

ALASKA LEGISLATURE SPECIAL COMMITTEE/SUBJECT FILES 8672

2485 SCOMM 106 HOUSE SPEC. COMM. TELECOMMUNICATIONS, 1997-98

GENERAL COMMUNICATION, INC. -- DOMINATING ALASKAN COMMUNICATIONS

Salomon Brothers, September 16, 1997

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**...GCI plans to build a PCS network covering all urban areas
with PCS cells.... [p.7]**

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[p.3]**

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GCI will own and operate a statewide fiber network, a statewide digital satellite network, local fiber networks in major cities that cover 250,000 of Alaska's 350,000 local lines, the only statewide Internet backbone, the only statewide PCS network and an upgraded two-way 550 MHz cable system reaching 70% of Alaska's households. [p.3]

GENERAL COMMUNICATION, INC. -- DOMINATING ALASKAN COMMUNICATIONS

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GCI's strategy is trying to "cream skim" the local market and capture the higher end consumers who are also [sic] tend to be the high end heavy users of the long distance market. [p.14]

[W]e would find it very difficult to imagine a competitor being able to go into Alaska and replicate the advantages that GCI has.... [p.4]

MARKET POWER

Alaskan Bottleneck Facilities

544 Kbps

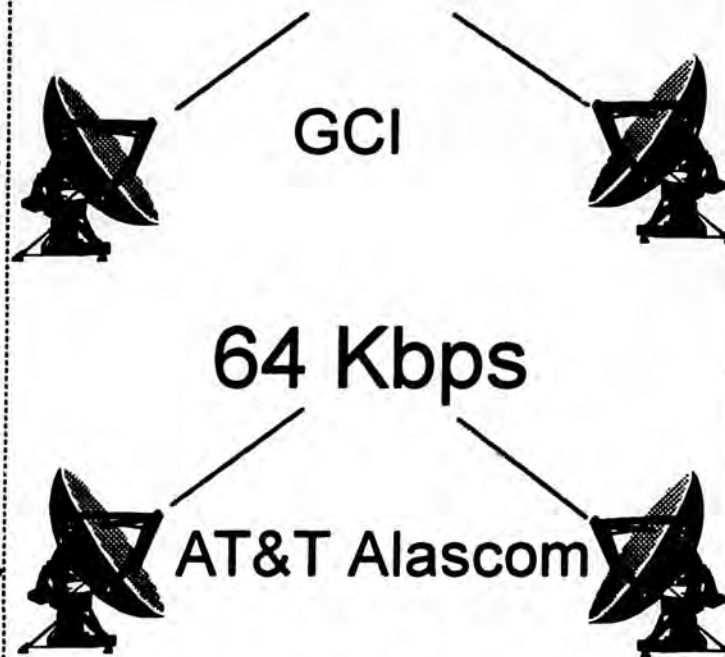
64 Kbps

44000+ Kbps

Rural
Alaskan
LEC



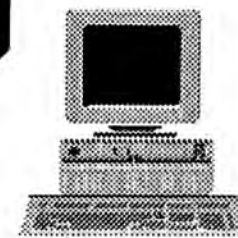
Terminal
Equipment
either telephone
or computer



Alaskan IXCs

When trying to connect two parts of a fire hose, it doesn't help to have a "choice" of which straw to connect them with.

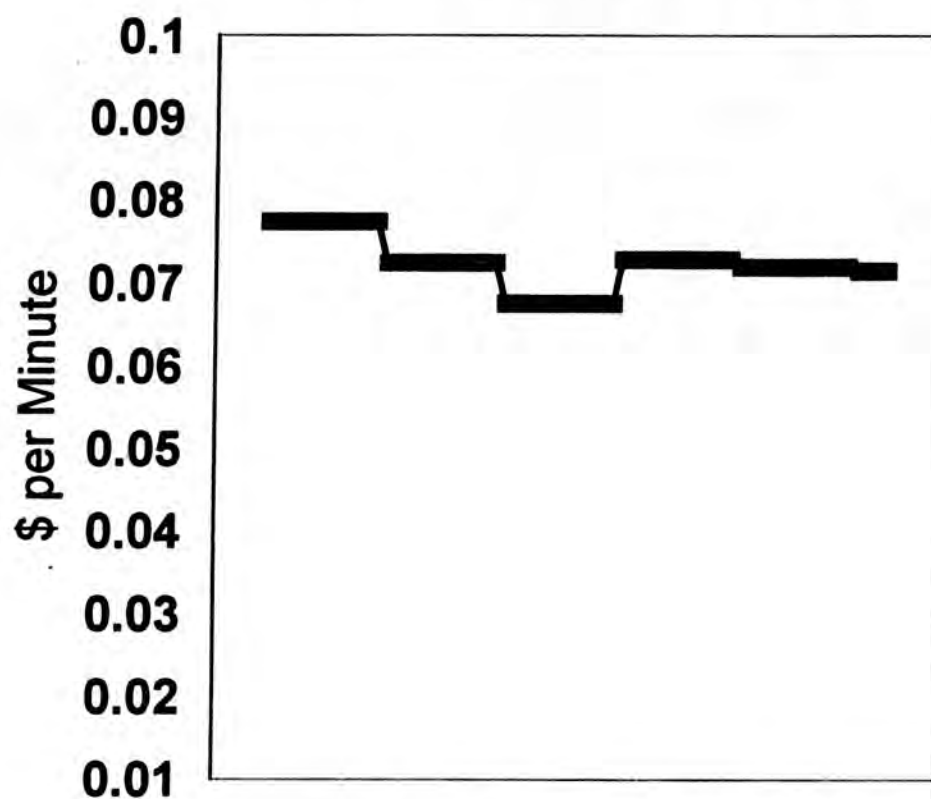
Urban
Alaskan
LEC



Terminal
Equipment
either telephone
or computer

Pooled Local Exchange (LEC) Access Rates

Intrastate Rates



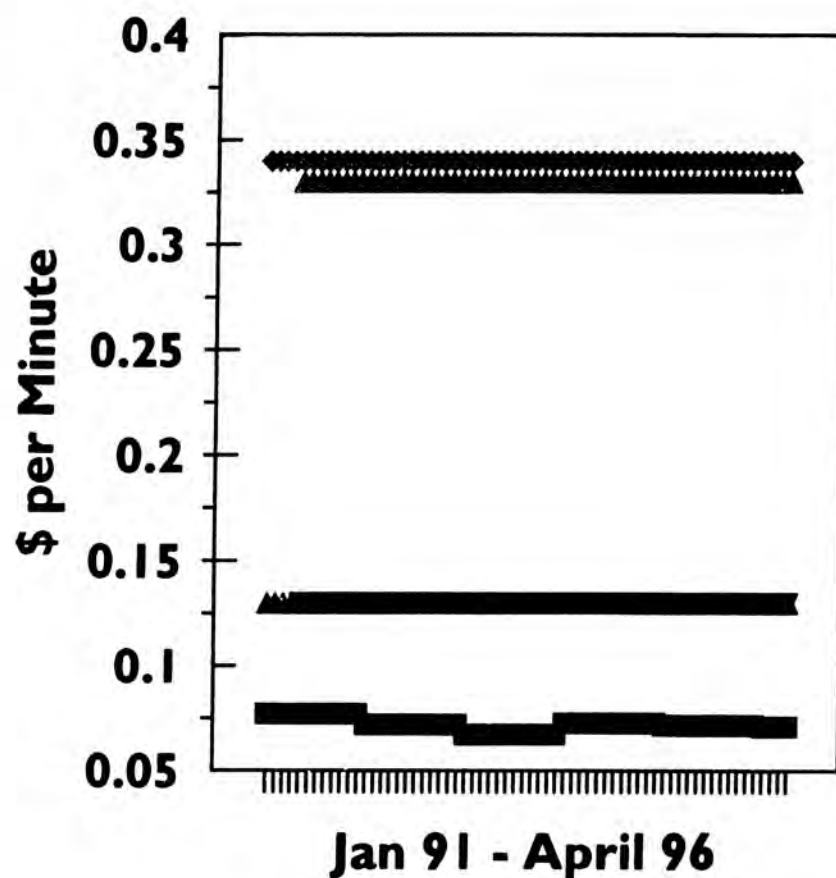
Local Exchange Access
Charges



Jan 91 - April 96

IXC Intrastate Rates (0-34mi)

Intrastate Rates



LEC Access Rates

Alascom 1st min. - 0-34 mi.

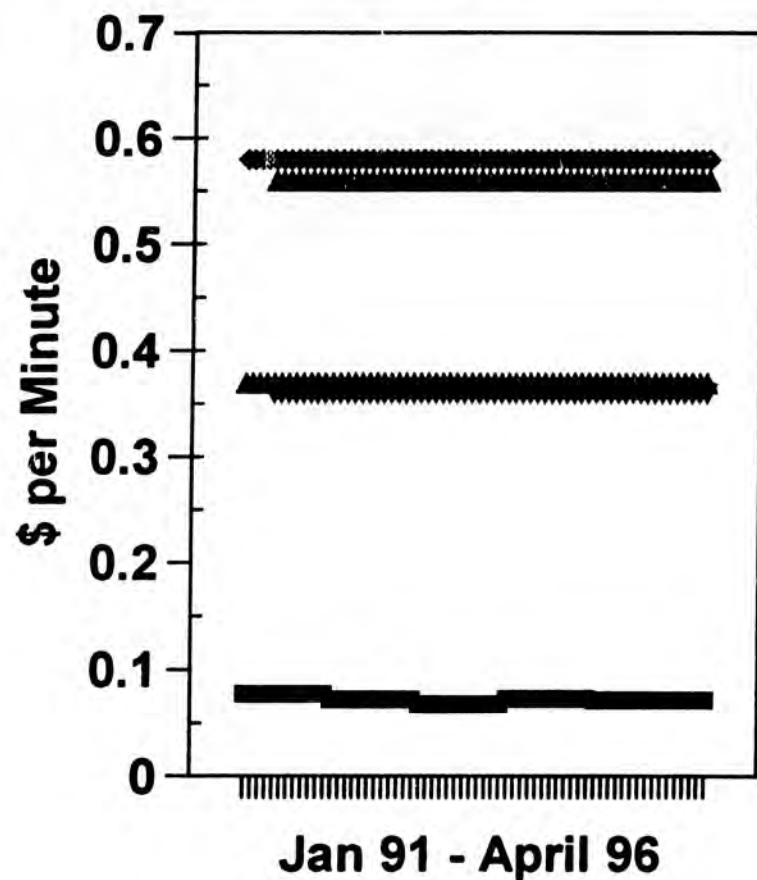
GCI 1st min. - 0-34 mi.

Alascom add'l min. - 0-34 mi.

GCI add'l min. - 0-34 mi.

IXC Intrastate Rates (215-275miles)

Intrastate Rates



LEC Access Rates

Alascom 1st min. - 215-274 mi.

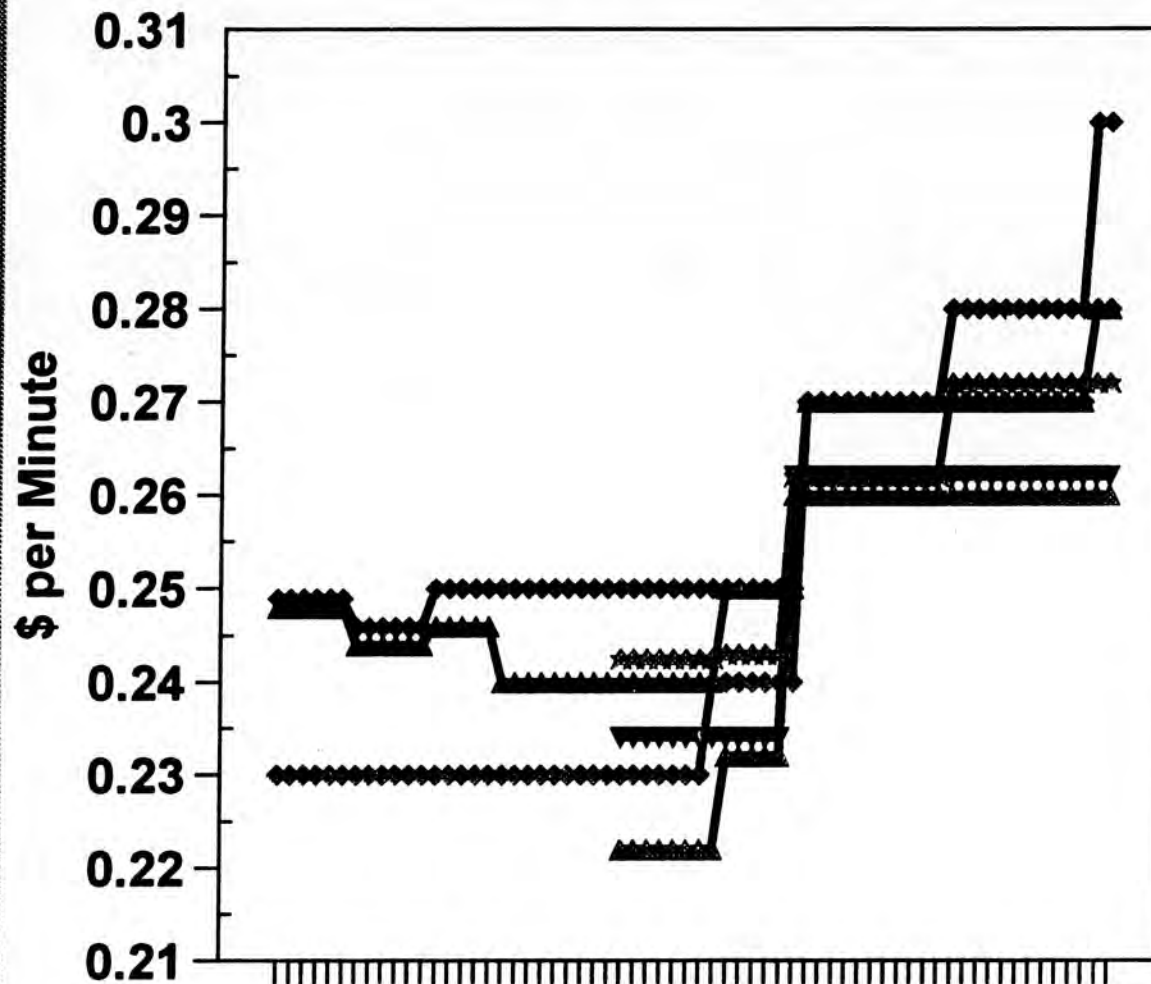
GCI 1st min. - 215-274 mi.

Alascom add'l min. - 215-274 mi.

GCI add'l min. - 215-274 mi.

IXC Interstate Rates

'1st Minute



Jan 91- April 96

Alascom 431-925 mi.

—◆—

GCI 431-925 mi.

—▲—

Alascom 926-1910 mi.

—▲—

GCI 926-1910 mi.

—▲—

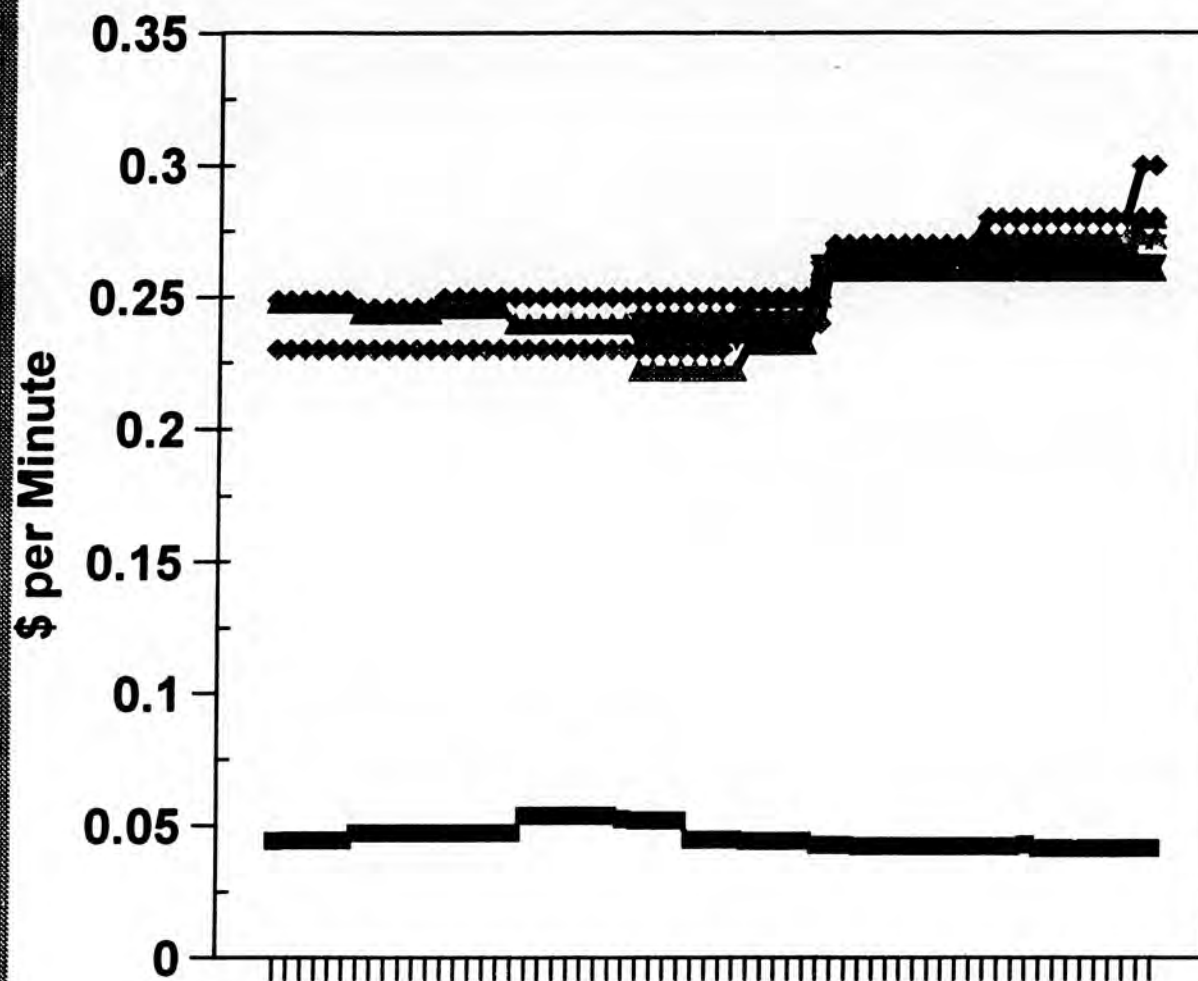
Alascom 1911-3000 mi.

—◆—

GCI 1911-3000 mi.

—▲—

IXC Interstate Rates GO UP! Pooled Local Exchange Access Rates GO DOWN!



Jan 91- April 96

Interstate 1st Minute

Access Costs

Alascom 431-925 mi.

GCI 431-925 mi.

Alascom 926-1910 mi.

GCI 926-1910 mi.

Alascom 1911-3000 mi.

GCI 1911-3000 mi.

Telecommunications Services

Salomon Brothers

Jack B. Grubman
(212) 783-0568
Sheri McMahon
(212) 783-7352
Christine Gochuico
(212) 783-7245

Global Telecom Team
United States
Jack B. Grubman
Group Leader
Sheri McMahon
Christine Gochuico

Europe
Andrew Harrington
Douglas Wight
John Jensen
Richard Sloane

Asia-Pacific
Dan J. Sherman
David Riedel
Chong Hwa Jon
John Tsang

Japan
Makio Inui

Latin America
Sari J. Mayer
Alberto Garcia-Tuñon

On August 6, 1997, we
initiated coverage of
General Communication,
Inc. with a Buy rating.

General Communication, Inc. — Dominating Alaskan Communications

Buy

- We initiated coverage of General Communication, Inc. (GCI) on August 6, 1997, with a Buy rating and a \$12-\$15 price target.
- GCI will be the first fully integrated facilities-based provider of local, long distance and cable in the United States — something that many communications companies only dream about doing.
- We believe that Alaska's unique market, GCI's 15 years of expertise in this market, GCI's current significant market share of the long-distance and cable markets which provide a customer base to sell a bundled local, long distance and cable package when local is added to GCI's product mix later this year, and the cross synergies of its local network buildout will all contribute to GCI's growth and margin expansion.
- Strategic investors include MCI, which owns 19.4% and Prime Cable, which owns 18.0% of GCI. Each of these companies holds two board seats.

Figure 1. General Communication, Inc. — Statistical Abstract

Ticker/Exchange	GNCMA/NASDAQ	Dividend:	—
Price (12 September):	\$8 ³ / ₈	Yield:	—
52-Week Price Range:	\$5 ³ / ₄ -\$8 ⁵ / ₈	Book Value Per Share:	\$4.35
Market Capitalization:	\$412.3 Million	Shares Outstanding:	49.2 Million
	EPS	EBITDA*	Firm Value/EBITDA
1996 Pro forma	\$0.16	\$47.427	12.2
1997E	(0.11)	37.994	15.3
1998E	(0.11)	60.742	9.6
1999E	0.11	97.922	5.9
2000E	0.30	118.918	4.9

* In thousands. E Salomon Brothers Inc estimate
Source: Company reports and Salomon Brothers Inc.

GNCMA QUANTITATIVE PROFILE: MARKET CLOSE 12 SEP 97
Relative Value

	GNCMA	5-Yr. Average	Industry Median ^a	S&P 500 Median
Price/Salomon 1997E	-76.14		16.34 ^d	21.90 ^e
Price/Salomon 1998E	-76.14		14.86 ^d	20.68 ^e
Price/Earnings (T12)	208.14	24.93	17.03	19.38
Price/Cash Flow ^b (T12)	18.34	7.78	7.44	12.20
Price/Sales (T12)	1.92	0.82	2.18	1.41
Price/Book Value	2.39	2.79	4.01	3.57
Firm Value/EBITDA ^c (T12)	21.19	9.03	9.47 ^d	13.0
Dividend Yield	0.00%		1.51%	1.54%

Financial Performance
Fiscal Year Ending Dec 96

	GNCMA	Industry Index	S&P 500 Index
Qtr.-Qtr. Earnings Growth ^f	-124.57%	10.95%	13.09%
Fiscal 1996 Earnings Growth	-0.53	14.22	11.53
Fiscal 1996 Sales Growth	27.55	16.26	7.25
Earnings/Sales Ratio	2.67	9.63	6.54
Long-Term Debt/Capitalization	58	44	35
Return on Equity	3.02	17.24	14.99

Shareholder Activity

	GNCMA	Industry Median	S&P 500 Median
Institutional Ownership ^h	NA	41.58%	60.77%
Insider Ownership	0.00	0.00	0.00
3-Month Change Institutional Ownership	NA	NA	NA
3-Month Change Insider Ownership	0.00	0.00	0.00
12-Month Inside Buyers-Sellers	0-6	1-3	1-4

Earnings Expectations
Fiscal Year Ending Dec 97

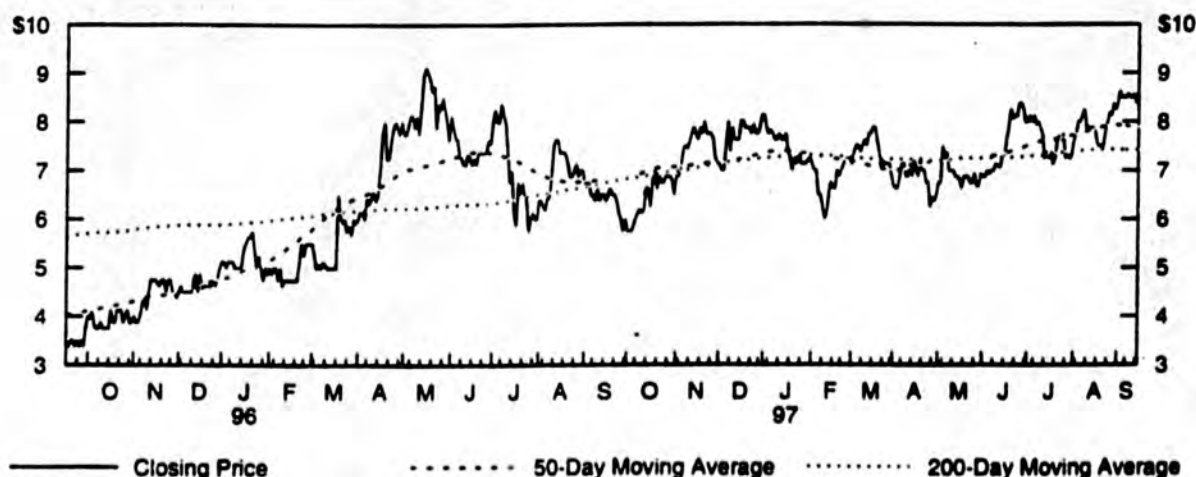
	Salomon Brothers	IBES	First Call
3Q Estimate	NA	-0.03	-0.03
4-Week Change in Estimate	NA	NA	-0.11
Fiscal 1997E	-0.11	-0.10	-0.11
Fiscal 1998E	-0.11	-0.15	-0.13
5-Year Growth Rate	NA	NA	NA
Next Announcement Date	11/15	10/01	11/15
Number of Fiscal 1997 Estimates	1	1	2

Technical Profile

	GNCMA	Industry Index	S&P 500 Index
Quarter-to-Date Price Return	4.69	NA	4.38
Year-to-Date Price Return	3.08	NA	24.73
21-Week Relative Strength Indicator ^g	60	NA	73
21-Week Stochastic ^h	94	NA	87
21-Week Money Flow/Volume Ratio ⁱ	-6%	1%	0%
Weight in the S&P 500	0.00	3.17%	
50-Day Average Daily Volume (00s)	1632		

Composition of Returns^j

	GNCMA	Industry Median	S&P 500 Median
Market Related	10%	23%	27%
Macroeconomic	12	14	9
Industry Related	0	10	11
Firm-Specific	78	46	49
Total	100		

Two-Year Price History


^a Industry medians are based on the 20 Russell 1000 constituents that are in the same industry. ^b Cash flow equals net income before extraordinary items plus depreciation, amortization and depletion. ^c Firm value divided by earnings before interest, taxes, depreciation, and amortization. Firm value equals the book value of total debt plus the market value of the firm's equity. ^d IBES median P/E ratios for the Russell 1000 stocks that are in the same industry. ^e S&P 500 P/E ratios are based on IBES top down consensus earnings for the index. ^f Percentage change in operating earnings between the last reported quarter and the same fiscal quarter one year ago. ^g The 21-week relative strength indicator is an overbought/oversold indicator that measures upside price movement as a percentage of total price movement (up and down). Values above 70 indicate that the stock may be overbought and values below 30 signal that the stock may be oversold. ^h The 21-week stochastic is an overbought/oversold indicator that measures where the stock price is within its 21-week trading range. Values above 80 indicate that the stock may be overbought and values below 20 suggest that the stock may be oversold. ⁱ Money flow equals the dollar volume executed on upticks, less the dollar volume executed on downticks. ^j Industry weight in the S&P 500. ^k Institutional and insider data source is CDA Investment Technologies. ^l The values equal the percentages of monthly return variation that are explained by movements in the S&P 500, key macroeconomic variables, and the relevant S&P industry index. E Estimate. EBITDA Earnings before interest, taxes, depreciation, and amortization. NA Not available. T12 Trailing 12 months.

GENERAL COMMUNICATION, INC. — DOMINATING ALASKAN COMMUNICATIONS

We initiated coverage of General Communication, Inc. (GCI) on August 6, 1997, with a Buy rating and a \$12-\$15 price target. Later in the report we provide details on our valuation. We believe that there is upside to our numbers — that is, GCI believes that it can gain share in local faster than we have factored into our current models (we have GCI local share roughly 35% in ten years; however, given that GCI has 45% of long distance and 55% in business long distance, there is no reason why it should not attain similar share in local, especially against municipally owned LECs). Furthermore, GCI's recent share offering resulted in a tripling in the float from eight million shares to roughly 24 million shares, thus further enhancing the investment appeal of GCI.

GCI will be the first fully integrated facilities-based provider of local, long distance and cable in the United States — something that many communications companies only dream about doing. GCI will own and operate a statewide fiber network, a statewide digital satellite network, local fiber networks in major cities that cover 250,000 of Alaska's 350,000 local lines, the only statewide Internet backbone, the only statewide PCS network and an upgraded two-way 550 MHz cable system reaching 70% of Alaska's households. Furthermore, GCI will construct an undersea fiber optic network connecting Anchorage to Seattle with a spur to Juneau and a terrestrial connection to Fairbanks (see Figure 5) and redundant ring-protected inland extensions will be constructed. GCI has completed the necessary marine survey and has a supply contract with Tyco Submarine Systems (TSS) to build the system with commercial service expected to begin in late 1998. The new fiber will give GCI added capacity (which is greatly needed since capacity is filled on the current fiber optic cable) to transmit high bandwidth services including data transmission and Internet applications. GCI expects that AT&T will lease some of the fibers in the cable and become an equity partner in this investment within five years rather than build its own, since significant excess capacity would likely affect pricing for AT&T and GCI services.

A recent article in an Alaskan newspaper and a press release indicated that a privately held company had obtained financing to build another undersea fiber cable over the same period and at the same landing points as GCI, with the state of Alaska, the University of Alaska and the military as potential customers. However, based on our due diligence — that is, in conversations with AT&T, the state of Alaska, a former general who is a consultant to the military, Sea Floor Survey International (undersea surveyors), and TSS (potential suppliers of the undersea fiber cable) — no one had any commitments with GCI's potential competitor to either supply equipment or to be an anchor tenant of its fiber capacity. In fact, the state, the military and the university would have to go through a procurement process and accept bids before any commitment would be made. In addition, TSS, as part of its agreement with GCI to be GCI's supplier and builder of GCI's undersea fiber, is precluded from building a competing undersea fiber. Hypothetically speaking, if another undersea cable is built and AT&T does not buy a 50% share of GCI's cable, nonetheless GCI's investment would be justified given the amount of traffic GCI carries and the proliferation of demand for bandwidth-consuming services.

Clearly, GCI is following a business plan that we support and believe is necessary in order to compete and earn sufficient margins in this industry — that is, the company is a facilities-based provider versus a reseller of long distance, cable. In addition, by the end of 1998 the company will have local facilities. GCI will do this in Alaska — a market in which it has competed and become an expert in over the last 15 years and whose

geographical idiosyncrasies, population distribution, competitive landscape and communication-intensive needs serve as a barrier to entry for competitors and more important, a market opportunity for GCI.

We believe the following will contribute to GCI's growth and margin expansion: (1) the unique telecom-intense characteristics of the Alaska market; (2) GCI's 15 years of expertise in Alaska; (3) growth of existing business (which we flesh out later) — its 45% share of the long distance market (55% of business long distance) and its 64% penetration of homes passed for cable (GCI passes 70% of the households in Alaska) — which provide a customer base to which GCI will cross sell their existing services (GCI has 104,000 long distance customers and 94,000 cable customers with only 50% using GCI for both) and new services like cable modems and local which will be added later this year; (4) its position as the first significant provider of integrated communications services; and (5) the cost synergies of common network and systems platforms (for example, access costs will be reduced as traffic is put on its own network rather than the incumbent local exchange carrier's network, some of the local network facilities will be shared with cable, and joint billing and customer service platforms).

Alaska is a market with about \$800 million of telecom/cable revenue — 90% of which is local/long distance. With GCI only now addressing the long distance and cable portion (55%), and with the overall market growing at a double-digit rate, significant upside exists for GCI, especially as it enters local. However, since Alaska is, well Alaska, there is limited return of capital investment for a new competitor without facilities; thus, we would find it very difficult to imagine a competitor being able to go into Alaska and replicate the advantages that GCI has as Alaska's first fully integrated provider of communications services. So, while GCI does face a somewhat finite opportunity and probably has little takeover appeal, nonetheless, we view the Alaska market as a virtue since there will not be big telecom players coming in to compete (neither MCI nor Sprint have facilities — they use GCI) and GCI's capital program is truly fully funded.

UNIQUE ALASKAN MARKET PROVIDES OPPORTUNITY FOR GCI

- **GCI has 15 years of expertise in Alaska and understands its needs.** Geography poses unique issues in providing telephony and cable. However, GCI has built its expertise during its more than 15 years in Alaska and understands the complexities of the market. Such expertise ranges from how to reach Alaska's remote communities, given the lack of terrestrial transportation infrastructure, to installing a VSAT on an oil rig in the straits between Alaska and Russia for the numerous oil companies drilling in Alaska — not the typical things network engineers in the lower 48 need to grapple with on a day-to-day basis, or for which they have the skill set. Because of its geography, Alaska relies extensively on satellite-based transmission for intrastate calling between remote communities where investment in a terrestrial network would be uneconomic or impractical.

- **Good demographics propelled market growth.** Alaska's population is growing at a 2% CAGR driven by growth in its tourism and distribution industries, in addition to oil and fishing. Per capita income for Alaskans tends to be higher than in the lower 48 and purchasing power is enhanced by the lack of state income tax and the annual Permanent Fund dividend that every resident receives from the state to live in Alaska (the state paid over \$1,100 per person in 1996 to live in Alaska). In addition, Alaskans have a higher education level, which translates into a higher demand for more advanced technologies and services. For example, 60% of Alaskans have a computer compared with 37% of the population in the lower 48. The growing need for higher bandwidth-consuming services and Alaska's

dependence on communications in lieu of travel has propelled the double-digit per annum growth in the telecommunications market in which we believe GCI will be the best positioned player in all segments of the communications market, since the company owns its own facilities.

- **Alaskans use telecommunications as a substitute for travel.** Factors further influencing the telephony and cable markets include (1) the lack of terrestrial transportation infrastructure (the majority of Alaska's communities are accessible only by air or water), its population distribution and Alaska's northern latitude (not something we telecom analysts and, for that matter, the industry, need to focus on very often). Communities are generally in small, dense population clusters (with the exception of Anchorage, Fairbanks and Juneau) and lack such things as hospitals and libraries. In most of Alaska, you can't just walk down the block to visit the library or drive five minutes to go to the hospital — things that we in the lower 48 take for granted. As such, things like telemedicine and Internet services for information are a necessity for which there is high demand, along with an emphasis on distance education. This is very good news for GCI, which has an Internet backbone and will be providing cable modems in 1998.

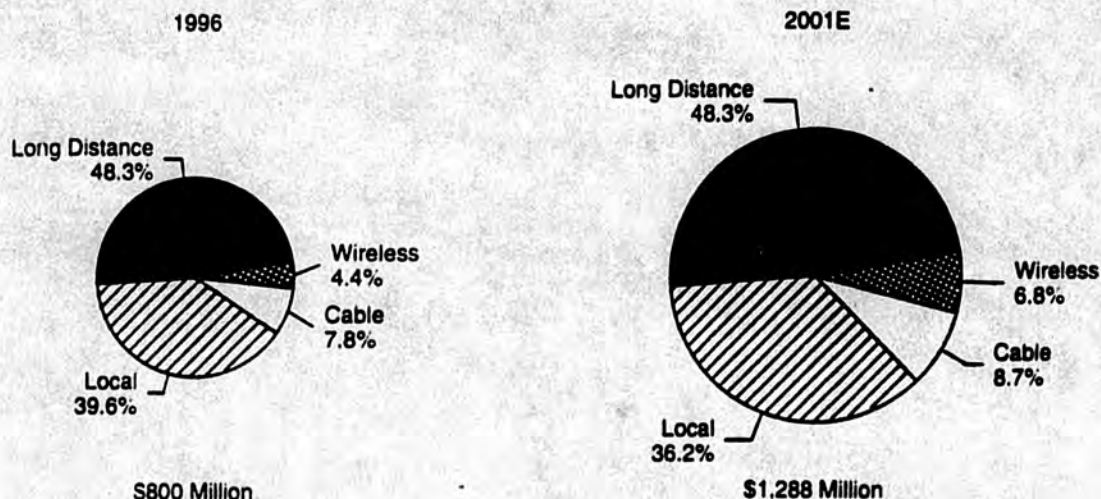
GCI's STRATEGY EXPANDS ADDRESSABLE MARKET WHILE IMPROVING MARGINS

GCI's strategy is to provide a fully integrated, facilities-based telecommunications and cable operations, expand its addressable market, increase its penetration of these markets while improving operating margins and utilization of its capital resources.

- **Expand addressable market to include local.** Today, GCI has 45% share of the Alaska long distance market, up from zero in 1982 (since 1982, MCI and Sprint together have only achieved 25% of the U.S. long distance market and GCI gained eight percentage points of share since AT&T bought Alascom in 1995), and due to its acquisition of various cable properties late in 1996, provides cable services to 64% of homes passed, which represent roughly 70% of Alaska's households. Later this year, GCI will enter into the local market on a resale basis and plans to have all its local customers on a facilities basis by the end of 1998. Given that GCI already has majority share of the top-100 business accounts in long distance, which represent 33% of the local market and through its cable, has a majority of Alaska's households as customers, GCI can bundle and sell its local services to this base. Since the competition includes 22 independent telcos, three which are municipally owned, we believe that GCI will be able to gain local market share very quickly and become a dominant player in local as well as long distance and cable (see our section on local and wireless for GCI's local strategy below). Moreover, providing a bundled offering will enable GCI to increase customer retention rates, especially given that GCI's aggressive salesforce is going up against LECs that literally have no salespeople.

At the end of 1996, the Alaska communications market totaled \$800 million, with GCI addressing \$448 million through its long distance and cable operations. We estimate that the communications market will grow at a 10% cumulative annual growth rate (CAGR) and that by 2001, GCI's addressable market will be \$1.288 billion.

Figure 2. General Communication, Inc. — Addressable Market, 1996-01E (Dollars in Millions)



Source: Salomon Brothers Inc

• **Network build will allow an increase in penetration of markets.** GCI will build an integrated broadband network to provide a superior offering and a single point of contact for all services and leverage its customer base (see separate section below) to increase penetration of its markets and dominate each of its segments. With its recent equity and debt transactions, GCI is fully funded to carry out this buildout. GCI operates (1) a state-of-the-art network using the latest digital transmission technology based upon fiber optic and digital microwave facilities within and between Anchorage, Fairbanks and Juneau; (2) a digital undersea fiber optic cable (with a capacity of nine DS3s and backed-up by additional satellite capacity) linking Alaska to the lower 48 states and providing access to other carriers' networks for communications around the world; and (3) the use of satellite transmission to remote areas of Alaska (and for interstate traffic as well).

GCI has budgeted \$75 million over five years to upgrade its long distance systems, \$125 million for undersea fiber build (with \$60 million expected to be paid for by an expected equity partner) and \$40 million for satellite transponders, \$65 million to upgrade its cable plant to a minimum 550 MHz so that GCI will be able to offer cable modems to its customers, and \$140 million to build out its local network so that the company can provide its customers with facilities-based local services versus resold services.

Figure 3. General Communication, Inc. — Five-Year Capital Expenditures Plan

Long distance facilities	\$75
Satellite transponders	40
Local/PCS network buildout	140
Upgrade cable facilities	65
GCI Alaska United Fiber	125
Alaska United Partner	(60)
Total Capital Expenditures	\$385

Source: General Communication, Inc.

By the third-quarter 1997, GCI will have integrated customer service on a common information system platform with six-second queue times (that is, within six seconds your call will be answered) and a single bill for all services by the second quarter of 1998 — simplicity that consumers crave.

By the end of 1998, GCI will have an integrated broadband network with its fiber rings installed in urban markets, all cable systems upgrade to 550 MHz, a common switching platform supporting all services, a fiber optic network to the lower 48 and cable modems in all systems.

• **Achieve costs synergies across segments.** We expect GCI to achieve greater operational efficiencies and expand its margins by combining the marketing, sales and customer service, information systems and administrative functions of the cable systems with GCI's existing operations as explained above. In addition, GCI will reduce its access costs, which represented approximately 58% of its long distance revenues in 1996, as it builds its own local service network. The company estimates that the average access charge payable by it to Alaskan LECs for originating and terminating interstate access is roughly \$0.043 per minute of traffic and for originating or terminating intrastate access, approximately \$0.07 per minute of traffic (or a total of \$0.14 for both originating and terminating access).

In addition, GCI will leverage its investment in existing cable plant and rights-of-way by, in some cases, overlaying or using existing fiber optic cable for telephony or PCS applications. The incremental cost of such network enhancements, especially combined with planned upgrades to existing cable plant (which was described above), is significantly less than the cost of building entirely new network facilities.

GCI WILL LEVERAGE ITS CUSTOMER BASE AND EXPERTISE TO DOMINATE EACH OF ITS SEGMENTS

Long Distance

GCI began offering interstate long-distance services to Alaskans in 1982 and intrastate long distance services since 1991, when the Alaskan Public Utilities Commission (APUC) opened up the market for these services. Prior to 1982, Alascom (which was bought by AT&T in 1995) was Alaska's only interstate and intrastate long distance provider. Despite efforts by the incumbent monopoly to keep GCI from gaining share, GCI's market share grew from 0% in 1982 to 45% in 1996 — which matches the share loss of AT&T in the lower 48 to more than 800 competitors during that time. In fact, between MCI and Sprint, which we regard as fierce competitors, captured roughly one-half of GCI's market share gain, or 25%, of the lower 48 long distance market — showing that GCI is pretty good at what it does.

At the end of 1996, GCI held 45% market share, with 41% of the residential market and 55% of the business market and today, GCI is viewed as an expert in telecommunications in Alaska. In fact, although the revenues are not significant, GCI has served as an outsourcer of telecommunications expertise during the past two years for two of the top ten businesses in Alaska — the National Bank of Alaska and British Petroleum. Furthermore, GCI can leverage its recent purchase of cable properties and cross sell its long distance services to 59% of its cable customers — that is, 59% of cable customers are potential long distance customers — while 27% of its residential long distance customers are potential cable customers.

Current long distance competitors do not pose a threat

Currently, GCI's competitors in long distance consist of AT&T, which bought Alascom in 1995 (rather than continue to subsidize its unprofitable operation) and Anchorage Telecommunications Utility (ATU) in Anchorage. Since AT&T bought Alascom in 1995, GCI has gained eight market share points bringing its long distance share up to 45%. This is not surprising, as GCI is viewed as a telecommunications expert in Alaska and AT&T (which faces increasing competition in its core domestic long

distance operations and, frankly, has bigger fish to fry) no doubt focuses a majority of its attention on retaining its customers in the lower 48 states and does not direct any capital in its budget toward Alaska. ATU, the facilities-based local carrier in Anchorage (and which is certified as a reseller of intrastate long distance services throughout the state), currently resells long distance services to its customers in Anchorage and does not pose a real threat to GCI, whose cost basis as a facilities-based long distance operator is lower than ATU's cost as a reseller. Thus, we do not view either AT&T or ATU as a threat to GCI gaining additional market share.

We do not expect any significant new competitors

We do not expect any significant new competitors in this region for two reasons: (1) GCI has agreements with MCI and Sprint to terminate their long distance calls in Alaska; and (2) it does not make sense for new companies to build out in Alaska since they would need to build a statewide network. The only way to compete in long distance is to provide statewide service — including the bush of Alaska — through a ubiquitous network and the economics of such a strategy would not justify the investment.

GCI has entered into strategic agreements with MCI (which owns 19.4% of GCI stock after its recent offering) and Sprint which expire in 2001 and 1999, respectively, whereby GCI can route its long distance traffic which terminates in the contiguous 48 states (excluding Washington and Oregon) over MCI's network and all of its international calls over Sprint's network. In return, GCI will carry substantially all of MCI's and all of Sprint's calls which terminate in Alaska. The MCI agreement also requires that GCI handle MCI's 800 traffic originating in Alaska and handle MCI's calling card customers when they are in Alaska, while MCI originates calls for GCI's calling card customers when they are in the lower 49 states.

Upon termination of these agreements we do not believe MCI or Sprint will enter the market, because as a third or fourth player into a market with Alaska's idiosyncrasies, it would not be able to justify its investment, especially with a full facilities-based competitor as GCI, which has built its expertise in Alaska. In addition, entry into the market by a national carrier such as MCI or Sprint through acquisition, or through building its own facilities, would subject the carrier to more regulatory scrutiny as a dominant carrier (versus GCI's status as a nondominant carrier).

Upgrading network facilities and adding undersea fiber optic cable to improve efficiencies and increase capacity

GCI's current network includes six leased C-band transponders on Hughes' Galaxy IX satellite and one Ku-band transponder on Hughes' SBS5 satellite, which will be replaced by seven transponders (six C-band and one Ku-band), which the company will own on Hughes' Galaxy X satellite (expected to be launched in mid-1998). The C-band satellite network is used for the company's message toll services and private line and network services. The Ku-band network is higher power and is used primarily for point-to-point data communications. GCI has earth stations throughout Alaska which are used to receive and/or transmit signals via satellite (see Figure 5). GCI owns three digital toll switches in Anchorage, Fairbanks and Juneau and has installed a Lucent 5ESS combined local/long distance switches in Anchorage and will install additional 5ESS switches to consolidate its local and long distance operations.

Within and between Anchorage, Fairbanks and Juneau GCI uses digital microwave facilities leased from AT&T. The majority of GCI's interstate long distance traffic is carried to and from the contiguous 48 states over the current undersea fiber optic cable in which GCI owns one of the nine DS3s of capacity and leases 57% of another DS3 channel. GCI will construct an undersea fiber optic network from Alaska to the lower 48 as mentioned above.

Cable

Late in 1996, GCI purchased Prime Cable of Alaska, L.P., Alaska Cablevision and Alaskan Cable Network in three separate transactions for a combined purchase price of \$280.1 million (\$86.7 million in stock, \$72.8 million cash, \$110.6 million assumption of debt and issuance of \$10.0 million in subordinated convertible notes). GCI will add value to its cable acquisitions since GCI has the resources needed to upgrade the systems to enable the deployment of cable modems and has long distance customers to which it can cross-sell cable services (roughly 27% of the company's residential long distance customers are potential cable subscribers). After the purchase of these properties, GCI's homes passed reached 70% of households with a penetration of 64%. GCI kept the management of Prime Cable, which owns 18.0% of GCI after the recent offering and holds two Board seats, to manage the cable systems with a nine-year agreement, but either GCI or Prime Cable management could terminate the agreement after October 31, 1998.

GCI will offer cable modems beginning in the fourth quarter of 1997 once it upgrades its current 300-400 MHz of channel capacity network to between 450 and 550/750 MHz system with the upgrade expected to be completed by the end of 1998. The upgrade will improve network quality, expand channel capacity and add new services. For example, cable modems provide faster access to the Internet and other on-line data services. While AT&T through their AT&T Worldnet offers Internet services, an AT&T Worldnet customer needs to make a toll call in order to dial into the Internet since AT&T does not have an Internet backbone in Alaska, compared with a local call for GCI Internet customers. For this reason, we believe customers will sign on to GCI's offering over AT&T's.

Drawbacks of DBS Systems

DBS is not a very viable competitor because of Alaska's high northern latitude. Existing satellites which are situated over the equator have relatively low altitude above the horizon when viewed from Alaska, making their signals subject to interference from mountains, buildings and other structures. Therefore, in order to provide signals via satellite as in the DBS system, a carrier either needs a strong signal — meaning a satellite which is focused directly on Alaska — or a subscriber needs a six-foot diameter satellite dish to receive the signal (versus two feet in the lower 48). Multichannel, multipoint distribution service (MMDS) or wireless cable operators are also potential competitors, however, MMDS requires that customers' receiving antennas have line-of-sight access to transmitting radio towers and both MMDS and DBS signals are subject to interference from rain, snow and wind.

Local and Wireless

GCI's local strategy is a typical CLEC strategy, only better, since GCI has 55% of the business long distance and 41% of the residential long distance markets and thus has customers to which to sell local services. The top 100 business accounts in Alaska represents roughly one-third of the telecom market and 60% of the commercial telecom market, giving GCI a leg up in competing in the local market. GCI will offer local service either facilities-based, on unbundled local loops, or through resale. GCI will begin offering service in the third quarter of 1997 on a resale basis in Anchorage where it is certified as a local exchange carrier and has an approved interconnection agreement with the ATU — the incumbent local exchange carrier (ILEC) in Anchorage — initially to its long distance companies and then to Internet service providers and other business, including large businesses and will add Fairbanks and Juneau in 1998 and other markets during 1999.

Local network buildout plans

Through its buildout of local facilities, which will be completed by the end of 1998, GCI will transfer its local customers onto its own facilities, enabling greater cost efficiencies. On a facilities-basis, GCI could provide local service on its fiber-optic metropolitan area network (MAN) (which can handle high-speed data network services as well) and microwave radio facilities and potentially through the use of wireless local loop equipment and its coaxial cable network. GCI began construction of its 130-mile Anchorage MAN during 1997 and expects to complete the MAN by the end of 1998. The MAN will also benefit the cable network through creation of a hybrid fiber-coaxial infrastructure that will provide increased bandwidth and improved noise and distortion suppression. The system is being designed to provide up to 750 MHz of usable bandwidth for a combination of 550 MHz analog and 200 MHz digital cable video services. GCI plans to construct a 35-mile MAN in Fairbanks beginning in late 1997 and has acquired 52 miles of fiber optic networks in Juneau and Kodiak through its cable acquisitions.

PCS plans

GCI purchased a statewide 30 MHz B-block PCS license in June 1995 for \$1.65 million, or \$3 per pop. GCI plans to build a PCS network covering all urban areas with PCS cells and plans to rollout its PCS product in Anchorage in 1999 and in Fairbanks and Juneau in 2000. The planned MAN networks will provide the fiber optic cable backbone to link PCS cell sites in major population centers. GCI's PCS business expects to compete against the cellular subsidiaries of AT&T and ATU in Anchorage and the cellular subsidiaries of PTI and others outside of Anchorage and against the five other statewide PCS license holders (30 MHz A- and C-block, and 10 MHz D-, E- and F-block). However, to date, none of the PCS licensees have announced plans for service in Alaska.

Larger local competitors are the best competitors GCI can ask for — municipally owned monopolies

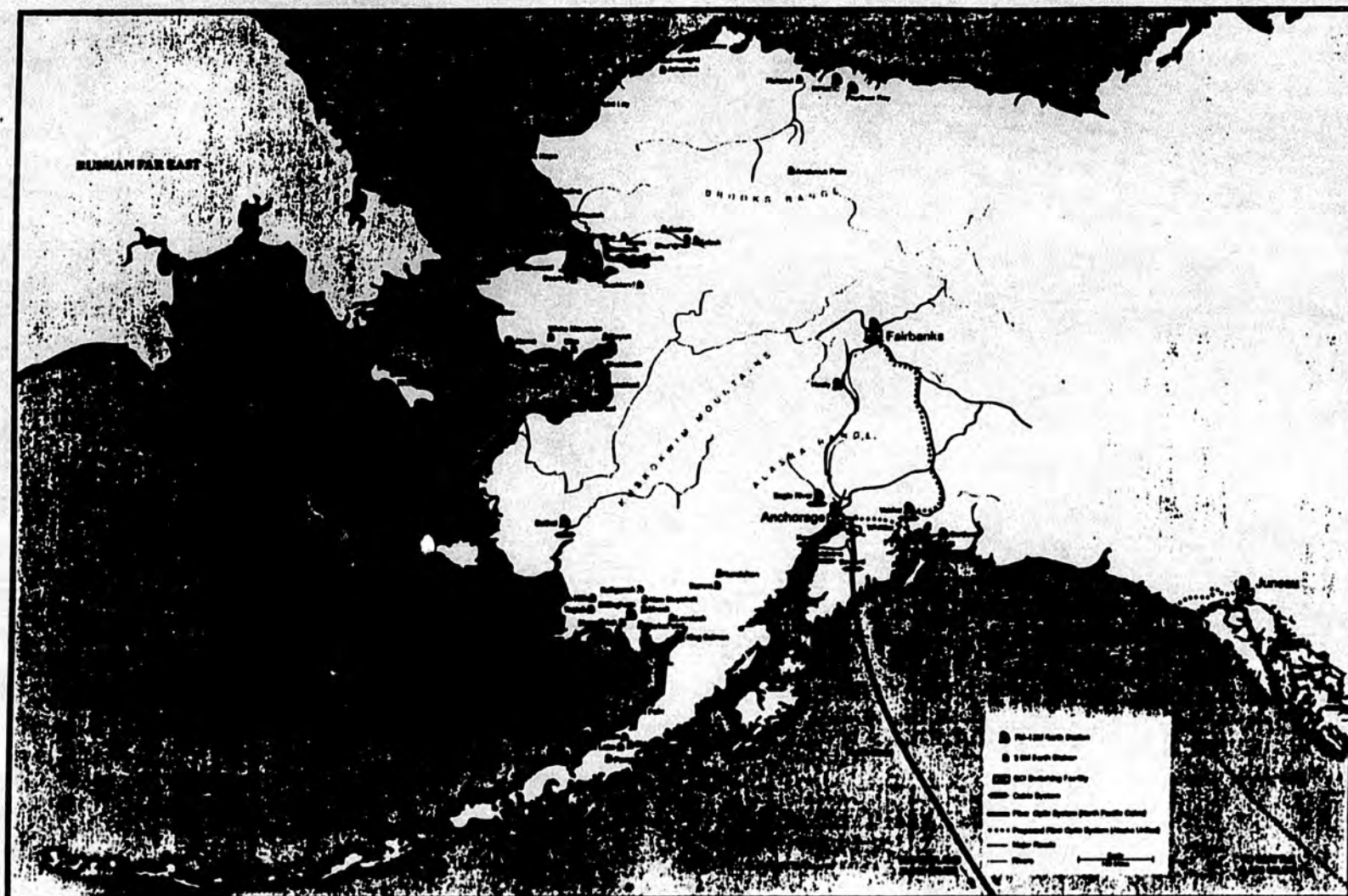
Current local competitors include ATU in Anchorage, which is a government-owned monopoly, Pacific Telecom, or PTI, which was recently bought by Century Telephone, in Juneau and is expected to be in Fairbanks by the end of 1997, GTE and 19 other independent telcos. GCI could not have asked for better competitors — three of the independent telcos, including ATU, are government-owned monopolies which make the RBOCs look like Microsoft. We suspect that these municipally owned monopolies do not have much competitive know-how, which at least a monopoly that is publicly traded has some notion of.

Figure 4. Comparison of Competitive Products and Facilities

	GCI	AT&T	ATU	PTI
Products				
Long distance	Yes	Yes	Resale	None
Local	Yes	Resale	Limited	Limited
Wireless	Yes	Limited	Limited	Limited
Internet	Yes	Limited	None	Limited
Video/Entertainment	Yes	None	None	None
Facilities				
Terrestrial fiber	Yes	Yes	None	None
Statewide satellite network	Yes	Yes	None	None
Wired local network	Yes	None	Limited	Limited

Source: General Communication, Inc.

Figure 5. General Communication, Inc. — Voice, Video and Data Network



Source: General Communication, Inc.

ACCESS REFORM BENEFICIARY AS LOCAL AND LONG-DISTANCE PROVIDER

The FCC's recent access reform order, which covers interstate access, allows GCI, as a facilities-based local service provider in rural America, to receive a subsidy for providing these service. The subsidy is paid out of a "Universal Service Fund (USF)" to which telecommunications carriers contribute on a proportional basis. With Alaska's large rural population, GCI would be a net taker of USF, which will subsidize 90% of a rural subscribers' including schools' and hospitals' telephony needs.

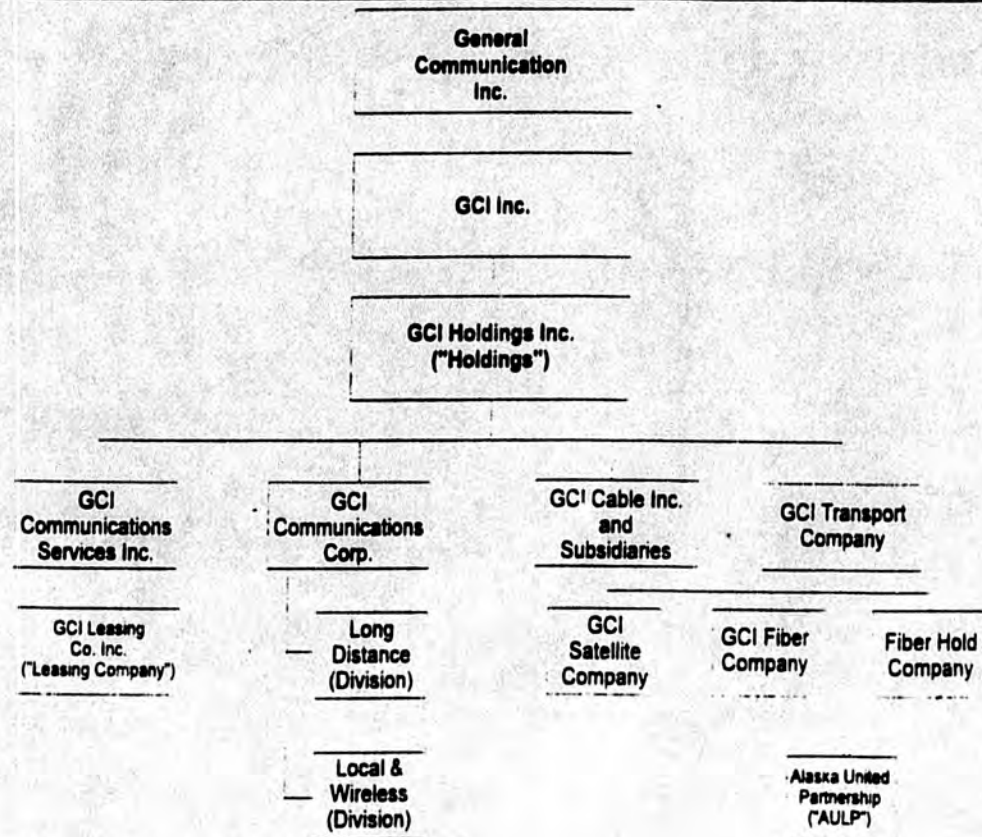
In addition, access reform also mandates that the access charges that the facilities-based local carriers charge interexchange carriers for using the local carrier's network to originate or terminate long distance calls be reduced such that by the year 2000, per minute originating and terminating access will be reduced from on average \$0.024 per minute to \$0.012. Furthermore, the FCC also mandated that terminating access charges will decline first. What this equates to for GCI is lower access expenses, since twice as many of the calls GCI carries are outgoing to the lower 48 and thus, GCI's originating access will be on its own network as its local build is completed and its terminating access charges are reduced as mandated by the FCC (that is, terminating traffic costs go down first).

COMPANY BACKGROUND AND MANAGEMENT

GCI was founded in 1979 by Ron Duncan and Robert Walp as a provider of interstate long distance services. From 1980-87, GCI was a wholly owned subsidiary of WestMarc Communications, Inc. The company was spun off in 1987 from WestMarc, a subsidiary of TCI that was itself spun off by TCI in 1984. TCI acquired its stock in GCI through its ownership of WestMarc, which was reacquired by TCI in 1990.

Management and the company's affiliates hold 45.3% of GCI stock after the recent equity offering. MCI, which has a strategic alliance with GCI (explained above in the segment analysis — long distance section), owns 19.4% after GCI's recent equity offering and holds two Board seats. Prime Cable, which received shares from its acquisition by GCI and provides management of the cable properties, owns 18.0% of the shares of GCI and also holds two Board seats.

Figure 6. General Communication Inc. — Corporate Structure



Source: General Communication Inc.

GCI's telecommunications operations are conducted primarily through GCI Communication Corp. and also through two other subsidiaries. GCI Communication Services, Inc. provides private network point-to-point data and voice transmission services between Alaska, Hawaii and certain western states, and GCI Leasing Co. Inc. is the owner of the company's existing undersea fiber optic cable capacity. The company's cable operations are conducted through GCI Cable, Inc. and its subsidiaries. GCI Transport Company and its subsidiaries were recently formed to finance the acquisition of seven transponders on the Galaxy X satellite that is expected to be launched in mid-1998, and to finance the construction of new undersea fiber optic cable facilities linking Anchorage and Juneau to the lower 48 states at Seattle, Washington with a terrestrial connection to Fairbanks.

GCI REPORTS IN-LINE SECOND QUARTER RESULTS; STRONG CORE REVENUE AND VOLUME GROWTH

GCI reported a good quarter in line with our expectations while some of the operational highlights of the quarter showed that GCI will benefit from its unique market. During the fourth quarter the gap between long distance revenue growth and MOU growth was positive — something we cannot say about the Big three LD players in the lower 48 with long-distance transmission revenue growth of 9.2% and MOU growth of 8.8% while sequential cable revenue growth was 2.9% (year-over-year comparisons are not available since GCI purchased the cable properties during the fourth quarter of 1996).

In addition, the company has been pre-marketing its local services with encouraging results. In fact, although GCI has not yet turned on its local operations (which is expected in September 1997 when they begin to connect into wire centers) it has already signed on its first local customer

and has a backlog of orders from commercial and consumer customers which will be turned up as soon as GCI starts providing local service. In Anchorage, GCI began to provide local dial tone dial up for AOL during the second quarter, carrying AOL internet traffic and continues local rollout with a backlog of customers that want GCI service. The delay in providing local service to is due to the ATU's (the incumbent's) foot dragging which GCI has resolved through an Alaska PUC decision that spells out a time frame for the ATU to provide the necessary interconnection for local service competition. Local services are expected to begin in mid-September with all wire centers expected to be turned on in Anchorage by the end of the year. We expect GCI will be able turn up 250-300 lines per day once they are in all the wire centers.

GCI's local customer commitments are largely from commercial customers which good news for GCI as these customers are higher value customers as compared with the consumer market and contracts are generally multi-year. This is clear evidence of GCI being able to leverage its 55% share of commercial long distance customers. In the consumer segment GCI's marketing plans include offering a bundled local, long distance and cable package to consumers. GCI has been selling services door-to-door to target customers with a \$19.95 product offering for basic local services with enhanced features such as Call Waiting and Caller ID if the customer also signs up for their long distance offering as well. With basic local services of \$10 in Alaska, GCI's strategy is trying to "cream skim" the local market and capture the higher end consumers who are also tend to be the high end heavy users of the long distance market. So far, GCI has had a good take rate to their \$19.95 local consumer offering although for competitive reasons will not disclose these amounts.

Since GCI completed its recent share offering (which fully funds its build out plans) the company has entered into a contract with Tyco Submarine Systems (TSS) to build its undersea fiber linking Alaska with the lower 48. As part of the terms of the contract, TSS is precluded from building a competing fiber making any competing fiber more difficult to build as TSS is only one of a few companies who are equipped for an undersea build. The fiber which started construction this month is expected to be completed by the end of 1998.

Long distance revenues were strong with 8.2% sequential revenue growth as GCI continues to gain market share. Overall revenue growth was 7.5% year over year with growth due to its strong LD transmission business which posted 9.2% revenue growth despite a 2.5% decrease (a small level which is unheard of in the lower 48) in the average revenue per switched minute as volumes were stimulated by this decrease. EBITDA margins for the long distance segment were 7.9% down from the 10.3% in the first quarter of 1997 with margin pressure primarily due to the increased costs from the integration of its information processing systems including billing and customer service and the expansion of its business. The information processing systems expenses are reported in the longdistance segment rather than spreading the costs across the three segments further impacting EBITDA margins. GCI expects integration costs to total approximately \$10 million for the year with the bulk of the costs during the first, second and third quarters of 1997. The company is on track to complete the integration of its customer service platform by the third quarter of 1997 and expects to complete the billing integration so that customers may receive a single invoice for all services by the second quarter of 1998. The fact is GCI's core LD margins have not deteriorated but rather long distance was burdened disproportionately with all the expenses of integration.

Cable revenues posted 2.9% sequential growth primarily due to price increases in Anchorage which began in April while EBITDA remained virtually flat at \$5.9 million due primarily to the increase in costs due to

the integration of the three cable properties that were purchased in 4Q'96. In fact, more than half of the increase in SG&A were due to non-recurring costs with the balance due to consolidation and integration costs. Average revenue per sub was basically flat with the first quarter of 1997 at \$39. GCI's upgrade of its cable plant continues adding 13 additional channels in Fairbanks with other markets in the process of being upgraded. GCI's cable businesses should benefit from its rebranding of cable services under the GCI name during the second quarter and a planned third quarter marketing campaign as well as from its upgrades are completed.

NET/NET: We continue to believe that GCI is on track with their build out plan and will reap the benefits of being a facilities-based integrated local, long distance and cable carrier with an integrated salesforce and service platforms including billing and will post positive eps beginning in 1999 and positive overall EBITDA during its buildout phase. With its core business posting strong revenue growth and volume growth and results from pre-marketing in local, we believe the company is well on its way to reaching its goal of greater than 50% share in all segments of its business — including local. We reiterate our Buy on the shares of GCI and our \$12-\$15 price target.

VALUATION

In Figures 7-10, we provide our quarterly and annual earnings models including a segment analysis and our discounted cash flow (DCF) for GCI. Given GCI's strategic position as the first fully facilities-based provider of communication services and our belief that GCI will grab market share quickly in local and further penetrate its already significant market share in long distance and cable, we believe the assumptions we used in building our model are conservative. Based on the assumptions we used, our DCF valuation implies a \$12-\$15 per share value for GCI. At a firm value/1999 estimated EBITDA multiple of 5.9 times, GCI is trading at RBOC multiples (in 1999, we expect GCI's buildout phase to be completed). Though RBOCs are not direct comparables to GCI, given that GCI has opportunities for growth greater than that of an RBOC and is a fully integrated provider, we believe that GCI is relatively inexpensive.

We assumed in our models that GCI's share of the long distance market will increase moderately from 45% of the market in 1996 to 47% by 2000 and 54% ten years out. In cable, we assumed that market penetration will moderately increase from 64% at the end of 1996 to 70% by 2000 and 74% by 2006, while we assumed that GCI would gain 29% market share in local by 2000 and 36% by 2006. We believe that these estimates may be conservative given the following: (1) GCI is starting with a significant share in long distance and cable and has potential cross-selling opportunities across these business lines as well as its local customers; (2) its ability to integrate service platforms and introduce new products that will ride the same facilities (that is, the long distance fiber network will provide an Internet and PCS backbone, local fiber rings will provide upstream assets for cable modems); and (3) the fact that additional competition with GCI's statewide facilities-based coverage is unlikely. Given these factors, we believe that GCI may end up with two-thirds of the long distance market (especially since AT&T will concentrate on the lower 48 versus Alaska) and 40% of the local market in five years. Thus, we believe that there may be upside to our numbers.

In our model, we assume that EBITDA margins will range from 28%-32% from 1999 to 2006, which is relatively conservative given that RBOCs have EBITDA margins at the 40% level, while long-distance margins are roughly 20% and cable margins are roughly 45%-47%. Given the synergies GCI will experience from a combined salesforce, and common platform

across all its business segments, we believe that our EBITDA estimates are very conservative. In addition, we have assumed that AT&T will buy 50% ownership of the undersea fiber optic cable to the lower 48 in 2001 and will then begin account for its investment in Alaska United on an equity basis.

In our DCF we used terminal multiples of roughly 2.5 times long distance revenues, 8.5 times cable EBITDA and 6.0 times local EBITDA and a discount rate of 12%, all of which result in an aggregate implied perpetuity growth rate of cash flow of only 5.2% per annum. This clearly gives us great confidence that our inputs to the model are reasonable, if not conservative.

INVESTMENT CONCLUSION

We believe that GCI has unique characteristics which make it an attractive investment. GCI's 15 years of market expertise in Alaska, its significant market share in long distance and cable and the company's opportunities in entering the local market, as well as its ability to achieve cost synergies across segments as GCI combines marketing and administrative functions and develops a single platform for customer service and information services (including billing) will allow the company to dominate all segments of the Alaskan market, in our view. Furthermore, Alaska's isolated market and limited investment appeal to new competitors is a plus for GCI, which will have the first and likely only facilities-based local, long distance and cable operation in the state. At a price target of between \$12-\$15 per share, we believe that investors in GCI (which currently trades in the \$8 range) will get a better return than many telecom investments.

Figure 7. General Communication Inc. — Quarterly Earnings Model, 1996-98E

	1996 Proforma	1997E 1Q4	2Q4	3Q4	4Q4	1997E Year	1998E Year
Revenues							
Telecommunications services	\$155,419	\$39,225	\$42,131	\$44,045	\$42,612	\$168,013	\$190,111
Cable services	55,343	13,656	14,055	14,413	15,272	57,396	65,361
Local services	0	0	0	1,399	2,257	3,656	16,822
Total Revenues	\$210,762	\$52,881	\$56,186	\$59,857	\$60,141	\$229,065	\$272,294
Operating Expenses							
Cost of sales and services	104,180	27,168	29,778	31,271	31,069	119,286	129,355
Total SG&A	59,155	16,301	18,014	18,633	18,837	71,785	82,197
-Operating and engineering		2,792	2,638	2,775	2,685	10,889	12,019
-Cable television		4,368	4,918	4,857	4,773	18,915	19,935
-Sales and communications		2,914	3,716	3,964	3,835	14,429	16,642
-General and administrative		5,256	5,778	6,085	6,613	23,733	29,565
-Legal and regulatory		448	345	396	384	1,573	1,664
-Bad debts		523	619	556	548	2,246	2,372
EBITDA	\$47,427	\$9,412	\$8,394	\$9,952	\$10,235	\$37,994	\$60,742
EBITDA Margin	22.5%	17.8%	14.9%	16.6%	17.0%	16.6%	22.3%
Depreciation and amortization	20,553	6,120	5,608	6,980	7,664	26,372	35,500
Operating Income	\$26,874	\$3,292	\$2,786	\$2,973	\$2,571	\$11,622	\$25,241
Operating Margin	12.8%	6.2%	5.0%	5.0%	4.3%	5.1%	9.3%
Interest expense, net	15,512	3,949	4,228	5,489	6,338	20,004	34,118
Income Before Taxes	\$11,362	\$(857)	\$(1,442)	\$(2,516)	\$(3,767)	\$(8,382)	\$(8,877)
Income tax expense (benefit)	4,695	(132)	(610)	(1,031)	(1,544)	(3,318)	(3,639)
Effective income tax rate	41.3%	NA	41.0%	41.0%	41.0%	39.6%	41.0%
Net Income	\$6,700	\$(525)	\$(832)	\$(1,484)	\$(2,222)	\$(5,064)	\$(5,237)
Average Shares Outstanding	43,167	43,167	43,474	49,236	49,236	46,278	49,236
EPS	\$0.16	\$(0.01)	\$(0.02)	\$(0.03)	\$(0.05)	\$(0.11)	\$(0.11)
Long Distance							
Revenue	\$155,419	\$39,225	\$42,131	\$44,045	\$42,612	\$168,013	\$190,111
Distribution costs and costs of services	90,597	23,884	26,495	27,528	26,632	104,539	110,720
SG&A	42,550	11,320	12,291	12,861	12,443	48,915	54,364
EBITDA	22,272	4,021	3,345	3,656	3,537	14,559	25,027
EBITDA Margin	14.3%	10.3%	7.9%	8.3%	8.3%	8.7%	13.5%
Depreciation and amortization	7,189	2,623	2,295	2,958	3,221	11,097	14,476
Operating Income	15,083	1,398	1,050	698	316	3,462	10,551
Operating Margin	9.7%	3.6%	2.5%	1.6%	0.7%	2.1%	5.7%
Capital expenditures		9,529	10,000	32,500	32,500	84,529	116,000
LD market share based on number of lines	45%	45%	45%	45%	45%	43%	42%
Cable							
Revenue	\$55,343	\$13,656	\$14,055	\$14,413	\$15,272	\$57,396	\$65,361
Programming and copyright costs	13,583	3,166	3,165	3,243	3,436	13,010	15,033
SG&A	15,735	4,465	5,027	4,972	4,895	19,359	20,458
EBITDA	26,025	6,025	5,863	6,198	6,941	25,028	29,870
EBITDA Margin	47.0%	44.1%	41.7%	43.0%	45.5%	43.6%	45.7%
Depreciation and amortization	13,364	3,497	3,313	3,848	4,023	14,681	16,348
Operating Income	12,661	2,528	2,550	2,350	2,918	10,346	13,522
Operating Margin	22.9%	18.5%	18.1%	16.3%	19.1%	18.0%	20.7%
Capital expenditures			6,667	6,667	6,667	20,000	22,500
Homes passed	162,395	163,220	163,414	163,691	163,291	163,291	163,985
Basic subscribers	102,115	104,656	103,942	104,940	107,178	107,178	110,691
Penetration	62.9%	64.1%	63.6%	64.1%	65.6%	65.6%	67.5%
Local							
Revenue	\$0	\$0	\$0	\$1,399	\$2,257	\$3,656	\$16,822
Distribution costs and costs of services	0	118	118	500	1,000	1,736	3,602
SG&A	870	516	696	800	1,500	3,512	7,375
EBITDA	(870)	(634)	(614)	99	(243)	(1,592)	5,845
EBITDA Margin	NA	NA	NA	NA	NA	NA	34.7%
Depreciation and amortization				174	420	594	4,676
Operating Income	(870)	(634)	(614)	(76)	(662)	(2,186)	1,169
Operating Margin	NA	NA	NA	NA	NA	NA	6.9%
Capital expenditures			8,333	8,333	8,333	25,000	45,000
Lines in service				6,614	15,949	15,949	47,177
-Residential lines in service				-	7,760	7,760	22,736
-Business lines in service				6,614	8,189	8,189	24,441
Addressable lines				28,709	161,908	161,908	262,080
Market share of lines				23.0%	9.9%	9.9%	18.0%
-Residential lines				-	102,864	102,864	179,869
-Business lines				28,709	59,044	59,044	82,211
Total							
EBITDA		9,412	8,394	9,952	10,235	37,994	60,742
Depreciation and amortization		6,120	5,608	6,980	7,664	26,372	35,500
Total capex		9,529	25,000	47,500	47,500	129,529	183,500

1996 is proforma for cable acquisitions. EBITDA Earnings before interest, taxes and depreciation and amortization. E Salomon Brothers estimate
Source: Salomon Brothers Inc

Figure 8. General Communication Inc. — Annual Earnings Model, 1996-06E

	1996 Proforma	1997E Year	1998E Year	1999E Year	2000E Year	2001E Year	2002E Year	2003E Year	2004E Year	2005E Year	2006E Year
Revenues											
Telecommunications services	\$155.419	\$168.013	\$190.111	\$214.054	\$231.115	\$243.844	\$262.406	\$282.465	\$305.248	\$328.737	\$356.897
Cable services	55.343	57.396	65.361	74.021	79.035	84.293	89.168	93.958	98.833	103.707	108.612
Local services	-	3.656	16.822	34.437	50.932	62.853	72.241	78.184	82.810	85.743	91.105
Total Revenues	\$210.762	\$229.065	\$272.294	\$322.511	\$361.080	\$390.989	\$423.815	\$454.607	\$486.891	\$518.187	\$556.615
Operating Expenses											
Cost of sales and services	104.180	119.286	129.355	139.084	151.865	170.103	180.436	190.993	207.320	221.204	244.435
Total SG&A	59.155	71.785	82.197	85.506	90.298	94.906	98.793	105.142	112.116	119.492	124.313
-Operating and engineering	-	10.889	12.019	12.081	13.168	14.199	15.312	16.516	17.883	19.436	21.126
-Cable television	-	18.915	19.935	20.524	20.798	21.430	23.023	24.235	25.469	26.314	27.547
-Sales and communications	-	14.429	16.642	17.115	17.557	17.742	16.588	17.892	19.373	21.056	22.886
-General and administrative	-	23.733	29.565	31.368	34.052	36.189	38.129	40.235	42.642	45.391	44.870
-Legal and regulatory	-	1.573	1.664	1.812	1.975	2.130	2.297	2.477	2.682	2.915	3.169
-Bad debts	-	2.246	2.372	2.606	2.748	3.209	3.444	3.786	4.068	4.380	4.716
EBITDA	\$47.427	\$37.984	\$60.742	\$87.922	\$118.918	\$125.981	\$144.585	\$158.472	\$167.455	\$177.491	\$187.867
EBITDA Margin	22.5%	16.6%	22.3%	30.4%	32.9%	32.2%	34.1%	34.9%	34.4%	34.3%	33.8%
Depreciation and amortization	20.553	26.372	35.500	46.803	52.010	52.780	56.735	59.213	61.692	68.090	50.325
Operating Income	\$26.874	\$11.622	\$25.241	\$41.119	\$66.908	\$73.201	\$87.850	\$99.259	\$105.763	\$129.400	\$137.541
Operating Margin	12.8%	5.1%	9.3%	15.9%	18.5%	18.7%	20.7%	21.8%	21.7%	25.0%	24.7%
Equity in income of affiliates	-	-	-	-	-	325	425	490	555	625	700
Interest expense, net	15.512	20.001	34.118	41.716	42.109	37.801	31.157	24.691	18.128	13.835	9.479
Income Before Taxes	\$11.362	\$(8.382)	\$(8.877)	\$9.403	\$24.799	\$35.075	\$56.268	\$74.078	\$87.680	\$114.940	\$127.362
Income tax expense (benefit)	4.695	13.315	13.639	3.855	10.168	14.381	23.070	30.372	35.703	47.125	52.219
Effective income tax rate	41.3%	39.6%	41.0%	41.0%	41.0%	41.0%	41.0%	41.0%	41.0%	41.0%	41.0%
Net Income	\$6.700	\$(15.064)	\$(15.237)	\$5.548	\$14.631	\$20.694	\$33.198	\$43.706	\$51.377	\$67.815	\$75.144
Average Shares Outstanding	43.167	46.278	49.236	49.236	49.236	49.236	49.236	49.236	49.236	49.236	49.236
EPS	\$0.16	\$(0.11)	\$(0.11)	\$0.11	\$0.30	\$0.42	\$0.67	\$0.89	\$1.04	\$1.38	\$1.53

1996 is proforma for cable acquisitions. EBITDA Earnings before interest, taxes and depreciation and amortization. E Salomon Brothers estimate.
Source: Salomon Brothers Inc

Figure 9. General Communication Inc. — Segment Analysis, 1996-06E

	1996 Proforma	1997E Year	1998E Year	1999E Year	2000E Year	2001E Year	2002E Year	2003E Year	2004E Year	2005E Year	2006E Year
Long Distance											
Revenue	\$155.419	\$168.013	\$190.111	\$214.054	\$231.115	\$243.844	\$262.406	\$282.465	\$305.246	\$328.737	\$356.897
Distribution costs and costs of services	90.597	104.539	110.720	115.516	125.879	141.270	148.925	157.485	171.269	182.512	202.450
SG&A	42.550	48.915	54.364	55.171	59.036	62.477	64.822	69.917	75.704	82.267	85.912
EBITDA	22.272	14.559	25.027	43.367	46.200	40.100	48.659	55.062	58.275	63.945	68.536
EBITDA Margin	14.3%	8.7%	13.5%	21.5%	21.1%	16.9%	19.1%	20.0%	19.6%	19.7%	19.5%
Depreciation and amortization	7.189	11.097	14.476	24.072	28.110	28.047	30.695	32.304	33.912	20.559	21.994
Operating income	15.083	3.462	10.551	19.296	18.090	12.054	17.964	22.759	24.362	43.386	46.542
Operating Margin	9.7%	2.1%	5.7%	9.6%	8.2%	5.1%	7.0%	8.3%	8.2%	13.4%	13.2%
Capital expenditures		84.529	116.000	12.500	12.000	8.500	8.500	8.500	8.500	8.500	8.500
LD market share based on number of lines	45%	43%	42%	41%	43%	44%	46%	47%	49%	51%	54%
Cable											
Revenue	\$55.343	\$57.396	\$65.351	\$74.021	\$79.033	\$84.293	\$89.168	\$93.958	\$98.833	\$103.707	\$108.612
Programming and copyright costs	13.583	13.010	15.033	19.245	21.339	24.023	26.750	29.127	31.627	34.223	37.471
SG&A	15.735	19.359	20.458	21.116	21.351	22.273	23.915	25.269	26.556	27.455	28.744
EBITDA	26.025	25.028	29.870	33.660	36.343	37.996	38.503	39.562	40.651	42.829	42.400
EBITDA Margin	47.0%	43.6%	45.7%	45.5%	46.0%	45.1%	43.2%	42.1%	41.1%	40.5%	39.0%
Depreciation and amortization	13.364	14.681	16.348	17.681	18.640	19.473	20.551	21.420	22.290	22.487	23.287
Operating income	12.661	10.346	13.522	15.978	17.703	18.523	17.952	18.142	18.361	19.548	19.119
Operating Margin	22.9%	18.0%	20.7%	21.6%	22.4%	22.0%	20.1%	19.3%	18.6%	18.8%	17.6%
Capital expenditures		20.000	22.500	15.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Homes passed	162,395	163,291	163,985	165,827	167,783	169,665	171,609	173,477	175,409	177,379	179,359
Basic subscribers	102,115	107,176	110,691	113,614	117,476	120,639	122,989	125,576	127,844	130,127	132,242
Penetration	62.9%	65.6%	67.5%	68.5%	70.0%	71.1%	71.7%	72.3%	72.9%	73.4%	73.7%
Local											
Revenue	\$0	\$3.656	\$16.822	\$34.437	\$50.932	\$62.855	\$72.244	\$78.184	\$82.810	\$85.744	\$91.105
Distribution costs and costs of services	-	1.736	3.602	4.323	4.647	4.809	4.761	4.380	4.421	4.469	4.513
SG&A	870	3,512	7,375	9,219	9,910	10,158	10,057	9,956	9,856	9,758	9,660
EBITDA	(870)	(1,582)	5,845	20,895	36,375	47,885	57,423	63,848	68,529	71,516	76,931
EBITDA Margin	NA	NA	34.7%	60.7%	71.4%	76.2%	79.5%	81.7%	82.8%	83.4%	84.4%
Depreciation and amortization	-	594	4,676	5,050	5,261	5,261	5,489	5,489	5,489	5,050	5,050
Operating income	(870)	(2,186)	1,169	15,845	31,115	42,624	51,934	58,358	63,040	66,466	71,881
Operating Margin	NA	NA	6.9%	46.0%	61.1%	67.8%	71.9%	74.6%	76.1%	77.5%	78.9%
Capital expenditures		25,000	45,000	37,500	30,000	15,000	12,500	10,000	10,000	10,000	10,000
Lines in service		15,949	47,177	71,883	83,562	91,560	102,643	104,968	109,405	111,062	112,752
-Residential lines in service		7,760	22,736	33,867	40,925	47,312	57,604	59,120	62,731	63,543	64,370
-Business lines in service		8,189	24,441	38,016	42,637	44,248	45,039	45,848	46,674	47,519	48,382
Addressable lines		161,908	262,080	282,205	286,228	290,337	294,532	298,817	303,192	307,659	312,220
Market share of lines		9.9%	18.0%	25.5%	29.2%	31.5%	34.8%	35.1%	36.1%	36.1%	36.1%
-Residential lines		102,864	179,869	186,827	189,148	191,517	193,934	196,400	198,917	201,485	204,106
-Business lines		59,044	82,211	95,378	97,080	98,820	100,598	102,417	104,275	106,174	108,114
PCS penetration				2.0%	5.0%	7.2%	9.8%	11.3%	12.1%	13.0%	13.5%
Total											
EBITDA		37,994	60,742	97,922	118,918	125,981	144,585	158,472	167,455	177,491	187,867
Depreciation and amortization		26,372	35,500	46,803	52,010	52,780	56,735	59,213	61,692	48,093	50,325
Total capex		129,529	183,500	65,000	52,000	33,500	31,000	26,500	28,500	28,500	28,500

1996 is proforma for cable acquisitions. EBITDA Earnings before interest, taxes and depreciation and amortization. E Salomon Brothers estimate.
Source: Salomon Brothers Inc.

Figure 10. General Communication Inc. — Discounted Cash Flow Analysis

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Part 1: Annual free cash flow projections										
EBITDA	\$37.99	\$60.742	\$97.922	\$118.918	\$125.981	\$144.585	\$158.472	\$167.455	\$177.491	\$187.867
Growth Rate	NM	59.9%	61.2%	21.4%	5.9%	14.8%	9.6%	5.7%	6.0%	5.8%
Net income	(\$5.064)	(\$5.237)	\$5.548	\$14.631	\$20.694	\$33.198	\$43.706	\$51.377	\$67.815	\$75.144
Plus:										
Sale of 50% Undersea Fiber to AT&T	0	0	0	0	47.000	0	0	0	0	0
Interest Expense After-Tax	12.085	20.130	24.612	24.844	22.303	18.383	14.566	10.696	8.165	5.593
Tax Rate	40%	41%	41%	41%	41%	41%	41%	41%	41%	41%
Depreciation and Amortization	26.372	35.500	46.803	52.010	52.780	56.735	59.213	61.692	48.090	50.325
Less: Capital Spending	(129.529)	(183.500)	(65.000)	(52.000)	(33.500)	(31.000)	(28.500)	(28.500)	(28.500)	(28.500)
Less: Working Capital Increase	0	0	0	0	0	0	0	0	0	0
Free Cash Flow	(96.136)	(133.107)	11.963	39.465	109.277	77.316	88.987	95.265	95.568	102.562
Discounted Free Cash Flow	(90.840)	(112.299)	9.011	26.557	65.622	41.454	42.600	40.719	36.472	34.947
Part 2: Perpetuity Value Calculation										
	#1	#2	#3							
Assumed 2006 FV/EBITDA Multiple	8.5	9.1	9.8							
Long distance FV/Revenue	2.3	2.5	2.8							
Cable FV/EBITDA	8.3	8.5	8.8							
Local FV/EBITDA	5.8	6.0	6.3							
Implied 2006 P/E Multiple	19.1	20.7	22.2							
Part 3: Calculation of theoretical value per share										
Discount rate (%)	12.00%	12.00%	12.00%							
Sum of discounted cash flow	\$94.244	\$94.244	\$94.244							
Long distance revenues	273.624	304.027	334.430							
Cable EBITDA	119.192	122.804	126.416							
Local EBITDA	150.730	157.283	162.977							
PV of perpetual cash flow	543.546	584.114	624.682							
Value of debt plus equity	637.789	678.357	718.925							
Less: market value of debt	(216.849)	(216.849)	(216.849)							
Plus: market value of cash	54.730	54.730	54.730							
Theoretical value	475.670	516.238	556.806							
Current Shares Outstanding	43.474	43.474	43.474							
Theoretical value per share	\$10.94	\$11.87	\$12.81							

EBITDA Earnings before interest, taxes and depreciation and amortization. E Salomon Brothers estimate.
Source: Salomon Brothers Inc

Salomon Brothers

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Alaska State Legislature

Representative Brian S. Porter

HOUSE MAJORITY LEADER

CHAIRMAN

HOUSE SPECIAL COMMITTEE ON TELECOMMUNICATIONS

MEMBER

HOUSE JUDICIARY COMMITTEE

HOUSE RULES COMMITTEE

HEALTH, EDUC. & SOCIAL SERVICES COMMITTEE

LEGISLATIVE COUNCIL JOINT COMMITTEE



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HOUSE SPECIAL COMMITTEE ON TELECOMMUNICATIONS

MEMORANDUM

Date: March 19, 1998

To: House Committee Members
Representative Dyson
Representative Ivan
Representative James
Representative Berkowitz

From: Brian Porter

Subject: Committee Hearing

There will be a committee hearing on Monday, March 23, 1998, from 4-6PM in room 120. The topic of the hearing will be State right of way access for fiber optic projects. Attached is a copy of a letter from the Governor discussing some of the areas that we will cover in the hearing.

cc Speaker Phillips
Governor Knowles

March 23, 1998
Fiber-Optic Telecommunication Facilities:
Compensation for Rights-of-Way on State Public Domain Land

Policy Question - What is the appropriate rate of compensation for the state to charge for the use of state public domain lands to accommodate fiber-optic telecommunication facilities?

Current Status

Several companies have recently filed requests to install fiber-optic telecommunication systems on state land under the management jurisdiction of the Department of Natural Resources (DNR). The applications range from easements of a few hundred feet to hundreds of miles in length. The routes include not only state public domain lands but state parks, private or municipal property, federal land, and other public rights-of-way, such as the Alaska Railroad and state highways.

The federal Telecommunications Act of 1996 removed restrictions on entry into the telecommunications industry. This law instructs state and local governments that:

- states cannot create any barriers to competitive entry into this industry;
- state actions to control rights-of-way must be competitively neutral and non-discriminatory in nature;
- compensation for rights-of-way must be fair, reasonable, and publicly disclosed.

The new federal rules in the telecommunications marketplace have motivated a reassessment of right-of-way procedures on state public domain land managed by DNR's Division of Land. Below is the Division of Land's analysis of its right-of-way authorities under current law, and the compensation the state would receive under different options.

Procedures to Grant Rights-of-Way: General Process A right-of-way is only "one stick in the bundle of rights" that constitute land title. Nevertheless, a private right-of-way is a property right, not a revocable permit. Granting such a right-of-way across the public domain constitutes a "disposal" of an interest in state land. Before such a disposal, the Division of Land must prepare a written finding under AS 38.05.035(e) that explains what it proposes to grant, which statute it plans to use as its legal authority, and the terms and conditions it believes necessary to serve the state's interests. Notice is given under AS 38.05.945 to invite public comment. Those who comment on the proposed decision are notified of the final decision and of their appeal rights. After the final decision and the completion of a survey (AS 38.04.045), the right-of-way is granted. Usually the Division of Land allows construction to begin after the final decision, so that an "as-built" survey can be done on the installed transportation facility instead of a pre-installation boundary survey.

Rights-of-way under AS 38.05.850 The Division of Land typically grants rights-of-way under the authority of AS 38.05.850, a law that also deals with revocable permits, although it can also lease rights-of-way under AS 38.05.075. Originally written in 1959, AS 38.05.850 lacks policy guidance on situations where there is a competitive interest in the route, and it does not mandate any appraisal of the use's fair market value. Instead, it requires the Department of Natural Resources to establish a reasonable rate or fee schedule to be charged for rights-of-way and revocable permits. That fee schedule is set out in regulation, 11 AAC 05.010(e). For a non-exclusive private right-of-way, the regulation sets the fee at an annual rent of \$100 per acre, but no less than \$200 per right-of-way. Alternatively, a higher fee can be set under 11 AAC 05.010(f) if the Division of Land determines that the location or nature of the use makes a higher fee appropriate to ensure a reasonable return to the state.

Market Trends for Fiber-Optic Rights-of-way

The marketplace indicates that rights-of-way for fiber-optic facilities are quite valuable. Rights-of-way terms set by the Alaska Railroad confirm this trend in Alaska. Summaries of three Alaska Railroad fiber-optic contracts follow.

Telecom Company	World Net Communications, Inc.	United Native American Telecommunications, Inc.	GCI
Location	Anchorage to Whittier	Anchorage to Eielson AFB	Potter Marsh to Indian
Term	35 years	35 years	Early Entry Permit
Compensation	5% adjusted gross revenue w/ sliding scale minimum in years 2-10 Years 11-35 not less than \$297,320 nor more than \$891,960 per year	5% adjusted gross revenue w/ sliding scale minimum in years 2-10 Years 11-35 not less than \$2,433,564 nor more than \$5,407,920 per year	\$20,856 calculated @ \$.50/linear foot/year (\$675 calculated from a 1996 corridor appraisal for the segments was rejected as too low)
1st 10 years revenue	\$2,230,000	\$13,519,800	\$208,560
1st 10 years @ \$100/acre	\$ 170,000	\$ 1,166,667	\$ 9,580

Fair and Reasonable Compensation

Compensation for fiber-optic telecommunication facilities on state lands must be at a fair and reasonable rate, assessed on a competitively neutral and nondiscriminatory basis, and consistent with Title 38 and with the federal Telecommunications Act of 1996. Under existing law, the Division of Land has the following options:

- The Division of Land has the authority to grant fiber-optic rights-of-way under AS 38.05.850 and use the rate set by the fee schedule regulation 11 AAC 05.010(e)(11) of \$100/acre/year. For a right-of-way at a typical width of 25 feet, this per-acre rate works out to six cents (\$0.06) per linear foot per year.
- The Division of Land has the authority to grant fiber-optic rights-of-way under AS 38.05.850 and set a higher rate under 11 AAC 05.010(f) after determining that "the nature of the use makes a higher fee appropriate to ensure a reasonable return to the state." The regulation requires that, to complete this determination, the division must estimate the fair market value of the use. The trend in the current marketplace for fiber-optic telecommunications appears to be a minimum rental of fifty cents per linear foot per year. Therefore, this is the rate the Division of Land would set. However, if the applicant disputes that rate, the regulation allows the rate to be set by an appraisal of the fair market value of the use, done at the applicant's option and expense under instructions issued by the Division of Land and with the appraisal itself subject to approval by the Division of Land.
- The Division of Land has the authority to lease fiber-optic rights-of-way on a long-term basis under AS 38.05.075. Under this statute its statutory mission is to "maximize the return on the lease to the state and shall be a form of compensation set out in AS 38.05.073(m)." As DNR has not leased any fiber-optic rights-of-way under this statute, it cannot provide estimates of revenues they would produce, but they are likely to exceed those obtainable by the options above. In addition, the leasing statutes expressly provide for competition, satisfying the "competitively neutral" standard established by the federal law.

Appraisal statutes and regulations for other land interests require the state to appraise only the market value or most probable selling price of the land, rather than the market value of the use. When land appraisals are used for leases under AS 38.05.075, the Division has the authority to set an amount above the appraised land value. Under the regulations for rights-of-way under AS 38.05.850, the approved appraisal sets the rent amount.

Traditionally, right-of-way applicants have accepted the fees set by the Division of Land under 11 AAC 05.010(e) or (f). So far, no applicant has opted to perform a value-in-use appraisal under 11 AAC 05.010(f). Although a land value appraisal is the most common type of valuation, national appraisal standards have long provided for alternative methodologies such as value in use. Rights-of-way for fiber optic cables are seldom bought or sold, and constitute what is known in the appraisal profession as a "limited market property." "A limited market property is a property that has relatively few potential

buyers at a particular time."¹ For limited market properties, it is appropriate to estimate use value, rather than market value. "Use value is the value a specific property has for a specific use."²

Two recent applications by Northstar Communications and GCI propose fiber-optics cables from Whittier to Seattle using similar routing. Northstar Communications' 20-foot-wide right-of-way across 307 miles (745 acres) of state tidelands and MFSNT's pending 240 miles (727 acres) of right-of-way along the Alyeska Pipeline are used as examples of the range of revenues generated for the state under these three methods.

	ROW Leased to "Maximize Return to State"	ROW Granted at \$100/Acre fee-schedule rate	ROW Granted at \$0.50/Foot/Year
Annual Return to State from Northstar or GCI	Unknown	\$ 74,500	\$ 810,480
Cumulative Return to State over 25 Years from Northstar or GCI	Unknown	\$ 1,862,500	\$20,262,000
Annual Return to State from MFSNT	Unknown	\$ 72,700	\$ 633,600
Cumulative Return to State over 25 Years from MFSNT	Unknown	\$ 1,817,500	\$15,840,000

Summary

DNR has considered valuing fiber-optics rights-of-way two different ways under existing statutes and regulations. Current market indications suggest that a reasonable base rate based on use value is \$.50 per linear foot per year. The alternative, and more traditional, method is to use the existing fee schedule which results in a fee of \$100 per acre per year, or about \$.06 per linear foot.

Establishing fees based on use value would result in higher fees to the state. Applying the lower fees from the fee schedule should encourage development of additional fiber optics infrastructure. We have chosen the latter approach.

Alternatively, the Legislature could choose to update AS 38.05 to develop a new rental rate or method of calculating a rate of compensation for fiber-optic telecommunication systems.

¹ The Appraisal of Real Estate. Eleventh Edition, 1996, page 25

² ibid., page 24

House Special Committee on Telecommunications

3/27/98 Hearing

Discussion points for Public Policy with regards to Rights of Way

Given: The State government has a fiduciary responsibility in managing the state's assets. It is consistent with this responsibility to charge a fair value for access to, and use of state assets.

There may be circumstances where the state may opt for an economic incentive rate. A low cost or no cost option might be appropriate for the development or extension of essential infrastructure. The terms of or the period of an economic incentive rate are subjects for discussion.

Negotiated terms can have unintended results. Policy positions need to be aware of the following issues.

- **Do the terms give or create a competitive advantage?**
- **If a low cost or no cost option is deemed in the public interest, are the savings passed to the citizens?**
- **Is a low cost or no cost option necessary for the project to go forward?**
- **Should there be different treatment for Private Carrier versus Common Carrier? Rate payer owned vs. Private company, Alaska owned vs. Lower 48 or multi-national?**
- **Is it ever in the states best interest to grant exclusive rights of way?**
- **Some lands such as railroad property and Mental Health Lands have been set aside to produce revenue for those purposes. Other agencies such as state parks use fees for operational needs. Should public policy consider the purpose and usage of state lands when considering right of way policy?**
- **Are citizens of Alaska served in a new or better way by increased communications capacity?**

Administrative discussions related to policy:

- **Who is authorized to negotiate Rights of Way contracts? Is it centralized or can an agency or department negotiate the contract?**
- **Should there be an appeals procedure developed to deal with disputed terms? The Public Utilities Commission, Office of the Governor might be an appeal level.**
- **Should there be periodic review of terms of Rights of Way contracts?**
- **Are long term contracts without review consistent with state policy?**
- **Can the state negotiate for service in lieu of financial compensation? Is this form of payment consistent with policy?**
- **How important is past practices in setting fees, or lack of fees?**



April 9th 1998

Speaker Gail Philips
Capitol Building
Juneau AK

Dear Gail:

I saw a copy of the letter you sent to the Governor concerning Rights of Way in Alaska. I still have an interest in this issue, because as you will remember from our conversations last year, Kanas had problems with the Administration over rights of way, and we still have not finally resolved these issues.

However this is a very complex issue, because although I totally agree with your position that the state should have the right to charge higher rates for their valuable rights of way, you must ensure that the charges are equitable. And that is not as simple as it sounds.

I am attaching a draft of an article I am writing for the Daily News Compass section on this issue. I will be submitting this article upon my return to Alaska.

In the article I am highlighting two major issues:

- There are two types of right of way, non-exclusive, and exclusive. Kanas asked the state for the right to lay cable in the State's non-exclusive right of way. That means any competitor can lay cable alongside ours. Alaska Fiber Star and the other company who have Alaska Rail Road right of way, asked for and obtained exclusive right of way, and then used that exclusivity to block other companies from using that route, forcing them to use a route that had higher construction costs. A higher rate should therefore be paid for an exclusive right of way, because it gives the holder a competitive advantage.
- Today's technology allows Internet providers to move their information over existing electrical lines and cable systems. Since all forms of wire connection can be used for this purpose, including electricity supply and cable television providers; other utility rights of ways charges should be included for increases, including those already issued.

Sorry I could not explain this to you in person but I am out of state, and have dictated this to my office and have asked them to pass it on to you.

I am available from next week if you have any questions.

Yours truly,

A handwritten signature in dark ink that reads "Michael F. G. Williams" followed by a stylized flourish or initials.

Michael F. G. Williams
President & COO

In his March 11th letter to the Chairs of the House and Senate Finance Committees, Governor Knowles stated that his administration was going to consider a number of pending requests for rights-of-way across state lands for fiber-optic projects under existing standards and historically used pricing methods.

The Governor noted in his letter that the State of Alaska has long recognized the value of providing state lands for infrastructure developments that benefit Alaskan and Alaskan businesses. Moreover, he noted that the current policy accurately reflects present right-of-way land values, and provides for competition through reasonable rates and non-exclusive rights-of-way.

However some people are asking if, in this time of reduced oil revenues and budgetary constraints, the state should raise its charges for non-exclusive rights-of-way, in order to raise money for the funding of other state services. The very high right-of-way fees obtained by the Alaska Rail Road Corporation for an exclusive right-of-way along its tracts has been used as an example of what the state could charge.

This argument is fallacious for two reasons. The first is it does not compare like with like. The quoted right-of-way issued by the Alaskan Rail Road is an exclusive right of way. The communications company that acquired that right-of-way must have believed that obtaining exclusivity gave it a competitive advantage, otherwise it would have built its system along existing state rights-of-way. If the State's non-exclusive rights-of-way had been used, the communications company would have paid a much lower fee to the State of Alaska.

The second argument against raising the cost of the State's non exclusive rights-of-way to the level charged by the Alaska Rail Road is that it would have a negative impact on the economy of the state.

Any change in state policy for rights-of-way will affect not only the fiber optic communication industry, but all other utilities, including telephone, cable television and electric power supply. All of these services have one thing in common. They can be used by the consumer to access the Internet. And access to the Internet is of critical importance to business and individuals alike.

The federal Telecommunications Act of 1996 provides that states may not create barriers to competitive entry to the telecommunication infrastructure of the country, and that rights-of-way actions be competitively neutral and non-discriminatory. Therefore if the legislature wishes to raise the price the state charges for all non-exclusive rights-of-way, in order to raise revenue, then the cost of all existing rights-of-way as well as for new will have to be raised. This would mean increased costs for cable television, electric power supply or for fiber optic systems, and would have an impact on the majority of households in Alaska.

Governor Knowles is to be congratulated on his knowledge and understanding of an industry that is bringing new jobs to Alaska and low cost access to the world of the inter-net to many of the citizens of the state.

FAX TO KEP. PORTERS OFFICE 907-465-3834

ATU Long Distance, Inc.

State of Alaska Right of Way Policy

Comments of
ATU Long Distance, Inc.

Presented by Mark A. Foster, President
House Special Committee on Telecommunications
Monday, March 23, 1998

Mr. Chairman, members of the Committee,

Thank you for this opportunity to present comments today.

My name is Mark Foster, I am presenting comments today as President of ATU Long Distance.

ATU Long Distance believes that access to rights-of-way for fiber optic cable should be:

- ◆ Fair – price should be based on a rational valuation method
- ◆ Consistent – access should be available to all providers on a reasonable basis – both now and in the future [Telecom Act of 96 – “actions to control rights-of-way must be competitively neutral and non-discriminatory in nature”]

ATU Long Distance believes that these principles require a policy grounded upon the principle of open access at reasonable prices.

- ◆ Open Access – all providers should have access to public rights-of-way. Where a shortage of right-of-way capacity exists, the provider of fiber optic cable should be required to install additional conduit space or “dark fiber” which will be made available to others so that the “exclusive” access granted by the State does not convey a monopoly to those with the right of way.
- ◆ Reasonable Prices – the State should sell its public rights-of-way at reasonable prices which can be rationally supported. In turn, any exclusive grants of right of way should carry with them the requirement that capacity be available for resale at a reasonable price.

Are recent developments consistent with these policy principles?

ATU Long Distance, Inc.

State of Alaska Right of Way Policy

ATU Long Distance is concerned that attempts to give away rights of way access at prices that appear to be below current market prices today may not be a sustainable policy because:

- ◆ It relies upon a faulty rational that giving away right of way for fiber optic rights of way "should encourage development of additional fiber optics infrastructure."
- ◆ Such a rational appears contrary to current market developments where investment has been attracted to Alaska *without* such incremental reductions in right of way cost
- ◆ Right of way acquisition costs remain relatively minor costs in the economic analysis of a fiber optic project especially when compared to the estimates of market share and market price used in the analysis of the viability of the project.

If the underlying rational for the "below market price" policy is flawed, ATU Long Distance is very concerned that as the rational for the policy fails to stand up to scrutiny, the policy itself will come under increasing pressure and may change in the future when ATU Long Distance may well be purchasing right of way.

Thus ATU Long Distance is concerned that while below market right of way prices may prove beneficial for some carriers today, the policy may not be grounded upon a solid foundation – leaving some carriers to benefit from low prices today which may not be available to other carriers in the future.

In conclusion, ATU Long Distance would encourage a right of way policy grounded in open access at reasonable prices and discourage pricing policies based on faulty rationale.



GOLDEN VALLEY ELECTRIC ASSOCIATION INC. PO Box 71249 • Fairbanks, Alaska 99707-1249 • 907-452-1151

March 23, 1998

Via facsimile
(907) 465-3834

House Special Committee on Telecommunications
Honorable Representative Brian Porter
Alaska State Legislature
State Capitol Building
Juneau, Alaska 99801-1182

Re: Fees for State right-of-way access for fiber optic projects.

Dear Sir:

Golden Valley Electric Association has numerous electric facilities constructed within State of Alaska Division of Natural Resources permits and Department of Transportation and Public Facilities permits. Admittedly, we do not provide telecommunications, but we do provide a service to the public which is regulated by the Alaska Public Utilities Commission.

As you consider the charges for use of public lands, we would like you to consider whether or not the utility is regulated by APUC. In determining the use fees, consideration should be given to those who will benefit through the addition of this utility infrastructure. Regulated utilities which provide service to the public, should have provisions for waivers or reduced fees for crossing State lands. The benefits will flow to the users of that service through reduced costs of service.

Sincerely,

Steven Haagenson, P.E.
Manager of Engineering Services

ALASKA RAILROAD CORPORATION



Corporate Address: P.O. Box 107500, Anchorage, Alaska 99510
327 W. Ship Creek Avenue, Anchorage, Alaska 99501

Executive Office
Telephone: (907) 265-2414
Fax Number: (907) 265-2312

March 24, 1998

The Honorable Brian Porter
Alaska State Legislature
State Capitol Building
Room 216
Juneau, AK 99801-1182

Dear Representative Porter:

During yesterday's Telecommunications Committee Teleconference, I briefly touched on the exclusive feature contained in ARRC's fiber optic corridor permit with World Net Communications ("World Net"). This letter provides more detail about the "exclusive" feature which is actually a limited form of exclusivity.

World Net's "exclusive" right to lay cable in the right-of-way (ROW) is limited to a corridor extending 25-feet from the edge of our rail ties. The total width of our ROW is 200-feet (100-feet on each side of the center line of the track). World Nets exclusive right to lay cable covers only 12.5% of the available ROW, with ARRC retaining 87.5% to satisfy future demand.

World Net was willing to pay a premium for the exclusive right to lay cable within this 25-foot corridor because it is conveniently located next to our rail. This proximity facilitated the laying of cable as it could be done rapidly using equipment operated from the rail. In extending this exclusive right to World Net, ARRC considered the following:

1. The permit fee was considered in excess of that indicated by appraisals and discussions with other corridor owners. World Net was ready, willing and able to pay the premium because they intended to move swiftly to lay their cable.
2. It was impossible at the time of entering into the World Net permit to predict future cable corridor demand.
3. ARRC retained sufficient corridor capacity to accommodate anticipated future demand.

CORRECTION

**THE FOLLOWING DOCUMENT(S)
HAVE BEEN REFILMED TO
ASSURE LEGIBILITY OR PAGINATION**



Rev. 6/98

Central Microfilm Services
Department of Education
State of Alaska

ALASKA RAILROAD CORPORATION



Corporate Address: P.O. Box 107500, Anchorage, Alaska 99510
327 W. Ship Creek Avenue, Anchorage, Alaska 99501

Executive Office
Telephone: (907) 265-2414
Fax Number: (907) 265-2312

March 24, 1998

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Alaska State Legislature
State Capitol Building
Room 216
Juneau, AK 99801-1182

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1. The permit fee was considered in excess of that indicated by appraisals and discussions with other corridor owners. World Net was ready, willing and able to pay the premium because they intended to move swiftly to lay their cable.
2. It was impossible at the time of entering into the World Net permit to predict future cable corridor demand.
3. ARRC retained sufficient corridor capacity to accommodate anticipated future demand.

4. The present value of certain, near-term corridor permit revenue from World Net was greater than that of uncertain, future corridor revenue. It appeared to be worth it to accept their demand of limited exclusivity.

In summary, the World Net cable permit was financially advantageous to ARRC, was immediate and reserved 87.5% of our ROW to meet future corridor demand.

It is always difficult to predict the future. We did our best to balance present financial returns with future opportunity and believe that we made the correct business decision. I trust that this letter provides clarification of the "exclusive" feature of our World Net cable permit.

Please don't hesitate to contact me should you have additional questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Bill Sheffield". The signature is fluid and cursive, with the first name "Bill" and last name "Sheffield" clearly distinguishable.

Governor Bill Sheffield
President and Chief Executive Officer



March 23, 1998

Representative Brian Porter
House Special Committee on Telecommunications
Alaska State Legislature
State Capitol, Room 214
Juneau, Alaska 99801-1182

Subject: State Right-of-Way Access for Fiber Optic Projects

Dear Representative Porter:

Kanas Telecom, Inc. is pleased to present information for your consideration on the State of Alaska's approach to granting rights-of-way across state lands for fiber optic projects.

Kanas supports the administration's position for pricing rights-of-way of state lands for fiber optic projects. As citizens of the State of Alaska we all recognize how little infrastructure our state has. Whenever projects that improve access are funded not by government but by private industry, whether it is roads, utilities or information, it is important that the State support such activities. Increasing rights-of-way costs serves only to inhibit such badly needed infrastructure.

Some key information points I ask you consider are:

- The State of Alaska has a historical rate that it charges public utilities for the use of state rights-of-way.
- A modern telecommunications infrastructure is critical to the state's future with respect to economic development, education, business, and keeping up with global competition.
- Without a modern telecommunications system Alaskans will be inhibited in competing in business without access to the high speed broad band networks that the rest of the country will access.
- In the letter introducing the "Telecommunications and Information Technology Plan", the Lt. Gov. wrote, "The vision behind the plan is based on the principle of universal and equitable access to telecommunications in Alaska. Simply put, everyone should be able to get access at a reasonable cost. Without this principle, new technology could create another class of "haves and have nots" in our state, instead of fulfilling the promise of erasing distance and equalizing opportunity."
- In the "Telecommunications Plan," released by the Lt. Governor last year, the state adopted the following guiding principles: "The state should encourage the telecommunications service providers to expedite the deployment of new technology and additional capacity in order to meet the needs of the

Right-of-way Issuespage 2 of 2

expanding Alaska market," and "The state should be a stimulator as well as facilitator of private-sector efforts to expand, improve, and modernize the existing telecommunications infrastructure."

- The state clearly agrees telecommunications infrastructure is critical to Alaska's future. As such, it should not be developing special extra taxes for telecommunications. The state should charge for right of ways for telecommunications uses the same as they have for all other public utilities.

Thank you very much for this opportunity to present Kanas Telecom's views on this subject.

Sincerely yours,


Lowell A. Humphrey
General Manager

Cc: Board of Directors
Kanas Telecom, Inc.



ENSTAR Natural Gas Company
A DIVISION OF SEAGULL ENERGY CORPORATION
3000 Spenard Road
P.O. Box 190288
Anchorage, Alaska 99519-0288
e-mail: <rfbarnes@alaska.net>
(907) 264-3681

Richard F. Barnes
President

March 23, 1998

Special Committee on Telecommunications
Alaska House of Representatives

Dear Committee members:

Re: Right-of-Way fees

Use of state lands for energy transportation and communication has minimal effect on Alaska's natural beauty and has significant benefits for our population. Alaska should continue to make these lands available for utilities to construct the infrastructure that helps improve our living conditions and fosters economic development.

The alternative of materially increasing the basis for charging for use of rights of way will tend to reduce the amount of facilities available for the public's benefit and result in increased costs of living and doing business in the state.

ENSTAR Natural Gas favors a policy that charges fees for use of state lands that is based on the true value of the land lost to other uses. Underground utilities require only a small corridor that cannot be used for other purposes. The offsetting benefits of service availability and competition far outweigh any loss of land value by the state.

We have extended gas service to over 97,000 customers in South-Central Alaska by constructing over 4,000 miles of pipelines on public and private lands. Our customers pay among the lowest utility costs in the country. Our pipeline system and the benefits that go to over half the population of the state would not be possible without use of land on a reasonable basis.

We encourage you to maintain the state's progressive approach to land use for utility rights of way.

Very truly yours,

A handwritten signature in cursive script that reads "R F Barnes".

**Alaska Support Industry
ALLIANCE**
4220 'B' Street, Suite 200
Anchorage, AK 99503
Phone 907.563.2226
Fax 907.561.8870

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GENERAL MANAGER

Karen Court



THE ALLIANCE

... for responsible development of Alaska's Oil, Gas & Mineral Resources

March 23, 1998

via fax to (907) 465-3834

Representative Brian Porter
House Special Committee on Telecommunications
Alaska State Legislature
State Capitol, Room 214
Juneau, AK 99801-1182

RE: State Right-of-Way Access for Fiber Optic Projects

Dear Representative Porter:

For two decades, The Alaska Support Industry Alliance (The Alliance) has served as the statewide non-profit trade organization for businesses which provide products and services to the oil and gas industry. Today, our 300-plus members employ over 25,000 people in Alaska ... 23,000 are permanent residents of the state.

Collectively, The Alliance membership advocates the environmentally sound and responsible development of Alaska's oil, gas and mineral resources for the benefit of all Alaskans. To that end, we support resource-planning efforts that acknowledge the need for greater access, as well as the private sector's ability to access the resources in a responsible manner. The Alliance also supports governmental policy that is conducive to business, that ultimately creates jobs for Alaskans and contributes to a healthy economic future for the State of Alaska.

For this reason, The Alliance agrees that fiber optic projects requiring rights-of-way across state land should be considered under existing standards and historically used pricing methods. Given a shrinking state budget, it is important to encourage private sector initiatives to fund crucial infrastructure projects. Increasing rights-of-way costs serves only to inhibit such privatization.

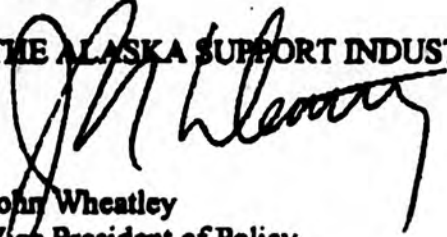
State government has reiterated telecommunications infrastructure is critical to Alaska's future. Creating unreasonable regulations and taxation measures would be counter productive to such expansion. The state should not be developing special extra taxes for telecommunications; but rather it should charge for rights-of-way for telecommunications uses the same as it has or all other public utilities.

In the Telecommunications Plan released by the Lt. Governor last year, the state adopted the following guiding principles: "The State should encourage the telecommunications service providers to expedite the deployment of new technology and additional capacity in order to meet the needs of the expanding Alaska market," and "The state should be a stimulator as well as facilitator of private-sector efforts to expand, improve, and modernize the existing telecommunications infrastructure." We agree.

Thank you for the opportunity to comment.

Sincerely,

THE ALASKA SUPPORT INDUSTRY ALLIANCE



John Wheatley
Vice President of Policy

ALASKA NETWORK SYSTEMS, INC.

4300 B Street, Suite 502
Anchorage, Alaska 99503
Telephone: 907-562-6345
Facsimile: 907-563-7149

VIA FAX - URGENT

March 23, 1998

The Honorable Representative Brian S. Porter
Alaska State Legislature
State Capitol Building
Juneau, Alaska 99801-1182

Dear Representative Porter:

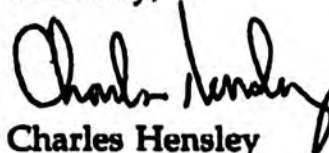
Alaska Network Systems respectfully requests that you consider the following comments at your hearing today on right-of way-access for fiber optic projects.

The lowest possible fee for use of state rights-of-way is important in encouraging private investment in communications infrastructures that are essential for economic growth. Viewing rights-of way pricing as a revenue maximization opportunity is not consistent with encouraging this private investment.

Pricing and processes related to rights-of-way use must be competitively neutral and non-discriminatory and not create barriers to competitive entry into the communications marketplace. Companies planning infrastructure investments need to view state policies as fair and predictable.

Thank you for the opportunity to comment. We look forward to the outcome of your deliberations.

Sincerely,



Charles Hensley
President

TONY KNOWLES
GOVERNOR



STATE OF ALASKA
OFFICE OF THE GOVERNOR
JUNEAU

P.O. Box 110001
Juneau, Alaska 99811-0001
(907) 465-3500
Fax (907) 465-3532

March 11, 1998

The Honorable Senators Drue Pearce, Bert Sharp,
The Honorable Representatives Mark Hanley and Gene Therriault
Alaska State Legislature
State Capitol Building
Juneau, Alaska 99801-1182

Drue
Dear Senator Pearce:

My administration has been reviewing our approach to granting rights-of-way across state land for fiber-optic projects. This is a rapidly growing issue in today's age of technology and I welcome legislative involvement.

Your letter of February 23 to Commissioner John Shively urges the administration to promptly consider pending requests for rights-of-way across state land for fiber-optic projects under existing standards and historically used pricing methods. I agree. This approach makes sense from several standpoints:

- Several right-of-way applications have been submitted and under consideration for months. Telecommunication companies have assumed rights-of-way would be granted under the state's longstanding policies in this area. Maintaining these current policies would ensure fairness and predictability in state governmental actions.
- The current process accurately reflects present right-of-way land value estimates.
- The current approach recognizes the value of providing state lands for infrastructure development that benefits many Alaskans and Alaska businesses.
- The current process provides for competition through reasonable rates and non-exclusive rights-of-way.
- The current process meets the terms of the federal Telecommunications Act of 1996 that provide that barriers not be created to competitive entry; that rights-of-way actions be competitively neutral and non-discriminatory; and that compensation for rights-of-way be fair and reasonable.

March 11, 1998

Page 2

The procedure we would continue to use for most state lands, including submerged lands, is authorized in AS 38.05.850. It requires the Department of Natural Resources (DNR) to establish a reasonable rate or fee schedule which is contained in regulation (11 AAC 05.010(e)). The fee for a non-exclusive private right-of-way is an annual rent of \$100 per acre, or six cents per linear foot based on an average right-of-way width of 25 feet. For certain high-value lands such as designated state park lands we could require a different fee structure for a special park use permit to reflect the higher land values and mitigation involved in crossing park lands.

DNR current regulations could also allow the State to value the right-of-way based on its use. DNR estimates that this method would result in a higher fee.

I believe choosing the lower fee is consistent with state policy to encourage development of important infrastructures for Alaska. The expansion of fiber optic capacity will be a vital component in building a 21st century economy.

Balancing maximum revenues with the compelling public interest in making rights-of-way available and promoting infrastructure growth presents a significant public policy issue. For this reason, I strongly urge the legislature to hold public hearings to review the leasing and permitting of rights-of-way across state lands.

I plan to withhold action on the pending applications until after April 24 in order to give the legislature proper time for a review of the right-of-way process. Unless the legislature passes legislation or clearly indicates its desire to alter the current rights-of-way policy, we would take action on the pending applications using the current procedures after that date.

Sincerely,



Tony Knowles
Governor

cc: President Mike Miller
Speaker Gail Phillips
Rep. Brian Porter, Chair Special House Committee on Telecommunications

Convention Floor Resolution No. 4

Local Regulation of Telecommunications Providers

WHEREAS, State Commissions have long been recognized by State legislatures as the appropriate locus of entry and rate regulatory authority over intrastate telecommunications; and

WHEREAS, Local units of government have an important statutory role in ensuring that the use of public rights-of-way for the construction of facilities by new entrants and incumbents alike is undertaken in a manner consistent with the public health and safety, such as by regulating the time and locations of excavations, enforcing local building codes, and coordinating the use rights-of-way; and

WHEREAS, Section 253(c) of the Federal Telecommunications Act of 1996 ("1996 Act") affirms the authority of local units of government to "manage the public rights-of-way" and "require fair and reasonable compensation from telecommunications providers, on a competitively neutral and nondiscriminatory basis,"; and

WHEREAS, Some units of local government are considering or have adopted ordinances which have been found by the courts or the FCC to address matters traditionally within a State commission's jurisdiction over telecommunications regulation, such issues as certification of fitness to provide service, interconnection, rate regulation, technical standards, and universal service; but may serve to duplicate or conflict with efforts undertaken by state commissions and the Federal Communications Commission ("FCC"); and

WHEREAS, Some of these ordinances have been found by the courts or the FCC to impose franchise fees on competitive providers of local telecommunications services which would exceed the statutory "fair and reasonable standard" deterring new entrants from offering service; and

WHEREAS, The National Association of Regulatory Utility Commissioners recognizes the important statutory role which local units of government must play, but is concerned that potential efforts by local units of government to impose fees and conditions on telecommunications providers in excess of statutory standards that may have already been imposed by state regulatory commissions may erect significant new barriers to entry; now, therefore, be it

RESOLVED, That the National Association of Regulatory Utility Commissioners (NARUC), convened at its 109th Annual Convention in Boston, Massachusetts, believes compensation for rights-of-way use by entities developing the telecommunications infrastructure should be "fair and reasonable" and "competitively neutral" as required by Section 253(c) of the Telecommunications Act of 1996; and be it further

RESOLVED, That NARUC shall convene discussions with the State and Local Advisory Group of the FCC, the FCC, representatives of State and local government, and industry representatives in order to clarify the authority and responsibility of each with respect to the management and use of rights-of-way under the 1996 Act and develop policies on the management of rights-of-way which could be implemented that encourage local service competition and do not create barriers to entry.

Sponsored by the Committee on Communications

Adopted by the Executive Committee on November 11, 1997

TESTIMONY OF KIM JACOBS**Before the House Special Committee on Telecommunications****March 23, 1998**

Mr. Chairman. Thank you for the opportunity of being able to address this Special Committee. I address you as an actual participant in the Alaskan telecommunications infrastructure industry. My name is Kim Jacobs. I am a Director of World Net Communications, Inc., which owns 65% of Alaska Fiber Star, the company which has constructed the fiber optic cable between Anchorage and Fairbanks along the corridor of the Alaska Railroad. I am also a Director of WCI Cable, the company which is the developer of a fiber optic cable between Anchorage and Whittier along the corridor of the Alaska Railroad and is also in the process of laying an undersea fiber optic cable between Whittier and Valdez, and is planning to lay an undersea fiber optic cable between Valdez and the lower 48. Together, these companies have invested or have plans to invest over \$150 million in telecommunications infrastructure projects in the State of Alaska.

I am very concerned that the State of Alaska is about to grant rights-of-way for the purpose of installing fiber optic cable at a price which will put Alaska Fiber Star and WCI Cable at a competitive disadvantage. The State of Alaska we understand wishes to support and encourage foreign investment in Alaska. We came to Alaska and constructed fiber optic cable along the Railroad's corridor pursuant to permits which required an appraised fair market price. Now, after Alaska Fiber Star has already constructed a fiber optic cable from Anchorage to Fairbanks, and after WCI Cable has already constructed a fiber optic cable from Anchorage to Whittier, it appears as though the State of Alaska is about to change the State's policy, which potentially will give GCI and Kanas a significant competitive advantage over Alaska

Fiber Star and WCI Cable. This is not fair and is not the way to encourage investment in Alaskan infrastructure.

Alaska Fiber Star has constructed a fiber optic cable from Anchorage to Fairbanks pursuant to a right-of-way permit issued by the Alaska Railroad. This right-of-way is 386 miles long and 25 feet wide. The price required by this Railroad permit is a minimum of \$250,000 in permit year two, \$500,000 in permit year three, \$750,000 in permit year four, and \$1,000,000 per year in permit years five through thirty-five. This results in a price of 49 cents per linear foot per year.

We are also involved in the development of a fiber optic cable from Anchorage to Whittier pursuant to a right-of-way permit issued by the Alaska Railroad. This right-of-way is 56 miles long and 25 feet wide. The price required by this Railroad permit is a minimum of \$297,000 per year beginning in permit year six for permit years six through thirty-five. This results in a minimum price of 47 cents per linear foot per year.

These permits will result in significant revenues to the Railroad and to the State. We understand that GCI is currently constructing a fiber optic cable from Anchorage to Whittier and then on to Valdez and Kanas is constructing a fiber optic cable from Valdez to Prudhoe Bay along the Trans-Alaska Pipeline. We also understand that GCI has entered into an agreement with Kanas to swap dark fiber. This agreement will allow both GCI and Kanas to provide service between Anchorage and Fairbanks in competition with Alaska Fiber Star.

GCI's fiber optic cable will either be installed along the highway from Anchorage to Portage or over Powerline Pass to Indian and along the highway to Portage, and then along the Railroad's corridor to Whittier. In either case, GCI's fiber

optic cable will run roughly parallel to WCI Cable's fiber optic cable along the Railroad's corridor from Anchorage to Whittier. These cables are routed along roughly parallel paths and will carry traffic between the same locations.

I have also reviewed a series of documents relating to this hearing. In a February 23 letter to Commissioner Shively, Senator Pearce requested the Department of Natural Resources to grant pending applications for telecommunications rights-of-way at historical prices. Under state regulations, the historical price is apparently 6 cents per linear foot per year.

A February 25, 1998 draft memo, authored by the Department of Natural Resources, addresses the issue of the appropriate rate of compensation for the State of Alaska to charge for rights-of-way for installing fiber optic cable. This memo would appear to carefully explore the market trends for fiber optic rights-of-way. This memo concludes that the marketplace indicates that rights-of-way for fiber-optic facilities are quite valuable and that the Division of Land should grant fiber-optic rights-of-way at the *minimum* market price of 50 cents per linear foot per year.

However, after this memo was drafted, the policy of charging 50 cents per linear foot per year was apparently rejected. As can be seen by a March 11 letter from Governor Knowles to Senator Pearce, the Governor concludes that rights-of-way across State land should be granted at the price of 6 cents per linear foot per year "to encourage development of important infrastructures for Alaska."

It is not my intention here nor in the future to advise the State of Alaska on whether it should dispose of its resources, including telecommunications rights-of-way, at less than their fair market value. However, the Governor, in his March 11 letter, suggests that the price of 6 cents per linear foot per year is necessary in order to

CORRECTION

**THE FOLLOWING DOCUMENT(S)
HAVE BEEN REFILMED TO
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State of Alaska

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It is not my intention here nor in the future to advise the State of Alaska on whether it should dispose of its resources, including telecommunications rights-of-way, at less than their fair market value. However, the Governor, in his March 11 letter, suggests that the price of 6 cents per linear foot per year is necessary in order to

encourage development in Alaska when this is clearly not the case as is evidenced by our actual investment. The Railroad right-of-way permits require a significantly higher price for the for telecommunications rights-of-way between Anchorage and Fairbanks and between Anchorage and Whittier. In addition, GCI's Railroad right-of-way permit requires the significantly higher price of \$20,000 for an eight mile right-of-way along the Railroad's corridor from Anchorage to Whittier. This amounts to about 47 cents per linear foot per year.

Based on what has already happened in Alaska, the low price of 6 cents per linear foot is not necessary to encourage development of telecommunications infrastructure between the larger population centers in Alaska and between Alaska and the lower 48. The State of Alaska may want to consider a price which gives an economic incentive to encourage development of telecommunications infrastructure to the more rural areas of Alaska. We are not concerned what the level of economic incentive is but only that it is evenly applied to all players. The current proposal does not do this.

The State may want to consider a different process before disposing of such valuable State resources at other than their fair market value. We are not opposed to this. All we ask for is a "level playing field".

Most importantly, whether the State disposes of its rights-of-way at 6 cents per linear foot or at the market price of 50 cents per linear foot, the State should treat telecommunications carriers equally and fairly and should not charge different prices for rights-of-way between the same locations. For example, WCI Cable will pay at permit year six a minimum of \$297,000 per year for the right-of-way between Anchorage and Whittier. If the State decides to charge GCI the price of 6 cents per linear foot per year for a parallel right-of-way between Anchorage and Whittier, then

GCI will only be paying approximately \$37,740 for a parallel right-of-way between the same locations. This amount also includes the \$20,000 which the Railroad is charging GCI. This price differential for two parallel rights-of-way between the same locations would put WCI Cable at a significant competitive disadvantage.

As another example, at permit year five, Alaska Fiber Star will be paying a minimum of \$1,000,000 per year for the right-of-way from Anchorage to Fairbanks. As I stated before, this right-of-way is 386 miles long. This amounts to approximately 49 cents per linear foot per year. If Alaska Fiber Star were paying 6 cents per linear foot per year, Alaska Fiber Star would be paying approximately \$122,000 per year. MFS Network Technologies has been granted the right-of-way along the route of the Trans-Alaska Pipeline from Prudhoe Bay to Valdez. A portion of this route is parallel to Alaska Fiber Star's fiber optic cable project. Again, this price differential for these two parallel rights-of-way would put Alaska Fiber Star at a significant competitive disadvantage.

In short, we urge the State of Alaska to treat all telecommunications participants fairly and on a competitively neutral and non-discriminatory basis. If the State of Alaska decides to charge a lower price for telecommunications rights-of-way, then all telecommunications participants should be charged the same price. The State of Alaska should strive to create and maintain a level competitive playing field with respect to its rights-of-way. This is the only way that true competition will occur.

Alaska Fiber Star and WCI Cable are making a very significant investment in telecommunications infrastructure in relation to Alaska. This infrastructure investment will be noticed at the national and the international level. However, discriminatory prices for rights-of-way may put Alaska Fiber Star and WCI Cable at a significant

competitive disadvantage which could jeopardize these infrastructure investments. This would not be in the interest of Alaska in general, its consumers, its residents, and would not be fair to Alaska Fiber Star and WCI Cable.

Thank you Mr. Chairman for the opportunity to address this Special Committee.

John R. Ayers
Testimony Before the House Special Subcommittee on
Telecommunications - March 23,1998

My name is John Ayers . I am president of e.Net, Ltd. an Anchorage based telecommunications consulting firm.

Thank you for the opportunity to once again address the House Special Committee on Telecommunications.

The issue of what is a fair price to pay for right-of-way on state land is not new to me. As Executive Vice President of Alascom prior to its sale to AT&T, I was intimately involved in negotiating the price, terms, and conditions of right-of-way along the Alaska Railroad from Anchorage to Fairbanks. This is the same right-of-way permit that was returned to the Railroad and subsequently taken up by UNAT. It is important to note that the process used was one of negotiation and fair market value of the right-of-way; i.e., there was a willing seller (the ARR) and a willing buyer (Alascom) that concluded a lease on mutually accepted bases.

To say now that the practice of charging six cents per linear foot should be continued does not take into account that a new methodology has been established by the Railroad that is more relevant in a competitive environment. Making right-of-way available to telecommunications providers at a price negotiated around the fair market value for the service is the best way to insure that it is permitted in a competitively neutral manner. Moreover, I'm not sure the argument could not be made that the Railroad should reduce its rate for right-of-way to six cents for current holders of permits.

I am also quite concerned that we are here today discussing what and by what methodology DNR should charge for use of its right-of-way and not what the State of Alaska should be. This should be a debate on Alaska policy for all its lands. Otherwise competitors might use State divisional policies to gain competitive advantage by shopping for the lowest cost option. I am also concerned that the State might propose a policy of managing the lands in a manner that will not generate the best return for the state especially at a time when we are hearing that the budget reserve might be tapped for several hundred millions of dollars.

I confess to being a believer in the market place as the key driver in stimulating deployment of new technology and services. It is the telecommunications marketplace that has caused GCI to generate 225 million dollars in revenue on 500 million dollars in assets and become the largest telecommunications company in Alaska. It is the marketplace that has caused Alaska fiberstar to build a fiberoptic link between Anchorage and Fairbanks. And it is the market that is driving two competitors to build competing fiberoptic cables to the lower 48. To suggest that the State now needs to subsidize the cost of right-of-way to encourage development of telecommunications infrastructure is disconcerting at best particularly since the cost of right-of-way is not a key driver in the decision making process as to whether or not to build a new telecommunications facility. The best encouragement the State can give telecommunications providers is to buy service from them and not build its own. The State can, however, adopt a policy and a methodology that insures one provider will not be advantaged by the process .

I would also point out that a potential conflict in approach will probably occur in communities where there are both municipal and state rights-of-way especially when they meet or cross.

Lastly, let me read the resolved portions of NARUC convention floor resolution no.4, adopted November 11, 1997:

"RESOLVED, That the National Association of Regulatory Utility Commissioners (NARUC), convened at its 109th Annual Convention in Boston, Massachusetts, believes compensation for rights-of-way use by entities developing the telecommunications infrastructure should be 'fair and reasonable' and 'competitively neutral' as required by Section 253(c) of the Telecommunications Act of 1996; and be it further

RESOLVED, That NARUC shall convene discussions with the STATE and Local Advisory Group of the FCC, the FCC, representatives of State and Local government, and industry representatives in order to clarify the authority and responsibility of each with respect to the management and use of rights-of-way under the 1996 Act and develop policies on the management of rights-of-way which could be implemented that encourage local service competition and do not create barriers to entry."

Mr. Chairman, that concludes my formal remarks. I am available for questions at your pleasure.

SCOMM

106:3

FISCAL NOTE

No: 1
Bill version: HB 345

STATE OF ALASKA 1998 LEGISLATIVE SESSION

(H) Publish Date: 1/23/98

Revision Date (Note if correction) _____ Dept. Affected _____ All state agencies _____
Title An Act relating to electronic records and BRU _____
signatures. _____ Component _____
Sponsor Rules Committee _____
Requester Governor _____ Component Serial No. _____

Expenditures/Revenues

(Thousands of Dollars)

OPERATING EXPENDITURES	FY 99	FY 00	FY 01	FY 02	FY 03	FY 04
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0

CAPITAL EXPENDITURES						
-----------------------------	--	--	--	--	--	--

CHANGE IN REVENUES ()						
-------------------------------	--	--	--	--	--	--

FUND SOURCE

(Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type)						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY98) cost: _____

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: (Attach a separate page if necessary)

This bill would not have a significant fiscal impact on any state agency.

Prepared by Jack Kreinheder *Jack Kreinheder* Phone 465-4676
Division Office of Management and Budget Date 1/6/98
Approved by Commissioner Jim Ayers, Chief of Staff *Jim Ayers* Date _____
Agency Office of the Governor

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Page 1 of 1

HOUSE SPECIAL COMMITTEE ON TELECOMMUNICATIONS

February 11, 1998

4:05 p.m.

MEMBERS PRESENT

Representative Brian Porter, Chairman

Representative Ivan Ivan

Representative Fred Dyson

Representative Ethan Berkowitz

MEMBERS ABSENT

Representative Jeannette James

OTHER HOUSE MEMBERS PRESENT

Representative J. Allen Kemplen

COMMITTEE CALENDAR

* HOUSE BILL NO. 345

"An Act relating to electronic records and signatures, revising certain requirements that signatures be notarized or verified, and providing for electronic records in the state archives; relating to the permanency of records in the state archives; and providing for an effective date."

- MOVED HB 345 OUT OF COMMITTEE

(* First public hearing)

PREVIOUS ACTION

BILL: HB 345

SHORT TITLE: STATE ARCHIVES RECORDS

SPONSOR(S): RULES BY REQUEST OF THE GOVERNOR

Jrn-Date	Jrn-Page	Action
01/23/98	2116	(H) READ THE FIRST TIME - REFERRAL(S)
01/23/98	2116	(H) TEL, LABOR AND COMMERCE
01/23/98	2117	(H) ZERO FISCAL NOTE (GOV/ALL DEPTS)
01/23/98	2117	(H) GOVERNOR'S TRANSMITTAL LETTER
02/11/98		(H) TEL AT 4:00 PM CAPITOL 120

WITNESS REGISTER

ANDY KLINE, Special Staff Assistant
Office of the Lieutenant Governor
P.O. Box 110015

Juneau, Alaska 99811-0015

Telephone: (907) 465-3520

POSITION STATEMENT: Presented HB 345 and answered questions.

ACTION NARRATIVE

TAPE 98-1, SIDE A
Number 0001

CHAIRMAN BRIAN PORTER called the House Special Committee on Telecommunications meeting to order at 4:05 p.m. Members present at the call to order were Representatives Porter, Ivan and Dyson. Representative Berkowitz arrived at 4:13 p.m.

CHAIRMAN PORTER advised listeners that the committee had been established the previous year by resolution to look at telecommunications issues for the House, and had met during the interim.

HB 345 - STATE ARCHIVES RECORDS

CHAIRMAN PORTER announced the committee would hear HB 345, "An Act relating to electronic records and signatures, revising certain requirements that signatures be notarized or verified, and providing for electronic records in the state archives; relating to the permanency of records in the state archives; and providing for an effective date." He called on Andy Kline to present the bill.

Number 0063

ANDY KLINE, Special Staff Assistant, Office of the Lieutenant Governor, advised members he is a special assistant for telecommunications to Lieutenant Governor Fran Ulmer, who chairs the Telecommunications Information Council (TIC), the main policy-making body in state government for telecommunications and information technology. Mr. Kline added that he staffs that council and had therefore been chosen to testify on this bill.

MR. KLINE said through their telecommunications planning effort, the TIC had identified electronic signatures as an important issue to resolve in state government, and in December of 1996 they had released a state plan on telecommunications and information technology. In that plan, recommendation number 56 is that the

state should address the use of electronic signatures, which will streamline many internal processes and will position the state for a method of authentication and verification of electronic communications with the public.

MR. KLINE advised members that 28 other states have enacted electronic signature and digital signature legislation. Alaska is not on the leading edge but is trying to stay in the pack, ready and open for business on the Information Highway.

Number 0216

MR. KLINE told members that a number of internal state government functions and other types of functions that electronic signatures will help have been identified nationwide, and even internationally. Utah is probably the leading state in electronic signatures, and many other states lean on Utah's progress and mistakes in developing statutes and regulations regarding electronic signatures.

MR. KLINE stated, "I can tell you from Utah's point of view, they have a short list in that packet that I gave you of the things that they see as specific applications, including court filings and corporation filings, procurement, grant applications, motor vehicle titling, real estate transactions. I mean, the list kind of is endless, with the way that business interacts with state government, ... with the way that business interacts with other business in a state, and in the way the public interacts, in a transactional way, with state government." Mr. Kline said this allows a person, with a click of a mouse button, to encrypt a document and make it verifiable who sent it.

Number 0303

MR. KLINE pointed out that someone receiving an E-mail message today has no way of really knowing whom it came from without verification, because there are simple ways to electronically modify addresses and so forth to indicate that a message came from another source. Verification can be done through a number of methods.

MR. KLINE informed members that three kinds of legislation have been passed nationally dealing with electronic signatures, as described by the Internet Law and Policy Forum, a think-tank organization. The three types of legislation are: prescriptive, the most detailed; criteria-based, which is in the middle; and signature-enabling, which reduces barriers existing in law today that say things like "must be signed," which in legal terms means

a piece of paper signed.

MR. KLINE cited Utah's as the best example of prescriptive legislation. In Utah, they had set out detailed implementation in statute. Although on-target at the time, it became problematic because of rapidly changing technology, resulting in one revising piece of legislation already. Therefore, Utah's legislation is a good example of going too far.

Number 0430

MR. KLINE said Massachusetts has the best example of signature-enabling legislation. It doesn't get into any technical standards or criteria upon which a signature is determined to be verifiable. Instead, it says electronic signatures are as good as written signatures.

MR. KLINE advised members that California and Georgia have criteria-based legislation, which is middle ground. "And that's the model that we chose to go with," Mr. Kline explained. "We felt that there needed to be some language that talked about what the state would accept ... as a verifiable signature. So, that's in the law itself."

MR. KLINE referred to page 2, beginning on line 29, which sets out criteria: "'electronic signature' means an electronic or digital method, executed or adopted by a person with the intent to be bound by or to authenticate a record, that is unique to the person using it, is capable of verification, is under the sole control of the person using it, and is linked to data in such a manner that if the data are changed the electronic signature is invalidated" Mr. Kline noted that Massachusetts' legislation hadn't gone that far.

Number 0548

MR. KLINE said the main things they want to address in HB 345 are removing those legal barriers and setting these simple criteria for potential technologies. He pointed out that different methods exist to obtain digital signatures, such as using public and private keys; for example, a person may hold a private diskette that uses encryption technology, to put together with a public "key" for verification. Mr. Kline explained that they had not been specific with the criteria in the framework because of foreseeable technological changes. In addition, few citizens or industries in Alaska today are really ready to start using these complicated and sometimes costly methods of getting public and private keys. Mr. Kline said they want to allow industry to come in and answer those questions, with technology that fits into the law.

Number 0669

CHAIRMAN PORTER recognized Representative Kemplen, who had joined members at the table. Noting that signatures are essential to some documents, he asked Mr. Kline what the thought is on litigation relating to lack of specific criteria for verification.

MR. KLINE explained that the specifics of the technology that will be used to make verifiable signatures will be handled through a regulation process. The state will speak to what technologies are acceptable, but they believe it is best handled not through statute but through regulation, in order to adapt more easily to changing technologies. Mr. Kline said they are not leaving it wide-open. However, following the problems that Utah, especially, has had, they didn't believe it was appropriate to address that in the original legislation.

Number 0781

CHAIRMAN PORTER advised members that present to answer questions were Sarah Felix from the Office of the Attorney General; John Stewart and George Smith from the Division of Libraries, Archives and Museums; and Mike Monagle from the Division of Banking, Securities and Corporations.

Number 0795

REPRESENTATIVE J. ALLEN KEMPLER asked which industries Mr. Kline envisions as most likely to take advantage of this change in the law.

MR. KLINE said he believes banks will be the first to do so. From there, economies of scale come in. Large industries will find a small savings per transaction by using electronic signatures, and an entity with numerous transactions, or with transactions involving large dollar amounts, will benefit most. Mr. Kline said they see this as a wave of the future, noting that four years ago, many people wouldn't have predicted how much electronic mail has changed the business process. "And we feel that this is the next logical step," he concluded.

Number 0879

REPRESENTATIVE KEMPLER asked whether Mr. Kline has information from other states about the volume and rate of growth of the demand for electronic signatures.

MR. KLINE answered that except in Utah, this really isn't happening

much in practice. Utah, he explained, is forward-thinking when it comes to technology, and they are attracting technology businesses and industry through this type of legislation. There is some information on the Utah Website concerning demand, mostly around high technology industries that want to use electronic signatures as part of a paperless way of doing business.

MR. KLINE noted that electronic signatures, inasmuch as they allow for paperless government and business transactions, can be a part of incredible efficiencies. As an example he cited Cisco Systems, a large company whose chief information officer had said that by going completely paperless - and by using other, purely electronic, ways of dealing with employees, including training, travel reimbursements and payroll - that company saves \$360 million yearly. Mr. Kline suggested that high-technology industries with numerous transactions see this as something friendly to their businesses.

Number 0998

REPRESENTATIVE KEMPLIN asked whether this is mostly interstate or intrastate.

MR. KLINE replied, "It's both, and also internationally. And that's a difficult part of the law: How do you mesh what different states and different countries are doing, and are saying are verifiable signatures?" He indicated that isn't really addressed in HB 345, then added that it can be problematic to specify which types of technology will be accepted. Mr. Kline stated, "What we're saying is that ... if there's two parties and they're both agreeing, and the signature is verifiable through a mutually agreed verification process that the state has approved through regulations, then that's an acceptable signature."

MR. KLINE pointed out that firms in Washington State and Pacific Rim countries are conducting business with electronic signatures. He said in Washington State, digital signature legislation was recently passed, largely because Microsoft wanted to see it passed because they want to conduct business this way.

Number 1083

REPRESENTATIVE KEMPLIN asked whether if this legislation is passed, it would it be a significant incentive for some industry to locate here in Alaska because of the state's providing this flexibility.

MR. KLINE replied that it is a signal to high-technology firms, especially, that Alaska is a technologically aware state. He

hadn't seen anything that says industries are some quantifiable percent more likely to locate in an area that has electronic signature legislation. However, high-technology firms look for states that are forward-thinking in technology legislation when they are locating.

Number 1149

REPRESENTATIVE ETHAN BERKOWITZ asked whether there is any provision for facsimile signatures.

MR. KLINE replied that it doesn't address faxes specifically, and faxes are problematic. Most digital signature legislation assumes use of a computer and that a person can encrypt something using a logarithmic encryption device; that is not really possible on a fax. Mr. Kline pointed out that faxes are some of the most easily forged types of documents, because everything is already fuzzy and it is easy to make something look authentic.

Number 1207

REPRESENTATIVE BERKOWITZ explained that part of the reason he'd asked is that on page 21, it says, "'electronic record' means any information that is recorded in machine-readable form." He suggested that signatures could be read into machines.

MR. KLINE said that is a good point, for which he didn't have a specific answer.

Number 1240

REPRESENTATIVE IVAN IVAN referred to the zero fiscal note and asked about any technological requirements to use this.

MR. KLINE responded that it is difficult to answer only because they haven't specified a technology associated with this bill. However, most encryption programs are software, which work on existing mainframe computers or existing personal computers (PCs). Although he couldn't say that there wouldn't be a penny spent on software or a scanner, for example, there certainly are no widespread, large costs associated with passing legislation about using verifiable electronic signatures on legal documents.

Number 1321

CHAIRMAN PORTER noted that to be consistent with this law, if data on the document were altered, the electronic signature would be invalidated. He suggested it would require software.

MR. KLINE agreed, saying it requires software on both ends. He suggested that if the state is concerned about costs, they could say, "The state recognizes a certain type of signature as a verifiable electronic signature, but we're not going to be the certifying agency; we're not going to be the certification authority. Key Bank, National Bank of Alaska, will be the certification authority. They will buy a license from us to become that certification authority. They'll own the software, own the hardware, ... and people will have to take a document to them to verify it." Mr. Kline pointed out that there are different ways of doing it. It could be set up in-house, with the Department of Administration, for example, having a certification authority within it that verifies electronic signature documents. "And we've left that up to regulation, as well," Mr. Kline added.

Number 1387

CHAIRMAN PORTER asked about the evolution in other states, and whether this might become a nationally recognized system, for example.

MR. KLINE referred to a 133-page document from the American Bar Association, which he said was an attempt to make a nationwide model legislation. "They couldn't do it," he explained. "They came up with digital signature guidelines, which ... actually shaped what Utah ended up doing. But the short answer is no, different states have tended to want to do different types of things. As I said, Washington's very concerned about dealing with Japan, for instance. Other states are concerned with other types of activities. ... And then ... there are different philosophies on how detailed ... the initial statute should be. And for that reason, there isn't a nationwide standard yet."

MR. KLINE continued, "And that's one reason why we're holding back on specifying a standard, because ... we're recognizing here that this is technology that is not fully and widespread developed to this point. The technology is there, and people understand how to use it. There's not a huge, widespread demand at this point. There may be by next January. Next February, there may be a huge demand, and we all know how fast technology moves. And that's why ... we don't want to have unnecessary legal barriers in the way of that happening, if it becomes a widespread-type of thing, or something that industry ... is demanding."

Number 1475

REPRESENTATIVE BERKOWITZ said, "The reason why we're addressing this sort of legislation, it seems to me, is the banks, or whatever

group decides to use electronic signatures, is going to do so at its own peril. But we need to put some kind of enabling legislation down in order that they can venture out into that minefield?"

MR. KLINE replied, "That's right. That's one part of it. And the other part of it is we want state government to be able to interact with business and citizens, and do it in a way that's consistent with our laws. ... And in large part, it's recognizing something brand new, that wasn't envisioned when laws were passed about having a signature on a piece of paper, to verify that."

Number 1520

CHAIRMAN PORTER asked whether there were further questions. He expressed his understanding that the bill is not trying to answer all questions available to be asked on this type of technology. Chairman Porter added, "And I think if there was ever an area that was conducive to regulation, as opposed to statute, it would be telecommunications." He asked the wish of the committee.

Number 1545

REPRESENTATIVE FRED DYSON responded, "Move it."

CHAIRMAN PORTER noted the motion to move the bill with individual recommendations and fiscal notes as attached. He asked whether there was any objection. There being none, HB 345 was moved from the House Special Committee on Telecommunications.

Number 1591

CHAIRMAN PORTER called an at-ease at 4:28 p.m. in order to prepare for the joint work session with the Telecommunications Information Council policy committee. [See cover sheet relating to that portion of the meeting.]