



Horizon Communications Corporation (A)

by

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In June 1996, Bob Taylor (Chicago MBA '90), Joe Beatty (Chicago MBA '89), John Barnicle, and Brian Addy needed to decide on a financing strategy for Horizon Communications Corporation. The four had decided to form Horizon in April to provide competitive local switched telecommunications services in major metropolitan areas throughout the United States. Two months later, armed with a detailed business plan, they had to decide how much money to attempt to raise and from whom to attempt to raise it.

Industry Background

On February 8, 1996, the Telecommunications Act of 1996 (the Act) was signed into law, opening the door to competition in the local telecommunications market -- a market with close to \$100 billion in annual revenues. The Act required existing carriers -- known as local exchange carriers (LECs) -- to: (1) sell interconnection to each part of their network at reasonable prices; (2) provide existing rights-of-way at reasonable prices; and (3) pay reciprocal compensation for calls to new competitors -- referred to as Competitive Local Exchange Carriers (CLECs). The Act, therefore, opened the local loop to competition, ending the last non-competitive remnant of the once vast monopolistic empire of AT&T. Previous changes to telecommunications law had spawned or expanded multi-billion dollar industries such as equipment manufacturing, long distance and wireless telecommunications services. (For readers unfamiliar with the industry, the Appendix provides a glossary of commonly-used terms in the telecommunications market.)

¹ This case was prepared with the assistance of Daniel Adeshk. Some information has been disguised.
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CLEC Markets

CLECs provided five primary types of services. First, CLECs provided **carrier-to-carrier transport** which connected the local points of presence (POP) of interexchange (long-distance) carriers. Second, CLECs provided **private lines** or non-switched connections between two locations in a local services territory. These lines might be used to connect the servers of two offices of the same company. Third, CLECs provided **special access service** which is the local portion of a private line provided by a long distance carrier. This service is for non-switched calls. Fourth, CLECs provided **switched access transport** which is the local portion of a long-distance call that goes from the long-distance carrier's POP to the LEC's switching center. Finally, CLECs provided **local switched services** which would replace portions of the services provided by a LEC. The service consisted of a transmission facility to a customer's premises that terminated on the CLEC's switching system. The CLEC then would connect to other local providers and to long distance providers.²

The Local Switched Services Market

The local loop was dominated by the networks of LECs. In a metropolitan area, the LECs would have a large number of wire centers (e.g. 130 in the Chicago area alone). The locations of these sites were dictated by the electrical properties of copper wire (which was still the predominant medium used in the local loop for switched services). Within any wire center, there might be several switches or "central offices" directly serving customers. Thus, the switch that served any given customer was predetermined by geography, rather than marketing potential. For a customer to be served by another switch (to change or avoid changing phone numbers, to reduce toll charges or for protection in case the customer's primary switch were to fail), a huge premium known as a foreign exchange charge was typically applied.

There were over 150 million switched access lines in operation nationwide. Local exchange carriers generated over \$80 billion per year in revenue from these lines. (They generated additional revenue of about \$20 billion from private line services, yellow pages, and miscellaneous sources.) On average these carriers had EBITDA margins in excess of 43% and operating margins in excess of 23%. Switched access lines had grown at a compound annual growth rate of nearly 4% over the past three years, and usage (as measured by interstate minutes of use) had grown at over 8% per year over the same period. Exhibit 1 provides some information on the historical growth of LEC access lines.

Another indicator of the growth of the industry was the number of new area codes that had been introduced recently to accommodate the need for telecommunications-related services, including cellular, paging, fax services and Internet access. Area code splits were once relatively rare. During 1995 and 1996, however, forty-two new area codes were introduced or planned.

² This section is based on "Competitive Local Exchange Carriers," NationsBank, June, 1996.

These new area codes often result in customer confusion and animosity. In the Chicago area alone, the market had gone from one area code in 1989 to five area codes by 1997.

About 30% of the above-mentioned switched access lines were multi-line business access lines. These lines generated revenue at nearly twice the rate per line as residential or single business lines. Thus, nearly 50% of the total switched local services revenue was concentrated in 30% of the market. In Chicago, there were over 1.2 million business lines provided by Ameritech and Sprint/Centel-IL. Based upon ARMIS data filed with the Federal Communications Commission, the annual revenue generated from these lines was over one billion dollars.

Horizon History

Bob Taylor and John Barnicle were both working at MFS Telecom Companies, the largest Competitive Local Exchange Company (CLEC) in the U.S. At MFS, Taylor operated and managed the Global Services Group which serviced MFS' largest accounts. Barnicle was Vice President of Marketing at MFS.

Already before the Act, both Taylor and Barnicle noticed that their large customers often asked if MFS could provide additional local dialtone, i.e., alternative switched services. The customers wanted an additional provider both to provide redundancy in case of a service disruption and to use as leverage in negotiating with their RBOC or other LEC. MFS, however, did not satisfy the demands of these customers. Before the passage of the Act and the requirement of reciprocal compensation, the economics of local switched services were substantially less attractive. With the passage of the Act, it was possible to imagine starting a company that could satisfy this customer demand. While it was impossible to know if they could succeed, Taylor and Barnicle were encouraged by the fact that at each previous juncture of telecommunications deregulation, new competitors had grown to become worth billions of dollars.

As with the previous phases, Taylor and Barnicle thought that this opportunity would probably not completely cannibalize the market share of the incumbent local phone companies. Instead, they thought it would lead to accelerated growth in the market, which would support the many new entrants that were likely to emerge. In fact, most of the RBOCs were doing everything they could to promote competition in the local loop. The RBOCs also needed to demonstrate that competition was viable so that they could be freed to enter the long distance market from which they had been barred.

Taylor and Barnicle decided they should seriously consider starting a CLEC. To round out their team, they recruited Joe Beatty and Brian Addy. Barnicle had worked with Beatty when the two were at Centel in the early 90s. All three of the others knew Addy. Exhibit 2 provides brief descriptions of the four founders.

In early April 1996, the four founders officially formed Horizon Communications

Corporation to provide competitive local switched telecommunications services in major metropolitan areas. Before committing fully to Horizon, the four spent weekends and evenings in April and May fleshing out the company's operating strategy and financial projections. When they were not all in Chicago, they communicated via e-mail. By June, they concluded that they had a viable business concept.

Horizon's Operating Strategy

Horizon would provide local switched telecommunications services to targeted sectors of the market. These sectors included high margin corporate applications, custom Internet access offerings and strategic alliances with value added resellers of its services. They hoped that this targeted marketing approach would yield customers that generated cash flow per access line 50% higher than the average generated by the incumbent carriers.

To provide these services, Horizon planned to invest in a state-of-the-art-switching platform capable of providing services offered by the incumbent carriers. Horizon would design its switches to meet the needs of its specific target markets and engineer them to handle high volumes of traffic. The company would minimize capital expenditures by foregoing the construction of costly fiber optic transmission facilities. Rather, it would lease facilities from other carriers. These factors would ensure a capital investment structure per access line less than half of the incumbent local exchange carriers, while minimizing the risk of stranded investment. (The downside, of course, would be that Horizon would have higher variable costs than the competition.) In addition, Horizon would provide a superior level of service because of its ability to lease transport facilities from multiple vendors to a given customer location. Thus the Horizon message: Functionally Equivalent, Technically Superior, Low Cost local telecommunications services.

Horizon's Network Architecture

The Horizon team had developed a network architecture that it felt was superior to that of its LEC competition. A schematic of this architecture is provided in Exhibit 3. First, it would have a single, high-quality dual processor switch in a given local market. The switch was to be populated with several NPA-NXXs (blocks of 10,000 telephone numbers within given area codes) which would make it appear as if customers were served by multiple central offices scattered throughout the area. This application was especially critical to Horizon's Internet strategy. Internet Service Providers (ISPs) normally attempted to have their customers call them without requiring toll charges. Horizon could accomplish this with its network because of its in-depth knowledge of current local interconnection practices.

Horizon's decision to lease took advantage of the availability, overcapacity and low cost of the multiple fiber optic private line networks that had been deployed in the major markets. Horizon felt that competition had made leasing local transmission services much more attractive

than building a competitive network, given the time and capital cost of doing so. While most major service providers offered quality transmission services, they relied strictly on their own network platforms. This subjected these providers to the risk of a catastrophic failure if they experienced a failure in a major network component. Such failures occurred during the Hinsdale (Illinois) fire, the bombing of the World Trade Center, and recent earthquakes in California. By procuring capacity from multiple carriers, Horizon hoped to provide a level of redundancy and diversity that no other single carrier could.

Also in Horizon's favor, carriers not only had a financial incentive to sell transport services to Horizon, they also were required to do so on reasonable terms by law. The law not only required carriers to negotiate in good faith, it also required them to satisfy a prescribed competitive checklist and to demonstrate that competition existed in their local market(s) before they were allowed to provide long-distance services within their regions.

By leasing capacity from existing fiber network providers, Horizon also hoped to avoid (1) the need to seek costly and time-consuming franchise and right-of-way agreements; and (2) potential construction delays caused by permitting problems, building moratoriums, weather, etc. Horizon, therefore, believed that leasing would allow it to bring its services to market quickly.

While Horizon would lease its fiber optic network, Horizon did intend to control the interface to the end user by renting a small (100 to 200 sq. foot) space in customers' buildings. Transmission services would terminate in this room, where common multiplexing and power equipment would reside. Horizon would cable from there throughout the facility to its customers, making the use of third-party vendors to provide transmission services transparent to the end user.

Horizon initially planned to utilize the Regional Bell Operating Company (RBOC) for access to long distance carriers and other local phone companies. Horizon's Class 5 switch (which directly serves customers) would subtend one or more RBOC Class 4 switches (which connect Class 5 switches together). The RBOC would bill and collect on Horizon's behalf for access traffic through a meet-point billing process. As traffic demands dictated, Horizon would establish direct trunk groups to the other carriers and eliminate the potential LEC point(s) of failure. Horizon also would offer equal access to all long distance carriers from the start.

Marketing

Horizon planned to target three primary markets for its services: Internet Service Providers (ISPs), general corporate customers, and other communications services companies.

Internet Service Providers

The growth in the use of the Internet had been phenomenal, and was expected to continue for the foreseeable future. ISPs had an almost insatiable demand for basic telecommunications

services which had been difficult for other service providers to satisfy. By the year 2000, the ISP business was expected to grow from an estimated \$400 million in 1995 revenues to \$5 billion in 2000. Morgan Stanley estimated that revenues derived from telecommunications and related services driven by use of the Internet would grow from \$700 million to \$2 billion during this time frame.

ISPs attempted to configure their networks in such a way that their end users could dial into them via a local call (i.e. in Chicago, this would mean setting up multiple points of presence so that customers did not have to call more than eight miles to the nearest one). Horizon planned to establish multiple "virtual" points of presence using its single switch because of its intimate knowledge of existing local exchange carrier networks and related billing rate centers. As a result, ISPs would be able to take all of their phone service from a single switch -- and at a single location -- minimizing their maintenance costs by virtually eliminating "windshield" time to reach multiple traffic concentration points. The Horizon setup would also allow them to avoid expensive foreign exchange and other back hauling charges that the LECs would apply for similar service. Horizon felt that incumbent LECs would not be able duplicate these benefits.

Another benefit was that the ISPs would have the option of collocating their equipment in Horizon's office space. Horizon would invest over one million dollars to provide power backup, environmental conditioning, network monitoring, and fire suppression systems for its own needs. This infrastructure would be highly desirable to ISPs, but unaffordable to most. Horizon hoped to pull through additional sales of its basic services and minimize churn by offering to let ISPs collocate their equipment in Horizon's central office and tap into these facilities.

Corporate Customers

While corporate customers had had choices for long distance carriers since before the ATT break-up in 1984, they had not, until very recently, had a choice as to which carrier would provide their local service. According to several recent industry surveys and Bob Taylor's personal experience at MFS, many corporate users would consider a viable alternative to their current local telecommunications provider if it existed. Horizon intended to be the low cost provider of local service, initially positioned as a cost-effective insurance policy in case of a catastrophic failure. Once in the door, Horizon planned to take an ever larger share of the customer's traffic through targeted programs. The unique design of Horizon's multi-carrier transmission service also would position Horizon's as superior to that of other service providers by making it more survivable.

Communications Services Providers

Horizon planned to concentrate its efforts on providing basic local access and distribution telecommunications services. It did not plan to directly offer long distance, teleconferencing, or shared tenant services nor did it plan to compete directly as a voice mail service bureau or pay

phone provider. Horizon planned to position itself as an unaffiliated provider of basic telecom services to all companies in these fields. Horizon hoped to sell services to all of these service providers and encourage them to package and resell them with their core services.

Sales

Horizon planned to market directly to customers with a dedicated sales force recruited, trained and supported to aggressively pursue business accounts. The direct sales program also would rely heavily on existing relationships and industry knowledge.

Pricing

Finally, Horizon targeted prices for core services to be 10-15% below those of the LEC. Horizon believed that its low cost structure and regulatory flexibility would enable it to profitably offer service at up to 40% less than the LEC as necessary. Horizon also believed that once it demonstrated that its services were technically superior to those of the LECs, it should be able to rapidly gain market share based upon the LEC pricing umbrella.

Competition

While the Horizon team was confident of its analysis, they also realized that the Act would accelerate competition in the local loop, attracting many other new entrants. Several companies had already announced plans to enter the local market in major metropolitan areas targeted by Horizon. Exhibit 4 presents a detailed competitive analysis.

Overall

The Horizon team felt that their highly focused, low cost strategy positioned Horizon to maximize cash flow opportunities presented by the Act. Although leasing fiber rather than building a network would lead to a higher operating cost per access line, Horizon's customers were expected to generate 50% higher revenue per line from an imbedded capital investment less than half that of the incumbents leading to a superior return on capital.

Horizon had identified nine primary target markets for its services: Chicago, New York, San Francisco, Washington DC, Los Angeles, Seattle, Detroit, Boston and Miami. These markets had been chosen based on market potential, regulatory climate (co-carrier agreements with reciprocal compensation terms already in place), presence of one or more alternate transport providers such as MFS and Teleport, and location (proximity to potential secondary expansion markets). The Chicago area had been chosen as the initial market for investment. After a successful launch in Chicago, Horizon would expand to the eight additional primary markets,

expansions which would require additional external financing.

Financial Summary

Horizon expected to be fully operational in Chicago within six months of financing. It would expand to new markets every six to nine months until all nine targeted primary markets were implemented. Horizon expected to obtain a 3% share of the multi-line, business line market in each of its target markets. Based on this, each market was expected to reach cash flow break-even between twelve and fifteen months from commencement of operations. Cash flow from consolidated operations was expected to reach break-even within twenty-nine months of financing, or twenty-three months from commencement of operations. The financial projections (in Exhibits 5A, 5B, and 6) assume that Horizon would develop Chicago first and the additional markets later.

Beatty built Horizon's projections from a bottoms-up perspective. Beatty assumed revenue would not be generated in a given market until seven months after the decision was made to enter that market. Thus, month zero (the starting point for a market's projections) was when the switch was ordered. It takes several months for delivery and several more to turn it up.

Revenue was built-up based on the number of salespeople. Each sales rep would sell two accounts per month; each account would represent roughly 50 lines of service. Each line was assumed to generate a certain amount of usage or Minutes of Use (MOUs). For corporate lines, this was 7,000 MOUs per month; for ISP lines this was 10,000 MOUs per month. Further, all MOUs were not assumed equal in that some would generate more revenue than others. All ISP MOUs were inbound, local MOUs with associated revenue of \$.009 per MOU. Corporate MOUs were a mix of inbound and outbound and distributed among local, toll, and access (to long distance carriers). Outbound corporate MOUs were assumed to yield about \$.02 for local, \$.035 for toll, and \$.028 for access. On top of this, a portion of the MOUs were assumed to be inbound and generated either \$.009 (local = reciprocal comp rate), \$.0138 (toll = intrastate access rate), or \$.028 (access = interstate access rate). In addition to usage charges, Horizon expected to earn monthly recurring revenue (MRR) for the fixed costs associated with the lines themselves.

Expenses were similarly built-up. Carrier settlement charges, which would be paid to other carriers for termination of outbound traffic, were estimated along with revenue in the aforementioned usage model. Other operating expenses were projected using relevant drivers such as headcount, etc.

As far as market size was concerned, Beatty used a "top-down" approach as a sanity check. MSA-1 (metro Chicago) had about 1.2 million multi-line, business lines according to data filed with the Illinois Commerce Commission by Ameritech. Horizon's plan projected roughly 35,000 of these lines at the end of five years in MSA-1, equating to approximately a 3% market share.

Of course, the financial projections were not cast in stone. In particular, it was possible that Horizon's assumption of minimal lead times was optimistic. The time between receiving funding and the turn-up of the first customer was expected to be about six months. Many individual events needed to take place in order for this to happen including: recognition as a common carrier by the Federal Communications Commission and the various state commissions, negotiation of co-carrier agreements, as well as the selection, installation and testing of a switch and related operational support systems.

Based on their financial projections in Exhibits 5A, 5B, and 6, the founders anticipated Horizon would need external equity contributions of roughly \$25 million over the first three years. The remaining external capital was expected to come in the form of secured financing from the vendors of its switches or other third parties.

Financing Decision

As the four Horizon founders gathered in Chicago in June, they had to answer a number of questions as to how to proceed. How much of the \$25 million required over the next three years should they look to raise initially? What valuation should they expect? (Exhibit 7 presents information on current interest rates and industry valuations.)

Once they had agreed on a financing plan, they would have to devise a strategy for approaching venture capitalists. Which venture capital firm(s) should they approach? Why? How many should they approach at one time? Should they approach all the desirable firms at once or should they approach a few first to see what would happen? And finally, what criteria should they use for choosing a venture capitalist? Exhibit 8 describes several of the venture capital firms that Horizon was considering approaching with their business plan. Exhibit 9 provides information on pre-money valuations

Exhibit 1**Advanced Feature Capabilities of Major LECs**

EQUIPPED ACCESS LINES BY TYPE OF OFFICE							
(THOUSANDS)							
YEAR END	TOTAL OFFICES	EQUAL ACCESS OFFICES		SIGNALING SYSTEM 7 OFFICES		ISDN OFFICES	
1980	81,032	0	0.0%	0	0.0%	0	0.0%
1981	82,581	0	0.0	0	0.0	0	0.0
1982	83,819	0	0.0	0	0.0	0	0.0
1983	86,186	146	0.2	0	0.0	0	0.0
1984	88,630	9,350	10.5	0	0.0	0	0.0
1985	91,455	49,241	53.8	0	0.0	0	0.0
1986	93,630	70,543	75.3	0	0.0	0	0.0
1987	96,593	81,743	84.6	1,035	1.1	12	0.0
1988	99,564	91,809	92.2	10,325	10.4	47	0.0
1989	102,684	97,410	94.9	21,917	21.3	111	0.1
1990	105,641	102,429	97.0	40,026	37.9	13,970	13.2
1991	107,387	105,413	98.2	57,327	53.4	20,567	19.2
1992	109,994	109,006	99.1	77,102	70.1	28,375	25.8
1993	113,369	112,992	99.7	92,492	81.6	39,875	35.2
1994	117,266	117,266	100.0	109,585	93.4	56,849	48.5

Exhibit 2

Horizon Management Team

Robert C. Taylor, Jr. - President and Chief Executive Officer

Mr. Taylor most recent position was Vice President, Strategic Business Operations and the Chief Operating Office of the Mexican operations for MFS Telecom Companies. At the time, MFS was the largest CLEC in the U.S. In the first of these positions, he operated and managed the Global Services Group which included MFS' 50 largest customers. Responsibilities included developing marketing strategies, business analysis, budgeting, compensation plans, financial reporting, sales and revenue forecasting and contract management.. As head of the Mexican operations, Mr. Taylor managed the day-to-day operations, negotiated construction and vendor contracts, right-of-ways and building access agreements within Mexico City. Previously, he served as a regional director of development for MFS, as a vice president of marketing for McLeod Telecommunications Group (a successful Iowa-based CLEC), as a corporate development staff member for MCI, and as a director of new product development for Ameritech. Mr. Taylor has a BS in Mechanical Engineering from the University of Denver (1985) and an MBA in Management and Finance from the University of Chicago (1990)

John R. Barnicle, Executive Vice President/Chief Operating Officer

Mr. Barnicle was Vice President of Marketing for MFS. In that job, he was responsible for product management, product development, sales support and business analysis for the subsidiary of MFS Communications which provided services to large end users, long distance carriers and Internet service providers. Prior to this, from 1994 to 1995, he worked for Duff and Phelps as the analyst responsible for providing credit ratings on public bond issues of telecommunications firms. From 1992 to 1994, he was a director of product development for MFS Telecom. In that role, he developed MFS' collocation/interconnection business. His duties included development of company strategy, regulatory filings, and negotiations with ten major local exchange carriers. He also developed MFS Telephone, the subsidiary which sold switched services to large end users and wholesale customers. Before joining MFS, Mr. Barnicle held a variety of positions with Centel. Mr. Barnicle earned a BS in Electrical Engineering from the University of Illinois (1987) and an MBA in Finance from DePaul University (1995).

Joseph Beatty - Executive Vice President/Chief Financial Officer

Most recently, from 1994 to 1996, Mr. Beatty was an investment analyst at Nations Bank, responsible for investment research coverage of the telecommunications industry with a concentration in the CLEC segment. The duties of this position included providing support to trading and investment banking professionals, advising investors, and maintaining contact with management teams of companies in the telecommunications sector. From 1992 to 1994, he worked for Duff & Phelps as an analyst responsible for providing credit ratings on public bond issues of telecommunications firms. From 1989 to 1992, Mr. Beatty worked as a manager of sales engineering for Centel where he was responsible for providing engineering and sales support of business telephone services. From 1985 to 1989, he worked in technical planning for Centel. Mr. Beatty has BS Electrical Engineering from the University of Illinois (1985) and MBA from the University of Chicago (1989).

Brian F. Addy - Executive Vice President

From 1993 to 1996, Mr. Addy worked for Security Capital Group, a start-up Real Estate Investment Trust that focused on the acquisition, development and operation of bulk distribution facilities. As acquisitions officer, Mr. Addy analyzed and executed property acquisitions in Phoenix, Salt Lake City, Reno, Las Vegas, Albuquerque and Denver. From 1991 to 1993, he was the general manager of Centel Cellular Company of New Mexico, a start-up cellular telephone venture of Centel. In that position, he had complete profit/loss responsibility including engineering, customer service, sales, strategic alliances and capital program. From 1986 to 1991, Mr. Addy held various sales and operating positions with Centel. Mr. Addy has a BS in Electrical Engineering from Duke University (1986).

Exhibit 3
Horizon Network Architecture

Exhibit 4

Horizon Competitive Analysis - June 1996

Today there is virtually no competition in the \$80 billion local switched services market. Competitive local exchange carriers (CLECs) combined had revenues totaling only \$1.2 billion in 1995. Most of the total resulted from the resale of long distance services or from the sale of private line (i.e. non-switched) services. Potential competition for local switched telecommunications services can be broken into eight general categories.

Competitive Access Providers (CAPs): These companies are facilities-based competitors that construct their own fiber optic networks. Services may include Centrex, PBX trunks, local calling, and switched access to long distance carriers, in addition to their traditional transmission services. Teleport Communications group (TCG) and MFS Communications (MFS) are the two largest CAPs and operate in the major markets Horizon intends to serve. The Intelcom Group, Intermedia Communications, Brooks Fiber and ACSI generally serve smaller markets and are not expected to be direct competitors in the near term.

Horizon Response: Horizon will be categorized as a CAP, but will differ from other CAPs in that it will not construct a dedicated fiber network. Management believes that leasing existing facilities will provide both short and long term strategic and cost advantages. Capital will be concentrated in switching equipment, enabling Horizon to maintain a significantly lower capital investment per customer. CAPs, while providing high-quality transmission services, have not yet significantly penetrated the market for local switching services.

Cable TV Companies: Most cable TV companies are looking to convert their transmission to deliver local telephone and multi-media services that integrate voice, data and video. Companies such as TCI Communications, Time Warner, Comcast and Cox Communications are active in this segment. **Horizon Response:** The cable TV companies are primarily targeting residential services, where they have the largest market presence. Residential service is not a primary Horizon target market.

Local Service Resellers: These will include telemanagement service firms, shared tenant service providers, payphone operators and long distance resellers that target residential customers. Generally, these companies are value-added suppliers who will consolidate bills and principally compete to serve the needs of small businesses and residential customers. **Horizon Response:** With the possible exception of shared tenant services providers these companies are not considered primary Horizon target markets. Even with this segment however, there is no need to develop any new services or alter prices to compete effectively.

Wireless Local Service Providers: Cellular, paging, PCS, and SMR companies are positioning themselves as local service providers, with plans to offer wireless voice and data telephony for the mass market place. These companies include AT&T Wireless, Sprint Spectrum, 360 Communications, and the RBOCs. **Horizon Response:** Horizon's target customers will require applications that are not currently supported by wireless technologies. The long term technical and cost advantages of fiber optics will limit wireless competition for large scale business applications for the foreseeable future.

Electric Utilities: Several companies have expressed their desire to leverage right-of-ways into virtually every home and office in America to provide local telephone service. The Act formally opens this door to these companies. **Horizon Response:** While the electric companies will have the opportunity to provide service, they do not currently have facilities in the ground, nor do they have expertise in this area. They also face deregulation and competition in their own industry. If these companies choose to enter into local telephone service, they will need to acquire the expertise and develop their service, thus migrating them to status as a CAP.

Local Telephone Companies: The existing local telephone companies will be Horizon's primary competitors. This competition could be potentially compounded should any of them choose to pursue local service opportunities outside their previously regulated territories. The RBOCs may see particular advantage if they are permitted to provide IntraLATA (long distance) services in those out-of-region markets. **Horizon Response:** The RBOC's primary interest at this time is to gain permission to pursue long distance opportunities within their regions. In order to do so, they must show that competition exists in the local loop and that companies such as Horizon are successful in gaining some market share. Given their inherent vulnerabilities and their desire to get into the long distance business, they are not expected to indulge in anti-competitive tactics. Moreover, none of the RBOCs has announced plans to expand outside their traditional franchise areas. Rather, Bell Atlantic has announced its intent to merge with NYNEX, and SBC Corp. plans to merge with Pacific Telesis.

Private Networks: Big corporations, governments and schools own and operate large scale telecommunications networks which some consider to be local competition. **Horizon Response:** Horizon believes most of these entities will focus on their core business and continue to purchase services rather than become common carriers in their own right. They represent opportunities for Horizon.

Exhibit 5A

Horizon Communications Corp.

Income Statement / Statement of Cash Flows

	Year 1	Year 2	Year 3	Year 4	Year 5
Income Statement					
Revenue	801,376	11,109,754	39,325,562	99,269,392	203,939,135
Carrier settlements	615,094	5,476,682	16,122,942	39,073,668	74,916,466
Gross Profit	186,282	5,633,072	23,202,620	60,195,724	129,022,669
Sales & Customer service expense	1,874,670	7,630,001	15,629,151	27,006,148	41,623,578
General & administrative expenses	2,107,180	4,004,122	6,738,946	11,265,285	16,324,642
Total Cash Expenses	3,981,850	11,634,123	22,368,096	38,271,433	57,948,219
EBITDA	(3,795,568)	(6,001,051)	834,524	21,924,291	71,074,450
Depreciation & Amortization	383,557	1,623,495	3,558,807	6,697,708	11,173,936
Operating Income	(4,179,124)	(7,624,546)	(2,724,284)	15,226,583	59,900,514
Other Income (net)	0	0	0	0	0
Interest Expense	382,643	1,800,275	3,735,904	5,498,781	6,410,358
Income Taxes	0	0	0	0	16,160,631
Net Income	(4,561,767)	(9,424,822)	(6,460,187)	9,727,801	37,329,525
Statement of Cash Flows					
Net Income	(4,561,767)	(9,424,522)	(6,460,187)	9,727,801	37,329,525
Depreciation & Amortization	383,557	1,623,495	355,807	6,697,708	11,173,936
Changes in working capital	24,041	420,349	1,128,632	2,397,753	4,186,790
Other non-cash items	382,643	1,800,275	3,306,892	3,301,430	2,983,802
Cash from Operations	(3,771,526)	(5,580,702)	1,534,143	22,124,693	55,674,053
Capital expenditures	(8,255,642)	(12,858,515)	(21,777,045)	(35,808,976)	(49,409,633)
Other investments	0	0	0	0	0
Cash for Investing	(8,255,642)	(12,858,515)	(21,777,045)	(35,808,976)	(49,409,633)
Secured Financing	8,255,642	7,431,057	12,886,834	11,520,241	0
Repayment of secured debt	0	0	0	(550,015)	(6,871,369)
Other debt financing	0	0	1,426,753	1,519,766	2,697,743
Preferred stock	0	0	0	0	0
Common stock	20,000	0	0	0	0
Other	0	0	0	0	0
Cash from Financing	8,275,642	7,431,057	14,313,587	12,489,992	(4,173,626)
Beg. Cash balance	0	(3,751,526)	(14,759,686)	(20,689,001)	(21,883,291)
Change in cash	(3,751,526)	(11,008,160)	(5,929,315)	(1,194,291)	2,090,794
Ending Cash Balance	(3,751,526)	(14,759,686)	(20,689,001)	(21,883,291)	(19,792,498)

Exhibit 5B
Horizon Communications Corp.
Monthly Income Statement / Statement of Cash Flows

Exhibit 6
Horizon Communications Corp.
Balance Sheet

	Year 1	Year 2	Year 3	Year 4	Year 5
<u>ASSETS</u>					
Cash & mkt. Securities	(3,751,526)	(14,759,686)	(20,689,001)	(21,883,291)	(19,792,498)
Accounts receivable	34,345	222,195	786,511	1,985,388	4,078,783
Other current assets	0	0	0	0	0
Current Assets	(3,717,181)	(14,537,491)	(19,902,489)	(19,897,903)	(15,713,715)
Gross PPE	8,184,838	20,227,527	40,323,981	71,607,563	112,005,958
Accum depreciation	383,557	2,007,052	5,565,859	12,263,567	23,437,503
Net PPE	7,801,282	18,220,475	34,758,122	59,343,996	88,568,454
Goodwill & other intangibles	0	0	0	0	0
Non-current Assets	7,872,085	19,107,105	37,325,343	66,436,611	104,672,308
Total Assets	4,154,904	4,569,614	17,422,854	46,538,708	88,958,593
<u>LIABILITIES</u>					
Accounts Payable	58,386	666,585	2,359,534	5,956,164	12,236,348
Debt Maturities	0	0	1,426,753	2,946,519	5,644,262
Other accrued expenses	0	0	0	0	0
Current Liabilities	58,386	666,585	3,786,287	8,902,683	17,880,610
Secured debt	8,638,285	17,869,617	34,063,343	48,334,999	44,447,432
Other long term debt	0	0	0	0	0
Other no-current liab.	0	0	0	0	0
Non-Current Liabilities	8,638,285	17,869,617	34,063,343	48,334,999	44,447,432
Preferred stock (@ LV)	0	0	0	0	0
Common stock @ par	20,000	20,000	20,000	20,000	20,000
Additional paid in capital	0	0	0	0	0
Retained earnings (deficit)	(4,561,767)	(13,986,588)	(20,446,776)	(10,718,974)	26,610,551
<u>Shareowners Equity</u>	<u>(4,541,767)</u>	<u>(13,966,588)</u>	<u>(20,426,776)</u>	<u>(10,698,974)</u>	<u>26,630,551</u>
Total Liabs. & Shareholder Equity	4,154,904	4,569,614	17,422,854	46,538,708	88,958,593
Key Statistics					
Total lines	2,437	14,277	37,7190	78,489	140,820
Total employees	27	77	153	230	406
Total switches in service	2	4	6	8	9
Beg. Gross plant	0	8,184,838	20,227,527	40,323,981	71,607,563
CAPX	8,255,642	12,858,515	21,777,045	35,808,976	49,409,633
Pct. Retirements	1%	4%	4%	6%	7%
Ending gross plant	8,184,838	20,227,527	40,323,981.0	71,607,563.0	112,005,958.0
Depreciation rate	12%	12%	12%	12%	12%
Net plant	7,801,282	18,220,475	34,758,122	59,343,996	88,568,454
Embedded cost of debt	13%	14%	14%	13%	13%

Exhibit 7 Capital Markets Information, June 1996

Interest Rates

One-Year Treasury Bills		5.45%
Ten-Year Treasury Bond		6.85%
Thirty-Year Treasury Bond	7.00%	
AA Long-term Debt		7.75%
A Long-term Debt		8.04%
BBB Long-term Debt		8.33%
BB Long-term Debt		9.10%
B Long-term Debt	10.85%	

Summary Comparative Market Data for Selected Industry Competitors

Company	Estimated 1996 Revenue (\$ million)	Estimated 1996 EBITDA (\$ million)	Estimated 1996 Earnings (\$ million)	Route Miles	VGE Circuits (000)	Enterprise Market Capitalization (\$ million)	Equity Market Capitalization (\$ million)	Equity Beta
Comparable CLECs								
American Communication Services	\$12.3	(\$22.3)	(\$26.0)	136	82	470	469	NR
Brooks Fiber	\$30.4	(\$40.8)	(\$62.0)	470	153	1051	1067	1.22
GST Telecommunications	\$27.0	(\$11.0)	(\$35.0)	617	106	353	338	NR
IntelCom Group	\$174.0	(\$46.0)	(\$120.0)	637	488	954	789	1.10
Intermedia Communications	\$128.0	(\$30.0)	(\$65.0)	504	136	542	577	0.92
MFS	\$902.0	(\$54.0)	(\$335.0)	3183	2961	5794	5204	1.12
Winstar	\$74.0	(\$36.0)	(\$76.0)	NR	NR	1062	1040	1.32
Other Companies								
Ameritech	\$14,917.0	\$5400.0	\$2,100.0	NR	NR	38,600	3,4200	0.87
MCI	\$18,494.0	\$3607.9	\$1,202.0	NR	NR	21,616	17,216	1.26

Source: NationsBank, June, 1996, author's calculations.

Enterprise value is the sum of the book value debt, the book value of preferred stock, and the market value of equity less a firm's cash and marketable securities.

Exhibit 8

Potential Venture Capital Firms

Apex Investment Partners

Apex Investment Partners is a Chicago-based fund with over \$100 million under management that targets telecommunications, information technology and software deals (70%) plus consumer goods and industrial-related companies (30%).

Representative investments include:

American Communication Services, an Illinois-based Competitive Access Provider and developer of fiber optic networks.

Online Resources & Communications Corp., based in McLean, Va., a provider of online services to financial institutions.

Tri-Tek Information Systems & Services, a designer of information networks and provider of outsourcing services based in St. Louis.

Tut Systems, a California-based maker of products designed to enhance high speed communications systems.

Battery Ventures

Battery Ventures is a leading venture capital firm that focuses its investments in the software and communications industries. Battery was founded in 1983 and currently manages four venture capital funds with a combined capital of \$360 million. The fund is based outside of Boston, but also has an office in Silicon Valley.

Battery is affiliated with the Yankee Group, a leading high technology market research firm specializing in communications and information systems. The relationship with Yankee augments Battery's research capabilities and technology market expertise.

Frontenac

Frontenac is a Chicago-based venture capital firm that has operated since 1971. Its latest fund, raised in 1993 had commitments of \$218 million. Frontenac was in the process of raising an additional \$250 million. Frontenac invests approximately half of its capital in buyouts and half in venture deals. It will primarily make equity investments of \$5 million to \$25 million per company, focusing mainly on businesses based in the central quarter of the country that operate in the technology, health care, consumer products, information services and light to medium manufacturing industries. Frontenac is organized in three teams –healthcare, information technology / telecom, and consumer / industrial.

JK&B Capital

JK&B Capital is a private venture capital firm founded in 1996 with initial capital under management of \$105 million. JK&B was founded by David Kronfeld, formerly a partner at Boston Capital Ventures. JK&B intends to invest in software, telecommunications and information technologies. Specifically, the fund will target technology and telecommunications companies, mostly in the early stages of development but may stray from this focus to capitalize on "exceptional situations." Investors include George Soros, Bill Farley (Fruit of the Loom), and Charles Wang (Computer Associates).

At Boston Capital, Kronfeld invested in Nextel Communications and Brooks Fiber Properties. The other partners, trained in specialties ranging from telephone network engineering to computer programming, play a more active role in

operating the businesses they finance than do most venture capitalists.

JK&B's first two investments are in:

Dallas-based Unisite, an operator of wireless transmission towers.

Cincinnati-based Vertex Holdings, a maker of electronic automatic tool and supply dispensers.

Madison Dearborn Partners

Madison Dearborn (MDP) is a private equity fund based in Chicago. Formerly the private equity arm of First Chicago Bank, MDP was formed in 1993 with \$550 million in commitments. MDP is in the process of raising a new fund of \$900 million. The firm focuses on four industries: communication operating companies, health care services, consumer distribution/retail and natural resources.

Representative investments include:

Cleartel Communications (Toronto), the largest independent specialized mobile radio operator in Canada.

Nextel Communications (Virginia), the largest specialized mobile radio operator in the U.S.

Omnipoint Corporation (Colorado), a leading developer of wireless spread spectrum communications technology and the holder of a PCS license in Metropolitan New York.

Marquette Venture Partners

Marquette is a venture capital fund based in Deerfield, Illinois. It raised \$106 million in early 1992 and will be raising an additional fund later this year. The firm invests in companies in the information technology, consumer/retail and health-care industries.

Representative investments include:

PetStuff, a pet retail superstore.

Oak Tree, a Medicaid HMO sold to Oxford Health Systems.

Exogen, a health-care technology company.

Sneaker Stadium, a retailer of casual shoes.

PCS Development, which has licenses for lowband PCS.

Progressive Bagels, a national bagel store.

Dynasty Technology, a provider of client-server tool sets.

Norwest Venture Capital

Norwest Venture Capital is headquartered in Minneapolis, Minn., and actively manages \$500 million in current investments. The firm has raised more than \$700 million since inception. The firm consists of nine partners with offices in Palo Alto, Boston and Minneapolis. Norwest has a broad private equity investment focus, including technology, health care and services, as well as management buyouts, corporate spin-outs, founder liquidity recapitalizations, and consolidations. They have representative investments in software, communications equipment, semiconductor, communications services, medical products, health care services, biotechnology, and consumer-related companies.

Representative investments include:

Brooks Fiber Communications builds state-of-the-art fiber-optic telecommunications networks that crossconnect at the high-volume central offices of local exchange carriers.

Documentum develops and markets software for enterprise document management.

Polycom develops audio-graphic conferencing equipment.

Prism Solutions provides data warehousing solutions that enable organizations to integrate, manage, and use business information effectively.

Xylan provides switched, highspeed computer network connections.

St. Paul Venture Capital

St. Paul Venture Capital is an investment subsidiary of The St. Paul Companies, a worldwide insurance organization. It is based in St. Paul, Minnesota. St. Paul Venture Capital has committed more than \$500 million to venture capital investments, including direct investments in more than 60 companies and indirect investments in more than 1,000 additional companies through venture partnerships. St. Paul's investments are focused principally in four major industry areas: Information processing and technology; specialty retailing and consumer products; health care products and services; and business services, environmental and manufacturing companies.

Investments in the telecommunications area include:

Advanced Fibre Communications, a manufacturer of fiber optics based telecommunications transmission systems.

BroadBand Technologies, a manufacturer of FibefTo The Home telecommunications transmission equipment.

Aristacom International, a developer of software integrating computers and telephone systems.

Clear Communications, a developer of softwareproducts which monitor the performance of broadband widearea networks.

Sierra Ventures

Sierra focuses its investments on early stage health care, information technologyrelated companies and service businesses. Sierra Ventures manages six venture capital partnerships, which together have more than \$400 million of committed capital. Sierra is based in Menlo Park, California.

Representative investments include:

Centex Telemanagement, a local and long distance reseller.

INA Technologies, a manufacturer of equipment for small and medium sized businesses to connect to high-speed networks, particularly commercial Internet access.

Venrock Associates

Venrock Associates is the venture capital investment arm of the Rockefeller Family, and has funded entrepreneurs for over six decades. Venrock has offices in both New York and California,

Representative investments include:

Arris Networks/Cascade Communications, a maker of integrated, public network access products targeted at common carriers and ISPs.

International CableTel, a developer and operator of broadband communications systems outside the U.S. to provide integrated "last mile" telecommunications services to both business and residential customers.

Visual Networks, a developer of products for maximizing the performance and reliability of widearea telecommunications networks based upon public data services such as frame relay, ATM, and the Internet.

Exhibit 9

Average Amount Raised & Pre-Funding Valuation In 1995 (\$ millions)

A. By Round Type

<u>Round</u>	<u>Average Pre-Valuation</u>	<u>Average \$ Raised</u>
Seed	\$ 1.7 million	\$ 1.2 million
First Round	\$ 8.0	\$ 4.6
Second Round	\$16.2	\$ 6.1
Later Rounds	\$45.9	\$ 8.8
LBOs	N.A.	\$38.9

B. By Stage of Development

<u>Stage</u>	<u>Average Pre-Valuation</u>	<u>Average \$ Raised</u>
Startup	\$ 2.4 million	\$ 2.8 million
Product In Development	\$14.8	\$ 5.2
In Beta Test	\$27.9	\$ 5.7
Shipping Products	\$24.9	\$ 9.1
Profitable	\$29.0	\$ 8.6

Source: Tables 5 and 6, NVCA Annual Report, 1995

Appendix

Glossary of Terms

56Kbps Circuit: A digital-phone line connection, or leased line, capable of carrying 56,000 bits per second. At this speed, a megabyte of data would take about 3 minutes to transfer.

bandwidth: Terminology used to indicate the transmission or processing capacity of a system or of a specific location in a system (usually a network system). Bandwidth is usually defined in bits per second.

baud: A unit of transmission speed equal to the number of times the state (or condition) of a line changes per second. Equal to the bit-per-second (BPS) rate only if each signal element represents one bit of information.

bill and keep: A form of reciprocal compensation between competing local telecommunications service providers in which -- for calls that are initiated on one company's network and terminated on the other company's -- each carrier bills its own customer for local service rather than charging fees to each other for completion of such calls.

BBS: Bulletin Board System, a computerized meeting and announcement system that allows people to have discussions, upload and download files, and make announcements without being connected to the computer at the same time.

bps: Bits per second, a measurement of how fast data are moved from one place to another.

BRI: Basic Rate Integrated Services Digital Network. BRI is the basic ISDN-to-user connection option, using four unshielded normal copper telephone wires to deliver digital services. The BRI interface is also referred to as a 2B+D connection and is comprised of two 64Kbps bearer (B) channels and one 16Kbps data (D) channel that carry both call set-up and user packet data across the network.

CAP: Competitive Access Provider. A company which provides its customers with an alternative to the local exchange carrier for local transport of private line and special access telecommunications services.

Class 4 Switch: An intermediate switch which connects multiple end user switches together.

Class 5 Switch: An end user switch. It provides basic dialtone, enhanced features and telephone numbers to customers.

Co-carrier status: A regulatory designation which confers upon competing telecom service providers the same full rights to telephone number assignments and connection to the public network as enjoyed by all local telephone companies. In a nutshell, co-carrier status entails having status equal to the local telephone company.

Collocation: The ability of a CAP to connect its network to the local telephone company's central office. It can also refer to customers that sublease space of a service provider.

Competitive Local Exchange Carrier (CLEC): A company authorized by the appropriate regulatory agencies to provide local exchange telecommunications services and to compete on an equal footing with the incumbent carriers.

common carrier: A company which provides telecommunications services to the general public.

Interconnection: The FCC requires local exchange carriers to provide the necessary services to allow other networks, such as those of CAPS, to connect to their networks. The Telecommunications Act of 1996 and various state commissions expanded those mandates to include local services as well.

ISDN: Integrated Services Digital Network: A digital telephonic system made up of two 64Kbps "B" channels for data and one "D" channel for traffic messaging. While an analog line usually takes up to 10 seconds to dial and make a connection, ISDN typically makes a dialup connection in 0.5 seconds.

ISP: Internet Service Provider, a business that allows companies and individuals to connect to the Internet by providing the interface to the Internet backbone.

IXC: An Interexchange Carrier is a company providing longdistance phone service, generally between Local Access Transport Areas (LATAs).

Local Access and Transport Areas (LATAs): Areas defined at Divestiture beyond which RBOCs could not legally carry traffic.

leased lines: A permanent physical connection between two locations that forms a private wide area network or links to the Internet. They are called leased lines because they are rented from a telephone company.

Local Exchange Carrier (LEC): A company providing local telecommunications services. This includes Regional Bell Operating Companies, as well as independent companies such as GTE.

local loop: The part of the local public network connecting an end user's premises to the local telephone company's switching equipment, usually in a Class 5 central office.

node: Any single computer connected to a network.

NPA: The area code.

NXX: Three digit prefix after the area code.

Number Portability: Refers to the ability of customers to retain their telephone numbers in the event they change their local telephone service provider.

POP: Point of Presence, a term used by Internet Service Providers to indicate the number or geographical locations of their access points to the Internet.

Reciprocal compensation: An incumbent telephone company paying or otherwise compensating a competitor for terminating a telephone company call on the competitor's network in the same amount as they are paid for such service. Competitors are usually forced to pay the incumbent carriers for this service, but are not always reimbursed the same amount for providing similar service.

Special Access Service: Private, dedicated telecommunications facilities of a local telephone company or a CAP that go from one point to another, with at least one end at a long distance carrier's point of presence. Special access services do not require the use of local switches.

T-1: A high speed leased line (1.544Mbps) which can be used for a variety of voice, data and video transport. Also known as Digital Signal Level 1 (DS-1).

T-3: A leased-line connection capable of carrying data at 45Mbps. Also known as Digital Signal Level 3 (DS3).

WAN: Wide-area Network, any network that covers an area larger than a single building or campus.