

# Migration

by  
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State Demographer

## Alaska is a state of migrants; only 38.1 percent were born here

**O**f all the factors that influence the growth or decline of a population, migration is the most important and the most difficult to study and understand. Migration involves movement of a person between two geopolitical locations over a period of time. Different types of migration data yield different insights into how people move in response to economic and other conditions.

### Key findings

Alaska has a higher rate of migration than any state other than the District of Columbia. Only 38.1% of Alaskans were born in the state. Recent

migration data show Anchorage to be the major hub of migration movement, both within the state and to and from other states. The military, with its regular rotation of troops and families, is a major stimulus to migration to and from Alaska; sites of military bases show higher migration rates than other locales. The census shows that Alaska Natives are moving from rural to urban locations. Immigration from other countries has been significant in Southeast Fairbanks and the Aleutians. In eight areas of the state during the period 1995-2000, more than half the population moved. The percent of foreign-born in Alaska is about half the national rate.

## Single Year and Five-Year Migration Alaska 1995 – 2000

Time Period	In Migration	Out Migration	Net Migration	Gross Migration	Population	In Migration Rate	Out Migration Rate
1999-2000	38,776	40,348	-1,572	79,124	627,697	6.2%	6.4%
1998-1999	39,885	42,222	-2,337	82,107	622,000	6.4%	6.8%
1997-1998	40,974	40,829	145	81,803	617,082	6.6%	6.6%
1996-1997	41,476	44,477	-3,001	85,953	609,655	6.8%	7.3%
1995-1996	40,282	44,023	-3,741	84,305	605,212	6.7%	7.3%
Sum of One Year Migration 1995-2000	201,393	211,899	-10,506	413,292	626,932	6.4%	6.8%
Place of Residence Migration 1995-2000*	95,562	126,060	-30,498	221,622	626,932	3.0%	4.0%
Synthetic measure of repeat migration:							
Moves per nonreturn mover	2.11	1.68		1.86			

\* Universe: Persons age 5 and over

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section, U.S. Census 2000

## Definition of terms

The term migration refers to the movement of people across a boundary such as a national, state, or county border for the purpose of establishing a new permanent residence. Movement across international boundaries is referred to as immigration or emigration. Movement into or out of a state or county is referred to as in-migration or out-migration. The difference between in- and out- migration is net migration. The total volume of migration (in-migration plus out-migration) is known as gross migration. Movement from one location to another within a county is referred to as local movement.

## Studying migration

Movement may be measured over different periods of time, producing widely different results. These can range from movement between one's place of birth and place of death, to daily flows from home to work. The movement can be studied from the point of view of the individual over a period of time, called cohort migration, or it can be studied through periodic surveys or snapshots, called periodic migration. Cohort migration follows the migration history of individuals born in the same year or who migrated to a place as part of a particular historical event such as the "pipeline boom". Cohort migration is used to study migration differences during a person's life cycle. Studies of cohort migration are uncommon because lifetime migration histories are rare.

## 2 Migration by Place of Residence Alaska 1995 – 2000

	Population Age 5+	Non- movers	Movers	% Movers	Local Move- ment	% Local Move- ment	Inflow			Outflow		
							Domestic In flow	In from Alaska	In from Other State	Domestic Outflow	Out to Alaska	Out to Other State
Alaska	579,740	267,958	311,782	53.8%	160,335	51.4%	138,883	43,321	95,562	169,381	43,321	126,060
Aleutians East Bor.	2,586	1,461	1,125	43.5%	187	16.6%	830	109	721	355	161	194
Aleutians West CA	5,220	1,999	3,221	61.7%	882	27.4%	1,982	354	1,628	2,026	429	1,597
Anchorage Municipality	240,627	100,167	140,460	58.4%	77,553	55.2%	56,190	13,047	43,143	71,222	12,339	58,883
Bethel Census Area	14,405	9,118	5,287	36.7%	3,515	66.5%	1,689	910	779	2,520	1,846	674
Bristol Bay Borough	1,169	656	513	43.9%	198	38.6%	311	171	140	474	251	223
Denali Borough	1,795	979	816	45.5%	214	26.2%	575	213	362	907	240	667
Dillingham CA	4,435	2,895	1,540	34.7%	770	50.0%	733	403	330	863	455	408
Fairbanks North Star Bor.	76,200	30,036	46,164	60.6%	19,871	43.0%	23,995	5,089	18,906	29,793	4,565	25,228
Haines Borough	2,266	1,182	1,084	47.8%	453	41.8%	592	302	290	657	233	424
Juneau City and Bor.	28,711	12,954	15,757	54.9%	8,968	56.9%	6,373	2,368	4,005	7,690	2,089	5,601
Kenai Peninsula Bor.	46,359	24,957	21,402	46.2%	11,400	53.3%	9,688	4,083	5,605	10,548	3,227	7,321
Ketchikan Gateway Bor.	13,135	6,393	6,742	51.3%	3,763	55.8%	2,838	1,108	1,730	4,320	1,105	3,215
Kodiak Island Borough	12,567	4,911	7,656	60.9%	3,483	45.5%	3,605	974	2,631	6,095	1,783	4,312
Lake and Peninsula Bor.	1,675	1,229	446	26.6%	181	40.6%	253	149	104	570	485	85
Matanuska-Susitna Bor.	55,170	27,247	27,923	50.6%	12,012	43.0%	15,264	7,792	7,472	10,533	4,105	6,428
Nome Census Area	8,395	5,230	3,165	37.7%	2,040	64.5%	1,073	563	510	1,866	1,143	723
North Slope Borough	6,679	3,444	3,235	48.4%	1,956	60.5%	1,156	597	559	1,465	936	529
Northwest Arctic Borough	6,444	3,879	2,565	39.8%	1,663	64.8%	877	495	382	1,231	856	375
Prince of Wales-Outer Ketchikan	5,706	3,134	2,572	45.1%	1,520	59.1%	1,022	464	558	2,089	835	1,254
Sitka City and Borough	8,317	3,580	4,737	57.0%	2,162	45.6%	2,470	747	1,723	2,426	753	1,673
Skagway-Hoonah-Angoon	3,251	1,940	1,311	40.3%	554	42.3%	742	350	392	1,337	700	637
Southeast Fairbanks CA	5,739	3,206	2,533	44.1%	875	34.5%	1,473	498	975	2,285	655	1,630
Valdez-Cordova CA	9,533	4,966	4,567	47.9%	1,998	43.7%	2,395	1,059	1,336	3,716	1,658	2,058
Wade Hampton CA	6,288	4,713	1,575	25.0%	1,108	70.3%	454	275	179	808	666	142
Wrangell-Petersburg CA	6,234	3,487	2,747	44.1%	1,685	61.3%	1,017	405	612	1,847	575	1,272
Yakutat City and Bor.	760	412	348	45.8%	146	42.0%	200	90	110	299	152	147
Yukon-Koyukuk CA	6,074	3,783	2,291	37.7%	1,178	51.4%	1,086	706	380	1,439	1,079	360

Source: U.S. Census

Percentages are computed by dividing the movers by the population in 2000.

The second way of studying migration is periodic migration, for example, measurement of where one lived last year or five years ago. There are two regular periodic measures of migration in the United States, the annual filings of federal income tax and the decennial census. Statistics on the movement of people between states and counties are derived from change of address on U.S. Internal Revenue Service (IRS) tax returns. Each decade, the U.S. Census asks a 16 percent sample of the population over five years of age where they lived five years ago. Periodic migration data by age can also be used to create synthetic cohorts to study migration patterns at different points in an individual's life cycle, work, or event history.

## Sources of migration data

Several sources of migration information are currently available for Alaska. Each has its limitations. Each year the IRS produces migration information based upon the county from which income tax returns are filed. Coverage is limited to those who file tax returns in two consecutive years. A second source is the Alaska Permanent Fund Dividend application. Coverage for the PFD is limited for the military and is only available for persons who have resided in Alaska for a full calendar year. Third, "residual net migration" can be estimated using population estimates and vital statistics. Net migration is computed as the

## Migration by Place of Residence 2

### Alaska 1995 – 2000 (continued)

	Net Flow			Gross Flow						
	Domestic Net flow	Net to Alaska	Other State	Domestic Gross flow	Gross to Alaska	Share Alaska	Gross to Other State	Share % Other State	Gross Other State	In from Abroad
Alaska	-30,498	0	-30,498	308,264	86,642	100.0%	221,622	100.0%	71.9%	12,564
Aleutians East Bor.	475	-52	527	1,185	270	0.3%	915	0.4%	77.2%	108
Aleutians West CA	-44	-75	31	4,008	783	0.9%	3,225	1.5%	80.5%	357
Anchorage Municipality	-15,032	708	-15,740	127,412	25,386	29.3%	102,026	46.0%	80.1%	6,717
Bethel Census Area	-831	-936	105	4,209	2,756	3.2%	1,453	0.7%	34.5%	83
Bristol Bay Borough	-163	-80	-83	785	422	0.5%	363	0.2%	46.2%	4
Denali Borough	-332	-27	-305	1,482	453	0.5%	1,029	0.5%	69.4%	27
Dillingham CA	-130	-52	-78	1,596	858	1.0%	738	0.3%	46.2%	37
Fairbanks North Star Bor.	-5,798	524	-6,322	53,788	9,654	11.1%	44,134	19.9%	82.1%	2,298
Haines Borough	-65	69	-134	1,249	535	0.6%	714	0.3%	57.2%	39
Juneau City and Bor.	-1,317	279	-1,596	14,063	4,457	5.1%	9,606	4.3%	68.3%	416
Kenai Peninsula Bor.	-860	856	-1,716	20,236	7,310	8.4%	12,926	5.8%	63.9%	314
Ketchikan Gateway Bor.	-1,482	3	-1,485	7,158	2,213	2.6%	4,945	2.2%	69.1%	141
Kodiak Island Borough	-2,490	-809	-1,681	9,700	2,757	3.2%	6,943	3.1%	71.6%	568
Lake and Peninsula Bor.	-317	-336	19	823	634	0.7%	189	0.1%	23.0%	12
Matanuska-Susitna Bor.	4,731	3,687	1,044	25,797	11,897	13.7%	13,900	6.3%	53.9%	647
Nome Census Area	-793	-580	-213	2,939	1,706	2.0%	1,233	0.6%	42.0%	52
North Slope Borough	-309	-339	30	2,621	1,533	1.8%	1,088	0.5%	41.5%	123
Northwest Arctic Borough	-354	-361	7	2,108	1,351	1.6%	757	0.3%	35.9%	25
Prince of Wales-Outer Ketchikan	-1,067	-371	-696	3,111	1,299	1.5%	1,812	0.8%	58.2%	30
Sitka City and Borough	44	-6	50	4,896	1,500	1.7%	3,396	1.5%	69.4%	105
Skagway-Hoonah-Angoon	-595	-350	-245	2,079	1,050	1.2%	1,029	0.5%	49.5%	15
Southeast Fairbanks CA	-812	-157	-655	3,758	1,153	1.3%	2,605	1.2%	69.3%	185
Valdez-Cordova CA	-1,321	-599	-722	6,111	2,717	3.1%	3,394	1.5%	55.5%	174
Wade Hampton CA	-354	-391	37	1,262	941	1.1%	321	0.1%	25.4%	13
Wrangell-Petersburg CA	-830	-170	-660	2,864	980	1.1%	1,884	0.9%	65.8%	45
Yakutat City and Bor.	-99	-62	-37	499	242	0.3%	257	0.1%	51.5%	2
Yukon-Koyukuk CA	-353	-373	20	2,525	1,785	2.1%	740	0.3%	29.3%	27

Source: U.S. Census

remainder of the change between two time periods minus natural increase (births minus deaths). Residual net-migration includes migration, but it may include any error from the population estimates. The fourth source is the Place of Residence Five Years Ago question from the census. The census also asks for Place of Birth. A new source of annual migration data is the American Community Survey. The ACS asks the same questions as the Census long form sample and will replace it beginning in 2010. The monthly ACS will begin nationwide in 2004, and after several years it will begin to measure seasonal migration.

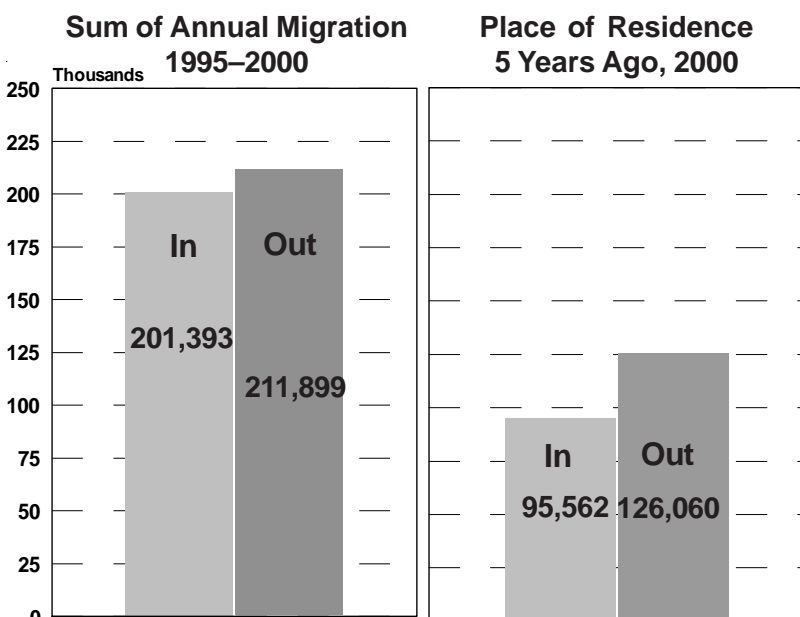
Computing migration with each data set will produce different results, although the overall trends for the most part should be similar. One of the critical differences can be seen when one compares annual measures of migration and the census place of residence five years ago question. (See Exhibits 1 and 3.) The place of residence migration measure will show smaller flows than

annual migration because it misses people who moved both in and out between the two dates. For example, the census place of residence would miss people who moved to Alaska in 1996 and left in 1999. Place of residence captures the individual experience for those it covers. If the annual migration for a five-year period is summed, it will capture the volume of migration flow, but it will count some individuals more than once since it includes the repeated migrations of individuals in each year of the five-year period. It is not uncommon for migrants to Alaska to come and go from the state repeatedly over several years. Research has shown that dividing the sum of annual migration for five years by the place of residence data for the five years yields an estimate of the number of moves per non-return mover. Overall, the number of moves per non-return mover over a five-year period averages about two. Alaska has the second highest level of migration to and from the state of any state (about 11.8%). Only the District of Columbia (18.8%) was higher. The average for all states is 6.5%. Alaska's resident population also continues to have a very transient seasonal component. Summer populations may run as high as 18% above the annual resident population.

### 3 Alaska Migration by Two Measures

#### A state of migrants

The majority of all persons living in Alaska at the time of the census in 2000 were migrants to the state. Only 38.1% of Alaskans were born in the state. Regionally, these proportions varied from a low of 25.0% born in Alaska in Aleutians West Census Area, to a high of 94.1% for Wade Hampton Census Area. Generally, more than 75% of the residents of rural Alaska were born in Alaska, compared to 32.1% for Anchorage, 29.5% for Fairbanks and from 33% to 38% for Matanuska-Susitna, Kenai, and Juneau. Another 1.3% were born abroad to American parents and 5.9% of Alaskans were foreign born. This is lower than the national levels of foreign born. In 2000, 11% of all persons in the U.S. were foreign born. Similarly, 2.7% of all Alaskans were not U.S. citizens compared to 6.6% for the U.S. as a whole.



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section, U.S. Census

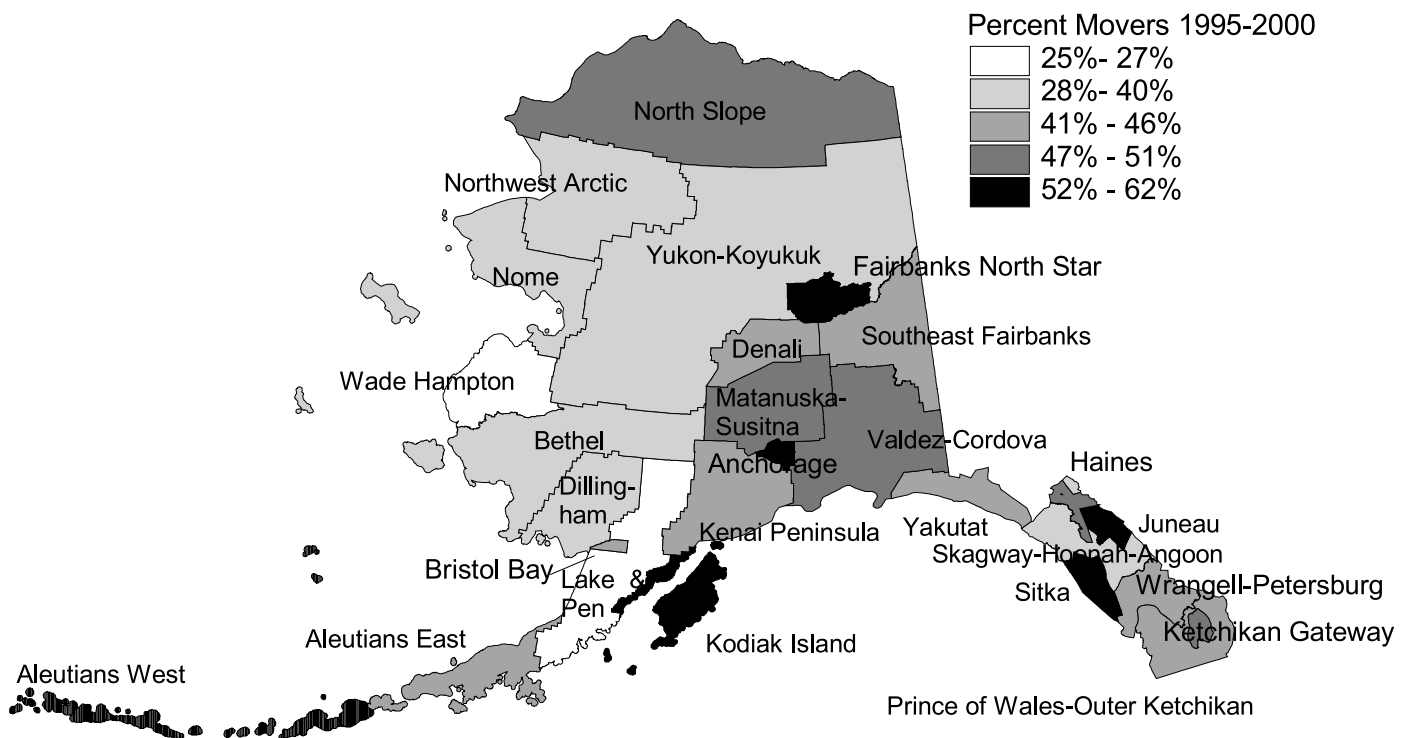
For the last two decades, place of residence migration data revealed periods of net loss of residents through migration from Alaska. 1985-1990 was the oil bust, which caused major out-migration. The 1995-2000 period was one of exceptional prosperity in the rest of the country compared to Alaska, and this attracted migrants from the state to the Northwest and West. In the first case there was a push and in the second there was a pull. Explaining the patterns of movement and the overall characteristics of movers is best done in terms of gross migration flows.

Exhibit 2 shows all the different forms of movement and migration for Alaska and its boroughs and census areas. Movement includes all persons five years of age and over who are living in a different house in the county, state, or U.S. than they lived

in five years earlier. It does not cover immigrants from abroad. While Anchorage and Fairbanks account for almost three quarters of all immigrants since 1995, immigrants and foreign nationals are a bigger share of the population in three areas. Southeast Fairbanks has seen an influx of Russian immigration, while Kodiak and the Aleutians continue to experience Asian and Latin American Hispanic immigration of fish processing workers.

Exhibit 4 shows the wide variation in the degree of stability and movement in communities across Alaska. In six areas more than 52% of the population moved, either locally or through migration, at least once in the 1995-2000 period. Aleutians West and Kodiak experience substantial transience associated with fish processing. Anchorage, Fairbanks North Star Borough, Kodiak,

## Percent of Population who Moved 1995 – 2000 4



Source: U.S. Census



Sitka, and Juneau all experience higher levels of population movement because of Army, Air Force, and Coast Guard rotation. In addition, Ketchikan, Haines, Matanuska-Susitna, Valdez-Cordova, and North Slope also experience relatively high levels of movers. The fewest movers are found in Lake and Peninsula and Wade Hampton and the predominately rural Alaska Native areas of the state.

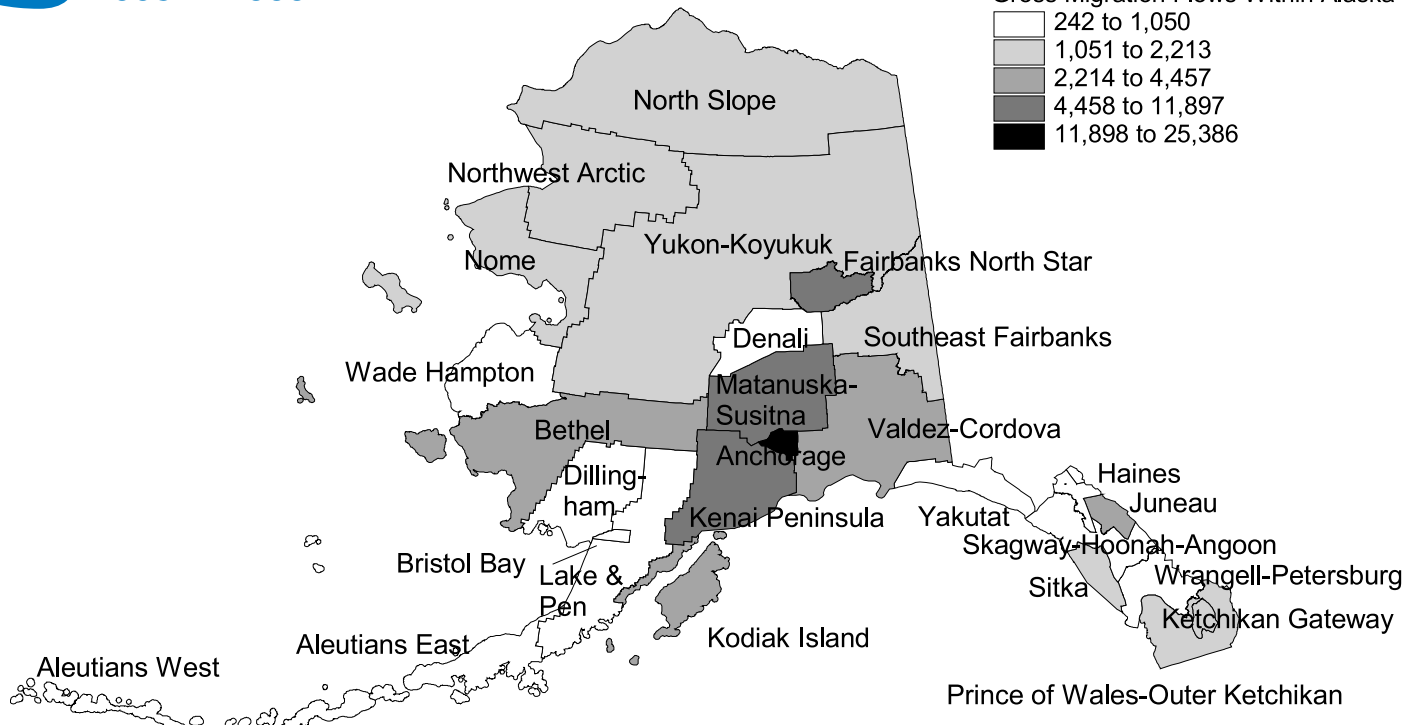
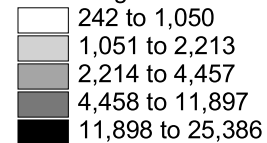
The migration of Alaskans is of two different types. The first is the pattern of movement of Alaskans within the state, as shown in Exhibit 5, and the second is the flow of migrants between Alaska and other states, as shown in Exhibit 7. The outstanding trend within Alaska is the movement of people to or from Anchorage and the rest of the state. This was followed by movement to or from Matanuska-Susitna, Kenai Peninsula and Fairbanks North Star boroughs. The smallest migration flows within the state can be found to or from the

villages of the Aleutians, Bristol Bay, Dillingham, Wade Hampton in Southwest Alaska, Denali Borough in the Interior, and Yakutat, Haines, Skagway-Hoonah-Angoon, and Wrangell-Petersburg in Southeast.

A key part of this internal migration is the movement of Alaska Natives. Exhibit 6 shows the percent change in Native population that is attributed to migration between 1995 and 2000. The data clearly document the rural to urban movement of Alaska's Native population. Anchorage and Matanuska-Susitna Borough saw a 10-15% increase in their Native populations through in-migration from other parts of Alaska. Native populations of Fairbanks North Star Borough, Kenai Peninsula Borough and Denali Borough increased between 5% and 9%, and Juneau, Yakutat, Bristol Bay, Dillingham, and Aleutians West had 1% to 4% increases. In all other parts of Alaska, Native populations experienced out-migration.

## 5 Gross Migration Flows within Alaska 1995 – 2000

Gross Migration Flows Within Alaska



Source: U.S. Census

## Movement between states

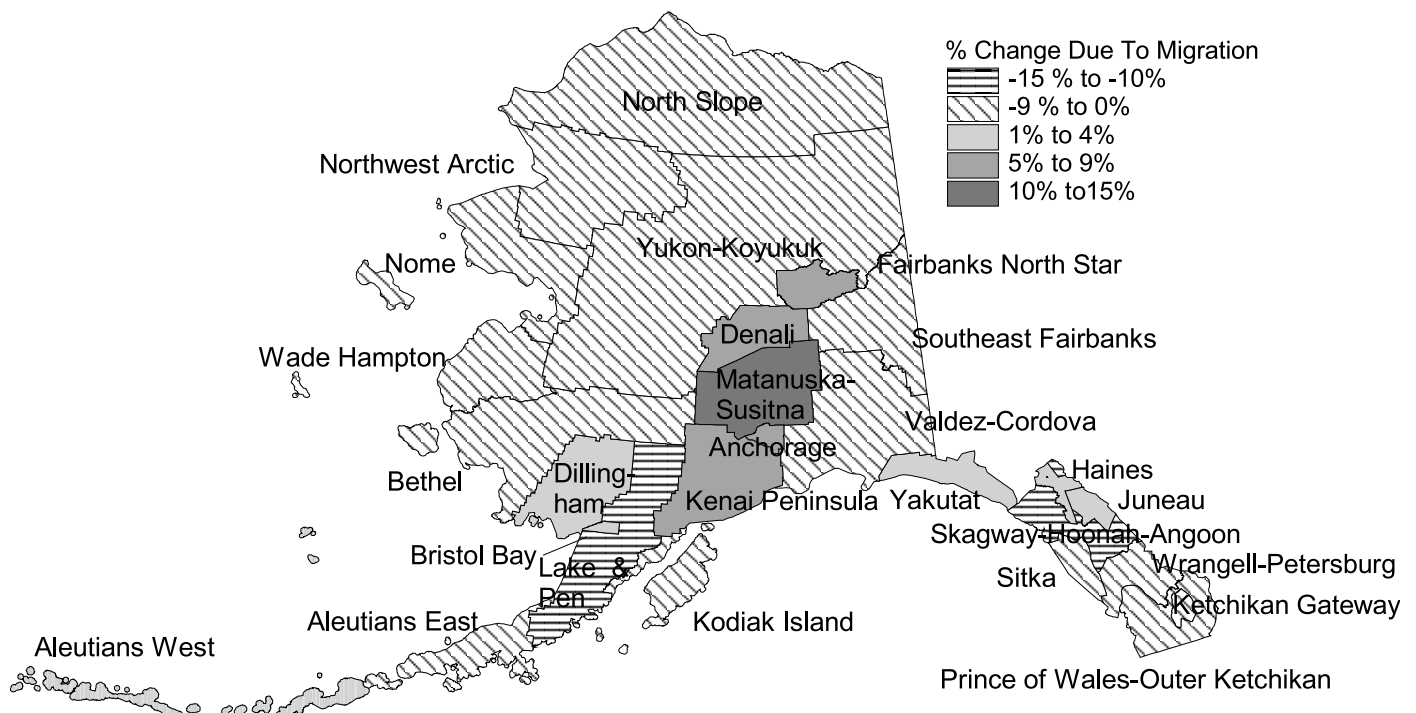
Another migration flow is the movement between Alaska and other states. The destinations for those arriving and departing the state are relatively few. Exhibit 7 shows the gross migration between Alaska and other states. The Municipality of Anchorage is the departure or arrival point for 46% of all migrants to or from the state. Another 20% arrived or departed through Fairbanks North Star Borough. Mat-Su, Kenai Peninsula and Juneau boroughs accounted for another 16% of the out-of-state migrants. Exhibit 8 shows the percent of the total migration flows accounted for by out-of-state migration. This table shows that more than 73% of migration to or from Anchorage, Fairbanks and the Aleutians was from out-of-state. Between 50% and 73% of migration to or from Wrangell-Petersburg and Southeast Fairbanks census areas, and Ketchikan Gateway, Sitka, Juneau, Kodiak Island, Kenai Peninsula, and Denali boroughs were out-of-state flows.

Exhibit 10 shows Alaska's gross migration flows to and from counties across the U.S. The most common origins and destinations for Alaska migrants are in the West and Mountain states. The counties that provided the largest number, 20% of all in-migrants to Alaska were: Pierce, WA (Tacoma); King, WA (Seattle); Maricopa, AZ (Phoenix); San Diego, CA (San Diego); Bexar, TX (San Antonio); Cumberland, NC (Ft. Bragg); El Paso, CO (Colorado Springs); Multnomah, OR (Portland); Sacramento, CA (Sacramento); Harris, TX (Houston); Kern, CA (Bakersfield); Clark, NV (Las Vegas); Spokane, WA (Spokane); Orange, CA (Anaheim/Irvine); Los Angeles, CA (Los Angeles); Bell, TX (Ft. Hood); Honolulu, HI (Honolulu); Lane, OR (Eugene); Clark, WA (Vancouver).

Destinations receiving the most out-migrants from Alaska (23% of total) were: King, WA (Seattle), Maricopa, AZ (Phoenix); Clark, NV (Las Vegas);

## Percent Change Due to Migration For Alaska Natives, 1995 – 2000

6



Source: U.S. Census

Pierce, WA (Tacoma); El Paso, CO (Colorado Springs); Snohomish, WA (Everett); Los Angeles, CA (Los Angeles); Pima, AZ (Tucson); San Diego, CA (San Diego); Multnomah, OR (Portland); Spokane, WA (Spokane); Bexar, TX (San Antonio); Honolulu, HI (Honolulu); Lane, OR (Eugene); Marion, OR (Salem); Cumberland, NC (Ft Bragg); Clark, WA (Vancouver); Washington, OR (suburban Portland); Salt Lake, UT (Salt Lake City); Harris, TX (Houston). The major migration flows are predominately accounted for by military, college, work, and retirement.

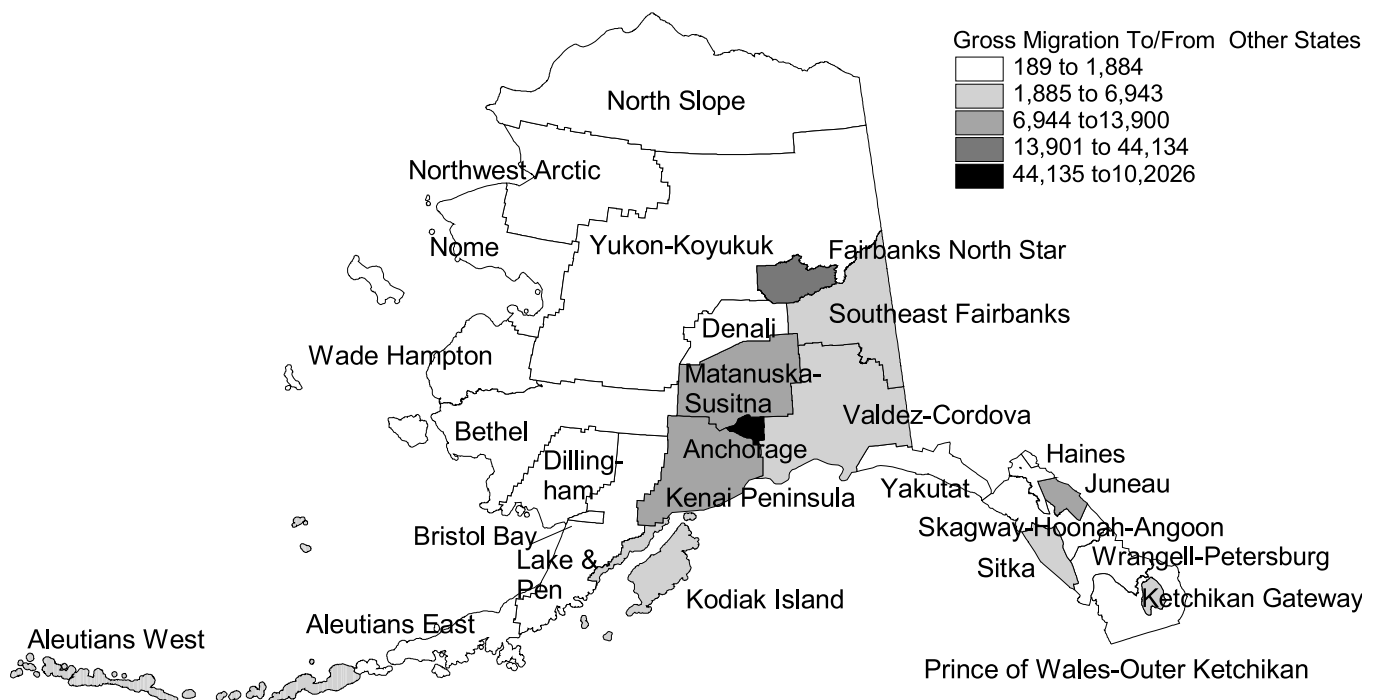
The place of residence migration data on class of worker (Exhibit 9) shows that people who left the state had a slightly higher tendency to be employed at their destination than those who migrated to Alaska. There is a slightly higher tendency for those who leave Alaska not to be in the labor

force. College students probably accounted for this tendency.

### Military rotation important factor in migration

Nearly 12% of all migrants to or from Alaska are in the military. Adding estimated dependents would bring the total to nearly 29%. Recent independent information from the Department of Defense suggests that the annual military migration may in fact be larger. The military share of migration is larger than previously estimated by this office. The place of residence migration would suggest that as much as 72% of our migration to or from North Carolina may be military and dependent flows, and that military migration from nearly half of the states to Alaska may account for more than 40% of the total

## 7 Gross Migration to and from Other States 1995 – 2000



Source: U.S. Census



migration flows from those states. The states where a substantial proportion of migrants are military are: North Carolina, Georgia, Delaware, Virginia, Oklahoma, Nebraska, Mississippi, South Carolina, Alabama, North Dakota, Kentucky, Maryland, South Dakota, Louisiana, Rhode Island, New Mexico, New Jersey, New York, Connecticut, Texas, and Florida.

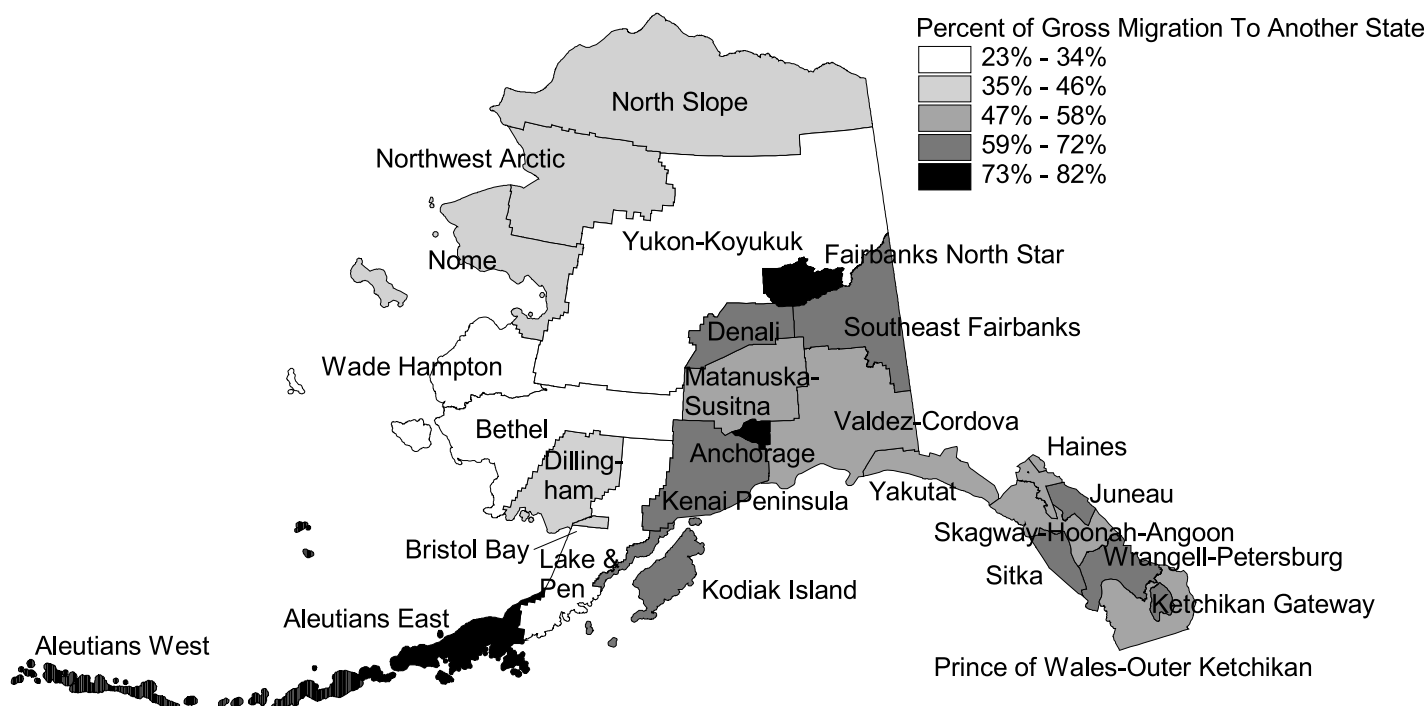
In other states, military and dependent populations account for less than 20% of the states' migration to and from Alaska. These states are Vermont, Oregon, Minnesota, Washington, Montana, New Hampshire, Utah, Nevada, Iowa, Indiana, Wyoming, Idaho, Wisconsin, and Michigan.

Clearly, military rotation is a major driver to the overall trends in migration in Alaska and a major factor in transportation, real estate and other

industries that benefit from population turnover. It is clear that military flows contribute to the substantial gross migration rates of many of the counties. This is particularly true of those located east of the Mississippi. Many of the remaining counties outside the West, and a number of counties in the West are the sites of universities.

More migration analysis from the census and other sources listed above is currently under way. Some additional analysis appears in the *Alaska Population Overview: 2000–2002 Estimates and Census 2000*, just released by the Alaska Department of Labor and Workforce Development.

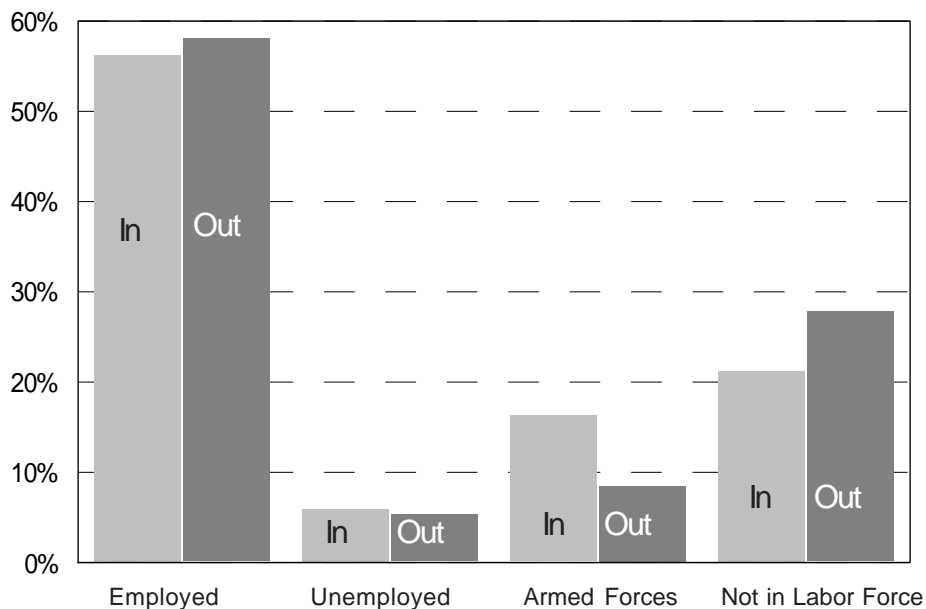
## Percent of Gross Migration to Another State 1995 – 2000



Source: U.S. Census

## 9 Alaska Migration

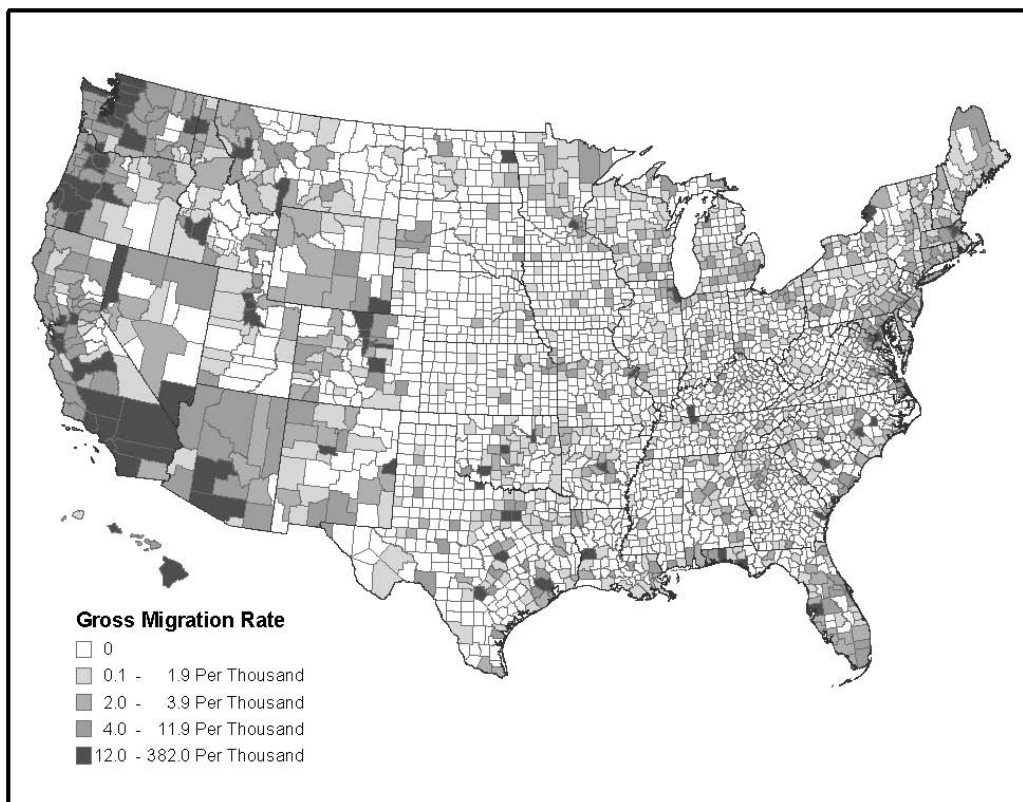
### By labor force status 1995 – 2000



Source: U.S. Census

## 10 Gross Migration Rate to and from Alaska

### 1995 – 2000



Source: U.S. Census, and Alaska Department of Labor and Workforce Development, Research and Analysis Section