

244 Fifth Ave., 2nd Fl., Ste. 2801 • New York, NY 10001 • Tel: (212) 726 1408 • Fax: (413) 215 0880

METRICOM, Inc. (NASDAQ: MCOM)

Update Report: Status of the Ricochet Rollout - ACCUMULATE

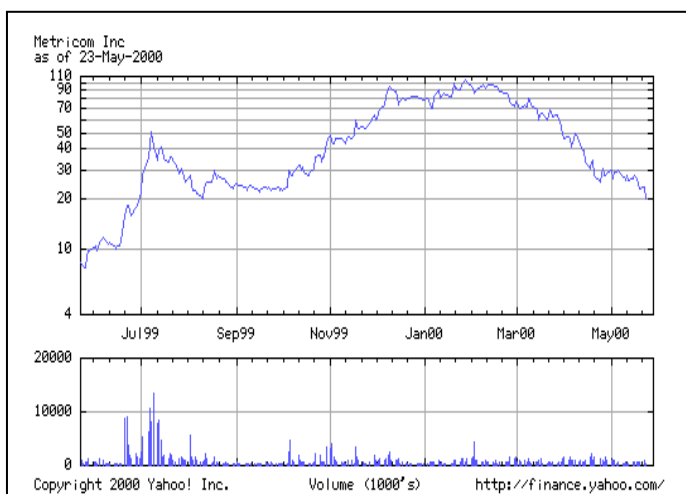
May 23, 2000

I. Key Considerations

- Metricom has expanded right-of-way efforts to 25 additional metropolitan areas, bringing the initial Ricochet rollout plan to a total of 46 markets, covering a population of \$100 million by the end of Summer 2001.
- Metricom is still unprofitable and is expected to continue to incur substantial losses for the foreseeable future. For the three months, ended 3/31/00, revenues fell 23% to \$3.2 million and net loss totaled \$32.3 million, up from \$15 million.
- The Company recently announced that Timothy Dreisback replaced Robert Dilworth as Chairman of the Board.
- Intense competition in the wireless communications market and evolving competing technologies will challenge Metricom's ability to expand its current network and gain market share.
- In February 2000, the Company completed a public offering of common stock with net proceeds of approximately \$473 million and a public offering of 13% senior notes due 2010 and warrants to purchase common stock with available net proceeds of approximately \$219 million. The principal uses of cash will be to fund the deployment of the high-speed network, to fund operating losses and to pay interest on the debt securities issued in February 2000, and dividends on the Company's preferred stock.
- Metricom and National Semiconductor announced that they have entered into a strategic alliance to develop high-speed Ricochet modem technology for the Information Appliance market. National will use Ricochet technology to develop a chipset for wireless modems.

Recent Price	\$22.81
52WK Low	\$7.50
52WK High	\$109.50
P/E	N/A
P/Book	1.52
P/Sales	29.48
Market Capitalization	\$698.63 M
Shares Outstanding	30.62 M
Float	10.40 M
Daily Volume (3-month Average)	0.84 M
EPS	
1998	(\$4.63)
1999	(\$5.13)
1Q00	(\$1.15)
2Q00E	(\$2.93)
Current Ratio	16.59
Total Debt to Equity	0.23
LT Debt to Equity	0.23
Total Cash per Share	\$35.30

ONE-YEAR PRICE AND VOLUME GRAPH



COMPANY PROFILE

Metricom, Inc. is a leading provider of wide area wireless data communications solutions. The Company's primary service, Ricochet, provides users of portable and desktop computers and hand-held computing devices with fast, reliable, portable and wireless access to the Internet, private intranets, local area networks (LAN's), e-mail and on-line services for a low, flat monthly subscription fee that permits unlimited usage. The Company was incorporated in December 1985 and Ricochet service began in September 1995. Additional information about Metricom, Inc. can be found on its web site at <http://www.metricom.com>.

This report was prepared by Dimosthenis A. Kostopoulos, MBA and David R. Rivas, Ph.D.

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II. Industry Outlook

The mobile wireless data access market has received increased attention in recent years due to the opportunities it offers, and an increasing number of companies have developed or are developing mobile wireless data access services and products using competing technologies. The market is characterized by rapidly changing technology and evolving industry standards in both the wireless and wire-line industries. In addition, a large number of companies in diverse industries are expected to enter the market in the near future. The principal factors on which companies compete in this market are effective data transmission rate, reliability, network coverage, ease of use and price.

Demand for mobile access to corporate networks and the Internet is expected to grow substantially during the next months. The growing demand by organizations and individuals for mobile access to corporate networks and the Internet is driven primarily by the following four trends:

Growth in the Number of Laptop Computers and Smart Handled Devices:

International Data Corporation, or IDC, a market research firm, has projected that unit shipments of portable computers and smart handheld devices in the U.S. will increase from an estimated 12 million in 1999 to 25 million in 2003, representing a compound annual growth rate of 21%.

Growth in the number of Internet Users:

Internet users in the U.S. is projected to increase from 70 million in 1998 to 179 million in 2003, representing a compound annual growth rate of 21%.

Increased Importance of Network Access:

40% of computer users worldwide working for mid-sized and large enterprises would remotely access corporate local area networks.

Growth in the Number of Mobile Workers:

IDC has projected that, by 2003, 47 million workers in the U.S. will spend at least 20% of their time away from their offices.

As a result of amendments to the Communications Act of 1934, the Wireless Communication Services Industry is subject to regulation at the federal, state and local levels. From time to time, the regulatory entities that have jurisdiction over our business adopt new or modified regulations or take other actions as a result of their own regulatory processes or as directed by other governmental bodies. This changing regulatory environment could adversely affect the nature and extent of the wireless business.

Therefore, competition within the industry appears to be intense during the next years. As demand grows and more people use portable computers and smart electronic devices in order to connect to their corporate networks and Internet, more communications companies enter the market in order to capitalize on new opportunities. Since the industry's standards are still evolving, it's relatively easy for a communications company that has experience as well as technical expertise on developing networks applications to come up with new wireless applications and services. As competition intensifies and new technologies come up, the bargaining power of consumers increases substantially and prices eventually fall. Companies are expected to focus their efforts on cost savings plans, expand their network coverage and design products and services that are compatible with existing applications and could help them achieve broader market acceptance.

III. Competition

The Company faces intense competition in the market for mobile wireless data access services targeted at users of laptop computers and other portable electronic devices. Metricom's current and anticipated future competitors can be categorized based on the types of communications networks they use to transmit data.

These networks include: terrestrial networks that are dedicated to data communications; terrestrial networks designed for cellular telephone service or personal communications services, or PCS; satellite communications networks; and traditional communications networks using wired fixed-point access, as well as future enhancements of other wireless technologies.

Metricom's high speed Ricochet service will compare favorably to available alternatives when the Company's network will be deployed in sufficient metropolitan markets to cover a cumulative population of at least 100 million, as contemplated by the company's current deployment plan. Ricochet is positioned primarily as a portable service with its largest competitive advantages being portability, low flat rate pricing, due to the use of the packet switching technology and higher speed access to data than any other remote mobile wireless technology available today.

SERVICES UTILIZING DEDICATED DATA COMMUNICATIONS NETWORKS.

Two companies currently offer their subscribers general mobile data access services like Metricom's utilizing terrestrial networks dedicated to data communications that have been operating for many years and are broadly deployed in major metropolitan markets: BellSouth Wireless Data LP offers a service utilizing a network formerly operated under the name RAM Mobile Data, and American Mobile Satellite Corporation offers a service utilizing the ARDIS network originally deployed by International Business Machines Corp. and Motorola, Inc. In addition to these general services, 3Com Corporation in 1999 began offering mobile data access services to users of its Palm VII personal digital assistant utilizing the RAM network. Further, two-way paging companies have begun to offer limited information access services, such as headline news and stock quotes. Based on published reports, effective data transmission rates available to customers of these services are limited to approximately eight kilobits per second. This limitation constrains the ability of users of these services to engage in relatively data-intensive applications, such as web browsing, file transfers and exchanging e-mail involving graphical or other large attachments. The Company's high-speed service will be complementary to relatively low-speed services, such as those utilizing the RAM and ARDIS networks, and that many users of wireless data access services will find it valuable to have access to both types of service. Lower-speed services are ideally suited for providing rapid access to limited amounts of data, such as stock quotes or driving directions, while a higher-speed service such as Ricochet is required for effective access to larger amounts of data, such as full web browsing or transmitting e-mail with attachments.

SERVICES UTILIZING CELLULAR TELEPHONE AND PCS NETWORKS.

Many telecommunications companies that operate terrestrial networks designed to provide cellular telephone or PCS services are offering or have announced plans to offer their customers data communications services utilizing those networks. Subscribers to these services can transmit and receive data using a variety of electronic devices, including conventional mobile telephones functioning as modems and connected to laptop computers or other portable electronic devices, as well as newer mobile telephones with built-in Internet browsing capabilities. These services are or will be based on a number of different communications technologies that vary by network, including cellular digital packet data, or CDPD; code division multiple access, or CDMA; time division multiple access, or TDMA; and global standard mobile, or GSM. Cellular telephone and PCS networks have the advantage of being widely deployed in major metropolitan markets and elsewhere, which enables network operators to offer services that are widely available geographically. To date, however, based on published reports, effective data transmission rates available to customers of these services have been limited to an average data transmission rate approximately 10 kilobits per second. For this reason, these services are subject to the same limitations as the services based on existing dedicated data communications networks. In addition, the providers of cellular telephone and PCS services have available only a finite amount of licensed radio spectrum and must allocate this spectrum among the various voice and data communications services they elect to make available to their subscribers. The amount of spectrum these service providers will allocate to data communications services is uncertain.

SERVICES UTILIZING SATELLITE COMMUNICATIONS NETWORKS.

Many companies offer one-way and two-way paging or other data communications services utilizing satellite communications networks alone or in conjunction with terrestrial networks. In addition, Iridium LLC in 1998

began offering voice and paging services on a global basis utilizing its proprietary network of low earth orbiting, or LEO, satellites. The average data transmission rates offered by these systems are five kilobits per second or less. Due to the power and other requirements associated with transmitting data from the earth to an orbiting satellite and the difficulty of transmitting data directly between a satellite and a user working with a small, mobile device inside a building, it will not be practicable in the foreseeable future for satellite system operators to offer commercial two-way mobile data access service at a competitive price.

SERVICES UTILIZING WIRED FIXED-POINT ACCESS.

Although not providing wireless mobility, wired fixed-point access to traditional communications networks offers virtually universal geographic coverage and very high potential data transmission rates. In recent years, fixed-point network connections have been made available at an increasing number of locations frequented by visitors using laptop computers or other portable electronic devices. These locations include airports and other transportation hubs, hotels, business office conference rooms, government buildings, and eating and other retail establishments. If this trend toward increasing availability of fixed-point access to traditional communications networks continues, the mobility offered by wireless services such as Metricom's could become less important to users, which would negatively affect the business overall. This could be true at current effective data transmission rates and would be particularly true if the effective data transmission rates available through fixed-point connections were to increase significantly.

FUTURE ENHANCEMENT OF OTHER WIRELESS TECHNOLOGIES.

In addition to Metricom, many other companies are aggressively seeking to develop or enhance the capabilities of their wireless communications technologies with the objective of providing increasingly high-speed wireless data access services. For example, it is widely believed that over the next several years there will be a worldwide evolution of cellular telephone and PCS networks -- whether currently based on GSM, TDMA or CDMA technology -- toward "third generation," or 3G, technologies. These 3G networks, utilizing approaches known as wideband CDMA, or WCDMA, and CDMA2000-3xRTT, are predicted to allow theoretical peak data transmission rates of 384 kilobits per second and average data transmission rates of 128 kilobits per second in many mobile applications and up to 2 megabits per second in some other applications in limited areas. However the commercialization of some of these emerging technologies will require access to radio spectrum that has not been allocated to date by the FCC.

Prior to deployment of 3G network infrastructure, many networks are anticipated to evolve through intermediate stages involving escalating data transmission rates, including approaches known as high-speed circuit switched data, or HSCSD; general packet radio service, or GPRS; enhanced data rates for GSM evolution, or EDGE; and CDMA2000-1xRTT. In addition, QUALCOMM Incorporated, which developed CDMA technology that is widely used in existing cellular telephone and PCS networks, has developed a CDMA variant known as high data rate, or HDR, which it claims will provide effective data transmission rates comparable to 3G networks and will be commercially deployed as early as 2001. HDR requires the carrier to dedicate a separate channel to data transmission, which could require the carrier to carry fewer voice channels.

Based on published information about the way multiple users are expected to share the available data and voice communications capacity of networks based on these technologies, Metricom's technology is better designed to provide users with high effective data transmission rates in typical mobile data access applications at a lower cost per bit delivered.

In addition to services based on terrestrial networks, Teledesic LLC has announced plans to offer, beginning in 2004, a very high-speed wireless "Internet-in-the-sky" service utilizing a proprietary network of LEO satellites. However, Teledesic has stated that handheld mobile service will not be available with this network. Moreover, Teledesic's laptop-sized terminals with large antennae, although transportable, are fixed-point devices that are unlikely to provide service inside buildings. If network equipment based on 3G or other technologies were to succeed in cost-effectively providing users with higher effective data transmission rates than those available with our service or if Teledesic or others were to provide a satellite-based service with increased mobility or higher speeds, Metricom's business could be seriously harmed.

In addition, Metricom may face competition from Internet service providers that could offer Internet, online or data access services at prices lower than those offered by the basic wireless carriers.

Metricom competes directly with the following wireless carriers (from previous report):

- **AT&T Wireless Services**
- **AirTouch Communications (Member of the Vodafone Group)**
- **AOL**
- **Bell Atlantic Mobile**
- **BellSouth Wireless Data**
- **Bell Mobility**
- **Earthlink, Inc.**
- **Nextel Communications**
- **SBC Communications**
- **SkyTel Communications**
- **Sprint PCS**
- **Novatel Wireless**

Potential New Entrants (Source: Industry Standards, Hoover's Online)

- **Aether Systems:** The company began in wireless systems engineering; it now licenses its Aether Intelligent Messaging software which works as a bridge between companies' applications and handheld wireless devices and has a network operations center that manages data delivery for wireless companies. OpenSky is an Aether's new venture with 3Com, that targets broader markets with wireless e-commerce, e-mail, and Internet access. AMD's NexGen owns 26% of the company, and wireless Baron Rajendra Singh's Telcom Ventures owns 20%.
- **Cable and Wireless USA:** Cable and Wireless USA is a subsidiary of the UK Cable and Wireless Company and provides voice and data telecommunications services to businesses in the US market. The company bought MCI's Internet Operations Business Unit and expanded its network. The company offers services, such as Internet access, frame relay data transport, and remote access to networks and Web hosting. Moreover, the company provides wholesale Internet services to approximately 1,300 ISP's.
- **Echostar Communications:** The company operates the DISH Network and offers direct broadcast satellite TV dishes and integrated receivers that receive programming for about 3 million DISH Network subscribers. Echostar also provides satellite delivery of local network stations and has partnered with Microsoft to provide WebTV access through its DBS system.
- **Microcell Telecommunications:** The company provides wireless PCS service, sells wholesale capacity on its network and uses the GSM (global system for mobile communications) digital standard. Venturing into data, Microcell has added mobile e-mail and wireless Internet connectivity to its list of services.
- **QUALCOMM:** A pioneer in the commercialization of digital wireless transmission standard CDMA, the company makes products for digital, cellular, personal communication services, and wireless local-loop systems. With the sale of its cell phone operations, QUALCOMM shifts its focus on a new wireless data standard -- High Data Rate -- which is expected to bridge the transition between current technologies and the so-called third-generation products.
- **Ericsson:** The company has formed a new unit to push m-commerce (mobile e-commerce) and is acquiring companies that offer new technologies, such as Internet equipment. Ericsson also has allied with other top information technology players such as Compaq, IBM, Intel, and Microsoft in order to develop wireless technology.
- **Excite @ Home:** The company through its cable partners offers a new kind of "next-generation" always-on, high-speed broadband access service. AT&T, through its AT&T Broadband & Internet Services subsidiary (formerly TCI), owns 26% of Excite@Home. Other investors include cable companies Comcast, Cox Communications, and Cablevision and venture capital firm Kleiner Perkins.
- **Palm:** Palm has created Palm.net, a service that feeds Internet data to the Palm VII and other mobile devices. 3Com, AOL, Motorola, and Nokia are some of the companies who invested in Palm.

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- **Phone.com:** The company, which developed much of the technology behind the wireless application protocol (WAP) standard, makes software that wireless operators can use to give customers Internet and corporate intranet access from their mobile phones. Phone.com's UP.Link software is used by providers such as AT&T (17% of sales) and Japanese wireless telecom DDI (14%). Manufacturers licensing its technology include top phone makers Ericsson, Matsushita, Motorola, Nokia, and Samsung.
 - **Nortel Networks:** The company provides communications infrastructure equipment and services for many of the world's largest telecommunications providers. Its expertise encompasses public data networks; enterprise networks (primarily private digital switching systems); wireless networks, including cellular and personal communication services (PCS); and broadband networking products for telecom carriers.
 - **Newbridge Networks:** Among others, Newbridge builds wireless and satellite access products, and Internetworking tools. The company's products are used by more than 350 telecommunications companies, including AT&T, MCI WorldCom, local-exchange carriers, regional Bells, and Internet service providers.
 - **Verizon:** Verizon was formed in 2000 when Bell Atlantic and Vodafone AirTouch combined their US wireless assets, including their PrimeCo partnership. Verizon's nationwide network uses both analog and CDMA digital technology to serve more than 16 million mobile phone customers and almost 4 million paging clients. The new company will gain GTE's US wireless assets when Bell Atlantic completes its acquisition of GTE.
 - **Weblink Wireless:** Weblink Wireless provides two-way wireless data services, enhanced messaging services and traditional one-way numeric and word paging services.

IV. Strategy for Growth

Metricom's most strategic objective is to be the leading provider of high-speed mobile wireless data access to users of laptop computers and other portable electronic devices. The key elements of the Company's strategy are as follows:

Rapidly Deploy a National Network:

The Company intends to deploy its network in three phases. There is a plan to launch the high-speed service during the late summer of 2000, and is expected that the initial service areas will cover a total population of approximately 62 million. After the third phase of the deployment, which is expected to complete by the end of the summer of 2001, the Company's network will cover a cumulative population of at least 100 million in the U.S. Understanding that time-to-market is a critical competitive advantage, the Company has already obtained a substantial portion of the approvals for municipal rights-of-way necessary to meet its network deployment objectives for 2000.

Target Mobile Professionals:

Advertising and marketing efforts focus on mobile professionals, particularly those who already use laptop computers or other portable electronic devices, and other people and businesses that are likely to require mobile access to information. Mobile workers, such as salespeople, consultants, lawyers and accountants, often require the flexibility to work outside of their offices and desire to maintain access to corporate networks and the Internet.

Capitalize on the Distribution Strength of a Select Group of Channel Partners:

The Company intends to increase the number of users of Ricochet service through sales efforts by MCI WorldCom and other potential channel partners. These partners will market and sell subscriptions to Ricochet service to their customers on a co-branded basis. This relationship provides Metricom with the immediate benefit of support from a large and sophisticated sales force that has experience selling products and services to businesses and consumers in its target market. Potential channel partners include local telephone companies, wireless carriers, digital subscriber line or other high-speed Internet access providers, laptop computer and other portable electronic device manufacturers and system integrators or networking consulting firms that recommend large-scale purchases of access services such as ours to their customers. The Company is currently in negotiations with a number of potential channel partners, with a goal of entering into agreements with additional channel partners in the second quarter of 2000.

Build Equity in the Ricochet Brand:

The Company intends to promote the Ricochet brand aggressively, seeking to gain widespread business and consumer recognition of our brand. The brand awareness and brand identity strategy will focus on the mobile access benefits of a high-speed network, with the objective of making the Ricochet brand synonymous with speed, reliability and security. Ricochet brand is promoted through co-branding arrangements that will require channel partners to display the Ricochet name and logo in addition to their own in promotional materials and to display Metricom's name on the Ricochet modem. Moreover, there will be advertising in traditional media and on the Internet, designed to increase business and consumer awareness of the Ricochet brand. The Company is planning to spend over \$50 million on sales and marketing efforts in 2000 and substantially more in 2001.

Maintain Network Performance and Cost Advantages:

The Company will continue its commitment to research and development so that, eventually it could offer its users faster data transmission rates on a more cost-effective basis than competing remote mobile wireless data access services. Core Technologies and particularly the utilization of packet-switched communications and unlicensed portions of the radio frequency spectrum -- will enable the Company to maintain performance and cost advantages over competing services in the future, as technological advancements increase the standard for data transmission speeds and network performance. Outsourcing some business functions is a key part of its strategy to maintain network performance and cost advantages for our users.

Pursue International Opportunities:

The Company plans to pursue opportunities to offer service based on its technologies in markets outside the U.S. after the launch of its domestic high-speed service.

V. Strategic Alliances and Partnerships

Metricom and National Semiconductor announced they have entered into a strategic alliance to develop high-speed Ricochet modem technology for the Information Appliance market. National will use Ricochet technology to develop a chipset for wireless modems. The two Companies will jointly market the solution to device manufacturers for incorporation into information appliances.

Tetra Tech, Inc. announced that it would work with Metricom, Inc. to provide additional network deployment services under a new contract. Tetra Tech will assist Metricom in creating mobile wireless access networks, which will provide access to the Internet and Intranets.

General Dynamics Worldwide Telecommunication Systems, a business unit of General Dynamics, announced that it has signed an agreement with Metricom, Inc. to provide architectural and engineering services in support of Metricom's deployment of its Ricochet 128 kbps mobile wireless data service in key United States markets.

Metricom currently has two channel partner relationships. In June 1999 and April 2000, MCI WorldCom and Juno Online Services, Inc., respectively, entered into agreements with Metricom to sell high-speed service to their customers. More specifically, MCI WorldCom and Metricom have entered into a strategic relationship, which includes national distribution of Ricochet. Under the terms of the deal, MCI WorldCom and Vulcan Ventures, the private investment vehicle of Microsoft Corporation will purchase 60 million new convertible preferred shares of Metricom stock, priced at \$10 per share. When consummated, and following an allowed conversion from preferred to common, the breakdown of ownership will include Vulcan Ventures, Inc. at 49%, MCI WorldCom at 38%, with the remaining 13% ownership held by other current public shareholders. In November 1999, MCI WorldCom, and Vulcan Ventures, each purchased shares of the Company's preferred stock for \$300 million in cash, providing Metricom with funds to commence the deployment of its high-speed network. In addition, MCI WorldCom has entered into an agreement with Metricom to sell subscriptions to its service and has agreed to pay the Company at least \$388 million in revenue over the five years following the launch of its service, subject to the timely deployment of the Company's network, its ability to meet agreed

performance standards and attract a significant number of subscribers through other channel partners. Currently, Metricom has entered into discussions with UUNet, a subsidiary of MCI WorldCom to support the exchange of traffic between the wired access points, network interface facilities, the telecommunications infrastructure and corporate networks and the Internet.

Metricom has recently entered into an agreement with Schlumberger Resource Management, Inc. a business segment of Schlumberger, Ltd and a leading provider of business services for utilities. The exclusive license agreement calls for Schlumberger to support current UtiliNet customers and market UtiliNet based products in the future, providing annual royalty fees to Metricom. UtiliNet is a comprehensive wireless data communications solution that utilizes spread – spectrum radios in the license-free 902-928 MHz area of the radio spectrum. It provides reliable private network solutions for remote industrial measurement data transmission, distribution and control applications. These networks transparently combine spread-spectrum, connectionless mesh architecture and packet switching technologies to ensure high speed and accurate data transmission. UtiliNet RF Technology will enhance the ability of Schlumberger to provide a broader array of Automatic Meter Reading (AMR) solutions to its electric, water and gas clients.

Metricom has also entered into several agreements regarding the deployment of its network interface facilities. These agreements have been negotiated with private carriers housing large telecommunications facilities. These agreements typically have five-year terms. In October 1999, the Company entered into agreements with Wireless Facilities, Inc., General Dynamics Worldwide Telecommunications Systems and Whalen & Company to provide it with expertise and personnel to assist with the deployment of its network. Wireless Facilities has agreed to assist with radio frequency engineering related to the physical deployment of the wired access point components of the network. All three companies will be responsible for many of the tasks involved in the deployment of our network wired access points, including assisting with acquiring sites for certain wired access points, obtaining necessary zoning approvals, network architectural and engineering management, construction management and the installation of wired access point services.

Metricom outsources all manufacturing of its current subscriber modems and network components. The proprietary external modem that current Ricochet subscribers use is manufactured by Alps Electric (USA), Inc. Metricom has entered into a two-year agreement with Alps to custom manufacture external modems to be used in the high-speed service. The Company is committed to Alps to purchase a minimum of 47,700 units in 2000. The agreement provides for a four-month lead-time for the delivery of modems. The Company has recently entered into two-year agreements with NatSteel Electronics, Ltd. and Marconi Communications for the purchase of additional modems. Metricom has recently entered into two-year agreements with Sierra Wireless and Novatel to custom develop and manufacture personal computer card modems for the high-speed service. It has also committed to purchase a minimum of 150,000 units in the first year of deliveries and to reimburse these suppliers for a portion of their development costs. Further, under these agreements, Metricom has agreed to license to Sierra Wireless and Novatel its technology to build other modems or devices. The Company will receive royalty payments for any devices incorporating its technology that Sierra Wireless and Novatel sell to third parties.

In July 1999, Metricom entered into a two-year agreement with Sanmina Corporation to custom and manufacture the poletop radios and network radios installed at the wired access points. Sanmina made the first delivery of radios under this agreement in November 1999. It is estimated that more than 130,000 poletop radios will be required to complete all three phases of our network deployment as planned. In January 2000, Metricom reported that it has been affected by industry-wide component shortages, causing delays to production of these radios.

VI. Key Risk Factors

- Metricom has limited experience in marketing its Ricochet service and needs to establish long term relationships with channel partners in order to increase its customers base, realize significant revenue growth rates and improve its long-term operating margins. In addition, the market for mobile wireless data

access services is in the early stages of development. Critical issues concerning wireless communications and data access, including security, reliability, cost, regulatory issues, ease of use and quality of service, remain unresolved and are likely to affect the market for wireless high-speed services. We expect that a substantial marketing effort will be necessary in order for the Company to generate volumes, stimulate demand and become profitable.

- The success of the business ultimately depends upon the acceptance of the high-speed service by users to whom channel partners will seek to sell subscriptions. Moreover, if the user base for the high-speed service does not expand at the rate required to support the planned deployment of the Company's network, revenue and business will suffer.
- Deployment of the network involves various risks and contingencies, many of which are not within control, including:
 1. Delays or refusals by local governments or other third parties to enter into the agreements the Company needs to deploy its network.
 2. Inability of third parties on whom the Company depends to meet delivery schedules.
 3. Failure of the network to perform as expected.
- The Company depends substantially on third parties to deploy its high speed network on a timely and cost effective basis.
- It's very possible that the Company might need significant additional capital in the future to fund its continuing development, deployment and marketing of its high-speed network and service. The principal uses of cash for the foreseeable future will be to fund the deployment of the high-speed network, to fund operating losses and to pay interest on the debt securities issued in February 2000, and dividends on the Company's preferred stock. Based on the Company's projections, we believe that, Metricom will require additional cash resources in order to be able to complete the third phase deployment of the network. Approximately \$692 million of these required resources, after deducting underwriting discounts and commissions and estimated offering expenses, and after establishing the required interest reserve to secure the first four interest payments on the notes, were funded from the net proceeds of the February 2000 common stock, notes and warrants offerings.
- The Company has a history of losses and expects to incur additional losses in the future. Expenditures associated with developing its high-speed service have contributed substantially to cumulative net losses of approximately \$338 million through December 31, 1999. In February 2000, the Company completed a public offering of common stock with net proceeds of approximately \$473 million and a public offering of 13% senior notes due 2010 and warrants to purchase common stock with available net proceeds of approximately \$219 million, after establishing the required reserve to secure the first four interest payments on the notes. This large amount of indebtedness could adversely affect the business by increasing the amount of required payments on indebtedness or limiting Company's ability to acquire additional financing in the future.
- The Company might not be able to keep up with the continuous technological change in the wireless services industry. Competition in the market for communications and data access services is intense. A number of privately and publicly held communications and data access companies have developed or are developing new wireless and wired communications and data access services and products using technologies that compete with Metricom's. Many of these companies have significantly greater resources, more established brand names and larger customer bases than Metricom. In addition, several companies in various other industries are expected to enter the market in the future. Further, the company might face competition from Internet service providers that could offer Internet, online or data access services at prices lower than those offered by Metricom's channel partners.

VII. Explanation of Financials

Revenue: Metricom derives service revenues from Ricochet subscriber fees as well as from Ricochet modem rentals and product revenues from the sale of UtiliNet products and Ricochet modems

Total revenues decreased to \$3.2 million in the first quarter of 2000 from \$4.2 million for the same period of 1999, primarily due to a decrease in product revenues. Product revenues declined to \$0.9 million for the first quarter of 2000 from \$1.8 million for the same period of last year as a result of licensing of the UtiliNet technology to Schlumberger. Service revenues decreased to \$2.3 million in the first quarter of 2000 from \$2.4 million in the same period of 1999. This decrease was primarily the result of a decrease in UtiliNet service revenues of approximately \$0.3 million, offset by a \$0.2 million increase in Ricochet service revenues. Ricochet service revenues increased as a result of a 10% increase in subscribers as of March 31, 2000 compared with March 31, 1999. It is expected that UtiliNet revenues will continue to decline significantly in the future as a result of the Company's focus on the launch of its high-speed service. All the future revenues will be generated from subscription fees paid to the Company by its channel partners.

Cost of Revenues:

- Cost of service revenues consists primarily of network operations costs, real estate management costs and depreciation expense on network equipment. Network operations costs include the costs associated with the field managers, engineers and technicians who operate and maintain Company's high-speed network, as well as the costs associated with network operations centers. Network operations costs also include the telecommunications costs incurred to transmit data between wired access points and network interface facilities and the Internet. Real estate management costs include the costs associated with the maintenance of lease agreements for poletop radios, wired access points and network interface facilities and the ongoing rental payments for these sites. Real estate management costs also consist of the internal and external labor costs associated with maintaining right-of-way agreements in the markets where the Company's network is currently deployed. Cost of service revenues in the first quarter of 2000 was \$13.8 million compared with \$4.4 million in the same period of 1999. The significant increase was due to increases in staffing, property, telecommunications and support costs associated with the deployment of the new high-speed service in various markets. Cost of service revenues is expected to increase significantly as a result of the continued operation of Ricochet networks and planned future deployment of Ricochet2 networks.
- Cost of product revenues consists primarily of the inventory and manufacturing costs associated with Ricochet modem and UtiliNet product sales. Cost of product revenues decreased to \$0.3 million in the first quarter of 2000 from \$1.3 million in the first quarter of 1999. Ricochet cost of product revenues as a percentage of Ricochet product revenues declined to 37% in the first quarter of 2000 compared with 106% in the first quarter of 1999 as a result of increased shipments of refurbished modems for which the majority of costs have been charged to operations in previous periods. UtiliNet cost of product revenues as a percentage of UtiliNet product revenues declined to 32% in the first quarter of 2000 from 53% in the first quarter of 1999 as a result of higher selling prices and lower allocated costs in 2000. We expect Ricochet cost of product revenues to increase in 2000 as the Company sells modem inventory directly to MCI WorldCom or other channel partners for resale to new subscribers to high-speed service.

Research and Development: Research and development costs include the costs incurred to develop network technology and subscriber modems, as well as to obtain rights-of-way and related site agreements in markets where the Company plans to offer service. Research and development expenses increased to \$9.6 million in the first quarter of 2000 from \$8.2 million in the same period of 1999. Right-of-way acquisition costs included in research and development increased to \$4.4 million in the first quarter of 2000 from \$3.1 million in the same period of 1999. The Company plans to spend a substantial amount on the development of its networking products to reduce the cost of its system components, increase the speed and performance of its services and develop additional applications. Moreover, there is also a plan to continue to improve and upgrade Metricom's network and service to address the emerging demands for mobile data access. As a result, we expect that research and development costs will continue to increase significantly for the foreseeable future.

Selling, General and Administrative: Selling, general and administrative expenses include corporate overhead and the costs associated with efforts to obtain and support channel partners, promote the Ricochet

brand and the high-speed service. Selling, general and administrative expenses increased to \$8.0 million for the first quarter of 2000 from \$4.1 million for the first quarter of 1999. Approximately three-quarters of the increase was due to increases in administrative staff and the labor, travel and support costs associated with supporting the widespread deployment of the high-speed service. Approximately one-quarter of the increase in 2000 was due to increased product marketing, advertising and public relations expenditures related to commercialization of the high-speed service. We expect selling, general and administrative costs to increase significantly from historical levels as the Company is planning to implement its advertising campaign related to the launch of the various phases of the high-speed service. It is expected that more than \$50 million will be spent on sales and marketing efforts in 2000 and substantially more in 2001.

Interest and Other Income and Interest Expense: Interest and other income increased to \$16.6 million in the first quarter of 2000 from \$0.1 million in the same period of 1999 due primarily to a significantly higher average balance of cash, cash equivalents and investments on hand in 2000. As a result of the November 1999 sale of the preferred stock for net proceeds of \$573.2 million and the February 2000 sale of common stock, 13% senior notes due 2010 and warrants to purchase common stock, the Company has over \$1 billion on hand. These cash resources are needed to fund the deployment of the Company's network, to fund operating losses and working capital requirements through the first two phases of the network deployment, and to fund interest on long-term debt and dividends on its outstanding preferred stock. Interest expense increased to \$7.5 million in the first quarter of 2000 from \$1.2 million in the same period of 1999 as a result of the increase in the outstanding debt in 2000. Due to senior notes and warrants offering in February 2000, the Company has approximately \$300 million in outstanding debt. The senior notes require semi-annual cash interest payments commencing August 15, 2000.

Preferred Dividends: In November 1999, the Company issued 60,000,000 shares of preferred stock to Vulcan Ventures Incorporated and MCI WorldCom, Inc. for gross proceeds of \$600 million. Each share of preferred stock bears a cumulative dividend at the rate of \$.65 per year for the first three years after issuance, which the Company can pay in cash or in additional shares of preferred stock. Because the preferred stock sold to Vulcan Ventures is immediately convertible into common stock at the holder's option at a conversion price of \$10.00 per share, which was below \$11.06, the per share closing price of the common stock on the date immediately prior to the execution of the preferred stock purchase agreement, the Company recorded an additional dividend of \$31.8 million in the fourth quarter of 1999 to reflect the beneficial conversion privilege associated with this series of preferred stock. The preferred stock issued to MCI WorldCom is also deemed to have been issued with a beneficial conversion privilege. However, that series of preferred stock does not begin to become convertible into common stock at the holder's option until May 2002. As a result, this discount will be amortized over the 48-month period, which began in November 1999, during which this series of preferred stock becomes convertible into common stock at the holder's option. Accordingly, for both series of preferred stock in the aggregate, the Company is expected to record preferred stock dividends in addition to its cash dividend on the preferred stock as follows:

2000... \$10.1 million
2001... \$10.1 million
2002... \$7.8 million
2003... \$2.6 million

Both series of preferred stock will accrete at approximately \$2.7 million per year in total over the ten-year period from the beginning aggregate net book value of \$573 million up to its aggregate face value of \$600 million. This accretion will be charged against retained earnings (accumulated deficit). In the first quarter of 2000, preferred dividends included \$9.7 million of accrued dividends payable, \$2.5 million of beneficial conversion privilege and \$0.7 million of accretion related to the preferred stock.

VIII. Valuation and Investment Opinion



Value Comparison 5/23/00					
<i>Company</i>	<i>\$ Price</i>	<i>Market Cap. In millions</i>	<i>P/S</i>	<i>Gross Margin % (TTM)</i>	<i>Industry</i>
Metricom, Inc.	22.81	698.63	29.48	NA	Wireless Communications
Sprint PCS	52.13	47,705.74	13.11	11.11	Wireless Communications
Bell Atlantic	52.63	81,340.15	2.47	75.43	Wireless Communications
AOL	53.38	122,623.03	21.96	47.64	Internet Service Provider
SBC Communications	42.69	145,212.62	2.93	31.32	Wireless Communications
Nextel Communications	91.94	34,860.13	8.33	79.99	Wireless Communications
Earthlink, Inc.	17.00	2,009.25	NA	62.94	Internet Service Provider
Excite @Home	19.88	7,892.80	15.60	59.62	Internet Service Provider
Echostar Communications	42.31	19,870.52	10.07	43.07	Cable & Satellite Systems
Phone.com	73.63	5,795.17	86.67	71.69	Wireless Communications
Weblink Wireless	8.63	353.32	1.08	77.85	Wireless Communications
SkyTel Communications	19.88	1,197.91	2.19	72.38	Wireless Communications
High Speed Access	6.88	374.12	67.70	NA	Cable Internet Services
AT&T Wireless Group	27.06	62,515.53	NA	49.57	Wireless Communications

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- Demand for mobile access to corporate networks and the Internet is expected to grow substantially during the next couple of years. Metricom has expanded right-of-way efforts to 25 additional metropolitan areas, bringing the initial Ricochet rollout plan to a total of 46 markets, covering a population of \$100 million by the end of Summer 2001. We believe that the Company's high speed Ricochet service will compare favorably to available alternatives when the Company's network will be deployed in sufficient metropolitan markets to cover a cumulative population of at least 100 million, as contemplated by the company's current deployment plan. We should not forget that Ricochet is positioned primarily as a portable service with its largest competitive advantages being portability, low flat rate pricing, due to the use of the packet switching technology and higher speed access to data than any other remote mobile wireless technology available today. Furthermore, the Company enjoys a strategic partnership with MCI World Com, Vulcan Ventures as well as with National Semiconductor. That explains the Company's relatively high P/S ratio (See table above).
 - During the last 12 months the Company has outperformed the Internet Index. However, since beginning of February 2000, the company's stock lost more than 70% of its value. The downward trend can be attributed to a positive correlation with the stock market, which has not performed well in this period due to fears of higher CPI and possible increase of short-term interest rates.
 - The Company faces intense competition in the market for mobile wireless data access. The number of potential competitors increases exponentially. Most of the traditional wireless communications companies are developing competing technologies so that they could offer new services to their subscribers' network. New strategic alliances and buyouts between traditional telecommunications companies and companies that have the potential to develop alternative technologies could represent a major threat for Metricom. We should not forget that most of the big companies like Bell Atlantic have already depreciated their assets and developed their wireless distribution and now try to capitalize on new opportunities that will differentiate them from the competition. On the other hand Metricom needs time and cash in order to develop its infrastructure, orchestrate potential relationships with channel partners and start offering its ultimate wireless service. It's very possible that the continued expansion of the wireless market may marginalize the Company's competitive position.
 - In February 2000, the Company completed a public offering of common stock with net proceeds of approximately \$473 million and a public offering of 13% senior notes due 2010 and warrants to purchase common stock with available net proceeds of approximately \$219 million. Company's interest expense increased to \$7.5 million in the first quarter of 2000 from \$1.2 million in the same period of 1999 as a result of the increase in the outstanding debt in 2000. The Company so far has enough cash reserves to finish the first two parts of its deployment schedule. However, we believe that Metricom will require further financing until the end of the year in order to complete the deployment of its network, fund its operating losses and pay interest on its long-term debt, which exceeds the \$300 million as well as pay dividends on its outstanding preferred stock.
 - Metricom is a leader in the areas of technology and product cost effectiveness. We believe that in a bullish market the Company could thrive and become a major player in the wireless industry. The only thing the Company needs right now is liquidity and time to deploy its network. Ricochet is a proven and leading technology. We strongly believe that Metricom has the know-how to develop several Ricochet applications and therefore we believe that its business has a significant growth potential. In the long run we expect the Company to maintain its competitive advantage, capitalize on its existing network distribution capabilities, expand its strategic alliances with potential channel partners and increase the stream of its revenue. Although the stock has fallen tremendously during the last 4 months we believe that Metricom has a significant upside potential and if it manages to keep its technological advantage until it completes the deployment of its network, it could be eventually a strong buy. Hence, for the next quarter, we give Metricom an ACCUMULATE recommendation.

Metricom, Inc. - Consolidated
Statement of Operations (in
000's except per share data)

	FY98	1Q99	2Q99	3Q99	4Q99	FY99	1Q00	2Q00E
Revenues								
Service Revenues	\$8,419	\$2,431	\$2,195	\$2,531	\$2,931	\$10,088	\$2,334	\$1,285
Product Revenues	\$7,440	\$1,755	\$2,468	\$2,264	\$1,950	\$8,437	\$889	\$325
Total Revenues	\$15,859	\$4,186	\$4,663	\$4,795	\$4,881	\$18,525	\$3,223	\$1,610
Cost of Revenue								
Cost of Service Revenue	\$28,310	\$4,433	\$4,459	\$4,782	\$7,645	\$21,319	\$13,750	\$26,500
Cost of Product Revenue	\$5,050	\$1,326	\$2,011	\$1,403	\$1,274	\$6,014	\$300	\$845
Total Cost of Revenue	\$33,360	\$5,759	\$6,470	\$6,185	\$8,919	\$27,333	\$14,050	\$27,345
Gross Profit (Loss)	(\$17,501)	(\$1,573)	(\$1,807)	(\$1,390)	(\$4,038)	(\$8,808)	(\$10,827)	(\$25,735)
Operating Expenses								
General and Administrative	\$22,934	\$4,140	\$4,529	\$5,212	\$6,856	\$20,737	\$7,989	\$14,850
Research & Development	\$27,313	\$8,235	\$8,806	\$8,559	\$10,081	\$35,681	\$9,623	\$17,450
Provision for Net Replacement	\$14,392	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Operating Expenses	\$64,639	\$12,375	\$13,335	\$13,771	\$16,937	\$56,418	\$17,612	\$32,300
Operations Income (Loss)	(\$82,140)	(\$13,948)	(\$15,142)	(\$15,161)	(\$20,975)	(\$65,226)	(\$28,439)	(\$58,035)
Interest Income	\$1,915	\$143	\$186	\$259	\$4,230	\$4,818	\$16,593	\$12,350
Interest Expense	\$3,939	\$1,213	\$1,601	\$1,752	\$1,318	\$5,884	\$7,471	\$7,650
Net Income (Loss)	(\$84,164)	(\$15,018)	(\$16,557)	(\$16,654)	(\$18,063)	(\$66,292)	(\$19,317)	(\$53,335)
Preferred Dividends	\$0	\$0	\$0	\$0	\$38,234	\$38,234	\$12,942	\$12,550
Income Available to Com.	(\$84,164)	(\$15,018)	(\$16,557)	(\$16,654)	(\$56,297)	(\$104,526)	(\$32,259)	(\$65,885)
Basic and Diluted EPS	(4.63)	(0.80)	(0.86)	(0.80)	(2.51)	(5.13)	(1.15)	(2.93)
Diluted Shares Outstanding	18,195	18,873	19,296	20,889	22,440	20,375	28,160	22,500
Margin Analysis as a % of Revenue								
Gross Margin	-110.35%	-37.58%	-38.75%	-28.99%	-82.73%	-47.55%	-335.93%	-1598.45%
General and Administrative	144.61%	98.90%	97.13%	108.70%	140.46%	111.94%	247.87%	922.36%
Research & Development	172.22%	196.73%	188.85%	178.50%	206.54%	192.61%	298.57%	1083.85%
Provision for Net Replacement	90.75%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Operating Margin	-517.94%	-333.21%	-324.73%	-316.18%	-429.73%	-352.10%	-882.38%	-3604.66%
Net Margin	-530.70%	-358.77%	-355.07%	-347.32%	-370.07%	-357.85%	-599.35%	-3312.73%
Growth %								
Total Revenue	NA	0.00%	11.40%	2.83%	1.79%	16.81%	0.00%	-50.05%
Gross Profit	NA	0.00%	-14.88%	23.08%	-190.50%	49.67%	0.00%	-137.69%
Operating Expense	NA	0.00%	7.76%	3.27%	22.99%	-12.72%	0.00%	-83.40%
Net Income	NA	0.00%	-10.25%	-0.59%	-8.46%	21.23%	0.00%	-176.10%

* On an annual basis

