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**TCS** TeleCommunication Systems  
Enabling Convergent Technologies®

INTEGRATING  
WIRELESS  
LOCATION  
AND MESSAGING  
TECHNOLOGIES

ANNUAL REPORT 2001

PROCESSED  
MAY 20 2002  
THOMSON  
FINANCIAL



8:05 am  
CHECKS FOR DRIVING  
CONDITIONS. RECEIVES  
LOCATION-SPECIFIC ADVICE.

8:05am  
road conditions:  
30 minute delay  
on I-215

10:15am

meeting @  
2:30 pm  
2day  
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10:15 am

RECEIVES TEXT MESSAGE  
CONFIRMING A MEETING.

**TCS Business Segment**

**Primary Customers**

**Products/Services**

Network Applications

Wireless carriers

**Software**

Wireless Internet Gateway  
Short Message Service Center  
Location Platform

**Services**

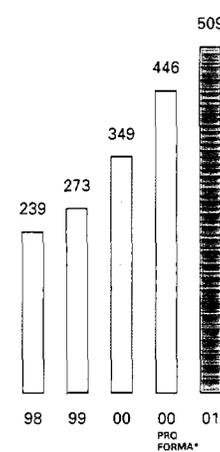
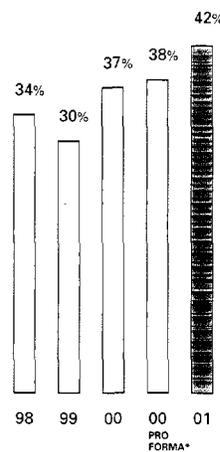
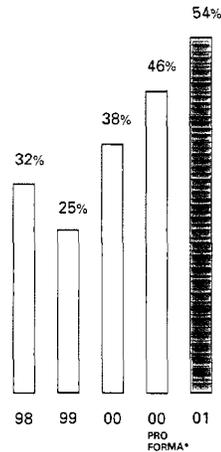
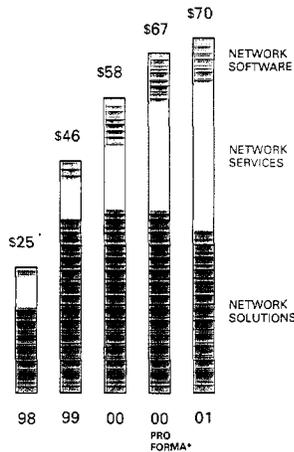
Wireless E9-1-1  
Message Distribution Center  
Mobile location services

Network Solutions

Government &  
Corporate customers

SwiftLink™ Deployable Communications Systems  
Network design, engineering and integration  
High speed wireless / cellular and satellite

**TCS HIGHLIGHTS**



REVENUE  
(\$ MILLIONS)

NETWORK APPLICATIONS  
AS A PERCENT  
OF TOTAL REVENUE

GROSS PROFIT MARGIN

TCS EMPLOYEES  
(YEAR END)

**OPERATING METRICS**

	12/31/00	3/31/01	6/30/01	9/30/01	12/31/01
Total Carrier Networks**	31	34	36	40	40
Carriers Using Multiple TCS Products/Services	9	10	11	10	12
Deployed E9-1-1 Subscribers (in millions)	5	6	7	8	9
Deployed Wireless Internet Gateways	17	22	32	37	42
Deployed Short Message Service Centers	16	20	22	20	22

\* Pro Forma as if Xypoint Corporation, which was acquired in January of 2001, had been acquired at the beginning of 2000.

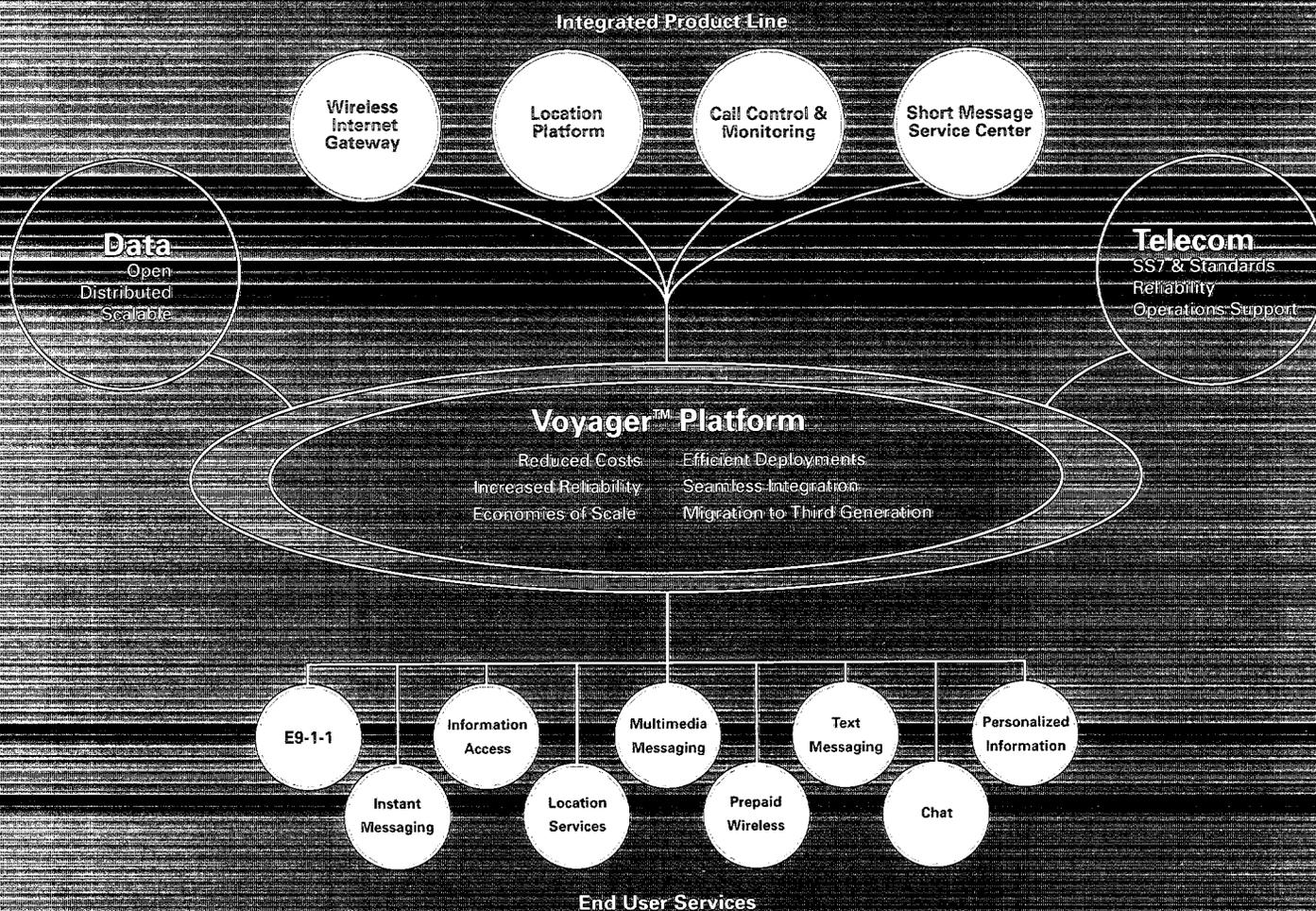
\*\* Under contract or being served.

Our successful product experience within carrier networks, and the business partner relationships that we have established provide us with insight to carrier needs. TCS is uniquely able to efficiently provide integrated wireless messaging, information access, presence, privacy and location applications.



2:00 pm

SEES A CAR ACCIDENT, CALLS 9-1-1 FROM CELL PHONE TO REPORT THE INCIDENT. LOCATION INFORMATION AUTOMATICALLY SENT TO EMERGENCY CALL CENTER.





**Maurice B. Tosé**  
Chairman, President and CEO

## LETTER TO SHAREHOLDERS

Dear Fellow Shareholders,

During 2001, TeleCommunication Systems (TCS) focused on enhancement and integration of wireless location and messaging products and achieved deeper carrier market penetration. We aided carrier compliance with FCC requirements for wireless E9-1-1 capability, and as the wireless carrier customer market endured pressure on capital spending, our foundation of revenue from our government customers cushioned the pressure to cut back on executing our enhanced carrier services business plan.

We have applied the funds that we raised in our third quarter 2000 IPO to increased product research and development, improved sales and marketing, and growing our higher margin Network Applications segment more quickly than our Network Solutions segment. Despite the challenging environment, our Network Applications segment software and services revenue increased 21% in 2001 due mainly to significant growth of wireless E9-1-1 service revenue. TCS ended 2001 with a leading position in U. S. E9-1-1 services with \$16.8 million in E9-1-1 revenue for the year and more than 9 million subscribers served.

### VALUE PROPOSITION

"TCS has a proven track record in the deployment of messaging and location services. As a regional communications provider, we depend on partners like TCS to deliver advanced, reliable, and flexible technology platforms that enhance our wireless service offerings."

**Rob Cale**  
VP, Marketing  
NTELOS

Wireless carriers – our primary customers - are compelled to introduce and promote premium service enhancements beyond commodity voice service in order to realize value from their network investments. Our software and service infrastructure powers these services for carriers and helps to increase their average revenue per user (ARPU). Since 1996, TCS has deployed and enhanced text messaging and data access software, including Short Message Service Center (SMSC) and Wireless Internet Gateway applications in leading carrier networks around the world.

With our January 2001 acquisition of Xypoint Corporation, a leader in wireless location technology, TCS now provides location carrier software products and related services. Our integrated suite of offerings is unique and is a compelling value for our customers.

### 2001 FINANCIAL SUMMARY

All of the comparative financial data from 2000 is pro forma, as if our first quarter 2001 acquisition of Xypoint had occurred at the beginning of 2000.

2:15pm

meeting  
postponed,  
now @ 2:45pm  
CUL8R



2:15 pm

RECEIVES TEXT MESSAGE OF  
A CHANGE IN THE SCHEDULE.

For 2001, total revenue grew 4% to \$69.6 million and gross profit increased 17% to \$29.5 million, with gross profit margin improvement from 38% in 2000 to 42% in 2001.

Our higher margin Network Applications software and services segment revenue grew 21% to \$37.3 million and accounted for 54% of total revenue in 2001 versus 46% in 2000. The gross profit margin in the Network Applications business segment increased to 58% in 2001 from 51% in 2000. Although Network Applications license revenue declined 5% from 2000 as a result of spending deferrals by the wireless carriers, our services revenue, which includes wireless E9-1-1 service bureau; maintenance and installation of our carrier software products; and custom software, grew 33% to \$28.2 million as our wireless E9-1-1 business grew.

Our Network Solutions segment revenue declined 10% to \$32.3 million in 2001, largely as a result of delays in projects for customers in emerging markets related to their financing or credit enhancement needs. The gross profit margin for our Network Solutions business segment was 25% in 2001 and 26% in 2000.



2:40 pm

PRIOR TO MEETING, SENDS  
TEXT MESSAGE TO REQUEST  
UPDATED INFORMATION.

2:40pm

pls send last  
week's sales  
figs, % \$  
asap Thx

#### SALES AND MARKETING

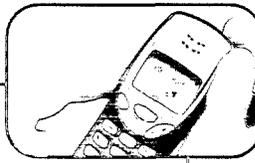
We increased sales and marketing investment by 45% in 2001 and made significant strides. We hired a top sales executive who brought experience in sales management from leading software companies. We developed strategic alliances with Motorola, Convergys, SnapTrack, Cisco, Sun Microsystems and Cibernet, in addition to our channel relationship with Lucent. We entered agreements to provide our wireless E9-1-1 service to Verizon Wireless and Cingular Wireless, the two largest wireless providers in the United States. In February 2002, we announced the signing of a master agreement with Hutchison 3G UK Ltd. (Hutchison 3G), holder of the UK's largest third-generation mobile phone license. Hutchison 3G will license the TCS Xypoint® Location Platform (XLP), which is the first packaged offer on the TCS Voyager™ architecture. The system will initially be deployed in the UK and later be made available in every country where Hutchison Whampoa has 3G interests. The affiliate list currently includes Italy, Sweden, Austria, Australia, Denmark and Hong Kong.

"We're very pleased to have TeleCommunication Systems on board to provide our location server technology. TCS demonstrated the location expertise, personal dedication, and architectural flexibility we look for when choosing a solution provider."

**Colin Tucker**  
Managing Director  
Hutchison 3G UK

#### RESEARCH AND DEVELOPMENT

In 2001, TCS' R&D investment nearly doubled as planned and produced many positive results. In our location business, we introduced a privacy center to our Xypoint Location Platform, which now contains three critical components to successful location capabilities – location, presence and privacy. To help our carrier customers comply with the FCC's Phase I and Phase II wireless E9-1-1 requirements, we introduced a service that accelerates the deployment of Phase I service in rural areas and we completed Phase II testing of our Xypoint Location Platform with both network-based and handset-based position determining technologies. Our Phase II E9-1-1 solution is now available. During the third quarter of 2001, TCS management decided to discontinue further development of certain other products acquired in the Xypoint acquisition.



2:48 pm  
RETRIEVES TEXT MESSAGE  
WITH UPDATED INFORMATION.

2:47pm

last week's  
sales: Up 17%,  
\$8.7 million :)

We announced the Voyager platform in October with the objective to combine wireless location and messaging on a common open, inexpensive, carrier-grade platform. Voyager's benefits to our carrier customers include reduced costs and economies of scale, increased reliability, more efficient deployments, compatibility with existing TCS products and a migration path to third generation services. For TCS, Voyager provides new revenue opportunities and development efficiencies.

TCS has been a leader in removing barriers to usage of enhanced wireless services. During 2001, we directly collaborated with carriers to provide text-messaging portals that make it easier for consumers to use Short Message Service (SMS) and access personalized content. We launched our Message Distribution Center (MDC), which facilitates inter-carrier messaging, and in January 2002, we added additional features to our MDC including: a financial settlement package; the ability for senders to receive delivery notification and set time parameters for the expiration of their messages; and the ability for carriers to deliver messages to Europe, where text messaging is more prevalent. These efforts will help to increase messaging traffic, benefiting both TCS and our carrier customers. In February 2002, we launched our Multimedia Message Service Center (MMSC), which delivers rich text e-mail, sound, fax, color photos, animation, video, Internet and location services to multiple device types.

Finally, our Network Solutions team introduced SwiftLink™, a portable deployable communications product that provides secure voice, video and data communications capabilities from anywhere in the world.

#### LOOK AT 2002

We are well positioned to further capitalize on our integrated wireless data and location expertise. Our successful product experience within carrier networks, and the business partner relationships that we have established provide us with insight to carrier needs. TCS is uniquely able to efficiently provide integrated wireless messaging, information access, presence, privacy and location applications. We are particularly excited about the opportunity to demonstrate our industry leadership through delivery of our location platform technology to the Hutchison 3G networks during the year. And the February 2002 opening of our London office will raise the visibility in Europe of our messaging and location expertise. In 2002, we will continue to aggressively build our brand in the carrier world, strengthen our customer relationships and invest R&D dollars in our core wireless carrier enhanced service products.

At December 31, 2001, we had \$42.9 million in cash and cash equivalents, and together with our foundation of government business, we are able and committed to execute our strategic software and service business plan.

In closing, I want to thank our more than 500 employees for their dedication in 2001 and for having laid the foundation for a very successful 2002. I remind our shareholders that we remain committed to deliver on our strategy and continue to increase the value of our company.

Sincerely,

**Maurice B. Tosé**  
Chairman, President and CEO  
TeleCommunication Systems, Inc.

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

**FORM 10-K**

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF  
THE SECURITIES EXCHANGE ACT OF 1934

For the year ended December 31, 2001

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF  
THE SECURITIES EXCHANGE ACT OF 1934

Commission File No. 0-30821

**TELECOMMUNICATION SYSTEMS, INC.**

(Exact name of registrant as specified in its charter)

**Maryland**

(State or Other Jurisdiction of Incorporation or Organization)

**275 West Street, Annapolis, MD**  
(Address of principal executive offices)

**52-1526369**

(I.R.S. Employer Identification No.)

**21401**  
(Zip Code)

**(410) 263-7616**

(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: Class A Common Stock, Par Value \$0.01

Indicate 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 Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days: Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

As of March 15, 2002 the aggregate market value of the Class A Common Stock held by non-affiliates, as reported on the NASDAQ National Market, was approximately \$54,094,228.\*

As of March 15, 2002 there were 18,616,018 shares of Class A Common Stock and 10,333,588 shares of Class B Common Stock outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE**

Document

Part of 10-K into which Incorporated

Proxy Statement related to registrant's Annual Meeting of Stockholders  
to be held on June 13, 2002

Part III

\* Excludes 1,166,267 shares of Class A Common Stock deemed to be held by officers and directors and stockholders whose ownership exceeds ten percent of the shares outstanding at March 15, 2002. Exclusion of shares held by any person should not be construed to indicate that such person possess the power, direct or indirect, to direct or cause the direction of the management or policies of the registrant, or that such person is controlled by or under common control with the registrant.

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This document contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements are statements other than historical information or statements of current condition. We generally identify forward-looking statements by the use of terms such as "believe," "anticipate," "intend" or "expect." These forward-looking statements relate to our plans, objectives and expectations for future operations. We base these statements on our beliefs as well as assumptions made using information currently available to us. In light of the risks and uncertainties inherent in all projected operational matters, the inclusion of forward-looking statements in this document should not be regarded as a representation by us or any other person that our objectives or plans will be achieved or that any of operating expectations will be realized. Revenues and results of operations are difficult to forecast and could differ materially from those projected in the forward-looking statements contained in this Form 10-K as a result of factors discussed in the "Management's Discussion and Analysis of Financial Conditions and Results of Operations" as well as those discussed elsewhere in this Annual Report on Form 10-K including, changes in economic conditions, technology and the market in general, and our ability to adapt our products and services to these changes. We undertake no obligation to release publicly the results of any future revisions we may make to forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events. We caution you not to put undue reliance on these forward-looking statements.

## Part I

### Item 1. *Business*

#### *Overview*

We develop and license Network Application Software products that enable the delivery of internet content, short messages, location, presence, and privacy information and other enhanced communication services to and from wireless devices, including phones, two-way pagers and personal digital assistants.

Our Network Applications Services include enhanced wireless E9-1-1, cross-carrier text message distribution services, maintenance and deployment of our software products, and development of custom software applications. We deliver our enhanced E9-1-1 services via our carrier grade network operations centers, using our service bureau business model that allows customers to acquire use of our software functionality through network connections to and from our facilities and to pay us monthly based on usage volume.

Our Network Solutions segment designs, installs and operates wireless and wireline communication systems, including our Swiftlink<sup>TM</sup> compact deployable products, and high speed, satellite, and internet protocol solutions for corporate and government customer enterprise networks.

We were founded in 1987 and initially provided network solutions to the U.S. Department of Defense and other government customers. In 1996, we entered into a development agreement with Lucent Technologies to develop and co-own the Short Message Service Center application software for wireless carrier customers. In January 2001, we acquired Xypoint Corporation and as a result, have become a leading provider of enhanced E9-1-1 services to wireless carriers. The acquisition, completed on January 19, 2001, was accounted for using the purchase method of accounting.

Through internal development and our January 2001 acquisition of Xypoint Corporation, we have expanded our portfolio of proprietary wireless technology. As of February 28, 2002, our customers include 41 wireless carrier networks around the world, including Verizon Wireless, Cingular Wireless, Voicestream, and Hutchison 3G.

## *The Market Opportunity*

The following trends are driving demand for our wireless products and services:

***Growth in Wireless Communications and Wireless Device Functionality.*** The use of wireless communications has increased significantly in recent years driven by expanded wireless network coverage, more affordable wireless communications service plans, and higher quality and less expensive wireless devices. In a September 2001 report, CIBC World Markets estimated that the number of total worldwide wireless subscribers will increase from approximately 600 million in 2000 to nearly 1.3 billion in 2005. Wireless carriers can increase average revenue per user (ARPU), differentiate their service offerings from competitors, improve customer loyalty and increase minutes of use by offering services that connect wireless users to the Internet and corporate intranets.

The proliferation of wireless networks and technologies has made it possible for individuals and enterprises to "wireless-enable" many services that previously required a wireline connection or that were performed manually. For example, electric utilities are increasingly using wireless technology to read meters, and wireless carriers are recognizing the potential for their networks to enable mobile commerce transactions. In response, manufacturers continue to increase the functionality of mobile devices including phones, personal digital assistants and two-way pagers. The introduction of higher capacity wireless networks in Europe and the United States over the next several years should further this trend.

***Location Services.*** One of the principal drivers of wireless communications growth is the ability to create value through the delivery of timely, highly specialized, interactive and location-specific advertising content. Advertisers, content providers and other businesses benefit from the ability to communicate and transact business in more direct and efficient ways on the Internet. By extending targeted advertising and content via wireless devices, we believe that advertisers, content providers and other businesses can expand the market for their products and content.

***The FCC's E 9-1-1 Mandate.*** In 1996, the Federal Communications Commission, or FCC, mandated the adoption of E9-1-1 technology by wireless carriers in two phases. Phase I requires wireless carriers to provide the public safety answering point, or PSAP, receiving the call with the E9-1-1 caller's telephone number and the location of the call sector from where the call was made. Phase II will require wireless carriers to locate wireless E9-1-1 callers within more precise location parameters specified in the FCC guidelines.

***Growth of the Internet, Corporate Intranets, E-Mail and Short Messaging.*** The Internet and internal corporate data networks, or intranets, have emerged as global communications channels that allow users to share information and conduct business transactions electronically. E-mail and short messaging services are increasingly important means of communication, with both the number of users and messages per individual projected to increase significantly. CIBC World Markets estimates the number of total worldwide wireless internet subscribers will grow from approximately 37 million in 2000 to more than 500 million in 2005 and the number of SMS messages will increase from 20 billion per month in mid 2001 to 70 billion messages per month in 2004.

***Increased Outsourcing Trends.*** As information technology systems become more complex, companies are increasingly outsourcing many of their information technology requirements. Wireless carriers and enterprises are choosing to focus on their core businesses and seeking to reduce costs associated with maintaining information technology networks and software applications. Wireless carriers and enterprises with limited data experience frequently outsource the development and integration of wireless data applications and services.

## *Our Solution*

Wireless carriers and enterprises face many technology challenges in the rapidly evolving wireless data market. These challenges and our related solutions include:

- **Ability to Access Information Stored Inside Wireless Networks.** There is a significant amount of information stored within wireless networks. Wireless intelligent networks manage mobility features, including call routing, roaming, and short messaging, and collect information such as user location, device on/off status and billing and transaction records. This information is transmitted within wireless networks through complex call control technology, known as Signaling System 7. However, this information is not readily accessible to most software developers.

*We have extensive knowledge of the Signaling System 7 technology. We use this knowledge to develop network application software that is able to access the information stored inside wireless networks to provide enhanced data services and features. For example, our products can use device on/off status information and hold messages until a device has been turned on in order to ensure delivery of a message, to deliver only the most recently updated version of repeated messages, such as weather or stock quotes, and to notify members of a chat group of current participant availability.*

- **Compatible Industry Standards.** Enterprises seeking to communicate with mobile employees and customers encounter a wide variety of wireless carriers, networks and devices. Enterprises must be able to identify their end users' wireless carriers and device types and deliver information through each carrier's specific message delivery system to these devices. Furthermore, wireless carriers use different types of wireless network technology, each of which require different messaging formats.

*Our products enable enterprises to deliver information to a wide variety of wireless devices and carrier networks and to be compatible with the existing systems of wireless carriers, wireless location determination technology companies and Internet protocols. We design products to be compatible with major types of wireless networks, including Time Division Multiple Access (TDMA), Code Division Multiple Access (CDMA), Global Standard for Mobile Communications (GSM), Integrated Digital Enhanced Network (iDEN) and Advanced Mobile Phone Service (AMPS). We are a member of the Wireless Application Protocol (WAP) Forum, Ltd. and our design products are compliant with the Wireless Application Protocol Forum's standards.*

- **Network Capacity.** Wireless networks are optimized for voice rather than data transmission. As a result, there is limited network capacity available for data delivery. The proliferation of wireless data traffic, including e-mail, news, stock quotes, traffic alerts and other Internet content, can congest wireless networks. As a result, carriers seek technical solutions to manage network capacity.

*Our software applications are designed to manage network capacity by prioritizing messages, blocking unwanted messages and recognizing when wireless devices are turned off or are out of range. These applications also delay the distribution of messages until the devices become available. These features improve carrier service quality by reducing the likelihood that unwanted, low priority or undeliverable messages will congest the network.*

- **Security and Reliability.** Enterprises are increasingly reliant on wireless devices to communicate with their mobile employees and customers. As a result, wireless carriers seek to provide secure and reliable messaging services.

*We apply our network solutions experience with the U.S. military and use encryption mechanisms to provide secure messaging services. In addition, our products provide carriers and enterprises with the ability to confirm message delivery and receipt.*

- **Deployment Challenges for New Software and Services.** Wireless carriers seek to cost-effectively introduce new data and voice services to meet customer demand. Each new software introduction requires compatibility with existing systems and extensive technical training for users, which can delay product launches and increase product costs.

*We design our software to be compatible with carrier network systems and existing software applications. In addition, our software enables carriers to easily accommodate additional capacity requirements. Our applications and services can be deployed as an application suite or individually depending on the wireless carrier's or other service provider's needs. As a result, our software provides for the cost-effective and rapid introduction of new services and the expansion of existing services.*

### *Business Strategy*

We plan to continue to develop and sell network application software and service bureau offerings that enable the delivery of Internet content, short messages, location information and other enhanced data communication services to and from wireless devices. The key elements of our strategy are to:

- **Leverage Our Expertise in Accessing Information Stored Inside Wireless Networks.** We will continue to leverage our knowledge of complex call control technology, known as Signaling System 7, to unlock valuable information such as user location, device on/off status and billing and transaction records that resides inside wireless networks and is difficult to retrieve and utilize. Using this information, we intend to expand our integrated package of products and services for wireless carriers and enterprises.
- **Grow Our Wireless Carrier Base.** We now serve or are under contract with 41 wireless carrier networks in 11 countries. We intend to expand our domestic and international carrier base by capitalizing on our relationship with Lucent and by expanding our own sales and marketing initiatives. We will continue to develop network application software for wireless carriers that operate on all major types of networks. We believe the trend towards globalization of communication standards like the Global Standard for Mobile Communications (GSM) represents a significant opportunity for us to increase our wireless carrier base and began installing our software in GSM-based networks.
- **Expand Our Sales and Marketing Capabilities.** We are developing relationships with communication infrastructure providers in order to expand our sales channels for our network application software products and services. For example, we have entered into an agreement with Motorola, Inc. that provides for the joint marketing of our network application software products and Motorola's wireless computer hardware and software products. We have historically leveraged our strategic relationship with Lucent Technologies to market our network application software products to wireless carriers. We have also grown our direct sales force and increased our sales and marketing expenditures. Our increased marketing efforts also include advertising, public relations, speaking engagements and conference sponsorship.
- **Develop and Enhance Our Technology.** We will continue to invest in our underlying technology and to capitalize on our network solutions expertise to meet the growing demand for sophisticated wireless applications. Our product development staff includes 187 engineers who specialize in network application software development and network solutions. We also have research and development relationships with wireless handset manufacturers, wireless carriers, and content and electronic commerce providers.

We are currently developing a new platform, Voyager, which will integrate our presence, privacy, location, call control and messaging technology into an efficient and highly reliable software and service offering. Voyager's benefits to our carrier customers include reduced costs and economies of scale, increased reliability, more efficient deployments, compatibility with our existing products and a migration path to third generation services.

- **Pursue Select Acquisitions.** We intend to selectively pursue acquisitions of companies and technologies in order to increase the scale and scope of our operations, market presence, products, services and customer base.

## *Product and Service Offerings*

### **Network Application Software Products**

We design and develop network application software for wireless carriers that provides the delivery of secure and personalized content, services and transactions to various wireless devices. In addition, we design and develop custom network software for a variety of telecommunications and information management systems. Our software uses universal industry standards. We specifically design our software for easy implementation, customization and integration with existing networks in order to accommodate future expansion. Network application software that we currently offer includes Wireless Internet Gateway and Short Message Service Center.

***Wireless Internet Gateway.*** Our Wireless Internet Gateway provides two-way data communication between the Internet and wireless networks. The Wireless Internet Gateway allows end users to customize the services they receive on wireless devices by setting up a user profile through a single Internet-based procedure. Wireless carriers can access these user profiles and usage data to gain a better understanding of customer behavior. The Wireless Internet Gateway allows additional wireless applications to be added as desired.

We have developed the following applications for use with the Wireless Internet Gateway:

- **Web Calendar.** The Web Calendar Application provides subscribers with the ability to schedule personalized events via the web for notification by either short message or e-mail. The subscriber can schedule any number of individual or recurring events.
- **Custom User Page.** The Custom User Page software allows users to create personalized Web pages that others can access using the Internet to enter text messages for delivery to the user's wireless device.
- **Personalized Contact List.** The Personalized Contact List (PCL) allows end users to store the names, aliases, and phone numbers of their personal contacts via the web site. PCL allows end users to send individual or group messages to the people they have provisioned.
- **QueryNet®.** The QueryNet software searches multiple sources on the Internet and intranets that the user selects in advance. QueryNet then formats and sends the search results to user-specified destinations at user-specified times.
- **Mobile Originated Menus™.** This software allows the rapid creation of customized menus of available services on wireless devices. Using the QueryNet software, MO Menus will allow users to request standard content sources from the Internet on demand. The software does not require a special Internet browser for wireless devices.

***Short Message Service Center.*** Our Short Message Service Center software enables users to send and receive text or data messages to and from wireless devices. It provides wireless carriers efficient two-way data delivery and supports major industry standards for wireless communications. The Short Message Service Center also allows the handset to function as a pager and provides single touch callback capabilities. Additionally, the Short Message Service Center can be combined with our Wireless Internet Gateway software to enable transmission of short messages between the Internet and wireless devices.

### **Network Application Services**

Our Network Application services include enhanced E9-1-1, Message Distribution Center and custom software applications. We also provide implementation, operation and maintenance services to support these applications.

***E9-1-1.*** Our E9-1-1 service bureau works with wireless carriers and local emergency services in compliance with the FCC's mandate. When a wireless subscriber covered by this service makes an E9-1-1 call from his or her wireless phone, the software (1) identifies the call as an emergency call, (2) accesses the handset's location information from the wireless network, (3) routes the call to the appropriate E9-1-1

jurisdiction, (4) translates the information into a user friendly format, and (5) transmits the data to the local emergency service call center. Our E9-1-1 service operates on a platform that resides at our two fully redundant data centers in Seattle, Washington and Phoenix, Arizona. As of December 31, 2001, we provide E9-1-1 services to 15 wireless carriers, including Verizon, Cingular and US Cellular, and serve 9.1 million of these carriers' wireless subscribers.

*Message Distribution Center.* Our Message Distribution Center acts as a clearinghouse that formats and delivers messages to various carrier networks and multiple device types. Our published Application Programming Interface provides Internet software developers and providers of content, such as news and entertainment, with a simple command set to "wireless enable" their software applications. Once integrated into existing software applications, the Application Programming Interface delivers message traffic to our Message Distribution Center.

The Message Distribution Center offers important advantages for enterprises and wireless carriers. The Message Distribution Center includes support for all of the features and services available on our Wireless Internet Gateway product and the software programs that can be run on it. The Message Distribution Center allows enterprises to deliver information to a wide variety of wireless devices and carrier networks being used by their employees and customers. Further, the Message Distribution Center's "store and forward" capability allows wireless carriers to prioritize message delivery and optimize the capacity available on their networks.

*Custom Software Applications.* We also develop custom software applications to support specific customer requirements. Many of these applications combine large, distributed billing data centers that support audit and reconciliation tasks. For example, we currently maintain and continue to modify telecommunication billing software used by the U.S. Defense Telecommunications Service - Washington. We have historically developed custom applications primarily for government agencies. We intend to develop additional custom software applications for enterprises.

*Implementation, Operation and Maintenance Services.* We provide implementation, operation and maintenance services in support of our network application software. Our engineers install software packages into new and existing networks. This typically involves the staging of equipment, redesign of network connections, modification of software code and on-site installation and testing support. We also provide ongoing operational support, including administration of system components, system optimization and configuration management. Maintenance services include tracking customer support issues, trouble shooting and developing and installing maintenance releases. We typically provide maintenance services for an annual fee paid in advance.

## Network Solutions

Our Network Solutions group designs and installs complex information processing and communication systems for corporate and government enterprise networks. We use a cooperative team approach designed to leverage our diverse technical skills in communications engineering, information systems, software engineering and telephony. We believe our 13 years of experience successfully providing network solutions for enterprises differentiates us from other providers of wireless network application software. Our network solutions primarily include the following types of projects:

- **Network Design, Installation and Operation.** We design, install and operate networks that integrate computing and communications, including systems that provide communications via both satellite and terrestrial links. We can provide complete network installation services from cabling infrastructure to complex communications system components. We also provide ongoing network operation and management support services.
- **Satellite Teleport.** We own and operate a high-speed satellite communications teleport in Baltimore, Maryland that is connected to the public switched telephone network via OC-3 fiber optic cable. This facility provides transport services for IP-based media content consisting of Voice Over IP (VOIP), Internet, video and messaging data.

- **Swiftlink™ Portable Deployable Voice/Video/Data Systems.** We designed and built SwiftLink™, a lightweight, secure deployable communication system (“DCS”), which can be immediately deployed in remote areas when other means of reliable communications do not exist. SwiftLink provides secure voice, video and data communications for up to eight people and a single person can deploy the system in less than ten minutes creating critical communication channels from any location around the world. Uses include emergency response, news reporting, public safety, drilling and mining operations, field surveys and other activities that require remote capabilities for video and data transmissions.

Examples of recent network solutions projects that are representative of the work we perform include:

- **Special Operations Forces.** We have developed a Command and Control Switching System for the Special Operations Forces of the U.S. Department of Defense that integrates secure and non-secure radio frequency, satellite and wireline networks for data and voice communications. The Command and Control Switching System enables automated support of teleconferencing across dissimilar networks in real time while providing a centralized network operations and management capability for the field commander. We have delivered similar systems to the U.S. Department of State and other U.S. Department of Defense agencies.
- **State of Jigawa, Nigeria.** We have an agreement with the State of Jigawa, Nigeria to build a network that will provide global Internet access, satellite communications connectivity, State-wide and local wireless Internet distribution and Internet protocol multimedia content to 26 cities within Jigawa.
- **U.S. Department of State.** We delivered our DCS to the U.S. Department of State. The DCS system supports a worldwide network for use by the Department of State during trips abroad and throughout the United States and provides full network functionality and IP telephony capability using landlines and satellite-based technologies.

#### *Customers*

**Network Applications.** The primary customers for Network Applications are wireless telecommunications carriers, either directly or through our channel partners including Lucent Technologies.

Lucent accounted for approximately 23% of our network applications revenue and approximately 12% of total revenue for the year ended December 31, 2001; approximately 65% of our network applications revenue and approximately 25% of total revenue for the year ended December 31, 2000 and approximately 45% of our network applications revenue and approximately 11% of our total revenue for the year ended December 31, 1999. Our revenue from Lucent was derived from sales to wireless carrier customers, including Verizon Wireless, which accounted for approximately 8% of our network applications revenue and 4% of our total revenue for the year ended December 31, 2001; approximately 30% of our network applications revenue and 11% of our total revenue for the year ended December 31, 2000 and approximately 11% of our network applications revenue and less than 5% of our total revenue for the year ended December 31, 1999. In addition, sales through Lucent to Telefonica International and Qwest each accounted for approximately 5% of our network applications revenue and approximately 2% of our total revenue for the year ended December 31, 2001. Sales through Lucent to Telefonica International and Telecom New Zealand each accounted for approximately 6% of our network applications revenue and less than 3% of our total revenue for the year ended December 31, 2000. Sales through Lucent to Telefonica International and Qwest accounted for over 10% of our network applications revenue for the year ended December 31, 1999 and each accounted for less than 5% of our total revenue for the year ended December 31, 1999.

In February 2002 we entered into a master agreement with Hutchinson 3G UK Ltd. to license the TCS Xypoint Location Platform (XLP). Hutchison Whampoa Limited holds a 65 percent stake in Hutchinson 3G, and the other major shareholders are NTT DoCoMo (20 percent) and KPN Mobile 15 percent. The XLP system will initially be deployed in the UK and later be made available in every country

where Hutchinson Whampoa has 3G interests. The affiliate list currently includes Italy, Sweden, Australia, Denmark, and Hong Kong.

We have two agreements with the General Services Administration pursuant to which we provide network applications and solutions to various federal government agencies. For the year ended December 31, 2001, the General Services Administration agreements by the U.S. Defense Telecommunications Service - Washington accounted for approximately 10% of network applications revenue and 6% of total revenue. Other federal government agencies accounted for approximately 7% of our network applications revenue and 4% of our total revenue during this period. For the year ended December 31, 2000, the General Services Administration agreements by the U.S. Defense Telecommunications Service - Washington accounted for approximately 17% of our network applications revenue and less than 7% of our total revenue and other federal government agencies accounted for approximately 13% of our network applications revenue and 5% of our total revenue during this period. For the year ended December 31, 1999, the General Services Administration agreements by the U.S. Defense Telecommunications Service - Washington accounted for approximately 27% of our network applications revenue and less than 10% of our total revenue. Other federal government agencies accounted for approximately 19% of our network applications revenue and less than 10% of our total revenue during 1999. The loss of any of these customers could have a material adverse effect on our business.

We also develop custom network application software products and provide related ongoing operational support and maintenance. We have historically provided government agencies including the City of Baltimore, U.S. Defense Telecommunications Service - Washington and General Services Administration with these products and services.

**Network Solutions.** Our major network solutions customers include the U.S. Department of Defense, U.S. Department of State, the State of Jigawa, Nigeria, the General Services Administration, the City of Baltimore, Computer Sciences Corporation, and Litton-PRC. Our network solutions projects typically run from one to twelve months and involve three to ten personnel.

For the year ended December 31, 2001, the General Services Administration agreements by the Naval Surface Warfare Center accounted for approximately 11% of our network solutions revenue and approximately 5% of our total revenue. Other federal government agencies accounted for approximately 42% of our network solutions revenue and approximately 19% of our total revenue during this period. For the year ended December 31, 2000, the General Services Administration agreements by the Naval Surface Warfare Center accounted for approximately 17% of our network solutions revenue and approximately 11% of our total revenue and other federal government agencies accounted for approximately 33% of our network solutions revenue and approximately 21% of our total revenue during this period. For the year ended December 31, 1999, the General Services Administration agreements by the U.S. Special Operations Command, the Space and Naval Warfare Center and the Naval Surface Warfare Center accounted for approximately 11%, 11% and 23%, respectively, of our network solutions revenue and less than 10%, less than 10% and approximately 17%, respectively, of our total revenue. Other federal government agencies accounted for approximately 25% of our network solutions revenue and approximately 19% of our total revenue during 1999.

**Backlog.** As of January 31, 2002, we had unfilled orders, or backlog, of approximately \$26.1 million, of which \$15.7 million was in our network applications business and \$10.4 million in our network solutions business, compared to \$23.3 million in December 31, 2000. We expect to fill substantially all of these orders during the course of 2002. The backlog at any given time may be affected by a number of factors, including contracts being renewed or new contracts being signed before existing contracts are completed. Some of our backlog is also subject to cancellation for causes such as late delivery, poor performance and other factors. Accordingly, a comparison of backlog from period to period is not necessarily meaningful and may not be indicative of eventual actual shipments or future revenue.

### *Sales and Marketing*

We sell our network applications products and services through our direct sales force and through indirect channels. Our direct sales force consists of 18 professionals. We have also historically leveraged our relationship with Lucent to market our network application software products to wireless carrier customers and we have added Motorola as a sales channel in 2001. During the indirect sales process, we have extensive direct contact with prospective carrier customers, as well as during installation and maintenance. We sell our network solutions primarily through direct sales professionals. As of December 31, 2001, we had 4 sales and marketing professionals devoted to sales of network solutions. We are pre-qualified as an approved vendor for federal, state and local government contracts.

We will continue to leverage our relationships with industry leaders and to expand and diversify our own sales and marketing initiatives to increase our sales to wireless carriers. Our marketing efforts also include advertising, public relations, speaking engagements and attending and sponsoring industry conferences.

### *Competition*

The market for our products and services is competitive. The adoption of industry standards may make it easier for new market entrants to compete with us. We expect that we will compete primarily on the basis of the functionality, price, breadth, time to market, ease of integration and quality of our products and services. The market and competitive conditions are continually developing. Our network application products compete with many similar products provided by other companies. We are not aware of competitors who offer the same range of products and services as we do. It is difficult to present a meaningful comparison between us and our competitors because there is a large variation in revenue generated by different customers, different products and services, as well as the different combinations of products and services offered by our competitors. We cannot, therefore, quantify our relative competitive position. With time and capital, it would be possible for our competitors to replicate our products and services.

Our current and potential competitors include companies such as:

- **Software Developers.** Glenayre Technologies, Inc.; InterVoice-Brite, Inc.; Logica-Aldiscon; Openwave Systems, Inc.; Sema plc; and Tech Now, Inc.
- **Wireless Location Based Software Services Companies.** SignalSoft Corporation; Intrado Inc.; and local exchange carriers.
- **Telecommunications Equipment Vendors.** ADC Telecommunications, Inc.; CMG plc; Converse Technology, Inc.; Ericsson Inc.; Lucent Technologies, Inc.; Motorola, Inc.; and Nortel Networks Corporation.
- **Information Technology Consultants.** American Management Systems, Incorporated; Accenture; BTG, Inc.; Computer Sciences Corporation; Electronic Data Systems Corporation; Keane, Inc.; and Litton PRC.

Many of our existing and potential competitors have substantially greater financial, technical, marketing and distribution resources than we do. Additionally, many of these companies have greater name recognition and more established relationships with their target customers. Furthermore, these competitors may be able to adopt more aggressive pricing policies and offer customers more attractive terms than we can.

We partner with vendors of precise location technology to provide Phase II compliant E9-1-1 services. Certain of our partners may attempt to compete with our operating platform by developing their own transmission platform or by purchasing another mobile location platform. The markets for commercial location and other mobile wireless applications are relatively new and continually developing. The convergence of wireless technologies and the Internet is creating many initiatives to bring data and transaction capabilities to wireless devices. There is a wide array of potential competitors in this market,

including providers of competing location management platforms, competing e-mail products, and other competing applications for wireless devices. In addition, certain of these companies have announced their intention to develop a mobile location manager that could compete with our infrastructure.

### *Research and Development*

Our success depends on a number of factors, which include our ability to identify and respond to emerging technological trends in our target markets, to develop and maintain competitive products, to enhance our existing products by adding features and functionality that differentiate the products from those of our competitors and to bring products to market on a timely basis and at competitive prices. Our staff includes 187 engineers who specialize in network application development and network solutions. Since 1996, we have made substantial investments in research and development; substantially all of which has been devoted to the development of network application software products and services, including our Wireless Internet Gateway, Short Message Service Center and E9-1-1. Our research and development expenditures, including capitalized software development costs, for the years ended December 31, 2001, 2000 and 1999 were approximately \$23.0 million, \$7.4 million and \$5.8 million, respectively.

We have a research relationship with Lucent Technologies, Inc. Through this relationship, Lucent provides us with access to its laboratories where we jointly test our products and identify product and service enhancements. Our relationship with Lucent also allows us to test new Lucent products and features for compatibility with its software applications before these new products and features become publicly available. Additionally, Lucent utilizes our software products to develop and test new wireless devices for interoperability. This increases the likelihood that our products will be compatible with new wireless devices coming to market. We also have research and development relationships with wireless handset manufacturers, wireless carriers and content and electronic commerce providers.

We actively support existing telecommunications standards and promote new telecommunications standards in order to expand the market for wireless data. In 1996, we co-founded the Intelligent Network Forum; an organization dedicated to expanding the role of intelligent networks in telecommunications. As part of our strategy to expand the role of short messaging, we co-founded the Short Message Peer-to-Peer Forum in 1999. Through this organization, we are establishing a de-facto standard for interfaces into short messaging service centers from the Internet, wireless gateways and Wireless Application Protocol servers.

We joined the Wireless Application Protocol Forum, Ltd. in 2000 to further define and support the interfaces between Wireless Application Protocol servers and short message service centers and to provide a liaison between the Short Message Peer-to-Peer Forum and the Wireless Application Protocol Forum.

Certain of our government customers contract with us from time to time to conduct research on telecommunications software, equipment and systems.

### *Intellectual Property Rights*

We rely on a combination of patent, copyright, trademark, service mark and trade secret laws and restrictions to establish and protect certain proprietary rights in our products and services.

We currently hold three U.S. issued patents relating to wireless communications. We have filed 26 additional U.S. patent applications and nine international patent applications for certain apparatus and processes we believe we have invented to enable key features of the Short Message Service Center, Prepaid Wireless, Mobile Originated data and E9-1-1 network application software. There is no assurance that these patent applications will result in a patent being issued by the U.S. Patent and Trademark Office or other patent offices, nor is there any guarantee that any issued patent will be valid and enforceable. With regard to certain Prepaid Wireless software, we have agreed with Lucent that we will each have an equal title interest in patent applications relating to joint inventions. Additionally, foreign patent rights may or may not be available or pursued in any technology area for which U.S. patent applications have been filed.

We currently hold seven registered trademarks, "QueryNet®" (U.S.), "Enabling Convergent Technologies®" (U.S.), "reachNet®" (U.S.), "Urgent Agents®" (EC), "XYPOINT®" (U.S., Canada, Great Britain and EC), "XYPOINT Technology®" (EC) and "XYBOX®" (U.S.). We have filed applications to register the marks "Swiftlink™", "WINSuite™", "MO Menus™", "MO Buddies™", "MO Chat™", "MO Mail™", "MobiChat™", "Gabriel™", "MoCafe™", "Mobile Originated Mail™", "PreferPay™", "Urgent Agents™", "Nomad™", "XLP™", "Connections that Matter™", "GOT ARPU™", "ARPU and design™", "Xypoint Technology™" and "Smart Carriers Prefer Intelligent Network Solutions™" on the Principal Register of the United States Patent and Trademark Office. We also have applications pending in Canada to register "Xypoint" and "Xypoint Technology". This Form 10-K also includes trade names, service marks and trademarks of other companies. All other brand names or trademarks appearing in this Form 10-K are the property of their respective holders.

Under our development agreement with Lucent, we developed the Short Message Service Center software in late 1996 and Prepaid Wireless software in mid-1998 and in April 2000 agreed to develop an enhanced Over-The-Air software application. Under the development agreement, we share ownership rights in these software applications with Lucent. The scope of each party's ownership interest in these software applications is subject to each party's various underlying ownership rights in intellectual property and also to confidential information contributed to the applications, and could be subject to challenge by either party.

The steps we have taken to protect our intellectual property may not prove sufficient to prevent misappropriation of our technology or to deter independent third-party development of similar technologies. The laws of certain foreign countries may not protect our services or intellectual property rights to the same extent as do the laws of the United States. We also rely on certain technologies that are licensed from third parties including data feeds and related software. These third-party technology licenses may not continue to be available to us on commercially attractive terms. The loss of the ability to use such technology could require us to obtain the rights to use substitute technology, which could be more expensive or offer lower quality or performance, and therefore have a material adverse effect on our business, financial condition or results of operations.

Third parties could claim infringement by us with respect to current or future products or services. As the number of entrants into our market increases, the possibility of an infringement claim against us grows. We may be inadvertently infringing a patent of which we are unaware. In addition, because patent applications can take many years to issue, there may be a patent application now pending of which we are unaware, which will cause us to be infringing when it issues in the future. Any infringement claim, whether meritorious or not, could be time-consuming, result in costly litigation, cause service installation delays or require us to enter into royalty or licensing agreements. Royalty or licensing agreements might not be available on terms acceptable to us or at all. As a result, any claim could have a material adverse effect upon our business, financial condition or results of operations.

As a member of various industry standard-setting forums, we have agreed to license certain of our intellectual property to other members on fair and reasonable terms to the extent that the license is required to develop non-infringing products under the specifications promulgated by those forums.

#### *Channel Sales Relationships*

In April 1996, we entered into a non-exclusive development agreement with Lucent Technologies, Inc. under which we developed network application software that Lucent sells to its wireless carrier customers. Under the agreement, we developed the Short Message Service Center, a software application that allows wireless device users to send and receive text or data messages. We share ownership rights in this application with Lucent, subject to each party's prior underlying ownership rights in intellectual property and confidential information contributed to the applications. We have the right to share revenue from Lucent's sales to its wireless carrier customers. The agreement may be terminated by mutual consent, or by either party if the other party commits any material breach of its obligations and fails to cure within 30 days' written notice of such breach. Either party may buy out the other's right to receive future revenue

from the sale of these software applications in exchange for a negotiated lump-sum payment. Under the original development agreement, we agreed to share revenue equally with Lucent from the sale of the Short Message Service Center and Prepaid Wireless software applications. We negotiate the initial license fees paid to us by Lucent for Wireless Internet Gateway sales on a case by case basis. Generally, Lucent has paid us fees ranging between 75% and 90% of the sale value. Our Lucent relationship provides us with several competitive advantages, including access to Lucent's sales and marketing resources, lab facilities, and proprietary hardware and software. We have extensive direct contact with prospective customers during the sales process, as well as during installation and maintenance.

In 1998 we developed a Prepaid Wireless application under our original Lucent agreement. In April 2000, we signed an amendment to the development agreement pursuant to which Lucent ceased to market the Prepaid Wireless software application that we developed under the development agreement and instead began to market and sell their new Converged Prepaid Wireless Software. Lucent has agreed to share revenue with us from the sale of their Converged Prepaid Wireless software application until March 31, 2004.

We perform maintenance for our network application software sold by Lucent and also provide a limited 90-day warranty on those applications. Maintenance revenue for these software applications is determined as a percentage of the related license sale. The product type and the range of related license revenue define the maintenance fee percentages. Generally, there are three ranges of license revenue. The maintenance fee percentages assigned to these ranges are used to determine maintenance revenue. In April 2000, we modified the maintenance provision of the development agreement. In exchange for providing additional maintenance and training support, including a toll free support line, a toll free facsimile line, an Internet address and training for Lucent employees on software developed under the agreement, we will receive fees based on a percentage of total sales or the collected maintenance fees. We will receive approximately 83% of the total maintenance fees collected.

In November 2001, we entered into a license and distribution agreement with Motorola, Inc. for sales of our Wireless Internet Gateway application software. Under the license and distribution agreement, Motorola will utilize our Wireless Internet Gateway along with Motorola's Message Register in its enhanced messaging service offerings to its wireless carrier customers around the world.

#### *Government Regulation*

We are not currently subject to direct federal, state or local government regulation, other than the FCC license to operate our Baltimore teleport and regulations that apply to businesses generally. The wireless carriers that utilize our products and services are subject to regulation by the FCC and, to a lesser extent, by state and local governmental agencies. Therefore, changes in FCC regulations, policies or interpretations, or broad-based state or local actions, could indirectly affect the availability of wireless services these carriers provide, thereby affecting the products and services they buy from us. We could, for example, be adversely affected by developments in regulations that govern or may in the future govern the Internet, the allocation of radio frequencies or the placement of wireless towers.

Concerns about personal privacy could result in regulations limiting the use of mobile location services. For example, a European Union ("EU") directive prohibits the transmission of personally identifiable data to third parties that are deemed to provide inadequate privacy protection for that information. The United States and the EU recently signed a data privacy agreement, which includes standards that U.S. companies will be able to use to comply with the EU directive. The FCC may adopt additional regulations related to this directive, including increased protections for personal data. Also, existing laws governing access to and use of consumer information could be interpreted or expanded to cover the wireless market. Congress currently is considering legislation that may regulate wireless carriers' use of call location information.

The FCC has adopted requirements for cellular and other commercial mobile radio service providers to implement enhanced E9-1-1 services. These services provide emergency service providers with the ability to better identify and locate callers using wireless services. Phase I of the FCC's E9-1-1 mandate

required that by April 1998 carriers deploy technology capable of providing public safety dispatchers a broad location estimate of a E9-1-1 caller. Phase II of the FCC's E9-1-1 rules requires carriers to deliver to dispatchers more specific latitude and longitude location information, a capability called automatic location identification. Phase II capabilities, subject to certain conditions, are scheduled to be phased in between October 1, 2001 and December 31, 2005. Several national wireless carriers, including Sprint PCS, AT&T Wireless, Cingular Wireless, Nextel Communications and Verizon Wireless have obtained waivers of aspects of the Phase II compliance deadline. All carriers that have received a Phase II compliance waiver must meet new carrier-specific compliance requirements imposed by the FCC. Beginning February 1, 2002 through February 1, 2006, all carriers that received a Phase II compliance waiver must file with the FCC quarterly reports detailing their progress towards Phase II compliance. The FCC has pending a proceeding to adopt privacy principles to assure that a caller's location information is adequately protected. The Commission also recently initiated a technical inquiry to develop information on issues affecting the deployment of E9-1-1 systems. The information developed in technical inquiry will be used to assist the FCC in further identifying wireless E9-1-1 deployment issues and assessing possible obstacles to timely development.

While we are not subject to the Telecommunications Act of 1996 (the "Act"), many wireless carriers that use our products are subject to this Act. The Act provided for significant deregulation of the U.S. telecommunications industry and such legislation remains subject to judicial review and additional FCC rulemaking. As a result of the act, as well as various initiatives of the FCC to implement its provisions, we cannot predict the effect that legislation or any state or federal rulemaking or other action may have on our future operations. Due to the increasing popularity and use of the Internet, there are an increasing number of laws and regulations being enacted and proposed pertaining to the Internet. In addition, a number of legislative and regulatory proposals are under consideration by various agencies and commissions in the United States and elsewhere. Laws or regulations may be adopted, and in some countries have already been adopted, with respect to the Internet relating to liability for information retrieved from or transmitted over the Internet, online content regulation, user privacy, taxation and quality of products and services. Moreover, the applicability to the Internet of existing laws governing issues such as intellectual property ownership and infringement, trade secret, obscenity, libel, employment and personal privacy is uncertain and developing. Uncertainty and new regulations could create turmoil in the marketplace that could reduce demand for its products and services or increase the cost of doing business and have a material adverse effect on our business, financial condition or results of operations.

### *Employees*

As of December 31, 2001, we have 509 employees, 499 full-time and 10 part-time, of which 187 were engineers who specialize in network applications development and network solutions. We believe relations with our employees to be good. None of our employees are represented by a union.

### *Item 2. Properties*

Our principal executive office is located in Annapolis, Maryland in a 35,399 square foot facility under a lease expiring in September 2002. We have a second 31,371 square foot facility in Annapolis, Maryland under lease. This lease began on May 1, 2000 and will expire in April 2005. Our Southeast Regional office is located in Tampa, Florida in a 7,376 square foot facility under a lease expiring in December 2005. In January 2001, in connection with the acquisition of Xypoint, we added an office in Seattle, Washington in a 22,406 square foot facility under a lease that expires in April 2004. We also have a hosting facility in Phoenix, Arizona in a 1,387 square foot office under a lease that expires in February 2004. During 2001, our Seattle operations expanded into an additional 16,548 square foot facility under a lease that expires August 30, 2004.

### *Item 3. Legal Proceedings*

In November 2001, a shareholder class action lawsuit was filed against us, certain of our current officers and a director, and several investment banks that were the underwriters of our initial public

offering (the "Underwriters"): *Highstein v. Telecommunication Systems, Inc., et al.*, United States District Court for the Southern District of New York, Civil Action No. 01-CV-9500. The plaintiffs seek an unspecified amount of damages. The lawsuit purports to be a class action suit filed on behalf of purchasers of our common stock during the period August 8, 2000 through December 6, 2000. The plaintiffs allege that the Underwriters agreed to allocate common stock offered for sale in our initial public offering to certain purchasers in exchange for excessive and undisclosed commissions and agreements by those purchasers to make additional purchases of common stock in the aftermarket at pre-determined prices. The plaintiffs allege that all of the defendants violated Sections 11, 12 and 15 of the Securities Act of 1933, as amended, and that the underwriters violated Section 10(b) of the Securities Exchange Act of 1934, as amended, and Rule 10b-5 promulgated thereunder. We intend to vigorously defend the lawsuit. We believe that more than 180 other companies have been named in nearly identical lawsuits that have been filed by some of the same law firms that represent the plaintiffs in the lawsuit against us.

We are not currently subject to any other material legal proceedings. However, we may from time to time become a party to various legal proceedings arising in the ordinary course of our business.

**Item 4. *Submission of Matters to a Vote of Security Holders***

None.

## Part II

### Item 5. Market for Registrant's Common Equity and Related Shareholder Matters

Our Class A Common Stock has been traded on the Nasdaq National Market under the symbol "TSYS" since our initial public offering on August 8, 2000. The following table sets forth, for the periods indicated, the high and low closing prices for our common stock as reported by the Nasdaq Stock Market's National Market:

	<u>High</u>	<u>Low</u>
<b>2001</b>		
First Quarter 2001 .....	\$10.19	\$ 2.91
Second Quarter 2001 .....	\$ 6.25	\$ 2.75
Third Quarter 2001 .....	\$ 2.90	\$ 0.95
Fourth Quarter 2001 .....	\$ 5.48	\$ 1.07
First Quarter 2002 (as of March 15, 2002) .....	\$ 5.74	\$ 2.47
<b>2000</b>		
Third Quarter 2000 (from August 8, 2000) .....	\$31.94	\$18.88
Fourth Quarter 2000 .....	\$17.38	\$ 3.38

As of March 15, 2002, there were approximately 521 holders of record of our Class A Common Stock.

As of March 15, 2002, there were 2 holders of record of our Class B Common Stock.

#### Dividend Policy

We have never declared or paid cash dividends on our common stock. We currently intend to retain any future earnings to fund the development, growth and operation of our business. Therefore, we do not currently anticipate paying any cash dividends on our common stock in the foreseeable future.

#### Change in Securities and Use of Proceeds

On January 19, 2001, we completed our acquisition of Xypoint Corporation. In connection with our acquisition of Xypoint, we paid \$734,000 cash and issued 3,597,520 shares of Class A Common Stock and 656,990 options to purchase our Class A Common Stock in exchange for all of the outstanding shares of capital stock, options and warrants of Xypoint. On December 27, 2000, the Securities and Exchange Commission declared effective our Registration Statement on Form S-4 (File No. 333-51656).

On February 14, 2001, we completed our acquisition of *reach*NET. In connection with the acquisition, we paid approximately \$500,000 and 59,000 shares of Class A Common Stock in exchange for all of the capital stock and options of *reach*NET. The issuance of these securities were deemed to be exempt from registration under the Securities act in reliance on Section 4(2) of the Securities Act as a transaction by an issuer not involving any public offering.

As of December 31, 2001, we have used part of the net proceeds from the initial public offering to fund capital expenditures of \$3.3 million, working capital of \$23.2 million, acquisitions of \$3.0 and repayment of indebtedness of \$10.7 million. The remaining amount of net proceeds of \$42.9 million are being held as cash and in temporary investments.

Item 6. *Selected Financial Data*

The table that follows presents portions of our financial statements and is not complete. You should read the following selected financial data together with our financial statements and related notes and with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the more complete financial information included elsewhere in this Form 10-K. We have derived the statement of operations data for the years ended December 31, 2001, 2000, and 1999 and the balance sheet data as of December 31, 2001 and 2000 from our financial statements which have been audited by Ernst & Young LLP, independent auditors, and which are included beginning on page F-2. We have derived the statement of operations data for the years ended December 31, 1998 and 1997 and the balance sheet data as of December 31, 1999, 1998 and 1997, from our audited financial statements which are not included in this Form 10-K. The historical results presented below are not necessarily indicative of the results to be expected for any future fiscal year. See "Management's Discussion and Analysis of Financial Condition and Results of Operations".

	Year Ended December 31,				
	<u>2001(2)</u>	<u>2000(1)</u>	<u>1999</u>	<u>1998</u>	<u>1997</u>
	(in thousands)				
<b>Statement of Operations Data:</b>					
Revenue:					
Network applications:					
Software licenses .....	\$ 9,059	\$ 9,546	\$ 3,975	\$ 2,104	\$ 1,373
Services .....	28,199	12,457	7,345	5,806	3,815
Network applications .....	37,258	22,003	11,320	7,910	5,188
Network solutions .....	32,294	36,060	34,440	17,078	22,636
Total revenue .....	69,552	58,063	45,760	24,988	27,824
Operating costs and expenses:					
Direct cost of network applications .....	15,796	10,061	4,993	4,252	2,918
Direct cost of network solutions .....	24,280	26,692	26,889	12,358	17,847
Research and development .....	18,083	5,272	1,098	1,455	1,045
Sales and marketing .....	13,826	6,930	2,285	4,001	3,091
General and administrative .....	14,325	11,007	5,329	354	204
Non-cash stock compensation expense .....	2,587	1,711	—	—	—
Depreciation and amortization of property and equipment .....	4,550	2,388	916	424	294
Amortization of software development costs .....	4,946	2,892	1,401	593	220
Amortization of goodwill and other intangibles .....	9,226	—	—	—	—
Acquired in-process research and development .....	9,700	—	—	—	—
Impairment of goodwill and other intangibles .....	43,000	—	—	—	—
Total operating costs and expenses .....	160,319	66,953	42,911	23,437	25,619
Income (loss) from operations .....	<u>(90,767)</u>	<u>(8,890)</u>	<u>2,849</u>	<u>1,551</u>	<u>2,205</u>
Net interest expense and other financing costs .....	1,284	518	(1,741)	(1,550)	(1,263)
Income (loss) before income taxes and extraordinary item .....	(89,483)	(8,372)	1,108	1	942
Income tax benefit (expense) .....	—	2,601	(2,408)	—	—
Loss before extraordinary item .....	(89,483)	(5,771)	(1,300)	1	942
Net income (loss) attributable to common stockholders .....	<u>\$(89,483)</u>	<u>\$(6,530)</u>	<u>\$(1,300)</u>	<u>\$ 1</u>	<u>\$ 942</u>
Loss per common share, basic and diluted .....	<u>\$(3.16)</u>	<u>\$(0.39)</u>	<u>\$(0.12)</u>	<u>\$ —</u>	<u>\$ 0.09</u>
Basic shares used in computation .....	28,297	16,948	10,788	10,788	10,788
Diluted shares used in computation .....	28,297	16,948	10,788	14,768	11,076

	As of December 31,				
	<u>2001 (2)</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>	<u>1997</u>
	(in thousands)				
<b>Balance Sheet Data:</b>					
Unrestricted Cash .....	\$ 42,928	\$ 66,117	\$ 3,257	\$ 440	\$ 864
Working capital (deficit) .....	46,138	72,442	4,229	(360)	(2,149)
Total assets .....	89,596	100,350	27,672	14,649	10,764
Capital leases and long-term debt .....	4,825	1,102	6,672	6,621	2,975
Total liabilities .....	26,735	16,201	22,351	15,994	12,269
Series A preferred stock .....	—	—	9,520	—	—
Total stockholders' equity (deficit) .....	62,861	84,149	(4,199)	(1,345)	(1,736)

- (1) In 2000, we recorded an extraordinary loss on early extinguishment of debt of \$(0.2) million, net of tax benefit. Approximately, \$9.3 million of our initial public offerings proceeds were used to extinguish debt.
- (2) In January 2001, we acquired Xypoint Corporation. See the footnote "Xypoint Acquisition" included in the audited financial statements for a discussion of the acquisition.

## **Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations**

### **Critical Accounting Policies and Estimates**

Management's Discussion and Analysis of Financial Condition and Results of Operations discusses our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. On an on-going basis, management evaluates its estimates and judgements, including those related to intangible assets, financing operations, and contingencies and litigation. Management bases its estimates and judgements on historical experience and on various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgements about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We identified our most critical accounting policies to be those related to revenue recognition for our contracts accounted for using the percentage of completion method, capitalized software, intangible assets and evaluation of impairment. We describe these accounting policies in the notes to the consolidated financial statements and at relevant sections in this discussion and analysis. This discussion and analysis should be read in conjunction with our consolidated financial statements and related notes included elsewhere in this report.

### **Overview**

We manage our business in two segments, network applications and network solutions. Our network applications segment consists of the development and licensing of software products and the provision of related services. Our network solutions segment includes the design, development and deployment of

complex information processing and communication systems and the provision of related services. The following table sets forth information on each of our segments:

	Year Ended December 31,		
	2001	2000	1999
	(in thousands)		
Revenue:			
Software licenses .....	\$ 9,059	\$ 9,546	\$ 3,975
Services .....	28,199	12,457	7,345
Network applications .....	37,258	22,003	11,320
Network solutions .....	32,294	36,060	34,440
Total revenue .....	<u>\$ 69,552</u>	<u>\$58,063</u>	<u>\$45,760</u>
Earnings (loss) before interest, taxes and non-cash charges:			
Network applications .....	\$(17,789)	\$(3,889)	\$ 2,852
Network solutions .....	1,031	1,990	2,314
Total segment (loss) earnings before interest, taxes and non-cash charges .....	<u>\$(16,758)</u>	<u>\$(1,899)</u>	<u>\$ 5,166</u>

A reconciliation of segment (loss) earnings before interest, taxes and non-cash charges for both segments to loss from operations is as follows:

	Year Ended December 31,		
	2001	2000	1999
	(in thousands)		
Total segment (loss) earnings before interest, taxes and non-cash charges .....	\$(16,758)	\$(1,899)	\$ 5,166
Non cash stock compensation expense .....	(2,587)	(1,711)	—
Depreciation and amortization of property and equipment .....	(4,550)	(2,388)	(916)
Amortization of software development costs .....	(4,946)	(2,892)	(1,401)
Amortization of goodwill and other intangibles .....	(9,226)	—	—
Acquired in-process research and development .....	(9,700)	—	—
Impairment of goodwill and other intangibles .....	(43,000)	—	—
Income (loss) from operations before extraordinary item .....	<u>\$(90,767)</u>	<u>\$(8,890)</u>	<u>\$ 2,849</u>

For the year ended December 31, 2001, our aggregate revenue from U.S. government agencies was \$21.2 million and our aggregate revenue from Lucent was \$8.7 million. For the year ended December 31, 2000, our aggregate revenue from U.S. government agencies was \$25.0 million and our aggregate revenue from Lucent was \$14.2 million. For the year ended December 31, 1999, our aggregate revenue from U.S. government agencies was \$29.5 million and our aggregate revenue from Lucent was \$5.1 million.

Total company backlog at January 31, 2002 was \$26.1 million. The backlog at any given time may be affected by a number of factors, including contracts being renewed or new contracts being signed before existing contracts are completed. Accordingly, a comparison of backlog from period to period is not necessarily meaningful and may not be indicative of eventual actual shipments or future revenue.

*Network Applications Revenue.* We generate network applications revenue from licensing of our software products, provision of related maintenance and deployment services and from our service bureau offerings, enhanced E9-1-1, Message Distribution Center and custom software applications. The Short Message Service Center and Wireless Internet Gateway products have been the principal generators of software license fees. We have historically sold our network application software products through our relationship with Lucent. This sales process typically includes participation of our engineers along with Lucent in presenting our products to prospective customers. We also market our network applications by

responding to requests for proposals and through our direct sales force. In 2001, approximately 17% of network applications license revenue was generated from carriers outside of the Lucent channel.

Lucent pays us initial license fees generally equal to 50% of the revenue it generates from sales of the Short Message Service Center application that we developed under our 1996 development agreement with Lucent. For sales of our Wireless Internet Gateway, Lucent pays us initial fees which we negotiate on a case by case basis and which have generally ranged between 75% and 90% of the sale value. Initial licensing fees are a function of the number of subscribers in the network where our software is deployed. As a carrier's subscriber base increases, the carrier must purchase additional capacity under its license agreement with Lucent and we receive additional revenue. We recognize license fee revenue when each of the following has occurred: (1) evidence of an arrangement is in place; (2) we have delivered software; (3) the fee is fixed or determinable; and (4) collection of the fee is probable. Software license fees billed and not recognized as revenue are included in deferred revenue.

In 1998 we developed Prepaid Wireless under our development agreement with Lucent. In April 2000, we signed an amendment to the development agreement with Lucent pursuant to which Lucent ceased to market the jointly developed Prepaid Wireless application and would instead market and sell a new prepaid wireless software application that Lucent developed. Lucent has agreed to share revenue with us from the sale of their new prepaid wireless software until March 31, 2004. Our license and related service revenue from the Prepaid Wireless software were approximately 4% and 5% of our network applications revenue for the year ended December 31, 2001 and 2000.

Our network applications service revenue arises from our enhanced E9-1-1 service bureau business, annual maintenance fees for our packaged software products and fees from development, implementation and maintenance of custom software. Revenue from our service bureau offerings consists of monthly recurring service fees and is recognized in the month earned. Service fees are primarily dependent on the number of subscribers the carrier covers. As the carrier's number of subscribers increases the monthly recurring service fees increase. Maintenance fees on packaged software are collected in advance and recognized ratably over the annual maintenance period. Unrecognized maintenance fees are included in deferred revenue. Custom software development, implementation and maintenance services may be provided under time and materials or fixed-fee contracts. We recognize fixed-fee contract revenue using the percentage-of-completion method. We measure progress to completion using costs incurred compared to estimated total costs. We recognize estimated losses under long-term contracts in their entirety upon discovery. If we did not accurately estimate total costs to complete a contract or do not manage our contracts within the planned budget then future margins may be negatively affected or losses to existing contracts may need to be recognized.

*Network Solutions Revenue.* We generate network solutions revenue from the design, development and deployment of information processing and communication systems for corporate and government enterprises. Examples of recent representative network solutions projects include work performed under our agreements with U.S. Department of Defense, U.S. Department of State and the State of Jigawa, Nigeria. We have an agreement with the State of Jigawa, Nigeria to build a network that will provide global Internet access, satellite communications connectivity, State-wide and local wireless Internet distribution and Internet protocol multimedia content to 26 cities within Jigawa. We have delivered our Deployable Communications System ("DCS") to the U.S. Department of State and the U.S. Department of Defense. The DCS system supports a worldwide network during trips abroad and throughout the United States and provides full network functionality and IP telephony capability using landlines and satellite-based technologies.

We generally provide network solutions under long-term contracts. We recognize revenue under long-term contracts as billable costs are incurred and for fixed-price contracts using the percentage-of-completion method, measured by total costs incurred compared to total estimated costs. We recognize estimated losses on contracts in their entirety upon discovery. If we did not accurately estimate total costs to complete a contract or do not manage our contracts within the planned budget then future margins may be negatively affected or losses to existing contracts may need to be recognized. Under our contracts with

the U.S. government, contract costs, including the allocated indirect expenses, are subject to audit and adjustment by the Defense Contract Audit Agency. We record revenue under these contracts at estimated net realizable amounts.

*Direct Cost of Network Applications.* Our direct cost of network applications consists primarily of compensation, benefits, purchased equipment and travel expenses incurred when providing our services, as well as the cost of our network operations centers circuits for connectivity to carrier customers and Public Safety Answering Points.

*Direct Cost of Network Solutions.* Our direct cost of network solutions consists primarily of compensation, benefits, travel, purchased equipment and the costs of third-party contractors that we engage. Our direct costs of providing services under long-term contracts include an allocation of indirect costs at rates that comply with federal contractor cost accounting regulations.

*Research and Development Expense.* Our research and development expense consists of the costs of developing software products incurred prior to establishing technological feasibility. Technological feasibility is established when all planning, designing, coding, and testing activities that are necessary to establish that the product can be produced to meet its design specifications including functions, features, and technical performance requirements have been completed. We incur research and development costs to enhance existing packaged software products as well as to create new software products. These costs primarily include compensation and benefits as well as costs associated with using third party laboratory and testing resources. We expense research and development costs as they are incurred.

*Sales and Marketing Expense.* Our sales and marketing expenses include compensation and benefits, and trade show, travel, advertising and public relations costs which are expensed as incurred. We have historically sold our network application software products through our relationship with Lucent. This sales process typically includes participation of our engineers along with Lucent in presenting our products to prospective customers. We also market our network applications and network solutions products and services by responding to requests for proposals and through our direct sales force. During the past two years, we have hired additional personnel to market our products directly to wireless carriers and enterprises.

*General and Administrative Expense.* General and administrative expense consists primarily of compensation costs and other costs associated with management, finance, human resources and internal information systems. These costs include compensation and benefits, rent, utilities and other facilities costs which are expensed as incurred.

*Non-Cash Stock-Based Compensation Expense.* During the second and third quarters of 2000, we granted options to purchase 885,983 shares of Class A Common Stock to employees and directors at an exercise price less than the fair market value of our Class A Common Stock at the date of grant. We will record future additional stock compensation expense of approximately \$4.9 million as a result of these option grants that will be recognized ratably over the remaining vesting period. During 2001, we recognized approximately \$2.6 million of stock compensation expense related to these grants.

*Depreciation and Amortization Expense.* Depreciation and amortization expense (other than amortization of software development costs) represents the period costs associated with our investment in computers, software, furniture and fixtures, and leasehold improvements. We compute depreciation and amortization using the straight-line method over the estimated useful life of the assets.

*Amortization of Software Development Costs.* We capitalize software development costs after we establish technological feasibility, and amortize those costs over the estimated useful life of the software beginning on the date when the software is first available for general release. We calculate amortization of software development costs on a product-by-product basis using the straight-line method over the remaining estimated economic life of the product, which is never greater than four years. We also compute amortization using the ratio that current revenue for the product bears to the total of current and anticipated future revenue for that product. If this revenue curve method results in amortization greater than the amount computed using the straight-line method, we record amortization at that greater amount.

Amortization as a percentage of software license fees is generally a higher percentage in the early stages of a product's life cycle.

Our policies to determine when to capitalize software development costs and how much to amortize in a given period requires us to make subjective estimates and judgements. If our software products do not achieve the level of market acceptance that we expect and our future revenue estimates for these products change, the amount of amortization that we record may increase compared to prior periods.

*Amortization of Other Intangible Assets.* Other intangible assets consist principally of tradename. These intangible assets are being amortized over three years using the straight-line method. In assessing the recoverability of our intangible assets we make assumptions regarding the remaining useful life, estimated future cash flows and other factors to determine the fair value of the assets. These estimates could change significantly based on changes in our strategy and/or market conditions. If these estimates or related assumptions change in the future, we may be required to record an impairment charge for our intangible assets.

#### Year Ended December 31, 2001 Compared to Year Ended December 31, 2000

*Revenue.* Total revenue increased \$11.5 million, or 20%, to \$69.6 million in 2001 from \$58.1 million in 2000.

Total network applications revenue increased \$15.3 million, or 69%, to \$37.3 million in 2001 from \$22.0 million in 2000. Network application software license revenue decreased \$0.5 million, or 5%, to \$9.1 million in 2001 from \$9.5 million in 2000. This decrease is a result of a slowdown in carrier purchases of licenses during the second half of 2001 as compared to 2000. Network application service revenue increased \$15.7 million, or 126%, to \$28.2 million in 2001 from \$12.5 million in 2000. The expansion of our network application services offerings in January 2001 to include our service bureau offering, enhanced E9-1-1, contributed \$16.8 million to network application services revenue for 2001. That increase was offset by a decrease in fees from deployment of our software product licenses consistent with the decrease of software license fee revenue.

Network solutions revenue decreased \$3.8 million, or 10%, to \$32.3 million in 2001 from \$36.1 million in 2000. The decrease in network solutions revenue is due to the completion of a major contract and fewer relocation services contracts.

*Direct Cost of Revenue.* Total direct cost of revenue increased \$3.3 million, or 9%, to \$40.1 million in 2001 from \$36.8 million in 2000. As a percentage of revenue, direct cost of revenue decreased to 58% in 2001 from 63% in 2000.

Direct cost of network applications increased \$5.7 million, or 57%, to \$15.8 million in 2001 from \$10.1 million in 2000. The increase in direct cost of network applications is in part related to the addition of \$6.3 million of costs related to our enhanced E9-1-1 service bureau offering. That increase was offset by lower hardware sales for our Wireless Internet Gateway product. As a percentage of related revenue, direct cost of network applications decreased to 42% in 2001 from 46% in 2000.

Direct cost of network solutions decreased \$2.4 million, or 9%, to \$24.3 million in 2001 from \$26.7 million in 2000. The decrease in direct cost of network solutions is due to the decrease in the volume of business in 2001. As a percentage of related revenue, direct cost of network solutions increased to 75% in 2001 from 74% in 2000 due to decreased revenue for 2001.

*Research and Development Expense.* Research and development expense increased \$12.8 million, or 243%, to \$18.1 million in 2001 from \$5.3 million in 2000. The expansion of our network applications group to include location based wireless technology accounted for \$6.3 million of the increase in research and development. The remaining increase was a result of devoting additional resources to the development of Wireless Internet Gateway products and our Prepaid product.

*Sales and Marketing Expense.* Sales and marketing expense increased \$6.9 million, or 100%, to \$13.8 million in 2001 from \$6.9 million in 2000. Over the past year, we have committed significant

resources to creating a comprehensive sales and marketing group. We have focused on hiring sales and marketing personnel as well as developing marketing tools, participating in trade shows and other similar activities to promote our products and services to carriers outside of the Lucent channel as well as to enterprises.

*General and Administrative Expense.* General and administrative expense increased \$3.3 million, or 30%, to \$14.3 million in 2001 from \$11.0 million in 2000. A portion of the increase, approximately \$1.1 million, is related to the addition of our location-based wireless technology business in January 2001. The remaining increase is due to additional expenses related to the expansion of our facilities to support the increased volume of software development and other business activities, as well as additional expenses incurred in connection with our operation as a public company.

*Depreciation and Amortization Expense.* Depreciation and amortization of property and equipment increased \$2.2 million, or 91%, to \$4.6 million in 2001 from \$2.4 million in 2000. The increase is primarily related to \$1.9 million of depreciation expense recorded for property and equipment related to our location based wireless technology business acquired in 2001 and the increase in property and equipment acquired under capital leases.

*Amortization of Software Development Costs.* Amortization of software development costs increased to \$4.9 million in 2001 from \$2.9 million in 2000. This increase was the result of the general release of enhancements to our software products that have increased our capitalized software development costs subject to amortization. Amortization expense as a percentage of software license fees increased to 55% in 2001 from 30% in 2000 due to a decrease in software license fee revenue in 2001.

*Amortization of Goodwill and Other Intangibles.* Amortization of goodwill and other intangibles relating to our acquisitions of Xypoint in January 2001 and reachNET in February 2001 aggregated \$9.2 million for 2001. In connection with the Xypoint and reachNET acquisitions, we recorded goodwill of approximately \$47.5 million, which was being amortized on a straight-line basis over a four-year period. We also recorded \$1.5 million and \$1.6 million in other intangibles related to workforce-in-place and trade name, respectively, in connection with the Xypoint acquisition. See "Impairment of Goodwill and Other Intangibles" for a discussion of the impairment recognized during the third quarter of 2001 and management's assessment of recoverability of the remaining intangible assets.

*Acquired In-Process Research and Development.* In connection with the acquisition of Xypoint in January 2001, we allocated \$9.7 million of the \$69.1 million purchase price to in-process research and development projects. This allocation represents the estimated fair value based on discounted cash flows related to the incomplete research and development projects. At the time of acquisition, the progress of these technologies had not yet reached technological feasibility and the technologies had no alternative future uses. Accordingly, these costs were expensed as of the acquisition date.

At December 31, 2001, seven of the nine technologies that were underway as of the acquisition remain on target with our original plans and projections. We ceased further development of the two remaining technologies — Nomad and InfoLink — as we did not believe that market demand was sufficient to warrant further development and commitment of resources. For the seven technologies remaining under development, we believe these research and development technologies are on track with management's plans at the time the acquisition occurred.

Funding for such technologies is expected to be from our remaining initial public offering proceeds and internally generated sources. Although we intend to complete the development of these technologies and management believes in the likelihood of their feasibility, there can be no assurance that such projects will be completed successfully, or that upon completion such technologies will achieve commercial success.

*Impairment of Goodwill and Other Intangibles.* In connection with the acquisition of Xypoint and reachNET in the first quarter 2001, we recorded goodwill and other intangible assets of approximately \$54.7 million. We also immediately expensed \$9.7 million as acquired in-process technology upon completion of the Xypoint acquisition.

During the quarter ended September 30, 2001, we performed an impairment assessment of the identifiable intangibles and goodwill recorded upon the acquisitions of Xypoint and *reachNET*. The assessment was performed as a result of the decision by management to discontinue the further development of certain products acquired in the acquisitions and current competitive influences related to these businesses. Based on these factors, it was determined that the goodwill and other intangible assets may have become impaired as of September 30, 2001. In accordance with SFAS No. 121, *Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of*, an undiscounted cash flow analysis of our acquisitions was performed to determine whether an impairment existed. Because the undiscounted cash flows were less than the carrying value of the net assets of these businesses, we determined that the intangible assets were impaired. To calculate the amount of the impairment, we estimated the fair value of the net assets using a discounted cash flow analysis. We used a discount rate of 29% and estimated revenues and costs based on current projections which take into account current and expected market conditions and our past experience.

An impairment charge of \$43.0 million was recorded, which represents the difference between the carrying value and fair value of goodwill and other intangible assets. The remaining identifiable intangible assets of approximately \$1.6 million consist of the developed technology and trade name acquired in the Xypoint acquisition and will continue to be amortized over the remaining useful life of 27 months.

*Interest Income (Expense) and Other Financing Costs.* Net interest income was \$1.3 million in 2001 compared to a net interest income of \$0.5 million in 2000. There was a decrease in cash available for investment during 2001 and an increase in interest expense related to capital leases.

*Net Income (Loss).* We incurred a net loss of \$89.5 million in 2001 compared to a net loss of \$6.5 million in 2000 due to the factors described above.

#### **Year Ended December 31, 2000 Compared to Year Ended December 31, 1999**

*Revenue.* Total revenue increased \$12.3 million, or 27%, to \$58.1 million in 2000 from \$45.8 million in 1999.

Total network applications revenue increased \$10.7 million, or 94%, to \$22.0 million in 2000 from \$11.3 million in 1999. Network application software license revenue increased \$5.6 million, or 140%, to \$9.5 million in 2000 from \$4.0 million in 1999. This increase resulted from additional sales of the Short Message Service Center and Wireless Internet Gateway applications. Network application service revenue increased \$5.1 million, or 70%, to \$12.5 million in 2000 from \$7.3 million in 1999. This increase resulted from increased maintenance revenue related to packaged software products, an increase in sales of custom software applications, and hardware revenue associated with the Wireless Internet Gateway applications.

Network solutions revenue increased \$1.6 million, or 5%, to \$36.1 million in 2000 from \$34.4 million in 1999. The increase resulted from the commencement of several new projects during the last half of 2000.

*Direct Cost of Revenue.* Total direct cost of revenue increased \$4.9 million, or 15%, to \$36.8 million in 2000 from \$31.9 million in 1999. As a percentage of revenue, direct cost of revenue decreased to 63% in 2000 from 70% in 1999.

Direct cost of network applications increased \$5.1 million, or 102%, to \$10.1 million in 2000 from \$5.0 million in 1999. The increase in direct cost of network applications resulted from higher personnel, increased hardware requirements with Wireless Internet Gateway sales, and other related costs necessary to support the increase in revenue as noted above. As a percentage of related revenue, direct cost of network applications increased to 46% in 2000 from 44% in 1999.

Direct cost of network solutions decreased \$0.2 million, or 1%, to \$26.7 million in 2000 from \$26.9 million in 1999. As a percentage of related revenue, direct cost of network solutions decreased to 74% in 2000 from 78% in 1999 due to a higher mix of contracts involving less subcontractor labor and purchased system components.

*Research and Development Expense.* Research and development expense increased \$4.2 million, or 380%, to \$5.3 million in 2000 from \$1.1 million in 1999. The increase was the result of devoting additional resources to the development of packaged software products, primarily wireless data products.

*Sales and Marketing Expense.* Sales and marketing expense increased \$4.6 million, or 203%, to \$6.9 million in 2000 from \$2.3 million in 1999. The increase was primarily a result of an increased number of personnel hired for sales and marketing efforts.

*General and Administrative Expense.* General and administrative expense increased \$5.7 million, or 107%, to \$11.0 million in 2000 from \$5.3 million in 1999. The increase in general and administrative expense primarily reflects expansion of our facilities, and employment of additional staff to support the increased volume of software development and other business activity.

*Depreciation and Amortization Expense.* Depreciation and amortization of property and equipment increased \$1.5 million, or 161%, to \$2.4 million in 2000 from \$0.9 million in 1999. Increased depreciation and amortization of our property and equipment resulted from growth of our infrastructure to support the volume of activity and equipment upgrades.

*Amortization of Software Development Costs.* Amortization of software development costs increased to \$2.9 million in 2000 from \$1.4 million in 1999. This increase was the result of the general release of enhancements to our software products that have increased our capitalized software development costs subject to amortization. Amortization expense as a percentage of software license fees decreased to 30% in 2000 from 35% in 1999 as a result of new product introductions.

*Interest Income (Expense) and Other Financing Costs.* Net interest income was \$0.5 million in 2000 compared to a net interest expense of \$1.7 million in 1999. This is mainly due to the repayment of all of our debt in August 2000 and interest income earned on the proceeds of our initial public offering.

*Net Income (Loss).* We incurred a net loss of \$6.0 million in 2000 compared to a net loss of \$1.3 million in 1999 due to the factors described above.

## **Income Taxes**

From January 1, 1993 through December 14, 1999, we elected to be treated as an S corporation for federal income tax purposes under Subchapter S of the Code and accordingly, we were not subject to federal and state income taxes during that period. We terminated our S corporation status on December 14, 1999, and upon termination determined the differences between the financial reporting and income tax bases of its assets and liabilities. These differences were recorded as deferred tax assets or liabilities, and the net difference was reported as income tax expense in 1999. We recorded \$2.4 million of income tax expense for the period from December 14, 1999 through December 31, 1999, primarily representing deferred taxes incurred as a result of deducting software development costs for tax purposes when incurred, rather than capitalizing and amortizing such costs in accordance with generally accepted accounting principles for financial reporting purposes. We recorded a \$2.6 million tax benefit in the year ended December 31, 2000, which resulted from our ability to reduce our deferred tax liabilities by the tax effect of our net operating loss for the period. No provision for federal or state income taxes has been made for the year ended December 31, 2001, given our loss position.

## **Liquidity and Capital Resources**

We have funded our operations and capital expenditures primarily using net proceeds from our initial public offering in August 2000, which generated approximately \$83.2 million, as well as revenue from our operations and various borrowing arrangements. Our borrowing arrangements have provided funding primarily through capital lease obligations. As of December 31, 2001, we had \$42.9 million in cash and cash equivalents and working capital of \$46.1 million.

Our net cash used in operating activities was \$11.7 million in 2001, \$3.1 million in 2000 and cash provided by operating activities was \$1.2 million in 1999. The \$11.7 million of net cash used in operating

activities for the year ended December 31, 2001 reflects the net loss of \$89.5 million offset by non-cash expenses of \$74.0 million and net increase in operating assets and liabilities of \$3.7 million, primarily related to the timing of accounts receivable collections and the increase in accounts payable and accrued liabilities. Loss before non-cash charges increased to \$15.5 million from \$1.2 million in 2000. Earnings before non-cash charges were \$3.7 million in 1999.

Working capital as of December 31, 2001 was \$46.1 million compared to \$72.4 million as of December 31, 2000. The decrease in working capital is primarily a result of a decrease in our cash balance of \$23.2 million. The remaining decrease in working capital is due to the increase in current liabilities offset by an increase in current assets. Our current assets increased \$3.7 million mainly due to a \$3.0 million and a \$3.1 million increase in accounts receivable and the current portion of notes receivable from employees, respectively. The increase in accounts receivable is mainly due to an increase in revenue and the timing of collections. The current portion of notes receivable increased because substantially all of the loans mature in 2002. See also the related party transaction discussion below.

Our current liabilities increased \$6.8 million primarily driven by a \$2.7 million increase in the current portion of capital leases and \$6.1 million increase in accounts payable. In 2002, we began to finance our furniture and computer equipment purchases through capital leases. Accounts payable has increased due to the increase in costs as well as timing of vendor payments.

Net cash used in investing activities was \$13.1 million in 2001, \$6.5 million in 2000 and \$5.2 million in 1999. In 2001, cash used in investing activities includes \$3.0 million used for the acquisition of Xypoint, \$3.6 million for the development of our software products and \$6.1 million for the purchase of property and equipment. We also made loans to employees during the year, which accounted for \$2.1 million of net cash used in investing activities. See "Related Party Transactions" for a discussion of these notes receivable.

Net cash provided by financing activities was \$1.6 million in 2001, \$72.4 million in 2000 and \$6.9 million in 1999. In 2001, we repaid capital lease obligations of \$2.6 million and notes payable from related parties of \$1.4 million. We also generated \$4.7 million of cash from the sale of equipment that we then leased from the buyer.

As of December 31, 2001, our most significant commitments consisted of obligations under capital leases and non-cancelable operating leases. We lease certain furniture and computer equipment under capital leases. We lease office space and equipment under noncancelable operating leases. As of December 31, 2001 our commitments consisted of the following (amounts in thousands):

	<u>Total</u>	<u>2002</u>	<u>2003 - 2004</u>	<u>2005 - 2006</u>
Capital Lease Obligations .....	\$ 9,567	\$4,195	\$5,372	\$ —
Operating Leases .....	<u>6,854</u>	<u>2,881</u>	<u>3,509</u>	<u>464</u>
Total Contractual Cash Obligations .....	<u>\$16,421</u>	<u>\$7,076</u>	<u>\$8,881</u>	<u>\$464</u>

We believe that our cash and cash equivalents, and the funds anticipated to be generated from operations will be sufficient to finance our operations for at least the next twelve months. Although, we currently believe that we have sufficient capital resources to meet our anticipated working capital and capital expenditure requirements beyond the next twelve months, unanticipated events and opportunities may make it necessary for us to return to the public markets or establish new credit facilities or raise capital in private transactions in order to meet our capital requirements.

#### Related Party Transactions

During 2001 and 2000, we made loans to six senior executives, including our founder and CEO, totaling \$4.9 million. A loan of \$1.3 million was made in late 2000 to one executive as part of a recruitment package and was repaid in December 2001. A loan of \$2.5 million to our founder and CEO was made as a successor to a share sale program which had resulted in chronic downward pressure on the

market price of our common stock. The other executives incurred obligations primarily from taxes incurred by them as a result of their exercise of stock options to acquire shares of our common stock at the time of our initial public offering. We concluded that concentrated selling of our stock by insiders during a period of thin trading volume and depressed market conditions would not be in the best interests of shareholders. All loans and their terms were presented to and approved by the Board of Directors. These loans bear interest based on the prime rate plus one to two percent (i.e. from 6.5% to 7.5%) and meet Internal Revenue Service guidelines. As of December 31, 2001, loans due from officers totaled \$3.5 million, and as of March 26, 2002, the aggregate of outstanding loan balance is \$2.8 million. Substantially all of the remaining loans mature in 2002. All loans to employees are full recourse and are collateralized by shares of our stock owned by the employees and their in-the-money vested stock options.

#### Recent Accounting Pronouncements

In June 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 142, *Goodwill and Other Intangible Assets*, effective for fiscal years beginning after December 15, 2001. Under the new rules, goodwill will no longer be amortized but will be subject to annual impairment tests in accordance with the Statement. Other intangible assets will continue to be amortized over their useful lives.

We will apply the new rules of accounting for goodwill and other intangible assets beginning in the first quarter of 2002. Application of the non-amortization provisions of the Statement will not have an effect on our operating results since we currently have no goodwill.

In August 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*. Statement No. 144 supercedes Statement No. 121, *Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of*, and provides a single accounting model for long-lived assets to be disposed of. Statement No. 144 retains the requirements of Statement No. 121 to recognize an impairment loss only if the carrying amount of a long-lived asset is not recoverable from its undiscounted future cash flows and to measure the impairment loss as the difference between the carrying amount and the fair value of the asset. We will adopt the new rules on accounting for the impairment or disposal of long-lived assets beginning in the first quarter of 2002. We believe that the adoption of the new standard will not materially affect our consolidated financial position or operating results.

#### Item 7A. *Qualitative and Quantitative Disclosures about Market Risk*

We have limited exposure to financial market risks, including changes in interest rates. Our capital leases have fixed interest rates; therefore, changes in interest rates will not materially impact our results of operations. At December 31, 2001, we had cash and cash equivalents of \$42.9 million. Cash and cash equivalents consisted of demand deposits and money market accounts that are interest rate sensitive. However, these investments have short maturities mitigating their sensitivity to interest rates. A hypothetical 100 basis point adverse movement (decrease) in interest rates would have increased our net loss for 2001 by \$542,078, resulting in no significant impact on our consolidated financial position, results of operations or cash flows.

During 2002, we entered into a contract which is denominated in British Pounds Sterling. Fluctuations in the value of the British Pound Sterling relative to the United States dollar could cause us to incur currency exchange losses. Under the terms of this contract, we will be paid in British Pounds Sterling which exposes us to foreign currency exchange risk. We may experience some fluctuation in the value of payments made to us. These fluctuations may materially affect our financial results and subject us to potential foreign currency gains and losses that may have a material effect on our financial results in the future. Additionally, we do not maintain significant cash account balances in currencies other than the United States dollar. Therefore, we do not believe that we currently have any significant direct foreign currency exchange rate risk.

**Item 8. *Financial Statements and Supplementary Data***

The financial statements listed in Item 14 are included in this report beginning on page F-1.

**Item 9. *Changes in and Disagreements With Accountants on Accounting and Financial Disclosure***

None.

### Part III

#### **Item 10. *Directors and Executive Officers of the Registrant***

The information required by this Item 10 is incorporated by reference from the information captioned "Management of TeleCommunication Systems, Inc." and "Proposal to Elect Eight Directors" to be included in the Company's proxy statement to be filed in connection with the annual meeting of stockholders, to be held on June 13, 2002 (the "Proxy Statement").

#### **Item 11. *Executive Compensation***

The information required by this Item 11 is incorporated by reference from the information captioned "Executive Compensation" to be included in the Proxy Statement.

#### **Item 12. *Security Ownership of Certain Beneficial Owners and Management***

The information required by this Item 12 is incorporated by reference from the information captioned "Beneficial Ownership of TCS Common Stock" to be included in the Proxy Statement.

#### **Item 13. *Certain Relationships and Related Transactions***

The information required by this Item 13 is incorporated by reference from the information captioned "Certain Transactions Relating to TeleCommunication Systems, Inc." to be included in the Proxy Statement.

Part IV

Item 14. Exhibits, Financial Statement Schedules, and Reports on Form 8-K

Financial Statement and Financial Statement Schedules

Report of Independent Auditors .....	F-1
Balance Sheets as of December 31, 2001 and 2000 .....	F-2
Statement of Operations for each of the three years in the period ended December 31, 2001 .....	F-3
Statement of Stockholders' Equity (Deficit) for each of the three years in the period ended December 31, 2001 .....	F-4
Statements of Cash Flows for each of the three years in the period ended December 31, 2001 .....	F-5
Notes to Financial Statements .....	F-6

Financial Statement Schedules

All financial schedules for which provision is made in the applicable accounting regulations of the Securities and Exchange Commission (the "Commission") are not required pursuant to the instructions to Item 8 or are inapplicable and therefore have been omitted.

Reports on Form 8-K

None.

EXHIBIT INDEX

<u>Exhibit Numbers</u>	<u>Description</u>
10.45	Services Integration Agreement dated January 31, 2002 by and between the Company and Hutchison 3G.†
23.1	Consent of Ernst & Young LLP
99.01	Factors Affecting our Business and Future Results

† Portions of this exhibit have been omitted based upon a request for confidential treatment filed with the SEC.

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.

TeleCommunication Systems, Inc.

By: /s/ MAURICE B. TOSÉ  
 Maurice B. Tosé  
 Chief Executive Officer, President and  
 Chairman of the Board

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 and on the dates indicated.

<u>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ MAURICE B. TOSÉ</u> Maurice B. Tosé	Chief Executive Officer, President and Chairman of the Board (Principal Executive Officer)	March 28, 2001
<u>/s/ THOMAS M. BRANDT, JR.</u> Thomas M. Brandt, Jr.	Chief Financial Officer and Senior Vice President (Principal Financial Officer)	March 28, 2001
<u>/s/ CLYDE A. HEINTZELMAN</u> Clyde A. Heintzelman	Director	March 28, 2001
<u>/s/ ANDREW C. BARRETT</u> Andrew C. Barrett	Director	March 28, 2001
<u>/s/ RICHARD A. KOZAK</u> Richard A. Kozak	Director	March 28, 2001
<u>Weldon H. Latham</u>	Director	March 28, 2001
<u>/s/ BYRON F. MARCHANT</u> Byron F. Marchant	Director	March 28, 2001
<u>Daniel K. Tseung</u>	Director	March 28, 2001

## Report of Independent Auditors

The Board of Directors and Stockholders  
TeleCommunication Systems, Inc.

We have audited the accompanying consolidated balance sheets of TeleCommunication Systems, Inc. as of December 31, 2001 and 2000, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2001. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of TeleCommunication Systems, Inc. at December 31, 2001 and 2000, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2001, in conformity with accounting principles generally accepted in the United States.

/s/ Ernst & Young LLP

Baltimore, Maryland  
February 5, 2002

**TeleCommunication Systems, Inc.**  
**Consolidated Balance Sheets**  
(amounts in thousands, except share data)

	December 31,	
	2001	2000
<b>Assets</b>		
Current assets:		
Cash and cash equivalents .....	\$ 42,928	\$ 66,117
Restricted cash .....	—	1,431
Accounts receivable .....	14,924	11,955
Unbilled receivables, less allowance of \$221 in 2001 and \$158 in 2000 .....	4,997	6,431
Current portion of notes receivable from employees .....	3,507	381
Other current assets .....	1,692	1,226
Total current assets .....	68,048	87,541
Notes receivable from employees, less current portion .....	14	1,065
Property and equipment, net of accumulated depreciation and amortization of \$7,761 in 2001 and \$4,396 in 2000 .....	12,428	3,980
Software development costs, net of accumulated amortization of \$9,173 in 2001 and \$5,178 in 2000 .....	6,712	6,657
Intangible assets, net of accumulated amortization of \$479 in 2001 .....	1,083	—
Other assets .....	1,311	1,107
Total assets .....	\$ 89,596	\$100,350
<b>Liabilities and stockholders' equity</b>		
Current liabilities:		
Accounts payable and accrued expenses .....	\$ 12,525	\$ 6,416
Accrued payroll and related liabilities .....	3,460	4,362
Deferred revenue .....	2,282	2,020
Note payable to related party .....	—	1,426
Current portion of note payable .....	100	—
Current portion of capital lease obligations .....	3,543	875
Total current liabilities .....	21,910	15,099
Note payable, less current portion .....	200	—
Capital lease obligations, less current portion .....	4,625	1,102
Commitments and contingent liabilities .....	—	—
Stockholders' equity:		
Class A Common Stock; \$0.01 par value:		
Authorized shares — 225,000,000; issued and outstanding shares of 18,165,431 in 2001 and 13,707,670 in 2000 .....	182	137
Class B Common Stock; \$0.01 par value:		
Authorized shares — 75,000,000; issued and outstanding shares of 10,593,588 in 2001 and 10,787,671 in 2000 .....	106	108
Additional paid-in capital .....	162,570	94,418
Accumulated deficit .....	(99,997)	(10,514)
Total stockholders' equity .....	62,861	84,149
Total liabilities and stockholders' equity .....	\$ 89,596	\$100,350

See accompanying notes.

**TeleCommunication Systems, Inc.**  
**Consolidated Statements of Operations**  
(in thousands, except per share data)

	Year ended December 31,		
	2001	2000	1999
Revenue:			
Network applications:			
Software licenses .....	\$ 9,059	\$ 9,546	\$ 3,975
Services .....	28,199	12,457	7,345
Network applications .....	37,258	22,003	11,320
Network solutions .....	32,294	36,060	34,440
Total revenue .....	69,552	58,063	45,760
Operating costs and expenses:			
Direct cost of network applications .....	15,796	10,061	4,993
Direct cost of network solutions .....	24,280	26,692	26,889
Research and development .....	18,083	5,272	1,098
Sales and marketing .....	13,826	6,930	2,285
General and administrative .....	14,325	11,007	5,329
Non-cash stock compensation expense .....	2,587	1,711	—
Depreciation and amortization of property and equipment .....	4,550	2,388	916
Amortization of software development costs .....	4,946	2,892	1,401
Amortization of goodwill and other intangibles .....	9,226	—	—
Acquired in-process research and development .....	9,700	—	—
Impairment of goodwill and other intangibles .....	43,000	—	—
Total operating costs and expenses .....	160,319	66,953	42,911
Income (loss) from operations .....	(90,767)	(8,890)	2,849
Interest expense and other financing costs .....	(684)	(1,394)	(1,741)
Interest income .....	1,968	1,912	—
Income (loss) before income taxes and extraordinary item .....	(89,483)	(8,372)	1,108
Income tax benefit (expense) .....	—	2,601	(2,408)
Loss before extraordinary item .....	(89,483)	(5,771)	(1,300)
Extraordinary loss on early extinguishment of debt, net of \$133 tax benefit .....	—	(219)	—
Net loss .....	(89,483)	(5,990)	(1,300)
Accretion of Series A Redeemable Convertible Preferred Stock .....	—	(58)	—
Dividends on Series A Redeemable Convertible Preferred Stock .....	—	(482)	—
Net loss attributable to common stockholders .....	\$(89,483)	\$(6,530)	\$(1,300)
Loss before extraordinary item per common share, basic and diluted .....	\$ (3.16)	\$ (0.37)	\$ (0.12)
Loss per common share, basic and diluted .....	\$ (3.16)	\$ (0.39)	\$ (0.12)
Pro forma data (unaudited — Note 12):			
Historical income before income taxes .....			\$ 1,108
Pro forma income tax expense .....			429
Pro forma net income .....			\$ 679
Pro forma earnings per common share:			
Basic .....			\$ 0.06
Diluted .....			\$ 0.04

See accompanying notes.

TeleCommunication Systems, Inc.

Consolidated Statements of Stockholders' Equity  
(amounts in thousands, except share data)

	Class A Common Stock	Class B Common Stock	Additional Paid-in Capital	Accumulated Deficit	Total
Balance at January 1, 1999	\$ 108	\$ —	\$ 922	\$ (2,375)	\$ (1,345)
Repurchase of warrants to purchase 1,292,209 shares of Class A Common Stock	—	—	(922)	(632)	(1,554)
Net loss for 1999	—	—	—	(1,300)	(1,300)
Balance at December 31, 1999	108	—	—	(4,307)	(4,199)
Options exercised for the purchase of 3,251,539 shares of Class B Common Stock	—	32	243	—	275
Dividends on Series A Redeemable Convertible Preferred Stock at \$0.08 per share	—	—	(289)	(193)	(482)
Accretion of Series A Redeemable Convertible Preferred Stock	—	—	(34)	(24)	(58)
Stock compensation expense for issuance of Class A Common Stock options at below fair market value	—	—	1,711	—	1,711
Issuance of 5,405,000 shares of Class A Common Stock upon initial public offering	54	—	85,399	—	85,453
Initial public offering issuance costs	—	—	(2,263)	—	(2,263)
Conversion of Series A Redeemable Convertible Preferred Stock into 3,505,480 shares of Class A Common Stock	35	—	9,543	—	9,578
Warrants exercised for the purchase of 1,377,043 shares of Class A Common Stock	14	—	46	—	60
Conversion of Class B Common Stock into Class A Common Stock — 3,251,539 shares	32	(32)	—	—	—
Conversion of Class A Common Stock into Class B Common Stock — 10,787,671 shares	(108)	108	—	—	—
Options exercised for the purchase of 168,608 shares of Class A Common Stock	2	—	62	—	64
Net loss for 2000	—	—	—	(5,990)	(5,990)
Balance at December 31, 2000	137	108	94,418	(10,514)	84,149
Options exercised for the purchase of 612,894 shares of Class A Common Stock	6	—	661	—	667
Issuance of 3,597,520 shares of Class A Common Stock for the acquisition of Xypoint	36	—	56,625	—	56,661
Issuance of stock options to purchase 656,990 shares of Class A Common Stock for the acquisition of Xypoint	—	—	7,860	—	7,860
Issuance of 53,264 shares of Class A Common Stock for the acquisition of reachNET	1	—	409	—	410
Issuance of stock options to purchase 5,554 shares of Class A Common Stock for the acquisition of reachNET	—	—	10	—	10
Stock compensation expense for issuance of Class A Common Stock options at below fair market value	—	—	2,587	—	2,587
Conversion of Class B Common Stock into Class A Common Stock — 194,083 shares	2	(2)	—	—	—
Net loss for 2001	—	—	—	(89,483)	(89,483)
Balance at December 31, 2001	<u>\$ 182</u>	<u>\$ 106</u>	<u>\$ 162,570</u>	<u>\$ (99,997)</u>	<u>\$ 62,861</u>

See accompanying notes.

TeleCommunication Systems, Inc.  
Consolidated Statements of Cash Flows  
(amounts in thousands)

	For the year ended December 31,		
	2001	2000	1999
<b>Operating activities:</b>			
Net loss	\$(89,483)	\$(5,990)	\$ (1,300)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Acquired in-process research and development	9,700	—	—
Impairment of goodwill and other intangibles	43,000	—	—
Amortization of goodwill and other intangibles	9,226	—	—
Amortization of software development costs	4,946	2,892	1,401
Depreciation and amortization of property and equipment	4,550	2,388	916
Extraordinary item — loss on early extinguishment of debt	—	352	—
Amortization of debt discount	—	204	315
Deferred income taxes	—	(2,734)	2,408
Non-cash stock compensation expense	2,587	1,711	—
Changes in operating assets and liabilities:			
Accounts receivable	(576)	(1,433)	(6,654)
Unbilled receivables	1,434	(5,087)	1,834
Other current assets	41	(620)	(297)
Accounts payable and accrued expenses	3,763	4,179	1,343
Accrued payroll and related liabilities	(1,052)	(216)	808
Deferred revenue	134	1,300	384
Net cash provided by (used in) operating activities	(11,730)	(3,054)	1,158
<b>Investing activities:</b>			
Purchases of property and equipment	(6,082)	(2,079)	(324)
Capitalized software development costs	(3,613)	(2,175)	(4,696)
Change in restricted cash	1,431	14	(71)
Acquisitions, net of cash acquired of \$3,600	(3,029)	—	—
Funding of notes receivable from employees	(3,411)	(1,321)	—
Payments on notes receivable from employees	1,336	—	(125)
Change in other assets	304	(974)	(23)
Net cash used in investing activities	(13,064)	(6,535)	(5,239)
<b>Financing activities:</b>			
Proceeds from initial public offering of stock	—	83,190	—
Proceeds from line of credit	—	1,590	16,322
Payments on line of credit	—	(1,590)	(17,245)
Payments on capital lease obligations	(2,603)	(2,301)	(624)
Proceeds from note payable to related party	—	—	1,426
Payment on note payable to related party	(1,426)	—	(1,985)
Repurchase of detachable stock warrants	—	—	(1,554)
Proceeds from exercise of employee stock options	667	399	—
Issuance of Series A Redeemable Convertible Preferred Stock, net of issuance costs of \$480	—	—	9,520
Proceeds from issuance of long-term debt	300	—	2,460
Payments on long-term debt	—	(8,357)	(1,322)
Payment of debt issue costs	—	—	(100)
Preferred stock dividend	—	(482)	—
Proceeds from sale-leaseback of equipment	4,667	—	—
Net cash provided by financing activities	1,605	72,449	6,898
Net (decrease) increase in cash	(23,189)	62,860	2,817
Cash at the beginning of the year	66,117	3,257	440
Cash at the end of the year	\$ 42,928	\$66,117	\$ 3,257

See accompanying notes.

TeleCommunication Systems, Inc.  
Notes to Financial Statements  
(amounts in thousands, except share data)

**1. Significant Accounting Policies**

**Description of Business**

We develop and license Network Application Software products that enable the delivery of internet content, short messages, location, presence, and privacy information and other enhanced communication services to and from wireless devices, including phones, two-way pagers and personal digital assistants.

We also provide Network Application Services, which includes enhanced wireless E9-1-1, as well as the maintenance of our software and development of custom software applications. We deliver our enhanced E9-1-1 services via our carrier grade network operations centers. E9-1-1 services are provided using our service bureau model that allows customers to acquire use of our software functionality through network connections to and from our facilities and to pay us based on usage volume.

Our Network Solutions segment designs, installs and operates wireless and wireline communication systems, including our Swiftlink™ compact deployable products, and high speed, satellite, and internet protocol solutions for corporate and government customer enterprise networks.

**Use of Estimates.** The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts and related disclosures. Actual results could differ from those estimates.

**Principles of Consolidation.** The accompanying financial statements include the accounts of our wholly owned subsidiary. All intercompany balances and transactions have been eliminated in consolidation.

**Cash and Cash Equivalents.** Cash and cash equivalents include all cash and highly liquid investments with a maturity of three months or less when purchased. Cash equivalents are reported at cost, which approximates fair value.

**Property and Equipment.** Property and equipment is stated at cost less accumulated depreciation. Depreciation is computed using the straight-line method based on the estimated useful lives of equipment, generally five years for furniture and fixtures and three years for computer equipment, software and vehicles. Amortization of leasehold improvements is provided using the straight-line method over the lesser of the useful life of the asset or the remaining term of the lease. Assets held under capital leases are stated at the lesser of the present value of future minimum lease payments or the fair value of the property at the inception of the lease. The assets recorded under capital leases are amortized over the lesser of the lease term or the estimated useful life of the assets in a manner consistent with our depreciation policy for owned assets.

**Software Development Costs.** Costs of developing software products incurred prior to completion of the working model confirming technological feasibility are accounted for as research and development expense. These costs are incurred to enhance existing packaged software products as well as to create new software products, and primarily include personnel costs and costs associated with using third party laboratory and testing resources. Research and development costs are expensed as incurred.

Costs incurred for the development of computer software that will be sold, leased or otherwise marketed are capitalized when technological feasibility has been established. Technological feasibility is established when all planning, designing, coding, and testing activities that are necessary to establish that the product can be produced to meet its design specifications including functions, features, and technical performance requirements have been completed. Costs that are capitalized include direct labor, related overhead and other direct costs. These capitalized costs are subject to an ongoing assessment of recoverability based upon anticipated future revenue and changes in hardware and software technologies.

TeleCommunication Systems, Inc.

Notes to Financial Statements — (Continued)  
(amounts in thousands, except share data)

Unamortized capitalized software development costs determined to be in excess of net realizable value of the product are expensed immediately.

Amortization of capitalized software development costs begins when the product is available for general release. Amortization is computed on a product-by-product basis using the straight-line method over the product's estimated useful life, which is not to exceed four years. Amortization is also computed using the ratio that current revenue for the product bears to the total of current and anticipated future revenue for that product. If this revenue curve method results in amortization greater than the amount computed using the straight-line method, amortization is recorded at that greater amount.

**Revenue Recognition.** Revenue is generated from three sources, the licensing of software products and performance of related services, service bureau offerings and from the design, development and deployment of information processing and communication systems. The accompanying statements of operations report revenue on an operating segment basis, as discussed more fully in Note 21.

*Network Applications Revenue.* We license packaged network application software principally for use in the wireless telecommunications industry. These licenses typically contain two elements, the product license and maintenance. The total arrangement fee is allocated among each element based on vendor-specific objective evidence of the relative fair value of each of the elements. The software licenses are generally perpetual licenses for a specified number of users that allow for the purchase of annual maintenance at a specified rate. The fair value of the maintenance element is based on separate sales of that element (the renewal rate). The fair value of the software is then determined by using the residual method. Under the residual method, the fair value of the maintenance element is deducted from the value of the total arrangement to determine an implied fair value of the software. After the software license fee is determined using the residual method, these license fees are recognized as revenue when four criteria are met. These four criteria are (i) evidence of an arrangement (ii) delivery of the software has occurred, (iii) the fee is fixed or determinable and (iv) the fee is probable of collection. Software license fees billed and not recognized as revenue are included in deferred revenue.

Software licenses include a 90-day warranty for defects. We have not incurred significant warranty costs on any software product to date, and no costs are currently accrued upon recording the related revenue.

Our network application services revenue is derived from our service bureau offerings, primarily enhanced E9-1-1, maintenance fees for packaged software products, and fees from development, implementation and maintenance of custom applications.

Service bureau revenue consists primarily of recurring monthly service fees. Revenues are recognized in the month earned. Monthly service fees billed and not recognized as revenue are included in deferred revenue.

Software maintenance fees include telephone support, bug fixes, and rights to software upgrades on a when-and-if-available basis. These fees are collected in advance and recognized ratably over the annual maintenance period. Unrecognized maintenance fees are included in deferred revenue.

Fees from the development and implementation of custom applications are generally performed under time and materials and fixed fee contracts. Professional services that are provided under long-term fixed fee contracts to develop and implement customized applications are recognized using the percentage-of-completion method. These contracts generally allow for monthly billing or billing upon achieving certain specified milestones. Progress to completion is generally measured using costs incurred compared to estimated total costs. Any estimated losses under long-term contracts are recognized in their entirety at the date that they become evident.

TeleCommunication Systems, Inc.

Notes to Financial Statements — (Continued)  
(amounts in thousands, except share data)

Direct cost of network applications consists of compensation, benefits and travel expenses incurred while providing these services.

*Network Solutions Revenue.* Network solutions revenue is generated from the design, installation and operation of wireless and wireline communication systems, including our compact deployable products, and high speed, satellite, and internet protocol solutions for corporate and government customer enterprise networks. These services are provided under time and materials contracts, cost plus fee contracts, or fixed price contracts. Revenue is recognized under time and materials contracts and cost plus fee contracts as billable costs are incurred. Fixed price contracts are accounted for using the percentage-of-completion method, measured by total costs incurred as a percentage of total estimated costs at the completion of the contract. These contracts generally allow for monthly billing or billing upon achieving certain specified milestones. Any estimated losses on contracts are recognized in their entirety at the date that they become evident. Direct cost of network solutions consists of compensation, benefits, travel and the costs of third party consultants. Federal government contract costs, including allocated indirect expenses, are subject to audit and adjustment by the Defense Contract Audit Agency. Contract revenue under these contracts are recorded at estimated net realizable amounts.

*Advertising Costs.* Advertising is expensed as incurred. Advertising expense totaled \$379 for the year ended December 31, 2001 and less than \$15 in each of the years ended December 31, 2000 and 1999.

*Intangible Assets.* Intangible assets consist principally of a tradename. These intangible assets are being amortized over three years using the straight-line method.

*Impairment of Long-Lived Assets.* Long-lived assets, including intangible assets, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset or group of assets may not be fully recoverable. If an impairment indicator is present, we evaluate recoverability by a comparison of the carrying amount of the assets to future undiscounted net cash flows that we expect to generate from these assets. If the assets are impaired, we recognize an impairment charge equal to the amount by which the carrying amount exceeds the fair value of the assets. Assets to be disposed of are reported at the lower of carrying values or fair values, less estimated costs of disposal.

*Stock Based Compensation.* We record compensation expense for all stock-based compensation plans using the intrinsic value method prescribed by Accounting Principles Board Opinion No. 25, *Accounting for Stock Issued to Employees* ("APB No. 25"). Under APB No. 25, if the exercise price of the company's employee stock options equals or exceeds the estimated fair value of the underlying stock on the date of grant, no compensation expense is generally recognized.

Financial Accounting Standards Board Statement No. 123, *Accounting for Stock-Based Compensation* ("Statement No. 123") encourages companies to recognize expense for stock-based awards based on their estimated fair value on the date of grant. Statement No. 123 requires the disclosure of pro forma net income in the notes to the financial statements if the fair value method is not elected. We determined that had we used the minimum value method to record compensation expense in 1999 at fair value the result would have been immaterial to net income (loss) and earnings (loss) per share. We supplementally disclose in Note 17 to these financial statements the pro forma information as if the fair value method was used to account for 2001 and 2000 stock option grants.

*Income Taxes.* From January 1, 1993 through December 14, 1999, our stockholder elected under Subchapter S of the Internal Revenue Code to include our income in his personal income tax return for federal and state income tax purposes. Accordingly, we were not subject to federal and state income taxes during that period. We terminated this election on December 14, 1999, and upon termination determined the differences between the financial reporting and income tax bases of our assets and liabilities. The tax

TeleCommunication Systems, Inc.

Notes to Financial Statements — (Continued)  
(amounts in thousands, except share data)

effects of these differences were recorded as deferred tax assets or liabilities, and the net difference as income tax expense.

Income tax amounts and balances are accounted for using the liability method of accounting for income taxes and deferred income tax assets and liabilities are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse.

**Recent Accounting Pronouncements.** In June 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 142, *Goodwill and Other Intangible Assets*, effective for fiscal years beginning after December 15, 2001. Under the new rules, goodwill will no longer be amortized but will be subject to annual impairment tests in accordance with the Statement. Other intangible assets will continue to be amortized over their useful lives.

We will apply the new rules of accounting for goodwill and other intangible assets beginning in the first quarter of 2002. Application of the non-amortization provisions of the Statement will not have an effect on our operating results since we currently have no goodwill.

In August 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*. Statement No. 144 supercedes Statement No. 121, *Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of*, and provides a single accounting model for long-lived assets to be disposed of. Statement No. 144 retains the requirements of Statement No. 121 to recognize an impairment loss only if the carrying amount of a long-lived asset is not recoverable from its undiscounted future cash flows and to measure the impairment loss as the difference between the carrying amount and the fair value of the asset. We will adopt the new rules on accounting for the impairment or disposal of long-lived assets beginning in the first quarter of 2002. We believe that the adoption of the new standard will not materially affect our consolidated financial position or operating results.

2. Loss Per Common Share

	Year ended December 31,		
	2001	2000	1999
Numerator:			
Loss before extraordinary item	\$ (89,483)	\$ (5,771)	\$ (1,300)
Extraordinary item, net of taxes	—	(219)	—
Net loss	(89,483)	(5,990)	(1,300)
Dividends on Series A Redeemable Convertible Preferred Stock	—	(482)	—
Accretion of Series A Redeemable Convertible Preferred Stock	—	(58)	—
Net loss attributable to common stockholders	<u>\$ (89,483)</u>	<u>\$ (6,530)</u>	<u>\$ (1,300)</u>
Loss attributable to common stockholders before extraordinary item	<u>\$ (89,483)</u>	<u>\$ (6,311)</u>	<u>\$ (1,300)</u>
Denominator:			
Denominator for basic and diluted loss per common Share— weighted-average shares	28,296,869	16,948,140	10,787,671
Loss per common share before extraordinary item — basic and diluted	<u>\$ (3.16)</u>	<u>\$ (0.37)</u>	<u>\$ (0.12)</u>
Loss per common share — basic and diluted	<u>\$ (3.16)</u>	<u>\$ (0.39)</u>	<u>\$ (0.12)</u>

**TeleCommunication Systems, Inc.**

**Notes to Financial Statements — (Continued)**  
 (amounts in thousands, except share data)

Basic loss per common share is based upon the average number of shares of common stock outstanding during the period. Because we incurred a net loss in 2001, 2000 and 1999, potentially dilutive securities were excluded from the computation because the result would be anti-dilutive. These potentially dilutive securities consist of stock options, warrants and convertible preferred stock.

**3. Supplemental Disclosure of Cash Flow Information**

Property and equipment acquired under capital leases totaled \$7,593, \$1,620, and \$1,943 during the years ended December 31, 2001, 2000, and 1999, respectively.

Interest paid totaled \$767, \$1,548, and \$1,447 during the years ended December 31, 2001, 2000, and 1999, respectively.

**4. Restricted Cash**

Restricted cash consisted of the following as of December 31, 2000:

Amounts invested in certificates of deposit which were pledged as collateral for a promissory note issued to our principal stockholder (see Note 9) . . . . .	\$1,426
Amounts on deposit with a surety insurance company which were pledged as collateral under bonding requirements contained in certain performance contracts . . . . .	<u>5</u>
	<u>\$1,431</u>

In January 2001, \$1,426 of restricted cash was used to repay the promissory note in full. As of December 31, 2001, we did not have any restricted cash.

**5. Unbilled Receivables**

Unbilled receivables consisted of the following at December 31:

	<u>2001</u>	<u>2000</u>
Amounts billable at specified milestones . . . . .	\$4,650	\$6,143
Contract retentions . . . . .	129	46
Rate variances and costs and estimated earnings in advance of billings . . . . .	<u>218</u>	<u>242</u>
	<u>\$4,997</u>	<u>\$6,431</u>

Substantially all unbilled receivables are expected to be collected within twelve months.

**6. Notes Receivable from Employees**

During 2001 and 2000, we made loans to our employees. As of December 31, 2001 and 2000, loans due from our employees totaled \$3,521 and \$1,446, respectively. These loans bear interest at rates ranging from 6.50% to 7.50% and are due in various installments over 12 to 60 months. During the third quarter of 2001, \$2,500 was loaned to our President and Chief Executive Officer. The loans are collateralized by our common stock owned by the employees and vested stock options granted to the employees.

The fair value of our notes receivable from employees at December 31, 2001 approximates its carrying value based on an assessment of the terms of similar instruments.

TeleCommunication Systems, Inc.

Notes to Financial Statements — (Continued)  
(amounts in thousands, except share data)

7. Property and Equipment

Property and equipment consisted of the following at December 31:

	<u>2001</u>	<u>2000</u>
Furniture and fixtures .....	\$ 2,391	\$ 675
Computer equipment .....	13,603	6,444
Computer software .....	2,634	720
Leasehold improvements .....	1,490	466
Vehicles .....	<u>71</u>	<u>71</u>
	20,189	8,376
Less: accumulated depreciation and amortization .....	<u>(7,761)</u>	<u>(4,396)</u>
	<u>\$12,428</u>	<u>\$ 3,980</u>

8. Line of Credit

We have a revolving line of credit agreement with a lender which allows for aggregate borrowings of up to \$8,000. The revolving line of credit agreement is cancelable upon 60 days' written notice.

The line of credit allows us to borrow 92% of assigned accounts receivable balances less than 90 days old. For any assigned accounts receivable balances that become greater than 90 days old, we must either replace the collateral with an eligible receivable balance or repay the related portion of the borrowings. Borrowings under the line, which are secured by the assigned accounts receivable, bear interest at the prime rate plus 1.5% (6.25% at December 31, 2001), payable monthly. In addition, we are charged fees for uncollected assigned accounts receivable balances more than 44 days outstanding.

As of December 31, 2001 and 2000, there were no borrowings outstanding under our line of credit.

9. Note Payable to Related Party

Note payable to related party consisted of an unsecured note to our President and Chief Executive Officer bearing interest at the rate of 7.32%. This note was paid in full on January 31, 2001.

Interest expense on note payable to related party totaled approximately \$9, \$111 and \$152 for the years ended December 31, 2001, 2000 and 1999, respectively.

10. Long-Term Debt

During 1998, the State of Maryland approved a \$400 loan-to-grant arrangement with us pursuant to Maryland's Sunny Day economic development program. In May 2001, \$400 was advanced to us pursuant to this arrangement. The loan accrues interest at 5% per annum and is secured by a letter of credit in favor of the State of Maryland. The loan becomes a grant in \$100 increments plus a pro rata share of the accrued interest, based on employment levels at annual milestones. At the time of the loan, \$100 was immediately converted to a grant. As of December 31, 2001, the remaining \$300 of the loan is outstanding.

In February 2002, \$100 of principal and the pro rata share of accrued interest was forgiven.

**TeleCommunication Systems, Inc.**  
**Notes to Financial Statements — (Continued)**  
(amounts in thousands, except share data)

**11. Capital Leases**

We lease certain furniture and equipment under capital leases. Property and equipment included the following amounts for capital leases at December 31:

	<u>2001</u>	<u>2000</u>
Furniture and fixtures .....	\$ 1,064	\$ 355
Computer equipment .....	9,761	4,311
Computer software .....	1,149	199
Leasehold improvements .....	209	—
Vehicles .....	<u>71</u>	<u>71</u>
	12,254	4,936
Less: accumulated amortization .....	<u>(4,902)</u>	<u>(2,839)</u>
	<u>\$ 7,352</u>	<u>\$ 2,097</u>

Amortization of leased assets is included in depreciation and amortization expense.

Future minimum payments under capital lease obligations consisted of the following at December 31, 2001:

2002 .....	\$ 4,195	
2003 .....	3,305	
2004 .....	<u>2,067</u>	
Total minimum lease payments .....	<u>9,567</u>	
Less: amounts representing interest .....	<u>(1,399)</u>	
Present value of net minimum lease payments (including current portion of \$3,543) .....	<u>\$ 8,168</u>	

Capital lease obligations of \$2,514 are secured by a pledge of revenues on two long-term contracts.

**12. Income Taxes**

Significant components of the provision (benefit) for income taxes attributable to income (loss) before income taxes and extraordinary item for the year ended December 31 are as follows:

	<u>2001</u>	<u>2000</u>	<u>1999</u>
Current:			
State and local .....	\$ —	\$ —	\$ —
Federal .....	<u>—</u>	<u>—</u>	<u>—</u>
	—	—	—
Deferred:			
State and local .....	—	(419)	385
Federal .....	<u>—</u>	<u>(2,182)</u>	<u>2,023</u>
	<u>—</u>	<u>(2,601)</u>	<u>2,408</u>
Total .....	<u>\$ —</u>	<u>\$ (2,601)</u>	<u>\$ 2,408</u>

TeleCommunication Systems, Inc.

Notes to Financial Statements — (Continued)  
(amounts in thousands, except share data)

Significant components of our deferred tax assets and liabilities at December 31 consisted of:

	<u>2001</u>	<u>2000</u>
Deferred tax assets:		
Reserves and accrued expenses .....	\$ 545	\$ 309
Non-cash stock compensation expense .....	—	650
Depreciation .....	314	372
Charitable contributions .....	47	
Net operating loss carryforward .....	<u>23,851</u>	<u>1,818</u>
Total deferred tax assets .....	<u>24,757</u>	<u>3,149</u>
Deferred tax liabilities:		
Capitalized software development costs .....	<u>(2,424)</u>	<u>(2,530)</u>
Total deferred tax liabilities .....	<u>(2,424)</u>	<u>(2,530)</u>
Net deferred tax asset (liability) .....	22,333	619
Valuation allowance for net deferred tax asset .....	<u>(22,333)</u>	<u>(378)</u>
Net deferred tax asset or (liability) .....	<u>\$ —</u>	<u>\$ 241</u>

At December 31, 2001, we had a U.S. federal net operating loss carryforward for income tax purposes of approximately \$62,800, which includes \$34,600 in Xypoint net operating loss carryforwards. The net operating loss carryforwards from Xypoint will begin to expire in 2016. The remaining net operating loss carryforwards will begin to expire in 2019. The amount available to be used in any given year may be limited by operation of certain provisions of the Internal Revenue Code. We have state net operating loss carryforwards available, the utilization of which may be similarly limited.

The reconciliation of the reported income tax expense (benefit) to the amount that would result by applying the U.S. federal statutory rate of 34% to income (loss) before extraordinary item for the year ended December 31 is as follows:

	<u>2001</u>	<u>2000</u>	<u>1999</u>
Income tax (benefit) at statutory rate .....	\$(30,424)	\$(2,846)	\$ 377
State tax benefit .....	(956)	(320)	—
Effect of income taxed at shareholder level during 1999 .....			(459)
Tax expense recorded upon termination of S Corporation Status .....			2,490
Non-deductible items .....	22,316	127	—
Other .....	246	60	—
Change in valuation allowance .....	<u>8,818</u>	<u>378</u>	—
Total .....	<u>\$ —</u>	<u>\$(2,601)</u>	<u>\$2,408</u>

*Pro Forma Income Taxes (unaudited)*

In December 1999, our status as an S Corporation was terminated and we have been subject to federal and state income taxes thereafter. Accordingly, for informational purposes, the accompanying statement of operations for the year ended December 31, 1999 includes unaudited pro forma data presenting what income taxes would have been had we been a C Corporation all of 1999.

TeleCommunication Systems, Inc.

Notes to Financial Statements — (Continued)  
(amounts in thousands, except share data)

Pro forma income tax expense (benefit) consists of the following for the year ended December 31, 1999:

Current:		
Federal .....		\$(575)
State .....		<u>(78)</u>
		(653)
Deferred:		
Federal .....		954
State .....		<u>128</u>
		1,082
Pro forma income tax expense .....		<u>\$ 429</u>

Our pro forma income tax expense for the year ended December 31, 1999 would result in an effective tax rate that varies from the statutory federal income tax rate, as follows:

Federal income taxes at the statutory rate .....	\$377
State income taxes, net of federal benefit .....	<u>52</u>
	<u>\$429</u>

13. Xypoint Acquisition

We completed the purchase of Xypoint Corporation ("Xypoint") for aggregate consideration of \$69,005 on January 19, 2001. Xypoint is a leading provider of enhanced E9-1-1 services to wireless carriers and focuses its business on wireless technology that identifies and makes use of information as to a wireless user's location. The acquisition has been accounted for under the purchase method of accounting and includes a \$9,700 charge for in-process research and development.

Acquisition consideration:	
Cash .....	\$ 734
Common stock .....	56,661
Stock options and warrants .....	7,860
Acquisition costs .....	<u>3,750</u>
Total consideration .....	<u>\$69,005</u>
Purchase price allocation:	
Tangible net assets acquired .....	\$ 7,249
Intangible assets acquired:	
In-process research and development .....	9,700
Developed technology .....	4,100
Workforce-in-place .....	1,500
Trade name .....	1,600
Goodwill .....	<u>44,856</u>
Total .....	<u>\$69,005</u>

We issued 3,597,520 shares of Class A Common Stock, valued at \$15.75 per share, the average market price per share of our Class A Common Stock in a range of two trading days before and after

TeleCommunication Systems, Inc.

Notes to Financial Statements — (Continued)

(amounts in thousands, except share data)

November 15, 2000, the announcement date of the acquisition. In addition, we issued 656,990 options and warrants to purchase shares of Class A Common Stock in exchange for all options and warrants to purchase shares of Xypoint common stock or convertible preferred stock. The value of the options and warrants was determined by estimating their fair value as of November 15, 2000 using the Black-Scholes option-pricing model with the following weighted-average assumptions:

- risk free interest rate of 5.80%;
- dividend yield of 0%;
- expected life of 1-2 years for vested options and warrants; and
- volatility factor for the expected market price of our common stock of 60%.

Tangible assets of Xypoint include cash and cash equivalents, accounts receivable, fixed assets and other assets. We assumed \$3,740 of liabilities primarily consisting of accounts payable, accrued liabilities, and capital lease obligations.

The value allocated to projects identified as in-process research and development of Xypoint's product suite was charged to expense immediately following completion of the acquisition. This write-off was necessary because the acquired in-process research and development had not yet reached technological feasibility and has no future alternative uses, and the related products under development may not achieve commercial viability. The nature of the efforts required to develop the purchased in-process research and development into commercially viable products principally relate to the completion of all planning, designing, prototyping, verification and testing activities that are necessary to establish that the product can be produced to meet its design specifications, including functions, features and technical performance requirements.

The value of developed technology was determined by taking into account risks related to the characteristics and applications of the developed technology, existing and future markets, and assessments of the stage of the developed technology's life cycle. The analysis resulted in a valuation for developed technology that had reached technological feasibility and therefore was capitalizable. The developed technology is being amortized on a straight-line basis over three years.

Goodwill was determined based on the residual difference between the amount of consideration paid and the values assigned to identifiable tangible and intangible net assets. See also Note 14 for a discussion of the third quarter 2001 impairment charge for acquired intangible assets.

*Unaudited Pro Forma Results of Operations.* The following summarizes unaudited pro forma statement of operations information for the year ended December 31, 2000 assuming the acquisition of Xypoint was completed on January 1, 2000. The in-process research and development charge is excluded from the pro forma statement of operations information because the charge is non-recurring. The results are not necessarily indicative of what would have occurred had this transaction been consummated as of the beginning of the period nor of our future operations:

Revenue .....	\$ 66,880
Loss before extraordinary item .....	\$(29,979)
Loss before extraordinary item attributable to common stockholders — basic and diluted .....	\$ (1.49)

#### 14. Impairment of Goodwill and Other Intangibles

During the quarter ended September 30, 2001, we performed an impairment assessment of the identifiable intangibles and goodwill principally recorded upon the acquisition of Xypoint. The assessment

TeleCommunication Systems, Inc.

Notes to Financial Statements — (Continued)  
(amounts in thousands, except share data)

was performed as a result of the decision by management to discontinue the further development of certain products and current competitive influences. Based on these factors, it was determined that our goodwill and other intangible assets may have become impaired by September 30, 2001. Accordingly, we performed an undiscounted cash flow analysis to determine whether an impairment existed. Because the estimated undiscounted cash flows for these segments was less than the carrying value of the net assets, we determined the fair value of the remaining net assets using a discounted cash flow analysis.

As a result of the review, we determined that the carrying value of our goodwill and certain other intangible assets were not likely to be fully recoverable. Accordingly, at September 30, 2001, an impairment charge of \$43,000 was recorded, which represents the difference between the carrying value and our estimate of the fair value of goodwill and other intangible assets. Approximately \$39,139 of the impairment related to goodwill and the remaining \$3,861 was for acquired technology.

**15. Extraordinary Loss**

We repaid \$9,300 of our long-term debt in 2000 prior to its maturity and incurred a loss of \$352 when we wrote off the remaining unamortized debt discount and deferred financing costs related to that debt. We classified that loss as an extraordinary loss, which, net of the related tax benefit of \$133, was \$219.

**16. Common Stock**

Our Class A common stockholders are entitled to one vote for each share of stock held for all matters submitted to a vote of stockholders. Our Class B stockholder is entitled to three votes for each share owned.

**17. Stock Compensation Plan**

*Stock Options.* We maintain a stock option plan that is administered by our Compensation Committee of our Board of Directors. The plan was amended in April 2000 to increase the number of shares reserved for issuance from 6,466,803 to 8,904,110. In June 2001, our shareholders approved a second amendment to increase the number of shares to 11,904,110. Options granted under the plan vest over periods ranging from one to five years and expire 10 years from the date of grant.

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Notes to Financial Statements — (Continued)  
(amounts in thousands, except share data)

A summary of our stock option activity, and related information consists of the following at December 31 (all share amounts in thousands):

	2001		2000		1999	
	Number of Options	Weighted Average Exercise Price	Number of Options	Weighted Average Exercise Price	Number of Options	Weighted Average Exercise Price
Outstanding, beginning of year	3,233	\$3.90	5,612	\$0.32	4,846	\$0.09
Granted	4,807	3.86	1,318	8.91	1,201	1.26
Exercised	(510)	0.77	(3,419)	0.10	—	—
Forfeited	(985)	8.54	(278)	2.04	(435)	0.44
Outstanding, end of year	<u>6,545</u>	<u>\$3.36</u>	<u>3,233</u>	<u>\$3.90</u>	<u>5,612</u>	<u>\$0.32</u>
Exercisable, at end of year	<u>1,554</u>	<u>\$2.39</u>	<u>680</u>	<u>\$0.70</u>	<u>3,355</u>	<u>\$0.09</u>
Estimated weighted-average grant-date fair value of options granted during the year	<u>\$ 3.61</u>		<u>\$ 12.38</u>		<u>\$ 0.29</u>	
Weighted-average remaining contractual life of options outstanding at end of year	<u>7.7 years</u>		<u>8.2 years</u>		<u>8.2 years</u>	

Exercise prices for options outstanding at December 31, 2001 ranged from \$0.01 to \$26.05 as follows (all share amounts in thousands):

Exercise Prices	Options Outstanding	Weighted Average Exercise Prices of Options Outstanding	Weighted Average Remaining Contractual Life of Options Outstanding (years)	Options Exercisable	Weighted Average Exercise Prices of Options Exercisable
\$ 0.01 - \$2.61	1,892	\$ 0.78	6.7	947	\$ 0.67
\$ 2.61 - \$5.21	3,510	\$ 3.14	8.2	414	\$ 2.82
\$ 5.21 - \$7.82	961	\$ 6.55	7.5	122	\$ 6.17
\$ 7.82 - \$10.42	12	\$ 9.60	8.5	12	\$ 9.60
\$10.42 - \$13.03	25	\$12.00	8.6	12	\$12.00
\$15.63 - \$18.24	2	\$17.37	8.4	2	\$17.37
\$18.24 - \$20.84	139	\$18.75	8.4	41	\$18.80
\$23.45 - \$26.05	4	\$26.05	8.4	4	\$26.05

Prior to our initial public offering in 2000, we granted incentive stock options to employees and directors to purchase 885,983 shares of Class A Common Stock. The options were granted at an exercise price less than the estimated market value of Class A Common Stock at the date of grant. For the year ended December 31, 2001 and 2000, we recorded \$2,587 and \$1,711 of non-cash stock compensation expense related to these grants. We expect to record future stock compensation expense of approximately \$4,858 as a result of option grants that will be recognized over the vesting period of five years.

*Pro Forma Information.* Because we use the intrinsic value method to record stock compensation expense, we are required to disclose pro forma operating data assuming that we used the fair value method.

TeleCommunication Systems, Inc.

Notes to Financial Statements — (Continued)  
(amounts in thousands, except share data)

In 1999, because we were not a public company, we used the minimum value method to estimate the fair value of our stock option grants. The resulting pro forma stock compensation expense did not materially change our reported net loss in 1999.

We estimate that our net loss in 2001 and 2000 would have been \$3,471 and \$2,058 higher, respectively, had we used the fair value method to record our stock compensation expense. Our loss per share would have been \$3.28 per share in 2001 and \$0.51 in 2000. In making the 2001 and 2000 pro forma estimates of stock compensation expense, we were required by generally accepted accounting principles to use the Black-Scholes option-pricing model. The Black-Scholes option-pricing model was developed for use in estimating the fair value of traded options that have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions including our expected stock price volatility. Because our stock-based awards have characteristics significantly different from those of traded options and because changes in the subjective input assumptions can materially affect our fair value estimate, in our opinion, this model does not provide a reliable single measure of the fair value of our stock-based awards. In calculating the fair value of our stock options using Black-Scholes, we assumed that the expected life was 5 years, that the risk free interest rate was 5.5% and that there was no dividend yield. We also assumed that the expected volatility of our stock was 60% for options granted in 2000 and 164% for options granted in 2001.

**18. Operating Leases**

We lease certain office space and equipment under noncancellable operating leases that expire on various dates through 2006. Future minimum payments under noncancellable operating leases with initial terms of one year or more consisted of the following at December 31, 2001:

2002 .....	\$2,881
2003 .....	2,213
2004 .....	1,296
2005 .....	462
2006 .....	<u>2</u>
	<u>\$6,854</u>

Rent expense aggregated \$2,607, \$1,475, and \$935 for the years ended December 31, 2001, 2000, and 1999, respectively.

**19. Retirement Plans**

We maintain a defined contribution benefit plan that covers substantially all employees who have attained age twenty-one. Participants may contribute from 1% to 15% of their annual compensation to the plan. On a discretionary basis, we may match contributions made by participants. All employer contributions vest over a six-year period. During 2001, 2000 and 1999, we made contributions of \$978, \$705 and \$446, respectively.

**20. Concentrations of Credit Risk and Major Customers**

Financial instruments that potentially subject us to significant concentrations of credit risk consist primarily of accounts receivable, unbilled receivables and notes receivable from employees. Accounts receivable are generally due within thirty days and no collateral is required. Our notes receivable from employees are discussed further in Note 6. We maintain reserves for potential credit losses and historically such losses have been insignificant and within our expectations.

**TeleCommunication Systems, Inc.**

**Notes to Financial Statements — (Continued)**  
(amounts in thousands, except share data)

At December 31, 2001, 2000 and 1999, accounts receivable from agencies of the federal government represented 48%, 33% and 46% of accounts receivable, respectively, and represented substantially all of the unbilled receivables. Revenue earned in 2001, 2000 and 1999 from federal agencies represented 30%, 43% and 64% of total revenue, respectively. One network applications customer contributed approximately 12%, 25% and 11% of total revenue for the years ended December 31, 2001, 2000 and 1999, respectively. Another network applications customer contributed approximately 14% of total revenue for the year ended December 31, 2001.

**21. Business and Geographic Segment Information**

We manage our business through two operating segments:

**Network Applications** — We develop packaged and custom network application software including intelligent network products (Wireless Internet Gateway, Short Message Service Center and Prepaid Wireless) that enable the delivery of Internet content, short messages, and enhanced communication services to a wide variety of wireless devices, including phones, two-way pagers and personal digital assistants. We also provide network application services which include our enhanced E9-1-1 offering.

**Network Solutions** — We provide network solutions services, which include the design, installation and operation of wireless and wireline communication systems, including our compact deployable products, and high speed, satellite, and internet protocol solutions. Customers include commercial telecommunications carriers, other commercial customers, and federal, state and local government agencies.

During the fourth quarter of 2001, management began evaluating our performance based on operating income (loss) before interest expense and other financing costs, income taxes and non-cash expenses. We have restated prior period information for comparative purposes. Substantially all revenue is generated from external customers within the United States.

We do not maintain information regarding segment assets. Accordingly, asset information by reportable segment is not presented. The accounting policies used by our reportable segments are the same as those described in Note 1.

The following table sets forth information on reportable segments:

	<u>Year ended December 31,</u>		
	<u>2001</u>	<u>2000</u>	<u>1999</u>
Revenue:			
Software licenses .....	\$ 9,059	\$ 9,546	\$ 3,975
Services .....	28,199	12,457	7,345
Network applications .....	37,258	22,003	11,320
Network solutions .....	32,294	36,060	34,440
Total revenue .....	<u>\$ 69,552</u>	<u>\$58,063</u>	<u>\$45,760</u>
Earnings (loss) before interest, taxes and non-cash charges:			
Network applications .....	\$(17,789)	\$(3,889)	\$ 2,852
Network solutions .....	1,031	1,990	2,314
Total segment (loss) earnings before interest, taxes and non-cash charges .....	<u>\$(16,758)</u>	<u>\$(1,899)</u>	<u>\$ 5,166</u>

TeleCommunication Systems, Inc.

Notes to Financial Statements — (Continued)  
(amounts in thousands, except share data)

A reconciliation of segment (loss) earnings before interest, taxes and non-cash charges for both segments to loss from operations is as follows:

	Year ended December 31,		
	2001	2000	1999
Total segment (loss) earnings before interest, taxes and non-cash charges	\$(16,758)	\$(1,899)	\$ 5,166
Non cash stock compensation expense	(2,587)	(1,711)	—
Depreciation and amortization of property and equipment	(4,550)	(2,388)	(916)
Amortization of software development costs	(4,946)	(2,892)	(1,401)
Amortization of goodwill and other intangibles	(9,226)	—	—
Acquired in-process research and development	(9,700)	—	—
Impairment of goodwill and other intangibles	(43,000)	—	—
Income (loss) from operations	<u>\$(90,767)</u>	<u>\$(8,890)</u>	<u>\$ 2,849</u>

22. Quarterly Financial Information (unaudited)

The following is a summary of the quarterly results of operations for the years ended December 31, 2001 and 2000. The quarterly information has not been audited, but in our opinion, includes all adjustments necessary for a fair presentation.

	2001			
	Three months ended			
	March 31	June 30	September 30	December 31
Revenue	\$ 17,137	\$ 16,268	\$ 18,059	\$18,088
Net loss	\$(17,996)	\$(10,721)	\$(53,845)	\$(6,921)
Net loss attributable to common stockholders	\$(17,996)	\$(10,721)	\$(53,845)	\$(6,921)
Loss per common share — basic and diluted	\$ (0.66)	\$ (0.38)	\$ (1.88)	\$ (0.24)
	2000			
	Three months ended			
	March 31	June 30	September 30	December 31
Revenue	\$ 12,059	\$ 12,504	\$ 16,412	\$17,088
Loss before extraordinary item	\$ (608)	\$ (698)	\$ (2,011)	\$(2,454)
Net loss	\$ (608)	\$ (698)	\$ (2,230)	\$(2,454)
Net loss attributable to common stockholders	\$ (832)	\$ (922)	\$ (2,323)	\$(2,454)
Loss per common share — basic and diluted:				
Loss before extraordinary item	\$ (0.08)	\$ (0.07)	\$ (0.11)	\$ (0.10)
Net loss	\$ (0.08)	\$ (0.07)	\$ (0.12)	\$ (0.10)

The sum of the quarterly earnings per share amounts may not equal the total for the year due to the effects of rounding and changes in outstanding shares within each quarter.

23. Commitments and Contingencies

In November 2001, a shareholder class action lawsuit was filed against us, certain of our current officers and a director, and several investment banks that were the underwriters of our initial public offering (the "Underwriters"): *Highstein v. Telecommunication Systems, Inc., et al.*, United States District Court for the Southern District of New York, Civil Action No. 01-CV-9500. The plaintiffs seek an unspecified amount of damages. The lawsuit purports to be a class action suit filed on behalf of purchasers

**TeleCommunication Systems, Inc.**

**Notes to Financial Statements — (Continued)**  
**(amounts in thousands, except share data)**

of our common stock during the period August 8, 2000 through December 6, 2000. The plaintiffs allege that the Underwriters agreed to allocate common stock offered for sale in our public offering to certain purchasers in exchange for excessive and undisclosed commissions and agreements by those purchasers to make additional purchases of common stock in the aftermarket at pre-determined prices. We intend to vigorously defend the lawsuit. We believe that more than 180 other companies have been named in nearly identical lawsuits that have been filed by some of the same law firms that represent the plaintiffs in the lawsuit against us.

Although we cannot currently predict the ultimate outcome of this matter, we do not expect the resolution will have a material effect on our consolidated results of operations, financial position or cash flows.

## CORPORATE INFORMATION

### BOARD OF DIRECTORS

**Maurice B. Tosé**

Chairman of the Board,  
President and Chief Executive Officer  
TeleCommunication Systems, Inc.  
Annapolis, MD

**Andrew C. Barrett**

Managing Director, The Barrett Group, Inc.  
Arlington, VA

**Clyde A. Heintzelman**

Chairman, Optelecom, Inc.  
Gaithersburg, MD

**Richard A. Kozak**

Chairman and CEO, 1eEurope Ltd.  
Annapolis, MD and London, England

**Weldon H. Latham**

Senior Partner, Holland & Knight LLP  
Washington, DC

**Byron F. Marchant**

Executive Vice President,  
General Counsel and  
Chief Administrative Officer  
Black Entertainment Television, Inc.  
Washington, DC

**Daniel K. Tseung**

Director of Investments  
SUNeVision  
Technology Arm of Sun Hung Kai Properties  
Hong Kong

### STOCK LISTING

TeleCommunication Systems, Inc. Class A  
common stock is traded on the NASDAQ National Market  
under the symbol TSYS.

### INDEPENDENT ACCOUNTANTS

Ernst & Young LLP, Baltimore, Maryland

### TRANSFER AGENT AND REGISTRAR

American Stock Transfer and Trust Company,  
New York, NY

### LEGAL COUNSEL

Piper Marbury Rudnick and Wolfe LLP  
Baltimore, Maryland

**Caution Concerning Forward-Looking Statements:** This document includes certain "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These statements involve risks and uncertainties, and actual results may differ materially. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in the Letter to Shareholders and Management's Discussion and Analysis of Financial Condition and Results of Operations as well as those discussed elsewhere in the Company's filings with the Securities and Exchange Commission. Readers are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date of this Annual Report. The Company undertakes no obligation to publicly release any revisions to the forward-looking statements or reflect events or circumstances after the date of this document.

### SENIOR CORPORATE EXECUTIVES

**Maurice B. Tosé**

Chairman of the Board,  
President and Chief Executive Officer

**Richard A. Young**

Executive Vice President and Chief Operating Officer

**Thomas M. Brandt, Jr.**

Senior Vice President and Chief Financial Officer

**Timothy J. Lorello**

Senior Vice President and Chief Marketing Officer

**Drew A. Morin**

Senior Vice President and Chief Technology Officer

**John C. Clark**

Senior Vice President, Managing Director Europe

**William J. Todd**

Senior Vice President, Corporate Affairs

**Kevin M. Webb**

Senior Vice President, Global Sales & Alliances

**Levin F. Custis III**

Vice President, Network Solutions

### TCS HEADQUARTERS

TeleCommunication Systems, Inc.

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Annapolis, Maryland 21401

410-263-7616 • 1-888-728-TSYS (8797) • 410-263-7617 fax

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### TCS EUROPE

TeleCommunication Systems Ltd.

John C. Clark

Senior Vice President, Managing Director Europe

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### FORM 10-K

Additional copies of this Annual Report on Form 10-K filed  
with the Securities and Exchange Commission are available,  
without charge, upon request from the Company.  
Attention: Investor Relations.

### ANNUAL MEETING

The annual meeting of stockholders will be held on  
June 13, 2002 at 10:00 AM at the Sheraton Barceló Annapolis  
in Annapolis, Maryland.

4:35pm

John's game  
@ 7 2nite  
field 3 ;)



4:35 pm

RECEIVES TEXT  
MESSAGE REMINDER OF A  
FAMILY EVENT TONIGHT.

**TeleCommunication Systems, Inc.**

**Headquarters**

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