock options exercised:								
Various prices per share			1		3,695			3,696
Purchase of treasury stock: 1,340 shares					(25,207))		(25,207)
Income tax benefit from exercise of non-qualified stock options			597					597
Balance, December 31, 2002	39,445	\$ 394	\$ 96,982	\$375,010	\$(40,271)	\$	3,097	\$ 435,212
Net Income				61,515				61,515
Dividend payments				(88,926)				(88,926)
Change in unrealized gain on marketable securities (net of deferred tax of \$4,484)				` ' '			7,618	7,618
Reclassification adjustment for amounts included in net income (net of income tax of \$576)							(997)	(997)
Unrealized foreign exchange translation (net of deferred tax \$141)							294	294
Stock options exercised:								
Various prices per share	214	2	14,814		40,271			55,087
100% stock dividend	39,635	397		(397)				0
Income tax benefit from exercise of non-qualified stock options			23,637					23,637
Issue of options below fair market value			381					381
Balance, December 31, 2003	79,294	\$ 793	\$135,814	\$347,202	\$ 0	\$	10,012	\$ 493,821

ADTRAN issued 4,125 shares, 375 shares and 76 shares of treasury stock to accommodate employee stock option exercises during 2003, 2002 and 2001, respectively, and issued 214 shares of common stock to accommodate employee stock option exercises during 2003.

Comprehensive income in 2003 of \$68,430 consists of net income of \$61,515 and unrealized gains on marketable securities of \$6,621 (net of deferred tax) and foreign currency translation adjustments of \$294 (net of deferred tax).

Comprehensive income in 2002 of \$18,498 consists of net income of \$24,776 and unrealized losses on marketable securities of \$6,278 (net of deferred tax).

Comprehensive income in 2001 of \$6,833 consists of net income of \$17,329 and unrealized losses on marketable securities of \$10,496 (net of deferred tax).

The accompanying notes are an integral part of these consolidated financial statements .

ADTRAN, INC.

Consolidated Statements of Cash Flows Years ended December 31, 2003, 2002 and 2001

(In thousands)	2003	2002	2001
Cash flows from operating activities			
Net income	\$ 61,515	\$ 24,776	\$ 17,329
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation	15,247	16,406	16,799
Loss on sale of property, plant and equipment	3	101	_
Loss (gain) on sale of short-term investments	_	(31)	180
Loss (gain) on sale of long-term investments	(226)	426	(5,159)
Write-down of other equity and debt securities	_	11,627	5,653
Non-cash compensation expense	381	_	_
Deferred income taxes	2,812	1,210	(2,527)
Income tax benefit from exercise of non-qualified stock options	23,638	597	16
Change in operating assets and liabilities:			
Accounts receivable, net	(13,502)	21,716	21,535
Other receivables	(2,528)	5,150	26,250
Income tax receivable	(11,586)	_	_
Inventory, net	(49)	16,923	32,403
Prepaid expenses and other assets	498	857	526
Accounts payable	10,241	2,237	(18,562)
Accrued expenses	3,683	728	(839)
Income taxes payable	(4,773)	2,455	(382)
Net cash provided by operating activities	85,354	105,178	93,222
Cash flows from investing activities			
Expenditures for property, plant and equipment	(6,782)	(2,647)	(13,216)
Proceeds from the disposition of property, plant and equipment	38	100	(13,210)
Proceeds from sale of available-for-sale investments	68,496	145,510	36,282
Purchases of available-for-sale investments	(114,462)	(189,386)	(97,793)
Proceeds from maturities of held-to-maturity investments	18,738	42,377	59,228
	(10,856)	(35,810)	(53,544)
Purchases of held-to-maturity investments	(10,830)	(55,810)	(33,344)
Net cash used in investing activities	(44,828)	(39,856)	(69,043)
Cash flows from financing activities			
Proceeds from issuance of common stock	55,087	3,696	453
Purchase of treasury stock	_	(25,206)	(4,100)
Dividend payments	(88,927)	_	_
Net cash used in financing activities	(33,840)	(21,510)	(3,647)
Net increase in cash and cash equivalents	6,686	43,812	20,532
Effect of exchange rate changes	294		20,552
Cash and cash equivalents, beginning of year	125,092	81,280	60,748
Cash and cash equivalents, end of year	\$ 132,072	\$ 125,092	\$ 81,280
·	<u> </u>		
Supplemental disclosure of cash flow information:	Φ	Φ 6 750	A 1 2
Cash paid during the year for interest	\$ 2,576	\$ 2,529	\$ 1,867
Cash paid during the year for income taxes	\$ 14,061	\$ 8,498	\$ 11,761

The accompanying notes are an integral part of these consolidated financial statements.

Notes to Consolidated Financial Statements

Note 1 - Nature of Business and Summary of Significant Accounting Policies

ADTRAN, Inc. designs, develops, manufactures, markets, and services a broad range of high-speed network access products utilized by providers of telecommunications services (serviced by our Carrier Networks Division) and corporate end-users (serviced by our Enterprise Networks Division) to implement advanced digital services over public and private networks. Our products are used primarily in the "last mile" of the network, or the local loop. The last mile is that segment of a telecommunications network that connects end user subscribers to a service provider's closest facility. Our products typically connect two ends of a telecommunications circuit, and serve to transmit data, voice, and video over that circuit.

Principles of Consolidation

Our consolidated financial statements include ADTRAN and its wholly owned subsidiaries. All significant inter-company accounts and transactions have been eliminated in consolidation.

Cash and Cash Equivalents

Cash and cash equivalents represent demand deposits, money market accounts, and short-term investments classified as held-to-maturity (see Note 2) with original maturities of three months or less.

Financial Instruments

The carrying amount reported in the balance sheets for cash and cash equivalents, accounts receivable, and accounts payable approximate fair value due to the immediate or short-term maturity of these financial instruments. The carrying amount reported for bonds payable approximates fair value because the underlying instruments are at variable rates that re-price frequently.

Investments represent re-marketed preferred stocks, municipal bonds, and marketable equity securities. Re-marketed preferred stocks and variable rate municipal bonds are designed to be marketed as money market instruments. These instruments' dividend rates reset on a short-term basis to maintain the price of the instruments at par. These instruments may be redeemed on the date the interest rate resets. The fair value of short-term investments is estimated based on quoted market prices (see Note 2).

Long-term investments represent restricted money market funds, municipal bonds, marketable equity securities, and other equity and debt investments (see Note 2). The fair value of the restricted money market funds approximates fair value due to a variable interest rate. Marketable equity securities are reported at market value as determined by the most recently traded price of the securities at the balance sheet date, although the securities may not be readily marketable due to the size of the available market. Unrealized gains and losses, net of tax, are reported as a separate component of stockholders' equity. Realized gains and losses on sales of securities are computed under the specific identification method and are included in current income. We periodically review our investment portfolio for investments considered to have sustained an other-than-temporary decline in value. Impairment charges for other-than-temporary declines in value are recorded as realized losses in the accompanying consolidated statements of income (see Note 2). Our investments at December 31, 2003 and 2002 are classified as available-for-sale or held-to-maturity.

Other Receivables

Other receivables are comprised primarily of accrued interest, amounts due from subcontract manufacturers for product component sales, and rebates due from vendors.

Inventory

Inventory is carried at the lower of cost or market, with cost being determined using the first-in, first-out method. Standard costs for material, labor, and manufacturing overhead are used to value inventory. All standard costs are rolled forward on a monthly basis. Therefore, inventory costs approximate actual costs at the end of each reporting period. We establish reserves for estimated excess, obsolete, or unmarketable inventory by an amount equal to the difference between the cost of the inventory and the estimated market value of the inventory based upon assumptions about future demand and market conditions. When excess and obsolete inventories are disposed of by our company, the related write-downs are charged against the inventory reserve.

Property, Plant and Equipment

Property, plant and equipment, which are stated at cost, are depreciated using methods which approximate straight-line depreciation over the estimated useful lives of the assets. We depreciate building and land improvements from five to 39 years, office machinery and equipment from three to seven years, and engineering machinery and equipment from three to seven years. Expenditures for repairs and maintenance are charged to expense as incurred. Betterments that materially prolong the lives of the assets are capitalized. The cost of assets retired or otherwise disposed of and the related accumulated depreciation are removed from the accounts, and the gain or loss on such disposition is included in selling, general and administrative expenses in the accompanying consolidated statements of income.

Liability for Warranty Returns

Our products generally include warranties of one to 10 years for product defects. We accrue for warranty returns at the cost to repair or replace the defective products at the time revenue is recognized. We engage in extensive product quality programs and processes, including actively monitoring and evaluating the quality of our component suppliers. Our warranty obligation is affected by product failure rates, material usage, and other rework costs incurred in correcting a product failure. The liability for warranty returns totaled \$1.5 million and \$1.4 million at December 31, 2003 and 2002, respectively. These liabilities are included in accrued expenses in the accompanying consolidated balance sheets.

		Addi	tions		
(In thousands)	Balance at Beginning of Period	Charged (Credited) to Costs & Expenses	Charged (Credited) to Other Accounts	Deductions	Balance at End of Period
Year ended December 31, 2003					
Warranty liability	\$ 1,384	\$ 3,034		\$ 2,877	\$ 1,541
Year ended December 31, 2002					
Warranty liability	\$ 1,277	\$ 3,846		\$ 3,739	\$ 1,384

Impairment of Long-Lived Assets

We review long-lived assets for impairment under the guidance prescribed by SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*. We evaluate long-lived assets used in operations for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable and the undiscounted cash flows estimated to be generated by those assets are less than the assets' carrying values. An impairment loss would be recognized in the amount by which the recorded value of the asset exceeds the fair value of the asset, measured by the quoted market price of an asset or an estimate based on the best information available in the circumstances. There were no such losses recognized during 2003, 2002 and 2001.

Research and Development Costs

Research and development costs are expensed as incurred and include compensation for engineers, support personnel, outside contracted services, and material costs associated with new product development, the enhancement of current products, and product cost reductions. We continually evaluate new product opportunities and engage in intensive research and product development efforts. Research and development costs totaled \$58.1 million, \$56.3 million and \$58.9 million for the years ended December 31, 2003, 2002 and 2001, respectively.

Advertising Costs

Advertising costs are expensed as incurred. Advertising expense was \$2.2 million, \$2.8 million and \$2.9 million for the years ended December 31, 2003, 2002 and 2001, respectively.

Comprehensive Income

Comprehensive income consists of all changes in equity (net assets) during a period from non-owner sources. Items included in comprehensive income include net income, changes in unrealized gains and losses on marketable securities, and foreign currency translation adjustments. Comprehensive income is presented in the consolidated statements of changes in stockholders' equity.

Income Taxes

The provision for income taxes has been determined using the asset and liability approach of accounting for income taxes. Under this approach, deferred taxes represent the future tax consequences expected to occur when the reported amounts of assets and liabilities are recovered or paid. The provision for income taxes represents income taxes paid or payable for the current year plus the change in deferred taxes during the year. Deferred taxes result from the difference between financial and tax bases of the Company's assets and liabilities and are adjusted for changes in tax rates and tax laws when changes are enacted. Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized. We also receive an income tax deduction for the difference between the exercise price and the market price of a nonqualified stock option upon exercise by the employee.

Foreign Currency

We record transactions denominated in foreign currencies on a monthly basis using the prior month-end exchange rate. Assets and liabilities denominated in foreign currencies are translated at the balance sheet dates using the closing rates of exchange between those foreign currencies and the U.S. dollar with any transaction gains or losses reported in income. Adjustments from translating financial statements of international subsidiaries are recorded in other accumulated comprehensive income or loss.

Revenue Recognition

Revenue is generally recognized upon shipment of the product to the customer in accordance with the terms of the sales agreement, or in the case of remote customer-located warehouses, upon delivery to the customer. Shipping fees are recorded as revenue and the related cost is included in cost of sales. Revenue is recorded net of discounts. Also, revenue is recorded when the product price is fixed and determinable, collection of the resulting receivable is probable, and product returns are reasonably estimable.

We participate in cooperative advertising and market development programs with certain customers. These programs are used to reimburse customers for certain forms of advertising and to provide sales incentives, and in general, allow customers credit up to a specified percentage of their net purchases. The costs associated with these programs are estimated and accrued at the time of sale, and are included in either marketing expenses or as a reduction of sales in the accompanying consolidated statements of income.

Unearned Revenue

Unearned revenue represents customer billings on our maintenance service programs paid up front. We currently offer one-year, three-year, and five-year maintenance contracts, primarily on Enterprise Networks Division products sold through distribution channels. Revenue attributable to these maintenance contracts is recognized ratably on a straight-line basis over the related contract.

Other Income (Expense)

Other income (expense) includes miscellaneous income or expense, gains or losses on foreign currency transactions, raw material scrap sales, and net recoveries from former customers.

Stock-Based Compensation

We record compensation expense for all stock-based compensation plans using the intrinsic value method in which compensation expense, if any, is measured as the excess of the market price of the stock over the exercise price of the award on the measurement date. We recorded \$0.2 million, net of tax, of compensation expense in 2003 for stock options granted at less than market value.

We apply APB Opinion No. 25 and related interpretations in accounting for our stock option plans. Had compensation cost for our stock-based compensation plans been determined based on the fair value at the grant dates for awards under those plans consistent with the method prescribed in SFAS No. 123, net income and earnings per share would have been reduced to the pro forma amounts indicated below:

Pro Forma Net Income (Loss) & Earnings (Loss) Per Share

(In thousands, except per share amounts)	2003	2002	2001
Net income - as reported	\$ 61,515	\$ 24,776	\$ 17,329
Add: stock-based compensation expense included in reported net income, net of tax	216	_	_
Less: stock-based compensation expense, net of tax	(22,755)	(21,998)	(17,869)
Net income (loss) – pro forma	\$ 38,976	\$ 2,778	\$ (540)
Earnings (loss) per share			
Basic-as reported	\$ 0.80	\$ 0.33	\$ 0.22
Basic-pro forma	\$ 0.50	\$ 0.04	\$ (0.01)
Diluted-as reported	\$ 0.76	\$ 0.32	\$ 0.22
Diluted-pro forma	\$ 0.48	\$ 0.04	\$ (0.01)

The pro forma amounts reflected above are not representative of the effects on reported net income in future years because, in general, the options granted typically do not vest for several years and additional awards are made each year. The fair value of each option grant is estimated on the grant date using the Black-Scholes option pricing model with the following weighted average assumptions:

Weighted Average Assumptions

	2003	2002	2001
Expected dividend yield	0.93%	0%	0%
Expected life (years)	5.00	4.21	5.00
Expected volatility	55.9%	49.6%	53.1%
Risk-free interest rate	3.20%	3.30%	4.72%

Earnings Per Share

Earnings per common share, and earnings per common share assuming dilution, are based on the weighted average number of common and, when dilutive, common equivalent shares outstanding during the year (see Note 11).

Dividends

The board of directors presently anticipates that it will declare a regular quarterly dividend so long as the present tax treatment of dividends exists and adequate levels of liquidity are maintained. On January 20, 2004, the board of directors declared a quarterly cash dividend. The quarterly cash dividend is \$0.08 per common share to be paid to holders of record at the close of business on February 3, 2004. The ex-dividend date was January 30, 2004 and the payment date was February 17, 2004. The quarterly dividend payment was approximately \$6.3 million.

Stock Split

On October 13, 2003, the board of directors declared, effective December 15, 2003, a two-for-one stock split to be effected in the form of a stock dividend of one share of common stock for each outstanding share of common stock for stockholders of record on December 1, 2003. Share and per share amounts, including stock options, in the accompanying Consolidated Statements of Income and Notes to Consolidated Financial Statements have been retroactively adjusted to reflect our stock split.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of

contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expenses during the reporting period. The more significant estimates include the bad debt allowance, obsolete and excess inventory reserves, warranty reserve, and estimated income tax contingencies. Actual results could differ from those estimates.

Reclassifications

Certain reclassifications have been made to the 2002 and 2001 consolidated financial statements in order to conform to the 2003 presentation. These reclassifications had no effect on previously reported net income, cash flows from operations, cash flows from investing activities, or total stockholders' equity.

Recently Issued Accounting Standards

In May 2003, the FASB issued SFAS No. 150, Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity ("SFAS 150"). SFAS 150 establishes how an issuer classifies and measures certain freestanding financial instruments with characteristics of both liabilities and equity and requires that such instruments be classified as liabilities. SFAS 150 was effective for financial instruments entered into or modified after May 31, 2003, and otherwise is effective at the beginning of the first interim period beginning after June 15, 2003 for those existing financial instruments subject to its provisions. We have not entered into any financial instruments within the scope of SFAS 150 since May 31, 2003. Accordingly, SFAS 150 had no impact on our consolidated financial statements for the year ended December 31, 2003.

In January 2003, the FASB issued FIN 46, Consolidation of Variable Interest Entities. In December 2003, the FASB issued FIN 46R (revised December 2003), which replaces FIN 46. FIN 46R clarifies the application of Accounting Research Bulletin No. 51, Consolidated Financial Statements, to certain entities in which equity investors do not have the characteristics of a controlling financial interest or do have sufficient equity at risk for the entity to finance its activities without additional subordinated support from other parties. FIN 46R is required to be applied to entities that are considered special-purpose entities no later than as of the end of the first reporting period that ends after December 15, 2003. Since we do not have any special-purpose entities, the accompanying consolidated financial statements for 2003 were not affected by FIN 46R. FIN 46R is required to be applied by March 31, 2004, to entities not considered to be special-purpose entities. We are currently evaluating this impact of FIN 46R and do not anticipate a material impact from such entities on our financial position, results of operations, or cash flows.

Note 2 - Investments

We classify our securities as either available-for-sale or held-to-maturity. At December 31, 2003 and 2002, we held the following securities, recorded at either fair value or amortized cost, which approximates fair value.

December 31, 2003

(In thousands)	Cost or Amortized Cost		Gross Unrealized Gains		Gross Unrealized Losses		Fair	r Value
	_						_	
Available-for-sale securities								
Restricted money market funds	\$	50,000					\$ 5	50,000
Municipal bonds and fixed income mutual funds		159,055	\$	2,002	\$	(356)	16	50,701
Marketable equity securities		15,939		13,741		(177)	2	29,503
Other equity securities		1,976						1,976
Total available-for-sale securities	\$	226,970	\$	15,743	\$	(533)	\$24	2,180
		·						
Held-to-maturity securities								
Municipal bonds and other government fixed income securities	\$	3,069					\$	3,069
Other debt securities		350						350
Total held-to-maturity securities	\$	3,419					\$	3,419
•		·						

December 31, 2002

(In thousands)	Am			Cost or Gross Gross Amortized Cost Unrealized Gains Unrealized Los			Fair Value	
Available-for-sale securities								
Restricted money market funds	\$	50,000					\$ 50,000	
Municipal bonds and fixed income mutual funds		103,849	\$	2,073	\$	(237)	105,685	
Marketable equity securities		22,669		3,831		(1,100)	25,400	
Other equity securities		911					911	
Total available-for-sale securities	\$	177,429	\$	5,904	\$	(1,337)	\$181,996	
				· .				
Held-to-maturity securities								
Municipal bonds and other government fixed income								
securities	\$	13,679					\$ 13,679	
Other debt securities		404					404	
Total held-to-maturity securities	\$	14,083					\$ 14,083	
•		·						

Gross realized gains on the sale of securities were approximately \$2.2 million, \$1.4 million and \$6.0 million for the years ended December 31, 2003, 2002 and 2001, respectively. Gross realized losses on the sale of securities were approximately \$2.0 million, \$1.7 million and \$1.2 million for the years ended December 31, 2003, 2002 and 2001, respectively. As of December 31, 2003 and 2002, we had no unrealized losses with a duration greater than 12 months. The fair values of investments with unrealized losses were \$86.5 million and \$29.9 million at December 31, 2003 and 2002, respectively. During 2002, we recognized gross losses of \$9.6 million on available-for-sale equity investments due to impairments that were deemed to be other-than-temporary.

We also invest in privately held companies and record our investments in these entities at cost. As of December 31, 2003 and 2002, we had \$2.3 million and \$1.3 million, respectively, of investments carried at cost. These investments are included in our total long-term investments in the accompanying consolidated balance sheets. We review our investments in these entities periodically in order to determine if circumstances (both financial and non-financial) exist that indicate that we will not recover our initial investment. Impairment charges are recorded on investments having a cost basis that is greater than the value that we would reasonably expect to receive in an arm's length sale of the investment. During 2003, 2002 and 2001, we recognized gross losses of \$0, \$2.0 million and \$5.5 million, respectively, on cost basis investments.

We have committed to invest an aggregate of \$7.9 million in two private equity funds, of which \$1.9 million has been invested to date. The duration of each of these commitments is five years, with \$2.9 million expiring in 2005 and \$5.0 million expiring in 2007. This investment is included in our total available-for-sale investments and is classified in long-term investments in the accompanying consolidated balance sheets.

Note 3 - Inventory

At December 31, 2003 and 2002, inventory was comprised of the following:

(In thousands)	2003	2002
Raw materials	\$19,526	\$23,259
Work in process	3,937	2,839
Finished goods	19,614	18,265
Inventory reserve	(3,102)	(4,437)
	ф20.0 25	ф20.02 <i>(</i>
Total	\$39,975	\$39,926

Note 4 - Property, Plant and Equipment

At December 31, 2003 and 2002, property, plant and equipment was comprised of the following:

(In thousands)	2003	2002
Land	\$ 4,263	\$ 4,263
Building	70,430	70,296
Land improvements	14,442	14,442
Office machinery and equipment	55,560	51,123
Engineering machinery and equipment	53,312	51,145
Total Property, Plant and Equipment	198,007	191,269
Less accumulated depreciation	(100,340)	(85,095)
Total Property, Plant and Equipment (net)	\$ 97,667	\$106,174

Depreciation expense was \$15.2 million, \$16.4 million and \$16.8 million in 2003, 2002 and 2001, respectively.

Note 5 - Alabama State Industrial Development Authority Financing and Economic Incentives

In conjunction with an expansion of our Huntsville, Alabama, facility, we were approved for participation in an incentive program offered by the State of Alabama Industrial Development Authority (the "Authority"). Pursuant to the program, on January 13, 1995, the Authority issued \$20.0 million of its taxable revenue bonds and loaned the proceeds from the sale of the bonds to ADTRAN. The bonds were originally purchased by AmSouth Bank of Alabama, Birmingham, Alabama, (the "Bank"). First Union National Bank of Tennessee, Nashville, Tennessee, (the "Bondholder") purchased the original bonds from the Bank and made further advances to the Authority, bringing the total amount outstanding to \$50.0 million. An Amended and Restated Taxable Revenue Bond ("Amended and Restated Bond"), was issued and the original financing agreement was amended. The Amended and Restated Bond bears interest, payable monthly. In 2003, the interest rate was 5%. The Amended and Restated Bond matures on January 1, 2020. The estimated market value of the bond at December 31, 2003, was approximately \$46.7 million. We are required to make payments to the Authority in amounts necessary to pay the principal of and interest on the Amended and Restated Bond. Included in long-term investments is \$50.0 million, which is invested in restricted money market funds. These funds serve as collateral deposit against the principal of this bond. In conjunction with this program, we are eligible to receive certain economic incentives from the state of Alabama that reduce the amount of payroll withholdings that we are required to remit to the state for those employment positions that qualify under the program. Our economic incentives realized for the years ended December 31, 2003, 2002 and 2001 were \$1.5 million, \$1.2 million and \$1.3 million, respectively.

Note 6 - Income Taxes

A summary of the components of the provision for income taxes as of December 31, 2003, 2002 and 2001 is as follows:

(In thousands)	2003	2002	2001
Current			
Federal	\$23,247	\$5,695	\$ 6,919
State	1,256	496	2,017
Total Current	24,503	6,191	8,936
Deferred tax provision (benefit)	2,812	1,210	(2,527)
Total provision for income taxes	\$27,315	\$7,401	\$ 6,409

The provision for income taxes differs from the amounts computed by applying the Federal statutory rate due to the following:

(In thousands)	2003	2002	2001
Tax provision computed at the Federal statutory rate (35% in 2003, 2002 and 2001)	\$31,091	\$11,262	\$ 8,308
State income tax provision, net of Federal benefit	2,028	1,380	2,314
Federal research credits	(2,270)	(2,200)	(2,386)
Tax exempt income	(1,546)	(1,724)	(898)
State tax incentives	(1,539)	(1,156)	(1,326)
Other	(449)	(161)	397
Total provision for income taxes	\$27,315	\$ 7,401	\$ 6,409

Temporary differences which created deferred tax assets and liabilities at December 31, 2003 and 2002 are as follows:

(In thousands)	2003			2002			
	Current	Non-Current	Current	Non-Current			
Accumulated depreciation		\$ (5,185)		\$ (4,651			
Investments Accounts receivable	\$ 639	(2,069)	\$ 892	3,799			
Inventory	1,687		1,807	/401			
Accruals State research credits	1,055	441	2,100	(421			
Valuation allowance		(441)					
Deferred tax asset (liability)	\$3,381	\$ (7,254)	\$4,799	\$ (1,273			

In accordance with SFAS No. 109, *Accounting for Income Taxes*, we believe it is more likely than not that we will not realize a portion of the benefits of certain deferred tax assets arising from state research credits, and accordingly, have provided a valuation allowance for them.

We recorded \$23.6 million, \$0.6 million and \$0.1 million during the years ended 2003, 2002 and 2001, respectively, as an income tax deduction for the difference between the exercise price and the market price of nonqualified stock option exercises.

Note 7 - Stock Option Plans

Our board of directors adopted the 1996 Employees Incentive Stock Option Plan (the "1996 Plan") effective February 14, 1996, as amended, under which 16,976,200 shares of common stock were reserved for issuance to certain employees and officers through incentive stock options and non-qualified stock options. We currently have options outstanding under the 1986 Employee Incentive Stock Option Plan (the "1986 Plan"), which expired on February 14, 1996. Options granted under the 1996 Plan or the 1986 Plan become exercisable after one year of continued employment, normally pursuant to a four or five-year vesting schedule beginning on the first anniversary of the grant date. Expiration dates of options outstanding under the 1996 Plan and the 1986 Plan at December 31, 2003, range from 2005 to 2013.

The board of directors adopted the 1995 Directors Stock Option Plan ("Directors Plan") effective October 31, 1995, as amended, under which 400,000 shares of common stock have been reserved. The Directors Plan is a formula plan to provide options to our non-employee directors. At December 31, 2003, 394,500 options had been granted under the Directors Plan, 72,000 options had been cancelled or forfeited, and 77,500 options remained available for grant. Expiration dates of options outstanding under the Directors Plan at December 31, 2003, range from 2006 to 2013.

On January 28, 2002, our board of directors approved a voluntary stock option exchange program for its employees, executive officers, and directors. In conjunction with the exchange offer, we filed a Tender Offer Statement on Schedule TO with the Securities and Exchange Commission. Under the option exchange program, employees, executive officers, and directors who held options to purchase our common stock and who had not received options after July 23, 2001, were given the opportunity to exchange unexercised stock options granted prior to September 30, 2000, with exercise prices of at least \$20 per share. For every four shares of an eligible option, three shares were made available under the new option grant. The newly issued options vest according to the vesting schedule of the tendered options. A total of 2,868,800 options were tendered and cancelled. As of December 31, 2002, a total of 1,983,366 new options were granted to qualified participants in the exchange program. The new option grant was made on August 30, 2002, at an exercise price of \$8.695 per share.

Pertinent information regarding our stock option plans is as follows:

(In thousands, except per share amounts)	Number of Options	Range of Exercise Prices		nted Average	Vesting Provisions
Options outstanding, December 31, 2000	8,087	\$ 0.84 - \$34.91	\$	22.01	Various
Options granted	2,886	\$ 9.62 - \$14.04 \$10.65 - \$34.91	\$ \$	12.77 22.02	Various Various
Options cancelled/forfeited Options exercised	(534)	\$ 0.84 - \$12.69	\$	6.18	Various
Options outstanding, December 31, 2001	10,366	\$ 0.84 - \$34.91	\$	13.66	Various
Options granted	4,312	\$ 8.69 - \$16.45	\$	9.82	Various
Options cancelled/forfeited Options exercised	(3,297) (397)	\$ 8.70 - \$34.91 \$ 1.25 - \$15.18	\$ \$	31.75 9.97	Various Various
Options outstanding, December 31, 2002	10,984	\$ 1.67 - \$34.91	\$	12.43	Various
Options granted	747	\$18.04 - \$36.64	\$	31.44	Various
Options cancelled/forfeited Options exercised	(118) (4,550)	\$ 1.67 - \$34.91 \$ 1.67 - \$34.91	\$ \$	14.28 12.23	Various Various
Options outstanding, December 31, 2003	7,063	\$ 8.69 - \$36.64	\$	14.53	Various

The following table summarizes information about stock options outstanding at December 31, 2003:

Options Outstanding at December 31, 2003

(In thousands, except per share amounts)

Range of Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
\$8.69 - \$9.72	757	6.48	\$8.73	337	\$8.75
\$9.90 - \$13.75	4,253	7.70	\$11.53	1,421	\$11.56
\$14.03 - \$17.94	204	7.62	\$14.99	92	\$15.98
\$18.03 - \$24.78	1,109	5.65	\$18.15	716	\$18.12
\$28.18 - \$36.64	740	9.75	\$32.20	23	\$34.17
Total	7,063		_	2,589	

Of the options above, 7,056,907 were issued at exercise prices that approximate fair market value at the date of grant and 6,000 were issued below fair market value at the date of grant. At December 31, 2003, 4,824,500 options were available for grant under the plans.

Note 8 - Employee Benefit Plan

Effective January 1, 1990, we adopted a savings plan (the "Savings Plan") for the benefit of eligible employees. The Savings Plan allows employees to contribute part of their compensation to the plan on a tax-deferred basis, and requires us to contribute an amount equal to 3% of compensation each year for eligible employees who have completed a year of service. The Savings Plan is intended to qualify under Sections 401(a) and 401(k) of the Internal Revenue Code of 1986, as amended (the "Code"), and is intended to be a "safe harbor" 401(k) plan under code Section 401(k)(12). Prior to January 1, 2001, we contributed matching contributions in an amount equal to 50% of each eligible employee's elective deferrals under the Savings Plan, up to 5% of the employee's compensation for the plan year. Effective January 1, 2001, the plan requires us to contribute a "safe harbor" amount equal to 3% of compensation each year for eligible employees who have completed a year of service up to the statutory maximum compensation (\$200,000 for 2003). Employees who become eligible for the safe harbor contribution during the plan year are eligible for 3% of compensation, including compensation earned during any portion of the plan year during which the employee was eligible to defer, but not yet eligible for the safe harbor contribution. All contributions under the Savings Plan are 100% vested. Charges to operations for employer contributions and plan administration for the Savings Plan amounted to approximately \$2.5 million, \$2.1 million and \$2.5 million in 2003, 2002 and 2001, respectively.

Note 9 - Segment Information and Major Customers

ADTRAN operates two reportable segments: (1) Carrier Networks Division and (2) Enterprise Networks Division. The accounting policies of the segments are the same as those described in the "Summary of Significant Accounting Policies" (see Note 1) to the extent that such policies affect the reported segment information. We evaluate the performance of our segments based on gross profit; therefore, selling, general and administrative costs, as well as research and development, other income, interest income/expense, net realized investment gains (losses) and provision for taxes, are reported on an entity-wide basis only. There are no inter-segment revenues.

The following table presents information about the reported sales and gross profit of our reportable segments for each of the years ended December 31, 2003, 2002 and 2001. Asset information by reportable segment is not reported, since we do not produce such information internally.

Sales by Market Segment

(In thousands)	200	2003		2002		01
	Sales	Gross Profit	Sales	Gross Profit	Sales	Gross Profit
Carrier Networks	\$ 267,563	\$ 145,007	\$ 218,912	\$ 105,277	\$ 238,367	\$ 93,644
Enterprise Networks	129,113	76,988	126,813	69,659	148,714	79,677
Total	\$ 396,676	\$ 221,995	\$ 345,725	\$ 174,936	\$ 387,081	\$ 173,321

Sales by Product

The Digital Business Transport (DBT)/Total Reach category is comprised of revenue from ISDN and DDS transport and connectivity products sold to carrier and enterprise customers. The High-bit-rate Digital Subscriber Line (HDSL)/T1 category is comprised of revenue from HDSL-related carrier products and T1 CSU/DSU enterprise products. The Systems category includes revenue from Total Access narrow-band products, M13 multiplexers, integrated access devices and new products comprised of NetVanta routers, Internet security products, DSLAM products, and optical access products. The following is sales information by product for the years ended December 31, 2003, 2002 and 2001:

(In thousands)	2003	2002	2001
Digital Business Transport (DBT) / Total Reach	\$ 31,850	\$ 44,932	\$ 86,794
High-bit-rate Digital Subscriber Line (HDSL) / T1	193,235	196,892	200,919
Systems	171,591	103,901	99,368
Total	\$396,676	\$345,725	\$387,081

Sales by Geographic Region

The following is sales information by geographic area for the years ended December 31, 2003, 2002 and 2001:

(In thousands)	2003	2002	2001
United States All other	\$377,060 19,616	\$325,429 20,296	\$369,422 17,659
Total	\$396,676	\$345,725	\$387,081

Single customers comprising more than 10% of our revenue in 2003 included SBC Communications, Inc. at 22.9%, Verizon Communications, Inc. at 15.0%, and Sprint Corporation at 13.8%. No other customer accounted for 10% or more of our sales in 2003. Sales of network access equipment to Incumbent Local Exchange Carriers (ILECs) and major independent telecommunications companies amounted to approximately 60%, 57% and 59% of total sales during the years ended December 31, 2003, 2002 and 2001, respectively. Our Enterprise Networks Division sells a significant portion of products to value-added resellers through a multi-tier distribution system. Our total sales of this type amounted to 25%, 25% and 26% of our revenue for each of the years ended December 31, 2003, 2002 and 2001, respectively, and were routed through four primary fulfillment distributors.

As of December 31, 2003, long-lived assets totaled \$97.7 million, which includes \$97.5 million held in the United States and \$0.2 million held outside the United States. As of December 31, 2002, long-lived assets totaled \$106.2 million, which includes \$106.0 million held in the United States and \$0.2 million held outside the United States.

Note 10 - Commitments and Contingencies

We have certain contingent liabilities resulting from litigation arising in the normal course of business. Although the outcome of any litigation can never be certain, it is our opinion that the outcome of such contingencies will not materially affect our business, operations, financial condition or cash flows.

We lease office space and equipment under operating leases which expire at various dates through 2008. As of December 31, 2003, future minimum rental payments under non-cancelable operating leases with original maturities of greater than 12 months are approximately as follows:

(In thousands)	
2004	\$ 684
2005	489
2006	410
2007	356
2008	152
Total	\$2,091

Rental expense was approximately \$1.9 million, \$2.1 million and \$2.2 million in 2003, 2002 and 2001, respectively.

We have various contractual obligations and commercial commitments. The following table sets forth, in millions, the annual payments, exclusive of interest payments, we are required to make under contractual cash obligations and other commercial commitments at December 31, 2003.

Contractual Obligations

(In millions)	Total	2004	2005	2006	2007	2008	After 2008
Long-term debt	\$50.0	_	_	_	_	_	\$50.0
Investment commitments	\$ 6.0	_	\$ 1.7	_	\$ 4.3	_	_
Operating lease obligations	\$ 2.2	\$ 0.7	\$ 0.5	\$ 0.4	\$ 0.4	\$ 0.2	_
Purchase obligations	\$27.9	\$27.9	_	_	_	_	_
Totals	\$86.1	\$28.6	\$ 2.2	\$ 0.4	\$ 4.7	\$ 0.2	\$50.0

We do not have off-balance sheet financing arrangements. At December 31, 2003, we had outstanding purchase agreements with vendors of approximately \$27.9 million to purchase materials and services. Additionally, we have committed to invest an aggregate of \$7.9 million in two private equity funds, of which \$1.9 million has been invested to date. The duration of each of these commitments is five years with \$2.9 million expiring in 2005 and \$5.0 million expiring in 2007.

Note 11 - Earnings Per Share

A summary of the calculation of basic and diluted earnings per share (EPS) for the years ended December 31, 2003, 2002 and 2001 is as follows:

(In thousands, except per share amounts)	For the Year Ended December 31, 2003					
	Income (Numerator)	Shares (Denominator)	Per-Share Amount			
Basic EPS						
Net income	\$ 61,515	76,942	\$ 0.80			
Effect of dilutive securities						
Stock options		3,797				
Diluted EPS						
Income available to common stockholders (with dilution) for assumed options exercised	\$ 61,515	80,739	\$ 0.76			
	For the Y	ear Ended December 3	1, 2002			
	Income (Numerator)	Shares (Denominator)	Per-Share Amount			
Basic EPS						
Net income	\$ 24,776	76,090	\$ 0.33*			
Effect of dilutive securities						
Stock options		353				
Diluted EPS						
Income available to common stockholders (with dilution) for assumed options exercised	\$ 24,776	76,443	\$ 0.32*			
	For the Y	ear Ended December 3	1, 2001			
	Income (Numerator)	Shares (Denominator)	Per-Share Amount			
Basic EPS						
Net income	\$ 17,329	77,135	\$ 0.22			
Effect of dilutive securities						
Stock options		218				
Diluted EPS						
Income available to common stockholders (with dilution) for assumed options exercised	\$ 17,329	77,353	\$ 0.22			

^{*} Includes an impairment charge related to other-than-temporary declines in the fair value of equity securities, resulting in an after-tax loss of \$7.4 million (\$0.10 per share assuming dilution).

The following options were outstanding during the respective years shown below, but were not included in the computation of that year's diluted EPS because the options' exercise prices were greater than the average market price of the common shares shown below, therefore making them anti-dilutive under the treasury method.

Outstanding Options

(In thousands, except per share amounts)

2003 2002				2003 2002			2001			
Options Granted		ercise Price	Expiration	Options Granted	Exercise Price	Expiration	Options Granted	Exercise Price	Expiration	
2	\$	32.88	2006	44	\$15.88-\$20.50	2005	69	\$15.25-\$23.13	2005	
28	\$	34.91	2010	28	\$15.25-\$20.75	2006	448	\$15.25-\$32.88	2006	
740	\$28.18	3 - \$36.64	2013	847	\$12.69-\$21.36	2007	945	\$12.69-\$21.19	2007	
				20	\$13.13-\$15.50	2008	23	\$13.13-\$15.50	2008	
				1,749	\$17.93-\$19.85	2009	1,934	\$12.69-\$25.72	2009	
				120	\$19.50-\$34.91	2010	2,549	\$19.50-\$34.91	2010	
				2,621	\$12.67-\$14.04	2011	2,792	\$12.67-\$14.04	2011	
				171	\$12.99-\$16.45	2012				

Note 12 - Summarized Quarterly Financial Data (Unaudited)

The following table presents unaudited quarterly operating results for each of our last eight fiscal quarters. This information has been prepared by us on a basis consistent with our audited financial statements and includes all adjustments, consisting only of normal recurring adjustments, considered necessary for a fair presentation of the data.

Unaudited Quarterly Operating Results

(In thousands, except for per share amounts)

	March 31,	June 30,	Sep	otember 30,	De	cember 31,
Three Months Ended	2003		2003		2003	
Net sales	\$ 86,223	\$90,437	\$	106,201	\$	113,815
Gross profit	\$47,073	\$49,670	\$	58,917	\$	66,304
Operating income	\$12,650	\$15,715	\$	23,305	\$	30,315
Net income	\$ 10,539	\$12,379	\$	17,165	\$	21,432
Earnings per common share assuming dilution (2)	\$ 0.14	\$ 0.15	\$	0.21	\$	0.26
Earnings per common share	\$ 0.14	\$ 0.16	\$	0.22	\$	0.27
Three Months Ended	March 31,	June 30,	Sej	otember 30,	De	cember 31,
Three Months Ended	March 31, 2002	June 30, 2002	Sej	2002	De	cember 31, 2002
Three Months Ended Net sales	,		Se _I		De \$	
	2002	2002	_	2002	_	2002
Net sales	\$83,342	\$85,784	\$	2002 88,180	\$	2002 88,419
Net sales Gross profit	\$83,342 \$39,359	\$85,784 \$41,623	\$	2002 88,180 45,525	\$ \$	2002 88,419 48,429
Net sales Gross profit Operating income	\$83,342 \$39,359 \$4,735	\$85,784 \$41,623 \$ 6,710	\$ \$ \$	2002 88,180 45,525 11,930	\$ \$ \$	88,419 48,429 14,150

⁽¹⁾ Net Income for the three months ended June 30, 2002, and September 30, 2002, includes other-than-temporary investment impairment charges, amounting to an after-tax loss of \$0.9 million and \$6.6 million, respectively.

⁽²⁾ Assumes exercise of dilutive stock options calculated under the treasury stock method.

Note 13 – Related Party Transactions

We paid the law firm of one of our directors emeritus \$120,000 in fees for legal services rendered to us during 2003. All bills for services rendered by this firm are reviewed and approved by our chief financial officer. We believe that the fees for such services are comparable to those charged by other firms for services rendered to us.

One of our non-employee directors is the President – Customer Markets, of one of our significant customers. For fiscal year 2003, we received payments, directly and indirectly, from this customer in the amount of approximately \$22.8 million for products supplied to this customer. We also paid to this customer \$566,938 for services provided to us.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

No independent certified public accountant of ADTRAN has resigned, indicated any intent to resign or been dismissed as the independent certified public accountant of ADTRAN during the two fiscal years ended December 31, 2003 or subsequent thereto.

ITEM 9A. CONTROLS AND PROCEDURES

- (a) Evaluation of disclosure controls and procedures. Our chief executive officer and chief financial officer are responsible for establishing and maintaining "disclosure controls and procedures" (as defined in the Securities Exchange Act of 1934 Rules 13a-15(e) and 15d-15(e)) for the company. Our chief executive officer and chief financial officer, after evaluating the effectiveness of our disclosure controls and procedures as of the end of the period covered by this annual report, have concluded that our disclosure controls and procedures are adequate and effective in timely alerting them to material information relating to us (including our consolidated subsidiaries) required to be included in our periodic SEC filings.
- (b) Changes in internal control over financial reporting. There were no changes in our internal control over financial reporting that occurred during our most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

Information relating to nominees for director of ADTRAN and compliance with Section 16(a) of the Securities Exchange Act of 1934 is set forth under the captions "Proposal 1–Election of Directors" and "Section 16(a) Beneficial Ownership Reporting Compliance," respectively, in the Proxy Statement for the Annual Meeting of Stockholders to be held on April 15, 2004. Such information is incorporated herein by reference. The definitive Proxy Statement was filed with the Securities and Exchange Commission on March 12, 2003. Information relating to the executive officers of ADTRAN, pursuant to Instruction 3 of Item 401(b) of Regulation S-K and General Instruction G(3) of Form 10-K, is set forth at Part I, Item 4(A) of this report under the caption "Executive Officers of the Registrant." Such information is incorporated herein by reference.

CODE OF ETHICS

We have adopted the ADTRAN, Inc. Code of Business Conduct and Ethics, which applies to all employees, officers and directors of ADTRAN. The Code of Business Conduct and Ethics meets the requirements of a "code of ethics" as defined by Item 406 of Regulation S-K, and applies to our Chief Executive Officer, Chief Financial Officer (who is both our principal financial and principal accounting officer), as well as all other employees, as indicated above. The Code of Business Conduct and Ethics also meets the requirements of a code of conduct under Nasdaq listing standards. The Code of Business Conduct and Ethics is posted on our website at www.adtran.com under the links "Investor Relations – Corporate Governance - ADTRAN Code of Business Conduct and Ethics." We intend to disclose any amendments to the Code of Business Conduct and Ethics, as well as any waivers for executive officers or directors, on our website at www.adtran.com.

ITEM 11. EXECUTIVE COMPENSATION

Information required by this Item 11 relating to executive compensation and other matters is set forth under the captions "Executive Compensation," "Proposal 1–Election of Directors–Director Compensation," and "Compensation Committee Interlocks and Insider Participation" in the Proxy Statement referred to in Item 10 above. Such information is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

Information relating to ownership of common stock of ADTRAN by certain persons is set forth under the caption "Share Ownership of Principal Stockholders and Management" in the Proxy Statement referred to in Item 10 above. Such information is incorporated herein by reference. Information regarding securities authorized for issuance under equity compensation plans of ADTRAN is set forth under the caption "Equity Compensation Plan Information" in the Proxy Statement referred to in Item 10 above. Such information is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Information relating to existing or proposed relationships or transactions between ADTRAN and any affiliate of ADTRAN is set forth under the caption "Certain Relationships and Related Transactions" in the Proxy Statement referred to in Item 10 above. Such information is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information relating to ADTRAN's principal accountant's fees and services is set forth under the caption "Principal Accountant Fees and Services" in the Proxy Statement referred to in Item 10 above. Such information is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K

-) Documents Filed as Part of This Report.
 - Consolidated Financial Statements

The consolidated financial statements of ADTRAN and the related report of independent auditors thereon are set forth under Part II, Item 8 of this report.

Consolidated Balance Sheets as of December 31, 2003 and 2002

Consolidated Statements of Income for the years ended December 31, 2003, 2002 and 2001

Consolidated Statements of Changes in Stockholders' Equity for the years ended December 31, 2003, 2002 and 2001

Consolidated Statements of Cash Flows for the years ended December 31, 2003, 2002 and 2001

Notes to Consolidated Financial Statements

2. Consolidated Financial Statement Schedules

Schedule II - Valuation and Qualifying Accounts

3. Exhibits

The following exhibits are filed with or incorporated by reference in this report. Where such filing is made by incorporation by reference to a previously filed registration statement or report, such registration statement or report is identified in parentheses. We will furnish any exhibit upon request to: ADTRAN, Inc., Attn: Investor Relations, P.O. Box 140000, 901 Explorer Boulevard, Huntsville, Alabama 35814. There is a charge of \$.50 per page to cover expenses for copying and mailing.

Exhibit Number

Description

- 3.1 Certificate of Incorporation, as amended (Exhibit 3.1 to ADTRAN's Registration Statement on Form S-1, No. 33-81062 (the "Form S-1 Registration Statement")).
- 3.2 Bylaws, as amended (Exhibit 3.2 to ADTRAN's Annual Report on Form 10-K for the year ended December 31, 2000).
- Documents relative to the \$50,000,000 Taxable Revenue Bond, Series 1995 (ADTRAN, Inc. Project) issued by the Alabama State Industrial Development Authority, consisting of the following:
 - (a) First Amended and Restated Financing Agreement dated April 25, 1997, among the State Industrial Development Authority, a public corporation organized under the laws of the State of Alabama (the "Authority"), ADTRAN and First Union National Bank of Tennessee, a national banking corporation (the "Bondholder") (Exhibit 10.1(a) to ADTRAN's Quarterly Report on Form 10-Q for the quarter ended March 31, 1997 (the "1997 Form 10-Q")).
 - (b) First Amended and Restated Loan Agreement dated April 25, 1997, between the Authority and ADTRAN (Exhibit 10.1(b) to the 1997 Form 10-Q).
 - (c) First Amended and Restated Specimen Taxable Revenue Bond, Series 1995 (ADTRAN, Inc. Project) (Exhibit 10.1(c) to the 1997 Form 10-Q).
 - (d) First Amended and Restated Specimen Note from ADTRAN to the Bondholder, dated April 25, 1997 (Exhibit 10.1(d) to the 1997 Form 10-Q).
 - (e) Amended and Restated Investment Agreement dated January 3, 2002 between ADTRAN and First Union National Bank (successor-in-interest to First Union National Bank of Tennessee (the "Successor Bondholder")) (Exhibit 10.1(e) to ADTRAN's Annual Report on Form 10-K for the year ended December 31, 2002 (the "2002 Form 10-K")).
 - (f) Resolution of the Authority authorizing the amendment of certain documents, dated April 25, 1997, relating to the \$50,000,000 Taxable Revenue Bond, Series 1995 (ADTRAN, Inc. Project) (Exhibit 10.1(f) to the 1997 Form 10-Q).
 - (g) Resolution of ADTRAN authorizing the First Amended and Restated Financing Agreement, the First Amended and Restated Loan Agreement, the First Amended and Restated Note, and the Investment Agreement (Exhibit 10.1(g) to the 1997 Form 10-Q).
 - (h) Amendment to First Amended and Restated Financing Agreement and First Amended and Restated Loan Agreement dated January 3, 2002 between ADTRAN and the Successor Bondholder (Exhibit 10.1(h) to the 2002 Form 10-K).
- Tax Indemnification Agreement dated July 1, 1994 by and among ADTRAN and the stockholders of ADTRAN prior to ADTRAN's initial public offering of Common Stock (Exhibit 10.5 to the 1994 Form 10-K).

Exhibit Number

Description

- 10.3 Management Contracts and Compensation Plans:
 - (a) Amended and Restated 1996 Employees Incentive Stock Option Plan, as amended by the First, Second and Third Amendments thereto (Exhibit 10.3(a) to the 2002 Form 10-K).
 - (b) Amended and Restated 1995 Directors Stock Option Plan, as amended by the First and Second Amendments thereto (Exhibit 10.3(b) to the 2002 Form 10-K).
 - (c) Third Amendment to the Amended and Restated 1995 Directors Stock Option Plan.*
 - (d) Offer to Exchange dated January 28, 2002 (Exhibit (a)(1)(A) to ADTRAN's Tender Offer Statement on Schedule TO (the "Schedule TO") filed on January 28, 2002, as amended by Amendment No. 1 to Schedule TO filed on February 13, 2002).
 - (e) Form of Election Form Concerning Exchange of Stock Options (Exhibit (a)(1)(B) to the Schedule TO filed on January 28, 2002, as amended by Amendment No. 1 to Schedule TO filed on February 13, 2002).
 - (f) ADTRAN, Inc. Deferred Compensation Plan (Exhibit 10.3(f) to the 2002 Form 10-K).
 - (g) First Amendment to the ADTRAN, Inc. Deferred Compensation Plan (Exhibit 10.3(g) to the 2002 Form 10-K).
 - (h) Management Incentive Bonus Program for the CEO, COO and Senior Vice Presidents (Fiscal Year 2004).*
 - Management Incentive Bonus Program for Corporate Vice Presidents (Fiscal Year 2004).*
 - (j) Management Incentive Bonus Program for Elected Officers (Fiscal Year 2003).*
- *23 Consent of PricewaterhouseCoopers LLP.
- *24 Powers of Attorney.
- *31 Rule 13a-14(a)/15d-14(a) Certifications.
- *32 Section 1350 Certifications.

(b) Reports on Form 8-K.

On October 14, 2003, ADTRAN, Inc. furnished a current report on Form 8-K announcing that its Board of Directors declared, effective December 15, 2003, a two-for-one stock split to be effected in the form of a stock dividend of one share of common stock for each outstanding share of common stock for shareholders of record on December 1, 2003. ADTRAN also announced its financial results for the fiscal quarter ended September 30, 2003 and certain other information.

^{*} Filed herewith

Signature

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on March 11, 2004.

ADTRAN, Inc. (Registrant)

By: /s/ James E. Matthews

James E. Matthews Senior Vice President – Finance, Chief Financial Officer and Treasurer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities indicated on March 11, 2004.

Title

Signature	The
/s/ Mark C. Smith	Chairman of the Board, Chief Executive Officer and Director
Mark C. Smith	Cinci Executive Officer and Director
/s/ Howard A. Thrailkill	President, Chief Operating Officer and Director
Howard A. Thrailkill	Fresident, Chief Operating Officer and Director
/s/ W. Frank Blount*	Company and Diseases
W. Frank Blount	Secretary and Director
/s/ Richard A. Anderson*	- Director
Richard A. Anderson	- Director
/s/ William L. Marks*	- Director
William L. Marks	• Director
/s/ Roy J. Nichols*	Discourage of the second of th
Roy J. Nichols	- Director
/s/ H. Fenwick Huss *	D'
H. Fenwick Huss	- Director
/s/ James E. Matthews	Senior Vice President-Finance, Chief Financial Officer and Treasurer
James E. Matthews	• Chief Financial Officer and Treasurer
*By: /s/ Howard A. Thrailkill	
Howard A. Thrailkill as Attorney in Fact	
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ADTRAN, INC.

SCHEDULE II VALUATION AND QUALIFYING ACCOUNTS

Column A	Column B	Colur	mn C	Column D	Column E
		Additions			
(In thousands)	Balance at beginning of Period	Charged (Credited) to Costs & Expenses	Charged (Credited) to Other Accounts	Deductions	Balance at end of Period
V I ID I . 21 2002					
Year ended December 31, 2003 Allowance for Doubtful Accounts	¢ 2.472	¢ (709)		\$ 18	¢ 1746
Inventory Reserve	\$ 2,472 \$ 4,437	\$ (708) \$ 3,832		\$ 5,167	\$ 1,746 \$ 3,102
Warranty Liability	\$ 1,384	\$ 3,034	_	\$ 2,877	\$ 1,541
Year ended December 31, 2002					
Allowance for Doubtful Accounts	\$ 3,882	\$ 3,703	_	\$ 5,113	\$ 2,472
Inventory Reserve	\$ 5,603	\$ 4,485	_	\$ 5,651	\$ 4,437
Warranty Liability	\$ 1,277	\$ 3,846	_	\$ 3,739	\$ 1,384
Year ended December 31, 2001					
Allowance for Doubtful Accounts	\$ 813	\$ 3,254	_	\$ 185	\$ 3,882
Inventory Reserve	\$ 4,638	\$ 5,388	_	\$ 4,423	\$ 5,603
Warranty Liability	\$ 1,520	\$ 3,719	_	\$ 3,962	\$ 1,277

ADTRAN, INC. INDEX OF EXHIBITS

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Quarterly Report on Form 10-Q for the quarter ended March 31, 1997 (the "1997 Form 10-Q")).

(b) First Amended and Restated Loan Agreement dated April 25, 1997, between the Authority and ADTRAN (Exhibit 10.1 (b) to the 1997 Form 10-Q).

Union National Bank of Tennessee, a national banking corporation (the "Bondholder") (Exhibit 10.1(a) to ADTRAN's

- (c) First Amended and Restated Specimen Taxable Revenue Bond, Series 1995 (ADTRAN, Inc. Project) (Exhibit 10.1(c) to the 1997 Form 10-Q).
- (d) First Amended and Restated Specimen Note from ADTRAN to the Bondholder, dated April 25, 1997 (Exhibit 10.1(d) to the 1997 Form 10-Q).
- (e) Amended and Restated Investment Agreement dated January 3, 2002 between ADTRAN and First Union National Bank (successor-in-interest to First Union National Bank of Tennessee (the "Successor Bondholder")) (Exhibit 10.1(e) to ADTRAN's Annual Report on Form 10-K for the year ended December 31, 2002 (the "2002 Form 10-K")).
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Exhibit Number	Descri	ption				
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	(a)	Amended and Restated 1996 Employees Incentive Stock Option Plan, as amended by the First, Second and Third Amendments thereto (Exhibit 10.3(a) to the 2002 Form 10-K).				
	(b)	Amended and Restated 1995 Directors Stock Option Plan, as amended by the First and Second Amendments thereto (Exhibit 10.3(b) to the 2002 Form 10-K).				
	(c)	Third Amendment to the Amended and Restated 1995 Directors Stock Option Plan.*				
	(d)	Offer to Exchange dated January 28, 2002 (Exhibit (a)(1)(A) to ADTRAN's Tender Offer Statement on Schedule TO (the "Schedule TO") filed on January 28, 2002, as amended by Amendment No. 1 to Schedule TO filed on February 13, 2002).				
	(e)	Form of Election Form Concerning Exchange of Stock Options (Exhibit (a)(1)(B) to the Schedule TO filed on January 28, 2002, as amended by Amendment No. 1 to Schedule TO filed on February 13, 2002).				
	(f)	ADTRAN, Inc. Deferred Compensation Plan (Exhibit 10.3(f) to the 2002 Form 10-K).				
	(g)	First Amendment to the ADTRAN, Inc. Deferred Compensation Plan (Exhibit 10.3(g) to the 2002 Form 10-K).				
	(h)	Management Incentive Bonus Program for the CEO, COO and Senior Vice Presidents (Fiscal Year 2004).*				
	(i)	Management Incentive Bonus Program for Corporate Vice Presidents (Fiscal Year 2004).*				
	(j)	Management Incentive Bonus Program for Elected Officers (Fiscal Year 2003).*				
*23	Consent of PricewaterhouseCoopers LLP.					
*24	Powers of Attorney.					
*31	Rule 13a-14(a)/15d-14(a) Certifications.					
*32	Section 1350 Certifications.					
* Filed her	ewith					

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-41458, 333-78417, 333-30375) of ADTRAN, Inc. of our report dated February 16, 2004 relating to the financial statements and financial statement schedule, which appears in this Form 10-K. We also consent to the references to us under the heading "Selected Financial Data" in Part II, Item 6 of this Form 10-K.

/s/ PricewaterhouseCoopers LLP PricewaterhouseCoopers LLP Birmingham, Alabama March 12, 2004

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that the undersigned constitutes and appoints Howard A. Thrailkill and James E. Matthews, and each of them, his true and lawful attorneys-in-fact and agents, with full power of substitution, for him and in his name, place and stead, in any and all capacities, to sign the Annual Report on Form 10-K of ADTRAN, Inc. for the fiscal year ended December 31, 2003, and any and all amendments thereto, and other documents in connection therewith and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission and the Nasdaq Stock Market, Inc., granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

This 26 day of January 2004.

Mark C. Smith
Chairman of the Board, Chief Executive Officer and
Director

/s/ Richard A. Anderson

Richard A. Anderson
Director

/s/ W. Frank Blount
W. Frank Blount
Director

/s/ H. Fenwick Huss
H. Fenwick Huss
Director

/s/ William L. Marks

Roy J. Nichols Director

William L. Marks

/s/ Roy J. Nichols

Director

/s/ Mark C. Smith

CERTIFICATIONS

I, Mark C. Smith, certify that:

- 1. I have reviewed this Annual Report on Form 10-K of ADTRAN, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) [Reserved]
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 9, 2004

/s/ Mark C. Smith

Mark C. Smith

Chairman of the Board and Chief Executive Officer

I, James E. Matthews, certify that:

- 1. I have reviewed this Annual Report on Form 10-K of ADTRAN, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) [Reserved]
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 9, 2004

/s/ James E. Matthews

James E. Matthews Senior Vice President – Finance and Chief Financial Officer

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of ADTRAN, Inc. (the "Company") on Form 10-K for the period ended December 31, 2003 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Mark C. Smith, Chairman of the Board and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Mark C. Smith

Mark C. Smith

Chairman of the Board and Chief Executive Officer

Date: March 12, 2004

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of ADTRAN, Inc. (the "Company") on Form 10-K for the period ended December 31, 2003 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, James E. Matthews, Senior Vice President – Finance and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ James E. Matthews

James E. Matthews Senior Vice President – Finance and Chief Financial Officer Date: March 12, 2004