

## A Small But Important Employer

**A**lthough Alaska's information industry is small – it employs only 2 percent of the state's wage and salary work force – it is the third-highest paying industry in the state, behind only natural resources/mining and construction. It is also one of the most dynamic. Technological changes, market conditions and the relatively recent deregulation of the telecommunications industry have transformed the landscape for most information sector employers. And more changes are likely.

### Who are they?

When the word "information" is used in terms like the "information age" or the "global information economy," it brings to mind places like Seattle or Silicon Valley. Many employers who thrive in those areas are, in fact, classified in the information sector, but the sector also includes other more traditional employers such as newspaper and magazine publishers and radio and television stations.

The information industry, also called the information sector, has six major components. Here are the short titles: telecommunications, general publishing, television and radio broadcasting, motion pictures and sound recording, Internet publishing, as well as Internet service providers combined with data processing.

In some cases information firms are businesses with a single focus, such as the single-screen Homer Family Theater. In other cases they are multi-service companies such as General Communications Incorporated (GCI) and Alaska Communications Systems (ACS), which now provide everything from traditional phone lines and cable to Internet access and wireless services.

The information sector also is a mixture of old stalwarts and newcomers. Some companies have provided Alaskans with telephone service, television reception and movie theaters for decades. Newer companies, and many of the older ones that have evolved and expanded, offer Internet access, cellular and other wireless communications. Still other new companies provide software publishing.

Four major players represent 46 percent of the information sector's employment: GCI, ACS, the Anchorage Daily News and the Matanuska Telephone Association. All four are on the list of the state's 100 largest private employers. GCI is the largest information sector employer (see Exhibit 1) and the 10th largest private employer in the state. The information sector's 25 largest employers represent three-quarters of the sector's employment. The rest are small companies with less than 20 employees.

## Information sector pays well

Alaska has 11 major industry sectors and only two – natural resources and mining, and construction – have average annual earnings higher than the information sector. In fact, the information industry’s \$48,047 average annual earnings exceed the statewide average by more than \$10,000. (See Exhibit 2.)

The sole reason for such high earnings is the telecommunications field, with average annual earnings of \$59,584 in 2004. (See Exhibit 3.) Only one other component in the information industry exceeded the state’s average: Internet service providers, data processing, Web search portals and services, which had average annual earnings of \$39,132. Motion picture and sound recording paid the lowest wages, \$12,478, primarily because low-wage and part-time jobs in movie theaters dominate its employment.

## Small but powerful

Looking at the number of employees, the information industry is the smallest of Alaska’s major employment sectors. (See Exhibit 4.) It employs a work force of just under 6,900 wage and salary workers and generates just \$330 million in payroll.

The small employment numbers, though, clearly understate the large impact the information sector has on Alaska’s economy. It has had a transforming effect on the state’s 10 other major sectors: It has changed and streamlined the way most firms do business and has become a significant contributor to increases in economic output. In many ways, the information sector weaves and binds the state’s economy together and connects it instantaneously to the rest of the world. Without the information sector, most of the rest of the economy could not function competitively.

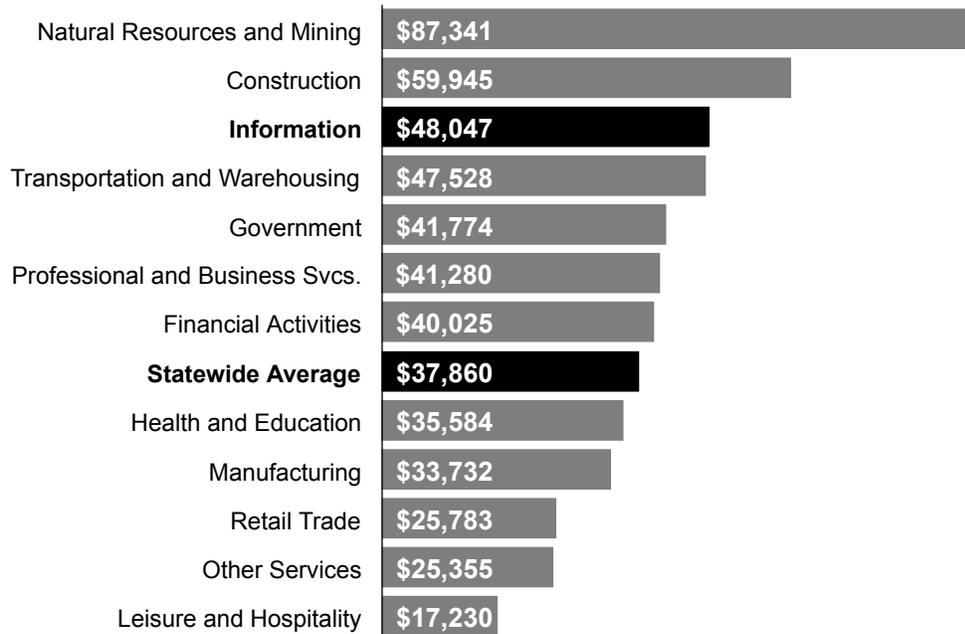
## Alaska’s Largest Employers in the Information Sector 2004



Rank	Employer	Annual Average Employment	Industry
1	General Communications Inc. (GCI)	1,225	Wired/Wireless/Internet/Cable Telecommunications
2	Alaska Communication Systems (ACS)	1,072	Wired/Wireless/Internet Telecommunications
3	Anchorage Daily News	540	Newspaper
4	Matanuska Telephone Association	323	Wired/Wireless/Internet Telecommunications
5	AT&T Alascom	259	Wired/Internet Telecommunications
6	Shivers Trading & Operating Company (Morris Communications)	242	Newspapers/Radio Stations
7	Arctec Alaska	153	Other Telecommunications
8	Fairbanks Daily News-Miner	145	Newspapers
9	United Utilities	142	Wired/Wireless/Telecommunications
10	KTUU TV (Anchorage’s Channel 2)	126	Television Broadcasting
11	Alaska Power & Telephone Company (AP&T)	125	Wired/Wireless/Internet/Electricity
12	Clear Channel Broadcasting	122	Radio Network
13	Dobson Communications (Cellular One)	121	Wireless Telecommunication
14	First Health Services	86	Data Processing, Hosting and Related Services
15	Eastgate Theatre	80	Movie Theaters
16	Century Theaters	77	Movie Theaters
17	Alaska Newspaper Inc.	66	Local Newspapers/Radio Station
18	Alaska Digital	59	Wireless Telecommunication
19	Smith Broadcasting Group (Anchorage’s Channel 13)	57	Television Broadcasting
20	CoastAlaska (Southeast Alaska public radio)	55	Radio Stations
21	Martin Marietta Operation Support	54	Other Communications
22	Regal Cinemas	52	Movie Theaters
23	Arctic Slope Telephone Association	52	Wired/Wireless/Internet Telecommunications
24	Gross Alaska	51	Movie Theaters
25	Alaska Public Telecommunications	47	Television Broadcasting

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

## 2 Information Industry Pays Above-Average Wages 2004 Annual Employee Earnings



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

### Telecommunications is the heavyweight

Nearly 60 percent of all information sector employment is in telecommunications. (See Exhibit 3.) That number is not surprising, considering that nearly every household in the state is connected by some type of phone, whether landline, wireless or both, and many subscribe to companies for Internet access or cable TV.

Just under 18 percent of the information sector's employment is in publishing. It employed 1,228 people in 2004. Of those, 83 percent worked for newspapers and about 9 percent worked for magazines.

Radio and television broadcasting is the third-largest employer within the information sector. It employed just over 12 percent of the industry's employees, or 857 workers. Often one company might do both radio and television, and in a few instances, a company might publish newspapers too. For example, Georgia-based Morris Communications publishes seven newspapers in Alaska, along with Alaska magazine and The Milepost, and also runs six radio stations around the state.

The motion picture subcategory is the fourth-largest employer in the information sector. It has 6 percent of the employment, or 406 employees, and is pretty straightforward: Nearly all the employees work in movie theaters. Alaska has 18 movie production studios that have employees, but the annual average employment for all 18 combined is just 33.

The last three components are the smallest. The component that represents Internet providers, Web search portals and data processing companies had 3 percent of the information sector employment in 2004, or 198 employees. A few local Internet providers provide those services, along with Alaska telecommunication companies or national providers with no physical presence in Alaska. The last two components represent 66 employees total: Internet publishing and broadcasting as well as the "other information" component, which includes private libraries and archives and news clipping services.

## It grew and then it stalled

Trends in telecommunications influence the direction of the entire information industry because telecommunications since the mid-1990s have been responsible for more than half the industry's employment and revenues.

Before 1996, the telecommunications world was heavily regulated and did not really change much year to year. (See Exhibit 5.) For example, in the mid-1990s, Alaskans did not have a choice of local phone companies. Cell phones had barely arrived and typically one company in each community dominated the industry. But beginning in 1996, things began to change dramatically. For the next four years the industry grew quite spectacularly.

In addition to deregulation, the high-tech boom that gripped the U.S. – and is largely credited for the country's dynamic growth in the mid-to late-1990s – hit Alaska too. It became the most-wired state in the nation. Sixty-eight percent of Alaskan households had Internet access in 2003, the highest share of any state, according to the U.S. Census Bureau. Foreign Direct Investment magazine in its June/July 2005 issue ranked Anchorage as the second-best

city, after Chicago, in telecommunications and information technology. The ranking is based on the percentage of residents who have access to telecommunications technology and the existing infrastructure. Anchorage tied with New York City and Phoenix.

With the convergence of deregulation and technology, new competitors entered the information industry marketplace, particularly in telecommunications, while existing players got involved in new products and technology. It all caused massive investment in the information industry. Wireless companies such as MacTel or Century Telephone popped up around the state along with Internet providers such as Greatland Internet Services and others. GCI, an older existing player that had a work force of 257 in 1994, grew nearly five times that amount in 11 years. It now has 1,225 employees. ACS, now the second-largest information sector employer in Alaska, did not even exist in its current form in 1994. In fact, nearly half of the 25 largest employers in the information sector (see Exhibit 1) were not on the same list a decade ago.

However, one trend gave information sector employment an artificial boost: the privatization of two sizeable telecommunications companies.

## Information Sector Employment 2004 **3**

	Annual Average Employment	Share	Payroll	Annual Average Earnings
<b>Total Information Employment</b>	6,865	100.0%	\$329,849,085	\$48,047
Publishing (except Internet)	1,228	17.9%	\$40,322,636	\$32,836
Motion picture and sound recording	406	5.9%	\$5,066,196	\$12,478
Broadcasting (except Internet)	857	12.5%	\$22,474,665	\$26,225
Internet publishing and broadcasting	9	0.1%	*	*
Telecommunications	4,110	59.9%	\$244,890,315	\$59,584
Internet service providers, Web search portals and data processing services	198	2.9%	\$7,748,067	\$39,132
Other Information	57	0.8%	*	*

\* Data suppressed for confidentiality in compliance with Bureau of Labor Statistics' standards.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

The largest was the Anchorage Telephone Utility, owned and operated by the Municipality of Anchorage. It was the nation's largest publicly owned phone company. When the Municipality of Anchorage sold it to ACS in late 1998, the 700 Municipality of Anchorage employees were suddenly private-sector employees. A similar situation occurred in 1997 when Pacific Telecom Inc. (PTI) bought part of the City of Fairbanks' Municipal Utility Services Company. ACS is now the owner.

As the nation's technology boom cooled off, areas with a high concentration of tech industries, such as Seattle or the Silicon Valley, experienced a full-blown bust in 2001. Alaska's information industry, for the most part, escaped because it was not producing the high technology – it was simply buying it from the Lower 48.

Employment in Alaska's information industry peaked at 7,500 in 2000, then tapered down to 6,865 employees in 2004 (see Exhibit 5), but this was primarily due to the consolidation of telecommunications, Internet and other types of information-service companies.

### Alaska mix is different than the U.S.

Although Alaska's information sector claims nearly the same share of total wage and salary

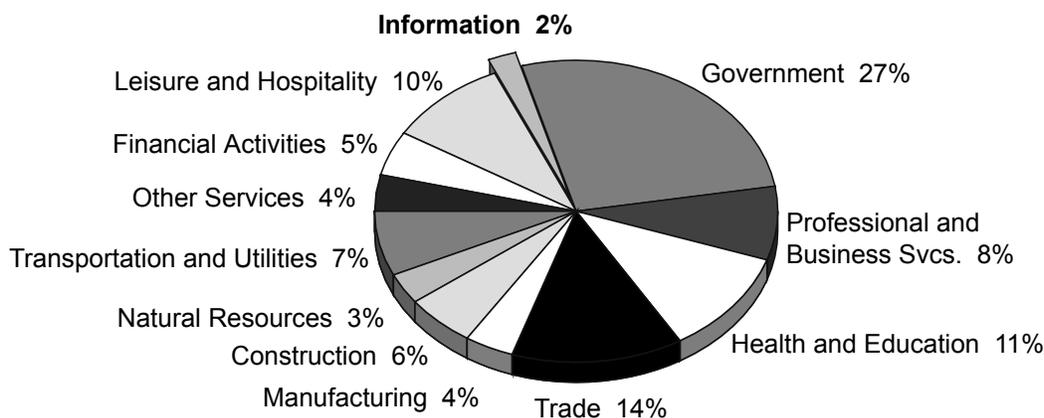
employment as it does nationally, there are distinct differences in the industry composition. (See Exhibit 6.) Telecommunications' dominance is much more accentuated in Alaska, where it claims 60 percent of the statewide information sector versus 33 percent of the national information sector. Telecommunications' large role in Alaska can be partially explained by the fact that many other components of the information sector have developed their businesses in the Lower 48, and that is where their employees are. Most software publishers, Web engineers, designers, motion picture producers and computer support people are based outside Alaska.

Publishing's share of the information sector is considerably smaller in Alaska than it is in the rest of the U.S. In Alaska, publishing represents 18 percent; nationwide, it is 29 percent. Newspapers are the biggest employers in the business, both in Alaska and nationally. Within the publishing component, software publishers in Alaska account for just 5 percent of this component – Alaska has nine such employers – while they account for nearly 36 percent of publishing employment nationwide.

Motion picture and sound recording employ 6 percent of Alaska's information sector; it employs 12 percent of the U.S. information sector.

## 4 Alaska's Information Industry Employment 2004

### A relatively small employer

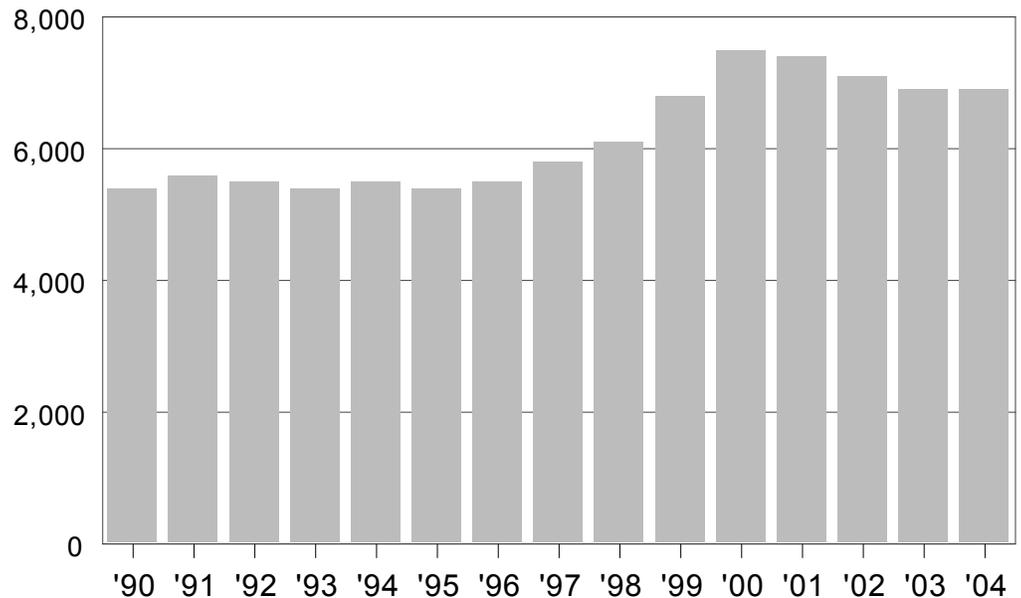


Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

## Alaska's Information Employment 1990-2004

It rose, peaked and declined slightly

**5**



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

Broadcasting – radio and television – employs 12 percent of Alaska's information sector; nationally, it is 10 percent. While radio networks and radio stations employ nearly 58 percent of the broadcasting industry in Alaska, television broadcasting plays the dominant role in the nation (53 percent).

Rural Alaskans maintain a special relationship with radio broadcasting because it connects the most remote places with the rest of the world and until the last decade or so it was their main link to the outside world.

New technology has dramatically expanded television viewing around the state. Many rural areas now have cable and satellite television, but the high costs associated with cable and satellite service and the small population bases have limited their coverage.

Both public radio and television play a disproportionately big role in rural locations and the Bush – Alaskans' term for remote areas – because the audience is usually too small

to support commercial stations. Twenty-seven public radio and five public television stations have their own programs. The only Alaska television channel that reaches the majority of Alaska's rural areas and the Bush is the state-run Alaska Rural Communication Service channel. It is specially designed for rural areas and consists of CBS, NBC and public television programs.

Anchorage has seven local commercial and public television stations, Fairbanks five, Juneau three and Kodiak, North Pole and Sitka one each, and their broadcasts often reach outlying areas.

Internet publishing and broadcasting is a fairly new information industry component. In Alaska, its size is miniscule – less than half a percent of Alaska's information industry. In the U.S., it is 1 percent.

Internet service providers, Web search portals and data processing companies in Alaska employ 3 percent of the state's information sector; it is 12 percent nationwide. Again, the developers

of such specialized equipment and services are mostly headquartered in the Lower 48. The “other information” employers described earlier employ 1 percent of Alaska’s information sector work force, compared to 2 percent in the U.S.

Alaska lacks the diversity of information employment that exists in other states. However, the consumption of new technology in Alaska is just as common as elsewhere.

### It is an urban phenomenon

Nearly two-thirds of the state’s information work force is employed in Anchorage (Exhibit 7.) The information sector allows people at a central work station, such as in Anchorage, to generate a work product and distribute it to areas throughout the state, all without having to hire anyone in those areas. For the most part, information sector products, whether a television broadcast, newspaper or Internet access, do not require physical contact between the supplier and the consumer.

### The information sector is new

The information sector did not exist as an economic classification until four years ago, when the U.S. Bureau of Labor Statistics adopted a new way of looking at employment.

Economists with the Alaska Department of Labor & Workforce Development, like their counterparts in the other states, converted to the new system in 2001.

Since the 1930s, government statistical programs nationwide had published data based on the U.S. Standard Industrial Classification (SIC) system, which focused more on the manufacturing industries and what was produced. In 1993, the statistical agencies of the U.S., Canada and Mexico began putting together a new system that better reflected the economy of the late 20th Century – the North American Industrial Classification System (NAICS). It was finalized 2001.

The NAICS places more emphasis on the service sector, and focuses on what workers do rather than what products are created or which services are provided. The new system is also more detailed. It replaces SIC’s 11 sectors with 20 of its own. Some of these, like the information sector, contain high-tech industries such as Internet publishing and broadcasting that did not even exist when the last SIC Manual was released in 1987. Other industries were shuffled around. Publishing fell under manufacturing in the old system; now it is a component of the information sector.

## 6 Employment Mix 2004 Information Industry in Alaska and the U.S.

	Alaska Industry Mix	National Industry Mix
<b>Information Industry Employment</b>	100%	100%
Publishing (except Internet)	18%	29%
Motion Picture and Sound Recording	6%	12%
Broadcasting (except Internet)	12%	10%
Internet Publishing and Broadcasting	0%	1%
Telecommunications	60%	33%
Internet Service Providers, Web Search Portals and Data Processing Services	3%	12%
Other Information Services	1%	2%

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

## Information Employment and Payroll by Area 2004

Another 24 percent of the information sector's employment is concentrated in the state's other more-populated areas of Fairbanks, Mat-Su, Juneau and the Kenai Peninsula. But some information employment can be found in every borough or census area throughout the state. And often the numbers are significant, even in the smaller communities: the Bethel area has 94 information industry employees, Sitka has 42 and the Wrangell-Petersburg area has 56.

### Summary

Alaska's small, eclectic but dynamic information sector provides a variety of employment and often cutting-edge career opportunities. It is an industry that has grown faster than average and, with the expectation that technology will continue to evolve rapidly, it will remain a key industry in the state. Without it and its continuing evolution, Alaska's economy could not thrive and remain connected within the state, to the rest of the nation and to the world.

	Annual Average Employment	Information Payroll
Statewide	6,865	\$329,849,085
Aleutians East Borough	3	*
Aleutians West Census Area	16	\$168,341
Anchorage, Municipality of	4,373	\$217,644,793
Bethel Census Area	94	\$1,007,684
Bristol Bay Borough	16	\$930,600
Denali Borough	1	*
Dillingham Census Area	36	\$2,231,453
Fairbanks North Star Borough	576	\$30,221,981
Haines Borough	20	798,590
Juneau, City & Borough of	290	\$11,497,786
Kenai Peninsula Borough	254	\$9,572,538
Ketchikan Gateway Borough	100	\$3,443,114
Lake and Peninsula Borough	1	*
Kodiak Island Borough	72	\$2,382,755
Matanuska-Susitna Borough	521	\$27,492,529
Nome Census Area	13	\$527,151
North Slope Borough	53	\$3,507,648
Northwest Arctic Borough	56	\$2,832,017
Prince of Wales - Outer Ketchikan Census Area	45	\$1,539,075
Sitka, City & Borough of	42	\$1,462,175
Skagway-Hoonah-Angoon Census Area	15	\$771,474
Southeast Fairbanks Census Area	43	\$1,868,226
Valdez-Cordova Census Area	99	\$5,320,343
Wade Hampton Census Area	2	*
Wrangell-Petersburg Census Area	56	\$1,445,204
Yakutat, City & Borough of	1	*
Yukon-Koyukuk Census Area	15	\$375,436

\* Data suppressed for confidentiality in compliance with Bureau of Labor Statistics' standards.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section