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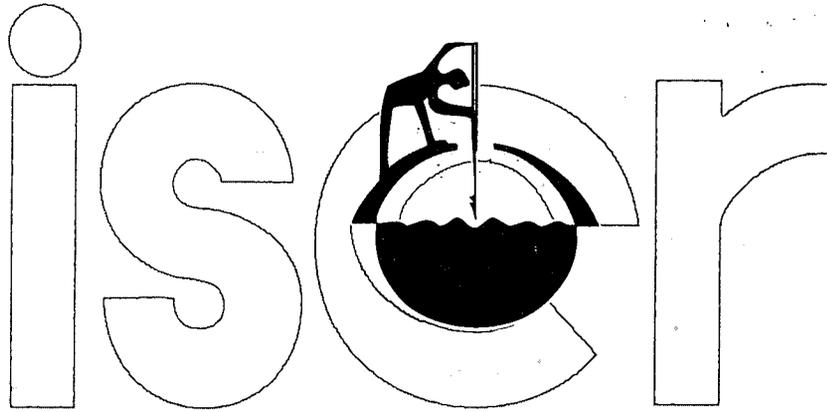
IDENTIFIERS \*University of Alaska

ABSTRACT

This study assesses current and future demands for distance education at the University of Alaska (UA). It highlights findings from interviews with representatives of 33 rural organizations, and 36 instructors who teach 53 distance education courses. It also lists questions raised and recommendations made by provosts at the Anchorage, Fairbanks, and Juneau campuses. Included are an economic and demographic overview, fall 1997 distance delivery education overview, provosts' questions and recommendations. Findings indicate that, during the fall 1997 semester, nearly 4,115 students in 178 Alaskan locations were enrolled in 293 distance education courses offered through the UA. Distance education instructors suggested that courses will continue to draw more students because of the flexibility and accommodations they provide, and recommended that UA increase media advertising. Rural employers were less satisfied with distance education offerings than the local education authorities, wanted more professional development for educators and more training for health care professionals, and felt that skills in public administration, management, and accounting could be improved through local educational opportunities. The provosts recommended that UA should develop a management information system to help track and coordinate programs and courses across the three campuses. Appended are economic and demographic information and survey questionnaires. (AS)

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CURRENT AND FUTURE DEMAND  
 FOR DISTANCE EDUCATION  
 EXECUTIVE SUMMARY AND FULL REPORT



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**CURRENT AND FUTURE DEMAND  
FOR DISTANCE EDUCATION  
EXECUTIVE SUMMARY AND FULL REPORT**

**PREPARED BY**  
G. WILLIAMSON MCDIARMID, SCOTT GOLDSMITH,  
ALEXANDRA HILL, AND TERESA HULL

**PREPARED FOR**  
OFFICE OF THE PRESIDENT  
UNIVERSITY OF ALASKA

February 1998



**INSTITUTE OF SOCIAL AND ECONOMIC RESEARCH  
UNIVERSITY OF ALASKA ANCHORAGE  
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ISER thanks representatives of the following organizations for providing us with information for this study:

Jim Stricks, Center for Distance Education, University of Alaska Fairbanks  
Bristol Bay Health Corporation  
Maniilaq Association  
Alaska Village Electric Cooperative  
North Slope Borough  
Kuskokwim Native Association  
Kodiak Area Native Association  
Alaska Department of Education, Office of Special Education  
Ketchikan Indian Corporation  
Alaska Gateway Schools  
Chugach Schools  
Bering Strait Schools  
Aleutians East Borough Schools  
Aleutian Region Schools  
Northwest Arctic Native Association  
City of Ketchikan  
Alaska Telephone Association  
Older Persons Action Group  
Annette Island Schools  
Bristol Bay Borough Schools  
AHTNA  
Council of Athabascan Tribal Governments  
Alaska Rural Electric Cooperative  
Copper River Schools  
Cordova City schools  
Craig City schools  
Delta Junction Schools  
Hydaburg Schools  
Juneau Borough Schools  
Chatham Schools  
Ft. Richardson  
Alaska Visitor Association  
State of Alaska, Vocational Rehabilitation

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## Executive Summary

The President's Office of the University of Alaska asked the Institute of Social and Economic Research to help assess current and future demand for distance education. In this summary we first highlight our findings and then list questions raised and recommendations made by provosts in Anchorage, Fairbanks, and Juneau after they reviewed a draft of this report.

"Distance education" means education or training where the instructor is not in the same room with the students. It doesn't necessarily mean, as the attached maps and figures show, that all students live far from campuses (although many do). A third of distance education students in the Fall 1997 semester, for instance, lived in Anchorage, Fairbanks, and Juneau. Distance education courses are offered over television, through audio or video conferencing, by mail, over the Internet, and through combinations of those methods.

During the Fall 1997 semester, 4,115 students in 178 Alaska locations (and a few places outside Alaska) were enrolled in 293 distance education courses offered through the University of Alaska.

### Findings of Interviews with Instructors and Rural Employers

ISER interviewed 36 instructors who teach 53 distance education courses. They told us:

- *Distance education courses will continue to draw more and more students* because the courses are available in remote places; they are flexible and convenient; and they are available when on-campus classes are full.
- *The university should increase media advertising* for distance education courses.
- *Technical problems are common* in courses that use audio conferencing, electronic mail, and the Internet—and until they are resolved, those problems will limit growth.
- *Native organizations are a significant potential market* for expanded distance education in rural areas.
- *Lack of personal contact with students* is a shortcoming of some distance education courses, as is the lack of important support services—like libraries, advisers, and access to computers—that on-campus students enjoy.

ISER also interviewed representatives of 33 organizations that operate primarily in rural Alaska—because in many remote places, distance education courses are among the few sources of postsecondary education and training available locally. We asked rural employers whether they were satisfied with current distance education offerings and what kinds of job openings they foresaw. Because our sample is small and local education authorities make up nearly half, we need to be careful in making generalizations. Still, some findings stand out:

- *Representatives of Native organizations, utility companies, and private businesses* seem less satisfied with current distance education offerings than are local education authorities.
- *Professional development for educators* appears to be an area of sustained demand. This includes both preservice courses for students in certification programs and counseling and inservice programs for instructional aides and teachers who want to be endorsed in special or bilingual education, technology, counseling, and specific subjects.
- *Enhanced expertise in the use of computers, telecommunications, and technology* is a widespread need.
- *More counselors are needed*—to deal with substance abuse and domestic violence—as well as to work in schools.
- *Health care professionals—especially nurses and community health aides*—are in short supply, and it's possible more training could be provided locally.
- *Public administration, management, and accounting* are among the skills Native organizations most often cited when talking about how they could benefit from more local education opportunities.
- *Utilities and private businesses may need specific training and education* that distance education courses could supply, but a more systematic and detailed survey would be needed to determine those specifics.

### **Economic and Demographic Overview**

How many Alaskans there are, where they live, and how many are employed will all influence future demand for distance education. Factors that may influence demand include:

- *About 60 percent of Alaskans live within 20 road miles of one of the three main UA campuses and another 25 percent live within 20 road miles of an extended site.*
- *Rural areas tend to have a higher concentration of children and teenagers and a smaller share of young adults (20-44) than the cities. That means that in the coming years, growing numbers of potential workers will be facing limited job opportunities*
- *The distribution of jobs in rural Alaska is quite different from that in the cities, with the largest categories of jobs being retail trade, education services, the seafood and timber industries combined, and public administration.*
- *About 17 percent of the job openings in various occupations statewide between 2000 and 2005 will be in rural Alaska, according to the state Department of Labor.*
- *Education beyond high school—ranging from post secondary vocational education to professional degrees—will be required for about 30 percent of the projected job openings statewide between 2000 and 2005. The Alaska Department of Labor projects that the largest numbers of openings requiring such education will be for general managers and top executives, teachers, dental hygienists, and administrative secretaries.*

### **Provosts' Questions and Recommendations**

After reviewing a draft of this study, the University of Alaska provosts developed the following set of questions and recommendations.

#### ***Questions***

1. *Is there much competition for students taking distance education courses, and is that competition increasing?* Most UA distance education faculty interviewed for this study believe there is not much competition—a perception that is at variance with other information suggesting there is considerable competition, and that it is increasing rapidly.
2. *Why are many distance education courses not being actively marketed?*
3. *How are text-based distance education courses funded?* UA should review funding methods for these courses; some may be offered in parallel with but as overloads to classroom courses.
4. *Are distance education courses cost-effective, and how could their cost effectiveness be evaluated?* This question is raised by the large number of courses offered, and the great variety of delivery methods.

#### ***Recommendations***

1. *UA should develop a centralized management information system to track what courses are being offered by distance delivery, how they are delivered, and who is being served. There is currently no such centralized, ongoing system.*
2. *Programs and courses should be coordinated across campuses. Effective and efficient planning requires such centralized coordination, which currently does not exist.*
3. *In a rapidly expanding distance education market, UA must decide what products to create—and which to buy. UA should also identify niches (including technological niches) where it can most effectively concentrate its distance education resources.*
4. *A statewide external advisory committee or board should be established to coordinate between the existing internal advisory groups on each campus. Such an external advisory group would annually review distance education policies statewide.*

## Distance Education in Alaska, Fall 1997

The maps and figures on the following pages provide a picture of distance education in Alaska during the Fall 1997 semester. They are based on data provided by Jim Stricks of the Center for Distance Education at the University of Alaska Fairbanks.

### *Maps*

1. *Distance Education in Alaska, by Location and Enrollment, Fall 1997* (foldout map). This map shows the nearly 200 Alaska communities with distance education students in Fall 1997 and the numbers of students served.
2. *Sample maps: Enrollments in Shishmaref, Petersburg, and Anchorage, by Locations where Courses Originated and Delivery Method, Fall 1997*. To illustrate how distance education students take advantage of courses offered from various locations—and in various ways—we selected three sample communities.
3. *Locations with Distance Education Courses Originating at UA Fairbanks, UA Anchorage, and UA Southeast (Juneau), Fall 1997*. This set of three maps shows locations served by each of the three central campuses in the Fall 1997 semester.

### *Figures*

1. *Use of Delivery Methods for Distance Education Courses, Fall 1997*. This set of 10 figures shows course enrollment by subject and delivery method at UA Anchorage, UA Fairbanks, UA Southeast, and affiliated campuses.
2. *Course Sharing Among UA Campuses (As Measured by Enrollment)*. This set of 10 figures illustrates course sharing among UA campuses—by comparing enrollment by faculty location and by student location.
3. *Course Sharing Among UA Campuses (As Measured by Credit Hours)*. This set of 10 figures provides a different measure of course sharing—a comparison of credit hours by faculty location and by student location.

# Maps and Figures

## Organization of the University of Alaska

### University of Alaska Anchorage

- Chugiak/Eagle River Campus
- Prince William Sound Community College (Valdez)
- Copper Basin Center (Glennallen)
- Cordova Center
- Military Education Centers
  - Eielson AFB
  - Elmendorf AFB
  - Fort Greely
  - Fort Richardson
  - Fort Wainwright
  - Western Aleutians-Adak
- Kenai Peninsula College
  - Kachemak Bay Branch
- Kodiak College
- Matanuska-Susitna College (Palmer)

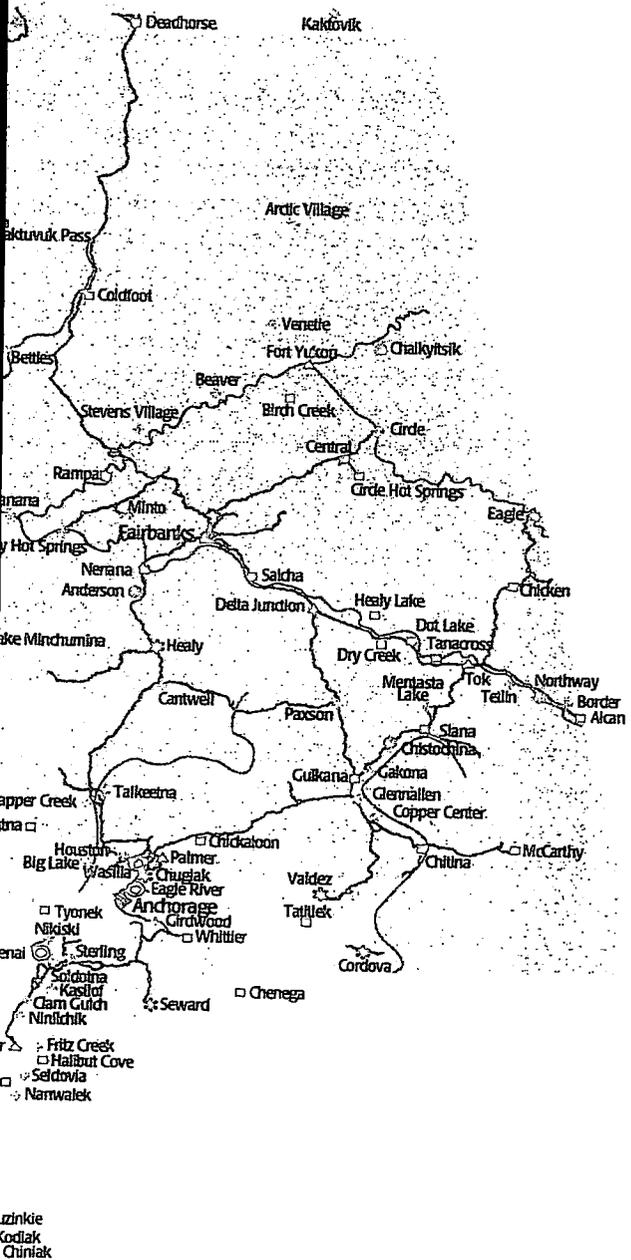
### University of Alaska Fairbanks

- Aleutian/Pribilof Center (Unalaska)
- Bristol Bay Campus (Dillingham)
- Chukchi Campus (Kotzebue)
- Interior-Aleutians Campus
- Kuskokwim Campus (Bethel)
- McGrath Center
- Nenana Center
- Northwest Campus (Nome)
- Tanana Valley Campus
- Tok Center
- Yukon Flats Center (Fort Yukon)
- Yukon-Koyukuk Center

### University of Alaska Southeast (Juneau)

- Ketchikan Campus
- Sitka Campus

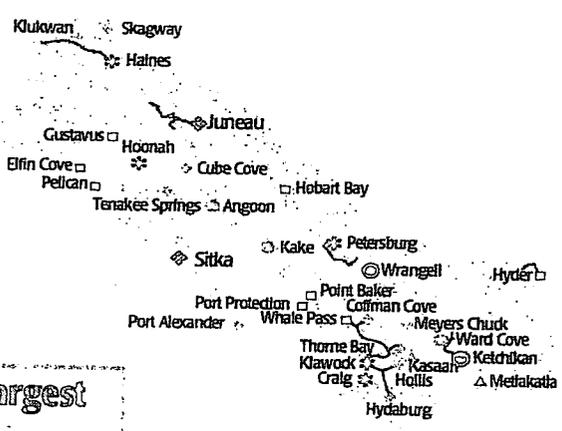




**Key: Headcount by Location\***

- ⊠ More than 100
- 50 - 100
- △ 26 - 49
- ✻ 11 - 25
- ⊙ 6 - 10
- ⊕ 1 - 5
- No Students, Fall 1997

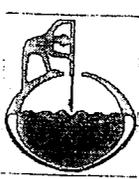
\* Headcount means number of students enrolled in courses; the headcount may be larger than the number of individual students, because one student may be enrolled in several courses



**Locations with Largest Headcounts**

Anchorage	689
Fairbanks	634
Sitka	304
Juneau	181
Bethel	149
Outside AK*	125

\* Students from various places in the Lower 48 and Canada take distance education courses offered through UA.

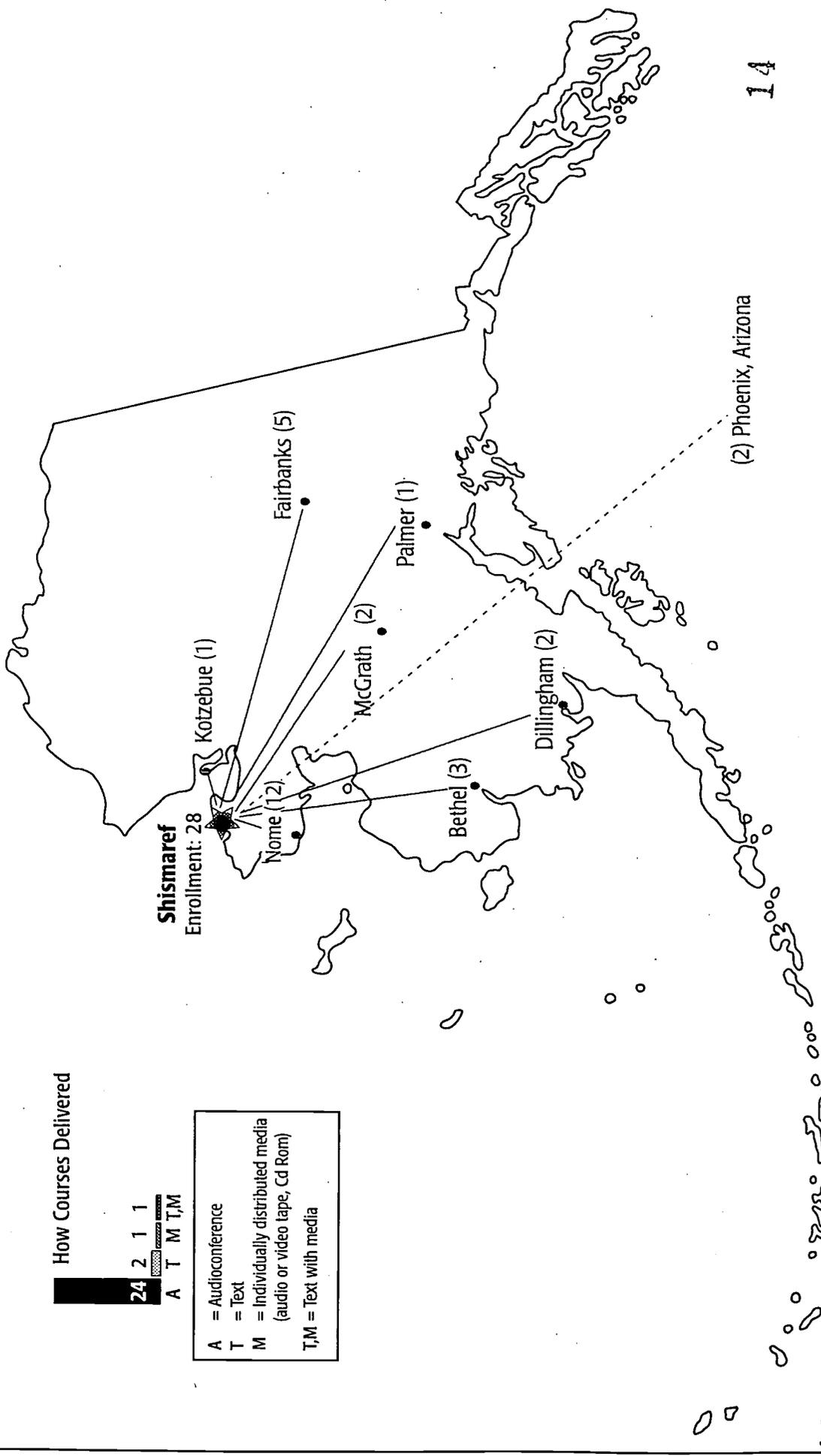


Institute of Social and Economic Research  
University of Alaska Anchorage

**Maps of Distance Education Enrollment  
in Shishmaref, Anchorage, and Petersburg  
(By Campus Where Courses Originated)**

# Distance Education Enrollment in Shishmaref, Fall 1997

## (By Campus Where Course Originated)



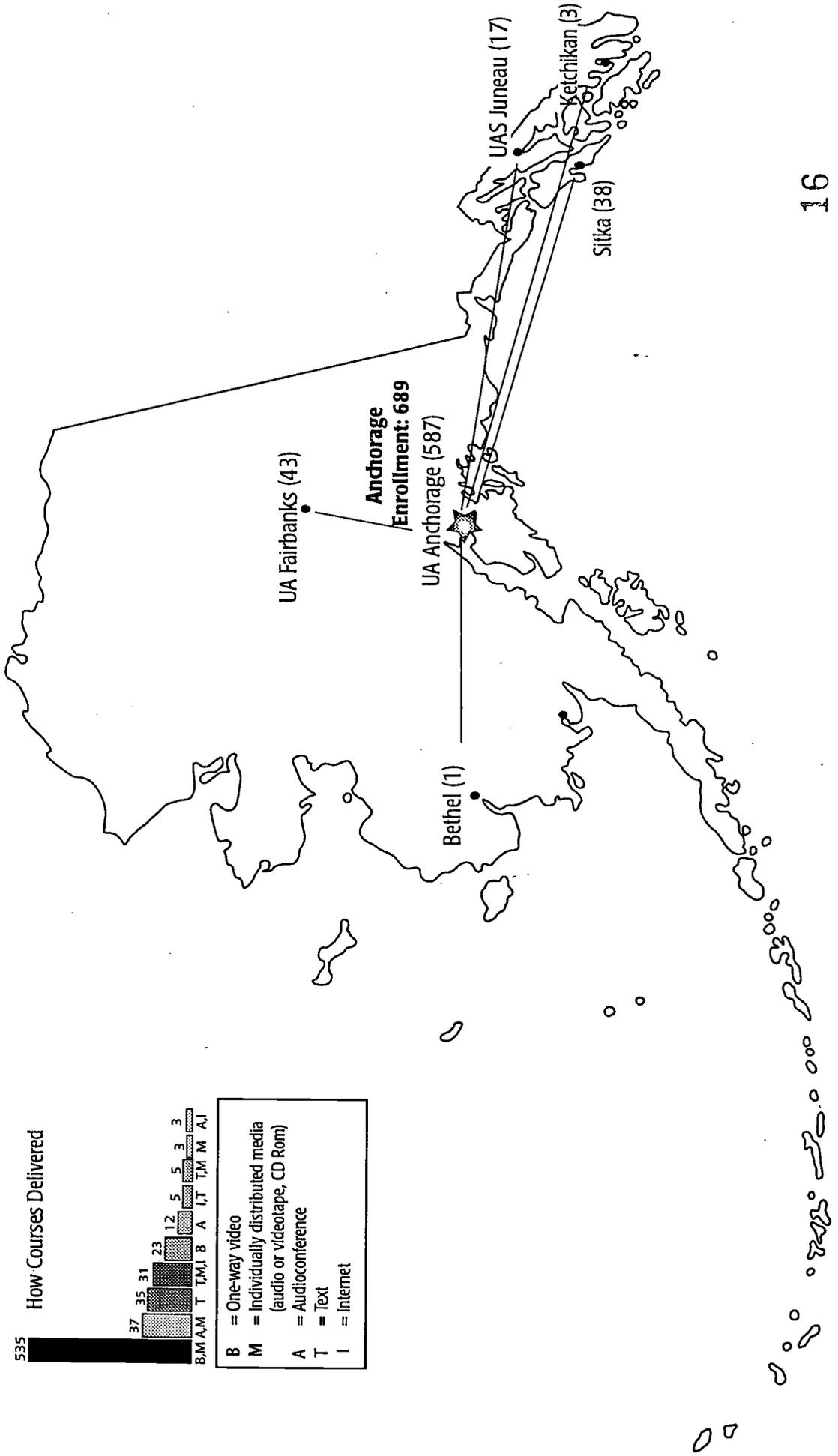
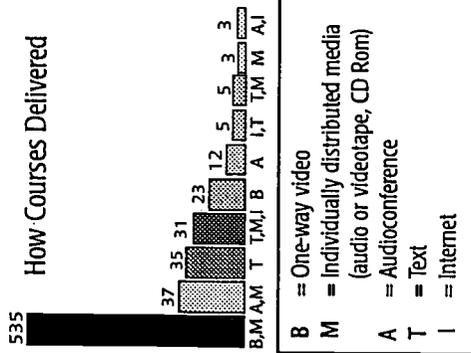
How Courses Delivered

24 2 1 1  
 A T M T,M

A = Audioconference  
 T = Text  
 M = Individually distributed media (audio or video tape, Cd Rom)  
 T,M = Text with media

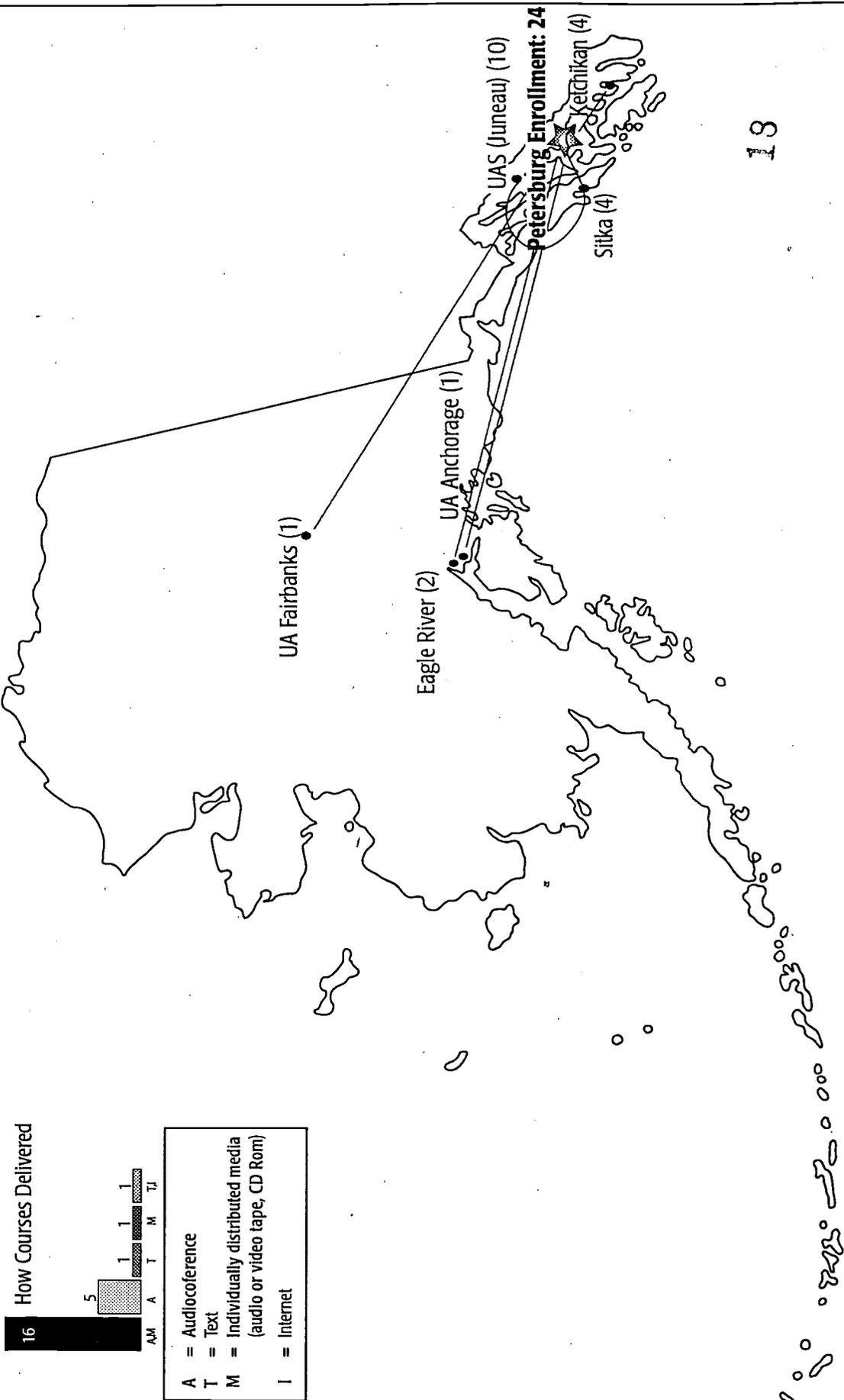
# Distance Education Enrollment in Anchorage, Fall 1997

(By Campus Where Course Originated)



# Distance Education Enrollment in Petersburg, Fall 1997

(By Campus Where Course Originated)

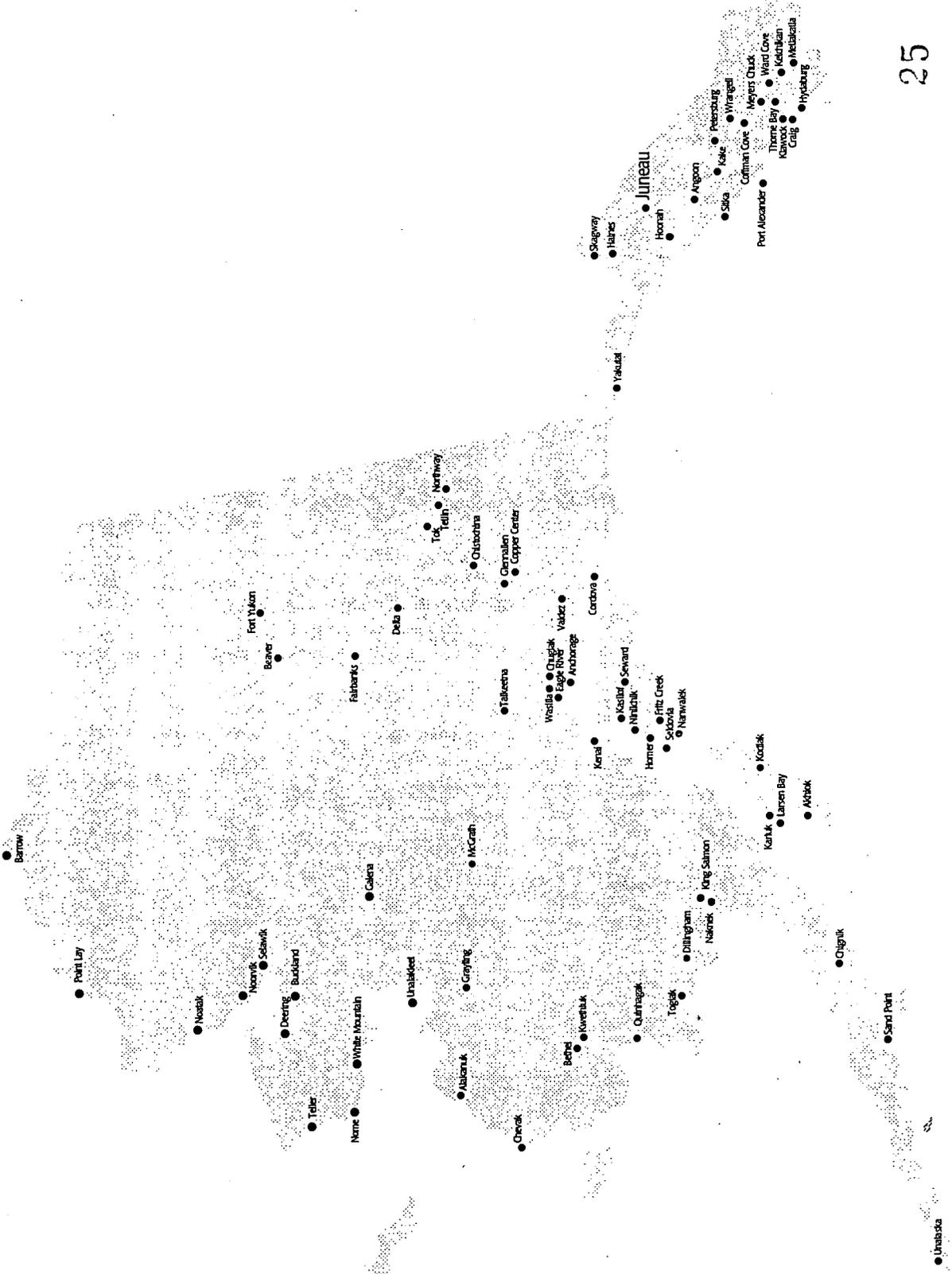


**Maps and Accompanying Table:  
Communities Served by UA Anchorage,  
UA Fairbanks, And UA Southeast  
Fall 1997**





# Locations with Distance Education Courses Originating at UA Southeast (Juneau), Fall 1997



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DISTANCE DELIVERY EDUCATION  
FALL 1997 COURSES

ENROLLMENT BY ORIGINATING CAMPUS AND LOCATION OF STUDENTS

		STATEWIDE	FAIRBANKS	ANCHORAGE	SOUTHEAST
		4,115	2,055	917	1,143
Akiachak	1	16	16	0	0
Akiak	2	18	17	1	0
Akhiok	3	1	0	0	1
Akutan	4	2	2	0	0
Alakanak	5	2	0	0	2
Aleknagik	6	2	1	1	0
Ambler	7	5	5	0	0
Anchorage	8	689	44	587	58
Anderson	9	6	6	0	0
Aniak	10	12	12	0	0
Angoon	11	9	6	0	3
Anvik	12	7	3	0	4
Arctic Village	13	2	2	0	0
Atka	14	4	4	0	0
Atmautluak	15	8	8	0	0
Barrow	16	16	10	0	6
Beaver	17	2	1	0	1
Bethel	18	149	132	3	14
Bettles	19	1	1	0	0
Big Lake	20	3	1	2	0
Border	21	1	1	0	0
Brevig Mission	22	7	7	0	0
Buckland	23	7	5	0	2
Cantwell	24	4	4	0	0
Chalkyitsik	25	7	5	2	0
Chefornak	26	19	19	0	0
Chevak	27	9	7	0	2
Chignik	28	3	2	0	1
Chistochina	29	7	6	0	1
Chugiak	30	14	1	8	5
Circle	31	1	1	0	0
Clam Gulch	32	3	0	3	0
Cold Bay	33	2	2	0	0
Coffman Cove	34	5	0	0	5
Copper Center	35	3	0	1	2
Cordova	36	15	1	4	10
Craig	37	24	6	0	18
Crooked Creek	38	3	2	1	0
Deering	39	8	7	0	1
Delta	40	36	12	1	23

DISTANCE DELIVERY EDUCATION  
FALL 1997 COURSES

ENROLLMENT BY ORIGINATING CAMPUS AND LOCATION OF STUDENTS

		STATEWIDE	FAIRBANKS	ANCHORAGE	SOUTHEAST
Dillingham	41	97	82	2	13
Eagle River	42	64	5	50	9
Ekwook	43	1	1	0	0
Elim	44	5	4	1	0
Emmonak	45	12	11	1	0
Fairbanks	46	634	549	13	72
False Pass	47	4	4	0	0
Fritz Creek	48	3	0	0	3
Ft. Yukon	49	26	24	1	1
Gakona	50	1	0	1	0
Galena	51	12	8	0	4
Gambell	52	9	9	0	0
Girdwood	53	5	2	3	0
Glenallen	54	3	0	1	2
Golovin	55	1	0	1	0
Goodnews Bay	56	9	9	0	0
Grayling	57	8	3	0	5
Haines	58	12	4	3	5
Healy	59	12	12	0	0
Holy Cross	60	10	10	0	0
Homer	61	47	7	8	32
Hoonah	62	16	1	0	15
Hooper Bay	63	12	8	4	0
Houston	64	1	0	1	0
Huslia	65	15	15	0	0
Hydaburg	66	1	0	0	1
Iliamna	67	6	6	0	0
Juneau	68	181	33	5	143
Kake	69	7	0	0	7
Kaktovik	70	2	2	0	0
Karluk	71	1	0	0	1
Kasigluk	72	29	29	0	0
Kasilof	73	5	1	4	0
Kenai	74	85	8	60	17
Ketchikan	75	58	12	4	42
King Cove	76	10	10	0	0
King Salmon	77	14	7	0	7
Kipnuk	78	14	14	0	0
Kivalina	79	1	1	0	0
Klawock	80	12	1	0	11

DISTANCE DELIVERY EDUCATION  
FALL 1997 COURSES

ENROLLMENT BY ORIGINATING CAMPUS AND LOCATION OF STUDENTS

		STATEWIDE	FAIRBANKS	ANCHORAGE	SOUTHEAST
Kodiak	81	87	10	18	59
Kokhanok	82	2	2	0	0
Koliganek	83	1	1	0	0
Kongiganak	84	7	7	0	0
Kotlik	85	8	8	0	0
Kotzebue	86	64	64	0	0
Koyuk	87	10	10	0	0
Koyukuk	88	2	2	0	0
Kwethluk	89	5	5	0	0
Kwigillingok	90	2	2	0	0
Lake Minchumina	91	1	1	0	0
Larsen Bay	92	3	0	0	3
Levelock	93	5	5	0	0
Lower Kalskag	94	1	1	0	0
Manley Hot Spgs	95	3	3	0	0
Manokotak	96	8	8	0	0
Marshall	97	5	5	0	0
McGrath	98	52	37	2	13
Mekoryuk	99	4	4	0	0
Mentasta	100	5	4	1	0
Metlakatla	101	43	4	4	35
Meyers Chuck	102	4	0	0	4
Minto	103	4	4	0	0
Mt. Village	104	7	7	0	0
Naknek	105	8	7	0	1
Nanwalek	106	2	0	0	2
Napaskiak	107	16	16	0	0
Newhalen	108	3	3	0	0
New Stuyahok	109	10	10	0	0
Newtok	110	2	2	0	0
Nikiski	111	1	0	1	0
Nikolai	112	1	1	0	0
Ninilchik	113	1	0	0	1
Noatak	114	4	3	0	1
Nome	115	99	82	5	12
Nondalton	116	6	6	0	0
Noorvik	117	13	6	0	7
Northway	118	9	7	0	2
Nulato	119	1	1	0	0
Nunapitchuk	120	15	15	0	0

DISTANCE DELIVERY EDUCATION  
FALL 1997 COURSES

ENROLLMENT BY ORIGINATING CAMPUS AND LOCATION OF STUDENTS

		STATEWIDE	FAIRBANKS	ANCHORAGE	SOUTHEAST
Nuiqsut	121	1	0	1	0
Old Harbor	122	1	0	1	0
Palmer	123	39	8	29	2
Pedro Bay	124	10	10	0	0
Petersburg	125	24	1	0	23
Pilot Point	126	1	1	0	0
Pilot Station	127	2	2	0	0
Point Lay	128	3	0	1	2
Port Alexander	129	1	0	0	1
Port Lions	130	2	2	0	0
Quinhagak	131	11	10	0	1
Red Devil	132	3	3	0	0
Russian Mission	133	2	2	0	0
Sand Point	134	4	0	2	2
Savoonga	135	11	11	0	0
Scammon Bay	136	17	15	2	0
Selawik	137	4	2	0	2
Seldovia	138	2	1	0	1
Seward	139	21	2	8	11
Shageluk	140	1	1	0	0
Shaktoolik	141	2	2	0	0
Shishmaref	142	28	28	0	0
Shungnak	143	3	3	0	0
Sitka	144	304	48	7	249
Skagway	145	3	2	0	1
St. George	146	4	4	0	0
St. Mary's	147	8	8	0	0
St. Michael	148	13	13	0	0
Stebbins	149	9	9	0	0
Sterling	150	2	0	2	0
Stevens Village	151	3	3	0	0
Takotna	152	5	5	0	0
Talkeetna	153	3	2	0	1
Tanana	154	1	1	0	0
Teller	155	8	6	0	2
Tenakee Springs	156	1	1	0	0
Tetlin	157	4	2	0	2
Thorne Bay	158	5	1	0	4
Togiak	159	12	11	0	1
Tok	160	33	26	1	6

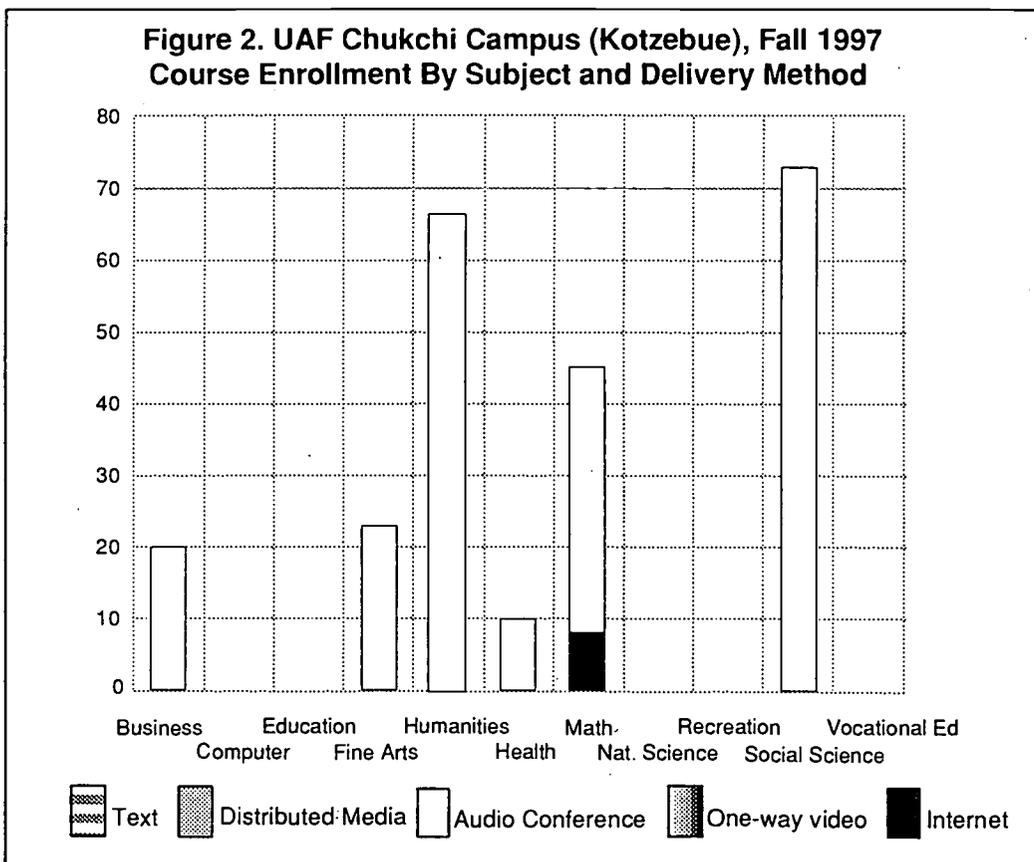
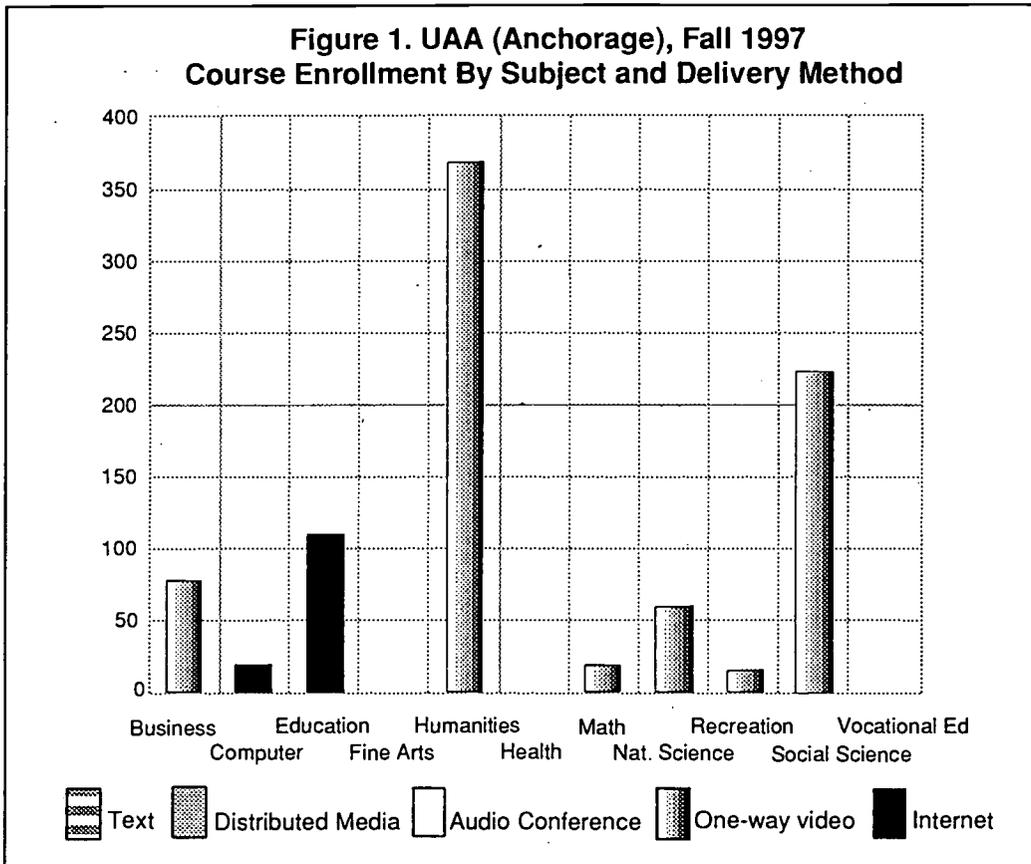
DISTANCE DELIVERY EDUCATION  
FALL 1997 COURSES

ENROLLMENT BY ORIGINATING CAMPUS AND LOCATION OF STUDENTS

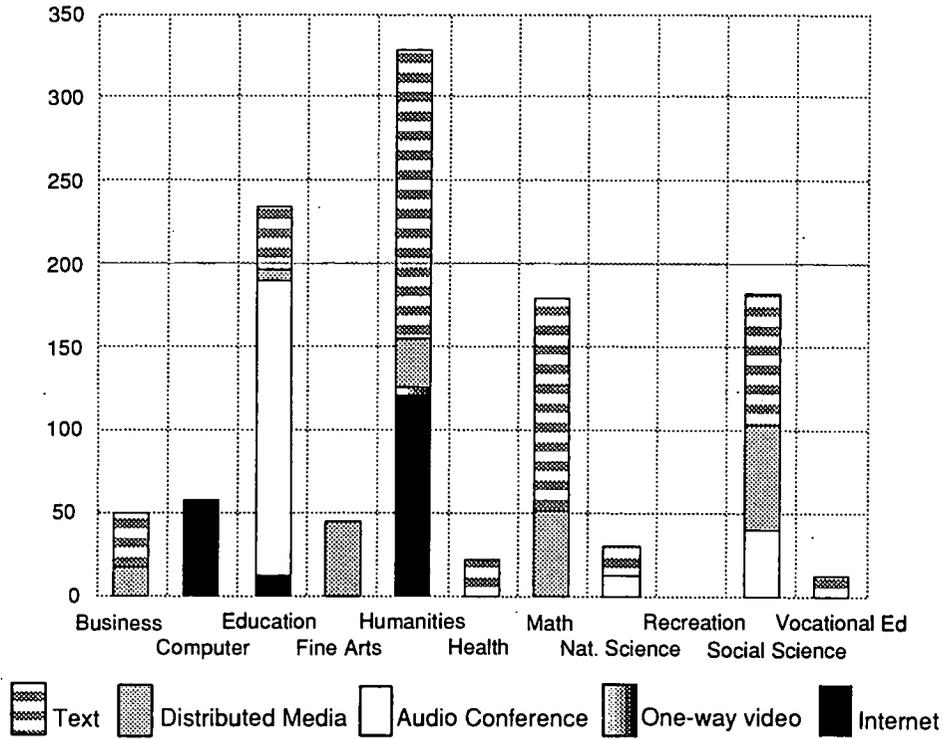
		STATEWIDE	FAIRBANKS	ANCHORAGE	SOUTHEAST
Toksook Bay	161	1	1	0	0
Trapper Creek	162	1	0	1	0
Tuluksak	163	24	24	0	0
Tuntutuliak	164	2	2	0	0
Unalakleet	165	6	4	1	1
Unalaska	166	46	39	0	7
Upper Kalskag	167	2	2	0	0
Valdez	168	15	3	6	6
Venetie	169	1	1	0	0
Wainwright	170	2	2	0	0
Wales	171	5	5	0	0
Ward Cove	172	10	7	0	3
Wasilla	173	73	15	40	18
White Mountain	174	4	1	0	3
Willow	175	1	1	0	0
Wrangell	176	72	11	1	60
Yakutat	177	13	3	1	9
Outside AK	178	125	84	5	36

**Use of Delivery Methods for  
Distance Education Courses  
(By Enrollment and Subject)  
Fall 1997**

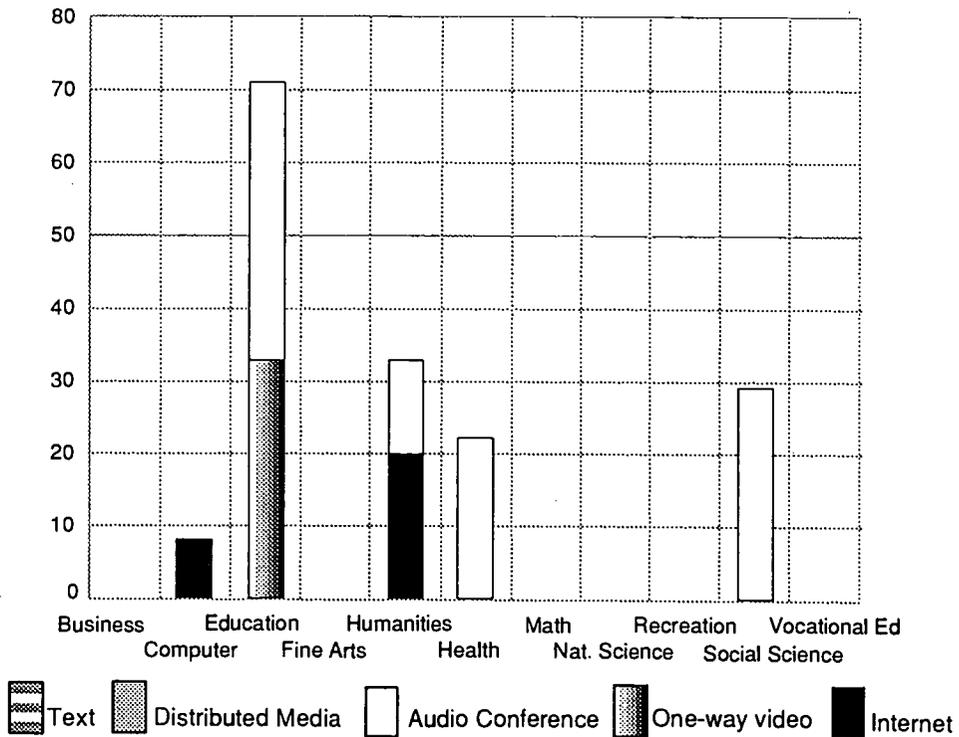
# Use of Delivery Methods for Distance Education Courses, Fall 1997



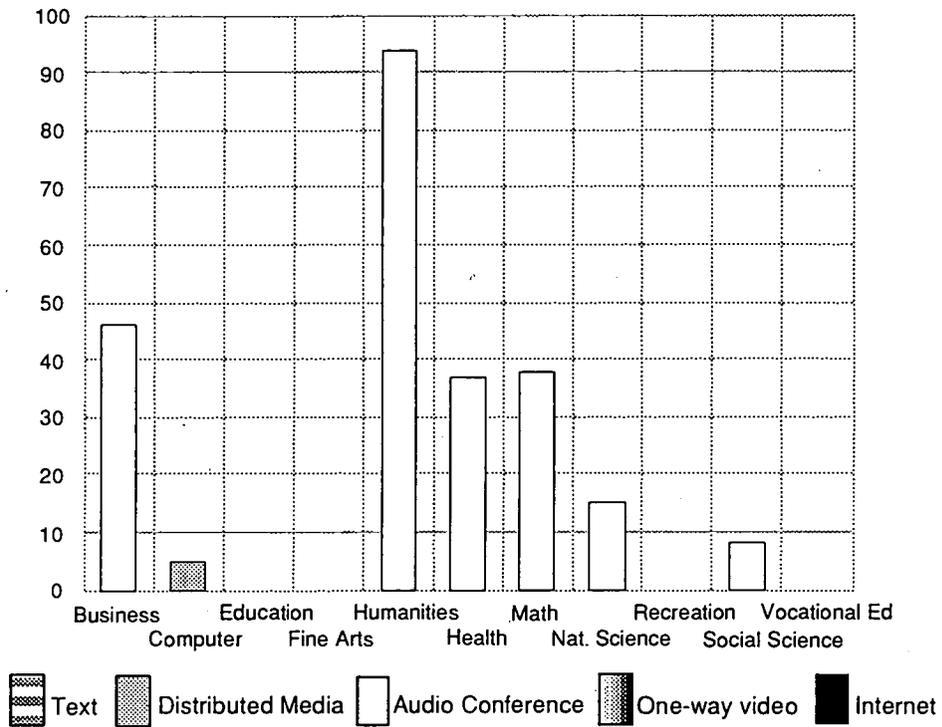
**Figure 3. UAF Fairbanks Campus, Fall 1997  
Course Enrollment By Subject and Delivery Method**



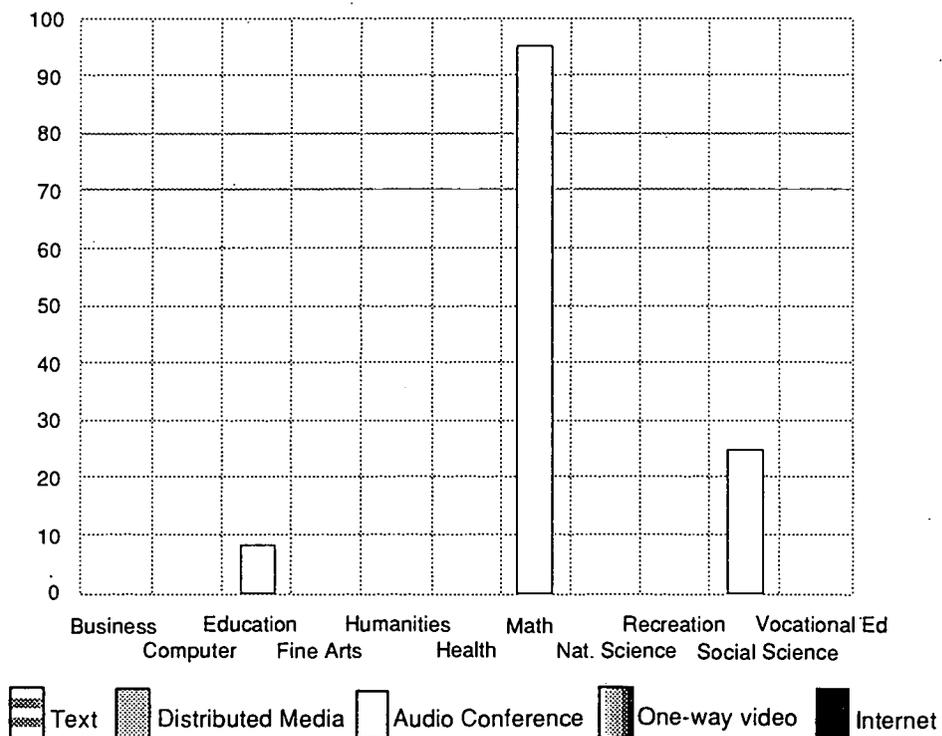
**Figure 4. UAF Kuskokwim Campus (Bethel), Fall 1997  
Course Enrollment By Subject and Delivery Method**



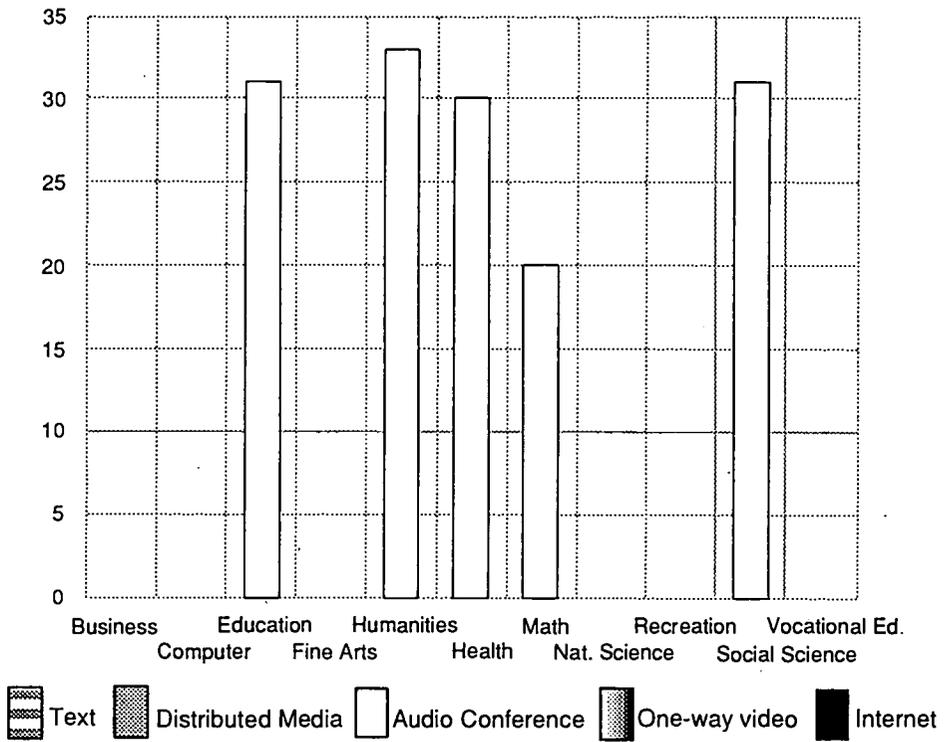
**Figure 5. UAF Northwest Campus (Nome), Fall 1997  
Course Enrollment By Subject and Delivery Method**



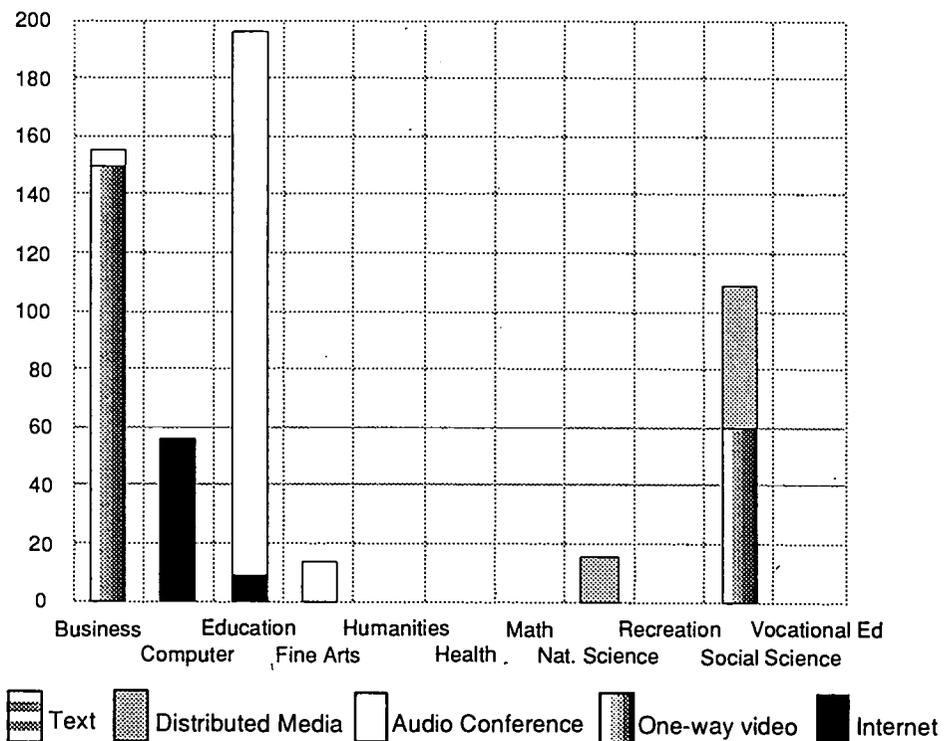
**Figure 6. UAF Bristol Bay Campus (Dillingham), Fall 1997  
Course Enrollment By Subject and Delivery Method**



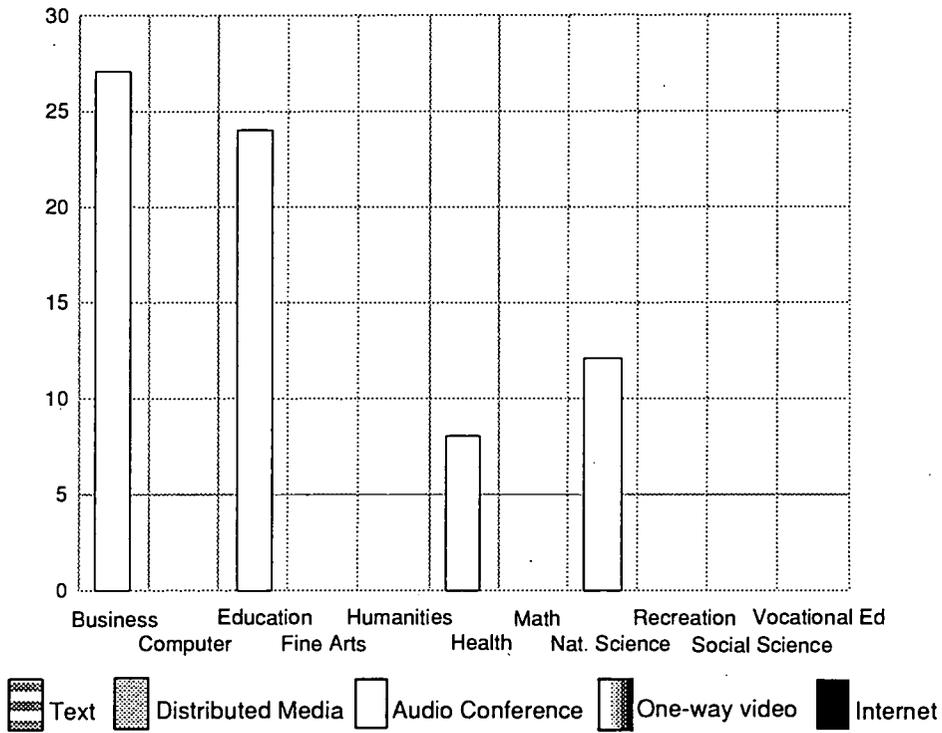
**Figure 7. UAF Interior-Aleutians Campus, Fall 1997  
Course Enrollment By Subject and Delivery Method**



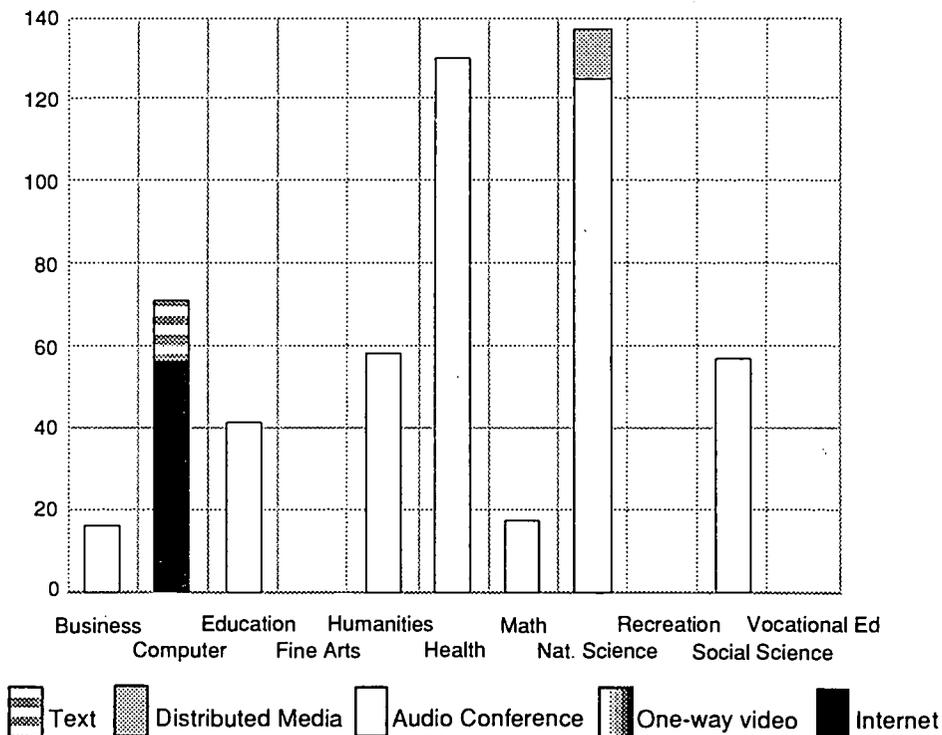
**Figure 8. UAS Juneau Campus, Fall 1997  
Course Enrollment By Subject and Delivery Method**



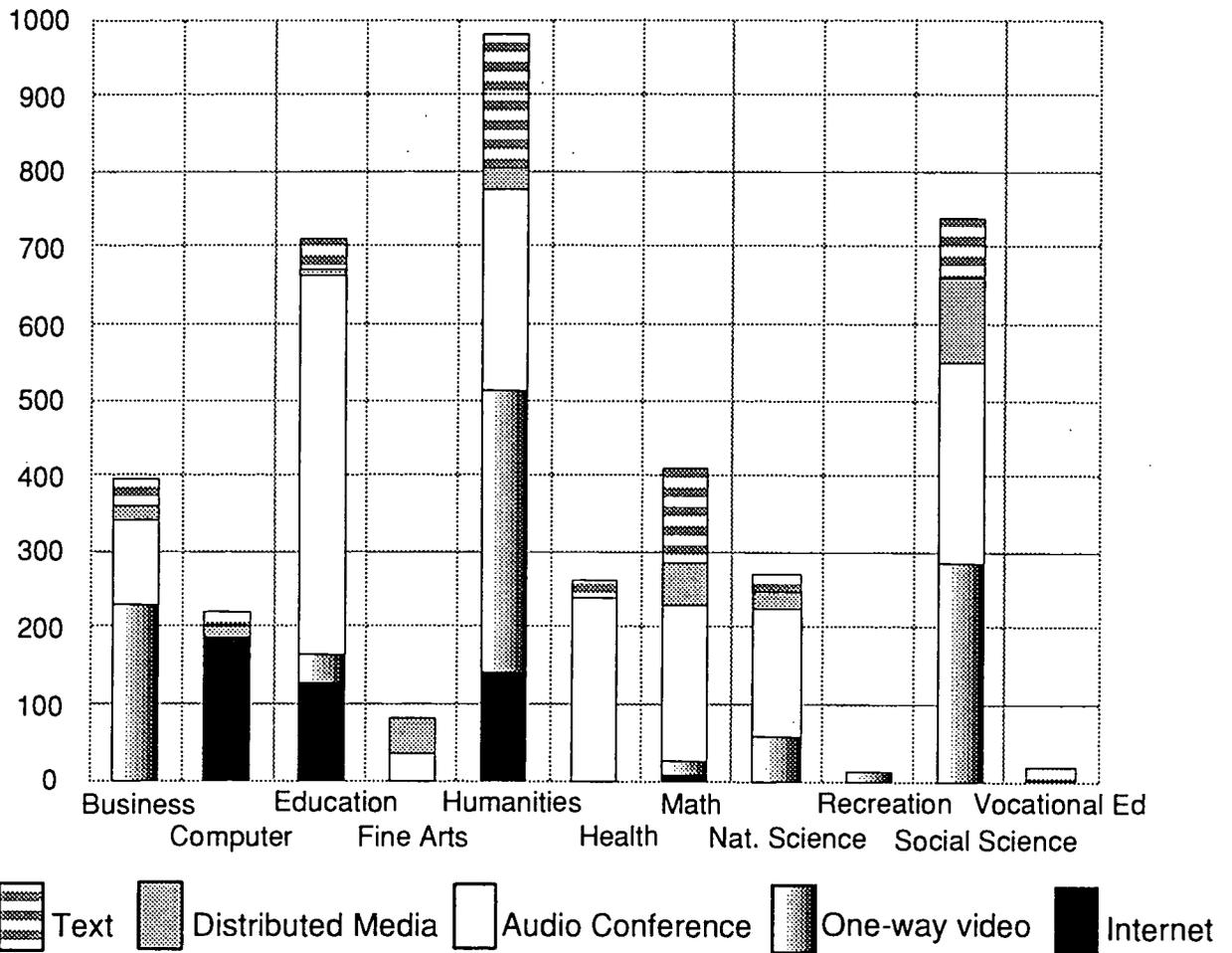
**Figure 9. UAS Ketchikan Campus, Fall 1997  
Course Enrollment By Subject and Delivery Method**



**Figure 10. UAS Sitka Campus, Fall 1997  
Course Enrollment By Subject and Delivery Method**

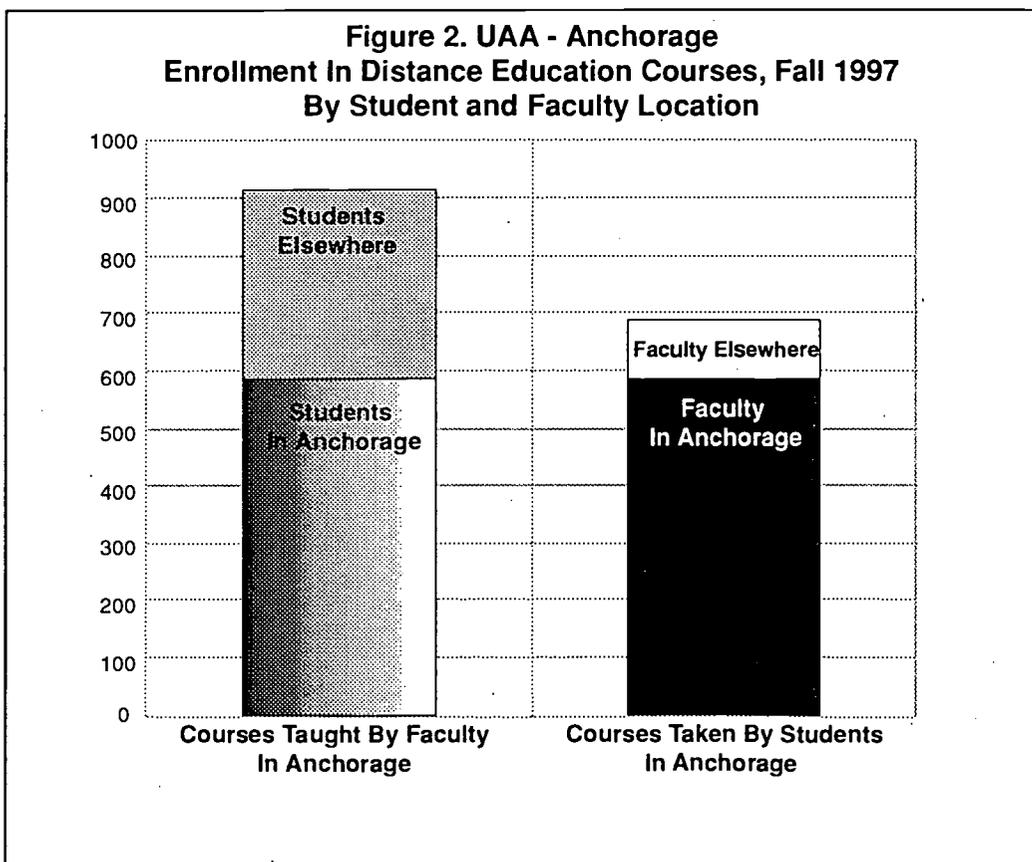
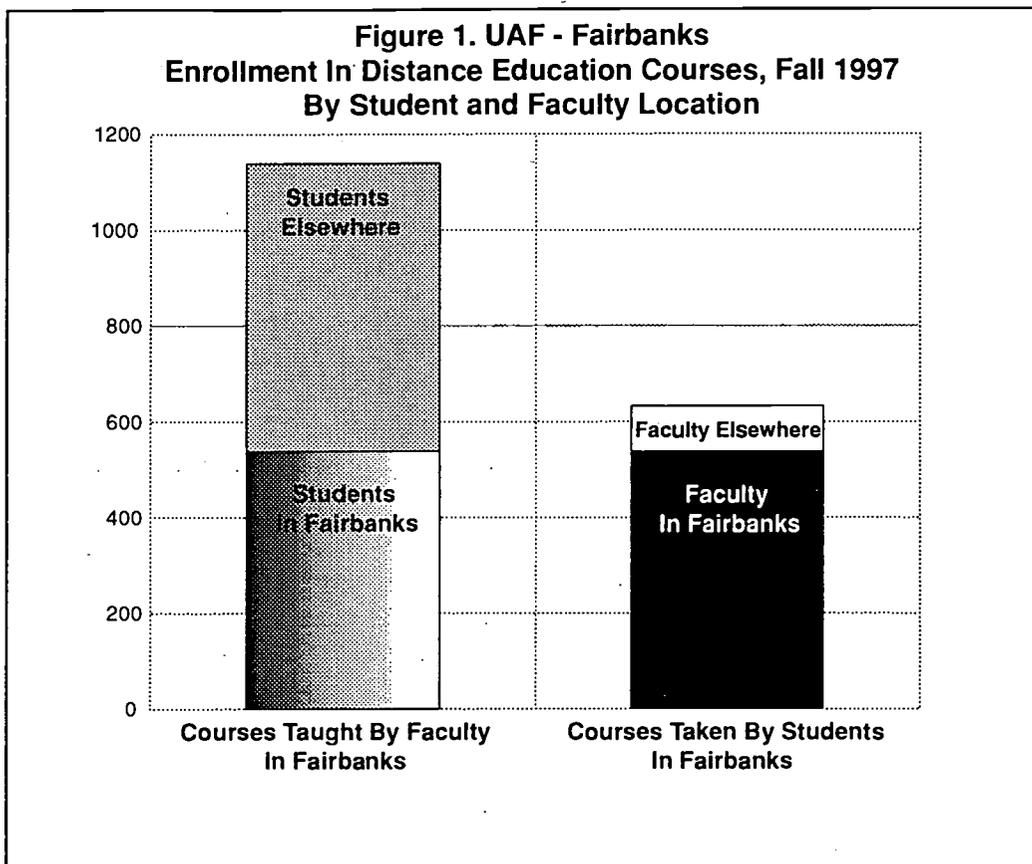


**Figure 11. State Total, Fall 1997**  
**Course Enrollment By Subject and Delivery Method**

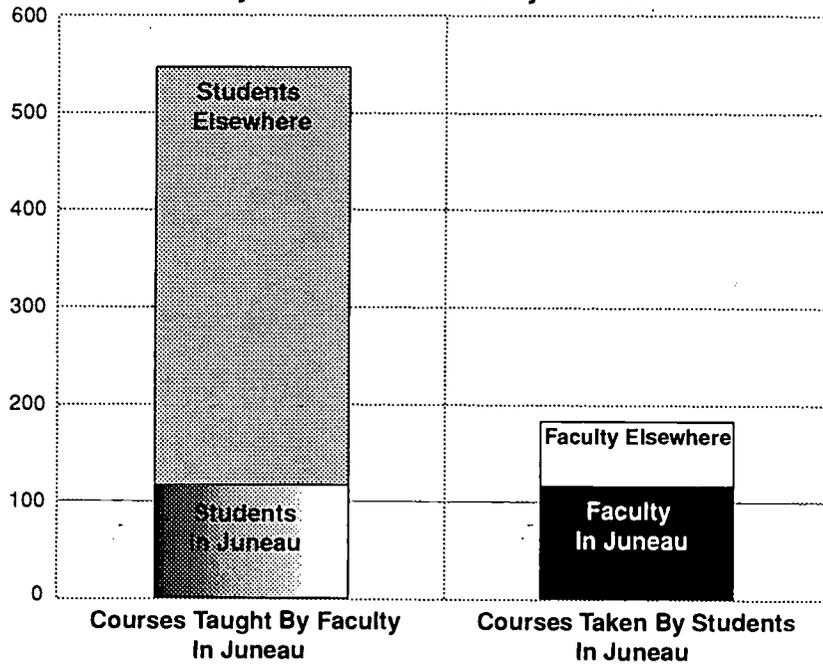


**Course Sharing Among UA Campuses:  
Enrollment By Faculty and Student Location  
Fall 1997**

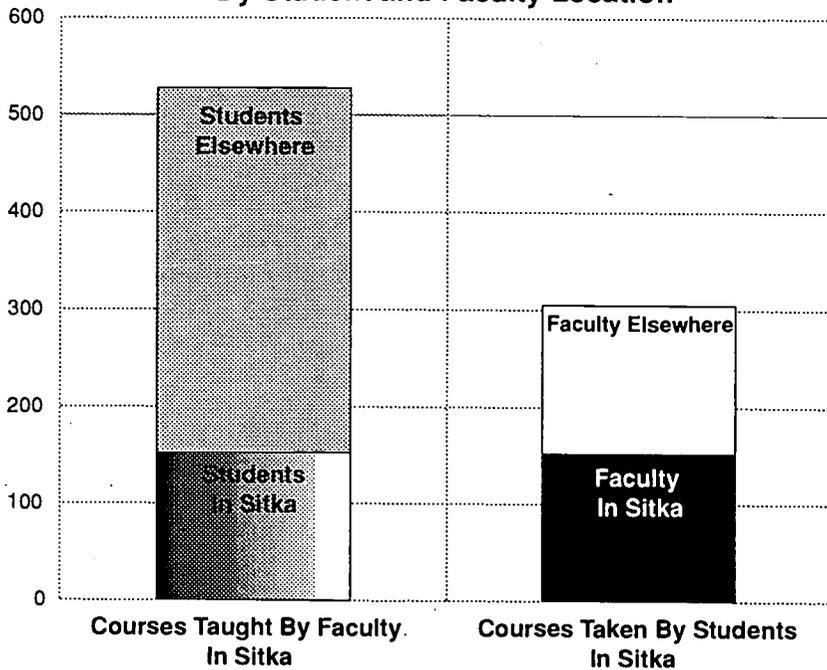
# Course Sharing Among UA Campuses, Fall 1997 (As Measured By Enrollment)



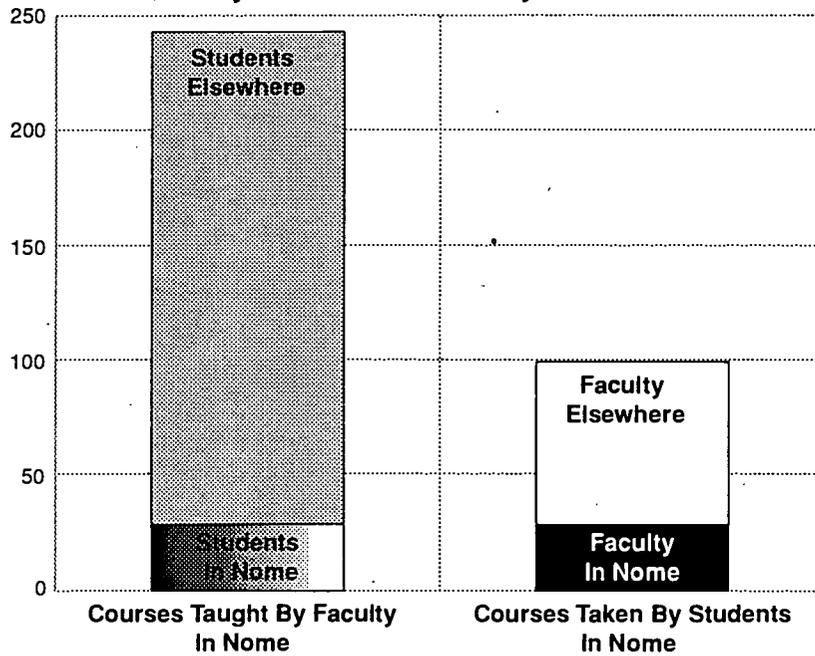
**Figure 3. UAS - Juneau**  
**Enrollment In Distance Education Courses, Fall 1997**  
**By Student and Faculty Location**



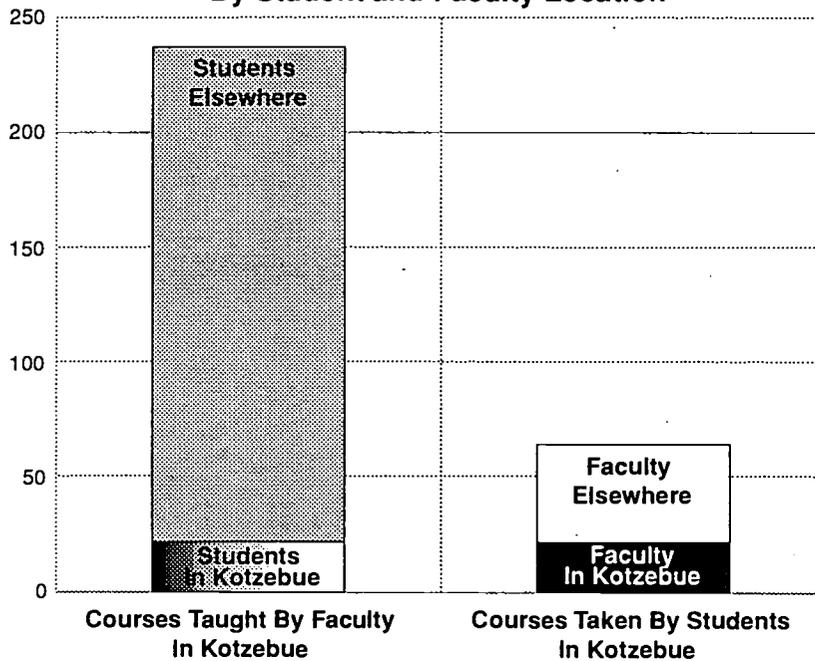
**Figure 4. UAS - Sitka**  
**Enrollment In Distance Education Courses, Fall 1997**  
**By Student and Faculty Location**



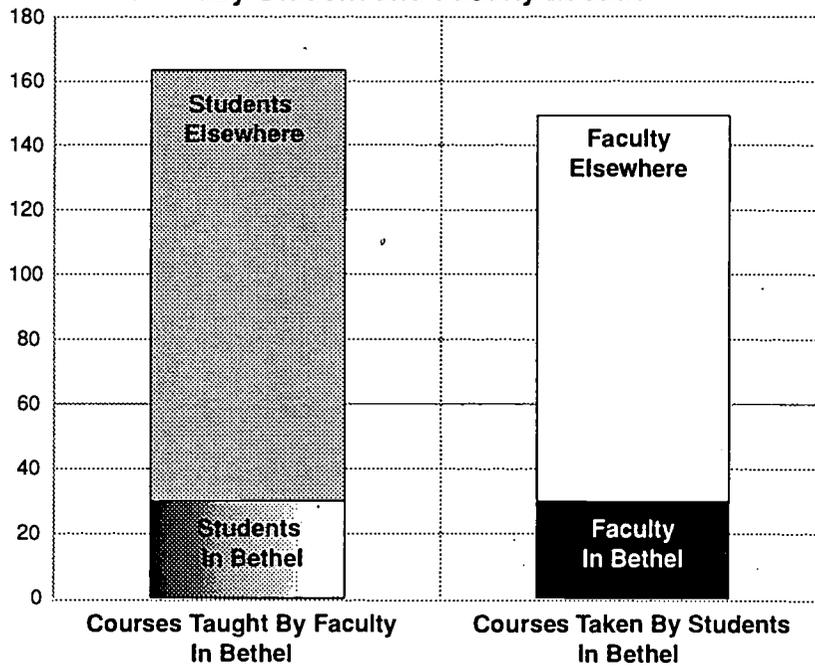
**Figure 5. UAF - Northwest Campus (Nome)  
Enrollment In Distance Education Courses, Fall 1997  
By Student and Faculty Location**



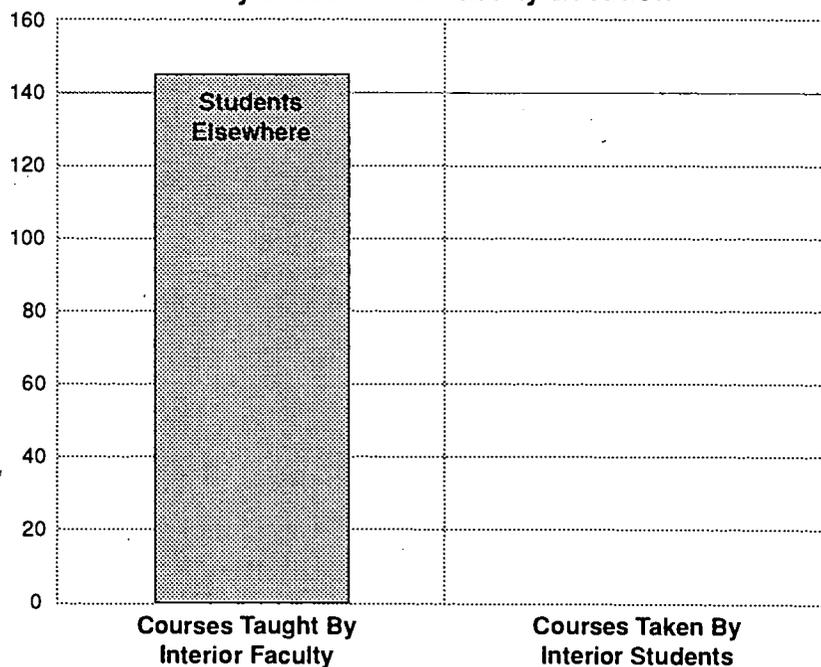
**Figure 6. UAF - Chukchi Campus (Kotzebue)  
Enrollment In Distance Education Courses, Fall 1997  
By Student and Faculty Location**



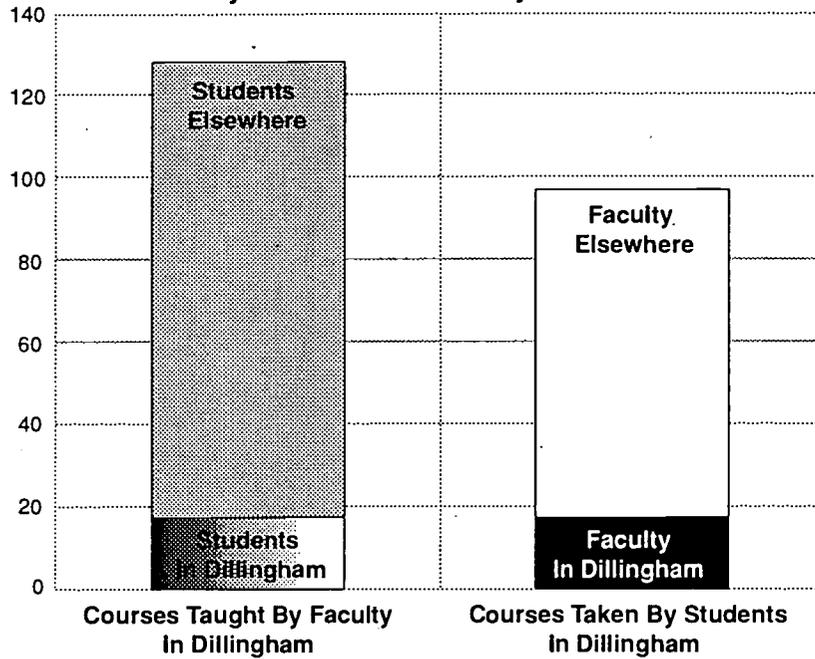
**Figure 7. UAF - Kuskokwim Campus (Bethel)  
Enrollment In Distance Education Courses, Fall 1997  
By Student and Faculty Location**



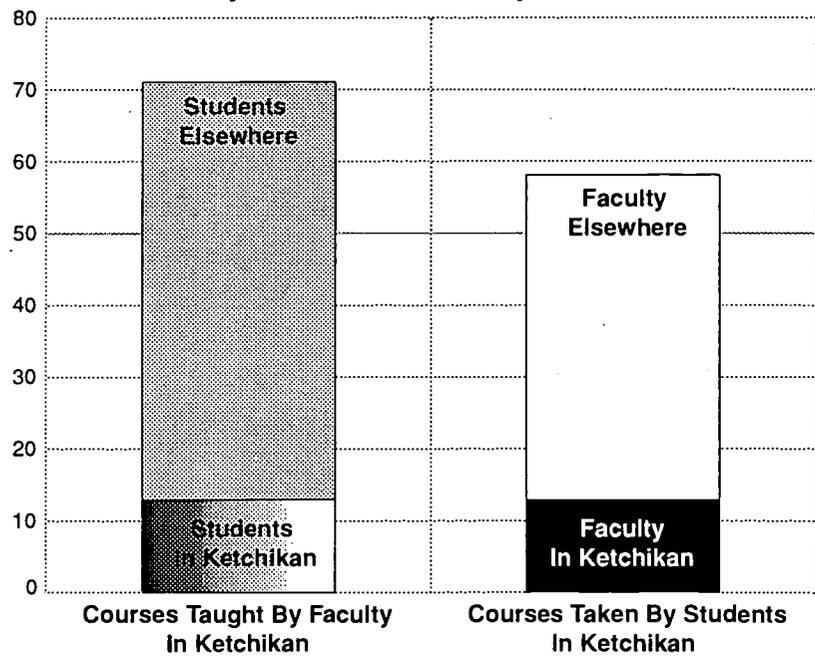
**Figure 8. UAF - Interior-Aleutians Campus  
Enrollment In Distance Education Courses, Fall 1997  
By Student and Faculty Location**



**Figure 9. UAF - Bristol Bay Campus (Dillingham)  
Enrollment In Distance Education Courses, Fall 1997  
By Student and Faculty Location**

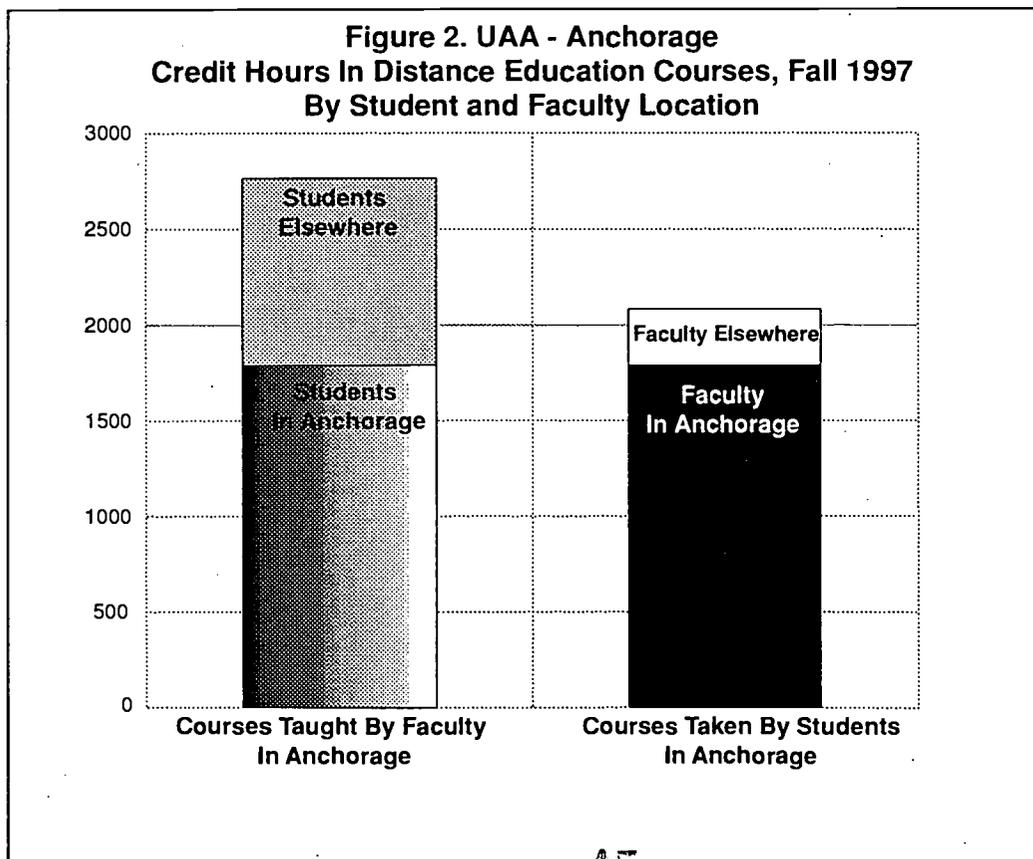
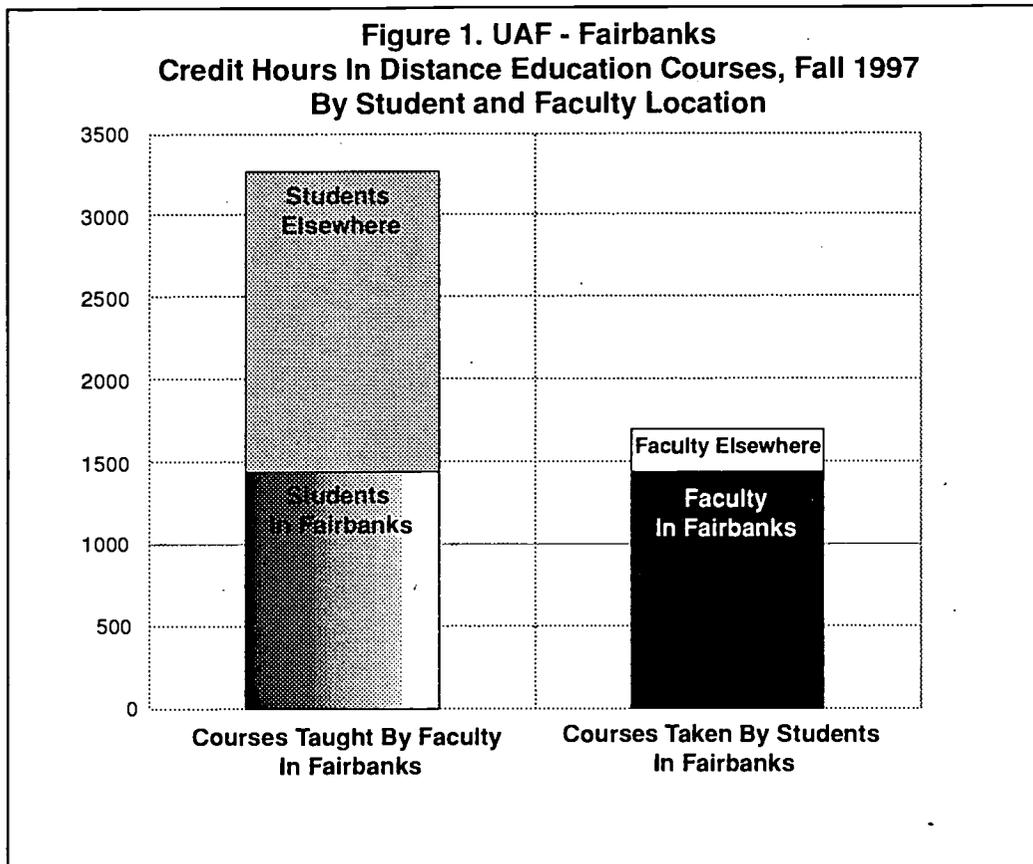


**Figure 10. UAS - Ketchikan Campus  
Enrollment In Distance Education Courses, Fall 1997  
By Student and Faculty Location**

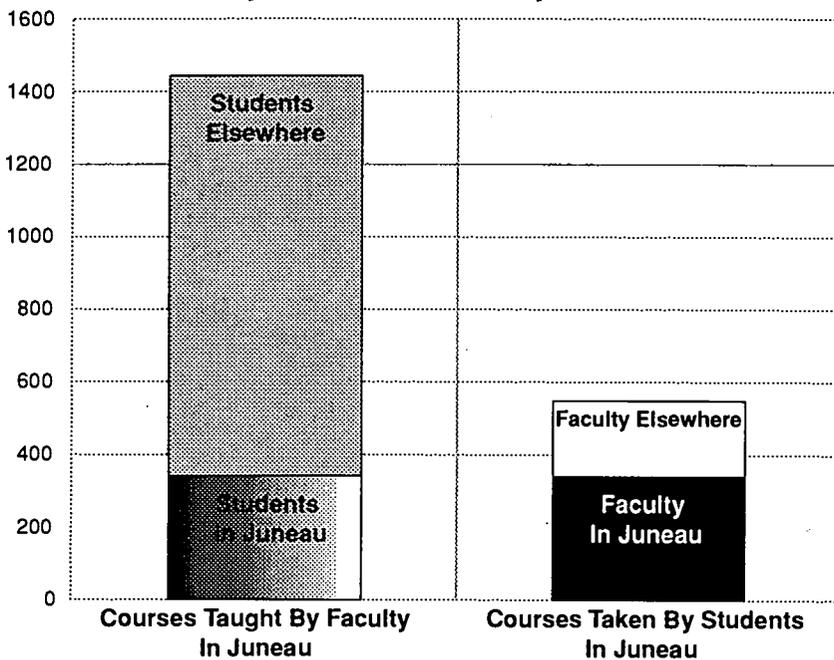


**Course Sharing Among UA Campuses:  
Credit Hours By Faculty and Student Location  
Fall 1997**

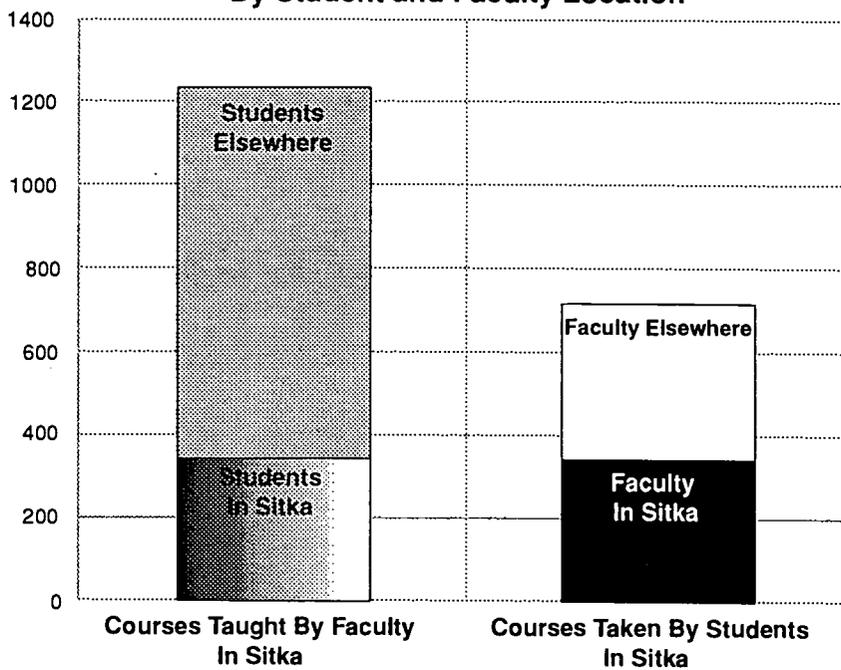
# Course Sharing Among UA Campuses, Fall 1997 (As Measured By Credit Hours)



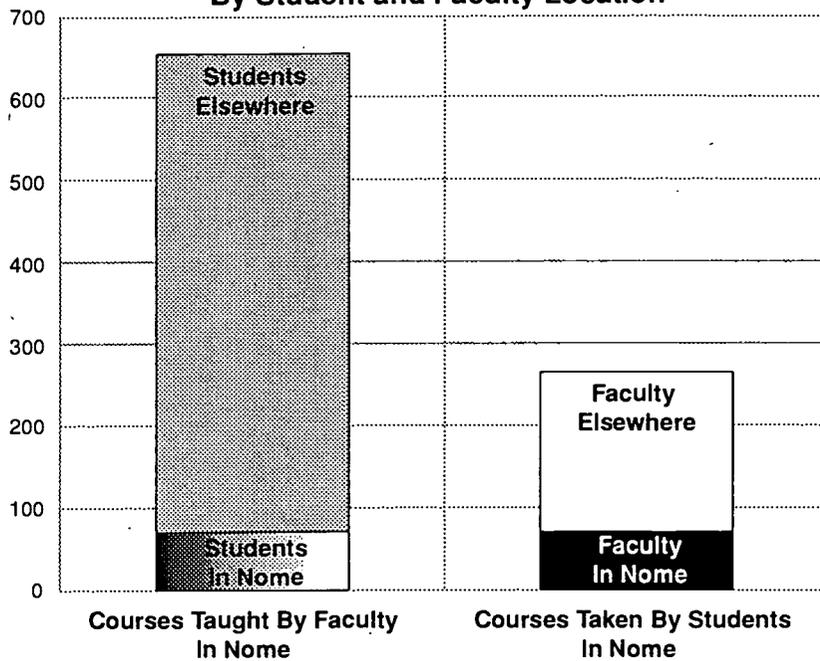
**Figure 3. UAS - Juneau**  
**Credit Hours In Distance Education Courses, Fall 1997**  
**By Student and Faculty Location**



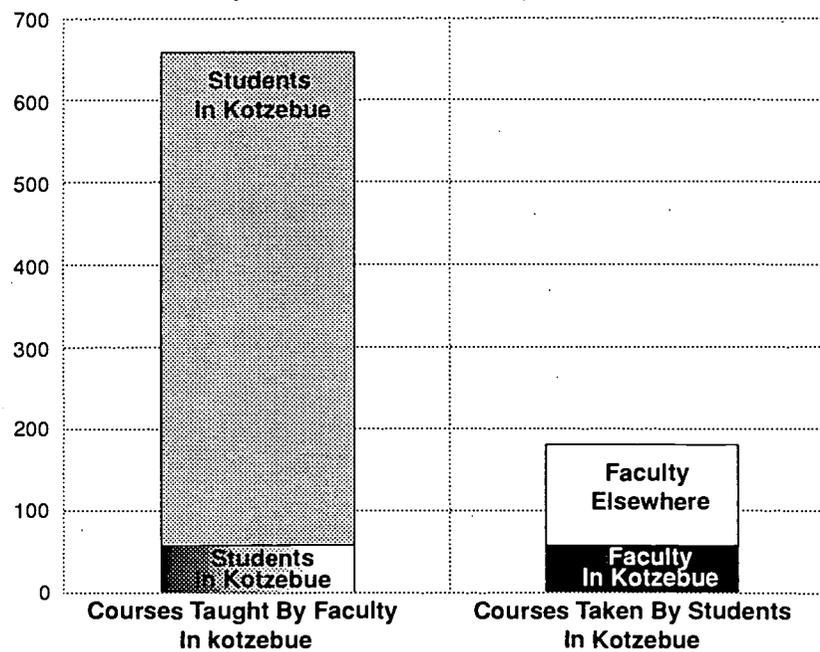
**Figure 4. UAS - Sitka**  
**Credit Hours In Distance Education Courses, Fall 1997**  
**By Student and Faculty Location**



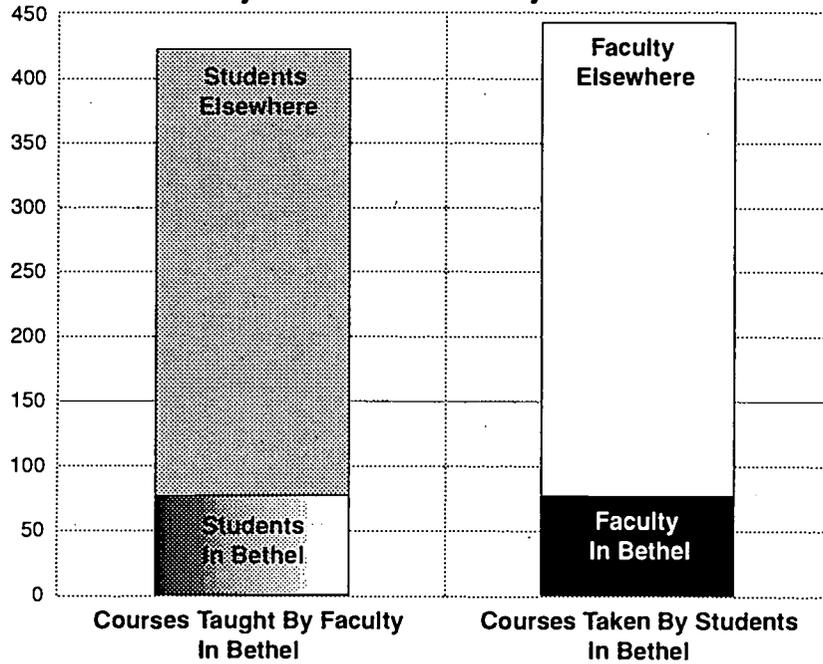
**Figure 5. UAF - Northwest Campus (Nome)  
Credit Hours In Distance Education Courses, Fall 1997  
By Student and Faculty Location**



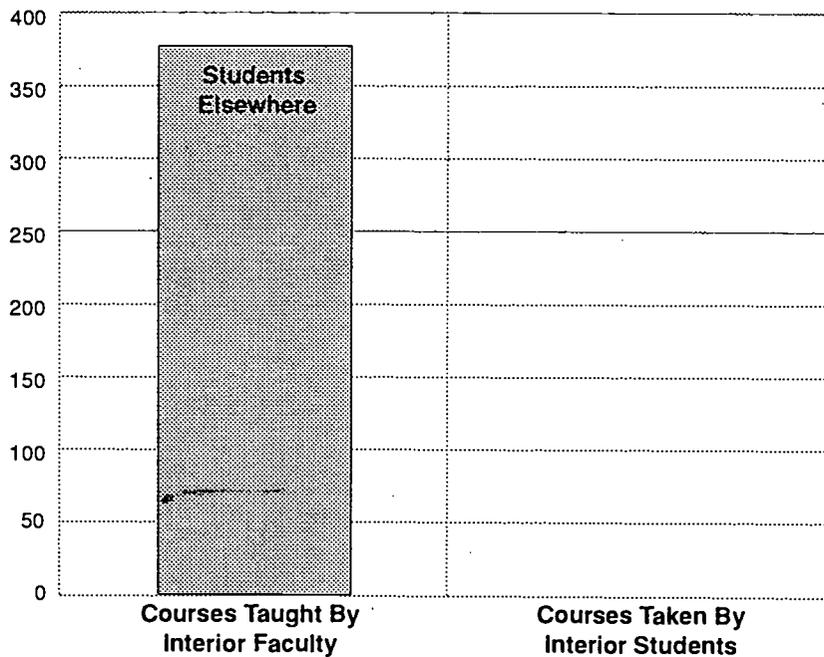
**Figure 6. UAF - Chukchi Campus (Kotzebue)  
Credit Hours In Distance Education Courses, Fall 1997  
By Student and Faculty Location**



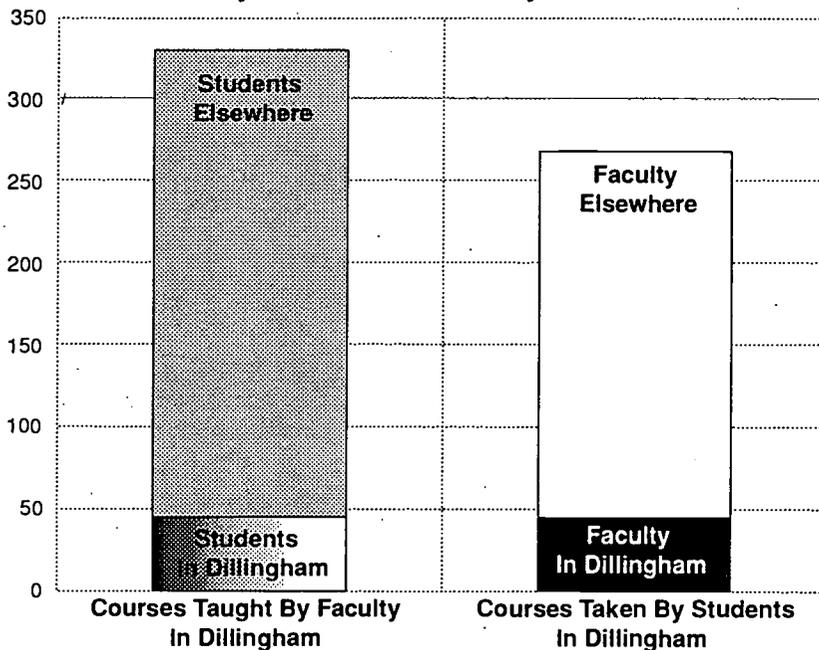
**Figure 7. UAF - Kuskokwim (Bethel)**  
**Credit Hours In Distance Education Courses, Fall 1997**  
**By Student and Faculty Location**



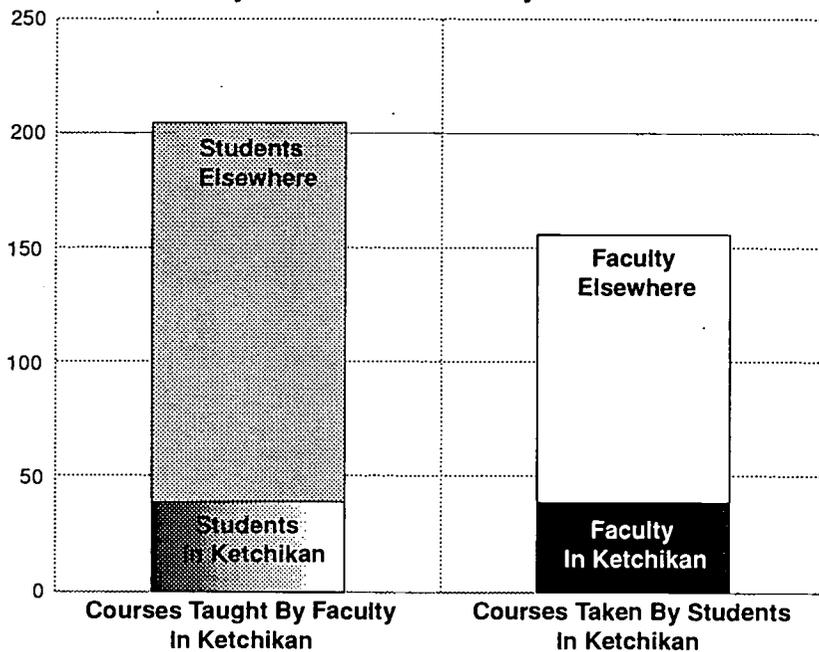
**Figure 8. UAF - Interior - Aleutians Campus**  
**Credit Hours In Distance Education Courses, Fall 1997**  
**By Student and Faculty Location**



**Figure 9. UAF - Bristol Bay Campus (Dillingham)  
Credit Hours In Distance Education Courses, Fall 1997  
By Student and Faculty Location**



**Figure 10. UAS - Ketchikan Campus  
Credit Hours In Distance Education Courses, Fall 1997  
By Student and Faculty Location**



# Current and Future Demand for Distance Education

## Introduction

The President's Office of the University of Alaska asked the Institute of Social and Economic Research to help assess current and future demand for distance education. "Distance education" means education or training where the instructor is not in the same room with the students. It doesn't necessarily mean that all distance education students live far from campuses (although many do). Courses are offered over television, through audio or video conferencing, by mail, over the Internet, and through combinations of those methods.

To learn more about the demand for distance education, we did three things: (1) we surveyed UA instructors currently teaching distance education courses and representatives of organizations serving rural Alaska; (2) we prepared an economic and demographic overview of the state, including projections of future population and job growth in rural and urban areas; and (3) we analyzed a Fall 1997 survey of distance education courses. The main text of this report is divided into major sections corresponding to those tasks and a final section listing questions and recommendations made by UA provosts after they reviewed a draft of this report. Appendix A presents detailed economic and demographic information and Appendix B presents our survey questionnaire.

## Surveys of Distance Education Instructors and Rural Organizations

To learn more about the demand for distance education, we surveyed two groups of informants. The first informants were University of Alaska instructors (systemwide) currently teaching courses via distance education. The second were human services and personnel directors in organizations that serve primarily rural Alaska; we talked with rural employers because in many remote places, distance education courses are among the few sources of postsecondary education and training available locally.

Because both time and funding were limited, we did not draw a random sample for either group. Instead, we called as many in each group as time and money allowed. The resulting samples amounted to 36 instructors who teach 53 distance education courses and representatives of 33 organizations that operate primarily in rural Alaska. These organizations were school districts, Native organizations, utilities, private companies, and government agencies. Because these are not random samples, readers must be careful in making generalizations about all instructors and organizations.

We urge the President's Office to consider a full-scale study of the demand for distance education services. The data collection instruments and modes of analysis we developed for this pilot study could be used to systematically gather and analyze data from a genuine random sample. For some organizations—utility companies and Native organizations in particular—there may be reasons to collect data from the full universe rather than from random samples. In fact, the university might consider initiating talks with these organizations to identify specific areas in which to offer distance education in the future.

## What We Learned from Instructors

- **Reasons for taking distance education courses:** Primary reasons instructors gave for students taking distance education courses were that the courses are available in remote locations; that they are flexible and convenient; and that they are accessible even when on-campus sections are full.
- **Quality of students who take distance education courses:** Most instructors we interviewed judged their distance education students to be of the same or better quality than their on-campus students.
- **How students learn about distance education offerings:** According to the instructors, students find out about these courses mainly from the distance catalogue, program brochures, acquaintances, counselors, advisers, or the media. Instructors suggested that the university use the media more extensively to advertise course offerings.
- **How distance education instructors conduct classes:** Nearly all courses rely on multiple means of communication, with the most typical combination being audioconferencing, telephone calls between the instructor and individual students, mail, and the Internet. Textbooks and other printed materials still play a major role in distance education instruction. Videotapes are critical to particular courses. Instructors mentioned that frequent technical problems plague their use of audioconferencing, electronic mail, and the Internet.
- **Major problems with distance education courses:** Instructors catalogued a wide range of problems, with the most frequent complaint being lack of personal contact between instructor and students in some courses. Technological problems, particularly trouble with phone lines and audioconferencing, were mentioned next most frequently. Next cited were the lack of both a “learning community” for students and of the supports—including libraries and advisors—that on-campus students enjoy. The lack of student access to computers, or problems with platform or program compatibility, also caused concern. Finally, the instructors thought that for some courses, the time it took to receive, respond to, and return student assignments undermined the value of the assignment.
- **Views of future demand for distance education:** Nearly all the instructors we interviewed believe that the demand for distance education will expand in the future. They believe that students in remote areas will demand greater access to courses. Students like the convenience and flexibility of such offerings. In addition, courses offered through distance education are requirements for certain programs and for professional advancement in fields such as teaching. In some cases, on-campus sections are filled and the students’ only option is to take required courses via distance education. This finding suggests that the university should look at current degree and certificate programs that may lend themselves to delivery through some combination of distance education, on-campus short-courses, and local internships—which might also require distance education courses to train intern supervisors.
- **Improving distance education:** Most suggestions focused on improved telecommunications technology—particularly electronic mail, telephone, audioconferences, the Internet, videoconferences, and interactive video.
- **What courses the university should offer through distance education:** No consensus on what courses UA should offer emerged from instructors’ responses. They tended to respond from the perspective of their fields, naturally. The general impression we draw from the responses is that instructors believe the market will bear a lot more than is being offered, both in their own fields and others. Some potential leads include professional

development for teachers, especially in Special Education, and business classes. But we heard few specific suggestions. Again, our general impression is that considerable opportunities exist for expanding current offerings, but that such expansion will require improvements in telecommunications.

- ***Who would take advantage of expanded distance education offerings:*** Clearly, the instructors we talked to believe that a variety of Native organizations—regional and village corporations, non-profits, health organizations, and local governments—would be interested in more courses. The Public Administration program might wish to explore this area. A number of instructors also suggested that state agencies, particularly the Department of Education, and private companies, particularly oil companies, are potential users.
- ***Competition from other providers:*** UA instructors we interviewed saw little competition from others offering distance education. Only two—one who teaches linguistics and a second who teaches secondary methods—felt they faced serious competition.
- ***Technological limitations to expanding distance education courses:*** The main technological limitations instructors identified were in telecommunications—particularly unreliable and “dirty” phone lines and limited student access to e-mail and the Internet.
- ***Instructors’ satisfaction with teaching distance education courses:*** Satisfaction with current support appears to be a function not only of instructors’ major administrative units (MAUs) but their departments as well. Instructors from UAA were more likely to be unhappy with the level of financial and other support they received. On the other hand, nearly a quarter of the instructors we talked with declared themselves satisfied with the current level of administrative support. Complaints ranged over a wide field that included the lack of: adequate faculty and compensation; technical support on computer problems; a central systemwide distance education office to address logistical problems and to serve as a clearinghouse for instructional materials; teacher’s aides; on-campus faculty oversight and monitoring of the quality of distance education courses; a system for ensuring that students receive textbooks and materials in a timely fashion; understanding of rural issues; and, of course, (what survey of faculty would be complete without this?) campus parking.

## What We Learned from Employers

- ***Satisfaction with current distance education offerings:*** Although most employers we talked to were satisfied with current offerings, employers in three sectors—Native organizations, utilities, and private businesses—noted that currently available courses were not satisfactory. The very small size and non-randomness of our sample suggests, however, that we need to look deeper into this issue. Nonetheless, these responses suggest that distance education may be missing some opportunities to connect with private companies and utilities as well as, perhaps, Native organizations. But without more data collection, we hesitate to suggest what those opportunities might be.
- ***Unmet needs:*** Informants in our small sample of organizations serving rural areas said that most needs for training and education are being met. This is slightly more likely to be true for local education authorities (LEAs) than for other types of organizations.

- *Reputation of distance education offerings:* As we have noted elsewhere, among LEAs the distance education offerings have a pretty good reputation and are highly valued. Among other organizations, particularly Native organizations, the picture is more mixed.
- *Duplication of services:* Only in rare cases did our informants see any duplication of distance education services.

## **What We learned About Current and Future Job Openings Among Organizations Serving Rural Alaskans**

### *Education Jobs*

Given the predominance of local educational agencies in our sample (15 out of 33), it is no surprise that most of the specific jobs mentioned by the informants were related to education. Informants most frequently identified special educators, certified K-12 teachers, and technology teachers as positions that they need to fill annually (see Table 1). Currently, preparation for these jobs takes place either at one of the MAUs of UA or outside Alaska. Our informants believe that local demand for preparation for these positions does exist.

Another group of positions identified were non-certified instructional aides, both for regular classrooms and for students with special needs. Currently, at least some of the training for these positions is being provided locally by the schools or school districts. Despite this locally available training, our informants believe there are remaining unmet needs for training of instructional aides.

Two other positions that informants identified were related to professional development for the existing teaching force. Several informants also mentioned subject matter specialists who can offer training to their colleagues in specific subjects, as well as others who can offer teachers courses for re-certification and generic professional development.

Technology and computer teachers were a particularly acute area of need that representatives of LEAs mentioned. Nearly everyone we spoke with at LEAs identified the need for technology and computer teachers, both immediately and in the future.

Other teaching positions identified include: foreign language/bilingual, gifted and talented, multiculturally-trained (capable of training colleagues), health, and vocational education.

### Counseling & non-instructional school positions

Both LEAs and Native organizations also identified job opportunities in various counseling positions. Specifically, our informants mentioned general (including domestic violence), drug and alcohol, and vocational counselors. Although some training was available locally, those who currently fill these positions usually receive their training elsewhere. Our informants believe that potential candidates for these positions would respond to local training opportunities.

### *Health Jobs*

Because 8 of the 33 employers we contacted were Native organizations, and because a major focus of these organizations is health care, our informants mentioned the potential for jobs in this sector second most frequently, after education jobs. Two positions in particular were mentioned often as areas of continuing need: community health aides and public health and

registered nurses. Locally available programs to train community health aides appear common; apparently, Sitka, Nome, Bethel, and Anchorage offer such training. Nonetheless, our informants believe there is an unmet need for training in this field.

The need for locally available training for nurses was even more consistently expressed. Apparently, the need for public health nurses is acute in some areas. Training programs are available in the UA system; beyond that, informants asserted that prospective nurses would have to go outside Alaska for a training program. Related areas of need are for nursing assistants and for nurse practitioners and physicians assistants.

Some informants also identified a need for physicians and dentists. Informants disagreed about whether local demand exists for preparation in these fields.

Other potential jobs identified in health areas included physical therapists, health aide instructors, occupational therapists, x-ray technicians, dental hygienists, medical technologists, pharmacists, pharmacist technicians, school nurses, speech pathologist, and hospital food service workers.

### ***Business and Administration Jobs***

Informants in Native organizations as well as in government agencies identified needs in a range of areas, mostly in administration, management, and accounting.

### ***Technical And Skilled Trades***

Informants from the full range of organizations in our sample—school districts, Native organizations, utilities, private companies, and government agencies—identified a high demand for computer positions. These organizations need workers who understand both hardware and software, especially as these relate to telecommunications. If the needs in this general field are added to the need for technology teachers, the result is sizable—roughly 25 positions. Currently, the educational needs of those filling such positions are being met by a hodgepodge of providers—universities through both on-campus and distance education courses; private companies; vocational and business colleges; and locally developed and delivered training.

Another area of high demand is general office services—people trained to do word-processing, reception, administrative support, and related jobs. Like computer support workers, these workers are currently being educated by a wide range of providers. The need for expanded local opportunity varies by organization and location, as it does for computer support.

Another field of high demand is skilled trades—carpenters, electricians, and plumbers. While the training needs for these positions are apparently being met through local unions, there may be unmet demand in some locations and for some trades.

There is demand for several specific jobs in utilities, including power generator technicians, linemen, instrument controllers, and millwrights. Currently, training for these positions is provided by utilities in Anchorage, by manufacturers of the equipment used, and by the AV technical center in Seward. Other jobs identified as in demand include engineers, cooks, medical records specialists, medical lab technicians, and phone system technicians.

## Summary of Survey Findings

Because our sample is not random and cannot be said to represent the universe of organizations that potentially might hire people for specific jobs, any generalizations must be viewed as highly speculative. Moreover, because local education authorities (LEAs) represented nearly half of the 33 organizations we surveyed, their needs and views are probably over-represented. We say “probably,” because LEAs are the major employers in some rural regions of the state.

With these reservations in mind, we can cite several findings that seem notable:

- **Professional development for educators appears to be an area of sustained demand.** This development would include both (1) preservice courses for students in certification programs and counseling; and (2) inservice programs for instructional aides and teachers who want to be endorsed in special education, bilingual education, technology, counseling, and specific subject-matter areas. There may also be a demand for graduate courses to prepare teachers as professional developers for their colleagues. Over the past two decades we have learned a good deal about adult learning and about learning to teach. Schools and districts looking to mount their own professional development programs for their faculty may welcome opportunities to develop the knowledge and skills of master teachers. Nationwide, schools and school districts appear to be moving away from “off-the-shelf” professional development toward workshops, study groups, and other formats that are home-grown and tailored to the specific needs of their own students, teachers, and schools.
- **The need for enhanced expertise in the use of computers, telecommunications, and technology is widespread.** As we have noted, the need for expertise in technology is strong across organizational types. Organizations need people who can both set up local systems and support others in using computers, electronic mail, and the Internet. Schools need teachers who are trained to teach both students and colleagues how to use computers and telecommunications technology.
- **Counseling is another area of immediate and future need.** The need for trained counselors—substance abuse, domestic violence, vocational, and school—appears greater than the available supply. In addition, our informants mentioned this as an area in which the local demand for education is not being met.
- **The need for trained health care professionals—particularly nurses and community health aides—is great, and it’s possible more training could be provided locally.** While physicians and dentists are also needed, the greatest need appears to be for nurses.
- **Native organizations identified public administration, management, and accounting as areas of particular need that could be better addressed through more locally available educational opportunities.**
- **Utilities and private organizations may have specific training and educational needs that could be addressed through distance education, but a more systematic and detailed survey would be necessary to determine this.** We surveyed only two rural utilities. Both seemed to have personnel needs that lend themselves to distance education. Only an industry-by-industry survey, however, would enable us to identify specifically what these needs are.

**Table 1. Current and Future Jobs Available by Sector,  
as Reported by Organizations Serving Rural Alaska**

<b>Job category</b>	<b>Position</b>	<b>Number needed</b>
<b>Education</b>	Special education	32.5
	Vocational ed	2
	Health teachers	3
	Certified reg teacher (K-12)	25.5
	Instructional aides	24
	Specialized aides	23
	GT teachers	5.5
	Multicultural teachers	3
	Foreign Lang/Bilingual	6
	Technology teachers	15.5
	Professional development leader	12.5
Subject matter specialist	14	
<b>Total</b>		<b>166.5</b>
<b>Counseling &amp; other non- instructional school roles</b>	Counselors	9
	Drug & Alcohol Counselors	5
	Vocational counselor	2
	Assessment of Special Needs	1
	Educator director (regional non-profit)	1
<b>Total</b>		<b>21</b>
<b>Health</b>	Community health aides	19
	Instructor Coordinator for Health aides	3.3
	Public Health/Registered nurses	28
	Dentists	8.5
	Dental hygienist	2
	Physicians	8.5
	Nurse practitioner/PA	4
	Hospital food service	1
	Medical technologists	2
	Pharmacists	2
	Pharmacist technician	1.5
	X-ray technicians	2
	Nursing assistants	6.5
	School nurse	1
Occupational therapy	2	
Physical therapy	3	
Speech pathology	1	
<b>Total</b>		<b>70</b>

**Table 1. Current and Future Jobs Available by Sector,  
as Reported by Organizations Serving Rural Alaska (continued)**

<b>Job category</b>	<b>Position</b>	<b>Number needed</b>
<b>Business &amp; Administration</b>	Hotel/Hospitality managers	2
	Construction manager	1
	Management	1
	Program managers	1
	Program administrator	1
	Housing coordinator	.5
	Financial officer	1
	Administrators (health field)	5
	Accounting technician	.5
	Grant administrator	1
	Accountant	2
<b>Total</b>		<b>16</b>
<b>Technical &amp; Skilled Trades</b>	Communications specialist	1
	Computer specialist	5
	Computer programmer	1
	Computer support/network spec.	3.5
	Lineman	2.5
	Power generator technician	5
	Instrumentation control	2.5
	Millwright (diesel)	2
	Medical records	3
	Phone system technician	1
	Lab technician	1
	Carpenters, electricians, plumbers	45
	Cook	2.5
	Engineers	3.5
	Office positions	40.5
<b>Total</b>		<b>119</b>

## Economic and Demographic Overview

### Historical Patterns

Since Alaska became a state in 1959, wage and salary job growth has averaged nearly 5 percent annually, punctuated by statewide and regional resource-related business cycles. This robust growth rate has been nearly double the historical average of about 2.5 percent for the U.S. economy as a whole. The Alaska job growth rate has moderated since 1990 and current projections are for job growth to average less than 2 percent annually for the foreseeable future. Alaska per capita income, adjusted for the higher cost of living in Alaska compared with the rest of the nation, has historically been below the national average except during periods of economic boom in the mid-1970s and early 1980s. This pattern (of incomes below the national average except during economic booms) is expected to continue. Population growth tends to follow growth in jobs, with more people moving into Alaska than out when job opportunities are growing rapidly, and more people leaving than arriving when job opportunities are not growing as fast. With slower employment growth projected for the future, it will become more common for more people to leave than to move in, since natural increase (births minus deaths) will provide sufficient additions to the labor force to meet the demand created by job growth. (See Figure A-1.)

### Composition of Employment

Growth in employment (including military and self employment as well as wage and salary) has been concentrated in two broad categories—Support and State and Local Government. The Support category consists mainly of jobs providing services to Alaska residents in the Trade (Wholesale and Retail) and Services (including Finance) sectors. These sectors have grown rapidly because of income and population growth, because local markets were underserved in the early years of statehood, because the national economy is adding trade and particularly service jobs more rapidly than other types of jobs, and because oil money has been stimulating the economy.

Jobs in Alaska resource industries (petroleum, seafood, timber, mining, tourism, agriculture) and in federal agencies, including the armed forces, made up the bulk of jobs when Alaska became a state. Job growth in this category—which we call Basic—has lagged behind growth in other categories, and Basic jobs now account for less than one in three jobs. The final broad category of jobs—Infrastructure—has grown at about the same rate as overall jobs. Construction and transportation are the most important sectors in this category (Figure A-2.)

The bulk of Basic jobs are in the military, the federal government, and the seafood industry. Since statehood, the petroleum and tourism sectors have grown most rapidly but still directly account for fewer jobs. Timber, mining, and agriculture are regionally significant but contribute only a small amount to total statewide Basic jobs. (See Figures A-3. and A-4.)

Resource extraction and processing jobs make up a small share of all jobs in the state. The bulk of these jobs are in the seafood industry, followed by the petroleum industry. Timber and mining jobs are a small share of the total. (See Figure A-5.)

The changing composition of employment over time has also contributed to the relative decline in the per capita income of Alaskans, since Support jobs tends to pay lower wages than other categories of jobs. (See Figure A-6.)

## **Distribution of Employment by Place**

We can use the 1990 U.S. census to get a rough snapshot of the composition of employment in different types of places defined by the place of residence of the individual respondent—"census places" and "not in places." Unfortunately, some Alaskans do not work where they live and some non-residents take Alaska jobs. (The incidence of jobs taken by non-local residents is probably more prevalent in smaller places.) We arbitrarily define the four largest places in the state—Anchorage, Fairbanks, Juneau, and Ketchikan—as cities and all other places as "other places." (The census includes incorporated places as well as census-defined places in "places.") We define "other places" as rural Alaska. The remainder of the population is put into the "not in places" category. This "not in places" category is composed mostly of suburban areas of the Alaska railbelt (from Seward to Fairbanks) and consequently is probably similar to the population in the cities. (See Figures A-7. and A-8.)

About 27 percent of all jobs are in rural Alaska. We find that the distribution of jobs in rural Alaska ("other places") is very different from that of the cities. Four categories of jobs are over-represented in rural Alaska: Agriculture, Forestry, and Fishing (harvesting); Durable Manufacturing (timber); Non-Durable Manufacturing (seafood); and Educational Services. Mining (oil and gas), Wholesale trade, Finance, and most Services are under-represented in Rural Alaska. Construction, Transportation, Communications (public utilities), Retail Trade, Recreation Services, and Public Administration jobs fall in the middle; about one in four jobs statewide in these industries occur in rural Alaska.

Of the 66,000 jobs in rural Alaska, the largest categories are Retail Trade and Educational Services, with about 10,000 and 9,000 jobs respectively. Next in importance is Public Administration, with about 7,500. Seafood and Timber combined account for about 13,000 jobs (the combined categories of Agriculture-Forestry-Fisheries, Non-Durable Manufacturing, and Durable Manufacturing). Transportation and Communications account for about 7,000 jobs. Services (excluding Education) account for 12,000 jobs, of which Health Services make up about 4,000. Construction accounts for about 4,500 jobs and Wholesale Trade and Finance each account for about 1,500.

It is likely that these estimates of rural jobs are low in some sectors, particularly construction and fishing, because non-locals fill some jobs. However, this calculation does underscore the importance of support, trade, education, and public administration jobs in rural Alaska. In fact, trade, finance, and service jobs combined account for nearly two-thirds of rural resident employment (although not of total rural jobs, since some non-locals work in rural Alaska).

## **Labor Force Participation**

People are considered to be in the labor force if they have jobs or if they are looking for work. Labor force participation is lower among Alaska Natives than among other groups, but the difference has narrowed as the market economy extended into rural parts of the state and a larger share of the Native population moved into urban Alaska. According to the 1990 census, 80 percent of all Alaska men aged 16 to 64 (the potential labor force) were employed or looking for work. The Native male labor force participation rate increased from 54 percent in 1980 to 69 percent in 1990, but was still considerably below the white rate of 88 percent. The female participation rates have consistently increased since the 1960 census. In 1990 the overall female rate had reached 66 percent, with whites females at 68 percent and Native females at 51 percent. (Figure A-9.)

People in cities (Anchorage, Fairbanks, Juneau, and Ketchikan) are more likely to be in the labor force, and more likely to have jobs if they are in the labor force, than people in "other

places.” According to the 1990 census, 26 percent of males and 40 percent of females in “other places” in Alaska were not in the labor force. Of those in the labor force, males were much more likely than females to be unemployed. (Figure A-10.)

### **Age Distribution of Population**

Alaska has a relatively young population, because the growth of job opportunities has continued to draw young people into the state at the same time that older Alaskans have tended to leave. For example, as the cohort born between 1965 and 1969 (who were 15-19 in 1985) aged over the period from 1985 to 1995, their numbers were augmented by net in-migration of about 10,000 new Alaskans. During the same 10-year period, those who were 35-39 year in 1985 lost about 7,000 through a combination of deaths and out-migration. (Figure A-11.)

Although this process has resulted in a very heavy concentration of “baby boomers” in the population, their importance has been declining with the deceleration of the economy over the last 10 years. An important consequence of a large baby boomer population is a large population of children—the echo boom following at the heels of the boomers. The contrasting age distributions of the U.S. and Alaska populations clearly show the concentration of the Alaska population among young adults (aged 25-45) and children (aged 0-14) compared with the rest of the nation. (Figure A-12.)

Since Native Alaskans do not migrate to other states in large numbers, baby boomers do not comprise as large a share of the Native population as of the total Alaska population. However, the high Native birth rate results in an even younger average age for the Native population than for the overall Alaskan population. (Figure A-13.) The Native population is more concentrated in the 0-24 age group and less concentrated in the 25-64 age group.

The difference in Native and non-Native age distribution is reflected in a difference in the age distribution between the city and the non-city populations. Using Alaska Department of Labor population data, we define the city for this particular analysis to include Anchorage, the Mat-Su and Kenai Peninsula boroughs, Juneau, Ketchikan, and the Fairbanks North Star Borough. In the non-city areas, there tends to be a larger share of children and teenagers (0-19) and a smaller share of young adults (20-44) than in the cities. This difference shows quite clearly if we compare Wade Hampton, the most rural census area of the state, with Sitka (which is demographically similar to the larger cities). Nearly 30 percent of the Wade Hampton population is under 10, compared with about 15 percent of the population of Sitka. By contrast, the share of the population 25 and over is much smaller in Wade Hampton census area than in Sitka. (Figure A-14.)

### **Spatial Distribution of Population**

For this analysis, we can assign the population in each census place to one of four groups, based on access and proximity to University of Alaska campuses (Anchorage, Fairbanks, Juneau) or extended sites:

- Within about 20 miles by road from a university campus
- Within about 20 miles by road from an extended university site
- On the road system but more than 20 miles by road from a campus or extended site
- Not on the road system (and no road access to a campus or extended site)

With these classifications, we find that the majority of Alaskans (about 60 percent) live within 20 miles by road from one of the three main campuses (Anchorage, Fairbanks, and Juneau) of the university. (See Figures A-15. and A-16. Figure A-17 shows the location of each university site in relation to state population.) An additional 24.5 percent live within 20 miles by road from an extended site. Of the remaining 15.5 percent of the population, about 11.5 percent live in places not connected by road to a university site and the remaining 4 percent live on the road system but more than 20 miles from a site.

Alaska's population has become more "suburban" since 1980, since the share of the population living within 20 miles of one of the three campuses has fallen while the rest of the population either on the road system or with access to an extended site has increased from 25 to 29 percent. Over the same period, the share of the population not on the road system and without access to a university site has fallen from 14 percent to 11.5 percent.

More than two thirds of the population growth within 20 miles by road from an extended site has been either in the Mat-Su Borough or on the Kenai Peninsula. Most of the growth on the road system but more than 20 miles from a campus or extended site has also occurred in those two areas.

Most of the growth off the road system between 1980 and 1997 (14,671) has been in the following census areas: North Slope Borough, Bethel, Prince of Wales, Wade Hampton, Nome, and Northwest Arctic Borough.

The Native population growth rate has been the same as the total population growth rate since 1980, but migration within the state has resulted in a shift of the Native population toward the urban areas of the state. The Native population growth rate has been equal to or greater than the state average since 1980 in Anchorage, Fairbanks, Juneau, Kenai Peninsula, Mat-Su Borough, Outer Ketchikan, and the North Slope Borough. Although these urban areas accounted for about one third of the Native population in 1980, they accounted for more than 50 percent of the growth in the Native population from 1980 to 1995. In general, areas with slower Native population growth experienced slower overall population growth as well. (Figure A-18)

### **Alaska Department of Labor Employment Projections**

The Alaska Department of Labor projects an increase of 21,700 jobs in Alaska between 2000 and 2005. More than 75 percent will be in the service producing industries, most notably services, retail trade, and transportation-communications-utilities. Growth in jobs that produce goods will be concentrated in mining and construction. A small number of jobs will be added in government, virtually all at the state or local level.

If we net out Anchorage, Fairbanks, and Southeast Alaska, which are separately identified in the Department of Labor projections, job growth in the rest of the state is projected to increase at almost the same rate as statewide, but that growth will be concentrated in the service producing industries. In particular, services and retail trade are projected to grow faster in the rest of the state. Unfortunately, this finding may be somewhat misleading, since we cannot separate suburban Alaska (the Kenai Peninsula and Mat-Su boroughs) from the rest of the state in this calculation. (Figure A-19.)

Job opportunities come not only from an increase in the number of jobs, but also as a result of separations when an employed person leaves a job and the employer needs to hire a replacement. So is important to know the total number of jobs, as well as the projected growth in jobs, when considering employment opportunities. (In general, separations should

be related to the total number of jobs in each industry.) The Department of Labor projects that 23 percent of total employment will be in areas outside Anchorage, Fairbanks, and Southeast Alaska ( "the rest of the state" category) in 2005. The rest of the state will have its share of jobs producing goods, but that share will not be as large as the share of jobs producing services. Jobs that will be concentrated in the rest of the state in 2005 include local government, manufacturing, mining, and agriculture-forestry-fisheries. (Figure A-20.)

The Department of Labor estimates the annual openings in various occupations from projections of the number of separations from existing jobs and growth in the number of jobs by industry. The estimated annual openings from 2000 to 2005 are 8,344 for Anchorage, Fairbanks, and Southeast Alaska and 1,682 for the rest of the state. Openings in service occupations will dominate in Anchorage, Fairbanks, and Southeast Alaska, while openings for "operators, fabricators, and laborers" will be the largest category in the rest of the state. That last category includes a large share of jobs that have historically been taken by non-locals, so it's not clear how many of the new jobs will go to rural residents. (Figure A-21.)

Of the projected job openings statewide, about 30 percent will require some education beyond high school—ranging from post secondary vocational education to a professional degree. (Figure A-22.) Among the jobs requiring more than a high school education, the largest numbers of annual openings will be for general managers and top executives, teachers, dental hygienists, and administrative secretaries. (Figure A-23.)

### **ISER Economic Projections**

Projections ISER prepared for the Alaska Department of Transportation in 1997 show that economic growth in Western-Arctic Alaska will lag behind growth in the rest of the state. The projections show little variation between the growth rates in urban and rural Alaska, but since in this study the urban-rural division is based on census areas—that is, we define entire census areas as urban or rural—it is not particularly useful for determining whether growth will be concentrated in large or small places.

ISER also prepared a set of four small region projections for DOT. These projections provide some insight on the composition of employment growth anticipated outside the main cities and on how population might respond to employment changes. One small region we examined is the Yukon Kuskokwim Delta Region, consisting of the Bethel and Wade Hampton census areas and portions of the Yukon Koyukuk and Nome census areas. Bethel is the largest community in this region. Of a total of 8,220 jobs in this region, 45 percent are state and local government, 37 percent are support, and 18 percent are basic—fishing, mining and federal government employment. In the base case, wage and salary employment in this region is projected to increase by only 250 jobs (from a current 7,775) between 1996 and 2005, primarily because no growth is expected in the fishery resource base and no new sources of revenues to fund expansions of state and local government activity are anticipated.

The population of the Yukon Kuskokwim Delta Region is primarily Native. The population is relatively young and the adult labor force participation rate is relatively low. As increasing numbers of young Natives reach adulthood, it is difficult to anticipate what they will do in the face of limited employment opportunities in the region. This uncertainty about how people will respond to limited employment opportunities in turn leads to uncertainty about the future size of the regional population.

By contrast, the base case projection for Southeast Alaska shows an increase in wage and salary employment of more than 3,000 between 1996 and 2005, starting from a base of 37,000. No net increase in state and local government employment is projected for this region, but growth will be distributed between the basic sectors—primarily tourism and mining—and support industries. (Figure A-24.)

## Fall 1997 Distance Delivery Education Overview

Jim Stricks of the University of Alaska Fairbanks conducted a census of fall 1997 Distance Delivery Education courses. An analysis of that data provides an overview of the current use pattern of this resource. There were 293 different courses delivered to 4,115 students (some may have enrolled in more than one course) living in 178 different receiving locations across the state (and outside Alaska) for a total of 11,351 credit hours. The maps, figures, and tables in the Executive Summary at the beginning of this report provide a picture of the kinds of distance education courses taken, delivery methods, and course sharing among campuses. Below we broadly discuss distance education in the fall 1997 semester. Detailed tables reporting the results of Jim Stricks' census are available from ISER.

A breakdown by subject area shows a broad distribution of courses, particularly in Business, Education, Humanities, Mathematics, and Social Science. More limited offerings were in Health Sciences, Computer Science, Fine Arts, Recreation, and Vocational Studies.

The delivery methods were categorized as follows:

- One-way video, microwave, satellite, cable, (with or without phone callback) [B]
- Internet based [I]
- Audioconference [A]
- Individualized media such as audiotape, videotape, or CD-ROM [M]
- Text based [T]

Forty six (46) courses, mostly in the Humanities and Social Sciences, were delivered by one-way video, usually in combination with individualized media. Thirty eight (38) courses, mostly in Computer Science, Business, and Education, were delivered over the Internet, often in combination with text material. One hundred eighteen (118) courses employed audioconferencing, with some supplemented by distributed individualized media. Most of the 100 courses employing individualized media used it in combination with one of the other modes of delivery. Of the 122 courses employing texts, 67 relied solely on texts. Availability was categorized as follows:

- Cross Regional—available in 2 or more campus service areas but not statewide
- Available statewide through the UALC menu operation
- Available statewide but outside the UALC menu
- Regional—only available within the campus regional service area
- Outside Alaska only or in addition to within the state

There appears to be a roughly even split between courses offered statewide and those offered just regionally. No courses were taken exclusively by students outside Alaska. The Fairbanks and Anchorage campuses provided service to about half of all distance delivery education students in fall 1997, followed by Juneau and Sitka, which together accounted for an additional 25 percent. The following list shows locations that provided service and numbers of students served in the fall of 1997.

Fairbanks	[FS]	1139	Kuskokwim	[KU]	163
Anchorage	[AI]	917	Bristol Bay	[RB]	128
Juneau	[JU]	545	Ketchikan	[KE]	71
Sitka	[SI]	527			
Northwest	[NW]	243			
Chukchi	[CC]	237			
Interior	[RI]	145			

If we aggregate all locations served into regions associated with campuses or extended sites, we find that nearly one third (1,323 of 4,115) of students served reside in the cities of Anchorage or Fairbanks. The greater Anchorage and Fairbanks regions accounted for 1,489 students. Next in order of importance was the Bethel region with 482. The totals for the regions were as follows:

Anchorage	772
Fairbanks	717
Bethel	482
Sitka	321
Ketchikan	258
Juneau	226
Nome	217
Dillingham	193
Palmer	125
Kenai	118
Kotzebue	109
Kodiak	95
Tok	83
Unalaska	72
McGrath	58
Homer	54
Ft. Yukon	41
Copper Center	19
Cordova	15
Valdez	15
Outside Alaska	125

The campus centers and extended sites are all net exporters of courses, but courses are also imported into those locations from other sites. For example, the enrollment in courses offered from Fairbanks was 1,139 students in the fall of 1997. Of that total, 47 percent (538 students) lived in Fairbanks and 53 percent (601) lived elsewhere—so an enrollment of 601 students was actually exported outside the “home” site. At the same time, the enrollment in courses taken by Fairbanks residents (634) included 96 taking courses originating outside Fairbanks. The originating sites for these imports included Anchorage, Juneau, Sitka, Northwest, Chukchi, Kuskokwim, Interior, and Ketchikan (all other sites except Bristol Bay).

We also sorted courses and receiving locations by enrollment. Although the average enrollment per course was 14 in the fall of 1997, the range was from a high of 62 to a low of 1 (19 courses). Receiving sites included almost all places within the state, as well as an enrollment of 125 from outside the state. There were many sites with very small enrollments, but these sites may draw on a number of origins. For example, the enrollment in Chevak was 9 and those students drew on four different sites—Fairbanks, Juneau, Northwest, and Kuskokwim.

Additional detailed tables available from ISER show a variety of information on distance education courses by instructor and campus; by subject area, delivery method, and campus; and by originating and receiving sites.

## Provosts' Questions and Recommendations

After reviewing a draft of this study, the University of Alaska provosts developed the following set of questions and recommendations.

### *Questions*

1. *Is there much competition for students taking distance education courses, and is that competition increasing?* Most UA distance education faculty interviewed for this study believe there is not much competition—a perception that is at variance with other information suggesting there is considerable competition, and that it is increasing rapidly.
2. *Why are many distance education courses not being actively marketed?*
3. *How are text-based distance education courses funded?* UA should review funding methods for these courses; some may be offered in parallel with but as overloads to classroom courses.
4. *Are distance education courses cost-effective, and how could their cost effectiveness be evaluated?* This question is raised by the large number of courses offered, and the great variety of delivery methods.

### *Recommendations*

1. *UA should develop a centralized management information system* to track what courses are being offered by distance delivery, how they are delivered, and who is being served. There is currently no such centralized, ongoing system.
2. *Programs and courses should be coordinated across campuses.* Effective and efficient planning requires such centralized coordination, which currently does not exist.
3. *In a rapidly expanding distance education market, UA must decide what products to create—and which to buy.* UA should also identify niches (including technological niches) where it can most effectively concentrate its distance education resources.
4. *A statewide external advisory committee or board should be established* to coordinate between the existing internal advisory groups on each campus. Such an external advisory group would annually review distance education policies statewide.

## Appendix A. Figures A-1 through A-24 Detailed Economic and Demographic Information

- A-1. Alaska Economic Indicators
- A-2. Alaska Employment
- A-3. Alaska Basic Employment
- A-4. Parts 1 and 2. Basic Employment by Industry
- A-5. Direct Employment in Natural Resource Activities
- A-6. Alaska Annual Earnings
- A-7 Regional Employment Patterns
- A-8. Labor Force and Employment, Regional Patterns
- A-9. Alaska Labor Force Participation Rates
- A-10. Labor Force Regional Patterns
- A-11. Alaska Population Change, 1985 to 1995
- A-12. Age Distribution of Alaska and U.S. Population
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- A-14. Age Distribution of 1995 Population, City vs. Country and Contrasting Census Areas
- A-15. Distribution of Population by Road Access to University of Alaska
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- A-17. UA Campuses and Extended Sites in Relation to 1997 Population
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- A-19. Regional Employment Growth Projections, 2000 to 2005 (Department of Labor)
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- A-21. Regional Occupational Demand, 1995 to 2000 (Department of Labor)
- A-22. Share of Annual Job Openings, by Occupational Training Level
- A-23. Annual Job Openings Requiring Postsecondary Education
- A-24. Economic and Demographic Projections for Alaska: Statewide;  
Urban and Rural; Regions

FIGURE A - 1  
ALASKA ECONOMIC INDICATORS

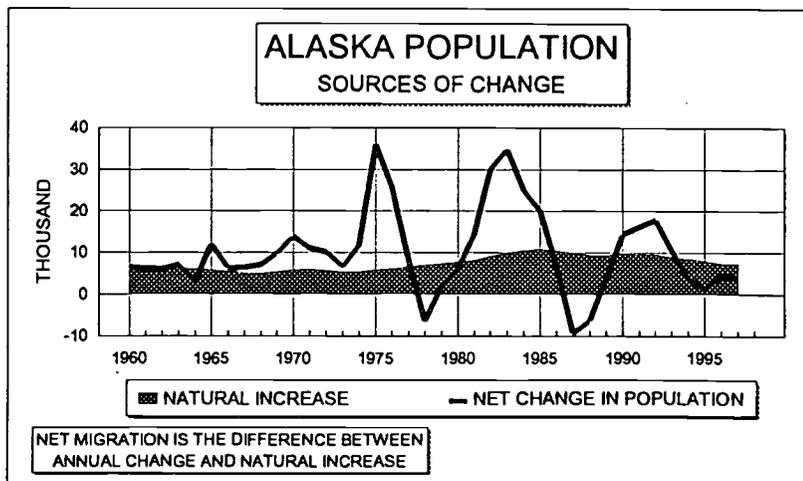
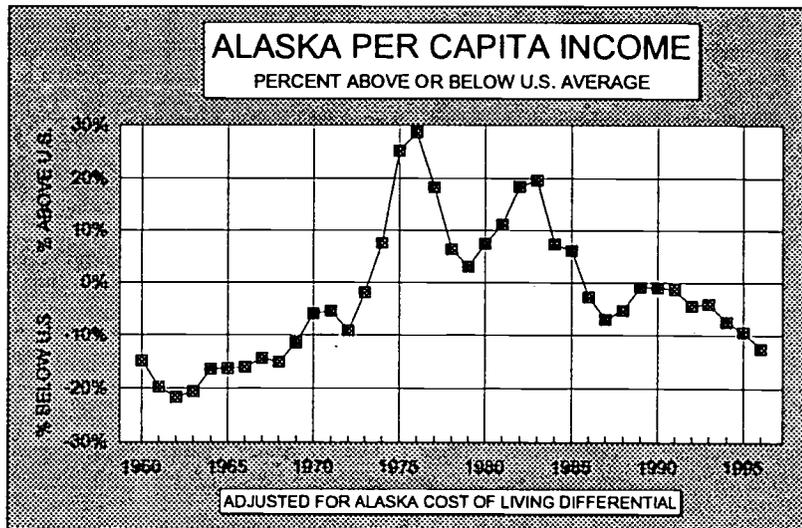
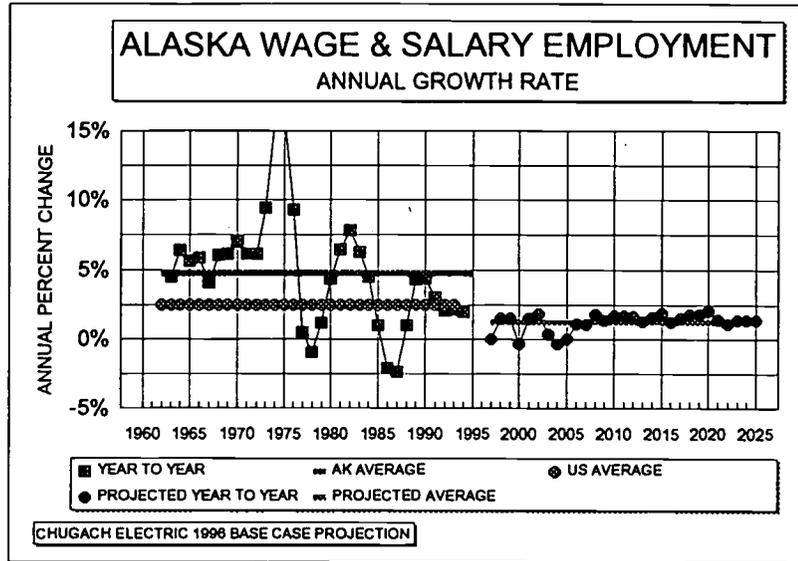
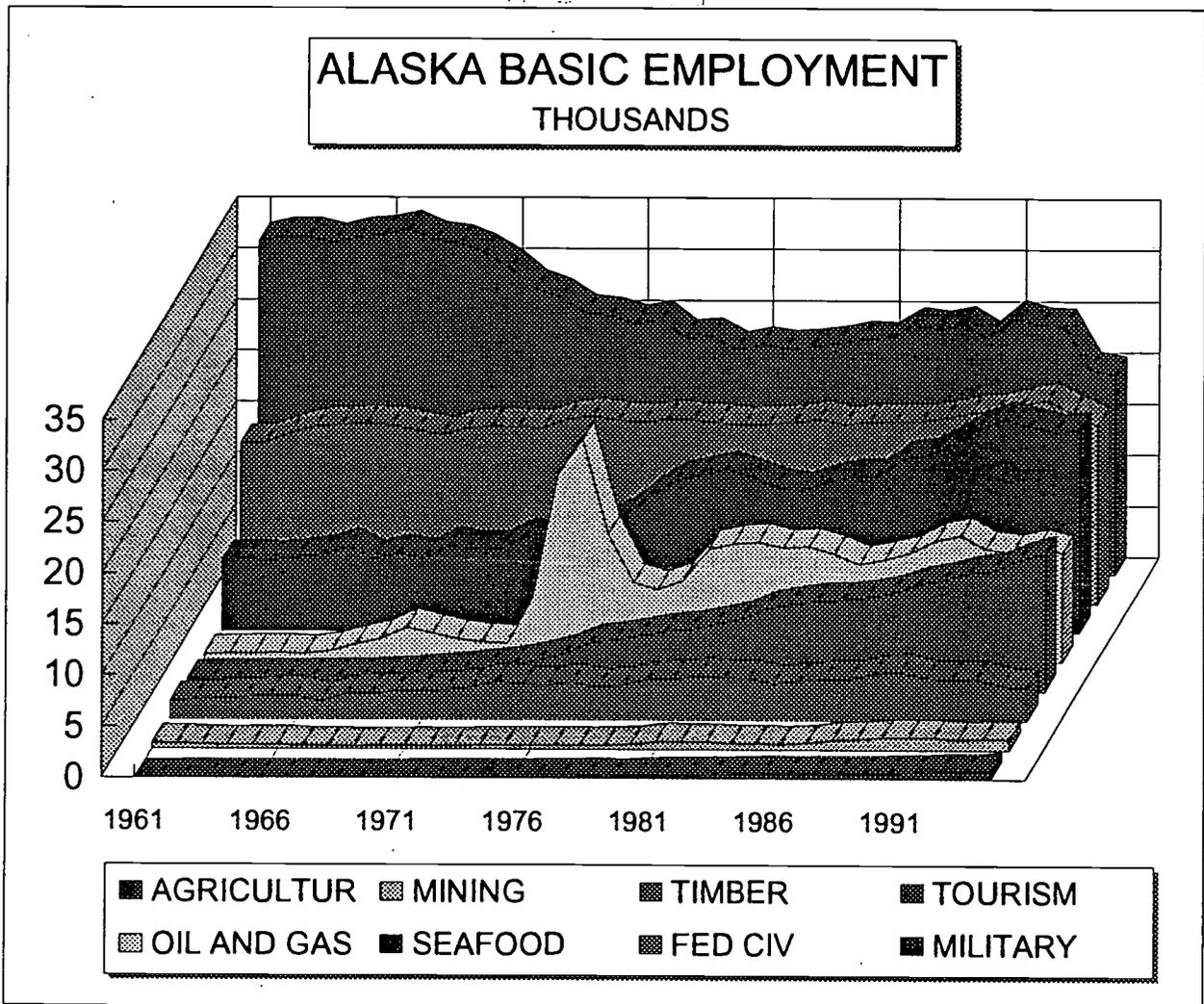


FIGURE A - 2

## ALASKA EMPLOYMENT (thousands)

	1961	1965	1970	1975	1980	1985	1990	1995	annual growth rate
<b>TOTAL</b>	94.827	109.631	133.828	199.864	209.544	274.402	283.577	305.648	3.8%
<b>BASIC</b>	59.225	62.67	64.447	77.444	73.599	79.841	89.43	86.655	1.4%
Oil and Gas	0.6	0.66	2.692	18.242	7.956	11.266	11.908	10.754	10.9%
Seafood	7.04	7.59	8.49	8.7	15.43	14.75	18.692	19.928	3.4%
Forest Products	1.83	2.33	2.76	3.44	3.95	3.58	4.712	3.249	3.3%
Mining	0.59	0.43	0.35	0.38	0.53	0.64	1.217	1.125	2.5%
Tourism	1.045	1.19	1.535	2.992	5.793	8.475	10.473	13.533	8.3%
Agriculture	0.02	0.04	0.08	0.13	0.22	0.49	0.567	0.857	12.2%
Federal Civilian	15.6	17.43	17.11	18.29	17.72	17.57	18.729	17.576	0.6%
Federal Military	32.5	33	31.43	25.27	22	23.07	23.132	19.633	-1.2%
<b>INFRASTRUCTURE</b>	11.571	14.882	17.693	34.312	30.06	41.722	34.372	39.051	3.8%
Construction	4.05	6.45	6.89	11.13	10.169	17.387	10.278	12.569	3.3%
Transportation	4.151	4.472	6.133	11.332	9.081	9.905	11.693	12.793	3.6%
Public Utilities	2.67	2.56	2.67	4.53	5.74	6.14	5.739	6.06	2.7%
Business Services	0.7	1.4	2	7.32	5.07	8.29	6.662	7.629	8.1%
<b>SUPPORT</b>	15.831	19.849	33.248	59.268	69.595	103.639	108.775	126.458	6.9%
Wholesale Trade	1.65	1.85	3.24	5.91	5.53	8.73	8.038	8.647	5.6%
Retail Trade	6.102	7.624	11.506	19.103	21.553	33.68	33.728	40.063	6.1%
Finance	1.52	2.17	3.1	6.05	7.65	11.62	9.165	10.555	6.4%
Non-Business Services	4.582	5.644	8.826	16.623	22.303	31.34	38.968	46.468	7.7%
Proprietors	1.287	1.601	5.288	9.714	10.137	15.103	15.842	17.694	9.0%
Miscellaneous Manufacturing	0.69	0.96	1.288	1.868	2.422	3.166	3.034	3.031	5.2%
<b>STATE AND LOCAL GOVT</b>	8.2	12.23	18.44	28.84	36.29	49.2	51	53.484	6.5%

FIGURE A - 3



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FIGURE A - 4 PART 1  
BASIC EMPLOYMENT

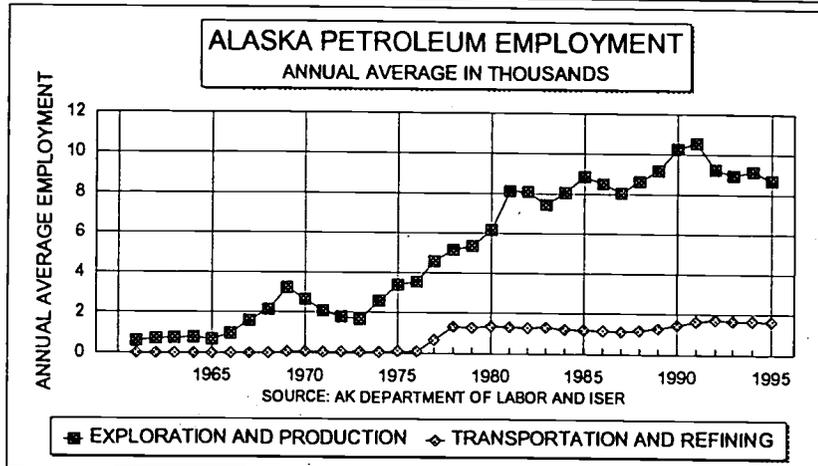
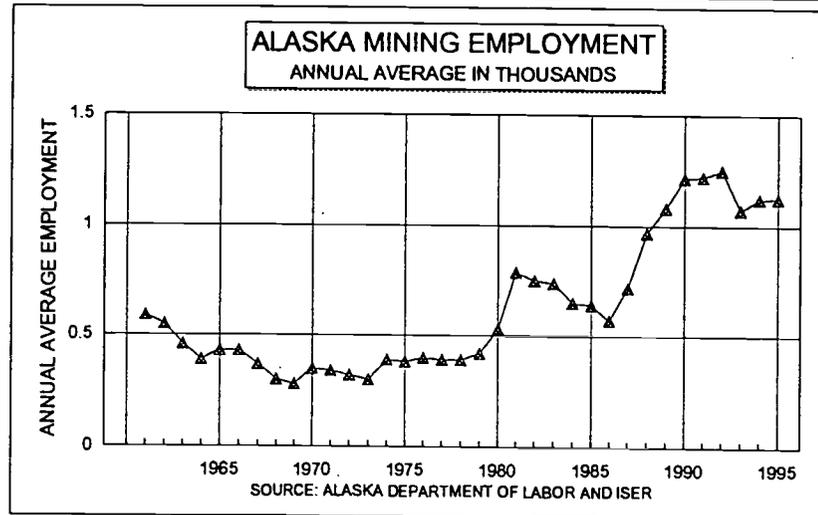
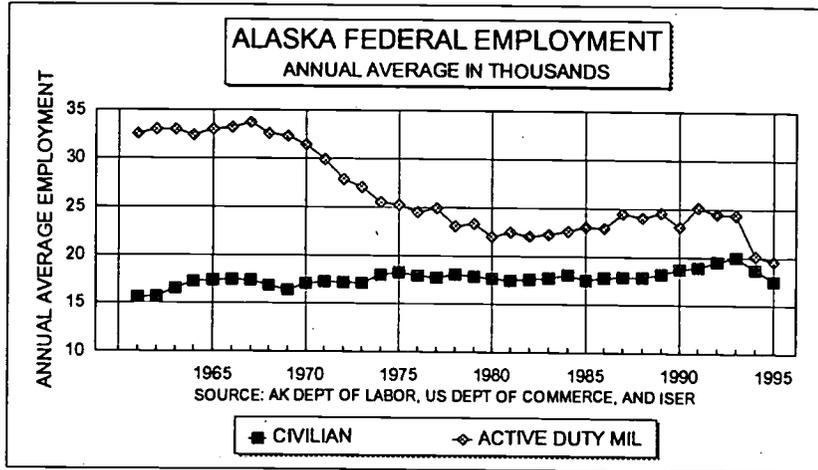


FIGURE A - 4 PART 2  
BASIC EMPLOYMENT

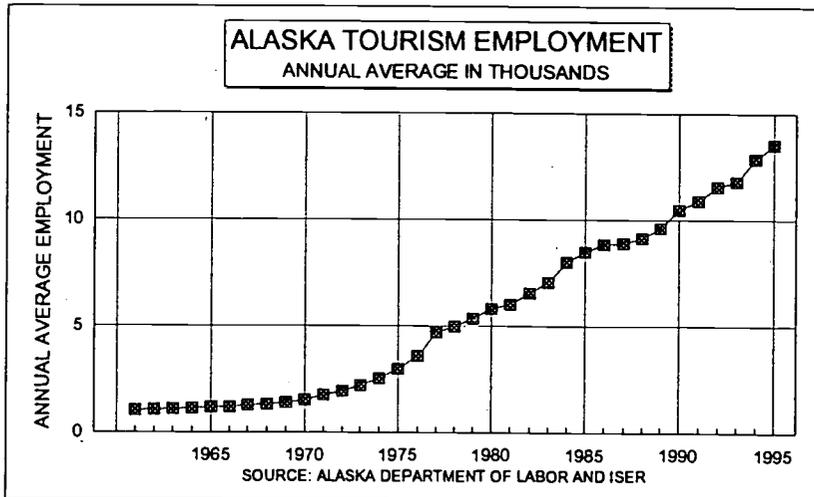
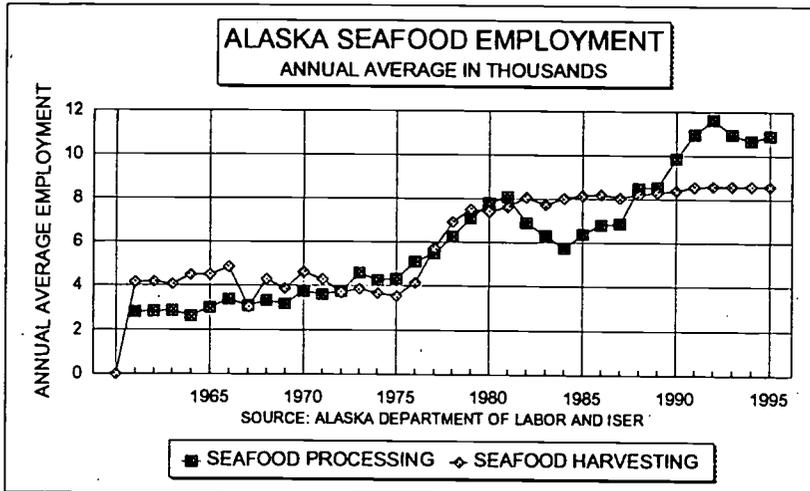
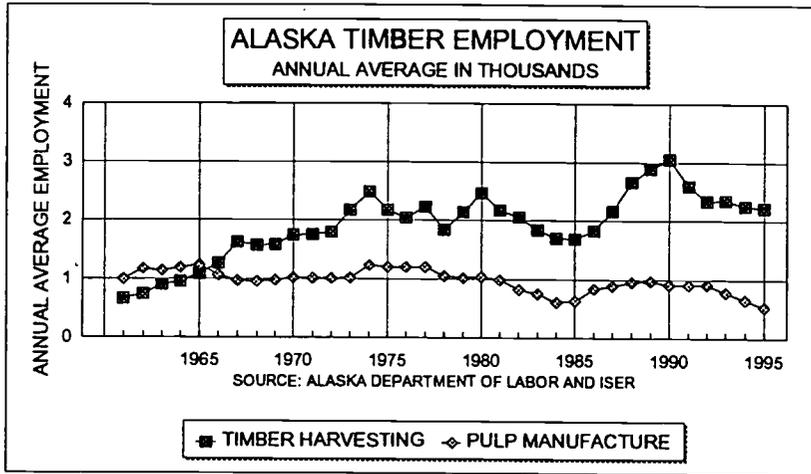


FIGURE A - 5  
DIRECT EMPLOYMENT IN NATURAL RESOURCE ACTIVITIES

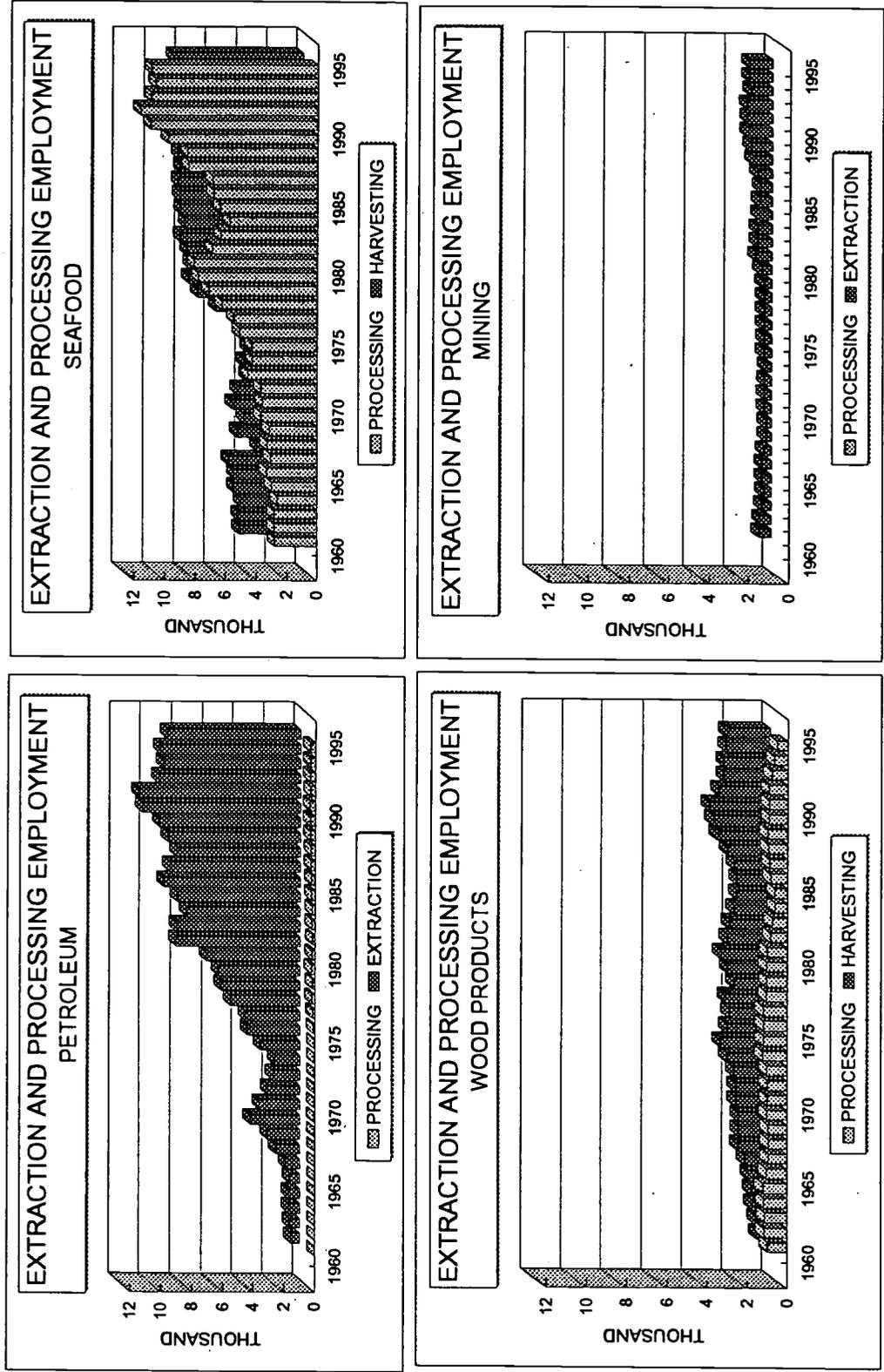
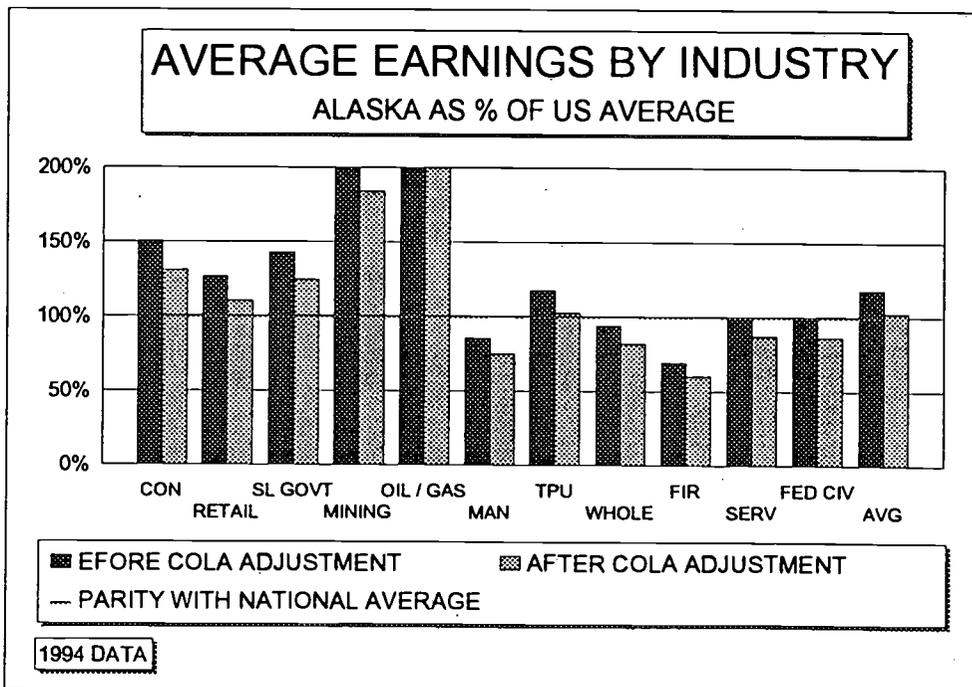
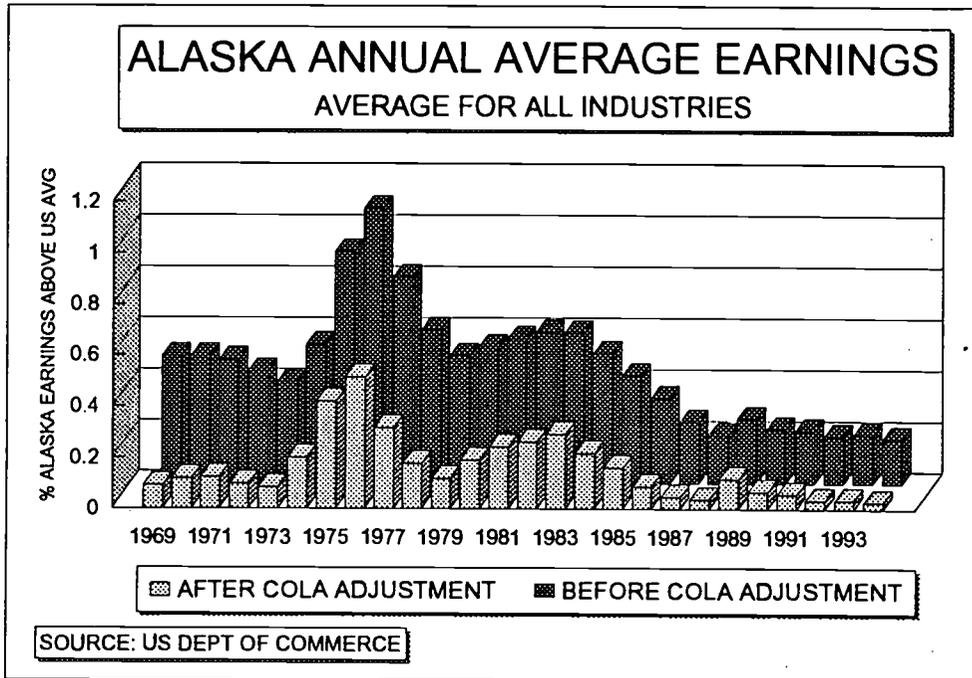


FIGURE A - 6

### ALASKA ANNUAL EARNINGS



**FIGURE A - 7**  
**EMPLOYMENT**  
**REGIONAL PATTERNS**

	INDUSTRY																	
	TOTAL	AFF	MINING	CONST	MANU NON	MANU DUR	TRANS	COM	WHOL	RET	FIR	BUS SER	PER SER	REC SER	HEAL SER	ED SER	OTHER SER	PUB ADMIN
<b>STATE OF ALASKA</b>	248,379	8,651	8,935	16,184	8,382	6,193	18,648	7,684	7,427	39,619	11,186	10,147	7,908	3,073	18,772	24,961	20,223	30,386
<b>NOT IN PLACES</b>	35,205	1,603	1,209	2,954	991	1,209	2,269	1,058	748	4,855	1,113	1,213	835	360	4,783	3,939	2,188	3,878
share of row	14.2%	18.5%	13.5%	18.3%	11.8%	19.5%	12.2%	13.8%	10.1%	12.3%	9.9%	12.0%	10.6%	11.7%	25.5%	15.8%	10.8%	12.8%
<b>CITIES</b>	146,829	2,592	5,801	8,802	3,222	2,360	11,531	4,424	5,209	24,769	8,599	7,079	5,351	1,920	10,176	11,926	14,028	19,040
share of row	59.1%	30.0%	64.9%	54.4%	38.4%	38.1%	61.8%	57.6%	70.1%	62.5%	76.9%	69.8%	67.7%	62.5%	54.2%	47.8%	69.4%	62.7%
share of state																		
Anchorage city		1,641	5,234	6,307	2,458	1,548	8,984	3,662	4,505	18,556	7,135	5,910	4,208	1,436	8,074	8,002	10,485	13,097
Fairbanks city		33	102	990	244	222	720	313	282	2,450	638	474	474	182	740	1,019	1,451	1,091
College CDP		40	31	427	44	89	377	116	107	940	193	150	116	110	331	1,473	535	491
Juneau city		599	434	751	181	160	958	271	204	2,103	446	450	479	122	802	1,142	1,271	4,109
Ketchikan city		279	0	327	295	341	492	62	111	720	187	95	74	70	229	290	286	252
<b>OTHER PLACES</b>	66,345	4,456	1,925	4,428	4,169	2,624	4,848	2,202	1,470	9,995	1,474	1,855	1,722	793	3,813	9,096	4,007	7,468
share of row	26.7%	61.6%	21.5%	27.4%	49.7%	42.4%	26.0%	28.7%	19.8%	25.2%	13.2%	18.3%	21.8%	25.8%	20.3%	36.4%	19.8%	24.6%
share of state																		

SOURCE: US CENSUS





TABLE 1. LABOR FORCE AND EMPLOYMENT REGIONAL PATTERNS

Table with columns: LABOR FORCE - MALES (SUM, ML, EMPLOYED, UNEMP, NOT IN LF), LABOR FORCE - FEMALES (SUM, ML, EMPLOYED, UNEMP, NOT IN LF), and INDUSTRY (AFF, MING, CONST, NON, MANU, DUR, TRNS, COM, WHOL, RET, FIR, BUS, PER, REC, HEAL, ED, OTHER, PUB ADMN). Rows list various locations like Game Creek CDP, Glenham CDP, etc.

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FIGURE A - 9  
ALASKA LABOR FORCE PARTICIPATION RATES

	1960	1970	1980	1990
<b>MEN</b>				
Civilian	76.8%	78.8%	78.5%	79.9%
White		85.5%	83.5%	87.5%
Non-white	50.2%			
Black		80.7%	81.2%	82.4%
Native		50.6%	54.2%	69.4%
Asian / Pacific Islander			84.2%	84.7%
<b>WOMEN</b>				
Civilian	39.4%	45.7%	58.9%	65.9%
White		48.5%	61.6%	68.2%
Non-white	26.0%			
Black		56.9%	71.3%	70.7%
Native		31.0%	42.8%	51.4%
Asian / Pacific Islander			62.4%	71.3%

SOURCE: US CENSUS

FIGURE A - 10  
LABOR FORCE  
REGIONAL PATTERNS

	LABOR FORCE - MALES			LABOR FORCE - FEMALES			TOTAL			
	SUM	MIL	EMPLOYED	UNEMP	NOT IN LF	SUM		MIL	EMPLOYED	UNEMP
STATE OF ALASKA	208,669	22,103	134,297	14,862	37,407	184,725	2,888	111,082	8,725	62,030
NOT IN PLACES	27,899	1,889	18,827	2,089	5,094	23,580	249	13,390	1,161	8,780
share of row			72.4%	8.0%	19.6%			57.4%	5.0%	37.6%
share of state	13.4%		14.0%	14.1%	13.6%	12.8%	8.6%	12.1%	13.3%	14.2%
CITIES	115,056	13,860	77,566	6,958	16,672	107,894	1,653	69,263	4,545	32,433
share of row			76.6%	6.9%	16.5%			65.2%	4.3%	30.5%
share of state	55.1%		57.8%	46.8%	44.6%	58.4%	57.2%	62.4%	52.1%	52.3%
Anchorage city	9,349		59,149	5,197	11,680		1,275	52,093	3,224	24,321
Fairbanks city	4,073		5,583	799	1,850		355	5,842	697	3,304
College CDP	122		3,106	255	926		0	2,464	214	1,321
Juneau city	168		7,464	492	1,608		23	7,018	240	2,550
Ketchikan city	148		2,264	215	608		0	1,846	170	937
OTHER PLACES	65,714	6,354	37,904	5,815	15,641	53,251	986	28,429	3,019	20,817
share of row			63.9%	9.8%	26.3%			54.4%	5.8%	39.8%
share of state	31.5%		28.2%	39.1%	41.8%	28.8%	34.1%	25.6%	34.6%	33.6%
SOURCE:	US CENSUS									

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FIGURE A - 11:

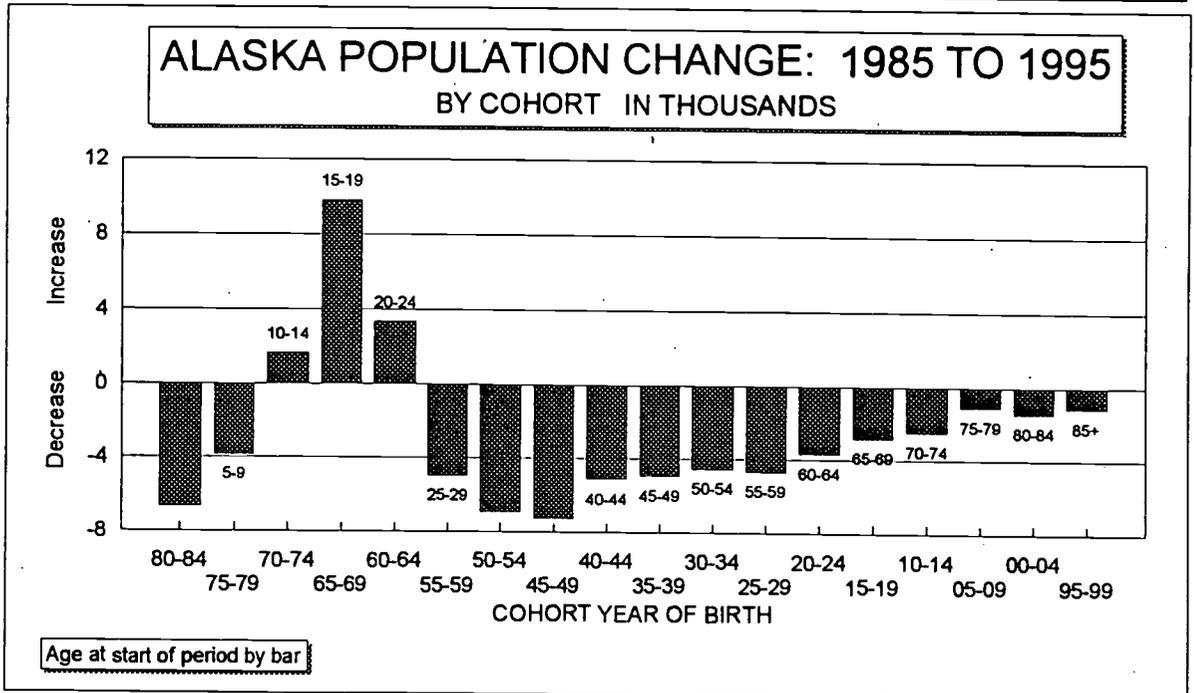
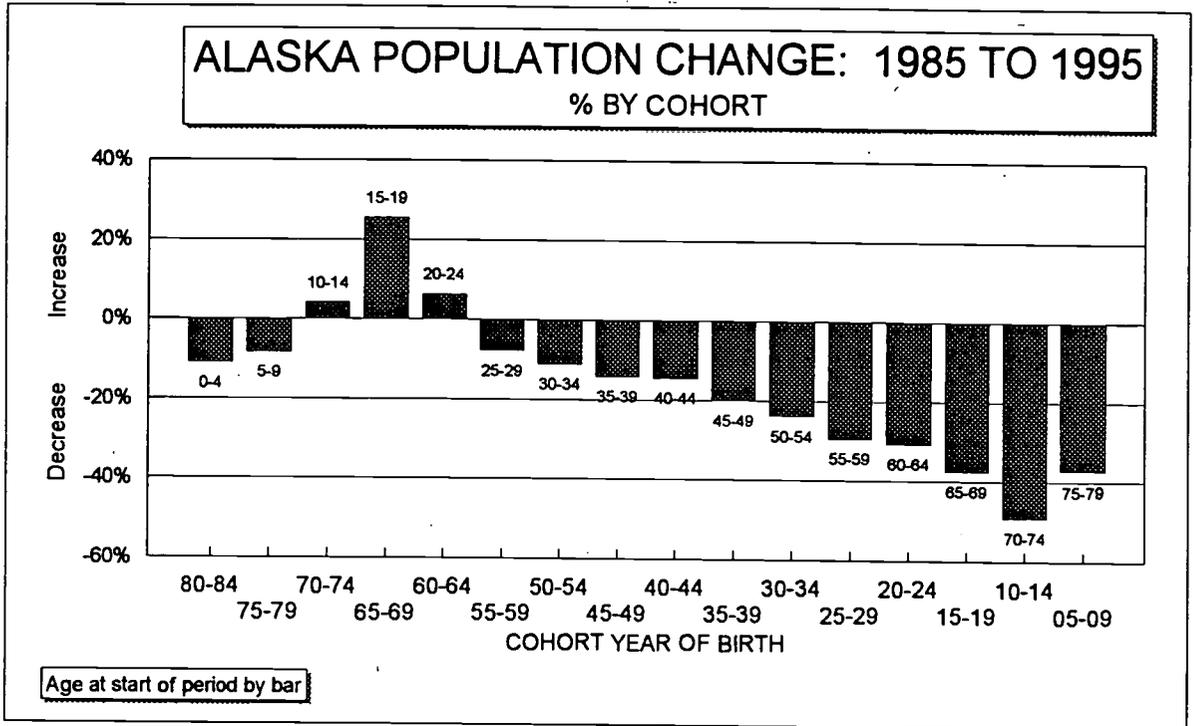


FIGURE A - 12

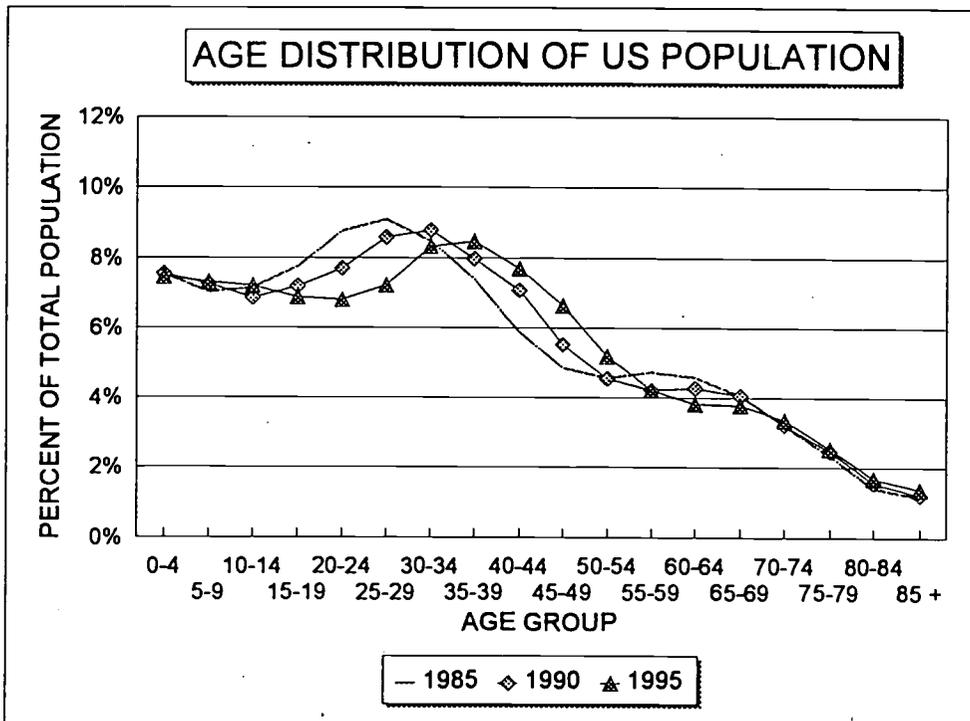
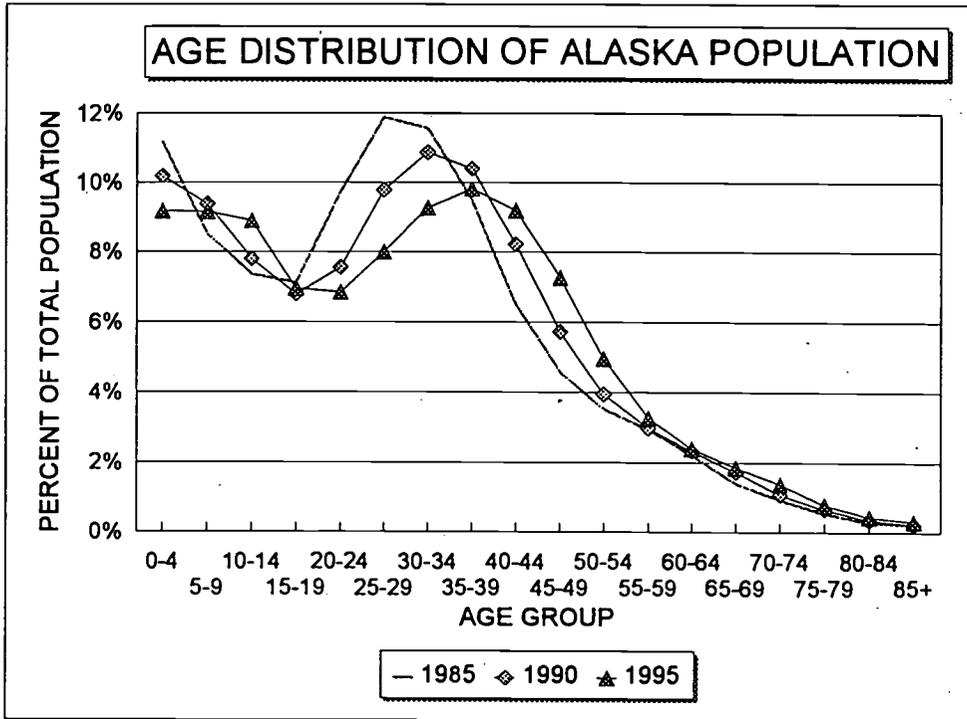


FIGURE A - 13

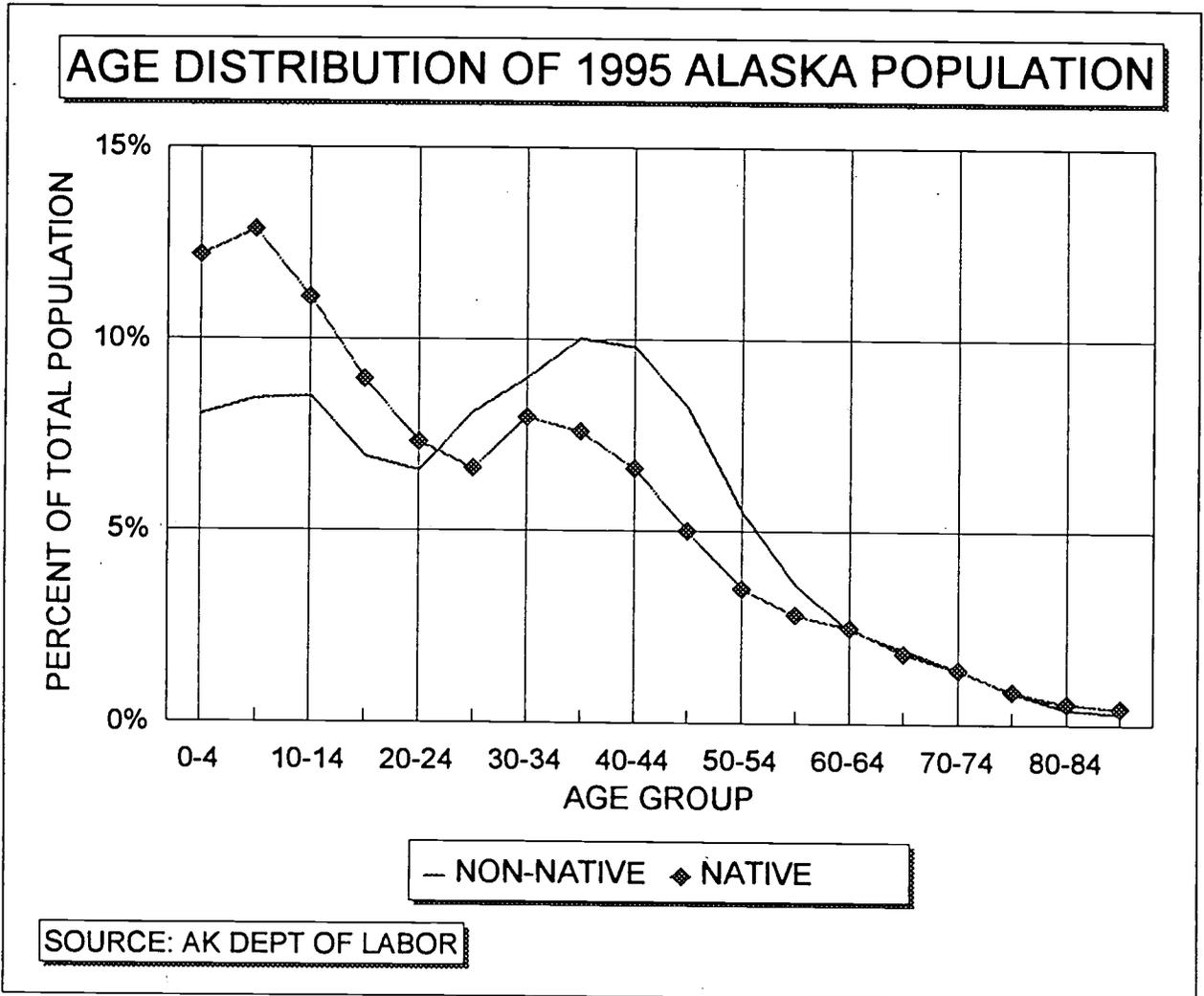
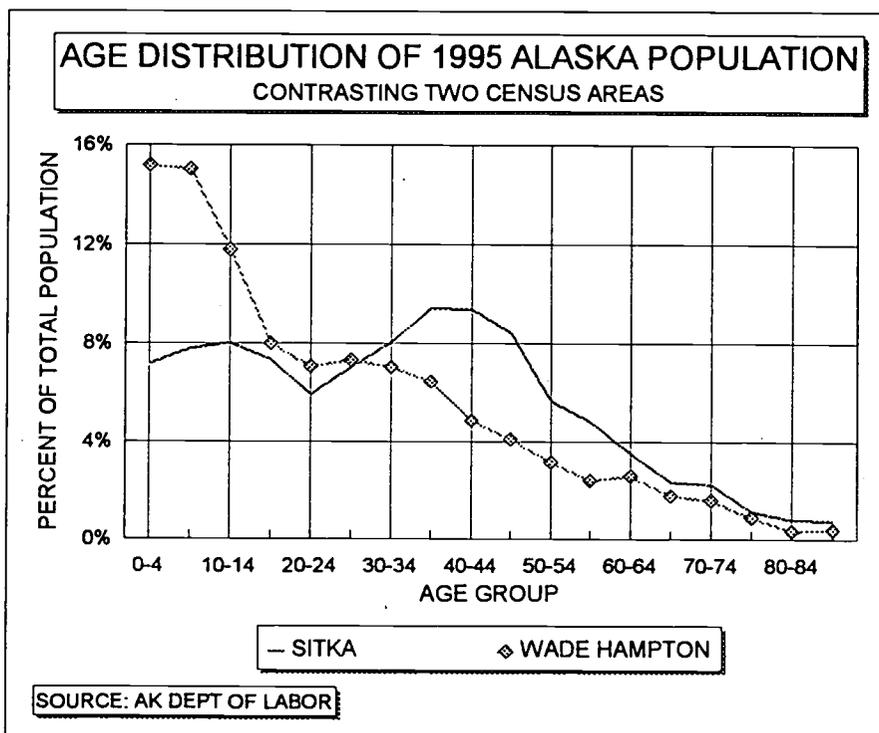
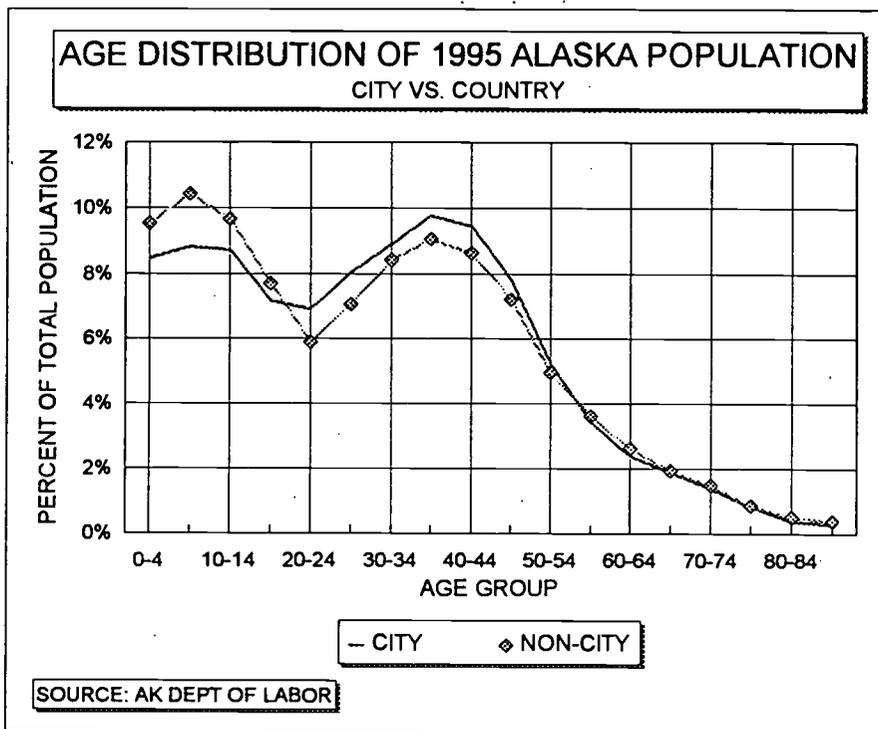


FIGURE A - 14



**FIGURE A - 15**  
**DISTRIBUTION OF ALASKA POPULATION**  
**BY ROAD ACCESS TO UNIVERSITY**

	POPULATION		POPULATION CHANGE		ANNUAL GROWTH RATE	
	01-Apr 1980	01-Apr 1990	01-Jul 1997	1980-1990	1990-1997	1980-1997
<b>TOTAL ALASKA</b>	401,855	550,043	611,301	148,188	61,258	209,446
Within approximately 20 miles by road to university campus	247,475	330,162	366,237	82,686	36,075	118,762
Within approximately 20 miles by road to extended site	85,712	130,086	149,484	44,374	19,398	63,772
On road system more than 20 miles from campus or extended site	13,157	20,369	25,399	7,212	5,029	12,241
Not on road system	55,510	69,426	70,182	13,916	756	14,671
<b>SHARES</b>						
Within approximately 20 miles of road to campus	61.6%	60.0%	59.9%	55.8%	58.9%	56.7%
Within approximately 20 miles of road to extended site	21.3%	23.7%	24.5%	29.9%	31.7%	30.4%
On road system more than 20 miles from campus or extended site	3.3%	3.7%	4.2%	4.9%	8.2%	5.8%
Not on road system	13.8%	12.6%	11.5%	9.4%	1.2%	7.0%

**FIGURE A - 16**  
**DISTRIBUTION OF ALASKA POPULATION**  
**BY ROAD ACCESS TO UNIVERSITY**  
**(DETAIL)**

1990 CENSUS AREA	POPULATION			POPULATION CHANGE			ANNUAL GROWTH RATE		
	01-Apr 1980	01-Apr 1990	01-Jul 1997	1980-1990	1990-1997	1980-1997	1980-1990	1990-1997	1980-1997
<b>WITHIN 20 MILES BY ROAD TO UNIVERSITY CAMPUS</b>	<b>247,475</b>	<b>330,162</b>	<b>366,237</b>	<b>82,686</b>	<b>36,075</b>	<b>118,762</b>			
Anchorage Borough	174,431	226,338	254,849	51,907	28,511	80,418	3.0%	1.8%	2.7%
Municipality of Anchorage	174,431	226,338	254,849	51,907	28,511	80,418			
Fairbanks North Star Borough Eielson Reservation census	5,408	5,268	4,216	(142)	(1,050)	(1,192)	-0.3%	-2.8%	-1.3%
Eielson AFB CDP	5,320	5,251	4,203	(69)	(1,048)	(1,117)			
Remainder of Eielson Res	88	15	13	(73)	(2)	(75)			
Fairbanks North Star Borough Fairbanks North State Census Area	48,108	71,807	77,359	23,698	5,552	29,251	4.9%	1.1%	3.6%
Fairbanks city	22,845	30,843	31,850	8,198	1,007	9,205			
College CDP	4,043	11,249	11,663	7,206	414	7,620			
North Pole city	724	1,456	1,831	732	175	907			
Moose Creek CDP	510	610	683	100	73	173			
Two Rivers CDP	359	453	623	94	170	264			
Pleasant Valley CDP		401	552	401	151	552			
Fox CDP	123	275	321	152	46	198			
Ester CDP	149	147	236	(2)	89	87			
Remainder of Fairbanks N Star csa	19,555	26,373	29,800	6,817	3,427	10,245			
Juneau Borough 3/	19,528	26,751	29,813	7,223	3,062	10,285	3.7%	1.6%	3.1%
Juneau city	19,528	26,751	29,813	7,223	3,062	10,285			
<b>WITHIN 20 MILES BY ROAD TO EXTENDED SITE</b>	<b>85,712</b>	<b>130,086</b>	<b>149,484</b>	<b>44,374</b>	<b>19,398</b>	<b>63,772</b>			
Aleutians West Census Area	1,322	3,089	4,251	1,767	1,162	2,929	13.4%	5.4%	13.0%
Unalaska city *	1,322	3,089	4,251	1,767	1,162	2,929			INTERIOR - ALEUTIANS CAMPUS
Bethel Census Area Lower Kuskokwim census subarea	3,576	4,674	5,277	1,098	603	1,701	3.1%	1.8%	2.8%
Bethel city *	3,576	4,674	5,277	1,098	603	1,701			KUSKOKWIM CAMPUS
Dillingham Census Area	1,563	2,017	2,252	454	235	689	2.9%	1.7%	2.6%
Dillingham city *	1,563	2,017	2,252	454	235	689			BRISTOL BAY CAMPUS
Kenai Peninsula Borough Kenai-Cook Inlet census sub	20,865	34,375	40,904	13,510	6,529	20,039	6.5%	2.7%	5.6%
Kenai city	4,324	6,327	6,971	2,003	644	2,647			
Sterling CDP	919	3,802	5,705	2,883	1,903	4,786			
Homer city	2,209	3,660	4,126	1,451	468	1,917			
Soldotna city	2,320	3,482	4,092	1,162	610	1,772			KACHEMAK BAY BRANCH KPC KENAI PENINSULA COLLEGE
Nikiski CDP	1,109	2,743	3,023	1,634	280	1,914			
Ridgeway CDP		2,018	2,364	2,018	346	2,364			
Fritz Creek CDP	404	1,426	1,972	1,022	546	1,568			
Anchor Point CDP	226	866	1,157	640	291	931			
Selamatof CDP *	334	999	1,134	665	135	800			
Cohoe CDP		508	598	508	90	598			
Kaslof CDP	201	383	539	182	156	338			
Nikolaevsk CDP		371	474	371	103	474			
Fox River CDP		382	435	382	53	435			
Kachemak city	301	365	398	64	33	97			
Kalfoneksy CDP	92	285	335	193	50	243			
Clam Gulch CDP	50	79	100	29	21	50			
Primrose CDP		63	62	63	(1)	62			
Remainder of Kenai-Cook Inlet csa	8,376	6,616	7,419	(1,760)	803	(957)			
Ketchikan Gateway Borough	11,239	13,724	14,486	2,485	762	3,247	2.2%	0.8%	1.7%
Ketchikan city	7,198	8,263	8,552	1,065	289	1,354			KETCHIKAN
Saxman city *	273	369	381	96	12	108			
Remainder of Ketchikan ca	3,768	5,092	5,553	1,324	461	1,785			
Kodiak Island Borough Kodiak Island census subarea	8,435	11,747	11,913	3,312	166	3,478	3.9%	0.2%	2.4%
Kodiak city	4,756	6,365	6,749	1,609	384	1,993			KODIAK COLLEGE
Womens Bay CDP		620	662	620	42	662			

**FIGURE A - 16**  
**DISTRIBUTION OF ALASKA POPULATION**  
**BY ROAD ACCESS TO UNIVERSITY**  
**(DETAIL)**

	POPULATION			POPULATION CHANGE			ANNUAL GROWTH RATE		
	01-Apr 1980	01-Apr 1990	01-Jul 1997	1980-1990	1990-1997	1980-1997	1980-1990	1990-1997	1980-1997
<b>1990 CENSUS AREA</b>									
Kodiak Station CDP	1,370	2,025	1,638	655	(387)	268			
Remainder of Kodiak Island csa	2,309	2,737	2,864	428	127	555			
<b>Matanuska-Susitna Borough</b>	16,313	33,180	41,912	16,867	8,733	25,600	10.3%	3.8%	9.2%
Weslita city	1,559	4,028	4,917	2,469	889	3,358			
Palmer city	2,141	2,868	3,946	725	1,080	1,805			
Butte CDP	988	2,039	2,538	1,051	499	1,550			MATANUSKA-SUSITNA COLLEGE
Lazy Mountain CDP		838	1,043	838	205	1,043			
Remainder of Matanuska-Sus ca	11,825	23,409	29,468	11,784	6,060	17,844			
<b>Nome Census Area</b>	3,129	4,214	4,398	1,085	184	1,269	3.5%	0.6%	2.4%
Nome city	2,506	3,500	3,595	994	95	1,089			
Unalakleet city *	623	714	803	91	89	180			NORTHWEST CAMPUS ALEUTIANS / PRIBILOF CENTER
<b>Northwest Arctic Borough</b>	2,054	2,751	2,885	697	134	831	3.4%	0.7%	2.4%
Kotzebue city *	2,054	2,751	2,885	697	134	831			CHUKCHI CAMPUS
<b>Sitka Borough</b>	7,803	8,588	8,733	785	145	930	1.0%	0.2%	0.7%
Sitka city	7,803	8,588	8,733	785	145	930			SITKA
<b>Southeast Fairbanks Census Area</b>	2,174	2,628	3,236	455	607	1,062	2.1%	3.3%	2.9%
Tok CDP *	589	935	1,216	346	281	627			TOK CENTER
Tenacross CDP *	117	106	85	(11)	(21)	(32)			
Tetlin CDP *	107	87	68	(20)	(19)	(39)			
Remainder of Southeast Fairbanks ca	1,361	1,500	1,867	140	366	506			
<b>Valdez-Cordova Census Area</b>									
Copper River census subarea	946	1,344	1,527	398	183	581	4.2%	1.9%	3.6%
Copper Center CDP *	213	449	536	236	87	323			
Glenallen CDP	511	451	513	(60)	62	2			COPPER BASIN EXTENSION CENTER PWSCC
Tazlina *	31	247	297	216	50	266			
Gulkana CDP *	104	103	95	(1)	(8)	(9)			
Gekona * S/	87	94	86	7	(8)	(1)			
<b>Valdez-Cordova Census Area</b>									
Cordova census subarea	2,241	2,579	2,496	338	(83)	255	1.5%	-0.5%	0.7%
Cordova city S/	1,879	2,110	2,467	231	357	588			CORDOVA EXTENSION CENTER PWSCC
Eysak CDP *	47	172	0	125	(172)	(47)			
Remainder of Census Area	315	297	29	(18)	(268)	(286)			
<b>Valdez-Cordova Census Area</b>									
Prince William Sound csa	3,079	4,068	4,184	989	116	1,105	3.2%	0.4%	2.1%
Valdez city	3,079	4,068	4,184	989	116	1,105			PRINCE WILLIAM SOUND COMMUNITY COLLEGE
<b>Yukon-Koyukuk Census Area</b>									
McGrath-Holy Cross csa	974	1,108	1,031	134	(77)	57	1.4%	-1.0%	0.3%
McGrath city *	355	528	456	173	(72)	101			McGRATH CENTER
Fort Yukon city *	619	580	575	(39)	(5)	(44)			YUKON FLATS CENTER
<b>MORE THAN 20 MILES BY ROAD TO CAMPUS OR EXTENDED SITE</b>	13,157	20,369	25,399	7,212	5,029	12,241			
<b>Denali Borough 1/</b>	1,000	1,764	1,899	764	135	899	7.6%	1.1%	5.3%
Healy CDP	334	487	603	153	116	269			
Anderson city	517	593	565	78	(28)	48			
Remainder of Denali		211	200	211	(11)	200			
McKinley Park CDP	60	171	196	111	25	136			
Cantwell CDP *	89	147	144	58	(3)	55			
Lignite CDP		99	122	99	23	122			
Ferry CDP		56	69	56	13	69			
<b>Fairbanks North Star Borough</b>									
Fairbanks North Star census	357	381	402	24	21	45	0.7%	0.8%	0.7%
Selcha CDP	319	354	373	35	19	54			
Harding Lake CDP	38	27	29	(11)	2	(9)			
<b>Kenai Peninsula Borough</b>									
Kenai-Cook Inlet census sub	636	1,312	1,673	676	361	1,037	10.6%	3.9%	9.6%

FIGURE A - 16  
DISTRIBUTION OF ALASKA POPULATION  
BY ROAD ACCESS TO UNIVERSITY  
(DETAIL)

1990 CENSUS AREA	POPULATION			POPULATION CHANGE			ANNUAL GROWTH RATE		
	01-Apr 1980	01-Apr 1990	01-Jul 1997	1980- 1990	1990- 1997	1980- 1997	1980- 1990	1990- 1997	1980- 1997
<b>Ninilchik CDP 4/</b>	341	458	655	115	199	314			
<b>Happy Valley CDP</b>		309	391	309	82	391			
<b>Cooper Landing CDP</b>	116	243	271	127	28	155			
<b>Hope CDP</b>	103	161	152	58	(9)	49			
<b>Moose Pass CDP</b>	76	81	116	5	35	40			
<b>Crown Point CDP</b>		62	88	62	26	88			
<b>Kenai Peninsula Borough</b>									
<b>Seward census subarea</b>	2,497	3,911	4,301	1,414	390	1,804	5.7%	1.4%	4.3%
<b>Seward city</b>	1,843	2,699	2,999	856	300	1,156			
<b>Grouse Creek Group *</b>		580	624	580	44	624			
<b>Remainder of Seward csa</b>	654	632	678	(22)	46	24			
<b>Kodiak Island Borough</b>									
<b>Kodiak Island census subarea</b>	304	377	362	73	(15)	59	2.4%	-0.6%	1.1%
<b>Larsen Bay city *</b>	168	147	120	(21)	(27)	(48)			
<b>Chiniak CDP</b>		69	74	69	5	74			
<b>Remainder of Kodiak Island csa</b>	136	161	168	25	7	33			
<b>Matanuska-Susitna Borough</b>	1,445	6,300	10,310	4,856	4,010	8,865	33.6%	9.1%	36.1%
<b>Meadow Lakes CDP</b>		2,374	4,693	2,374	2,319	4,693			
<b>Big Lake CDP</b>	410	1,477	2,243	1,067	766	1,833			
<b>Houston city</b>	370	697	994	327	297	624			
<b>Knik CDP *</b>	10	272	443	262	171	433			
<b>Sutton CDP</b>	182	308	431	126	123	249			
<b>Willow CDP</b>	139	285	408	146	123	269			
<b>Talkeetna CDP</b>	264	250	347	(14)	97	83			
<b>Trapper Creek CDP</b>		296	306	296	10	306			
<b>Chickaloon CDP</b>		145	205	145	60	205			
<b>Chase CDP</b>		38	53	38	15	53			
<b>Alexander *</b>	11	40	38	29	(2)	27			
<b>Remainder of Matanuska-Sus csa</b>	59	118	149						
<b>Nome Census Area</b>	373	444	526	71	82	153	1.9%	2.6%	2.4%
<b>Teller city *</b>	212	232	265	20	33	53			
<b>Brevig Mission city *</b>	138	198	261	60	63	123			
<b>Solomon *</b>	4	6	0	2	(6)	(4)			
<b>Council *</b>	19	8	0	(11)	(6)	(19)			
<b>Southeast Fairbanks Census Area</b>	3,314	3,118	2,911	(196)	(207)	(403)	-0.6%	-0.9%	-0.7%
<b>Delta Junction city</b>	945	652	855	(293)	203	(90)			
<b>Fort Greely CDP</b>	1,635	1,289	740	(346)	(549)	(895)			
<b>Big Delta CDP</b>	285	400	508	115	108	223			
<b>Eagle city</b>	110	168	165	58	(3)	55			
<b>Northway CDP</b>	73	123	119	50	(4)	46			
<b>Northway Junction CDP</b>		88	114	88	26	114			
<b>Northway Village CDP (Northway)</b>	112	113	110	1	(3)	(2)			
<b>Dry Creek CDP</b>		106	110	106	4	110			
<b>Dot Lake CDP</b>	67	70	80	3	10	13			
<b>Healy Lake CDP *</b>	33	47	60	14	13	27			
<b>Eagle Village CDP (Eagle *)</b>	54	35	34	(19)	(1)	(20)			
<b>Aican CDP</b>		27	16	27	(11)	16			
<b>Valdez-Cordova Census Area</b>									
<b>Copper River census subarea</b>	1,775	1,419	1,655	(356)	236	(120)	-2.0%	2.4%	-0.4%
<b>Kenny Lake CDP</b>		423	500	423	77	500			
<b>Mertasta Lake CDP *</b>	59	96	122	37	26	63			
<b>Chitina CDP *</b>	42	49	84	7	35	42			
<b>Mendeltna CDP</b>		37	72	37	35	72			
<b>Siana CDP *</b>	49	63	58	14	(5)	9			
<b>Chistochina CDP *</b>	55	60	55	5	(5)	0			
<b>Tonsina CDP</b>	135	38	46	(97)	8	(89)			
<b>Faxson CDP</b>	30	30	34	0	4	4			
<b>McCarthy CDP</b>	23	25	28	2	3	5			
<b>Remainder of Census Area</b>	1,382	598	658	(784)	58	(726)			
<b>Valdez-Cordova Census Area</b>									
<b>Prince William Sound csa</b>	198	243	289	45	46	91	2.3%	2.7%	2.7%
<b>Whittier city</b>	198	243	289	45	46	91			
<b>Yukon-Koyukuk Census Area</b>									
<b>Koyukuk-Middle Yukon csa</b>	1,142	947	899	(196)	(48)	(244)	-1.7%	-0.7%	-1.3%

**FIGURE A - 16**  
**DISTRIBUTION OF ALASKA POPULATION**  
**BY ROAD ACCESS TO UNIVERSITY**  
**(DETAIL)**

	POPULATION			POPULATION CHANGE			ANNUAL GROWTH RATE		
	01-Apr 1980	01-Apr 1990	01-Jul 1997	1980-1990	1990-1997	1980-1997	1980-1990	1990-1997	1980-1997
<b>1990 CENSUS AREA</b>									
<b>Nome census area</b>									
Nome city *	470	393	356	(77)	(37)	(114)			
Mirto CDP *	153	218	244	65	26	91			
Marley Hot Springs CDP *	61	96	90	35	(6)	29			
Wiseman *	8	33	24	25	(9)	16			
Remainder of Census Area	450	207	185	(244)	(22)	(266)			
<b>Yukon-Koyukuk Census Area</b>									
<b>Yukon Flats census subarea</b>	117	154	172	37	18	55	3.2%	1.7%	2.6%
Circle CDP *	81	73	83	(8)	10	2			
Central CDP	36	52	57	16	5	21			
Circle Hot Springs Station		29	32	29	3	32			
<b>NOT ACCESSIBLE BY ROAD</b>	<b>55,510</b>	<b>69,426</b>	<b>70,182</b>	<b>13,916</b>	<b>756</b>	<b>14,671</b>			
<b>Aleutians East Borough</b>	1,643	2,464	2,238	821	(226)	595	5.0%	-1.3%	2.1%
Sand Point city *	625	878	870	253	(6)	245			
King Cove city *	460	677	691	217	14	231			
Akutan city *	169	589	420	420	(169)	251			
Nelson Lagoon CDP *	59	83	90	24	7	31			
Cold Bay city	192	148	85	(44)	(63)	(107)			
False Pass city *	70	69	64	(1)	(5)	(6)			
Remainder of Aleutians East c.a.	58	20	18	(38)	(2)	(40)			
Bethkofski *	10	0	0	(10)	0	(10)			
<b>Aleutians West Census Area</b>	4,803	6,389	1,115	1,586	(5,274)	(3,688)	3.3%	-11.8%	-4.5%
St. Paul city *	551	763	764	212	1	213			
St. George city *	158	136	153	(20)	15	(5)			
Atka city	93	98	111	5	13	18			
Remainder of Aleutians West c.a.	38	33	44	(3)	11	8			
Nikolski CDP *	50	35	43	(15)	8	(7)			
Eareckson Air Force Station		664	0	664	(664)	0			
Adak Station CDP	3,315	4,633	0	1,318	(4,633)	(3,315)			
Amchitka CDP		25	0	25	(25)	0			
Shemya station	600			(600)	0	(600)			
<b>Bethel Census Area</b>									
<b>Aniak census subarea</b>	1,301	1,529	1,615	228	86	314	1.8%	0.8%	1.4%
Aniak city *	341	540	578	199	36	237			
Lower Kalskag city *	246	291	278	45	(13)	32			
Upper Kalskag city (Kalskag *)	129	172	198	43	28	69			
Crooked Creek CDP *	108	106	138	(2)	32	30			
Chustbuluk city *	105	97	115	(8)	18	10			
Sleetmute CDP *	107	106	102	(1)	(4)	(5)			
Remainder of Aniak census subarea	106	68	65	(38)	(3)	(41)			
Red Devil CDP *	39	53	49	14	(4)	10			
Lime Village CDP *	48	42	47	(6)	5	(1)			
Stony River CDP *	62	51	42	(11)	(9)	(20)			
Napalmute *	4	3	3	(1)	0	(1)			
Georgetown *	6	0	0	(6)	0	(6)			
<b>Bethel Census Area</b>									
<b>Lower Kuskokwim census subarea</b>	6,122	7,453	8,705	1,331	1,252	2,583	2.2%	2.4%	2.5%
Kwethuk city *	454	558	669	104	111	215			
Kipruk CDP *	371	470	567	99	97	196			
Quinhagak city *	412	501	567	89	66	155			
Akiachak city * [Disolved 1990]	438	481	560	43	79	122			
Kasigluk city * [Disolved 1996]	342	425	514	83	89	172			
Toksook Bay city *	333	420	496	87	76	163			
Nunapitchuk city	289	378	489	79	111	190			
Cheformek city *	230	320	405	90	85	175			
Napasidak city *	244	328	399	84	71	155			
Tuluksak city * [Disolved 1997]	236	358	385	122	27	149			
Napaklak city *	262	318	354	56	38	92			
Tuntutulak CDP *	216	300	351	84	51	135			
Kongiganek CDP *	239	294	349	55	55	110			
Kwigillingok CDP *	354	278	333	(76)	55	(21)			
Tununak city * [Disolved 1997]	298	316	330	18	14	32			
Akiak city *	198	285	327	87	42	129			
Atmautluk city * [Disolved 1996]	219	258	292	39	34	73			
Eek city *	228	254	277	26	23	49			
Newtok city (pt.) * [Disolved 1997]	131	207	269	76	62	136			
Goodnews Bay city *	168	241	263	73	22	95			
Nightmute city *	119	153	206	34	53	87			

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FIGURE A - 16  
DISTRIBUTION OF ALASKA POPULATION  
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(DETAIL)

1990 CENSUS AREA	POPULATION			POPULATION CHANGE			ANNUAL GROWTH RATE		
	01-Apr 1980	01-Apr 1990	01-Jul 1997	1980-1990	1990-1997	1980-1997	1980-1990	1990-1997	1980-1997
Mekoryuk city *	160	177	192	17	15	32			
Oscarville CDP *	56	57	59	1	2	3			
Platinum city *	55	64	41	9	(23)	(14)			
Remainder of Lower Kuskokwim csa	60	12	11	(48)	(1)	(49)			
<b>Bristol Bay Borough</b>	<b>1,094</b>	<b>1,410</b>	<b>1,270</b>	<b>316</b>	<b>(140)</b>	<b>176</b>	<b>2.9%</b>	<b>-1.4%</b>	<b>0.9%</b>
Naknek CDP *	318	575	640	257	65	322			
King Salmon CDP *	545	696	478	151	(218)	(67)			
South Naknek CDP *	145	136	149	(9)	13	4			
Remainder of Bristol Bay Borough	88	3	3	(83)	0	(83)			
<b>Dillingham Census Area</b>	<b>1,669</b>	<b>1,995</b>	<b>2,269</b>	<b>326</b>	<b>274</b>	<b>600</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.1%</b>
Togiak city *	470	613	762	143	149	292			
New Stuyahok city *	331	391	452	60	61	121			
Manokotak city *	294	385	387	91	2	93			
Koiganek CDP *	117	181	194	64	13	77			
Aleknagik city *	154	185	176	31	(9)	22			
Ekwoik city *	77	77	124	0	47	47			
Clarke Point city *	79	60	66	(19)	6	(13)			
Twin Hills CDP *	70	68	59	(4)	(7)	(11)			
Remainder of Dillingham c.a.	22	29	33	7	4	11			
Portage Creek *	48	5	14	(43)	9	(34)			
Ekuk *	7	3	2	(4)	(1)	(5)			
<b>Fairbanks North Star Borough</b>	<b>198</b>	<b>266</b>	<b>301</b>	<b>69</b>	<b>35</b>	<b>103</b>			
Remainder of Fairbanks N Star csa	198	266	301	69	35	103			
<b>Haines Borough</b>	<b>1,680</b>	<b>2,117</b>	<b>2,421</b>	<b>437</b>	<b>304</b>	<b>741</b>	<b>2.6%</b>	<b>2.1%</b>	<b>2.6%</b>
Haines city	993	1,238	1,429	245	191	436			
Remainder of Haines census area	687	707	794	20	87	107			
Mosquito Lake CDP		80	92	80	12	92			
Covenant Life CDP		47	54	47	7	54			
Lutak CDP 2/		45	52	45	7	52			
<b>Kenai Peninsula Borough</b>									
Kenai-Cook Inlet census sub	972	854	829	(116)	(25)	(143)	-1.2%	-0.4%	-0.9%
Seldovia *	479	459	414	(20)	(45)	(65)			
Tyonek CDP *	239	154	151	(85)	(3)	(86)			
Halibut Cove CDP	47	78	78	31	0	31			
Jakotof Bay CDP (Red Mountain)	36	28	35	(8)	7	(1)			
Remainder of Kenai-Cook Inlet csa	171	135	151	(36)	16	(20)			
<b>Kenai Peninsula Borough</b>									
Seward census subarea	312	350	391	38	41	79	1.2%	1.7%	1.5%
Port Graham CDP *	161	166	186	5	20	25			
Narwalak (English Bay C	124	158	177	34	19	53			
Remainder of Seward csa	27	26	28	(1)	2	1			
<b>Ketchikan Gateway Borough</b>	<b>77</b>	<b>104</b>	<b>113</b>	<b>27</b>	<b>9</b>	<b>36</b>	<b>3.5%</b>	<b>1.3%</b>	<b>2.8%</b>
Remainder of Ketchikan ca	77	104	113	27	9	36			
<b>Kodiak Island Borough</b>									
Kodiak Island census subarea	1,201	1,185	1,272	(16)	87	71	-0.1%	1.0%	0.3%
Old Harbor city *	340	284	301	(56)	17	(39)			
Ouzinkie city *	173	209	246	38	37	73			
Port Lions city *	215	222	239	7	17	24			
Akhiok city *	105	77	101	(28)	24	(4)			
Karkuk CDP *	96	71	48	(25)	(23)	(48)			
Remainder of Kodiak Island csa	272	322	337	50	15	65			
<b>Lake and Peninsula Borough</b>	<b>1,384</b>	<b>1,668</b>	<b>1,780</b>	<b>284</b>	<b>112</b>	<b>396</b>	<b>2.1%</b>	<b>1.0%</b>	<b>1.7%</b>
Nondalton city *	173	178	221	5	43	48			
Newhalen city *	87	160	177	73	17	90			
Kokshonak CDP *	83	152	168	69	16	85			
Egegik city *	75	122	127	47	5	52			
Chignik Lake CDP *	138	133	127	(5)	(6)	(11)			
Chignik city *	178	188	125	10	(63)	(53)			
Port Halden city *	92	119	116	27	(3)	24			
Levelock CDP *	79	105	115	26	10	36			
Perryville CDP *	111	108	107	(3)	(1)	(4)			
Ilamna CDP *	94	94	103	0	9	9			

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FIGURE A - 16  
DISTRIBUTION OF ALASKA POPULATION  
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1990 CENSUS AREA	POPULATION			POPULATION CHANGE			ANNUAL GROWTH RATE		
	01-Apr 1980	01-Apr 1990	01-Jul 1997	1980-1990	1990-1997	1980-1997	1980-1990	1990-1997	1980-1997
Pilot Point city *	68	53	79	(13)	26	13			
Chignik Lagoon CDP *	48	53	74	5	21	26			
Port Alsworth CDP	22	55	67	33	12	45			
Igloo CDP *	33	33	46	0	13	13			
Pedro Bay CDP *	33	42	37	9	(5)	4			
Ivanof Bay CDP *	40	35	27	(5)	(8)	(13)			
Ugashik *	13	7	5	(8)	(2)	(8)			
Remainder of Lake and Parin ca	19	31	59	12	28	40			
<b>Matanuska-Susitna Borough</b>	<b>59</b>	<b>203</b>	<b>226</b>	<b>145</b>	<b>23</b>	<b>167</b>	<b>24.6%</b>	<b>1.6%</b>	<b>16.7%</b>
Sikwenta CDP		85	77	85	(8)	77			
Remainder of Matanuska-Sus ca	59	118	149						
<b>Nome Census Area</b>	<b>3,020</b>	<b>3,630</b>	<b>4,254</b>	<b>610</b>	<b>624</b>	<b>1,234</b>	<b>2.0%</b>	<b>2.5%</b>	<b>2.4%</b>
Gambell city *	445	525	653	80	128	208			
Savoonga city *	491	519	622	28	103	131			
Shishmaref city *	394	458	542	62	86	148			
Stebbins city *	331	400	513	69	113	182			
St. Michael city *	239	295	341	56	46	102			
Elm city *	211	284	291	53	27	80			
Koyuk city *	188	231	272	43	41	84			
Shaktook city *	164	178	226	14	48	62			
White Mountain city *	125	180	193	55	13	68			
Diomedes city (Inalik *)	139	178	174	39	(4)	35			
Wales city *	133	161	162	28	1	29			
Golovin city *	87	127	152	40	25	65			
Port Clarence CDP	29	26	24	(3)	(2)	(5)			
Mary's Igloo *	0	0	0	0	0	0			
Ukirok *	0	0	0	0	0	0			
Remainder of Census Area	44	90	89	46	(1)	45			
<b>North Slope Borough</b>									
<b>Barrow-Point Hope census subarea</b>	<b>3,784</b>	<b>5,581</b>	<b>6,871</b>	<b>1,797</b>	<b>1,290</b>	<b>3,087</b>	<b>4.7%</b>	<b>3.3%</b>	<b>4.8%</b>
Barrow city *	2,287	3,469	4,380	1,202	911	2,113			
Point Hope city *	484	639	749	175	110	285			
Wainwright city *	405	492	550	87	58	145			
Nulqsut city *	208	354	435	146	81	227			
Anaktuvuk Pass city *	203	259	301	56	42	98			
Atkasook city (Atkasook *)	107	216	235	109	19	128			
Point Lay CDP *	68	139	207	71	68	139			
Remainder of Barrow-Point Hope csa	62	13	14	(49)	1	(48)			
<b>North Slope Borough</b>									
<b>Prudhoe Bay-Kaktovik csa</b>	<b>415</b>	<b>398</b>	<b>392</b>	<b>(17)</b>	<b>(6)</b>	<b>(23)</b>	<b>-0.4%</b>	<b>-0.2%</b>	<b>-0.3%</b>
Kaktovik city *	165	224	222	59	(2)	57			
Remainder of Prudhoe Bay-Kaktovik csa	136	101	99	(35)	(2)	(37)			
Prudhoe Bay CDP	50	47	47	(3)	0	(3)			
Deedhorse CDP	64	26	24	(38)	(2)	(40)			
<b>Northwest Arctic Borough</b>	<b>2,777</b>	<b>3,362</b>	<b>3,816</b>	<b>585</b>	<b>454</b>	<b>1,039</b>	<b>2.1%</b>	<b>1.9%</b>	<b>2.2%</b>
Selawik city *	535	596	696	61	100	161			
Noorvik city *	492	531	571	39	40	79			
Kiana city *	345	385	415	40	30	70			
Buckland city *	177	318	412	141	94	235			
Noatak CDP *	273	333	401	60	68	128			
Kivalina city *	241	317	357	76	40	116			
Ambler city *	192	311	333	119	22	141			
Shungnak city *	202	223	252	21	29	50			
Deering city *	150	157	158	7	1	8			
Kobuk city *	62	69	89	7	20	27			
Remainder of Borough	108	122	132	14	10	24			
<b>Prince of Wales-Outer Ketchikan ca</b>									
<b>Metlakatla Indian Community csa</b>	<b>1,195</b>	<b>1,469</b>	<b>1,595</b>	<b>274</b>	<b>126</b>	<b>400</b>	<b>2.3%</b>	<b>1.2%</b>	<b>2.0%</b>
Metlakatla CDP	1,056	1,407	1,528	351	121	472			
Annette CDP	139	43	47	(96)	4	(92)			
Remainder of Metlakatla Ind com csa	0	19	20	19	1	20			
<b>Prince of Wales-Outer Ketchikan ca</b>									
<b>Outer Ketchikan census subarea</b>	<b>136</b>	<b>157</b>	<b>182</b>	<b>19</b>	<b>25</b>	<b>44</b>	<b>1.4%</b>	<b>2.3%</b>	<b>1.9%</b>
Hyder CDP	77	99	151	22	52	74			
Meyers Chuck CDP	50	37	28	(13)	(9)	(22)			
Remainder of Outer Ketchik csa	11	21	3	10	(18)	(8)			

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FIGURE A - 16  
DISTRIBUTION OF ALASKA POPULATION  
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1990 CENSUS AREA	POPULATION			POPULATION CHANGE			ANNUAL GROWTH RATE		
	01-Apr 1980	01-Apr 1990	01-Jul 1997	1980-1990	1990-1997	1980-1997	1980-1990	1990-1997	1980-1997
<b>Prince of Wales-Outer Ketchikan ca</b>									
Prince of Wales census subarea	2,489	4,652	5,099	2,163	447	2,610	8.7%	1.4%	6.2%
Craig city *	527	1,280	2,043	733	783	1,516			
Kispiock city *	318	722	704	404	(18)	386			
Thorne Bay city	377	581	625	204	44	248			
Remainder of Prince of Wales csa	565	430	411	(135)	(19)	(154)			
Hydaburg city *	298	384	398	86	14	100			
Coffman Cove city	183	188	246	(7)	60	53			
Hollis CDP		111	175	111	64	175			
Naukatl Bay CDP		93	136	93	43	136			
Whale Pass CDP	90	75	79	(15)	4	(11)			
Edna Bay CDP	6	88	70	80	(18)	64			
Port Protection CDP		62	56	62	(4)	58			
Point Baker CDP	90	39	57	(51)	18	(33)			
Kasaan city *	25	54	42	29	(12)	17			
Polk Inlet CDP		135	36	135	(99)	36			
Port Alice CDP		30	19	30	(11)	19			
Dora Bay CDP		57	0	57	(57)	0			
Labouchere Bay CDP		149	0	149	(149)	0			
Long Island CDP		198	0	198	(198)	0			
<b>Skagway-Hoonah-Angoon Census Area</b>									
Angoon census subarea	712	1,182	925	450	(237)	213	6.3%	-2.9%	1.8%
Angoon city *	465	638	571	173	(67)	106			
Cube Cove CDP		156	137	156	(19)	137			
Hobart Bay CDP		187	107	187	(80)	107			
Tenakee Springs city *	138	94	98	(44)	4	(40)			
Remainder of Angoon csa	109	19	12	(90)	(7)	(97)			
Freshwater Bay CDP		68	0	68	(68)	0			
<b>Skagway-Hoonah-Angoon Census Area</b>									
Hoonah census subarea	1,368	1,697	1,852	329	155	484	2.4%	1.3%	2.1%
Hoonah city * 7/	680	795	906	115	111	226			
Oustevus CDP	98	258	346	160	88	248			
Whitestone Logging Camp CDP		184	189	184	25	189			
Pelican city *	180	222	187	42	(35)	7			
Remainder of Hoonah-Yakutat csa	382	140	103	(242)	(37)	(279)			
Game Creek CDP		61	67	61	6	67			
Elin Cove CDP	28	57	54	29	(3)	26			
<b>Southeast Fairbanks</b>	151	167	207	16	41	56	1.0%	3.5%	2.2%
Remainder of Southeast Fairbanks ca	151	167	207	16	41	56			
<b>Skagway-Hoonah-Angoon Census Area</b>									
Klukwan census subarea	135	129	160	(6)	31	25	-0.4%	3.4%	1.1%
Klukwan CDP (Chikil *)	135	129	160	(6)	31	25			
<b>Skagway-Hoonah-Angoon Census Area</b>									
Skagway census subarea	814	692	816	(122)	124	2	-1.5%	2.6%	0.0%
Skagway city	814	692	816	(122)	124	2			
<b>Valdez-Cordova Census Area</b>									
Prince William Sound csa	109	299	280	190	(19)	171	17.4%	-0.9%	9.2%
Tatitlek CDP *	68	119	99	51	(20)	31			
Chenege CDP *		94	91	94	(3)	91			
Remainder of Census Area	41	68	90	45	4	49			
<b>Wade Hampton Census Area</b>	4,664	5,791	6,910	1,127	1,119	2,246	2.4%	2.8%	2.8%
Hooper Bay city *	627	845	1,012	218	167	385			
Emmonak city *	567	642	798	75	158	231			
Mountain Village city *	583	674	738	91	64	155			
Chevak city *	468	598	721	132	123	255			
Alekanuk city *	522	544	651	22	107	129			
Pilot Station city *	325	463	547	138	84	222			
Kotik city *	293	461	543	168	82	250			
St. Mary's city	382	441	504	59	63	122			
Scammon Bay city *	250	343	459	93	118	209			
Marshall city *	262	273	318	11	45	56			
Russian Mission city *	169	246	295	77	49	126			
Pitkas Point CDP *	88	135	154	47	19	66			
Sheldon Point city *	103	109	150	6	41	47			

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	POPULATION			POPULATION CHANGE			ANNUAL GROWTH RATE		
	01-Apr 1980	01-Apr 1990	01-Jul 1997	1980-1990	1990-1997	1980-1997	1980-1990	1990-1997	1980-1997
<b>1990 CENSUS AREA</b>									
Remainder of Wade Hampton ca	27	17	20	(10)	3	(7)			
Hamilton *		0	0	0	0	0			
Newtok city (pt.) * (Dissolved 1997)		0	0	0	0	0			
Chulioonawick *		0	0	0	0	0			
Ohogamiut *		0	0	0	0	0			
Bill Moore's *		0	0	0	0	0			
Palmiut *		0	0	0	0	0			
<b>Wrangell-Petersburg Census Area</b>									
Petersburg census subarea	3,804	4,407	4,558	603	151	754	1.6%	0.5%	1.2%
Petersburg city	2,821	3,207	3,432	386	225	611			
Kake city *	555	700	767	145	67	212			
Remainder of Petersburg csa	295	225	232	(70)	7	(63)			
Port Alexander city	86	119	94	33	(25)	8			
Kupreanof city	47	23	24	(24)	1	(23)			
Rowan Bay CDP		133	9	133	(124)	9			
<b>Wrangell-Petersburg Census Area</b>									
Wrangell census subarea	2,363	2,635	2,631	272	(4)	268	1.2%	-0.0%	0.7%
Wrangell city	2,184	2,479	2,543	295	64	359			
Remainder of Wrangell csa	179	87	88	(92)	1	(91)			
St. John Harbor CDP		69	0	69	(69)	0			
<b>Yakutat Borough GI, 10/</b>									
Yakutat city (* pt)	449	705	833	256	128	384	5.7%	2.6%	5.0%
<b>Yukon-Koyukuk Census Area</b>									
Koyukuk-Middle Yukon csa	3,181	2,882	2,646	(200)	(336)	(536)	-0.6%	-1.6%	-1.0%
Golena city *	765	833	543	68	(290)	(222)			
Nulato city *	350	359	365	9	6	15			
Tanana city *	388	345	299	(43)	(46)	(89)			
Kaktag city *	247	240	245	(7)	5	(2)			
Huslia city *	188	207	232	19	25	44			
Ruby city *	197	170	189	(27)	19	(8)			
Allakaket city	163	170	182	7	12	19			
Koyukuk city *	98	126	113	28	(13)	15			
Stevens Village CDP *	96	102	99	6	(3)	3			
Rampart CDP *	50	68	54	18	(14)	4			
Hughes city *	73	54	52	(19)	(2)	(21)			
Lake Minchumina CDP *	22	32	45	10	13	23			
Evansville *	94	69	43	(25)	(26)	(51)			
Remainder of Census Area	450	207	185	(244)	(22)	(266)			
<b>Yukon-Koyukuk Census Area</b>									
McGrath-Holy Cross csa	957	920	908	(37)	(12)	(49)	-0.4%	-0.2%	-0.3%
Holy Cross city *	241	277	260	36	(17)	19			
Grayling city *	209	208	186	(1)	(22)	(23)			
Shageluk city *	131	139	145	8	6	14			
Nikolai city *	91	109	108	18	(1)	17			
Anvik city *	114	82	83	(32)	1	(31)			
Takotna CDP *	48	38	63	(10)	25	15			
Talida *	33	11	5	(22)	(6)	(28)			
Medfra *	15	0	0	(15)	0	(15)			
Remainder of Census Area	75	56	58	(19)	2	(17)			
<b>Yukon-Koyukuk Census Area</b>									
Yukon Flats census subarea	471	604	701	133	97	230	2.8%	2.3%	2.9%
Venetie CDP *	132	182	241	50	59	109			
Arctic Village CDP *	111	96	121	(15)	25	10			
Beaver CDP *	66	103	118	37	15	52			
Chalkyitsik CDP *	100	90	87	(10)	(3)	(13)			
Birch Creek CDP *	32	42	37	10	(5)	5			
Canyon Village *		0	0	0	0	0			
Remainder of Yukon Flats csa	30	91	97	61	6	67			

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FIGURE A - 17.  
UNIVERSITY OF ALASKA  
CAMPUSES AND EXTENDED SITE LOCATIONS  
IN RELATION TO 1997 POPULATION

	SOUTHEAS	ANCHORAGE	FAIRBANKS	OPERATIV
	EXTENDED	EXTENDED	RURAL	EXTENSION
	CAMPUS	CAMPUS	CAMPUSES	DISTRICT
		AND	AND	OFFICES
		AFFILIATED SITES	AFFILIATED SITES	
<b>Aleutians East Borough</b>	2,238			
Akutan city *	420			
Belkofski *	0			
Cold Bay city	85			
False Pass city *	64			
King Cove city *	691			
Nelson Lagoon CDP *	90			
Sand Point city *	870			
Remainder of Aleutians East c.a.	18			
<b>Aleutians West Census Area</b>	5,366			
Adak Station CDP	0			
Amchitka CDP	0			
Atka city	111			
Eareckson Air Force Station	0			
Nikolski CDP *	43			
St. George city *	153			
St. Paul city *	764			
Unalaska city *	4,251			
Remainder of Aleutians West c.a.	44			
Attu CG Station	26			
Shemya station				
<b>Anchorage Borough</b>	254,849	ANCHORAGE		
Municipality of Anchorage	254,849	CHUGIAK / EAGLE RIVER CAMPUS		x
Eklutna *	425	ELMENDORF AFB EDUCATION CENTER		
		FORT RICHARDSON ARMY POST EDUCATION CENTER		
<b>Bethel Census Area</b>	15,597			
<b>Aniak census subarea</b>	1,615			
Aniak city *	578			
Chuathbaluk city *	115			
Crooked Creek CDP *	138			
Georgetown *	0			
Lime Village CDP *	47			
Lower Kalskag city *	278			
Napalmute *	3			
Red Devil CDP *	49			
Sleetmute CDP *	102			
Stony River CDP *	42			
Upper Kalskag city (Kalskag *)	198			
Remainder of Aniak census subarea	65			
<b>Lower Kuskokwim census subarea</b>	13,982			
Akiachak city * [Disolved 1990]	560			
Akiak city *	327			
Atmautiuk city * [Disolved 1996]	292			
Bethel city *	5,277		KUSKOKWIM CAMPUS	x
Chefornak city *	405			
Eek city *	277			
Goodnews Bay city *	263			
Kasigluk city * [Disolved 1996]	514			
Kipnuk CDP *	567			
Kongiganak CDP *	349			
Kwethluk city *	669			
Kwigillingok CDP *	333			
Mekoryuk city *	192			
Napaklak city *	354			
Napasklak city *	399			
Newtok city (pt.) * [Disolved 1997]	269			
Nightmute city *	206			
Nunapitchuk city	489			
Oscarville CDP *	59			
Platinum city *	41			
Quinhagak city *	567			
Toksook Bay city *	496			
Tuliaksak city * [Disolved 1997]	385			

FIGURE A - 17  
UNIVERSITY OF ALASKA  
CAMPUSES AND EXTENDED SITE LOCATIONS  
IN RELATION TO 1997 POPULATION

	SOUTHEAS	ANCHORAGE	FAIRBANKS	
	EXTENDED CAMPUS	EXTENDED CAMPUS AND AFFILIATED SITES	RURAL CAMPUSES AND AFFILIATED SITES	OPERATIV EXTENSION DISTRICT OFFICES
Tuntutullak CDP *	351			
Tununak city * [Disolved 1997]	330			
Remainder of Lower Kuskokwim csa	11			
<b>Bristol Bay Borough</b>	<b>1,270</b>			
King Salmon CDP *	478			
Naknek CDP *	640			
South Naknek CDP *	149			
Remainder of Bristol Bay Borough	3			
<b>Denali Borough 1/</b>	<b>1,899</b>			
Anderson city	565			
Cantwell CDP *	144			
Ferry CDP	69			
Healy CDP	603			
Lignite CDP	122			
McKinley Park CDP	196			
Remainder of Denali	200			
<b>Dillingham Census Area</b>	<b>4,521</b>			
Aleknagik city *	176			
Clarks Point city *	66			
Dillingham city *	2,252		BRISTOL BAY CAMPUS	
Ekuk *	2			
Ekwok city *	124			
Koiliganek CDP *	194			
Manokotak city *	387			
New Stuyahok city *	452			
Portage Creek *	14			
Toglak city *	762			
Twin Hills CDP *	59			
Remainder of Dillingham c.a.	33			
<b>Fairbanks North Star Borough</b>	<b>82,278</b>			
<b>Eielson Reservation census</b>	<b>4,216</b>			
Eielson AFB CDP	4,203	EIELSON AFB UAA MILITARY EDUCATION SERVICES		
Remainder of Eielson Res	13			
<b>Fairbanks North Star census</b>	<b>78,062</b>			
College CDP	11,663		FAIRBANKS	
Ester CDP	236			
Fairbanks city	31,850	FORT WAINWRIGHT EDUCATION CENTER		
Fox CDP	321			x
Harding Lake CDP	29			
Moose Creek CDP	683			
North Pole city	1,631			
Pleasant Valley CDP	552			
Saicha CDP	373			
Two Rivers CDP	623			
Remainder of Fairbanks N Star csa	30,101			
<b>Haines Borough</b>	<b>2,421</b>			
Covenant Life CDP	54			
Haines city	1,429			
Chilkoot *	255			
Lutak CDP 2/	52			
Mosquito Lake CDP	92			
Remainder of Haines census area	794			
Excursion Inlet	18			
<b>Juneau Borough 3/</b>	<b>29,813</b>			

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UNIVERSITY OF ALASKA  
CAMPUSES AND EXTENDED SITE LOCATIONS  
IN RELATION TO 1997 POPULATION

		SOUTHEAS	ANCHORAGE	FAIRBANKS	
		EXTENDED CAMPUS	EXTENDED CAMPUS AND AFFILIATED SITES	RURAL CAMPUSES AND AFFILIATED SITES	OPERATIV EXTENSION DISTRICT OFFICES
Juneau city	29,813	JUNEAU			x
Kenai Peninsula Borough	48,098				
Kenai-Cook Inlet census sub	43,406				
Anchor Point CDP	1,157				
Clam Gulch CDP	100				
Cohoe CDP	598				
Cooper Landing CDP	271				
Crown Point CDP	88				
Fox River CDP	435				
Fritz Creek CDP	1,972				
Hallbut Cove CDP	78				
Happy Valley CDP	391				
Homer city	4,126		KACHEMAK BAY BRANCH KPC		
Hope CDP	152				
Jakolof Bay CDP (Red Mountain)	35				
Kachemak city	398				
Kalifornsky CDP	335				
Kasilof CDP	539				
Kenai city	6,971				
Moose Pass CDP	116				
Nikiski CDP	3,023				
Nikolaevsk CDP	474				
Ninilchik CDP 4/	655				
Primrose CDP	62				
Ridgeway CDP	2,364				
Salamatof CDP *	1,134				
Seldovia *	414				
Seldovia city 5/	285				
Soldotna city	4,092		KENAI PENINSULA COLLEGE		x
Sterling CDP	5,705				
Tyonek CDP *	151				
Remainder of Kenai-Cook Inlet csa	7,570				
Seward census subarea	4,692				
Grouse Creek Group *	624				
Nanwalek (English Bay C	177				
Port Graham CDP *	186				
Seward city	2,999				
Remainder of Seward csa	706				
Ketchikan Gateway Borough	14,599				
Ketchikan city	8,552	KETCHIKAN			x
Saxman city *	381				
Remainder of Ketchikan ca	5,666				
Kodiak Island Borough	13,547				
Kodiak Island census subarea	11,909				
Akhlok city *	101				
Chiniak CDP	74				
Karluk CDP *	48				
Kodiak city	6,749		KODIAK COLLEGE		x
Larsen Bay city *	120				
Old Harbor city *	301				
Ouzinkie city *	246				
Port Lions city *	239				
Womens Bay CDP	662				
Remainder of Kodiak Island csa	3,369				
Kodiak Station census subarea	1,638				
Kodiak Station CDP	1,638				
Lake and Peninsula Borough	1,780				

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**FIGURE A - 17**  
**UNIVERSITY OF ALASKA**  
**CAMPUSES AND EXTENDED SITE LOCATIONS**  
**IN RELATION TO 1997 POPULATION**

	SOUTHEAS	ANCHORAGE	FAIRBANKS
	EXTENDED CAMPUS	EXTENDED CAMPUS AND AFFILIATED SITES	RURAL CAMPUSES AND AFFILIATED SITES
			COOPERATIV EXTENSION DISTRICT OFFICES
Chignik city *	125		
Chignik Lagoon CDP *	74		
Chignik Lake CDP *	127		
Egegik city *	127		
Iglugig CDP *	46		
Iliamna CDP *	103		
Ivanof Bay CDP *	27		
Kokahonak CDP *	168		
Levelock CDP *	115		
Newhalen city *	177		
Nondalton city *	221		
Pedro Bay CDP *	37		
Perryville CDP *	107		
Pilot Point city *	79		
Port Alsworth CDP	67		
Port Helden city *	116		
Ugashik *	5		
Remainder of Lake and Penin ca	59		
<b>Matanuska-Susitna Borough</b>	<b>52,448</b>		
Alexander *	38		
Big Lake CDP	2,243		
Butte CDP	2,538		
Chase CDP	53		
Chickaloon CDP	205		
Houston city	994		
Knik CDP *	443		
Lazy Mountain CDP	1,043		
Meadow Lakes CDP	4,693		
Palmer city	3,946	MATANUSKA-SUSITNA COLLEGE	x
Skwentna CDP	77		
Sutton CDP	431		
Talkeetna CDP	347		
Trapper Creek CDP	306		
Wasilla city	4,917		
Willow CDP	408		
Remainder of Matanuska-Sus ca	29,766		
<b>Nome Census Area</b>	<b>9,178</b>		
Brevig Mission city *	261		
Council *	0		
Diomedea city (Inalik *)	174		
Eilm city *	291		
Gambell city *	653		
Golovin city *	152		
Koyuk city *	272		
Mary's Igloo *	0		
Nome city	3,595		
Port Clarence CDP	24		
St. Michael city *	341		
Savoonga city *	622		
Shaktolik city *	226		
Shishmaref city *	542		
Solomon *	0		
Stebbins city *	513		
Teller city *	265		
Ukivok *	0		
Unalakleet city *	803		
Wales city *	162		
White Mountain city *	193		
Remainder of Nome census a	89		
<b>North Slope Borough</b>	<b>7,263</b>		
<b>Barrow-Point Hope census subarea</b>	<b>6,871</b>		
Anaktuvuk Pass city *	301		
Atkasook city (Atkasook *)	235		
		NORTHWEST CAMPUS	x
		ALEUTIANS / PRIBILOF CENTER	

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FIGURE A - 17  
UNIVERSITY OF ALASKA  
CAMPUSES AND EXTENDED SITE LOCATIONS  
IN RELATION TO 1997 POPULATION

		SOUTHEAS	ANCHORAGE	FAIRBANKS	
		EXTENDED CAMPUS	EXTENDED CAMPUS AND AFFILIATED SITES	RURAL CAMPUSES AND AFFILIATED SITES	OPERATIV EXTENSION DISTRICT OFFICES
Barrow city *	4,380				
Nulqsut city *	435				
Point Hope city *	749				
Point Lay CDP *	207				
Wainwright city *	550				
Remainder of Barrow-Point Hope csa	14				
Prudhoe Bay-Kaktovik csa	392				
Deadhorse CDP	24				
Kaktovik city *	222				
Prudhoe Bay CDP	47				
Remainder of Prudhoe Bay-Kaktovik csa	99				
Northwest Arctic Borough	6,701				
Ambler city *	333				
Buckland city *	412				
Deering city *	158				
Kiana city *	415				
Kivalina city *	357				
Kobuk city *	89				
Kotzebue city *	2,885			CHUKCHI CAMPUS	
Noatak CDP *	401				
Noorvik city *	571				
Selawik city *	696				
Shungnak city *	252				
Remainder of Northwest Arctic ca	132				
Red Dog	41				
Candle	11				
Prince of Wales-Outer Ketchikan C	6,876				
Metlakatla Indian Community csa	1,595				
Annette CDP	47				
Metlakatla CDP	1,528				
Remainder of Metlakatla ind com csa	20				
Outer Ketchikan census subarea	182				
Hyder CDP	151				
Meyers Chuck CDP	28				
Remainder of Outer Ketchik csa	3				
Prince of Wales census subarea	5,099				
Coffman Cove city	246				
Craig city *	2,043				
Dora Bay CDP	0				
Edna Bay CDP	70				
Hollis CDP	175				
Hydaburg city *	398				
Kasaan city *	42				
Klawock city *	704				
Labouchere Bay CDP	0				
Long Island CDP	0				
Naukatl Bay CDP	136				
Point Baker CDP	57				
Polk Inlet CDP	36				
Port Alice CDP	19				
Port Protection CDP	58				
Thorne Bay city	625				
Whale Pass CDP	79				
Remainder of Prince of Wales csa	411				
Sitka Borough	8,733				
Sitka city	8,733	SITKA			x
Skagway-Hoonah-Angoon CA	3,753				

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**FIGURE A - 17**  
**UNIVERSITY OF ALASKA**  
**CAMPUSES AND EXTENDED SITE LOCATIONS**  
**IN RELATION TO 1997 POPULATION**

		SOUTHEAS	ANCHORAGE	FAIRBANKS
		EXTENDED CAMPUS	EXTENDED CAMPUS AND AFFILIATED SITES	RURAL CAMPUSES AND AFFILIATED SITES
				COOPERATIV EXTENSION DISTRICT OFFICES
<b>Angoon census subarea</b>	925			
<b>Angoon city *</b>	571			
<b>Cube Cove CDP</b>	137			
<b>Freshwater Bay CDP</b>	0			
<b>Hobart Bay CDP</b>	107			
<b>Tenakee Springs city *</b>	98			
<b>Remainder of Angoon csa</b>	12			
<b>Hoonah census subarea</b>	1,852			
<b>Elfin Cove CDP</b>	54			
<b>Game Creek CDP</b>	67			
<b>Gustavus CDP</b>	346			
<b>Hoonah city * 7/</b>	906			
<b>Pelican city *</b>	187			
<b>Whitestone Logging Camp CDP</b>	189			
<b>Remainder of Hoonah-Yakutat csa</b>	103			
<b>Klukwan census subarea</b>	160			
<b>Klukwan CDP (Chilkat *)</b>	160			
<b>Skagway census subarea</b>	816			
<b>Skagway city</b>	816			
<b>Southeast Fairbanks CA</b>	6,354			
<b>Alcan CDP</b>	16			
<b>Big Delta CDP</b>	508			
<b>Delta Junction city</b>	855		FORT GREELY EDUCATION CENTER	
<b>Dot Lake CDP</b>	80			
<b>Dot Lake *</b>	60			
<b>Dry Creek CDP</b>	110			
<b>Eagle city</b>	165			
<b>Eagle Village CDP (Eagle *)</b>	34			
<b>Fort Greely CDP</b>	740			
<b>Healy Lake CDP *</b>	60			
<b>Northway CDP</b>	119			
<b>Northway Junction CDP</b>	114			
<b>Northway Village CDP (Northway)</b>	110			
<b>Tanacross CDP *</b>	85			
<b>Tetlin CDP *</b>	68			
<b>Tok CDP *</b>	1,216			TOK CENTER
<b>Remainder of Southeast Fairbanks ca</b>	2,074			
<b>Chicken</b>	17			
<b>Valdez-Cordova Census Area</b>	10,431			
<b>Copper River census subarea</b>	3,182			
<b>Chistochina CDP *</b>	55			
<b>Chitina CDP *</b>	84			
<b>Copper Center CDP *</b>	536			
<b>Tazlina *</b>	297			
<b>Copperville CDP (Tazlina)</b>	196			
<b>Gakona * 8/</b>	86			
<b>Gakona CDP (* pt.)</b>	23			
<b>Glennallen CDP</b>	513		COPPER BASIN EXTENSION CENTER PWSCC	
<b>Gulkana CDP *</b>	95			
<b>Kenny Lake CDP</b>	500			
<b>McCarthy CDP</b>	28			
<b>Mendeltna CDP</b>	72			
<b>Mentasta Lake CDP *</b>	122			
<b>Paxson CDP</b>	34			
<b>Stana CDP *</b>	58			
<b>Tonsina CDP</b>	46			
<b>Remainder of Copper River csa</b>	656			
<b>Chisana</b>	13			

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FIGURE A - 17  
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CAMPUSES AND EXTENDED SITE LOCATIONS  
IN RELATION TO 1997 POPULATION

		SOUTHEAS	ANCHORAGE	FAIRBANKS	
		EXTENDED CAMPUS	EXTENDED CAMPUS AND AFFILIATED SITES	RURAL CAMPUSES AND AFFILIATED SITES	OPERATIV EXTENSION DISTRICT OFFICES
<b>Cordova census subarea</b>	2,496				
<b>Cordova city 9/</b>	2,467		CORDOVA EXTENSION CENTER, PWSCC		x
<b>Eyak CDP * (annexed 1993)</b>	166				
<b>Eyak CDP *</b>	0				
<b>Remainder of Cordova csa</b>	29				
<b>Prince William Sound csa</b>	4,753				
<b>Chenega CDP *</b>	91				
<b>Tatitlek CDP *</b>	99				
<b>Valdez city</b>	4,184		PRINCE WILLIAM SOUND COMMUNITY COLLEGE		
<b>Whittier city</b>	289				
<b>Remainder of Prince William S. csa</b>	90				
<b>Wade Hampton Census Area</b>	6,910				
<b>Alakanuk city *</b>	651				
<b>Bill Moore's *</b>	0				
<b>Chevak city *</b>	721				
<b>Chulloonawick *</b>	0				
<b>Emmonak city *</b>	798				
<b>Hamilton *</b>	0				
<b>Hooper Bay city *</b>	1,012				
<b>Kotlik city *</b>	543				
<b>Marshall city *</b>	318				
<b>Mountain Village city *</b>	738				
<b>Newtok city (pt.) * [Disolved 1997]</b>	0				
<b>Dhogamiut *</b>	0				
<b>Palmiut *</b>	0				
<b>Pilot Station city *</b>	547				
<b>Pitkas Point CDP *</b>	154				
<b>Russian Mission city *</b>	295				
<b>St. Mary's city</b>	504				
<b>Andreafsky *</b>	469				
<b>St. Mary's *</b>	35				
<b>Scammon Bay city *</b>	459				
<b>Sheldon Point city *</b>	150				
<b>Remainder of Wade Hampton ca</b>	20				
<b>Wrangell-Petersburg CA</b>	7,189				
<b>Petersburg census subarea</b>	4,558				
<b>Kake city *</b>	767				
<b>Kupreanof city</b>	24				
<b>Petersburg city</b>	3,432				
<b>Port Alexander city</b>	94				
<b>Rowan Bay CDP</b>	9				
<b>Remainder of Petersburg csa</b>	232				
<b>Wrangell census subarea</b>	2,631				
<b>St. John Harbor CDP</b>	0				
<b>Wrangell city</b>	2,543				
<b>Remainder of Wrangell csa</b>	88				
<b>Yakutat Borough 6/, 10/</b>	833				
<b>Yakutat city (* pt)</b>	833				
<b>Yukon-Koyukuk Census Area</b>	6,355				
<b>Koyukuk-Middle Yukon csa</b>	3,543				
<b>Allakaket city</b>	182				
<b>Alatna *</b>	33				
<b>Allakaket *</b>	148				
<b>Evansville *</b>	43				
<b>Bettles city</b>	23				
<b>Evansville CDP</b>	20				

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**FIGURE A - 17**  
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**CAMPUSES AND EXTENDED SITE LOCATIONS**  
**IN RELATION TO 1997 POPULATION**

	SOUTHEAS	ANCHORAGE	FAIRBANKS	
	EXTENDED CAMPUS	EXTENDED CAMPUS AND AFFILIATED SITES	RURAL CAMPUSES AND AFFILIATED SITES	COOPERATIV EXTENSION DISTRICT OFFICES
Galena city *	543			
Hughes city *	52			
Huslia city *	232			
Kaltag city *	245			
Koyukuk city *	113			
Lake Minchumina CDP *	45			
Manley Hot Springs CDP *	90			
Minto CDP *	244			
Nenana city *	356			
Nulato city *	365			
Rampart CDP *	54			
Ruby city *	189			
Stevens Village CDP *	99			
Tanana city *	299			
Wiseman *	24			
Remainder of Koyukuk-Middle Yukon cs	369			
Coldfoot	26			
<b>McGrath-Holy Cross csa</b>	<b>1,364</b>			
Anvik city *	83			
Grayling city *	186			
Holy Cross city *	260			
McGrath city *	456		McGRATH CENTER	x
Medfra *	0			
Nikolai city *	108			
Shageluk city *	145			
Takotna CDP *	63			
Telida *	5			
Remainder of McGrath-Holy Cross csa	58			
<b>Yukon Flats census subarea</b>	<b>1,448</b>			
Arctic Village CDP *	121			
Beaver CDP *	118			
Birch Creek CDP *	37			
Canyon Village *	0			
Central CDP	57			
Chalkyitsik CDP *	87			
Circle CDP *	83			
Circle Hot Springs Station	32			
Fort Yukon city *	575		YUKON FLATS CENTER	
Venetie CDP *	241			
Remainder of Yukon Flats csa	97			

MILITARY EDUCATION SERVICES SW DIRECTOR  
 WESTERN ALEUTIONS-ADAK

Interior - Aleutians Campus  
 Nenana Center  
 Tanana Valley Campus  
 Yukon-Koyukuk Center

SOURCE: Alaska Department of Labor, Research and Analysis, Demographics Unit

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**FIGURE A - 19**  
**REGIONAL EMPLOYMENT GROWTH PROJECTIONS**  
**FOR 2000 TO 2005**  
**ALASKA DEPARTMENT OF LABOR**

	2005						2000						CHANGE 2000 TO 2005						ANNUAL GROWTH RATE		
	STATE		URBAN		REST OF STATE		STATE		URBAN		REST OF STATE		STATE		URBAN		REST OF STATE		URBAN	REST OF STATE	
	ANCH	FRBK3	SOUTH EAST	SUM	ANCH	FRBK3	SOUTH EAST	SUM	ANCH	FRBK3	SOUTH EAST	SUM	ANCH	FRBK3	SOUTH EAST	SUM	ANCH	FRBK3	SOUTH EAST	URBAN	REST OF STATE
<b>ALL JOBS</b>	204,864	160,766	36,001	39,499	226,046	66,909	273,226	136,300	33,066	36,811	209,167	84,026	21,729	11,466	2,716	2,676	16,849	4,681		1.56%	1.49%
<b>GOODS PRODUCING</b>	46,200	16,806	3,697	6,062	27,146	16,116	41,984	16,262	3,274	6,530	26,066	16,686	3,276	1,294	323	452	2,049	1,227		1.58%	1.41%
ag forestry fisheries	1,901	692	131	381	1,404	487	1,616	777	112	321	1,210	408	263	115	19	60	194	96		3.02%	4.03%
mining	13,076	5,351	647	777	6,975	6,101	11,093	4,722	654	500	5,876	5,217	1,063	629	183	277	1,069	694		3.49%	3.18%
construction	14,415	8,019	2,053	1,776	11,848	2,587	13,489	7,514	1,922	1,659	11,094	2,395	928	506	131	118	764	172		1.32%	1.40%
manufacturing	15,989	2,325	566	4,028	6,919	6,950	15,785	2,278	568	4,051	6,916	6,869	84	48	(20)	3	3	81		0.01%	0.18%
<b>SERVICE PRODUCING</b>	177,277	109,536	22,186	20,073	146,776	31,502	160,183	93,987	19,977	18,105	131,979	26,204	17,004	9,639	2,199	1,998	13,798	3,296		2.01%	2.24%
trans-comm-pu	29,871	16,634	3,091	3,600	23,325	6,546	26,465	14,741	2,743	3,146	20,632	5,833	3,406	1,863	348	462	2,863	713		2.49%	2.33%
wholesale trade	9,064	6,633	908	575	6,116	668	9,943	6,533	883	566	7,992	851	141	100	15	6	124	17		0.31%	0.35%
retail trade	52,236	29,846	7,237	6,842	43,925	6,313	47,954	27,497	6,653	6,294	40,434	7,520	4,294	2,369	664	646	3,491	703		1.97%	2.03%
finance-ins-real est	11,455	7,436	1,006	1,325	9,767	1,688	11,090	7,190	974	1,282	9,448	1,634	375	248	32	43	321	54		0.97%	0.85%
services	74,630	42,987	9,924	7,731	60,642	13,968	65,741	37,946	8,714	6,615	53,475	12,266	8,869	6,041	1,210	916	7,167	1,722		2.55%	2.86%
<b>GOVERNMENT</b>	72,182	30,496	10,030	12,434	62,869	19,203	70,768	29,946	9,828	12,162	51,628	16,830	1,406	547	204	282	1,033	373		0.39%	0.39%
federal	17,500	10,150	2,600	1,925	14,875	2,625	17,444	10,118	2,791	1,919	14,828	2,616	56	32	9	6	47	9		0.06%	0.07%
state	21,000	8,900	4,200	5,480	18,560	2,440	20,335	8,616	4,067	5,287	17,972	2,383	696	282	133	173	668	77		0.05%	0.04%
local	33,682	11,445	3,030	5,049	19,524	14,138	32,978	11,212	2,968	4,948	19,126	13,850	696	253	62	103	368	286		0.41%	0.41%
Undesignated	253	137	6	20	165	68	302	163	9	24	186	106	(49)	(26)	(1)	(4)	(31)	(18)		-3.38%	-3.65%

**FIGURE A - 20**  
**EMPLOYMENT PROJECTIONS**  
**FOR 2005**  
**ALASKA DEPARTMENT OF LABOR**

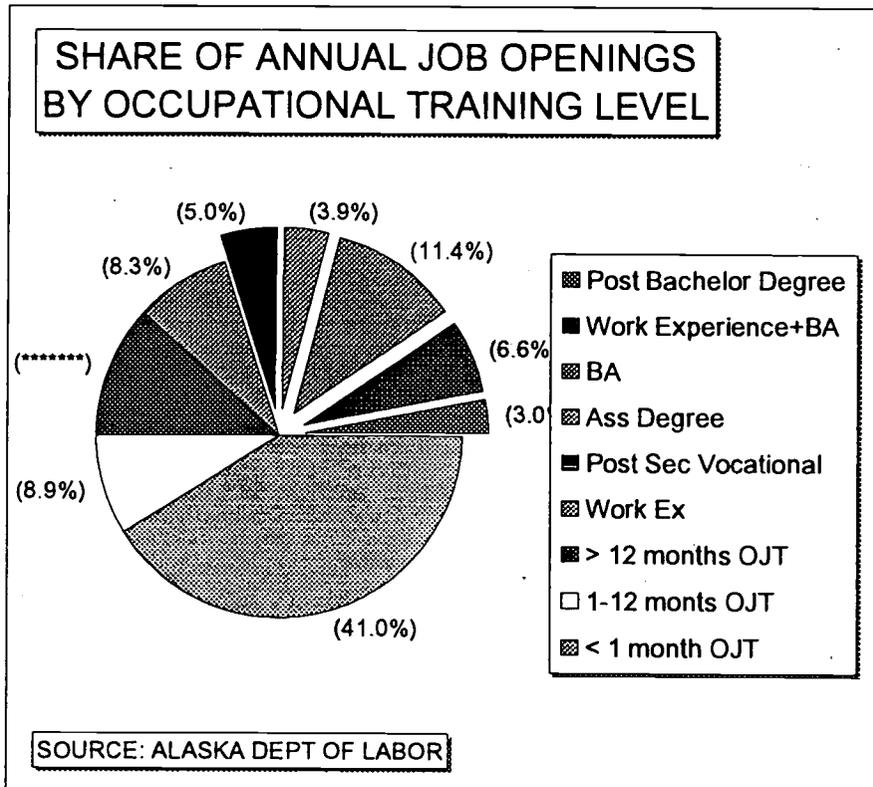
	STATE		URBAN		SOUTH EAST	SUM	REST OF STATE	DISTRIBUTION OF JOBS		SHARES		NON URBAN CONCENTRATION
	ANCH	FRBKS	FRBKS	FRBKS				URBAN	REST OF STATE	URBAN	REST OF STATE	
<b>ALL JOBS</b>	<b>284,964</b>	<b>150,755</b>	<b>35,801</b>	<b>39,489</b>	<b>226,045</b>	<b>68,909</b>	1.000	1.000	1.000	76.6%	23.4%	
<b>GOODS PRODUCING</b>	<b>45,280</b>	<b>18,586</b>	<b>3,597</b>	<b>6,982</b>	<b>27,145</b>	<b>18,115</b>	0.153	0.120	0.283	<b>60.0%</b>	<b>40.0%</b>	
ag forestry fisheries	1,901	892	131	381	1,404	497	0.006	0.006	0.007	73.9%	26.1%	x ag forestry fisheries
mining	13,076	5,351	847	777	6,975	6,101	0.044	0.031	0.089	53.3%	46.7%	x mining
construction	14,415	8,018	2,053	1,776	11,848	2,567	0.049	0.052	0.037	82.2%	17.8%	
manufacturing	15,869	2,325	566	4,028	6,919	8,950	0.054	0.031	0.130	43.6%	56.4%	x manufacturing
<b>SERVICE PRODUCING</b>	<b>177,277</b>	<b>103,538</b>	<b>22,188</b>	<b>20,073</b>	<b>145,775</b>	<b>31,502</b>	0.801	0.845	0.457	<b>82.2%</b>	<b>17.8%</b>	
trans-comm-pu	29,871	16,634	3,091	3,600	23,325	6,546	0.101	0.103	0.095	78.1%	21.9%	
wholesale trade	9,084	6,633	908	575	8,116	968	0.031	0.036	0.014	89.3%	10.7%	
retail trade	52,238	29,846	7,237	6,842	43,925	8,313	0.177	0.194	0.121	84.1%	15.9%	
finance-ins-real est	11,455	7,436	1,006	1,325	9,767	1,688	0.039	0.043	0.024	85.3%	14.7%	
services	74,630	42,987	9,924	7,731	60,642	13,988	0.253	0.258	0.203	81.3%	18.7%	
<b>GOVERNMENT</b>	<b>72,162</b>	<b>30,495</b>	<b>10,030</b>	<b>12,434</b>	<b>52,959</b>	<b>19,203</b>	0.245	0.234	0.279	<b>73.4%</b>	<b>26.6%</b>	
federal	17,500	10,150	2,800	1,925	14,875	2,625	0.059	0.066	0.038	85.0%	15.0%	
state	21,000	8,900	4,200	5,460	18,560	2,440	0.071	0.082	0.035	88.4%	11.6%	
local	33,662	11,445	3,030	5,049	19,524	14,138	0.114	0.086	0.205	58.0%	42.0%	x local
Unclassified	253	137	8	20	165	88	0.001	0.001	0.001	65.2%	34.8%	x unclassified



FIGURE A - 21  
REGIONAL OCCUPATIONAL DEMAND  
FOR 1995 TO 2000  
ALASKA DEPARTMENT OF LABOR

	ANNUAL OPENINGS						SHARE OF REGIONAL OPENINGS				REST OF STATE DEFICIT
	STATE	ANCH/MS	FRBKS	SE	SUM URBAN	REST OF STATE	STATE	URBAN	REST OF STATE		
Executives, Administrators, Managers, Inc. Support	929	586	133	124	843	86	9.3%	10.1%	5.1%	-0.49	
Professional Specialty	1290	760	186	170	1116	174	12.9%	13.4%	10.3%	-0.23	
Technicians and Related Support	466	272	48	39	359	107	4.6%	4.3%	6.4%	0.48	
Marketing and Sales	1482	925	217	174	1316	166	14.8%	15.8%	9.9%	-0.37	
Administrative Support, inc. Clerical	1466	848	215	174	1237	229	14.6%	14.8%	13.6%	-0.08	
Service	1920	1137	308	241	1686	234	19.2%	20.2%	13.9%	-0.31	
Ag. For., Fishing and Related	155	67	17	91	175	-20	1.5%	2.1%	-1.2%	-1.57	
Precision Production, Craft, and Repair	1100	526	146	117	789	311	11.0%	9.5%	18.5%	0.86	
Operators, Fabricators, Laborers	1218	459	154	210	823	395	12.1%	9.9%	23.5%	1.38	
	10026	5580	1424	1340	8344	1682	100.0%	100.0%	100.0%	0.00	

FIGURE A - 22



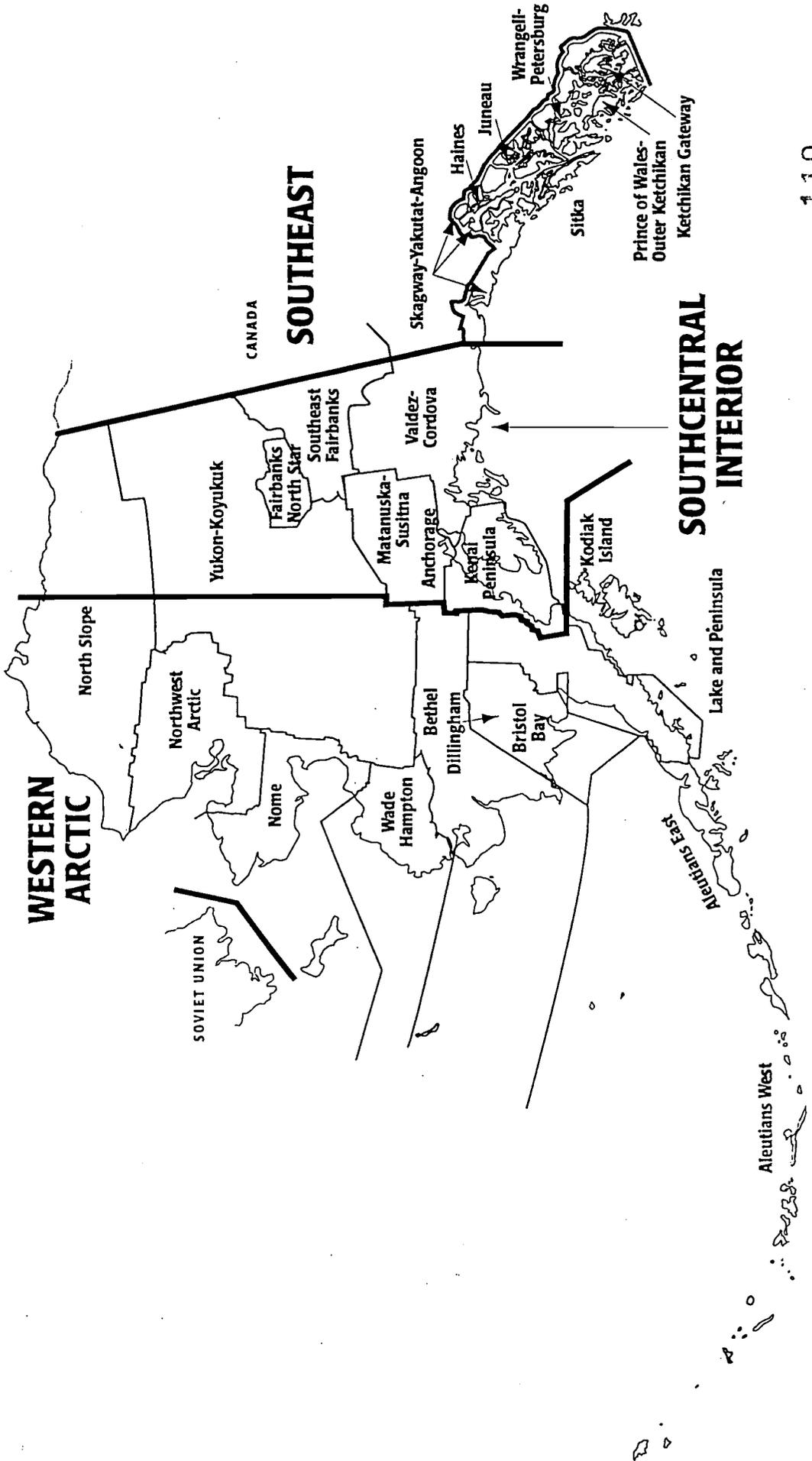
**FIGURE A - 23**  
**ANNUAL JOB OPENINGS**  
**REQUIRING POSTSECONDARY EDUCATION**

Occupations with more than 22 annual job openings		Educational Requirement
Sum	1829	
Physicians and Surgeons	45	first professional degree
Lawyers	29	first professional degree
Social Workers, Medical and Psychiatric	29	master's degree
General Managers and Top Executives	266	work+bachelor's
Financial Managers	75	work+bachelor's
Administrative Services Managers	40	work+bachelor's
Marketing, Advertising and PR Managers	36	work+bachelor's
Education Administrators	34	work+bachelor's
Engineering, Math/Natural Science Managers	29	work+bachelor's
Personnel, Training, Labor Related Managers	22	work+bachelor's
Teachers, Secondary School	110	bachelor's
Teachers, Primary School	90	bachelor's
Accountants and Auditors	69	bachelor's
Systems Analysts, EDP	56	bachelor's
Teachers, Special Education	50	bachelor's
Social Workers, except Medical/Psychiatric	44	bachelor's
Civil Engineers	37	bachelor's
Personnel, Training, Labor Relations Specialists	33	bachelor's
Teachers, Preschool and Kindergarten	31	bachelor's
Construction Managers	29	bachelor's
Geologists/Geophysicists/Oceanographers	29	bachelor's
Residential Counselors	27	bachelor's
Purchase Agents, except Wholesale/Retail/Farm	22	bachelor's
Dental Hygienists	129	associate
Veterinary Technicians	31	associate
Electrical/Electronic Engineering Technicians	24	associate
Secretaries ex. Legal and Medical	126	vocational training
Mechanics, Aircraft	78	vocational training
Hairdressers	77	vocational training
Travel Agents	47	vocational training
Welders and Cutters	35	vocational training
Nurses, Licensed Practical	25	vocational training
Sales Agents, Real Estate	25	vocational training

Source: Alaska Department of Labor, Alaska Industry-Occupation Outlook 1994-2005

**Figure A-24. Economic and Demographic Projections for Alaska:  
Statewide  
Urban and Rural Areas  
Regions**

# MAJOR ALASKA TRANSPORT REGIONS



## DOT REGIONS

### Census Areas

#### SOUTHEAST

Skagway-Yakutat-Angoon  
Haines  
Juneau  
Sitka  
Wrangell-Petersburg  
Prince of Wales-Outer Ketchikan

#### SOUTHCENTRAL INTERIOR

Anchorage  
Kenai Peninsula  
Valdez-Cordova  
Matanuska-Susitna Borough  
Fairbanks  
Southeast Fairbanks  
  
0.5 part of North Slope Borough  
0.62 part of Yukon-Koyukuk (including Denali)

#### WESTERN ARCTIC

Northwest Arctic Borough  
Nome  
Wade Hampton  
Bethel  
Dillingham (including Lake and Peninsula Borough)  
Bristol Bay Borough  
Aleutian Islands  
Kodiak  
  
0.5 part of North Slope Borough  
38 part of Yukon-Koyukuk

ECONOMIC AND DEMOGRAPHIC PROJECTIONS  
BASE CASE

ALASKA

	POPULATION	HOUSE- HOLDS	REAL PERSONAL INCOME	WAGE & SALARY EMPLOYMENT	
	THOUSAND	THOUSAND	1995 MILLION \$	THOUSAND	
1998	610.8	216.4	\$15,139	261.8	
2000	635.2	227.4	\$16,305	270.4	
2010	727.5	263.6	\$18,286	297.6	
2020	865.6	314.6	\$22,403	348.3	
2025	938.6	341.8	\$24,841	376.6	
GROWTH RATE					
98-00	1.0%	1.2%	1.9%	0.8%	
00-10	1.4%	1.5%	1.2%	1.0%	
10-20	1.8%	1.8%	2.1%	1.6%	
98-20	1.5%	1.6%	1.6%	1.2%	
TOTAL EMPLOYMENT					
	TOTAL EMPLOYMENT	BASIC	INFRA- STRUCTURE	SUPPORT	STATE / LOCAL GOVT
	THOUSAND	THOUSAND	THOUSAND	THOUSAND	THOUSAND
1998	306.7	86.7	37.7	128.5	53.3
2000	316.1	89.5	38.4	137.5	50.3
2010	345.9	97.7	41.9	152.7	53.6
2020	401.9	105.7	50.8	188.1	57.2
2025	433.3	110.2	54.8	209.2	59.0
GROWTH RATE					
98-00	0.8%	0.8%	0.4%	1.7%	-1.5%
00-10	0.9%	0.9%	0.9%	1.1%	0.6%
10-20	1.5%	0.8%	1.9%	2.1%	0.7%
98-20	1.1%	0.8%	1.3%	1.6%	0.3%

	POPULATION	HOUSE- HOLDS	REAL PERSONAL INCOME	WAGE & SALARY EMPLOYMENT
	THOUSAND	THOUSAND	1995 MILLION \$	THOUSAND
URBAN ALASKA				
1998	406.1	149.9	\$10,878	186.5
2020	564.7	213.5	\$16,095	248.8
98-20	1.4%	1.5%	1.6%	1.2%
RURAL ALASKA				
1998	204.7	66.4	\$4,261	75.3
2020	301.0	101.1	\$6,308	99.6
98-20	1.6%	1.8%	1.6%	1.2%

ECONOMIC AND DEMOGRAPHIC PROJECTIONS  
BY REGION  
BASE CASE

	POPULATION	HOUSE- HOLDS	REAL PERSONAL INCOME	WAGE & SALARY EMPLOYMENT
	THOUSAND	THOUSAND	1995 MILLION \$	THOUSAND
<b>SOUTHEAST - TOTAL</b>				
1996	74.1	27.3	\$2,083	37.1
2020	104	39.2	\$3,012	49.4
96-20	1.4%	1.5%	1.5%	1.2%
<b>SOUTHEAST - URBAN</b>				
1996	53.3	19.9	\$1,607	28.5
2020	76.4	29.2	\$2,352	38.5
96-20	1.5%	1.6%	1.6%	1.3%
<b>SOUTHEAST - RURAL</b>				
1996	20.8	7.3	\$475	8.6
2020	27.6	10	\$660	10.8
96-20	1.2%	1.3%	1.4%	1.0%
<b>SOUTHCENTRAL-INTERIOR - TOTAL</b>				
1996	457.5	167.4	\$11,445	186.8
2020	659.9	246.7	\$17,339	254.4
96-20	1.5%	1.6%	1.7%	1.3%
<b>SOUTHCENTRAL-INTERIOR - URBAN</b>				
1996	337.5	125.2	\$8,929	151.8
2020	469.9	178.3	\$13,315	203.2
96-20	1.4%	1.5%	1.7%	1.2%
<b>SOUTHCENTRAL-INTERIOR - RURAL</b>				
1996	119.9	42.2	\$2,516	35.1
2020	190.1	68.4	\$4,024	51.3
96-20	1.9%	2.0%	2.0%	1.6%
<b>WESTERN ARCTIC - TOTAL</b>				
1996	79.2	21.7	\$1,612	37.8
2020	101.7	30.2	\$2,052	44.5
96-20	1.0%	1.4%	1.0%	0.7%
<b>WESTERN ARCTIC - URBAN</b>				
1996	15.3	4.9	\$341	6.3
2020	18.4	6	\$428	7.1
96-20	0.8%	0.8%	1.0%	0.5%
<b>WESTERN ARCTIC - RURAL</b>				
1996	64	16.8	\$1,270	31.6
2020	83.2	22.8	\$1,624	37.5
96-20	1.1%	1.3%	1.0%	0.7%

**ECONOMIC AND DEMOGRAPHIC PROJECTIONS  
HIGH CASE**

**ALASKA**

	POPULATION	HOUSE- HOLDS	REAL PERSONAL INCOME	WAGE & SALARY EMPLOYMENT	
	THOUSAND	THOUSAND	1995 MILLION \$	THOUSAND	
1998	610.8	216.4	\$15,139	261.8	
2000	651.2	232.7	\$16,989	280.4	
2010	902.6	324.1	\$23,893	379.9	
2020	1149.7	417.3	\$32,673	480	
2025	1310.6	478.1	\$39,011	548.5	
<b>GROWTH RATE</b>					
98-00	1.6%	1.8%	2.9%	1.7%	
00-10	3.3%	3.4%	3.5%	3.1%	
10-20	2.4%	2.6%	3.2%	2.4%	
98-20	2.7%	2.8%	3.3%	2.6%	
	TOTAL EMPLOYMENT	BASIC	INFRA- STRUCTURE	SUPPORT	STATE / LOCAL GOVT
	THOUSAND	THOUSAND	THOUSAND	THOUSAND	THOUSAND
1998	306.7	86.7	37.7	128.5	53.3
2000	327.5	94.5	39.6	143.1	50.3
2010	439.7	113.8	53.1	203.5	69.2
2020	554.1	127.6	70	278.8	77.6
2025	632.7	137.4	80.4	334.2	80.7
<b>GROWTH RATE</b>					
98-00	1.7%	2.2%	1.2%	2.7%	-1.4%
00-10	3.0%	1.9%	3.0%	3.6%	3.2%
10-20	2.3%	1.2%	2.8%	3.2%	1.2%
98-20	2.5%	1.6%	2.6%	3.3%	1.6%

	POPULATION	HOUSE- HOLDS	REAL PERSONAL INCOME	WAGE & SALARY EMPLOYMENT
	THOUSAND	THOUSAND	1995 MILLION \$	THOUSAND
<b>URBAN ALASKA</b>				
1998	406.1	149.9	\$10,878	186.5
2020	757.8	285.5	\$23,648	343.3
98-20	2.6%	2.7%	3.3%	2.6%
<b>RURAL ALASKA</b>				
1998	204.7	66.4	\$4,261	75.3
2020	392.0	131.8	\$9,025	136.7
98-20	2.7%	2.9%	3.2%	2.5%

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**ECONOMIC AND DEMOGRAPHIC PROJECTIONS  
BY REGION  
HIGH CASE**

	POPULATION	HOUSE- HOLDS	REAL PERSONAL INCOME	WAGE & SALARY EMPLOYMENT
	THOUSAND	THOUSAND	1995 MILLION \$	THOUSAND
<b>SOUTHEAST - TOTAL</b>				
1996	74.1	27.3	\$2,083	37.1
2020	133.2	50	\$4,295	66.1
96-20	2.5%	2.6%	3.1%	2.4%
<b>SOUTHEAST - URBAN</b>				
1996	53.3	19.9	\$1,607	28.5
2020	100.3	38.1	\$3,414	52.6
96-20	2.7%	2.7%	3.2%	2.6%
<b>SOUTHEAST - RURAL</b>				
1996	20.8	7.3	\$475	8.6
2020	33	11.9	\$880	13.6
96-20	1.9%	2.1%	2.6%	1.9%
<b>SOUTHCENTRAL-INTERIOR - TOTAL</b>				
1996	457.5	167.4	\$11,445	186.8
2020	893.3	332.4	\$25,629	354.7
96-20	2.8%	2.9%	3.4%	2.7%
<b>SOUTHCENTRAL-INTERIOR - URBAN</b>				
1996	337.5	125.2	\$8,929	151.8
2020	636	240.4	\$19,676	282.4
96-20	2.7%	2.8%	3.3%	2.6%
<b>SOUTHCENTRAL-INTERIOR - RURAL</b>				
1996	119.9	42.2	\$2,516	35.1
2020	257.2	92	\$5,952	72.4
96-20	3.2%	3.3%	3.7%	3.1%
<b>WESTERN ARCTIC - TOTAL</b>				
1996	79.2	21.7	\$1,612	37.8
2020	123.2	35	\$2,750	59.1
96-20	1.9%	2.0%	2.3%	1.9%
<b>WESTERN ARCTIC - URBAN</b>				
1996	15.3	4.9	\$341	6.3
2020	21.3	7	\$557	8.4
96-20	1.4%	1.5%	2.1%	1.2%
<b>WESTERN ARCTIC - RURAL</b>				
1996	64	16.8	\$1,270	31.6
2020	101.8	28	\$2,193	50.8
96-20	2.0%	2.2%	2.3%	2.0%

**ECONOMIC AND DEMOGRAPHIC PROJECTIONS  
LOW CASE**

**ALASKA**

	POPULATION	HOUSE- HOLDS	REAL PERSONAL INCOME	WAGE & SALARY EMPLOYMENT
	THOUSAND	THOUSAND	1995 MILLION \$	THOUSAND
1998	610.8	216.4	\$15,139	261.8
2000	608.7	218.6	\$15,454	257.3
2010	667.4	242.8	\$16,278	271.4
2020	738.5	269.2	\$18,104	293.8
2025	761.9	277.9	\$18,650	295.8
<b>GROWTH RATE</b>				
96-00	-0.1%	0.3%	0.5%	-0.4%
00-10	0.9%	1.1%	0.5%	0.5%
10-20	1.0%	1.0%	1.1%	0.8%
96-20	0.8%	0.9%	0.7%	0.5%

	TOTAL EMPLOYMENT	BASIC	INFRA- STRUCTURE	SUPPORT	STATE / LOCAL GOVT
	THOUSAND	THOUSAND	THOUSAND	THOUSAND	THOUSAND
1998	306.7	86.7	37.7	128.5	53.3
2000	299.4	84.6	38.1	127.9	50.8
2010	312.5	85.6	38.4	135.5	53.0
2020	335.5	86.5	43.7	150.7	54.6
2025	337.1	87.3	43.7	155.4	50.6
<b>GROWTH RATE</b>					
96-00	-0.6%	-0.6%	-1.1%	-0.1%	-1.2%
00-10	0.4%	0.1%	0.6%	0.6%	0.4%
10-20	0.7%	0.1%	1.3%	1.1%	0.3%
96-20	0.4%	-0.0%	0.6%	0.7%	0.1%

	POPULATION	HOUSE- HOLDS	REAL PERSONAL INCOME	WAGE & SALARY EMPLOYMENT
	THOUSAND	THOUSAND	1995 MILLION \$	THOUSAND
<b>URBAN ALASKA</b>				
1998	406.1	149.9	\$10,878	186.5
2020	477	181.3	\$12,888	209.2
96-20	0.7%	0.8%	0.7%	0.5%
<b>RURAL ALASKA</b>				
1998	204.7	66.4	\$4,261	75.3
2020	261.5	87.9	\$5,216	84.6
96-20	1.0%	1.2%	0.8%	0.5%

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**ECONOMIC AND DEMOGRAPHIC PROJECTIONS  
BY REGION  
LOW CASE**

	POPULATION THOUSAND	HOUSE- HOLDS THOUSAND	REAL PERSONAL INCOME 1995 MILLION \$	WAGE & SALARY EMPLOYMENT THOUSAND
<b>SOUTHEAST - TOTAL</b>				
1996	74.1	27.3	\$2,083	37.1
2020	88	33.4	\$2,426	41.2
96-20	0.7%	0.8%	0.6%	0.4%
<b>SOUTHEAST - URBAN</b>				
1996	53.3	19.9	\$1,607	28.5
2020	64.8	25	\$1,906	32.3
96-20	0.8%	1.0%	0.7%	0.5%
<b>SOUTHEAST - RURAL</b>				
1996	20.8	7.3	\$475	8.6
2020	23.2	8.4	\$520	8.9
96-20	0.5%	0.6%	0.4%	0.1%
<b>SOUTHCENTRAL-INTERIOR - TOTAL</b>				
1996	457.5	167.4	\$11,445	186.8
2020	559.3	210.2	\$13,943	214.6
96-20	0.8%	1.0%	0.8%	0.6%
<b>SOUTHCENTRAL-INTERIOR - URBAN</b>				
1996	337.5	125.2	\$8,929	151.8
2020	396.9	151.4	\$10,648	171.1
96-20	0.7%	0.8%	0.7%	0.5%
<b>SOUTHCENTRAL-INTERIOR - RURAL</b>				
1996	119.9	42.2	\$2,516	35.1
2020	162.4	58.8	\$3,295	43.5
96-20	1.3%	1.4%	1.1%	0.9%
<b>WESTERN ARCTIC - TOTAL</b>				
1996	79.2	21.7	\$1,612	37.8
2020	91.1	25.6	\$1,735	37.9
96-20	0.6%	0.7%	0.3%	0.0%
<b>WESTERN ARCTIC - URBAN</b>				
1996	15.3	4.9	\$341	6.3
2020	15.2	5	\$334	5.8
96-20	-0.0%	0.1%	-0.1%	-0.3%
<b>WESTERN ARCTIC - RURAL</b>				
1996	64	16.8	\$1,270	31.6
2020	75.9	20.7	\$1,401	32.2
96-20	0.7%	0.9%	0.4%	0.1%

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YUKON/KUSKOKWIM DELTA REGION, ALASKA  
 BASE CASE PROJECTION  
 EMPLOYMENT (THOUSANDS)

	TOTAL	--- COMPONENTS OF TOTAL ---			RESIDENCE ADJUSTED TOTAL	WAGE AND SALARY
		BASIC	SUPPORT	GOVERNMENT		
1996	8.48	1.54	3.13	3.81	8.22	7.77
1997	8.37	1.56	3.15	3.66	8.11	7.66
1998	8.35	1.57	3.19	3.59	8.08	7.64
1999	8.44	1.59	3.25	3.60	8.17	7.73
2000	8.53	1.61	3.30	3.62	8.25	7.81
2001	8.53	1.62	3.27	3.64	8.25	7.82
2002	8.59	1.64	3.28	3.67	8.30	7.87
2003	8.61	1.65	3.28	3.68	8.32	7.90
2004	8.66	1.67	3.29	3.70	8.36	7.95
2005	8.69	1.68	3.29	3.71	8.39	7.98
2006	8.77	1.70	3.34	3.73	8.45	8.05
2007	8.83	1.72	3.37	3.74	8.51	8.11
2008	8.93	1.74	3.42	3.77	8.60	8.21
2009	9.00	1.75	3.45	3.80	8.67	8.29
2010	9.11	1.77	3.51	3.83	8.76	8.39
2011	9.19	1.79	3.54	3.86	8.84	8.47
2012	9.29	1.81	3.60	3.88	8.93	8.57
2013	9.39	1.82	3.66	3.91	9.03	8.67
2014	9.49	1.84	3.73	3.93	9.12	8.77
2015	9.60	1.85	3.78	3.97	9.23	8.88
2016	9.68	1.87	3.80	4.00	9.29	8.95
2017	9.78	1.89	3.87	4.02	9.39	9.06
2018	9.87	1.91	3.93	4.03	9.47	9.14
2019	9.97	1.93	3.99	4.05	9.56	9.24
2020	10.08	1.95	4.06	4.07	9.66	9.35
2021	10.18	1.97	4.12	4.10	9.76	9.45
2022	10.26	1.99	4.15	4.12	9.83	9.53
2023	10.35	2.01	4.20	4.15	9.91	9.62
2024	10.45	2.03	4.25	4.17	10.01	9.72
2025	10.56	2.05	4.31	4.20	10.10	9.82

SOURCE: ISER MAP MODEL SIMULATION CE96BR CREATED JULY 1997.

- TOTAL (MCEN.YK)
- BASIC (BCEN.YK)
- SUPPORT (SCEN.YK)
- GOVERNMENT (GCEN.YK)
- RESIDENCE ADJUSTED (MRCEN.YK)
- WAGE AND SALARY (M97CE.YK)

YUKON/KUSKOKWIM DELTA REGION, ALASKA  
 BASE CASE PROJECTION  
 POPULATION AND HOUSEHOLDS (THOUSANDS)

	POPULATION	ACTIVE DUTY MILITARY	NATIVE	CIVILIAN, NON-NATIVE	HOUSEHOLDS
1996	24.33	0.01	20.78	3.54	6.77
1997	24.43	0.01	21.19	3.23	6.83
1998	24.41	0.01	21.62	2.79	6.84
1999	24.60	0.01	22.05	2.55	6.90
2000	25.00	0.01	22.48	2.51	7.02
2001	25.46	0.01	22.93	2.52	7.15
2002	25.91	0.01	23.39	2.51	7.29
2003	26.26	0.01	23.86	2.40	7.40
2004	26.64	0.01	24.34	2.29	7.51
2005	26.98	0.01	24.84	2.14	7.62
2006	27.32	0.01	25.35	1.96	7.72
2007	27.65	0.01	25.87	1.77	7.81
2008	28.00	0.01	26.41	1.58	7.91
2009	28.38	0.01	26.96	1.42	8.02
2010	28.78	0.01	27.53	1.25	8.13
2011	29.21	0.01	28.11	1.09	8.25
2012	29.64	0.01	28.72	0.91	8.36
2013	30.07	0.01	29.33	0.73	8.48
2014	30.50	0.01	29.97	0.52	8.60
2015	30.95	0.01	30.63	0.32	8.73
2016	31.43	0.01	31.30	0.12	8.86
2017	31.87	0.01	31.99	-0.12	8.98
2018	32.28	0.01	32.70	-0.43	9.09
2019	32.67	0.01	33.43	-0.77	9.20
2020	33.02	0.01	34.18	-1.16	9.30
2021	33.38	0.01	34.95	-1.58	9.40
2022	33.76	0.01	35.75	-2.00	9.50
2023	34.13	0.01	36.56	-2.44	9.61
2024	34.49	0.01	37.40	-2.92	9.71
2025	34.83	0.01	38.27	-3.44	9.80

SOURCE: ISER MAP MODEL SIMULATION CE96BR CREATED JULY 1997.

POPULATION (PCEN.YK)

ACTIVE DUTY MILITARY (GML.YK)

NATIVE (PNAT.YK)

CIVILIAN NON-NATIVE (PCNN.YK)

HOUSEHOLDS (HHCEN.YK)

**SOUTHWEST ALASKA  
BASE CASE PROJECTION  
EMPLOYMENT (THOUSANDS)**

	TOTAL	--- COMPONENTS OF TOTAL ---			RESIDENCE	WAGE AND SALARY
		BASIC	SUPPORT	GOVERNMENT	ADJUSTED TOTAL	
1996	20.86	11.29	5.01	4.57	17.84	14.92
1997	20.74	11.32	5.04	4.37	17.71	14.80
1998	20.66	11.31	5.04	4.32	17.63	14.72
1999	20.76	11.34	5.09	4.33	17.72	14.81
2000	20.86	11.38	5.13	4.35	17.81	14.90
2001	20.83	11.41	5.06	4.36	17.78	14.87
2002	20.85	11.45	5.01	4.39	17.78	14.88
2003	20.90	11.48	5.03	4.39	17.83	14.93
2004	20.97	11.51	5.04	4.41	17.88	14.99
2005	21.01	11.55	5.03	4.42	17.92	15.03
2006	21.09	11.59	5.07	4.43	17.99	15.10
2007	21.18	11.63	5.11	4.44	18.07	15.19
2008	21.31	11.67	5.17	4.47	18.18	15.30
2009	21.42	11.71	5.22	4.49	18.28	15.40
2010	21.54	11.75	5.28	4.51	18.40	15.51
2011	21.65	11.78	5.33	4.54	18.50	15.60
2012	21.76	11.82	5.39	4.56	18.60	15.70
2013	21.89	11.85	5.46	4.58	18.72	15.81
2014	22.02	11.89	5.53	4.59	18.84	15.93
2015	22.14	11.92	5.59	4.62	18.95	16.03
2016	22.24	11.96	5.62	4.65	19.04	16.12
2017	22.35	12.00	5.68	4.66	19.14	16.21
2018	22.46	12.04	5.74	4.68	19.24	16.31
2019	22.58	12.08	5.81	4.69	19.35	16.42
2020	22.72	12.12	5.89	4.71	19.48	16.54
2021	22.86	12.16	5.97	4.73	19.61	16.66
2022	22.97	12.21	6.01	4.75	19.70	16.75
2023	23.08	12.25	6.06	4.77	19.80	16.85
2024	23.21	12.30	6.13	4.79	19.93	16.96
2025	23.35	12.34	6.20	4.81	20.05	17.08

SOURCE: ISER MAP MODEL SIMULATION CE96BR CREATED JULY 1997.

TOTAL (MCEN.SW)

BASIC (BCEN.SW)

SUPPORT (SCEN.SW)

GOVERNMENT (GCEN.SW)

RESIDENCE ADJUSTED (MRCEN.SW)

WAGE AND SALARY (M97CE.SW)

SOUTHWEST ALASKA  
 BASE CASE PROJECTION  
 POPULATION AND HOUSEHOLDS (THOUSANDS)

	POPULATION	ACTIVE DUTY MILITARY	NATIVE	CIVILIAN, NON-NATIVE	HOUSEHOLDS
1996	29.55	1.27	10.58	17.69	8.85
1997	29.49	1.27	10.79	17.43	8.86
1998	29.36	1.27	11.00	17.09	8.84
1999	29.57	1.27	11.22	17.08	8.92
2000	29.98	1.27	11.44	17.27	9.06
2001	30.29	1.27	11.67	17.35	9.18
2002	30.51	1.27	11.90	17.34	9.27
2003	30.75	1.27	12.13	17.35	9.37
2004	31.01	1.27	12.38	17.37	9.46
2005	31.25	1.27	12.62	17.35	9.56
2006	31.46	1.27	12.88	17.31	9.63
2007	31.72	1.27	13.14	17.30	9.73
2008	31.97	1.27	13.41	17.29	9.81
2009	32.29	1.27	13.69	17.33	9.92
2010	32.58	1.27	13.98	17.33	10.02
2011	32.90	1.27	14.27	17.35	10.12
2012	33.18	1.27	14.57	17.34	10.22
2013	33.48	1.27	14.89	17.33	10.32
2014	33.78	1.27	15.21	17.30	10.42
2015	34.09	1.27	15.53	17.28	10.52
2016	34.42	1.27	15.87	17.28	10.63
2017	34.68	1.27	16.22	17.19	10.72
2018	34.94	1.27	16.58	17.09	10.80
2019	35.20	1.27	16.94	16.98	10.89
2020	35.45	1.27	17.32	16.86	10.97
2021	35.72	1.27	17.71	16.74	11.06
2022	36.00	1.27	18.11	16.62	11.16
2023	36.26	1.27	18.52	16.47	11.25
2024	36.52	1.27	18.94	16.30	11.33
2025	36.76	1.27	19.38	16.12	11.41

SOURCE: ISER MAP MODEL SIMULATION CE96BR CREATED JULY 1997.

POPULATION (PCEN.SW)  
 ACTIVE DUTY MILITARY (GML.SW)  
 NATIVE (PNAT.SW)  
 CIVILIAN NON-NATIVE (PCNN.SW)  
 HOUSEHOLDS (HHCEN.SW)

COPPER RIVER REGION, ALASKA  
 BASE CASE PROJECTION  
 EMPLOYMENT (THOUSANDS)

	TOTAL	--- COMPONENTS OF TOTAL ---			RESIDENCE	WAGE AND SALARY
		BASIC	SUPPORT	GOVERNMENT	ADJUSTED TOTAL	
1996	5.62	1.95	2.16	1.52	5.39	4.94
1997	5.49	1.89	2.15	1.45	5.27	4.81
1998	5.47	1.89	2.15	1.43	5.24	4.78
1999	5.53	1.91	2.18	1.43	5.30	4.83
2000	5.59	1.93	2.22	1.44	5.37	4.89
2001	5.62	1.96	2.21	1.45	5.39	4.92
2002	5.66	1.98	2.22	1.46	5.42	4.95
2003	5.70	2.00	2.24	1.46	5.46	4.99
2004	5.73	2.01	2.25	1.47	5.49	5.02
2005	5.77	2.03	2.26	1.47	5.52	5.05
2006	5.82	2.06	2.29	1.48	5.58	5.11
2007	5.88	2.08	2.32	1.48	5.64	5.16
2008	5.96	2.10	2.37	1.49	5.72	5.23
2009	6.04	2.13	2.41	1.50	5.79	5.30
2010	6.12	2.15	2.46	1.51	5.87	5.38
2011	6.20	2.17	2.50	1.53	5.94	5.45
2012	6.28	2.19	2.55	1.54	6.02	5.52
2013	6.36	2.21	2.61	1.55	6.10	5.59
2014	6.45	2.23	2.66	1.55	6.19	5.67
2015	6.53	2.25	2.72	1.57	6.27	5.75
2016	6.60	2.27	2.75	1.58	6.34	5.81
2017	6.69	2.30	2.80	1.59	6.42	5.89
2018	6.77	2.32	2.86	1.59	6.49	5.96
2019	6.86	2.34	2.91	1.60	6.58	6.04
2020	6.95	2.37	2.98	1.61	6.67	6.13
2021	7.05	2.39	3.04	1.61	6.77	6.21
2022	7.13	2.42	3.09	1.62	6.84	6.29
2023	7.22	2.44	3.14	1.63	6.93	6.36
2024	7.32	2.47	3.20	1.64	7.02	6.45
2025	7.42	2.50	3.27	1.65	7.12	6.54

SOURCE: ISER MAP MODEL SIMULATION CE96BR CREATED JULY 1997.

- TOTAL (MCEN.CR)
- BASIC (BCEN.CR)
- SUPPORT (SCEN.CR)
- GOVERNMENT (GCEN.CR)
- RESIDENCE ADJUSTED (MRCEN.CR)
- WAGE AND SALARY (M97CE.CR)

COPPER RIVER REGION, ALASKA  
 BASE CASE PROJECTION  
 POPULATION AND HOUSEHOLDS (THOUSANDS)

	POPULATION	ACTIVE DUTY MILITARY	NATIVE	CIVILIAN, NON-NATIVE	HOUSEHOLDS
1996	11.59	0.09	1.50	10.00	4.16
1997	11.39	0.09	1.54	9.76	4.10
1998	11.33	0.09	1.58	9.66	4.09
1999	11.46	0.09	1.62	9.75	4.14
2000	11.69	0.09	1.66	9.94	4.23
2001	11.88	0.09	1.70	10.10	4.31
2002	12.04	0.09	1.74	10.21	4.38
2003	12.18	0.09	1.78	10.31	4.44
2004	12.31	0.09	1.83	10.40	4.50
2005	12.44	0.09	1.87	10.48	4.55
2006	12.59	0.09	1.92	10.58	4.61
2007	12.76	0.09	1.97	10.71	4.68
2006	12.96	0.09	2.01	10.85	4.75
2009	13.17	0.09	2.07	11.01	4.83
2010	13.39	0.09	2.12	11.18	4.91
2011	13.61	0.09	2.17	11.35	5.00
2012	13.83	0.09	2.23	11.51	5.08
2013	14.05	0.09	2.28	11.68	5.16
2014	14.27	0.09	2.34	11.84	5.24
2015	14.50	0.09	2.40	12.01	5.33
2016	14.72	0.09	2.46	12.17	5.41
2017	14.93	0.09	2.52	12.32	5.49
2018	15.14	0.09	2.59	12.46	5.57
2019	15.36	0.09	2.66	12.61	5.65
2020	15.58	0.09	2.73	12.76	5.73
2021	15.81	0.09	2.80	12.92	5.82
2022	16.03	0.09	2.87	13.07	5.90
2023	16.26	0.09	2.94	13.22	5.99
2024	16.48	0.09	3.02	13.37	6.07
2025	16.71	0.09	3.10	13.52	6.16

SOURCE: ISER MAP MODEL SIMULATION CE96BR CREATED JULY 1997.

POPULATION (PCEN.CR)

ACTIVE DUTY MILITARY (GML.CR)

NATIVE (PNAT.CR)

CIVILIAN NON-NATIVE (PCNN.CR)

HOUSEHOLDS (HHCEN.CR)

SOUTHEAST ALASKA  
 BASE CASE PROJECTION  
 EMPLOYMENT (THOUSANDS)

	TOTAL	--- COMPONENTS OF TOTAL ---			RESIDENCE	WAGE AND SALARY
		BASIC	SUPPORT	GOVERNMENT	ADJUSTED TOTAL	
1996	41.88	8.94	19.60	13.35	41.10	37.11
1997	41.84	9.22	19.71	12.90	41.05	37.07
1998	42.14	9.53	19.91	12.69	41.34	37.36
1999	43.11	9.92	20.47	12.72	42.27	38.29
2000	43.76	10.04	20.93	12.80	42.92	38.91
2001	43.97	10.23	20.89	12.85	43.11	39.10
2002	44.22	10.33	20.93	12.96	43.35	39.34
2003	44.52	10.44	21.12	12.97	43.64	39.63
2004	44.88	10.55	21.27	13.06	43.99	39.96
2005	45.13	10.66	21.37	13.09	44.23	40.20
2006	45.60	10.78	21.68	13.14	44.68	40.64
2007	46.07	10.90	21.99	13.18	45.15	41.08
2008	46.72	11.02	22.42	13.27	45.78	41.68
2009	47.30	11.15	22.80	13.35	46.36	42.23
2010	47.99	11.29	23.26	13.44	47.03	42.86
2011	48.60	11.39	23.67	13.54	47.63	43.43
2012	49.26	11.50	24.13	13.63	48.27	44.03
2013	49.98	11.61	24.65	13.71	48.99	44.70
2014	50.72	11.73	25.22	13.77	49.71	45.38
2015	51.45	11.84	25.73	13.88	50.44	46.06
2016	52.04	11.96	26.09	13.99	51.02	46.61
2017	52.73	12.08	26.60	14.04	51.70	47.25
2018	53.42	12.21	27.11	14.10	52.37	47.88
2019	54.17	12.34	27.67	14.16	53.11	48.57
2020	55.02	12.47	28.33	14.22	53.95	49.36
2021	55.86	12.61	28.96	14.29	54.78	50.14
2022	56.55	12.75	29.43	14.37	55.45	50.77
2023	57.27	12.89	29.93	14.45	56.16	51.43
2024	58.11	13.04	30.55	14.53	56.99	52.21
2025	58.97	13.19	31.18	14.61	57.83	53.00

SOURCE: ISER MAP MODEL SIMULATION CE96BR CREATED JULY 1997.

TOTAL (MCEN.SE)

BASIC (BCEN.SE)

SUPPORT (SCEN.SE)

GOVERNMENT (GCEN.SE)

RESIDENCE ADJUSTED (MRCEN.SE)

WAGE AND SALARY (M97CE.SE)

SOUTHEAST ALASKA  
 BASE CASE PROJECTION  
 POPULATION AND HOUSEHOLDS (THOUSANDS)

	POPULATION	ACTIVE DUTY MILITARY	NATIVE	CIVILIAN, NON-NATIVE	HOUSEHOLDS
1996	74.10	0.71	13.41	59.98	27.27
1997	74.02	0.71	13.67	59.64	27.35
1998	74.34	0.71	13.94	59.69	27.56
1999	75.93	0.71	14.21	61.01	28.20
2000	77.63	0.71	14.49	62.43	28.87
2001	78.88	0.71	14.77	63.40	29.40
2002	79.83	0.71	15.06	64.06	29.81
2003	80.77	0.71	15.35	64.71	30.21
2004	81.79	0.71	15.65	65.43	30.64
2005	82.70	0.71	15.97	66.02	31.02
2006	83.70	0.71	16.29	66.71	31.43
2007	84.83	0.71	16.61	67.51	31.87
2008	86.10	0.71	16.95	68.44	32.36
2009	87.49	0.71	17.30	69.49	32.90
2010	88.92	0.71	17.66	70.56	33.44
2011	90.38	0.71	18.02	71.65	34.00
2012	91.82	0.71	18.40	72.70	34.54
2013	93.34	0.71	18.79	73.83	35.11
2014	94.89	0.71	19.19	74.99	35.70
2015	96.49	0.71	19.60	76.17	36.30
2016	98.04	0.71	20.03	77.30	36.89
2017	99.49	0.71	20.46	78.32	37.45
2018	100.95	0.71	20.91	79.34	38.00
2019	102.46	0.71	21.37	80.38	38.57
2020	104.04	0.71	21.84	81.49	39.17
2021	105.66	0.71	22.32	82.63	39.78
2022	107.22	0.71	22.82	83.69	40.38
2023	108.77	0.71	23.34	84.72	40.97
2024	110.37	0.71	23.86	85.79	41.58
2025	111.98	0.71	24.41	86.86	42.20

SOURCE: ISER MAP MODEL SIMULATION CE96BR CREATED JULY 1997.

POPULATION (PCEN.SE)

ACTIVE DUTY MILITARY (GML.SE)

NATIVE (PNAT.SE)

CIVILIAN NON-NATIVE (PCNN.SE)

HOUSEHOLDS (HHCEN.SE)

## **Appendix B. Survey Questionnaires**

**Distance Delivery Education  
Fall 97 Instructor Survey**

**Studyno \_\_\_\_\_ «Studyno»**

A1. Instructor\_«Instructor»

Phone # \_\_\_\_\_

Hello, my name is \_\_\_\_\_ and I work for the Institute of Social and Economic Research at UAA. We've been asked by President Komisar to look at future market demand for distance education supplied by the university. As part of that study, we're talking to professors of this semester's distance education offerings about their courses, their students, and their views on the future for distance delivery education. The survey will take about 10 minutes, and your answers will only be used in combination with other instructors. Is this a good time for you to talk?

IF NO: When would be best for you? \_\_\_\_\_

IF YES, CONTINUE

The information we've been given says that in Fall '97, you're teaching:

Course 1	_____	mode	_____	time	_____
Course 2	_____	mode	_____	time	_____
Course 3	_____	mode	_____	time	_____
Course 4	_____	mode	_____	time	_____
Course 5	_____	mode	_____	time	_____
Course 6	_____	mode	_____	time	_____

Is this correct? <<IF NOT, OR IF DATA IS MISSING, GET CORRECT INFO>>

First, we have several questions specific to each course. For <Course 1>

**GO TO COURSE DATA SHEET**

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C1. Other than the courses currently available to your students, what classes do you think might be offered through distance delivery?

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C2. What opportunities do you see for expanding distance delivery education, both in your field and in other fields?

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C3. Do you know of any businesses, non-profit or governmental groups that might be interested in delivery of courses for their training needs? <<IF YES>> Do you know of someone we could talk to in that organization (NAME AND PHONE)?

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COURSE INFORMATION SHEET

B1. Instructor Name: \_\_\_\_\_ B2. Course Title: \_\_\_\_\_

B3. How many students are enrolled in <<COURSE>>? \_\_\_\_\_  
Of these, how many are regular students, that is, registered as working towards a degree or certificate? \_\_\_\_\_ And how many take only an occasional course? \_\_\_\_\_

B4. Why did your students take this course through distance delivery, rather than in traditional classroom settings? PROBE: ANY OTHER REASONS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

B5. Compared to students in on-site classes, how would you rate the quality of your students in <<COURSE>>?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

B6. How do students find out about <<COURSE>>? PROBE: ANY OTHER WAYS?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
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B9. Overall, how would you rate the quality of instruction you're able to provide in <<COURSE>>?

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B10. What are the best things about <<COURSE>>?

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B11. The worst?

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B12. Do you think there will be continuing demand for distance delivery of <<COURSE>> in the future?

Why? OR Why Not?

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B13. What improvements or changes would you like to see in <<COURSE>>?

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B14. To what extent do you think distance delivery of <<COURSE>> substitutes for on site delivery, rather than adding to total demand?

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IF R HAD MORE THAN ONE COURSE, GO ON TO THE NEXT COURSE SHEET.

IF THIS IS R'S ONLY OR LAST COURSE:

Now we have just a few last questions on distance delivery education in general.

RETURN TO MAIN QUESTIONNAIRE, Q. C1..

## Draft Distance Education Survey for Employers

Call Record:

Time

Result

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Hello, my name is \_\_\_\_\_ and I work for the Institute of Social and Economic Research at University of Alaska Anchorage. We've been asked by President Komisar to look at future market demand for distance delivered education supplied by the university. As part of that study, we're talking to businesses and other organizations that might be like to see specific education and training opportunities available locally to their current or potential employees or clients. Are you familiar with your organization's personnel needs?

IF YES, CONTINUE

IF NO: Can you tell me who in your organization I could talk to?

Name \_\_\_\_\_ Phone \_\_\_\_\_

ONCE YOU HAVE A KNOWLEDGABLE PERSON, CONTINUE

The survey will take about 15 minutes, and your answers will only be used in combination with others. Is this a good time for you to talk?

IF NO: When would be best for you? \_\_\_\_\_

IF YES, CONTINUE

By *Distance Delivered Education*, we mean education or training where the instructor is not in the same room with the students to deliver the course material. Classes are typically conducted by mail; television, audio or video conference, over the internet, or some combination of these methods. Students may choose distance delivered classes for many reasons, including the convenience of taking classes at home, because they live too far from a college campus, because the times fit their schedule better, or other reasons.

I'm going to ask you about job openings your organization typically has, and about what kinds of personnel needs you expect to have in the future. For each job that you list, I'll have several questions.

**Section A. Organization's Current Needs:**

First, what job openings does your organization typically have that require some special education or training, beyond high school level?

Job Number	Job Title
1	A1.
2	A2.
3	A3.
4	A4.
5	A5.

FOR EACH JOB, FILL OUT THE JOB MATRIX FOR CURRENT NEEDS:

- About how many openings per year occur for this job?
- How difficult is it to fill the openings with qualified people?
- What education or training does this position require? Include both training needed to start the position and continuing education needed by those in the position.
- Where can potential employees get the education or training they need for this position?
- Do you believe there is currently a demand for locally delivered education or training for this position?

Job Number	A__ a. Openings per year	A__ b. Difficult to fill?
A__ c. Training Required:		
A__ d. Where is Training Available?		
A__ e. Unmet Local Need for Training?		
Job Number	A__ a. Openings per year	A__ b. Difficult to fill?
A__ c. Training Required:		
A__ d. Where is Training Available?		
A__ e. Unmet Local Need for Training?		
Job Number	A__ a. Openings per year	A__ b. Difficult to fill?
A__ c. Training Required:		
A__ d. Where is Training Available?		
A__ e. Unmet Local Need for Training?		

**Section B. Organization's Future Needs:**

Looking down the road 5 to 10 years, what other jobs that will require specialized training do you expect to see your organization?

Job Number	Job Title
1	B1.
2	B2.
3	B3.
4	B4.
5	B5.

FOR EACH JOB, FILL OUT THE JOB MATRIX FOR FUTURE NEEDS:

- About how many openings per year do you expect for this job?
- How difficult do you expect it will be to fill the openings with qualified people?
- What education or training will this position require? Include both training needed to start the position and continuing education needed by those in the position.
- Where will potential employees get the education or training they need for this position?
- Is this training available locally now? Do you think it will be in the future?

Job Title	B__a. Openings / yr	B__b. Difficult to fill?
B__c. Training Required:		
B__d. Where is Training Available?		
B__e. Unmet Local Need for Training?		
Job Title	B__a. Openings / yr	B__b. Difficult to fill?
B__c. Training Required:		
B__d. Where is Training Available?		
B__e. Unmet Local Need for Training?		
Job Title	B__a. Openings / yr	B__b. Difficult to fill?
B__c. Training Required:		
B__d. Where is Training Available?		
B__e. Unmet Local Need for Training?		

### **Section C. University Classes Offered Currently**

C1. How well does the university meet local needs for training and education?

C2. How much of what the university provides is through distance delivery?

C3. How well do other organizations meet local education and training needs? How much of that is on-site, and how much distance delivered?

C4. What is your sense of the quality of distance delivered offerings?

C5. Are such offerings widely valued?

C6. Do you know of any distance delivered offerings that have been particularly effective?

C7. How about the opposite -- any that have been particularly ineffective?

C8. Do you know of instances in which distance delivered offerings from the university duplicate locally available opportunities?

## **Section D. Future University Offerings**

The University is currently trying to decide the future of its distance delivery capacity.

D1. Beyond those we may have already talked about, what needs for education or training in your region are not currently being met?

D2. Are there particular groups of individuals whose educational needs are not being met? Who are they? Would they likely take advantage of distance delivered education opportunities if these were available?

D3. What is your sense of the potential for attracting more students to distance delivered educational opportunities?

F4 Are there areas of education or training you believe lend themselves particularly well to distance delivery?

COURSE INFORMATION SHEET

B1. Instructor Name: \_\_\_\_\_ B2. Course Title: \_\_\_\_\_

B3. How many students are enrolled in <<COURSE>>? \_\_\_\_\_  
Of these, how many are regular students, that is, registered as working towards a degree or certificate? \_\_\_\_\_ And how many take only an occasional course? \_\_\_\_\_

B4. Why did your students take this course through distance delivery, rather than in traditional classroom settings? PROBE: ANY OTHER REASONS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

B5. Compared to students in on-site classes, how would you rate the quality of your students in <<COURSE>>?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

B6. How do students find out about <<COURSE>>?  
PROBE: ANY OTHER WAYS?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



B9. Overall, how would you rate the quality of instruction you're able to provide in <<COURSE>>?

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B10. What are the best things about <<COURSE>>?

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B11. The worst?

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B12. Do you think there will be continuing demand for distance delivery of <<COURSE>> in the future?  
Why? OR Why Not?

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B13. What improvements or changes would you like to see in <<COURSE>>?

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B14. To what extent do you think distance delivery of <<COURSE>> substitutes for on site delivery, rather than adding to total demand?

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IF R HAD MORE THAN ONE COURSE, GO ON TO THE NEXT COURSE SHEET.

IF THIS IS R'S ONLY OR LAST COURSE:

Now we have just a few last questions on distance delivery education in general.

RETURN TO MAIN QUESTIONNAIRE, Q. C1..



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From: Christina Rowsome <crowsome@inet.ed.gov>  
Subject: JC 990 195  
Cc: ckozerac@ucla.edu  
Bcc: cweller@inet.ed.gov  
Attached:

Hi Elaine and Gwyer:

I just want to give you the heads up on JC 990 195, "Current and Future Demand for Distance Education, Executive Summary and Full Report."

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