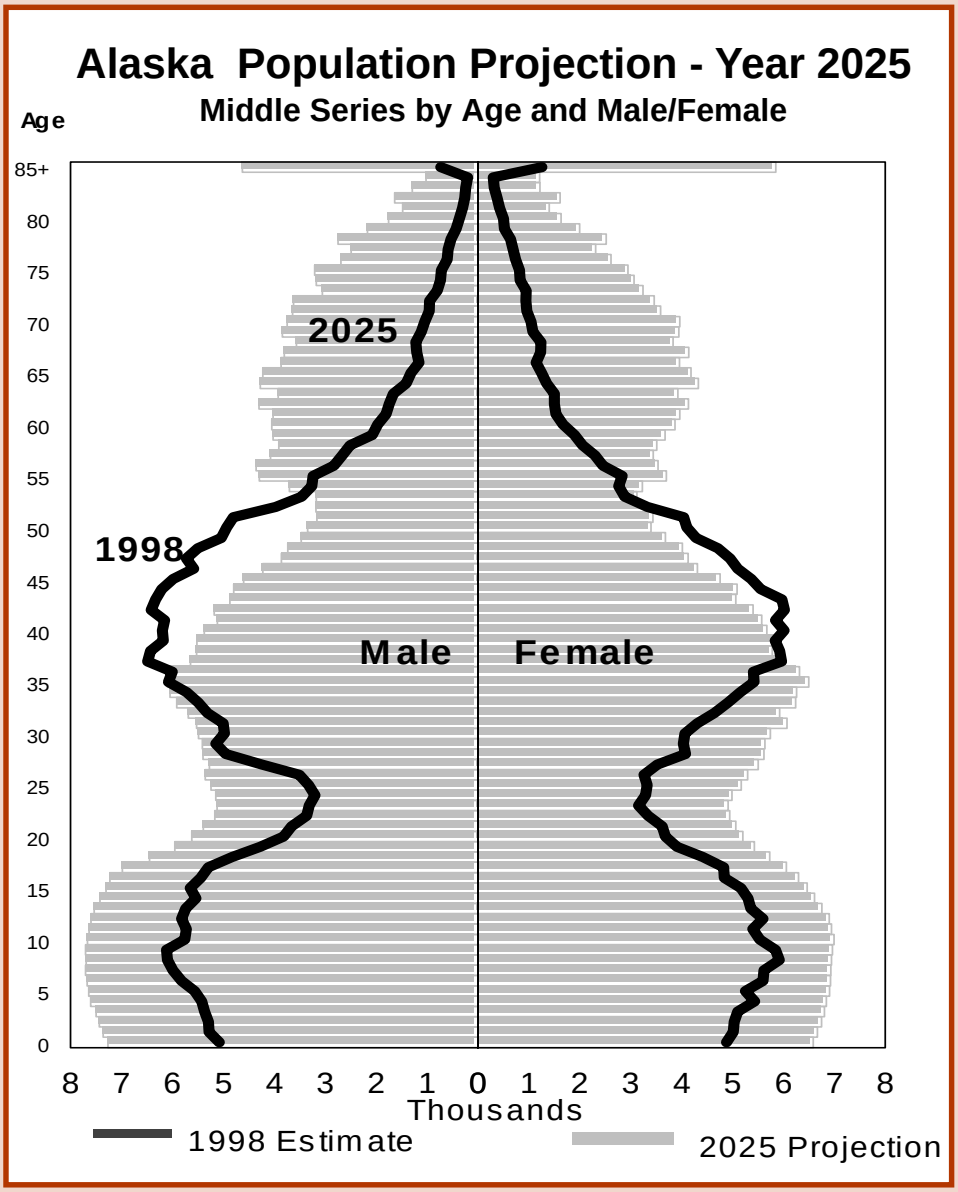
ALASKA ECONOMIC
SEPTEMBER–OCTOBER 1998
TRENDS

Population Projections Probe the Future



Gold, oil, and two wars have all helped build the State of Alaska, its population and its economy. State Demographer Greg Williams has analyzed past trends in births, deaths and migration, and incorporated variables such as fertility to build population projections up to year 2025.

Inside:
New Hires Up Summer of 97
Alaska Employment Scene: The Job Market is Hot

Tony Knowles, Governor of Alaska **Alaska Department of Labor**

September-October 1998
Volume 18
Number 9
ISSN 0160-3345

ALASKA ECONOMIC TRENDS

http://www.labor.state.ak.us/research/research.htm

New!

Alaska Economic Trends is a monthly publication dealing with a variety of economic-related issues in the state.

Alaska Economic Trends is funded by the Employment Security Division and published by the Alaska Department of Labor, P.O. Box 21149, Juneau, Alaska 99802-1149. For more information, call the AKDOL Publications Office at (907) 465-6019 or email the authors.

Editor's Note: The views presented in guest articles in *Alaska Economic Trends* do not necessarily reflect the views of the Alaska Department of Labor.

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This publication was funded by the Department of Labor's Employment Security Division, and produced at a cost of $.82 per copy.

Printed and distributed by Assets, Inc., a vocational training center and employment program

Correction:

The Trends 100, Alaska Economic Trends, August 1998
Exhibit 2:
77 Assets, Inc. 332 Anchorage Residential Employment Services
Exhibit 8: Firms Owned or Operated by Alaska Native Corporations:
Yukon-Kuskokwim Health Corp.: corrected annual avg. employment: 689
Exhibit 9: Nonprofit Organizations Employment
Corrected annual average employment:
Yukon-Kuskokwim Health Corp.: 689
Valley Hospital 427
Norton Sound Health Corp. 412

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Population Projections

by
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Introduction

The discovery of gold, World War II, the Korean War, construction of the Trans-Alaska Oil Pipeline, the decision to invest oil royalties and the fall of oil prices all have contributed positively or negatively to the Alaska economy and influenced the development of the present population of the state. When making projections, it is critical to observe historic demographic trends, while keeping in mind that past behavior is no guarantee of future results.

Population projections differ from population estimates. Population estimates use current actual statistics on population trends, such as births, deaths and migration. Population projections, on the other hand, use historical trends and relationships and a series of assumptions about how those trends will change to model the future.

The key to making projections is knowing the trends in the main variables affecting population growth or decline. Some variables, like mortality trends, are very stable and change slowly. By contrast, fertility is more variable, and migration even more pronouncedly so. Although fertility is moderately stable, it is influenced by economic and social trends and policy. It has not been uncommon for trends in fertility to change substantially in a period as short as five to10 years.

Most unstable of all variables is migration. Migration trends can change direction quickly in a place like Alaska, depending on the prosperity of the state's economy relative to the prosperity of states that provide or receive most of Alaska's incoming and outgoing migrants. In addition, economic and social policy and unique historical events nationwide and around the world can drastically influence Alaska's resource-based economy.

Migration and, to a lesser extent, fertility are related to jobs. However, while the main reasons that people migrate are to take jobs, attend school or to follow family members, the relationships that link economics and migration are very murky. Timing is not always immediate or consistent. Some people who come to Alaska searching for short-term work leave quickly after the work is gone. Others take any job or live off the land in order to remain. Many people come to Alaska for reasons not associated with work and hope they can find or create work once they get here.

Population projections start with an analysis of historical information about behaviors that affect population growth under the assumption that patterns exist that can be observed, measured and modeled. Even if the future doesn't mirror the past, knowing what the future would look like

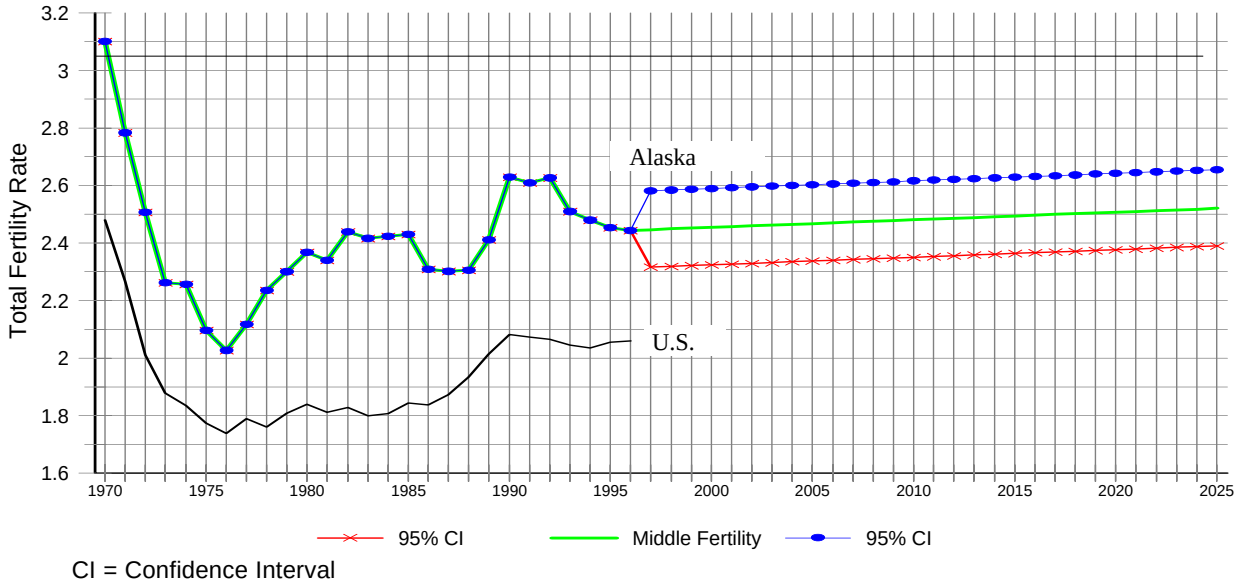
Life Expectancy at Birth 1
Alaska and U.S., 1960-1990

	Total	Male	Female
Alaska			
1960	67.5	...	...
1970	69.3	66.1	74.0
1980	72.1	68.8	76.5
1990	74.8	71.6	78.6
United States			
1960	69.7	66.6	73.1
1970	70.9	67.1	74.8
1980	73.7	70.0	77.5
1990	75.4	71.8	78.8

Sources: National Center for Health Statistics, and Alaska Department of Labor, Research and Analysis Section, Demographics Unit

2 Fertility

From 1970 and Projected to 2025, Alaska and



CI = Confidence Interval

Source: Alaska Department of Labor, Research and Analysis Section, Demographics Unit

based upon past trends helps to understand its new direction. Statisticians rely on the odds favoring certain events and not others, but know there is always a chance that something completely unpredictable or an extraneous force will dramatically change the future. Clearly, the farther into the future one goes the less reliable projections become. Twenty-five-year projections are not meant to be good for 25 years, any more than today's five-day weather forecast need not be updated for five days. Events must be constantly monitored for the influences that are beyond our ability to track and predict.

Population projections and the economy

Demographers and economists have been in the projections business for a long time. Demographers tend to be interested in the factors that cause population change. As a by-product of their population projections, demographers sometimes generate projections of the labor force or households. Economists tend to be interested in how the elements of the overall economy will cause employment to grow or decline based on consumption, production and the supply and demand for labor. As a by-product, economists, in turn, sometimes generate projections of population. Attempts to build joint economic/demographic models, however, have met with only limited success. None has been so successful as to become the standard for projections in both fields. The projections of population presented here rely primarily on a demographic approach. However, these projections are compared with forecasted job growth to see if the assumptions about migration are reasonable.

These projections are cohort component projections using gross migration flows. A cohort is a group of people who share a common event, typically the same year of birth. The birth cohort of 1946, for example, was the leading edge of the baby boom. A component projection means that factors such as death, birth and migration are independently modeled, as are their interactions, to produce the final projection.

Gross migration refers to a separate consideration of trends and patterns of in-migration and out-migration. The trends observed here are developed from several sources of indicator data: applications for the Alaska Permanent Fund Dividend, change in residence address from federal income tax returns, birth and death statistics, and employment statistics.

Projections usually are prepared for low, middle and high growth scenarios. This article presents

the middle, or most likely, series projections. The middle series is accompanied by 95% confidence intervals to define the confidence that is placed in the projection for each future year. By observing population-related events from year to year, demographers can measure the average and the historical distribution of these events. This information is used to establish a higher and lower range on either side of the historical average. There is 95% confidence that future data will fall within this range.

Assumptions about variables affecting population change:

Mortality

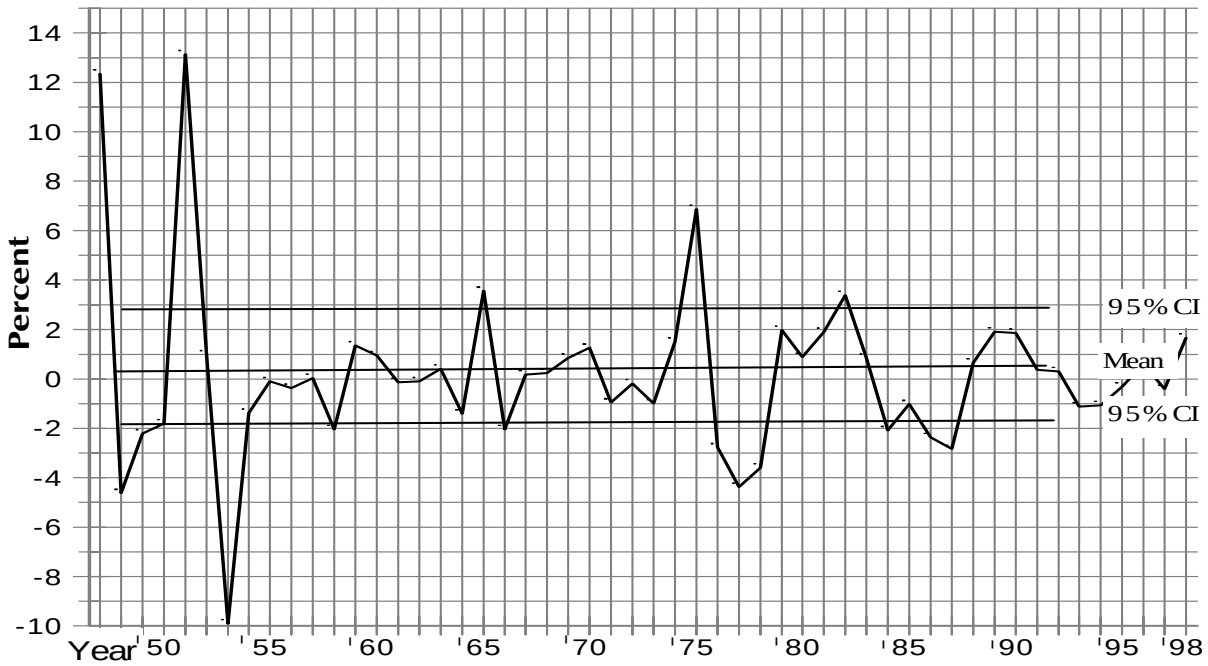
The average life expectancy for Alaskans in 1960 was 2.2 years shorter than life expectancy nationwide. By 1990, however, the gap between Alaska and U.S. life expectancy had closed to only 0.6 years. (See Exhibit 1.) It is assumed that Alaska's life expectancy will continue improving at the same pace as that of the nation. Changes in life expectancy, barring a catastrophic fatal disease, generally have a limited impact on projections. Between 1980 and 1990, Alaska and national life expectancies have converged, particularly for men. In 1989-91, life expectancy was 71.6 years for Alaska men and 78.6 for Alaska women.

Fertility

Fertility is trended through the use of age/race-specific fertility rates. These sum to the total fertility rates, which can be interpreted as completed family size if women were to continue having children throughout their child-bearing years at the current age-specific patterns. The 95% confidence intervals around the current fertility rates are based on the average and plus or minus 1.96 standard deviations for the birth rates measured during the last 25 years. That is, there is

Migration 3

Net Migration as Percent of Population, 1945-98



CI= Confidence Interval

Source: Alaska Department of Labor, Research and Analysis Section, Demographics Unit

95% confidence that, based on the historical average fertility behavior, the future average will fall within the range established by the confidence limits. Alaska's fertility is not assumed to converge toward the national average, nor is it likely to follow the national pattern into the future. (See Exhibit 2.) Fertility historically has had the greatest impact on Alaska's population growth. It continues to have the largest impact on projected population growth. Changes in marriage and fertility behaviors will, therefore, have the largest single impact on the projected future population of the state.

Migration

While events such as construction of the Trans-Alaska Oil Pipeline have caused the influx or exodus of large numbers of people, Alaska's booms and busts have been relatively short lived, usually lasting from one to four years. Over the past 50 years, the rate of growth or decline in population attributable to migration has exceeded plus or minus 4.0% of Alaska's population in only a few years. (See Exhibit 3.) When those few extreme years are excluded, the average of all annual change due to migration since World War II has been almost zero (-0.08%). The resulting 95% confidence interval is plus or minus 2.66%.

As Alaska's population gets larger, the number of migrants inevitably grows smaller relative to the base population. The result is a gradual decline in the influence of migration on annual population change. The impact of sudden surges or declines due to migration is best addressed in the alternative high and low projections series not presented here. The most significant observation concerning a boom and bust cycle is that, unless projections are made from the top of a boom cycle or the bottom of a bust cycle, the net effect of these movements is almost nil for overall historical population growth trends.

Influences of policy

This middle series population projection is intended to reflect the sum of the recent "good" and "bad" economic history of Alaska. No assumptions are made about the effects of future policy changes, the future volume of oil pumped or its price, environmental policy concerning the Arctic National Wildlife Refuge, logging in the Tongass National Forest, the federal management of wildlife and fisheries or cutbacks in the military. While the impacts of these events can be quantified in terms of jobs, the population impacts of these events are often much more difficult to quantify. Further, different kinds of events have different impacts.

The closing of military bases has immediate effects, both direct and indirect. Military movements of personnel are relatively sudden events, removing people from communities and precluding births that would otherwise have occurred in a community. This makes for a sharper change in population than would be produced by other civilian migration. The closure of Adak Naval Base in the Aleutians, the reduction of Army personnel at Anchorage's Ft. Richardson and the reorganization of Air Force personnel are excellent 1990s examples. While these projections do not assume any further reductions in overall military, it is possible that Alaska could lose the remaining personnel at Ft. Richardson in a coming round of base closures that could occur early in the next century.

Population size and growth

Beginning with a 1998 population of just over 621,400, the middle series forecast for year 2000 population is almost 635,400. (See Exhibit 5.) Under these assumptions, the population in the succeeding years is projected to be about 670,400 in 2005; 708,900 in 2010; 750,900 in 2015; 793,200 in 2020 and 833,000 in 2025. The implied annual growth rate ranges from about 1.0 to 1.5 percent, most of which is from natural increase rather than migration. Through the projections period to 2025, births would increase from about 9,800 to almost 14,000 annually, and deaths would increase from nearly 2,800 to almost 6,000 annually.

Populations and Components of Change 1946-98

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July 1 To June 30	End of Period Population	Population Change	Average Annual Rate of Change	Components Of Change			
				Births	Deaths	Natural Increase	Net Migrants
1945-46	103,000			2,050	1,220	830	
1946-47	117,000	14,000	12.73	2,490	1,200	1,290	12,710
1947-48	126,000	9,000	7.41	2,890	1,180	1,710	7,290
1948-49	132,600	6,600	5.10	3,300	1,190	2,110	4,490
1949-50	137,100	4,500	3.34	3,620	1,220	2,400	2,100
1950-51	160,000	22,900	15.42	4,110	1,310	2,800	20,100
1951-52	185,500	25,500	14.76	5,130	1,310	3,820	21,680
1952-53	193,800	8,300	4.38	6,270	1,280	4,990	3,310
1953-54	200,100	6,300	3.20	6,910	1,240	5,670	630
1954-55	206,500	6,400	3.15	7,190	1,200	5,990	410
1955-56	212,400	5,900	2.82	7,480	1,220	6,260	-360
1956-57	218,600	6,200	2.88	7,730	1,240	6,490	-290
1957-58	220,100	1,500	0.68	7,450	1,200	6,250	-4,750
1958-59	224,000	3,900	1.76	6,830	1,170	5,660	-1,760
1959-60	230,400	6,400	2.82	7,290	1,250	6,040	360
1960-61	236,700	6,300	2.70	7,560	1,300	6,260	40
1961-62	242,800	6,100	2.54	7,610	1,290	6,320	-220
1962-63	249,900	7,100	2.88	7,670	1,320	6,350	750
1963-64	253,200	3,300	1.31	7,480	1,380	6,100	-2,800
1964-65	265,200	12,000	4.63	7,170	1,390	5,780	6,220
1965-66	271,500	6,300	2.35	6,810	1,320	5,490	810
1966-67	277,900	6,400	2.33	6,410	1,300	5,110	1,290
1967-68	284,900	7,000	2.49	6,350	1,317	5,033	1,967
1968-69	294,600	9,700	3.35	6,670	1,330	5,340	4,360
1969-70	308,500	13,900	4.61	7,230	1,370	5,860	8,040
1970-71	319,600	11,100	3.53	7,437	1,444	5,993	5,107
1971-72	329,800	10,200	3.14	7,129	1,462	5,667	4,533
1972-73	336,400	6,600	1.98	6,781	1,468	5,313	1,287
1973-74	348,100	11,700	3.42	6,847	1,467	5,380	6,320
1974-75	384,100	36,000	9.83	7,275	1,497	5,778	30,222
1975-76	409,800	25,700	6.47	7,694	1,570	6,124	19,576
1976-77	418,000	8,200	1.98	8,175	1,612	6,563	1,637
1977-78	411,600	-6,400	-1.54	8,668	1,654	7,014	-13,414
1978-79	413,700	2,100	0.51	9,043	1,654	7,389	-5,289
1979-80	419,800	6,100	1.46	9,400	1,671	7,729	-1,629
1980-81	434,300	14,500	3.40	9,912	1,738	8,174	6,326
1981-82	464,300	30,000	6.68	10,783	1,775	9,008	20,992
1982-83	499,100	34,800	7.22	11,728	1,862	9,866	24,934
1983-84	524,000	24,900	4.87	12,319	1,945	10,374	14,526
1984-85	543,900	19,900	3.73	12,727	2,033	10,694	9,206
1985-86	550,700	6,800	1.24	12,556	2,110	10,446	-3,646
1986-87	541,300	-9,400	-1.72	11,941	2,096	9,845	-19,245
1987-88	535,000	-6,300	-1.17	11,483	2,073	9,410	-15,710
1988-89	538,900	3,900	0.73	11,468	2,088	9,380	-5,480
1989-90	553,124	14,224	2.61	11,776	2,142	9,634	4,590
1990-91	569,300	16,176	2.88	11,794	2,218	9,576	6,600
1991-92	587,129	17,829	3.08	11,734	2,205	9,529	8,300
1992-93	597,669	10,540	1.78	11,331	2,472	8,859	1,681
1993-94	601,555	3,886	0.65	10,970	2,397	8,573	-4,687
1994-95	602,897	1,342	0.22	10,437	2,473	7,964	-6,622
1995-96	607,314	4,417	0.73	10,077	2,662	7,415	-2,998
1996-97	609,873	2,559	0.42	10,026	2,519	7,507	-4,948
1997-98*	621,400	11,527	1.87	9,871	2,672	7,199	4,328

** Provisional*

Source: Alaska Department of Labor, Research and Analysis Section, Demographics Unit

The historical and projected populations and the components of change from 1946 through 2025 are shown in Exhibits 4, 5 and 6. Exhibit 5 also shows the numbers for the 95% confidence intervals for the projections. For example, based on birth, death and migration assumptions set by Alaska's history since 1946, during the 1998-99 period, there would be a 95% likelihood that the population growth rate will fall inside of the 0.69%-1.55% range. Assuming historical behavior and the accuracy of the provisional 1998 estimate, there is a 95% likelihood that the 1999 population will number between 625,676 and 631,108.

Age Distribution

While Alaska's median age remains around 32-33 years throughout the 1998-2025 projection period, the aging of the baby boom generation becomes a dominant factor by 2025. (See Exhibits 7 and 12.) As the generations who came to Alaska before the Trans-Alaska Oil Pipeline era dwindle and the

5 Population Growth Projections
Middle Series to 2025

July 1 to June 30	End of Period Population			Population Change			Average Annual Rate of Change		
Year	Low	Middle	High	Low	Middle	High	Low	Middle	High
1998-99	625,676	628,436	631,108	4,276	7,036	9,708	0.69	1.13	1.55
1999-00	629,831	635,370	640,788	4,155	6,934	9,680	0.66	1.10	1.52
2000-01	633,900	642,259	650,471	4,069	6,889	9,683	0.64	1.08	1.50
2001-02	637,943	649,164	660,268	4,043	6,905	9,797	0.64	1.07	1.49
2002-03	642,021	656,150	670,184	4,078	6,986	9,916	0.64	1.07	1.49
2003-04	646,131	663,237	680,217	4,110	7,087	10,033	0.64	1.07	1.49
2004-05	650,335	670,418	690,455	4,204	7,181	10,238	0.65	1.08	1.49
2005-06	654,581	677,761	700,968	4,246	7,343	10,513	0.65	1.09	1.51
2006-07	658,970	685,291	711,716	4,389	7,530	10,748	0.67	1.10	1.52
2007-08	663,502	693,018	722,710	4,532	7,727	10,994	0.69	1.12	1.53
2008-09	668,121	700,884	733,907	4,619	7,866	11,197	0.69	1.13	1.54
2009-10	672,869	708,928	745,349	4,748	8,044	11,442	0.71	1.14	1.55
2010-11	677,699	717,115	757,027	4,830	8,187	11,678	0.72	1.15	1.55
2011-12	682,619	725,416	768,882	4,920	8,301	11,855	0.72	1.15	1.55
2012-13	687,604	733,852	780,938	4,985	8,436	12,056	0.73	1.16	1.56
2013-14	692,601	742,350	793,138	4,997	8,498	12,200	0.72	1.15	1.55
2014-15	697,621	750,941	805,532	5,020	8,591	12,394	0.72	1.15	1.55
2015-16	702,576	759,515	817,997	4,955	8,574	12,465	0.71	1.14	1.54
2016-17	707,427	768,007	830,570	4,851	8,492	12,573	0.69	1.11	1.53
2017-18	712,146	776,488	843,258	4,719	8,481	12,688	0.66	1.10	1.52
2018-19	716,756	784,919	855,990	4,610	8,431	12,732	0.65	1.08	1.50
2019-20	721,136	793,232	868,853	4,380	8,313	12,863	0.61	1.05	1.49
2020-21	725,257	801,414	881,812	4,121	8,182	12,959	0.57	1.03	1.48
2021-22	729,123	809,480	894,877	3,866	8,066	13,065	0.53	1.00	1.47
2022-23	732,739	817,425	908,094	3,616	7,945	13,217	0.49	0.98	1.47
2023-24	736,088	825,271	921,441	3,349	7,846	13,347	0.46	0.96	1.46
2024-25	739,148	832,993	934,876	3,060	7,722	13,435	0.41	0.93	1.45

Source: Alaska Department of Labor, Research and Analysis Section, Demographics Unit

number of older women increases, the sex ratio of Alaska will approach that of the nation as a whole. The sex ratio can be expected to drop from 108 males per 100 females in 1998 to 103 by 2025.

For the baby boom generation, the leading edge of retirement begins to be noticeable after about 2010, and the peak of the baby boom will have reached retirement age by 2025. Current job entry opportunities for younger workers begin to disappear by 2005 as the peak of baby boomers' children begin to enter the workforce in large numbers. Opportunities for younger workers may become tighter between 2005 and 2010. The period 2010-2015 should provide advancement opportunities for younger Alaskans as boomers in senior positions begin to retire in large numbers.

Components of Change 1998 to 2025 — 6

July 1 to June 30	Births			Deaths			Natural Increase			Net Migrants [1]		
Year	Low	Middle	High	Low	Middle	High	Low	Middle	High	Low	Middle	High
1998-99	8,205	9,849	11,496	2,782	2,782	2,782	5,423	7,067	8,714	-1,147	-31	994
1999-00	8,164	9,840	11,529	2,859	2,867	2,870	5,305	6,973	8,659	-1,150	-39	1,021
2000-01	8,167	9,888	11,620	2,945	2,959	2,969	5,222	6,929	8,651	-1,153	-40	1,032
2001-02	8,242	10,004	11,790	3,029	3,050	3,058	5,213	6,954	8,732	-1,170	-49	1,065
2002-03	8,343	10,149	11,984	3,115	3,140	3,154	5,228	7,009	8,830	-1,150	-23	1,086
2003-04	8,498	10,355	12,238	3,211	3,234	3,248	5,287	7,121	8,990	-1,177	-34	1,043
2004-05	8,677	10,586	12,530	3,287	3,319	3,344	5,390	7,267	9,186	-1,186	-86	1,052
2005-06	8,867	10,827	12,831	3,377	3,412	3,432	5,490	7,415	9,399	-1,244	-72	1,114
2006-07	9,092	11,110	13,161	3,491	3,525	3,551	5,601	7,585	9,610	-1,212	-55	1,138
2007-08	9,308	11,384	13,495	3,602	3,642	3,669	5,706	7,742	9,826	-1,174	-15	1,168
2008-09	9,529	11,653	13,816	3,714	3,765	3,802	5,815	7,888	10,014	-1,196	-22	1,183
2009-10	9,782	11,956	14,183	3,821	3,885	3,922	5,961	8,071	10,261	-1,213	-27	1,181
2010-11	10,020	12,241	14,521	3,945	4,004	4,040	6,075	8,237	10,481	-1,245	-50	1,197
2011-12	10,214	12,476	14,812	4,059	4,125	4,175	6,155	8,351	10,637	-1,235	-50	1,218
2012-13	10,418	12,728	15,124	4,163	4,243	4,300	6,255	8,485	10,824	-1,270	-49	1,232
2013-14	10,561	12,913	15,359	4,289	4,366	4,426	6,272	8,547	10,933	-1,275	-49	1,267
2014-15	10,671	13,089	15,638	4,400	4,500	4,557	6,271	8,589	11,081	-1,251	2	1,313
2015-16	10,725	13,207	15,861	4,539	4,628	4,698	6,186	8,579	11,163	-1,231	-5	1,302
2016-17	10,751	13,300	16,064	4,646	4,757	4,822	6,105	8,543	11,242	-1,254	-51	1,331
2017-18	10,795	13,411	16,288	4,751	4,878	4,944	6,044	8,533	11,344	-1,325	-52	1,344
2018-19	10,809	13,494	16,483	4,884	5,006	5,106	5,925	8,488	11,377	-1,315	-57	1,355
2019-20	10,700	13,531	16,723	5,010	5,149	5,250	5,690	8,382	11,473	-1,310	-69	1,390
2020-21	10,585	13,555	16,968	5,161	5,310	5,415	5,424	8,245	11,553	-1,303	-63	1,406
2021-22	10,463	13,578	17,203	5,277	5,450	5,564	5,186	8,128	11,639	-1,320	-62	1,426
2022-23	10,353	13,615	17,463	5,409	5,603	5,721	4,944	8,012	11,742	-1,328	-67	1,475
2023-24	10,252	13,671	17,740	5,569	5,760	5,897	4,683	7,911	11,843	-1,334	-65	1,504
2024-25	10,140	13,710	17,991	5,731	5,933	6,083	4,409	7,777	11,908	-1,349	-55	1,527

Source: Alaska Department of Labor, Research and Analysis Section, Demographics Unit

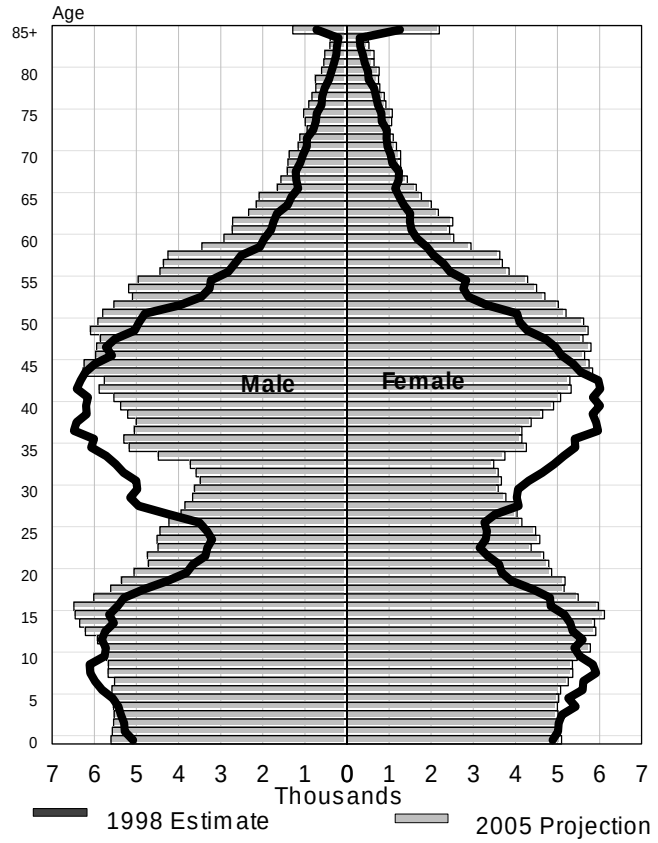
[1] Small variations in the residual net migration are due to rounding error in the components.

7 Population Projections by Age
1998 to 2025

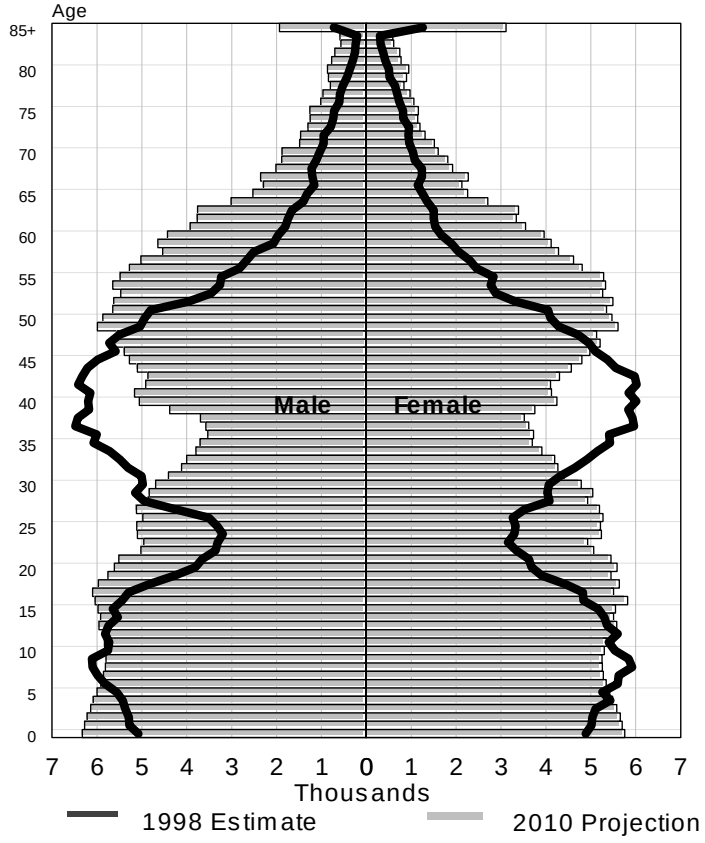
Age	1998	2000	2005	2006	2010	2015	2020	2025
65+	32,694	35,658	44,461	46,845	57,597	78,425	102,559	124,303
60-64	16,119	17,827	24,511	26,107	35,836	43,120	45,094	40,786
55-59	24,826	27,484	39,862	42,319	48,060	50,374	45,853	38,517
45-54	89,752	99,430	111,204	112,306	108,799	95,507	77,729	73,831
35-44	120,347	116,831	102,570	98,373	83,608	79,227	95,171	111,400
30-34	49,539	47,147	36,967	36,427	42,569	53,033	59,164	58,894
25-29	39,401	35,238	40,582	42,949	50,551	56,575	56,291	53,892
20-24	34,485	37,869	46,784	47,996	52,451	52,241	50,197	51,551
15-19	48,622	51,817	57,833	58,593	57,787	55,775	57,438	63,893
10-14	55,756	58,602	58,599	57,790	56,556	58,340	64,908	72,053
5-9	57,823	56,099	54,056	54,079	55,902	62,383	69,288	73,073
0-4	52,036	51,368	52,989	53,977	59,212	65,941	69,540	70,800
Total	621,400	635,370	670,418	677,761	708,928	750,941	793,232	832,993
Median Age	32.4	32.9	33.4	33.2	32.4	32.2	32.4	32.7
Males Per 100 Females	108.3	107.9	106.8	106.6	105.8	104.7	103.8	102.9
Youth Dependency (<18/18-64)	50.2	49.6	47.7	47.5	46.5	48.9	53.2	56.6
Aged Dependency (65+/18-64)	8.3	8.9	10.5	10.9	13.0	17.4	22.7	27.5

Source: Alaska Department of Labor, Research and Analysis Section, Demographics Unit

8 Population Projections
By Age & Male/Female—Year 2005



9 Population Projections
By Age & Male/Female–Year 2010



Seniors Surge: The most marked and certain population change will be the great expansion of the senior population by year 2025.

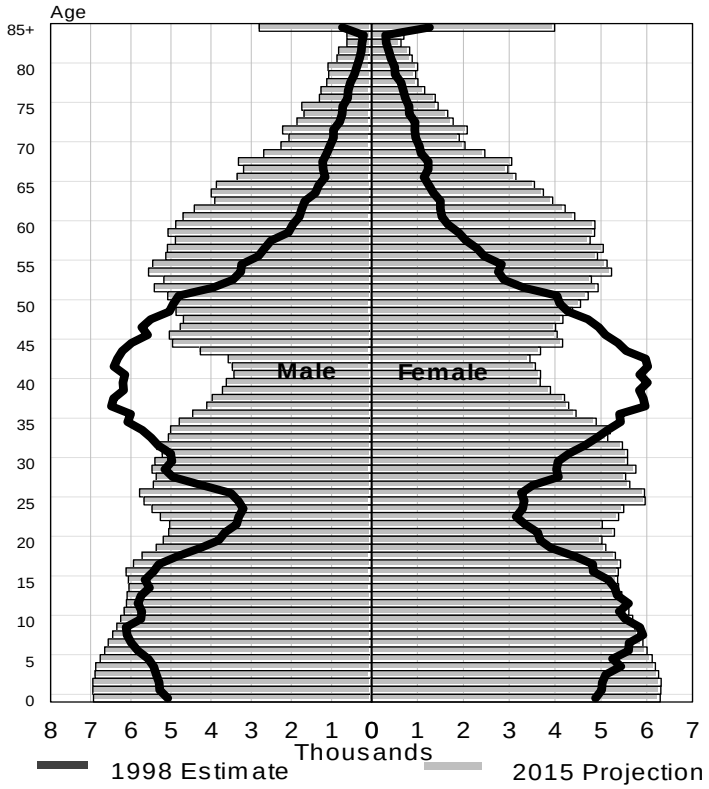
Baby Boomer Bulge: Baby Boomers begin to reach retirement around 2015 to 2020.

Children of the Boomers: As the peak of baby boomers' children enter the job market around 2005 to 2010, job entry opportunities are expected to become noticeably tighter.

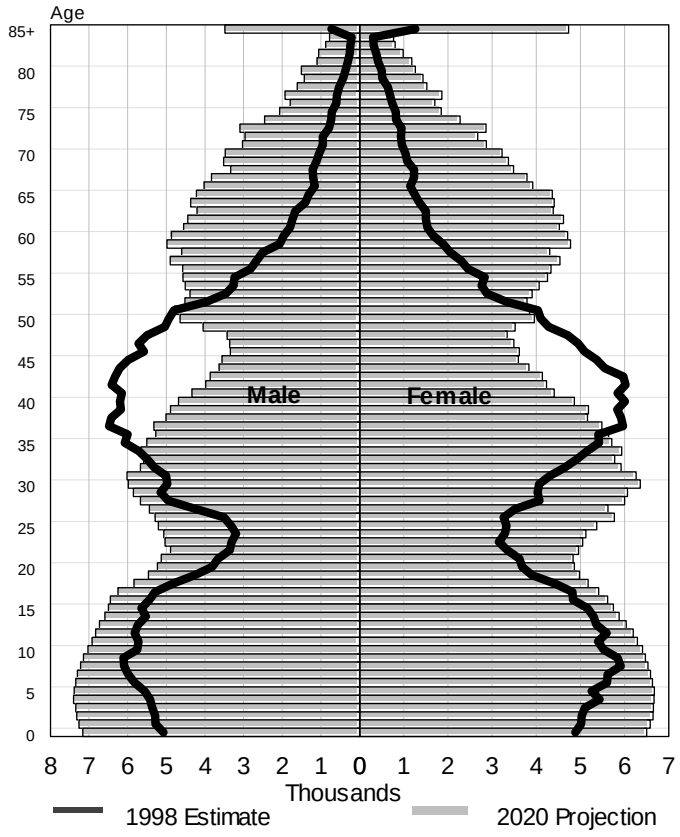
School-Age Populations: These are difficult to project due to the uncertainty of future fertility rates, and will require continual monitoring.

Source: Alaska Department of Labor, Research and Analysis Section, Demographics Unit

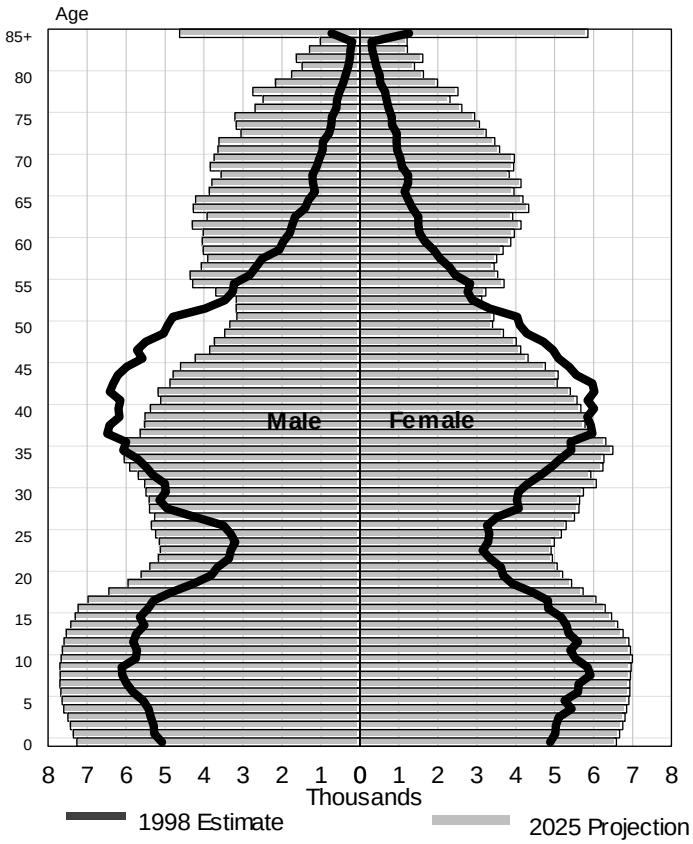
10 Population Projections
By Age & Male/Female–Year 2015



11 Population Projections
By Age & Male/Female–Year 2020



12 Population Projections
By Age & Male/Female–Year 2025



The burden of dependency for individuals and the state also is expected to increase sharply during the projection period. In 1998, each 100 Alaskans of working age are supporting 50 children and eight elders. By 2025, each 100 Alaskans of working age will be supporting about 57 children and 28 elders.

Specific Ages

Trends since 1990 in age groups five to17, 16 and over, and 65 and over are of particular interest. The historical uncertainty of fertility trends, compounded by migration, makes the future number of school-age children the most uncertain to project. Projection of school needs beyond 2005-2010 is problematic and will require continual monitoring.

The population aged 16 and over represents the potential labor force for Alaska. While the population as a whole is projected to grow at a little over one percent per year, the population 16 and over is expected to grow by about 1.5 percent annually over the next 10 years and then gradually decline to about one percent annually.

The most pronounced and most certain population growth during the next 27 years will be that of Alaska's elders. This group is currently increasing at about four percent annually. The rate of growth for this group is expected to increase to 5.0-6.5 percent annually from 2005 through 2020. Facilities, as well as medical and social services, to serve this population will need to expand at a corresponding rate.

Population, labor force and employment

The projected population 16 years of age and over represents Alaska's potential future labor supply. The forecast of the economy and future jobs is an indicator of the demand for labor. A time period that coincides with a number of medium-term economic projections is 2006. The working age population 16 years of age and older for 2006 is projected to be about 500,000. The civilian labor force for 2006 can be projected relative to the national trend in the change in age and male/female-specific labor force participation rates. Based on the national 1990-2006 change in labor force participation, the projected civilian labor force for Alaska would be approximately 335,700 in 2006. This assumes that the armed forces population in Alaska remains at its current level of about 18,100.

This projected civilian labor force population in 2006 is consistent with a recent wage and salary employment projection done at a detailed industry level by labor economists at the Alaska Department of Labor. After adjustment for the self-employed, workers not covered by unemployment insurance, multiple-job holders, nonresident workers and the unemployed, the middle series population projection would not be out of line with a relatively conservative projection of job growth for the state. Excessive out-migration of Alaska residents because of a shortage of jobs is not expected. The pressures of population growth are likely to continue to encourage orderly in-migration to the state.

Alaska Population Projections 1998-2025, due to be published this fall, will present more detailed trends, including projections of the state population by race; high, middle and low projection series; and projections for boroughs and census areas.

Summer New Hires Rebound

by
Todd Mosher
Labor Economist

1997 up from previous summer quarter

Email the new labor economist: Jill_Lewis@labor.state.ak.us

Summer quarter hiring in 1997 rose by 2.8% over the previous summer, as contract work on the North Slope and Kenai Peninsula led to brisk hiring in the oil industry. With the notable exception of seafood processing, which had nearly nine percent fewer new hires, almost all industries increased summer quarter hiring in 1997 compared to 1996. (See Exhibit 2.) Nevertheless, the seafood processing downturn held 1997's third quarter new hires below the peak of 1994 and 1995. (See Exhibit 1.)

Nearly three-fourths of summer '97's new hires were welcomed by four industries. Retail and services provided nearly half of them, while another 23 percent were split almost evenly between seafood processing and construction. Services hiring in the summer quarter continued its upward trend of the last several years, while summer retail new hires outpaced 1996, but fell just short of the stellar levels achieved in 1995.

Compared to 1996, the number of new hires grew in all of Alaska's regions except Southeast. In Southeast, summer new hires fell below 10,000 for the first time since 1993. The most significant factors in slower hiring in the region were the Ketchikan Pulp Mill closure, the seafood industry slowdown, and an absence of the large store start-ups in Juneau that boosted retail hires earlier this decade.

Hire status of summer workforce

For the new hire report, each worker is considered for every employer he or she worked for during the report quarter. Each unique worker-employer relationship is categorized as a new hire, a rehire, or a continuing worker, based on the employee's work history with the employer during the previous four quarters:

- New hires are those worker-employer relationships in which the worker did not work for the employer in any of the four quarters prior to third quarter 1997.

- Rehires are those that did not work for the employer during the second quarter of 1997, but did work for the employer in at least one of the three quarters prior to the second quarter of 1997. This category includes seasonal hire-backs whose jobs ended in the prior winter, fall, or summer.

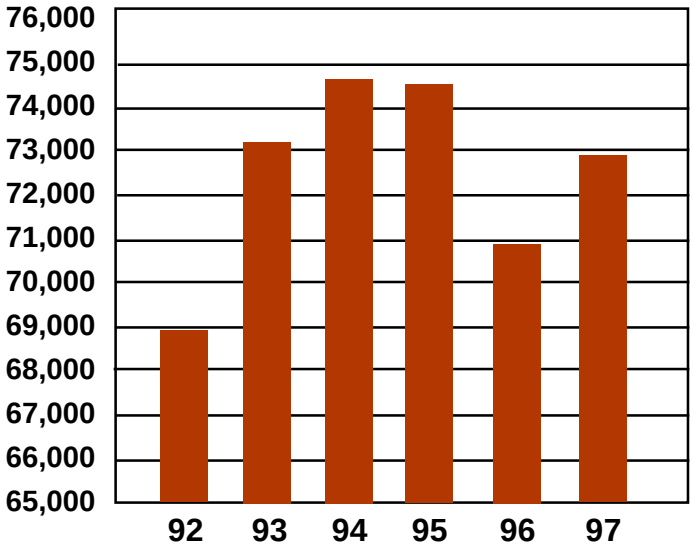
- Continuing workers are those who worked for the employer for two or more consecutive quarters ending with third quarter 1997.

(Continued on page 15.)

The summer (third) quarter includes July, August and September.

New hire data include turnover and do not equate to job growth.

New Hires 1
Summer Quarter, 1992-1997



New hires are workers who did not work for their 3rd quarter employer in any of the four previous quarters. New hire figures include turnover, and do not necessarily imply job growth.

Source: Alaska Department of Labor, Research and Analysis Section

2 Alaska New Hires
3rd Quarter 1997

	3rd Qtr 1997	Change from 2nd Qtr 1997	Change from 3rd Qtr 1996
Total New Hires	**72,810**	**1,922**	**1,978**
By Region:			
Northern	4,345	1,201	510
Interior	9,940	-1,028	316
Southwest	6,759	1,060	280
Anchorage	29,473	-843	284
Gulf Coast	11,226	1,611	1,030
Southeast	9,889	-273	-202
Offshore	711	9	-242
Outside	467	211	61
Unknown	0	-26	-59
By Industry:			
Agriculture/Forestry/Fishing	734	-302	6
Mining	2,078	669	416
Oil & Gas Extraction	1,752	767	610
All Other Mining	326	-98	-194
Construction	8,345	1,130	203
Manufacturing	9,678	2,605	-715
Seafood Processing	8,294	2,818	-795
All Other Mfg	1,384	-213	80
Trans/Comm/ Util [1]	4,612	-1,415	429
Tourism-related TCU [2]	1,276	-889	48
All Other TCU	3,336	-526	381
Wholesale Trade	2,354	224	289
Retail Trade	17,426	-1,460	427
Finance/Insurance/Real Estate	2,461	96	237
Services	18,727	-715	537
Hotels & Lodging	2,699	-1,306	-32
All Other Services	16,028	591	569
Public Administration	6,395	1,090	149

[1] Transportation, Communications, and Utilities (TCU)

[2] Includes local passenger, water, and nonscheduled air transportation, travel agencies and other travel arrangers. Not all of the employment in these categories is attributable to tourism, but all are heavily influenced by tourism in most regions.

Source: Alaska Department of Labor, Research and Analysis Section

***The New Hire Quarterly Report** counts job opportunities created by business expansions, business start-ups, and job turnover. Every firm with employees working in Alaska is required to report social security numbers, occupation, work site location and wages earned for each employee to the Alaska Department of Labor on a quarterly basis. The report assists employment security personnel and the job-seekers they serve in developing strategies for job placement in the Alaska economy.*

A new hire is defined as an employee who was not working for the employer in any of the four previous quarters. Since replacements for departing workers are included, readers are cautioned about drawing conclusions about job growth trends solely on quarterly new hire data. A worker can be counted as a new hire for more than one employer during a quarter.

Worker-Employer Relationships
by Hire Status-3rd Quarter 1997

3

	Total Worker-Employer Relationships	Hire Status: Percent New Hires	Percent Rehires	Percent Continuing Workers
Total, All Industries	**339,168**	**21.5%**	**4.1%**	**74.5%**
Agriculture/Forestry/Fishing	2,617	28.0	5.0	67.0
Oil & Gas Extraction	10,614	16.5	4.1	79.4
All Other Mining	2,167	15.0	2.5	82.5
Construction	24,721	33.8	5.7	60.6
Seafood Processing	22,847	36.3	12.5	51.2
All Other Manufacturing	7,773	17.8	2.5	79.7
Tourism-related Transportation [1]	7,106	18.0	3.7	78.4
All Other TCU [2]	24,774	13.5	2.7	83.9
Wholesale Trade	11,101	21.2	3.5	75.3
Retail Trade	67,311	25.9	2.9	71.2
Finance/Insurance/Real Estate	14,102	17.5	2.9	79.6
Hotels & Lodging	10,599	21.8	3.4	74.7
All Other Services	73,364	25.5	4.4	70.2
Public Administration	60,072	10.6	3.4	86.0

The three categories are mutually exclusive, meaning a worker can belong to only one category for each employer.

About one in five was a new hire

A little over 21 percent of all worker-employer relationships in summer 1997 were new hires. (See Exhibit 3.) However, this percentage varied greatly by industry. The highly seasonal seafood processing and construction industries had the highest percentage of new hires—36.3% and 33.8% of their total worker-employer relationships, respectively. On the other end of the spectrum, only 10.6% of public administration's worker-employer relationships were new hires.

Nearly two-thirds of seafood processing new hires were new entrants to the Alaska labor force, by far the highest percentage of any

Recent Alaska Work History
New Hires-3rd Quarter 1997

4

	Total New Hires	Percent New Entrants	Changed Employers: Percent worked in all 4 previous quarters	Percent worked in 1 to 3 of previous 4 quarters
Total	**72,810**	**41.2%**	**23.4%**	**35.4%**
Agriculture/Forestry/Fishing	734	49.2	14.7	36.1
Oil & Gas Extraction	1,752	40.3	24.7	35.0
All Other Mining	326	35.3	23.0	41.7
Construction	8,345	28.5	28.5	43.0
Seafood Processing	8,294	65.1	8.9	26.0
All Other Manufacturing	1,384	42.1	22.6	35.3
Tourism-related Transportation [1]	1,276	38.5	25.0	36.5
All Other TCU [2]	3,336	34.1	30.5	35.4
Wholesale Trade	2,354	37.6	25.8	36.6
Retail Trade	17,426	40.2	22.4	37.4
Finance/Insurance/Real Estate	2,461	32.5	30.2	37.3
Hotels & Lodging	2,699	44.3	17.6	38.1
All Other Services	16,028	39.5	26.0	34.5
Public Administration	6,395	41.1	27.6	31.3

Definitions:

Worker-employer relationship: workers are counted for each employer they worked for in 3rd quarter '97.

New Hire: worker did not work for current employer in any of the four previous quarters

Rehire: employee did not work for summer quarter 1997 employer during spring quarter '97 but did work for the employer during winter quarter '97, fall quarter '96, and/or summer quarter '96

New Entrants: did not work for any Alaska employer in any of the four previous quarters

Continuing Worker: also worked for current employer in spring quarter '97

[1] Includes local passenger, water, and nonscheduled air transportation, travel agencies and other travel arrangers. Not all of the employment in these categories is attributable to tourism, but all are heavily influenced by tourism in most regions.

[2] Transportation, Communications, and Utilities

May not total to 100% due to rounding.

Source: Alaska Department of Labor, Research and Analysis Section

5 Continuing Workers by Duration
3rd Quarter 1997

	Continuing Workers	Consecutive Quarters with Employer: Two	Three	Four	Five or more
Total	**252,606**	**25.8%**	**7.6%**	**6.3%**	**60.4%**
Agriculture/Forestry/Fish	1,753	47.3	9.6	3.9	39.2
Oil & Gas Extraction	8,431	16.2	4.9	2.9	76.1
All Other Mining	1,787	26.6	5.9	7.5	60.0
Construction	14,973	46.5	7.6	4.9	41.1
Seafood Processing	11,698	49.9	15.7	1.7	32.7
All Other Manufacturing	6,198	24.3	8.0	3.8	63.9
Tourism-related Transportation [1]	5,568	50.6	7.9	4.3	37.2
All OtherTrans/Comm/Util (TCU) [2]	20,780	17.3	5.9	5.4	71.4
Wholesale Trade	8,363	21.1	7.8	5.9	65.3
Retail Trade	47,909	32.6	7.9	8.8	50.7
Finance/Insurance/Real Estate	11,227	20.0	7.7	6.1	66.2
Hotels & Lodging	7,436	52.9	6.5	3.5	37.1
All Other Services	54,825	24.3	10.0	8.9	56.7
Public Administration	51,658	9.4	3.8	4.4	82.4

Definitions:
Continuing Worker: employee who worked for employer two or more consecutive quarters, including 3rd quarter 1997

[1] Includes local passenger, water, and nonscheduled air transportation, travel agencies and other travel arrangers. Not all of the employment in these categories is attributable to tourism, but all are heavily influenced by tourism in most regions.
[2] Transportation, Communications, and Utilities (TCU)

Source: Alaska Department of Labor, Research and Analysis Section

industry. (See Exhibit 4.) New entrants are new hires that had no prior employment with any Alaska employer from third quarter 1996 through second quarter 1997. Construction, on the other hand, had the highest percentage of workers with a recent work history in Alaska. Over 71 percent of its new hires had prior employment with one or more Alaska employers at some time during the previous four quarters. This finding emphasizes the project-to-project nature of the construction industry, where workers with specific skills move from employer to employer as one project ends and another begins.

Only one in 25 was a rehire

Only about one of every 25 worker-employer relationships in third quarter 1997 were rehires. However, one out of every eight seafood processing workers let go in the prior winter, fall, or summer, was hired back by the same employer in third quarter 1997. Nearly 70 percent of those seafood processing rehires were returning to an employer they had not worked for since the previous summer. (See Exhibit 6.) Construction also had a relatively high rate of summer rehires, but not nearly as pronounced as the seafood industry. The

Rehires by Last Prior Quarter 6
3rd Quarter 1997

	Total Rehires	Last Prior Qtr with Employer: 1st Qtr 1997	4th Qtr 1996	3rd Qtr 1996
Total	**13,752**	**33.2%**	**25.9%**	**40.9%**
Agriculture/Forestry/Fish	130	23.8	22.3	53.8
Oil & Gas Extraction	431	41.5	31.6	26.9
All Other Mining	54	18.5	59.3	22.2
Construction	1,403	31.7	38.8	29.5
Seafood Processing	2,855	14.7	16.3	68.9
All Other Manufacturing	191	34.6	35.6	29.8
Tourism-related Transportation [1]	262	19.1	46.6	34.4
All Other Trans/Comm/Util (TCU) [2]	658	44.8	29.9	25.2
Wholesale Trade	384	25.3	18.8	56.0
Retail Trade	1,976	44.4	25.5	30.1
Finance/Insurance/Real Estate	414	42.0	30.7	27.3
Hotels & Lodging	464	20.0	31.5	48.5
All Other Services	2,511	39.4	22.7	37.9
Public Administration	2,019	41.4	27.6	31.0

Definitions:
Rehire: employee did not work for summer quarter 1997 employer during spring quarter 1997 but did work for the employer during winter quarter 1997, fall quarter 1996, and/or summer quarter 1996

[1] Includes local passenger, water, and nonscheduled air transportation, travel agencies and other travel arrangers. Not all of the employment in these categories is attributable to tourism, but all are heavily influenced by tourism in most regions.
[2] Transportation, Communications, and Utilities (TCU)

Source: Alaska Department of Labor, Research and Analysis Section

percentages of rehires may sound low, but it is important to remember that these rehire figures are employer-based. For example, a worker who left one seafood company after the summer of 1996 and then worked for a different seafood company in the summer of 1997 would be a new hire rather than a rehire. Moreover, many seasonal workers, especially those in tourism-related occupations, are rehired during the spring quarter rather than the summer quarter.

Nearly three-fourths were continuing workers

The remaining workers in third quarter 1997 were continuing work with an employer they were employed with in the previous quarter. These continuing workers made up just under three-fourths of all worker-employer relationships. (See Exhibit 3.) Public administration and non-oil mining had the highest percentage of continuing workers, with both exceeding 80 percent.

Almost two-thirds of continuing workers had been with their employer for at least four quarters (including third quarter 1997), while a little over a quarter of them were entering their second straight quarter with the employer. (See Exhibit 5.) Nearly 87 percent of public administration's continuing workers and 79 percent of oil extraction's continuing workers were entering at least their fourth consecutive quarter with their third quarter 1997 employer. These high rates are indicative of industries with a large proportion of year-round jobs. Meanwhile, construction, seafood processing, and tourism-related sectors exhibited high percentages of workers who were entering only their second consecutive quarter with their employer. These industries have large seasonal upswings in employment starting in the spring and continuing into summer.

Conclusion

Alaska new hires continued to show improvement over 1996 levels during the summer of 1997, but hits to manufacturing, especially seafood processing, kept total new hires below the more robust years of 1994 and 1995. The service sector continued to show steady year-to-year gains in new hires, mirroring employment gains, while summer retail new hires easily surpassed 1996 and nearly caught up to 1995 levels.

Slightly more than 21 percent of all worker-employer relationships were new hires, while about four percent were rehires that last held employment with the employer in the prior winter, fall, or summer quarter. The remaining three-fourths of worker-employer relationships in third quarter 1997 were continuing workers—those who were carry-overs from the second quarter of 1997. About two-thirds of these continuing workers were entering at least their fourth consecutive quarter of employment with their third quarter 1997 employer. The makeup and distribution of new hires, rehires, and continuing workers vary considerably by industry as demonstrated in Exhibits 3 through 6.

Job Market is Hot

July shows usual economic peaks

Alaska Employment Scene

by
Neal Fried
Labor Economist

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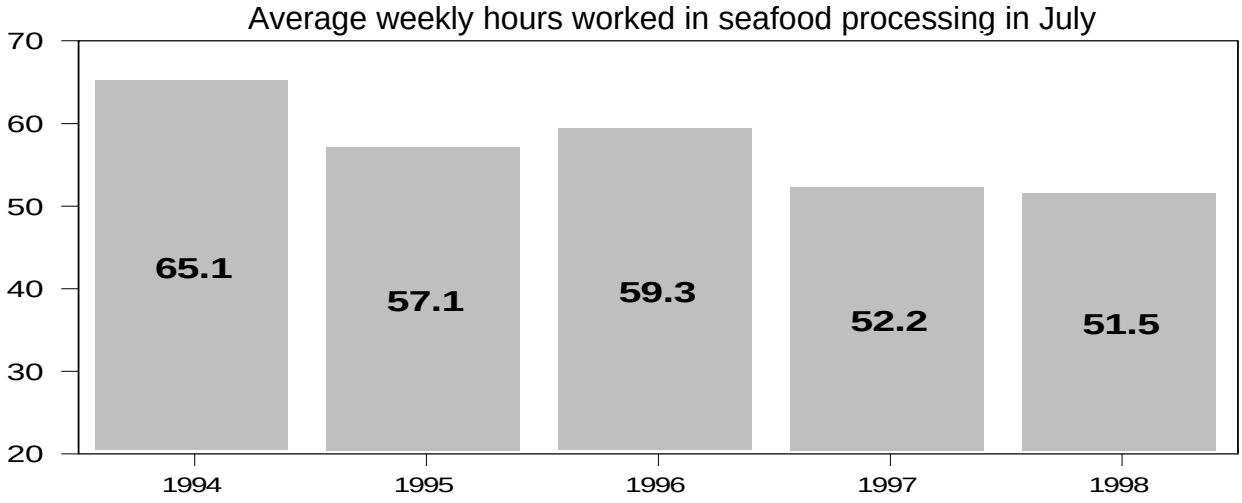
Every July most economic indicators in the state are at or near their best. Employment in almost all industries is reaching its seasonal peak and unemployment is registering its seasonal low. This July is no different–it's just providing a bit more flair than usual. Not only are Alaska's economic indicators enjoying a seasonal boost, but when compared to year-ago levels, the picture looks even better. For example, on the unemployment front, July's jobless rate of 5.2% represents a one and a half percentage point improvement over last year as well as a historic record low. Only in 1989, the year of cleaning up the Exxon Valdez oil spill, did unemployment in July come close at 5.3%.

For individuals without a job, or looking for a different job, there probably has not been a better time in many years. Will it continue? That is a difficult question to answer. It will last as long as the national labor market remains tight and the state's economy continues to grow at its present pace or better. However, if the national labor market softens, competition would increase almost immediately, as a new large group of job seekers would enter Alaska's job market.

The other ingredient in this stellar employment market is the demand for more workers in Alaska. Although weaknesses persist in some industries such as fishing and timber, they are more than offset by gains in construction, services, transportation, retail and oil. In July, there were 5,200 more jobs in the state's economy than a year ago and in many parts of the state, employers are finding it more difficult to fill these jobs.

1 Seafood Processors Work Fewer Hours

Because of poor salmon seasons



Source: Alaska Department of Labor, Research and Analysis Section

A tale of two seasonal industries– visitors up, fishing down

When all was said and done, the 1997 visitor season got lackluster to decent reviews. Although it is early to judge the industry's 1998 performance, indicators are almost universally positive. June and July counts of traffic entering Alaska via the Alaska Highway were up 20,450, or 38 percent, over the same period in 1997. In fact, July's highway count of 42,443 was the highest since 1988. Low gasoline prices are almost certainly a positive influence on these highway numbers. Cruise ship traffic through July is estimated to be up by 10-11 percent in Juneau. In addition, hotel receipts were up 11 percent in Anchorage for the second quarter and up 15 percent in Fairbanks for the first half of the year. Overall, hotel and lodging employment in the state in July came in 200 above year-ago levels. The red-hot national economy is probably the biggest positive influence in the performance of all of these visitor industry indicators.

Bad news dominated Alaska's salmon fishing industry in July. The Bristol Bay sockeye run, Alaska's most valued salmon fishery, failed for the second year in a row. From the disastrous level of 12.3 million fish in 1997, the harvest fell further to approximately 10 million fish in 1998. During the previous three years, the average annual take was more than 30 million sockeye. Nor was Bristol Bay the only bad-news fishery. Close behind are the Yukon-Kuskokwim fisheries and Cook Inlet. Cook Inlet's sockeye harvest of one million fish was less than half the forecast harvest, which was already well below historical levels. The king salmon run on the Yukon was the worst in history and its chum catch was the lowest in five years. The two healthy exceptions were Kodiak, which experienced strong sockeye and pink runs, and Southeast, which had a strong pink run. Cumulatively, poor fish harvests have taken a toll on nearly every region's income and employment.

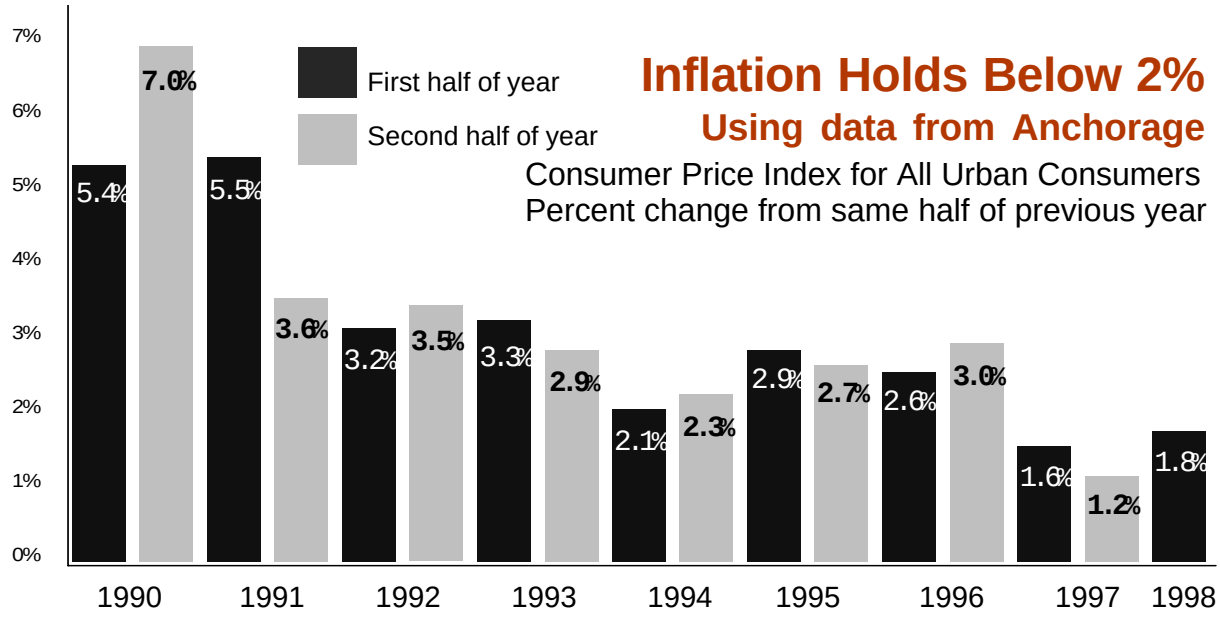
Some economic impacts of 1998's poor harvest will not show up until later in the year. However, one up-to-date set of figures helps illustrate the loss in employment and earnings in the seafood processing industry. While seafood processing moved into its peak employment, climbing over 6,000 from June to July, it remained 400 shy of 1997's level and was at its lowest level for July since 1989. However, employment in this industry tells only a small part of the story, since the processing workforce was recruited before the harvest proved a bust. Statistics measuring average hours worked and average weekly earnings are more revealing. When July 1998 is compared to July 1996, both

Inflation Holds Below 2%

Using data from Anchorage

2

Consumer Price Index for All Urban Consumers
Percent change from same half of previous year



Source: U.S. Department of Labor, Bureau of Labor Statistics

3 Wage and Salary Employment by Place of Work

Alaska

	preliminary 7/98	revised 6/98	7/97	Changes from: 6/98	7/97
Total Nonag. Wage & Salary	**294,200**	**287,200**	**289,000**	**7,000**	**5,200**
Goods-producing	50,400	42,900	50,100	7,500	300
Service-producing	243,800	244,300	238,900	-500	4,900
Mining	**10,800**	**10,500**	**10,400**	**300**	**400**
Oil & Gas Extraction	9,000	8,800	8,600	200	400
Construction	**16,400**	**15,300**	**15,700**	**1,100**	**700**
Manufacturing	**23,200**	**17,100**	**24,000**	**6,100**	**-800**
Durable Goods	3,100	3,100	3,500	0	-400
Lumber & Wood Products	1,800	1,800	2,200	0	-400
Nondurable Goods	20,100	14,000	20,500	6,100	-400
Seafood Processing	17,300	11,200	17,700	6,100	-400
Transportation/Comm/Utilities	**27,400**	**27,000**	**26,000**	**400**	**1,400**
Trucking & Warehousing	3,200	3,100	3,100	100	100
Water Transportation	2,500	2,500	2,400	0	100
Air Transportation	9,700	9,400	9,000	300	700
Communications	4,500	4,400	4,100	100	400
Electric, Gas & Sanitary Svcs.	2,500	2,500	2,300	0	200
Trade	**61,400**	**60,900**	**60,600**	**500**	**800**
Wholesale Trade	9,400	9,200	9,500	200	-100
Retail Trade	52,000	51,700	51,100	300	900
Gen. Merchandise & Apparel	9,900	9,800	9,800	100	100
Food Stores	7,400	7,500	7,500	-100	-100
Eating & Drinking Places	18,400	18,300	17,900	100	500
Finance/Insurance/Real Estate	**12,900**	**12,800**	**12,700**	**100**	**200**
Services & Misc.	**72,400**	**71,100**	**69,900**	**1,300**	**2,500**
Hotels & Lodging Places	9,100	8,600	8,900	500	200
Business Services	9,400	9,200	9,100	200	300
Health Services	15,100	15,200	14,700	-100	400
Legal Services	1,700	1,700	1,700	0	0
Social Services	7,000	7,100	6,700	-100	300
Engineering & Mgmt. Svcs.	8,000	7,800	7,300	200	700
Government	**69,700**	**72,500**	**69,700**	**-2,800**	**0**
Federal	18,100	17,900	18,200	200	-100
State	20,600	20,800	20,900	-200	-300
Local	31,000	33,800	30,600	-2,800	400

Municipality of Anchorage

	preliminary 7/98	revised 6/98	7/97	Changes from: 6/98	7/97
Total Nonag. Wage & Salary	**131,200**	**130,600**	**127,400**	**600**	**3,800**
Goods-producing	13,300	12,600	12,500	700	800
Service-producing	117,900	118,000	114,900	-100	3,000
Mining	**2,700**	**2,600**	**2,500**	**100**	**200**
Oil & Gas Extraction	2,500	2,400	2,300	100	200
Construction	**8,400**	**7,800**	**7,900**	**600**	**500**
Manufacturing	**2,200**	**2,200**	**2,100**	**0**	**100**
Transportation/Comm/Utilities	**13,200**	**13,200**	**12,600**	**0**	**600**
Air Transportation	5,700	5,600	5,300	100	400
Communications	2,600	2,600	2,500	0	100
Trade	**32,100**	**32,100**	**31,700**	**0**	**400**
Wholesale Trade	6,500	6,500	6,700	0	-200
Retail Trade	25,600	25,600	25,000	0	600
Gen. Merchandise & Apparel	4,900	4,800	4,900	100	0
Food Stores	3,000	3,000	3,100	0	-100
Eating & Drinking Places	9,200	9,200	8,900	0	300
Finance/Insurance/Real Estate	**7,500**	**7,400**	**7,400**	**100**	**100**
Services & Misc.	**37,300**	**37,200**	**36,100**	**100**	**1,200**
Hotels & Lodging Places	3,000	2,900	2,900	100	100
Business Services	6,500	6,500	6,300	0	200
Health Services	7,900	7,900	7,600	0	300
Legal Services	1,200	1,200	1,300	0	-100
Social Services	3,100	3,300	3,100	-200	0
Engineering & Mgmt. Svcs.	5,600	5,600	5,400	0	200
Government	**27,800**	**28,100**	**27,100**	**-300**	**700**
Federal	10,100	10,100	10,200	0	-100
State	8,100	7,900	7,800	200	300
Local	9,600	10,100	9,100	-500	500

Notes to Exhibits 3, 4, 5—Nonagricultural excludes self-employed workers, fishers, domestics, and unpaid family workers.

Exhibits 3 & 4—Prepared in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics

Exhibit 5—Prepared in part with funding from the Employment Security Division

Government category includes employees of public school systems and the University of Alaska.

Source: Alaska Department of Labor, Research and Analysis Section

4 Hours and Earnings for Selected Industries

	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
	preliminary 7/98	revised 6/98	7/97	preliminary 7/98	revised 6/98	7/97	preliminary 7/98	revised 6/98	7/97
Mining	$1,278.18	$1,264.56	$1,404.50	48.6	47.9	53.0	$26.30	$26.40	$26.50
Construction	1,171.24	1,112.40	1,189.88	44.5	43.2	45.8	26.32	25.75	25.98
Manufacturing	510.35	531.95	543.44	49.5	45.7	50.6	10.31	11.64	10.74
Seafood Processing	470.20	437.95	472.93	51.5	46.1	52.2	9.13	9.50	9.06
Transportation/Comm/Utilities	696.32	700.34	686.16	35.4	36.1	36.0	19.67	19.40	19.06
Trade	420.45	421.20	424.15	34.1	34.3	34.4	12.33	12.28	12.33
Wholesale Trade	635.40	639.68	641.65	38.3	39.1	38.7	16.59	16.36	16.58
Retail Trade	381.95	383.57	383.38	33.3	33.5	33.6	11.47	11.45	11.41
Finance/Insurance/Real Estate	531.71	525.89	495.72	35.4	35.2	36.0	15.02	14.94	13.77

Average hours and earnings estimates are based on data for full-time and part-time production workers (manufacturing) and nonsupervisory workers (nonmanufacturing). Averages are for gross earnings and hours paid, including overtime pay and hours.

Benchmark: March 1997

Source: Alaska Department of Labor, Research and Analysis Section

5 Wage and Salary Employment by Place of Work

Fairbanks North Star Borough

	preliminary 7/98	revised 6/98	7/97	Changes from: 6/98	7/97
Total Nonag. Wage & Salary	**34,750**	**34,250**	**33,850**	**500**	**900**
Goods-producing	4,400	4,000	4,050	400	350
Service-producing	30,350	30,250	29,800	100	550
Mining	**1,300**	**1,200**	**1,300**	**100**	**0**
Construction	**2,450**	**2,200**	**2,150**	**250**	**300**
Manufacturing	**650**	**600**	**600**	**50**	**50**
Transportation/Comm/Utilities	**3,400**	**3,300**	**2,850**	**100**	**550**
Trucking & Warehousing	650	600	650	50	0
Air Transportation	750	750	750	0	0
Communications	500	450	300	50	200
Trade	**7,200**	**7,200**	**7,200**	**0**	**0**
Wholesale Trade	850	850	850	0	0
Retail Trade	6,350	6,350	6,350	0	0
Gen. Merchandise & Apparel	1,400	1,400	1,350	0	50
Food Stores	750	750	850	0	-100
Eating & Drinking Places	2,100	2,100	2,050	0	50
Finance/Insurance/Real Estate	**1,100**	**1,100**	**1,100**	**0**	0
Services & Misc.	**8,850**	**8,750**	**8,650**	**100**	**200**
Hotels & Lodging Places	1,150	1,150	1,100	0	50
Health Services	1,950	1,950	1,900	0	50
Government	**9,800**	**9,900**	**10,000**	**-100**	**-200**
Federal	3,600	3,500	3,500	100	100
State	3,800	3,900	3,850	-100	-50
Local	2,400	2,500	2,650	-100	-250

Southeast Region

Total Nonag. Wage & Salary	**40,200**	**38,350**	**40,300**	**1,850**	**-100**
Goods-producing	7,100	5,600	7,600	1,500	-500
Service-producing	33,100	32,750	32,700	350	400
Mining	**400**	**400**	**350**	**0**	**50**
Construction	**1,850**	**1,850**	**2,000**	**0**	**-150**
Manufacturing	**4,850**	**3,350**	**5,250**	**1,500**	**-400**
Durable Goods	1,650	1,650	1,850	0	-200
Lumber & Wood Products	1,450	1,450	1,650	0	-200
Nondurable Goods	3,200	1,700	3,400	1,500	-200
Seafood Processing	2,850	1,300	2,950	1,550	-100
Transportation/Comm/Utilities	**3,750**	**3,600**	**3,600**	**150**	**150**
Trade	**7,800**	**7,700**	**7,750**	**100**	**50**
Wholesale Trade	650	600	650	50	0
Retail Trade	7,150	7,100	7,100	50	50
Food Stores	1,450	1,450	1,450	0	0
Finance/Insurance/Real Estate	**1,750**	**1,700**	**1,650**	**50**	**100**
Services & Misc.	**8,200**	**7,850**	**7,950**	**350**	**250**
Health Services	1,700	1,700	1,650	0	50
Government	**11,600**	**11,900**	**11,750**	**-300**	**-150**
Federal	2,000	1,950	2,100	50	-100
State	5,150	5,300	5,100	-150	50
Local	4,450	4,650	4,550	-200	-100

Northern Region

Total Nonag. Wage & Salary	**15,700**	**15,550**	**15,600**	**150**	**100**
Goods-producing	5,400	5,300	5,400	100	0
Service-producing	10,300	10,250	10,200	50	100
Mining	**4,800**	**4,800**	**4,750**	**0**	**50**
Oil & Gas Extraction	4,350	4,300	4,250	50	100
Government	**4,350**	**4,400**	**4,400**	**-50**	**-50**
Federal	200	200	200	0	0
State	300	300	300	0	0
Local	3,850	3,900	3,900	-50	-50

Interior Region

	preliminary 7/98	revised 6/98	7/97	Changes from: 6/98	7/97
Total Nonag. Wage & Salary	**42,000**	**41,500**	**41,400**	**500**	**600**
Goods-producing	4,800	4,350	4,850	450	-50
Service-producing	37,200	37,150	36,550	50	650
Mining	**1,550**	**1,400**	**1,600**	**150**	**-50**
Construction	**2,550**	**2,300**	**2,550**	**250**	**0**
Manufacturing	**700**	**650**	**700**	**50**	**0**
Transportation/Comm/Utilities	**4,300**	**4,150**	**3,700**	**150**	**600**
Trade	**9,050**	**9,050**	**8,950**	**0**	**100**
Finance/Insurance/Real Estate	**1,200**	**1,200**	**1,200**	**0**	**0**
Services & Misc.	**10,500**	**10,200**	**10,250**	**300**	**250**
Hotels & Lodging Places	2,000	1,850	1,950	150	50
Government	**12,150**	**12,550**	**12,450**	**-400**	**-300**
Federal	4,350	4,250	4,250	100	100
State	4,150	4,250	4,300	-100	-150
Local	3,650	4,050	3,900	-400	-250

Anchorage/Mat-Su Region

Total Nonag. Wage & Salary	**143,200**	**143,250**	**139,150**	**-50**	**4,050**
Goods-producing	14,600	13,900	13,800	700	800
Service-producing	128,600	129,350	125,350	-750	3,250
Mining	**2,700**	**2,650**	**2,500**	**50**	**200**
Construction	**9,500**	**8,900**	**8,900**	**600**	**600**
Manufacturing	**2,400**	**2,350**	**2,400**	**50**	**0**
Transportation/Comm/Utilities	**14,250**	**14,250**	**13,600**	**0**	**650**
Trade	**35,300**	**35,100**	**34,650**	**200**	**650**
Finance/Insurance/Real Estate	**8,000**	**7,950**	**7,900**	**50**	**100**
Services & Misc.	**40,650**	**40,550**	**39,350**	**100**	**1,300**
Government	**30,400**	**31,500**	**29,850**	**-1,100**	**550**
Federal	10,200	10,250	10,300	-50	-100
State	8,800	8,750	8,800	50	0
Local	11,400	12,500	10,750	-1,100	650

Southwest Region

Total Nonag. Wage & Salary	**19,950**	**18,100**	**19,600**	**1,850**	**350**
Goods-producing	7,550	5,250	7,450	2,300	100
Service-producing	12,400	12,850	12,150	-450	250
Seafood Processing	7,250	4,950	7,150	2,300	100
Government	**4,850**	**5,400**	**4,700**	**-550**	**150**
Federal	450	500	450	-50	0
State	550	600	550	-50	0
Local	3,850	4,300	3,700	-450	150

Gulf Coast Region

Total Nonag. Wage & Salary	**33,200**	**30,900**	**33,000**	**2,300**	**200**
Goods-producing	11,000	8,550	11,050	2,450	-50
Service-producing	22,200	22,350	21,950	-150	250
Mining	**1,300**	**1,300**	**1,200**	**0**	**100**
Oil & Gas Extraction	1,300	1,300	1,200	0	100
Construction	**1,700**	**1,500**	**1,550**	**200**	**150**
Manufacturing	**8,000**	**5,750**	**8,300**	**2,250**	**-300**
Seafood Processing	7,000	4,750	7,100	2,250	-100
Transportation/Comm/Utilities	2,650	2,650	2,600	0	50
Trade	**6,100**	**5,850**	**6,050**	**250**	**50**
Wholesale Trade	750	650	750	100	0
Retail Trade	5,350	5,200	5,300	150	50
Eating & Drinking Places	1,950	1,900	1,900	50	50
Finance/Insurance/Real Estate	**750**	**750**	**750**	**0**	**0**
Services & Misc.	**6,350**	**6,200**	**6,250**	**150**	**100**
Health Services	1,150	1,150	1,150	0	0
Government	**6,350**	**6,900**	**6,300**	**-550**	**50**
Federal	850	800	800	50	50
State	1,700	1,700	1,750	0	-50
Local	3,800	4,400	3,750	-600	50

6 Unemployment Rates by Region and Census Area

Not Seasonally Adjusted	Percent Unemployed preliminary 7/98	revised 6/98	7/97
United States	**4.7**	**4.7**	**5.0**
Alaska Statewide	**5.2**	**6.0**	**6.7**
Anch/Mat-Su Region	**4.5**	**5.0**	**6.0**
Municipality of Anchorage	4.1	4.5	5.2
Mat-Su Borough	6.7	7.4	9.7
Gulf Coast Region	**6.1**	**7.9**	**8.3**
Kenai Peninsula Borough	7.3	9.2	9.3
Kodiak Island Borough	3.6	5.2	5.8
Valdez-Cordova	5.0	6.7	7.8
Interior Region	**5.2**	**5.9**	**6.5**
Denali Borough	3.1	4.1	5.9
Fairbanks North Star Borough	4.8	5.6	6.1
Southeast Fairbanks	6.3	6.8	9.7
Yukon-Koyukuk	12.3	12.9	12.4
Northern Region	**9.5**	**10.3**	**12.0**
Nome	11.1	12.4	13.7
North Slope Borough	6.1	5.7	6.0
Northwest Arctic Borough	12.1	14.1	18.2
Southeast Region	**5.5**	**6.6**	**6.3**
Haines Borough	6.1	8.2	5.5
Juneau Borough	4.6	5.3	5.2
Ketchikan Gateway Borough	5.3	6.4	7.9
Prince/Wales-Outer Ketchikan	11.8	12.4	11.1
Sitka Borough	4.3	5.5	5.1
Skagway-Hoonah-Angoon	5.0	6.8	4.8
Wrangell-Petersburg	4.7	7.5	5.8
Yakutat Borough	13.2	12.4	8.4
Southwest Region	**7.7**	**9.5**	**8.0**
Aleutians East Borough	2.0	3.1	5.1
Aleutians West	6.0	7.1	5.6
Bethel	8.3	10.1	9.8
Bristol Bay Borough	2.2	4.9	3.2
Dillingham	6.6	9.3	5.3
Lake & Peninsula Borough	6.4	9.8	5.2
Wade Hampton	14.8	17.2	12.4
Seasonally Adjusted			
United States	4.5	4.5	4.8
Alaska Statewide	6.2	6.4	7.3

1997 Benchmark
Comparisons between different time periods are not as meaningful as other time series produced by Research and Analysis.
The official definition of unemployment currently in place excludes anyone who has not made an active attempt to find work in the four-week period up to and including the week that includes the 12th of the reference month. Due to the scarcity of employment opportunities in rural Alaska, many individuals do not meet the official definition of unemployed because they have not conducted an active job search. They are considered not in the labor force.

Source: Alaska Department of Labor, Research and Analysis Section

hours and earnings were down 12 percent. (See Exhibit 1.)

Income is up and inflation remains low

Preliminary income data for 1998 portend an improving income picture for Alaskans. According to data recently released by the U.S. Department of Commerce, Bureau of Economic Analysis, personal income grew by 2.3% in Alaska during the first quarter of 1998, faster than anywhere else in the nation except South Dakota, with which it was tied. The overall growth rate for the nation was 1.6%. Part of the explanation may be the state's revved-up oil industry and growth in construction—two of Alaska's highest paying industries. Alaska's 1997 income grew at a rate of 3.1%, faster than the 1.5% increase in the cost of living, but still lagging the nation's growth rate. Since this represents only one quarter of data, it is too early to call the income growth a new trend. Confirmation will come only if more quarters of data show a similar trend. What is more certain, however, is that income growth in 1998 will be more robust than increases in the cost of living.

Figures recently released by the U.S Department of Labor's Bureau of Labor Statistics show that inflation remains low. For the first half of 1998, the cost of living in Anchorage, as measured by the Anchorage Consumer Price Index for All Urban Consumers (CPI-U), increased by 1.8%. This mirrors the sub-two percent performance of last year and is the third lowest half-year figure in a decade. (See Exhibit 2.) It is also not much different from the nation's rate of 1.5%. Since Anchorage is the only location in Alaska where changes in the cost of living are measured, the Anchorage CPI-U is often used as a proxy for inflation in other locations in Alaska. Many businesses, unions, landlords and workers use this economic indicator in wage negotiations, adjusting for child support payments, rental agreements and other purposes.

Some components of the CPI-U contributed to the overall gain and others helped offset some of these increases. For example, the cost of apparel and private transportation actually fell. However, other categories, such as housing, medical care, and food, items that carry more weight in the overall index, experienced increases. Medical care increased 3.7% over the first half of 1997. Although this was one of the biggest increases among the items measured by the CPI-U, it did put the brakes on the 7% annual medical care increases seen in the previous three years.