



**Bond Price Data**

Amount	Coupon	Priority	Maturity	Ratings	Next Call		Bid Price	YTW	STW	Opinion
					Price	Date				
\$600mm	10.000%	SrNotes	02/15/05	B3/B-	105.00	2 /02	93.00	12.00	567	O
\$749mm	10.500%	SrNotes	12/01/06	B3/B-	NC	NC	93.00	12.09	576	O
EUR150mm	10.500%	SrNotes	12/01/06	B3/B-	NC	NC	NA	NA	NA	O
\$1,050mm	11.000%	SrNotes	08/01/09	B3/B-	105.50	08/04	95.00	11.91	578	O
\$350mm	11.500%	SrNotes	11/01/08	B3/B-	103.83	11/04	95.00	12.47	625	O

**Balance Sheet**

(US\$, millions)	12/31/99	3/31/00
Cash	1,755	2,023
Total Debt	3,292	3,292
Gross PP&E	1,203	1,553
Equity Market Capitalization	7,410	8,105

**Income Statement**

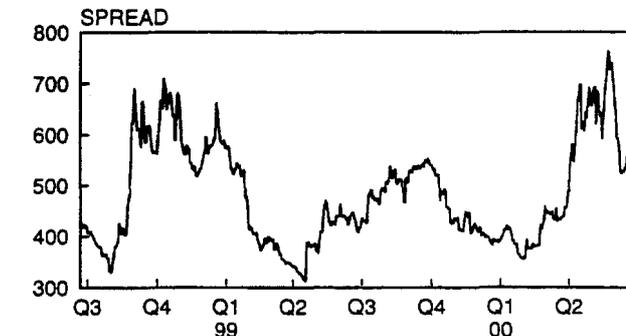
(US\$ millions)	4Q99A	1Q00A	FY00E
Revenue	185.4	222.9	1,089.2
Gross Margin	27.1%	26.6%	35.5%
EBITDA	(16.9)	(15.5)	35.4
Capital Expenditures	163	350	1,200

**Company Description**

PSINet is a facilities-based global provider of Internet and e-commerce solutions to businesses, and it calls itself an Internet Super Carrier. While many Internet service companies have chosen to focus on narrowly defined niches such as pure hosting or providing application services, PSINet has sought to be the "Supercenter" for Internet service offerings. PSINet offers a full suite of Internet access, transaction processing, carrier's carrier, and Web-based services, which include shared hosting and e-commerce. The company addresses a broad customer base from small businesses to very large corporations, as well as facility-less ISPs. It owns and operates a global IP network and has a presence in the top 20 markets worldwide.

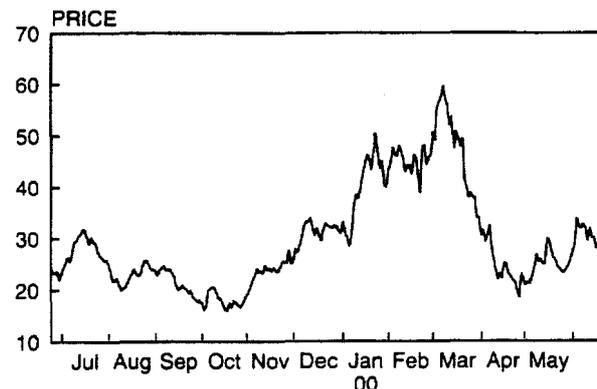
The company provides direct services to more than 90,000 business customers and processes over 20 million transactions daily, including over 12.5 million Internet transactions. PSINet has 1,200 sales people and another 2,500 indirect value added resellers. The company has purchased, via long-term Indefeasible Rights of Use (IRUs), the largest global broadband network in the Internet service provider and infrastructure high yield universe (see Table 1). Furthermore, it plans to have 2 million sq. ft. of Internet data center space on-line by the end of 2000.

**Spreads, 10% of 2005**



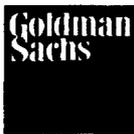
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**Equity Closing Price**



PSINet offers its customers a complete package of IP and e-commerce solutions, including shared and dedicated Web-hosting, collocation, and related Web-hosting management services. The company also offers access services such as global dial-up capability, DSL connectivity, and wireless solutions. In addition to access, PSINet can deliver advanced network applications such as voice over IP (VoIP), VPNs, and video streaming to business customers. PSINet recently acquired Transaction Network Services (TNS), which added transaction oriented point-of-sale and financial services.

PSINet owns its network, resulting in fixed capacity costs



regardless of the increasing sale of bandwidth to customers. It owns a fiber optic network in the United States and has secured IRUs for sizable amounts of capacity throughout Europe and Asia and key undersea cable links. PSINet's global data network is based on Internet Protocol and provides its customers Internet connectivity in over 150 countries through 900 network points of presence (POPs). While several of PSINet's large competitors have Internet operations spanning the U.S., Europe, and Asia, PSINet has established a presence in Latin America, Australia, and the Middle East as well, creating the industry's only truly global Internet Supercarrier.

PSINet currently operates Internet hosting facilities in New York, Los Angeles, Herndon, London, Sydney, Toronto, San Francisco, Tokyo, Amsterdam, and Switzerland. These data centers house the servers used to provide shared and dedicated Web site hosting and Internet offerings such as e-mail and e-commerce solutions. In addition to data centers, PSINet maintains two 24-hour-per-day, seven-days-per-week network operations centers that manage the network and deal with any problems. Consistent with the company's global focus, all of these facilities are managed by multi-lingual employees who are focused on providing comprehensive customer service.

**Recent Developments**

- On June 7, PSINet announced that it had purchased from Viatel over 14,000 km of dark fiber on Viatel's Pan-European Network. Additionally, as part of the transaction, PSINet acquired collocation space in 50 of Viatel's collocation facilities and points of presence. The deal significantly enhances PSINet's western European footprint and should allow the company to expand its operations on the European continent.
- On June 6, PSINet launched a solicitation for waivers to covenants of its 10% and 11.5% Senior Notes. The company is seeking to leave \$227 million of debt from its recent acquisition of Metamor Worldwide outstanding, rather than redeem the Metamor bonds as required under the covenants of PSINet's bonds.
- In March, 2000, PSINet agreed to acquire Metamor Worldwide, an information technology solutions provider. The PSINet-Metamor combination is intended to create a global business focused on using the Internet to provide business customers with turnkey solutions such as Web-design and managed hosting. Through Metamor, PSINet also acquires Metamor's controlling stake in Xpedior, a provider of e-business solutions to global companies, government, and emerging digital businesses. PSINet intends to use the technically skilled employees of Metamor and Xpedior to continue to develop its Web-hosting and enhanced services business lines.

**Credit Strengths**

- PSINet owns its own network. During the past two years, PSINet has spent roughly \$1 billion on its network,

purchasing dark fiber and capacity IRUs. The company is now the only Internet Infrastructure player to own and operate its own global broadband network.

- As an Internet SuperCarrier, PSINet offers one of the Internet industry's broadest sets of products and services. It has the ability to offer both large and small customers one-stop shopping for Internet solutions worldwide — a capability that no competitor we know of can match.
- Recent consolidations in the Internet and data services industry have validated PSINet's business model. NTT's acquisition of Verio, McLeodUSA's acquisition of Splitrock and NEXTLINK's acquisition of Concentric highlight the value and growth potential that traditional telecom service providers see in the data/Internet space.
- PSINet is uniquely positioned to take advantage of international Internet growth. Industry studies have suggested that international growth of the Internet should double the pace of growth in the U.S. over the next five years. Through an aggressive acquisition program, PSINet has expanded its presence to 27 countries on five continents.
- PSINet has significant liquidity, with over \$2 billion of cash on its balance sheet at 3/31/00.

**Credit Challenges**

- The ISP business is characterized by significant competitor (including many of the major telephone companies) and ongoing pricing pressures. While PSINet has sought to offset this by investing in network, careful attention to network investment and management will be necessary to protect profitability and the company's competitive position going forward.
- Acquisitions have typically been a meaningful source of growth for the company. Managing and integrating these acquisitions represents a management challenge.

**Industry Trends**

Internet usage is growing rapidly worldwide, and we think the companies providing Internet infrastructure services are well positioned to take advantage of this opportunity. According to Forrester Research and the Yankee Group, the U.S. Web hosting market is projected to grow from \$1.9 billion in 1999 to \$14.6 billion in 2003 — a 66% CAGR. While the U.S. was the site of most of the expansion in earlier years, *international markets have now surpassed it and continue to grow more rapidly.* Forrester and Yankee estimate that the European Web hosting market will grow from \$0.5 billion in 1999 to \$5.3 billion in 2003, a 80% CAGR. As a result, a number of Internet infrastructure companies are expanding their presence abroad, looking to take advantage of the high growth potential. In addition, customers are demanding that Internet Infrastructure companies provide them with a presence that is truly global.

Meanwhile, increased usage has driven similar growth for a number of other services, many of which are growing even



## PSINet

PSIX

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## High Yield Research

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more rapidly. These include e-commerce and other content services, managed access ("Intranets"), Web hosting, security services, and other products such as IP-based voice, fax, and video services. In our opinion, other factors are also driving (and benefiting from) Internet growth, including telecommunications deregulation and technological advances, both of which have made high-speed access more affordable to a broader range of businesses and consumers. This, in turn, is increasingly making Internet access and applications a requirement, rather than a luxury — even for smaller businesses.



**PSINet**

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### Company Description

RateXchange is a pioneer in the development of B2B e-commerce for the telecommunications industry. It is a development stage B2B, e-commerce company seeking to develop new transaction services for the estimated \$1 trillion international market for telecommunications services.

Founded in 1997, publicly traded RateXchange (OTC: RXCH) provides the telecommunications industry with an efficient, centralized exchange that significantly reduces the time and cost of selling, buying, and delivering bandwidth.

The company focuses on developing, operating, and maintaining liquid, efficient, and automated online market services to trade bandwidth and other telecommunications products. In February 2000, the company announced the launch of the RateXchange Real-Time Bandwidth eXchange ("RTBX").

Real-Time Bandwidth eXchange™ brings buyers and sellers of telecom capacity together in a centralized, online exchange for telecommunications bandwidth. The Real-Time Bandwidth eXchange is anonymous, and provides an efficient market, where all traders have equal and open access to price information.

CustomAuctions™ service markets the specialized sales of bandwidth, dark fiber, spectrum, or minutes capacity and enables RateXchange members to buy or sell these products through an online auction. Benefits include access to a worldwide market and a reduction in the time and cost needed to close specialized transactions.

Lead Generation service allows registered members to post offers to sell and bids to buy minutes, VoIP, bandwidth, and collocation. Parties are matched and they negotiate directly to complete a deal.

### Recent Developments

- On May 1, 2000, RateXchange announced that it will be conducting its first multi-million dollar CustomAuction™ for the buying and selling of telecommunications bandwidth. This online, anonymous auction is being conducted for a major carrier selling a wavelength (2.5 Gbps with the option to upgrade to 10 Gbps) of bandwidth between London, Frankfurt, Amsterdam, Paris and Brussels.
- On April 4, 2000, NetAmerica.com, Inc. ( to be renamed RateXchange) announced that it has secured a \$10 million lease line from Forsythe McArthur Associates, Inc. The Company, which secured an additional \$33 million just two weeks ago, will utilize the funds to further finance the company's development infrastructure and increase the amount of delivery hubs for its Real-Time Bandwidth eXchange (RTBX), an online commodities exchange for telecommunications bandwidth. This follows the company's recent announcement to deploy eight new U.S. domestic and four international delivery hubs by the end of the calendar year.
- On March 20, 2000, NetAmerica.com Corporation announced that it has completed a \$32.7 million private placement to accelerate the expansion of the company's operating subsidiary, RateXchange, Inc. - the leading business-to-business (B2B) e-commerce exchange for telecommunications commodities. This follows the company's announcement last month that, pending shareholder approval, it will change its name to RateXchange Corporation as part of its ongoing strategy to focus on the business of RateXchange. Quantum Partners LDC, a fund advised by Soros Fund Management LLC participated as the lead investor in the private placement
- Recently, the company announced the opening of its first two delivery hubs in New York and Los Angeles where carriers will interconnect to the exchange. A total of 14 delivery hubs will be installed in 2000, 10 in the US, two in Europe and two in Asia.
- During 2000, RateXchange will begin other revenue-generating services such as RateXchange CustomAuctions for buying and selling of other telecommunications products and services and to open additional interconnection delivery hubs.
- On February 7, 2000, RateXchange (then NetAmerica) announced its intention to change its name from NetAmerica to RateXchange and to focus its efforts on the business of RateXchange, Inc. As part of its restructuring, Donald H. Sledge agreed to serve as chairman and CEO. On April 20, 2000, the company's shareholders approved the name change.
- In April 2000 RateXchange launched RateXlabs (ratexlabs.com), which is an independent laboratory for economic and technical research for bandwidth commodity development and education.
- Since its launch in January 1998, the RateXchange portal (www.ratexchange.com) has registered more than 6,000 members, and is currently growing at a rate of 200 new members per month.





**Bond Price Data**

Amount	Coupon	Priority	Maturity	Ratings	Next Call		Bid Price	YTW	STW	Opinion
					Price	Date				
\$288mm	0/13.500%	SrDisc	05/15/08	B3/CCC+	104.50	5 /04	43.00	21.20	1494	NR
\$325mm	12.750%	SrNotes	04/15/09	B3/CCC+	106.38	4 /04	72.00	19.51	1333	NR
\$300mm	14.000%	SrNotes	02/15/10	B3/CCC+	104.67	2 /06	76.00	19.62	1351	NR

**Balance Sheet**

(US\$, millions)

	4Q99	1Q00
Cash & equivalents	436	1,144
Total Debt	505	812
PP&E	125	138
Equity Market Capitalization	2,435	2,907

**Income Statement**

(US\$, millions)

	4Q99A	1Q00A
Revenue	5.5	8.1
Gross Margin	-415%	-390%
EBITDA	(71.4)	(91.4)

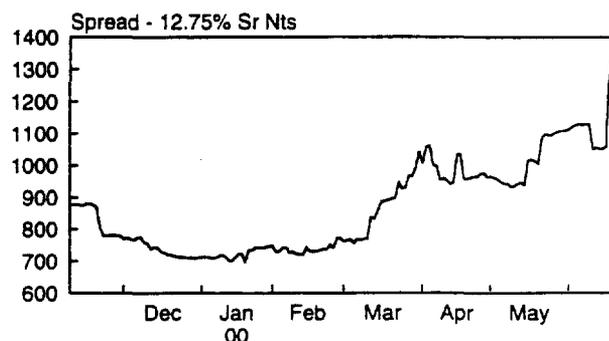
**Company Description**

Rhythms Netconnections provides DSL-based, broadband communications services to businesses and consumers throughout North America. Rhythms also offers a growing suite of network features and applications including Internet services that add value to the company's service offerings. The company's customers include ISPs, telecommunications carriers, and broadband communications services resellers, as well as individual businesses and enterprises that are not served by any resellers. As of March 31, 2000, Rhythms operated 20,000 DSL lines through 1,380 central office collocations in 49 markets across the U.S.

**Credit Strengths**

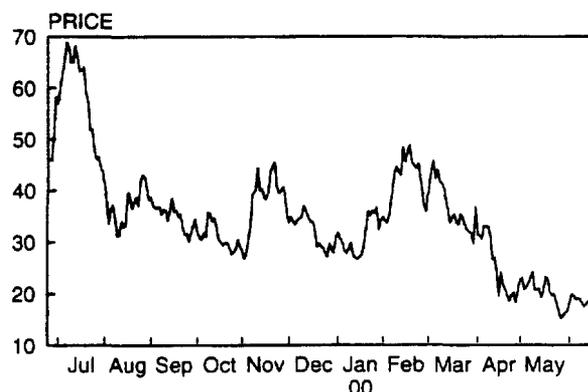
- Strong demand for services — The market for DSL services is currently supply-constrained. According to Goldman Sachs Equity Research, the DSL sector should grow from \$284 million in 1999 to \$6.5 billion in 2003, a 119% CAGR.
- Strong balance sheet — With over \$1 billion of cash and equivalents on its balance sheet at March 31, 2000, Rhythms has enough capital to provide operational flexibility and fund the company into 2001.

**Spread History**



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— 12.750% of 09

**Equity Closing Price**



**Credit Challenges**

- Execution — Despite robust demand for DSL services, Rhythms had only 20,000 DSL lines in service at the end of the first quarter.
- Though Rhythms is currently well-funded. The company consumes an enormous amount of capital. Rhythms is not expected to achieve positive EBITDA until 2002; in the meantime, the company will need to raise additional capital in the future.



## Rhythms NetConnections

RTHM

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### **Company Description**

Telseon provides managed gigabit data services between enterprise LANs and between enterprises and their service providers through advanced software technology and optical fiber networks. The company's service is used to link multiple hosting sites, enterprises, ASPs, and ISPs in a metropolitan area.

The service uses dark fiber from leading carriers such as Level 3, internally developed software, and Gigabit Ethernet technology to respond to the bandwidth bottleneck in the metropolitan area.

Telseon is a partner with service providers to deliver high bandwidth data services in the metropolitan area. Forrester Research and FirstBoston expect the market to exceed \$20 billion, and expect it to reach \$140 billion in 5-6 years. The company has deployed a production network in the Bay Area and plans over 15 additional networks by the end of 2000. Telseon plans to reach the top 20 U.S. markets in 2000 and reach into the top 50 markets in 2001. The company has contracted for 86 collocation facilities, with plans to double by year-end.

Telseon has equipment manufacturer alliances with 3Com, Riverstone, Cisco, Extreme and Foundry Networks. The company has service provider alliances with AboveNet, COLO.COM, Equinix and Verio. Customers include Incyte Genomics, Cooley Godward LLP, Compaq Computers, Verio, and Garage.com. Initial Investors include Sevin Rosen Funds and Crosspoint Ventures. Telseon's second round of funding came from Goldman Sachs, Morgan Stanley Dean Witter, Donaldson Lufkin & Jenrette, Pivotal Asset Management, and Hunt Ventures. Telseon received strategic cash and non-cash investments from Level 3, Nextlink, and Enron.

To accelerate the deployment of its managed gigabit services to the global metropolitan areas, Telseon leverages relationships with the leading providers of dark fiber and network services and operators of collocation facilities. For example, Telseon's relationships with COLO.COM, Level 3 and MFN are facilitating its expansion to strategic markets including Atlanta, Baltimore, Boston, Chicago, Cincinnati, Denver, Detroit, Houston, Los Angeles, New York, Miami, Newark, Orlando, Philadelphia, Phoenix, San Diego, San Francisco, Seattle, St. Louis, Stamford, Tampa and Washington D.C.

Telseon is operating its fiber optic network in the San Francisco markets, using 3200 fiber miles, with access to 10 markets within the metro. Telseon's fiber footprint is within reach of 60 collocation facilities in the area.

Telseon's management team brings together leaders from 3COM, AOL/Netscape, Bell Labs, Dell, Ernst & Young, ICG, Nextlink, Oracle and Star Telecommunications.



### Company Description

TeraBeam began operations in 1997 as Greg Amadon formed a team of scientists and engineers with the mission of breaking the bandwidth bottleneck that exists between businesses and the nation's long-haul fiber-optic networks. Today the company's Fiberless Optical(tm) network technology has caught the attention of investors, network visionaries and prospective customers who see TeraBeam as the long-awaited solution to the infamous 'last-mile' problem.

TeraBeam provides the speed of fiber-optic networks - without the fiber. TeraBeam's Fiberless Optics technology sends a low-power, invisible stream of light through the air to provide high-speed network connectivity. By eliminating the street trenching required by fiber-optic cables, TeraBeam breaks cost barriers and provides Internet or business-to-business connections in as little as a few days. Because the optical signal can travel through building glass, TeraBeam installs its transceivers in common office space, avoiding the need to negotiate building roof rights.

The company is led by Dan Hesse, former president of AT&T Wireless, and a management team with vast experience in the communications industry. Customer trials and network beta testing are under-way in preparation for a year 2000 network roll-out.

The company is well-funded and In April, TeraBeam launched a strategic partnership with Lucent Technologies. Under the agreement, Lucent is investing \$450 million. Previous rounds of financing have netted over \$125 million from major investors including: Softbank Venture Partners, Oakhill Venture Partners, Madrona Investments, Morgan Stanley Dean Witter, Merrill Lynch IBK Positions, Fidelity Management and Research Co., T. Rowe Price Investment Services, Capital Research and Management Co.

### Recent Developments

- In April 2000 TeraBeam announced the creation of TeraBeam Internet Systems and the launch of a strategic partnership with Lucent Technologies. Lucent is investing \$450 million (30% of TeraBeam Internet Systems). \$105 million of the financing was due in April 2000.
- Softbank Venture Partners, Oakhill Venture Partners, Madrona Investments, Morgan Stanley Dean Witter, Merrill Lynch IBK Positions, Fidelity Management and Research Co., T. Rowe Price Investment Services, Capital Research and Management Co. and five other unannounced major telecommunications strategic partners invested \$105 million of financing in April 2000.
- In March 2000, TeraBeam Networks provided Internet access to the PC Forum in Scottsdale, Arizona and established an intranet between Seattle and Scottsdale. TeraBeam's first customer trials began in March 2000 in a seven cell-site network deployed in downtown Seattle. TeraBeam Network's first customer is an e-commerce

company with requirements for serving 100+ Mbps into the Internet.

- Softbank Ventures and Oakhill Venture Partners invested \$10 million of financing in December 1999.
- In October 1999 TeraBeam Networks provided Internet access to the Internet2 Conference. Applications included the world's largest Internet video conference with over 50 institutions participating from around the world.
- In January 1999 TeraBeam Networks constructed the first known demonstration of streaming High Definition video over a free-space optical IP network.



## Company Description

The GTX (The Global TeleExchange, Inc.) operates a full service Internet-based portal and real-time applications exchange. The GTX enables member telecom companies to buy and sell products, access information, and perform market research on-line. Trading members may access real-time trading floors, broker assisted trading floors, and facilities management services.

The GTX created the Virtual Real-Time Exchange (VRTX) to facilitate anonymous, real-time trading of minutes and bandwidth intensive applications. The VRTX combines a web-based trading floor built on GTS software and systems, Lucent Technologies switching equipment, and the Bank of America's electronic banking systems. By linking the trading floor, network, and billing components, the VRTX is able to deliver services and pay Trading Members faster and more efficiently than the existing trading models.

VRTX members execute trades anonymously within 3 minutes and receive daily updates regarding the quantity of executed trades. Trading Members may choose to settle client transactions within 3 days from trade completion. By monitoring account balances, VRTX ensures that payments are made. The speed and efficiency of these transactions allows carriers to sign 1-4 week agreements.

Carriers may also leverage GTX carrier relations broker services via the AGent X system of Online Trading Floors. Trading Members include the largest incumbents to the newest facilities bases carriers worldwide and have posted a global collective footprint of over \$15 billion in capacity to trade in the spot and forward markets today. Trading Floors are available for bandwidth (local, national, and international), collocation facilities, and dark fiber.

Whether using real-time trading floors, broker assisted trading floors, or facility management services, GTX customers access an experienced team of Telecom professionals who understand the details of the business. By understanding the details, the management team has assembled the financing, technology, and customers to fulfill the obligations of a 21st century telecom exchange.

The GTX is headquartered outside of Washington DC in McLean, with a European office in London. Carriers can connect to VRTX in London and New York today with expansion to include Los Angeles, Miami, Frankfurt and Paris by July 2000.

## Recent Developments

- On June 20, 2000, The Global TeleExchange opened the minutes-based trading floor of its Virtual Real-Time Exchange (VRTX) and took a giant step toward creating an ultra-efficient deregulated telecommunications industry. VRTX is an Internet-based marketplace that enables telecom companies to instantly move wholesale phone and data applications from one network into another. It is made up of three components: a web-based trading floor built on

GTX patent-pending software and systems, Lucent Technologies' switching equipment, and Bank of America's electronic banking systems. VRTX adds significant efficiencies to the telecommunications/Internet infrastructure industry.

- On June 6, 2000, the Company announced a strategic agreement to purchase Lucent Technologies Softswitch, its breakthrough software switch technology. The Lucent Softswitch is a key technology showcased in The GTX's Virtual Real-Time Exchange (VRTX), an electronic market for carriers to trade, provision and monitor global Public Switched Telephone Network (PSTN) and Voice-over Internet Protocol (VOIP) minutes via a physical telecom delivery system.
- On June 6, 2000, The Company announced that it will use Bank of America's global electronic banking system as part of a real-time telecom exchange. This agreement will enable expedited settlements for wholesale telecommunications transactions executed on Internet-based Trading Floors and delivered over Next Generation switching equipment from Lucent.
- On May 9, 2000, The GTX announced the deployment of its newest Exchange Point in Los Angeles, creating a partnership with COLO.COM, a leading provider of carrier neutral collocation services.



06/22/2000



### Company Description

TriVergent is a broadband telecommunications company offering automated Web design and Web hosting, high-speed data and voice services to small and medium-sized businesses in the southeastern United States. A network buildout is under way, and is expected to encompass approximately 275 Unified Central Office Collocations (UCOLLO). The network will allow TriVergent to provide simultaneous voice and data services supported by various levels of firewall security systems and multi-protocol DSL services. DSL services include VoDSL and Nortel Networks 1-Meg Modem.

Once completed, the TriVergent network is expected to cover 30+ metropolitan areas and pass more than 13,000,000 access lines.

The company is currently selling bundle of services in Greenville, Spartanburg, and Anderson, South Carolina; Atlanta, Georgia; and Greensboro, Winston-Salem, and Burlington, North Carolina. The company plans to move into other southeastern markets throughout the remainder of 2000.

Global Crossing's Carrier Services Division has signed a \$50 million agreement to provide network services to TriVergent, including network transport, dedicated Internet access, Asynchronous Transfer Mode (ATM) network services and lease fiber capacity.

TriVergent has a \$302 mm financing package for the development of its high-speed Internet and broadband network. This amount is consists of two types of financings: recently completed \$120 million fully underwritten Senior Secured Credit Facility, the participating banks in this package are Toronto Dominion Bank, CIT Group, First Union Securities, CIBC, and Wachovia; and \$45 million underwritten by Nortel Networks.

Equity funding totaling \$137 mm in from existing investors: Moore Capital, Richland Ventures, First Union Capital Partners, Boston Millennia Partners, Seruus Ventures, Southeast Technology Fund, and Trivergent management, as well as Bank of America, CIBC, CIT Group, Toronto Dominion Securities, and Nortel Networks.

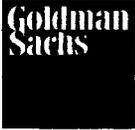
The company was founded by former managers of Corporate Telemanagement Group, now Qwest Communications, and Tel / Man, now MCI WorldCom. TriVergent's management team and directors have more than 200 years of aggregate competitive telecom experience.

### Recent Developments

- June 13, 2000: Gabriel Communications and TriVergent Communications, jointly announced that they had entered into an Agreement and Plan of Merger to combine their two companies to form a super-regional, facilities-based integrated communications provider.
- The combined company has fully-funded plans to develop

networks in over 40 markets in 16 contiguous Midwestern and southeastern states.

- The combined company is expected to have 40 networks operational by year-end 2001, with over 9 million addressable business lines, more than 25 million total addressable lines and approximately 450 collocations in service.
- On a pro forma basis, the combined company currently has approximately 800 employees and total invested and committed capital of over \$800 million. TriVergent and Gabriel are currently operational in a total of 16 markets and expect that the combined company will be in over 30 markets and will have approximately 350 collocations in service by year-end 2000.
- David L. Solomon, chief executive officer of Gabriel, will become chief executive officer of the combined company. Charles S. Houser, chairman and chief executive officer of TriVergent, will serve as vice chairman of the combined company's board of directors. Gerard J. Howe will continue as President and COO of Gabriel Communications and, in addition, will be president, strategic initiatives, of the combined company. G. Michael Cassity, president and COO of TriVergent, will continue as president and COO of TriVergent and will be president and COO of the combined company.





Company Description

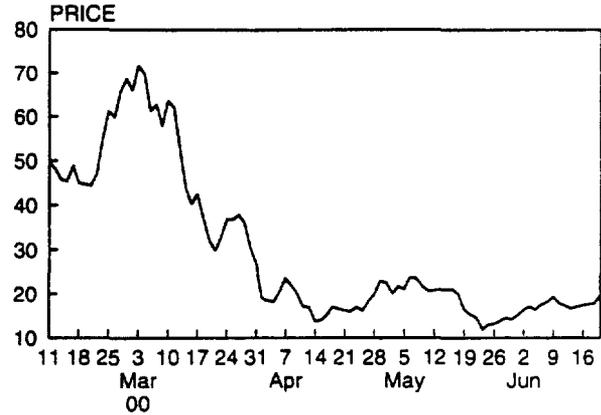
VIA Net.Works, Inc., is a leading international provider of Internet access and services focused on small and mid-sided businesses in Europe and Latin America.

The company was formed in June 1997 and has been built through the acquisition, integration, and growth of 19 Internet service providers in 12 countries.

VIA companies offer a comprehensive range of services, including Internet access, email, domain registration, Web site hosting, advanced data networking services, e-commerce tools, and Internet security. These services are supported by VIA's synchronous, ring-protected trans-Atlantic and pan-European STM-1 (155Mbps) backbone network.

VIA Net.Works completed its initial public offering in February 2000, raising approximately \$333 million net of underwriting fees. Prior to the Company's IPO, operations were funded by investments from The Centennial Funds, Norwest Equity Capital, Telecom Partners II, HarbourVest International, Providence Equity Partners, Verio Inc. and Boston Millennia Partners.

Equity Closing Price



Recent Developments

- On April 3, 2000 VIA acquired Internet Access Eindhoven (IAE), located in the Netherlands, for \$7.5 million in cash.
- As of March 31, 2000 the company had 56,800 business customers out of a total customer base of 113,200 representing 20% and 9% growth in business and total customers, respectively, since December 31, 1999.
- During the first quarter 2000, Via Net.Works completed three acquisitions in France, Germany, and Austria including: Net4You (Austria) — Purchased on January 4, 2000, for \$2.9 million; NDS Telecom (France) — Purchased on January 7, 2000, for \$11.8 million; and ISAR (Germany) — Purchased on February 16, 2000, for \$8.6 million.

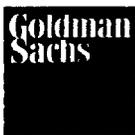


Via Networks, Inc.

High Yield Research

VNWI

06/22/2000



Bond Price Data

Table with columns: Amount, Coupon, Priority, Maturity, Ratings, Next Call (Price, Date), Bid Price, YTW, STW, Opinion. Rows include \$720mm and \$1,236mm bonds.

Balance Sheet

Table with columns: (\$,mm) and 1Q:00 A. Rows include Cash & equivalents, Senior Facilities, Sr. Notes, Other, Total Debt, and Equity Market Value (6/20/00).

Credit Statistics

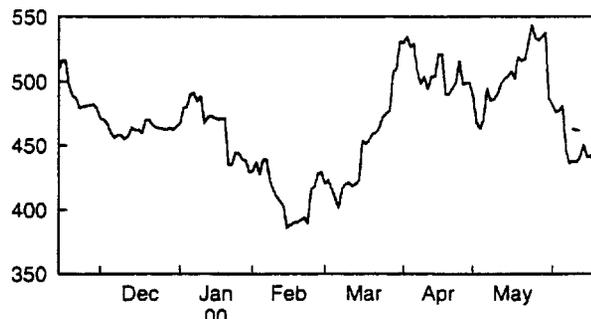
Table with columns: (\$,mm), PF is VSTR/OMPT/AERL, 1Q:00A, and 1Q:00PF. Rows include Covered Pops, EOP subscribers, Penetration, Service Revenues (LQA), and EBITDA (LQA).

Company Description

VoiceStream Wireless Corporation is the dominant PCS operator in the United States utilizing the GSM standard. The company was formed on May 3 1999, after being spun off from Western Wireless Corporation.

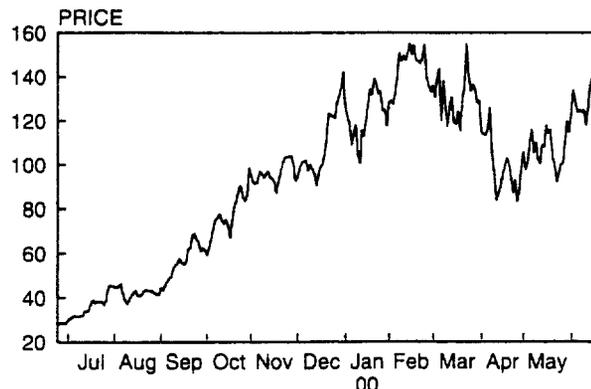
VoiceStream has minority interests in four joint ventures that are controlled by Cook Inlet Region, Inc. These joint ventures typically hold licenses in markets where the company either does not hold licenses or owns limited spectrum capacity.

Spread History



Left Axis: 0/11.875% of 09

Equity Closing Price



Omnipoint were transferred, along with the Designated Entity status, into two new Cook Inlet joint ventures, bringing the total to four. Collectively, these joint ventures hold licenses for new or additional spectrum capacity in 141 BTA markets covering some 119 million POPs.

Company Outlook

VoiceStream's network represents an extremely attractive strategic asset, with collective ownership of 325 broadband PCS licenses covering 23 of the top 25 U.S. markets and over 200 million licensed POPs.



and its extensive U.S. coverage, we would expect strategic alliances with international telecommunication companies to play a role in potential new business opportunities for VoiceStream going forward.

Since the company's spin-off from Western Wireless, VoiceStream has had superior operating performance relative to other PCS carriers by most standards. With the success of the "Get More" strategy, the company, on a stand-alone basis, has experienced an industry-leading average annualized incremental penetration of 2.5% over the past five quarters, and ended Q1:2000 with total penetration of just over 4%. The popularity of VoiceStream's simplified pricing plans has also led to one of the strongest consumer-based ARPU results at \$56.58.

Replicating the success of VoiceStream's brand and operating performance will be the key to the success of the Omnipoint and Aerial acquisitions. By most every standard, Omnipoint and Aerial results have lagged behind those of VoiceStream. We fully expect VoiceStream to achieve success in gaining greater operational efficiencies, stronger penetration rates, and higher ARPU customers in each of its markets. This, however, is not a simple task, and we expect integration challenges and increased costs related to the development of the network to result in greater EBITDA losses over the near term.

VoiceStream recently launched its initial data service offering through a personal on-line portal called MyVoiceStream.com. Through the Web site, subscribers have the ability to send and receive basic information-based services to and from their wireless phones. The initial service includes SMS two-way messaging, personalized updates of selected news, sports and stock prices, downloadable ringer-tone selections, on-line phonebook management, and on-line bill viewing and payment services. The company expects to begin offering WAP-enabled, as well as HTML-based, wireless Internet phones for sale later this year. VoiceStream also expects to begin its initial migration to 2.5G this fall in several key markets, with full rollout expected by mid-2001. When completed, the upgrade to high-speed GPRS will support data speeds up to 112 KBPS, or two times faster than the fastest 56 KBPS analog modems used in most PCs today.

Over the next several quarters we expect EBITDA losses to widen as the company moves aggressively to integrate the operations of Omnipoint and Aerial, and prepares for a costly nationwide marketing blitz to rebrand the newly acquired markets. For the remainder of FY2000, the company expects to spend \$1 billion in capital expenditures for the development and expansion of existing and new markets, which includes the joint ventures. In addition, the company expects to spend approximately \$200 million on the development of new call centers, on the expansion of existing call centers, and on other back office systems relating to the integration of Omnipoint and Aerial. To fund these capital needs, the company intends to use cash on hand of \$176 million and availability under its \$1.5 billion revolver which was undrawn at quarter end. The new credit facility, which includes the \$1.5 billion revolver and \$1.9 billion in outstanding term loans, also permits for up to \$1.5 billion of

additional incremental secured indebtedness. On April 28, the company entered into a new \$1 billion vendor facility, which then became part of the total credit facility.

*Goldman, Sachs & Co. or an affiliate has rendered significant corporate finance services to VoiceStream Wireless Corporation within the past 12 months. A director and/or employee of Goldman, Sachs & Co. is a director of VoiceStream Wireless Corporation. As a result of its position in VoiceStream Wireless Corporation's securities, regulations require that we indicate that Goldman, Sachs & Co. may be deemed an affiliate of the issuer. Investment funds affiliated with Goldman, Sachs & Co. (the 'Goldman Sachs Funds') have a principal investment in VoiceStream Wireless Corporation (the 'Company'). The Goldman Sachs Funds own approximately 10.2% of the outstanding shares of Common Stock of the Company. Pursuant to an agreement among the Company, the Goldman Sachs Funds and certain other shareholders, the Goldman Sachs Funds have the right to designate a nominee for election to the Company's Board of Directors. As a result of the Goldman Sachs Funds relationship to the Company, Goldman, Sachs & Co. may be deemed an affiliate of the Company.*



Bond Price Data

Table with columns: Amount, Coupon, Priority, Maturity, Ratings, Next Call (Price, Date), Bid Price, YTW, STW, Opinion. Rows include \$500mm and \$1,500mm bonds.

Balance Sheet

Table with columns: (US\$, millions), 3/31/00, 12/31/99. Rows include Cash & equivalents, Total Debt, Gross PP&E, Market Capitalization.

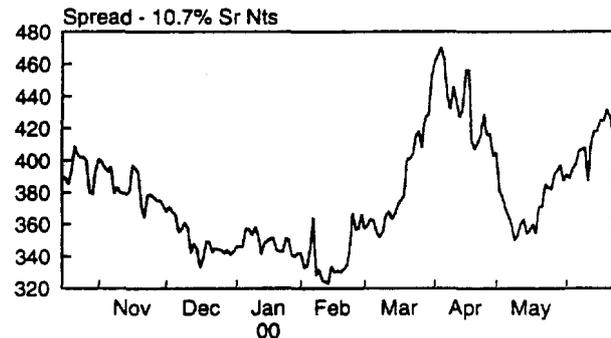
Income Statement

Table with columns: (US\$, millions), 1Q00, 1Q99. Rows include Revenue, Gross Margin, EBITDA, Capital Expenditures.

Company Description

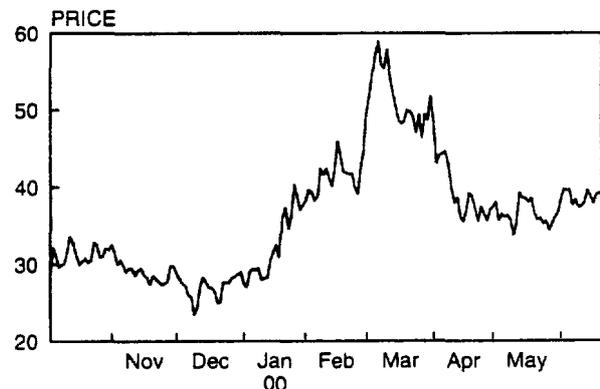
Williams Communications Group owns or leases a nationwide fiber optic network that is focused on providing voice, data, Internet, and video services to communications service providers.

Spread History



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Equity Closing Price



offer a greater variety of services to its customers and deliver them faster and at a lower cost.

By the end of the third quarter of 2000, Williams will complete an OC-48 IP over SONET backbone providing 7.1 Gbps of Internet connectivity.

Williams' solutions unit distributes and integrates communications equipment from leading vendor for the voice and data needs of businesses.



domestic and international businesses that create demand for capacity on the Williams network, increase its service capabilities, strengthen its customer relationships, develop its expertise in advanced transmission electronics, or extend its reach. Williams' domestic strategic investments include its ownership in Vyvx, a leading video transmission service for major broadcasters and advertisers, and minority interests in several U.S. communications companies. The company's international strategic investments include ownership interests in communications companies in Brazil, Australia, and Chile.

Approximately 85% of Williams Communications' stock is held by Williams Companies, which, in 1985, became the first energy company to use its core competency as a builder of networks to enable competition in the communications industry. Williams has a 25-year IRU to use approximately 2% of WinStar's wireless local capacity. In turn, WinStar has a 25-year IRU to use four strands of Williams' fiber over 15,000 route miles.

### Recent Developments

- On June 12, Williams announced an agreement to provide switched voice services on its nationwide network to Norstar Communications, a privately held long-distance voice and Internet service provider. Williams will provide Norstar with switched voice minutes over a three-year period. Norstar will also privately brand services from Williams' portfolio of voice services.
- In early June, Williams announced that it would create a separate Internet services group within its network business unit. The group will leverage Williams' fiber network to create a next-generation IP core network. The group will also begin a phased introduction of many IP-based value-added services. The creation of the group provides the focus required for rapid deployment of its IP network and services without any lack of focus on its other core initiatives. The new Internet group's functions will include planning and architecture, operations, engineering, support, product marketing, and systems management. The group is expected to grow to more than 125 dedicated staff by the end of 2000.
- On May 30, Williams announced that it had selected SONET equipment and services from Nortel Network for the first phase of its optical expansion into 50 metropolitan markets. Williams will use the products to connect markets to its existing long-haul network.
- On May 22, Williams announced that it and National Grid, a U.K.-based electric and telecom utility, and Chilean telecom carrier Telefonica Manquehue had created Southern Cone Communications Company SA. The new broadband fiber network is expected to link Argentina and Chile. Williams' \$24.5 million investment represents a 19.9% stake in Southern Cone. The Southern Cone network will be 4,300 km in length. The end points of the network will connect to the landing points of international submarine cable planned to circle South America. When complete, the system will link Argentina and Chile with cables to Peru, Colombia, Panama, Venezuela, Brazil, and the Caribbean, and ultimately the Williams network in the U.S.

### Credit Strengths

- **Large Market Opportunity:** Williams intends to capture a substantial market share in the IP wholesale market. According to International Data Corp. (IDC), IP traffic volume through major U.S. exchange points has risen 200% every year since 1994. IDC also predicts that annual wholesale IP revenue will more than triple over the next four years from \$3.8 billion in 2000 to a projected \$13.35 billion by 2004. By the end of the third quarter of 2000, Williams will complete an OC-48 IP over SONET backbone, providing 7.1 Gbps of Internet connectivity. Furthermore, Williams is the only carrier pursuing an aggressive 100% wholesale strategy. Since it does not compete with its customers for end-users, Williams has an advantage over other long haul carriers.
- Williams is constructing a substantial amount of its network through leasing and joint ownership agreements. The company will benefit from this capital efficient strategy and increase its time to market by jointly completing sections of its network. The company has strategic and financial relationships with SBC Communications, WinStar, Intel, Telmex, and Metromedia Fiber. In addition, Williams expects to receive high margin proceeds from the sale of dark fiber.
- Williams has a strong parent in Williams Companies, a national pipeline company with a \$19 billion market capitalization. In addition, Williams Communications is building its network along its parent company's pipeline rights of way. This gives the company an advantage over companies that build their network over more public rights of way such as railroads, telephone poles, or overheard power transmission lines. The company does not need to negotiate rights of way with multiple partners and patch them together to attain a national footprint.

### Credit Challenges

- Williams, like other fiber-builders, will continue to expand on its business plan and increase capital expenditure estimates going forward. In addition, many industry experts predict a fiber glut owing to the significant increase in fiber network construction. However, given the current evolution of the marketplace which is driven by the growth of the Internet and multimedia, we think a substantial demand for additional fiber exists.
- Williams is just one of a number of planned high capacity network buildouts. In addition to significant CLEC and other local activity, *Broadwing, Qwest, and Level 3* are all constructing new high capacity long haul fiber networks. We think that over-capacity, if it does occur, is likely to be localized to some markets or product lines; it will probably prove more disadvantageous to incumbents than to newcomers, given the relative cost structures of their networks and operation, as well as the data/voice mix. Nevertheless, the probability, timing, and exact effect of any such developments cannot be accurately assessed.
- An increasingly competitive global telecom marketplace may result in longer-term pricing pressures. The pressures might



squeeze operating margins of carriers' carriers, especially as new competitors enter the marketplace.

### **Industry Trends**

The fiber builders segment of the industry has seen an influx of new competitors in recent years, as the fiber excess that existed in the early 1990s has been more than absorbed by growing Internet and data traffic. Advances in fiber technology allow for greater capacity at lower prices, supported by more broadly spaced (and thus less expensive) electronics and increases in bandwidth capabilities. In addition, developments in optical switches, routers, and cross connects have reduced cost and increased fiber capacity for carriers. This, in turn, has led to concerns about the possibility of future overcapacity. We believe such fears are unfounded, because we think the lower cost of bandwidth delivery is driving significant growth in the demand for Internet and data usage. The elasticity is greater than 1. Furthermore, because fiber is more readily available and optical equipment advancements have driven down the cost to light a network, the barriers to entry have been lowered for "smart build" communications providers, which purchase dark fiber and bandwidth on a wholesale basis.

The most recent trend to emerge among fiber builders is the construction of data center/collocation facilities for housing the equipment of their end customers. Internet-centric dot-com customers place their Internet servers in these facilities and gain Web connectivity. Some emerging "smart build" telecommunications providers place voice-switching equipment in these facilities as well. The build-out of data center facilities is consuming more and more capital from our traditional fiber builders, and puts them in competition with Internet infrastructure providers such as PSINet and Exodus.

We follow seven public fiber builders for credit comparison analysis. The group has a combined equity value of \$125 billion — \$24 billion in total debt and \$22 billion in gross property plant and equipment. The fiber builders have constructed their networks with less leverage than the CLECs, as shown by a 1:1 ratio of debt to PP&E for the fiber builders and a 2:1 ratio of debt to PP&E for the CLECs. Many of the builders have financed their networks through presales of capacity and equity offerings. Because of their more conservative financing approach, the fiber builders tend to trade tighter to comparable Treasuries than CLECs do.



**Williams Communications**

WCG

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**Bond Price Data**

Amount	Coupon	Priority	Maturity	Ratings	Next Call		Bid		YTW	STW	Opinion
					Price	Date	Price				
\$325mm	12.500%	SrNotes	04/15/08	B3/B-	NC	NC	95.00		13.55	728	○
EUR200mm	12.750%	SrNotes	04/15/10	B3/B-	106.38	04/05	95.50		13.58	839	○
\$635mm	12.750%	SrNotes	04/15/10	B3/B-	106.38	4 /05	94.00		13.88	777	○

**Balance Sheet**

(US\$, millions)

	4Q99	1Q00
Cash & equivalents	246	857
Total debt	1,625	3,046
Gross PP&E	2,012	2,291
Market capitalization (6/12/00)	6,192	5,100

**Income Statement**

(US\$, millions)

	4Q99	1Q00	2000E
Revenue	141.0	163.0	700.0
Gross margin	35.4%	40.7%	45.0%
EBITDA	(61.8)	(56.6)	(162.9)
Gross PP&E/Net debt	1.5x	1.0x	1.0x
Net debt/annualized revenue	2.4x	3.4x	4.4x

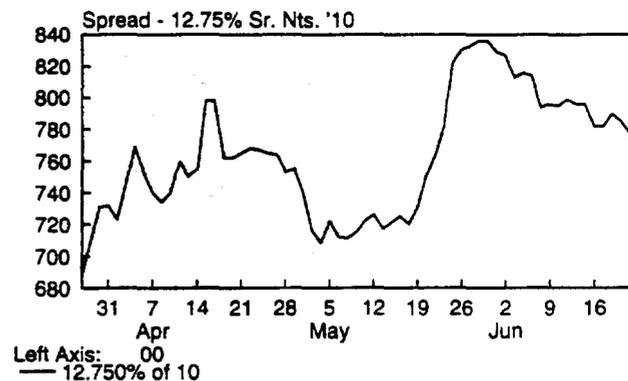
**Company Description**

WinStar offers broadband services to its customers over its own end-to-end broadband network. The company has local fiber rings in the top 50 markets covering 6,000 route miles. In addition, WinStar has wireless spectrum covering the entire country, with an average of 10 channels in 60 markets. WinStar currently serves 60 major markets in the U.S. including each of the top 30 U.S. markets. The company also offers service in 12 overseas markets, including Amsterdam, Brussels, Buenos Aires, London, and Tokyo. WinStar's broadband services revenue includes revenue derived from Internet connectivity, data transmission services, Web hosting, network capacity sales, local and long distance voice services, Web design and development services, network design and implementation, and equipment selection. The company also develops and distributes information content through television, video, cable and radio.

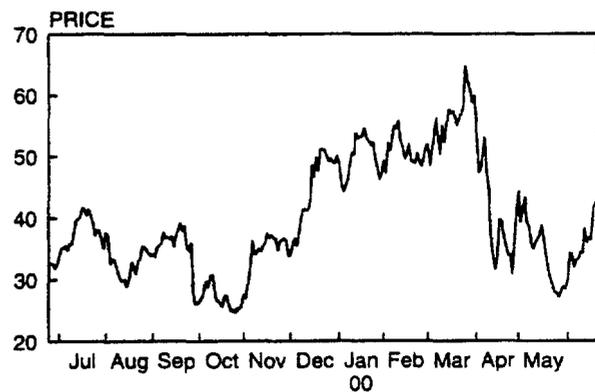
WinStar finished the first quarter with 9,700 building access rights plus 1,500 building options that are not expected to be on the network in the next 12-18 months. WinStar's 9,700 buildings represent 250,000 addressable customers, 1.6 billion square feet, and 5.4 million desktops. The company has 174 hub sites connected to fiber, connecting 2,000 buildings on-net. WinStar has 52 hubs under construction.

WinStar continues to add fiber to its network for long haul

**Spread History**



**Equity Closing Price**



and local backbone traffic. At the end of the first quarter, WinStar had 300 miles of lit fiber from Metromedia Fiber, of 6,000 contracted route miles. The 300 miles are in five metro markets: New York City, Philadelphia, Washington DC, Chicago, and San Francisco. WinStar intends to have 23 metropolitan areas lit by the end of 2000. We expect WinStar to receive the rest of the Metromedia fiber by the end of 2001. WinStar also has capacity on the Williams long haul network from Dallas, through Houston, Atlanta, Washington DC, and New York. By the end of 2000, WinStar intends to have 7,000 lit miles on the Williams network, and 16,000 lit miles by the end of 2001, connecting 60 cities on one seamless network.

WinStar's e-business initiatives include Web design and



development, e-commerce, multimedia, marketing services, ASP services, and hosting/collocation. WinStar is currently Microsoft's largest ASP investment to date, and Microsoft chose only 15 ASPs worldwide to offer its Microsoft Office 2000 on-line. Finally, WinStar has a robust e-business infrastructure, with a national end-to-end broadband network, Tier 1 IP backbone, and 125,000 square feet of collocation space.

WinStar intends to enter international markets by acquiring spectrum through a grant, auction, purchase, or joint venture. Once the spectrum is acquired, WinStar will install data switches through its Lucent financing agreement. WinStar estimates that it will cost \$3 million to build out a data market versus \$10 million for a voice market. To date, WinStar has acquired spectrum in 24 of its 50 targeted markets. The company also has European inter-city dark fiber on the Circe ring (Viatel) and in-city rings from Metromedia Fiber Network.

### Recent Developments

- For the first quarter of 2000, WinStar reported revenue of \$163 million, a 15% sequential increase over the \$142 million reported for the three months ended December 31, 1999. Part of WinStar's significant revenue growth was driven by the sale of a TV license in its new media division. Of the total revenue reported during the first quarter, WinStar generated \$133.5 million in CLEC revenue, a sequential increase of 18%. For the third quarter in a row, the company improved its gross margin by over 500 basis points. The company also reduced its SG&A as a percentage of sales from 79% in the fourth quarter to 76% in the first quarter of 2000. WinStar reduced spending as a percentage of revenue contributed to its EBITDA loss of (\$56.6) million during the three months ended March 31, 2000, from (\$61.8) million in the fourth quarter.
- On March 24, WinStar announced that it had been awarded a sole source Metropolitan Area Acquisition (MAA) award from the General Services Administration's (GSA) Federal Technology Service (FTS) to provide data, local switched voice services, and dedicated transmission services to government users in Cincinnati, Ohio. The company is the first broadband fixed wireless carrier to be awarded a major federal local contract. Previously, contracts had been awarded to AT&T, Sprint, MCI WorldCom, and the ILECs. WinStar estimates that the contract is potentially worth \$100 million in revenue over eight years. The contract lasts four years with four one-year options. In addition to providing its basic services, WinStar will have the ability to offer new technologies and services as they become commercially available.
- Following the Cincinnati award, WinStar announced six more contracts that in total, give it the opportunity to earn \$1.66 billion in revenue over the next eight years.
- After downsizing its proposed \$2 billion high yield offering by 20%, WinStar priced \$1.6 billion of high yield notes on March 27, 2000. The new senior notes will have less restrictive covenants than the notes being tendered for, which should aid WinStar in raising capital down the road.

- In addition to the high yield offering, WinStar received a \$150 million increase to its previously committed bank facility, to \$1.15 billion. WinStar intends to refinance its existing \$2 billion credit supply purchase facility with Lucent. Once the bank facility is closed, Lucent will make available \$1 billion of loans at any one time.

### Relative Value

WinStar ranked 11th, or next to last, in our scoring analysis. Despite its high leverage (net debt to annualized revenue of 3.4x), we rate WinStar Sr. Notes and Sr. Discount Notes Market Outperformer. We think WinStar 12.75% Sr. Notes trading at 91 or a YTW of 14.48% offer compelling value for investors.

WinStar has consistently improved its gross margin by 500 basis points or more for the past three quarters in a row. This is important evidence of its totally on-net customer growth.

WinStar recently announced seven government contracts that could provide up to \$1.6 billion in total revenue over the next eight years. The added on-net buildings required for the government contract should also provide WinStar with additional on-net selling opportunities.

We expect WinStar to continue its gross margin expansion throughout 2000 and exit the year with a run rate gross margin of nearly 50%. We also expect the company to exercise further SG&A discipline to reduce its EBITDA losses and reach EBITDA breakeven in 2001.

### Industry Trends

The competitive local exchange carrier (CLEC) opportunity is a significant one. With less than a 5% total market penetration, CLECs are targeting under-served customers of the incumbent local exchange carriers (ILECs), which are former monopolies. The growing demand for affordable bandwidth should give CLECs an opportunity to acquire customers as long as they adhere to attractive pricing, high quality customer service, and differentiated offerings. In our view, a CLEC needs four key elements to succeed:

- 1) Management and sponsorship
- 2) Access to capital
- 3) Successful execution of the stated business plan
- 4) The maintenance of a consistent strategy with investors

We follow 13 CLECs in the high yield market. Because most of these companies are still in the build-out mode and currently operating with negative cash flow (EBITDA), we carefully track the trends in revenue growth and margin improvement. In 2000, we expect most of the CLECs we rate Market Outperformer to achieve double-digit sequential revenue growth each quarter — especially in local telecommunications and data services. We also look for several carriers to improve their gross margins and SG&A



## WinStar Communications

WCII

**Market Outperformer**

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expense controls. Most of the carriers that we rate Market Performer have fallen behind in hitting their revenue growth targets and/or failed to improve their margins. Because the high yield market is currently difficult for most CLECs to access, we are concerned with the liquidity outlook for some of the carriers that have fallen behind.

In the first quarter, the CLECs in our comparison group increased revenues sequentially by over 12%, collectively reaching \$1.3 billion. EBITDA losses for the group were \$(162.5) million, including five companies generating positive EBITDA. Gross property, plant, and equipment for the group totaled \$13.26 billion, and the group has \$18.7 billion in total debt and \$5.2 billion in redeemable preferred. The group's enterprise value is now \$66.8 billion, which is a 60% increase over its total when we published our book for the 1999 Goldman Sachs Leverage Finance Conference in October of 1999. The total installed lines of the group grew 20% sequentially to 4,809,115 lines. All of the CLEC lines pale in comparison to the five Regional Bell Operating Companies (RBOCs) and GTE, which have over 160,000,000 installed lines. There is plenty of market opportunity. The CLECs also continue to make significant progress in moving lines onto their networks or switches via unbundled network elements (UNEs), which should contribute to improving gross margins in the future.

The group remains reasonably funded, with total cash at the end of the first quarter of \$10.7 billion. We are concerned about the liquidity of a few CLECs in our group, such as Adelpia Business Solutions, CapRock Communications, and KMC Telecom. Over the past 18 months, more than \$9.5 billion in private equity has funded various CLECs through their capital shortfalls, and some carriers have turned to the bank market. Given the current state of the high yield market, we think CLECs will continue to look to those sources for capital.



## **WinStar Communications**

WCII

*Market Outperformer*

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### Company Description

WorkNet Communications Inc. builds, owns and operates point-to-multipoint, high-speed fixed-wireless metropolitan area networks in 12 cities in the central United States and is rapidly expanding to cover a national footprint of 200 cities. The Company's primary business is delivering high-speed (300 Kbps to 4 Mbps, symmetrical) Internet access to small and mid-sized business customers. To deliver Internet services, the Company uses its own patent-pending, facilities-based BitBeam™ wireless network that completely bypasses the RBOC's local loop, last-mile facilities. The Company also offers local and long-distance voice services on a resell basis (from the RBOC and Qwest, respectively), which traffic the Company plans to move on-net later this year using the Company's proprietary VOIP wireless hardware as well as off-the-shelf equipment from vendors such as Cisco and Lucent. The Company will also seek to expand its relationship with the customer by offering other telecom and value-added network and data services (e.g. hosting), and is currently pursuing strategic relationships with established vendors in order to bring these services to market quickly.

WorkNet is, by a wide margin, the nation's largest private company building fixed-wireless networks, with over 260 people in 12 cities and growing.

The Company's domestic market strategy is tightly-focused on small and medium enterprises in second- and third-tier cities, as well as suburban areas surrounding first-tier urban markets. Small and medium enterprises are a vast and traditionally underserved market segment representing approximately 50% of all businesses and growing much more quickly than other segments. The Company also believes that its target cities will have less competitive activity and in some cases only limited broadband network capacity.

The Company's low capital cost (both hard and soft costs) of building a complete point-to-multipoint city POP gives the Company a significant financial advantage. In addition, the Company believes that its four years of operational experience, with an average monthly churn of less than 0.5%, lend it a significant competitive advantage. As the markets have come to understand the value of owning one's own broadband local loops, the WorkNet believes it is well-positioned to capitalize on its speed, technology, quality and cost advantages.





### Company Description

Yipes Communications provides managed optical IP networks, enabling business customers to extend IP services at LAN speeds across their network and to the Internet using reliable and scalable IP-over-glass networks. The Company is the first national provider of fully scalable bandwidth-on-demand for business applications. It currently serves areas in Boston, Chicago, Washington DC, Philadelphia, Miami, and Denver, with plans to establish a nationwide footprint by the end of this year.

Yipes offers two products, both scalable from 1 Mbps to 1 Gbps in 1Mbps increments: Yipes NET High Speed Internet Service, providing managed connectivity to the Internet, and Yipes MAN Metro Area Service for LAN-to-LAN IP Networking, which connects business partners within a metropolitan area. Leveraging on the elegance of native Ethernet technology, Yipes provides scalable service at roughly 40 percent of the price of traditional data communications services. The all-IP packet-based network guarantees maximum flexibility, low price points, and no circuit switching or SONET equipment. To ensure consistent effectiveness and efficiency, the company runs three Network Operations Centers (NOCs) jointly with Lucent Technologies NetCare Organization, which monitor and manage the Yipes network.

Yipes received \$91 million in funding from Norwest Venture Partners, New Enterprise Associates (NEA), The Sprout Group/DLJ, Soros Private Equity Partners, Chase Capital Partners, BancBoston Ventures/Robertson Stephens, NewSeed Capital and strategic investors Juniper Networks, Inc., Extreme Networks, and Intel Capital.

Yipes plans to tap big telecommunications and other companies in a late round of financing before going public.

Yipes' suppliers include Extreme Networks, Juniper Networks, NetScreen Technologies, Cisco Systems, Lucent Technologies, Qwest Communications, Level3 and MFN.

### Recent Developments

- In March 2000, Yipes joined the Accelerated Network Program of Akami Technologies (Nasdaq: AKAM) to provide an unmatched Web experience to subscribers. Yipes will install Amami's services in its facilities, lending further scalability to the robust Yipes network.
- An April 26, 2000 agreement with Level 3 Communications, Inc. further extended Yipes' gigabit optical infrastructure. Yipes has established similar fiber-optic infrastructure in major US cities, enabling Yipes to quickly deploy ultra-high-speed internet and transparent LAN services to customers in the technology-rich areas of Denver, San Diego, and San Francisco.
- Yipes has established similar fiber-optic infrastructure arrangements in other cities across the country with transport providers and peering partners including Qwest Communication, Level 3, and UUNet.

- Yipes' partnerships with Extreme Networks and Juniper Networks is the first end-to-end Ethernet-based network that are truly designed from the customer's perspective.



06/22/2000

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