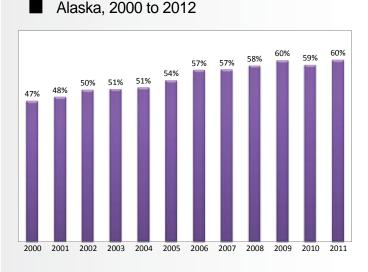
The Military and Alaska's Economy

Role waxes and wanes, but it's always a major player

ne of the federal government's first acts after purchasing Alaska was to send the U.S. Army to occupy and administer its new territory. However, it wasn't until World War II that the military solidified its role as one of Alaska's economic mainstays.

The military's presence in the 1940s was so major and transformational that the state was commonly referred to as "Military Alaska." More than 100,000 troops poured into the state along with billions of dollars for infrastructure.

With the end of the war, the prospect of a near pull-out by the military prompted concern for Alaska's economic future — but just a few years later, the Cold War began and Alaska's proximity to the Soviet Union cemented the military's role in Alaska's economy for many decades to come.



Defense Share of Federal GDP

Source: U.S. Department of Commerce, Bureau of Economic Analysis

We "export" defense

One way to look at the military's influence on Alaska's economy is to treat it like one of our leading "exports," which are especially relevant because they bring new money into the state. The benefits are similar to those from exporting gold, oil, or fish — but instead of a commodity, the military "sells" national defense, a service the rest of the country is willing to pay for.

According to economists at the University of Alaska Anchorage, only oil and nondefense federal spending generate more jobs and income in the state.

By another economic measure, the military's share of Alaska's federal gross domestic product has surpassed civilian federal spending since 2003. (See Exhibit 1.)

Tens of thousands of soldiers and their families live in Alaska and spend their income here, and with them comes money to build and maintain large, sophisticated facilities.

The military's influence on the state's economy can go unnoticed even in areas with a large presence, as it's often out of the public eye on bases that are fairly self-encompassing. Thousands of soldiers, civilians, and contractors live off the base, though, and those who live on base also spend a significant share of their wages in the surrounding community. Millions are also spent locally on procurement and construction.

Buildups and cutbacks

Since 1940, alternating military buildups and cutbacks have been driven by often unpredictable

international events that had little or nothing to do with Alaska. The list of military buildups is long, including World War II, the Cold War, the Korean and Vietnam wars, and the recent wars in Iraq and Afghanistan. Cutbacks typically followed the ends of these wars.

The most recent military reduction was in the early 1990s as the Cold War ended and federal budget restraints came into play. Between 1990 and 2000, Alaska lost nearly a quarter of its military population as installations closed in Galena and King Salmon along with Eareckson Air Station (formerly Shemya) and the naval base on Adak, then home to 2,500 personnel. Fort Greely, near Delta Junction, was shut down in 2001 and put on caretaker status.

During that period, many of the state's other industries grew considerably faster than the military sector, which compounded these absolute declines and fur-

ther diminished the military's influence on the state economy. At the time, a permanent decline seemed possible, but more unforeseen global events would soon reverse the trend.

Defense brings new vigor to the economy after 2001

The terrorist attacks of Sept. 11, 2001, and the wars in Iraq and Afghanistan led to a huge influx of military to Alaska, with Alaska's servicemen playing a big part in these new conflicts. Federal expenditures grew in turn, thanks in part to the seniority and influence of the state's congressional delegation.

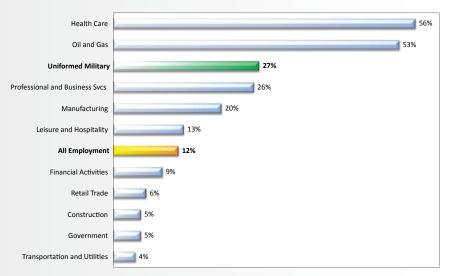
For the next decade, this expansion became an important ingredient in Alaska's broader economic growth. Uniformed military grew considerably faster than employment in most other industries. (See Exhibit 2.)

Total troop levels had fallen to 17,631 in 2000, but by 2009, the active duty count had climbed to 24,449, or the equivalent of adding a new installation. The military's share of the state's gross domestic product also grew by 138 percent between 2001 and 2011, in contrast to 85 percent growth for the overall GDP.

The increase in construction money probably had

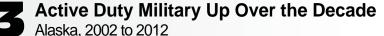
Strong Job Growth for Military

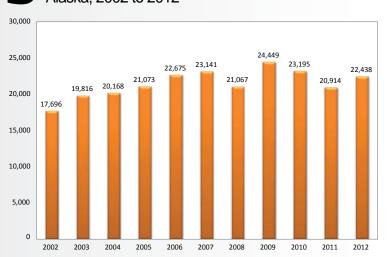
Alaska industries, 2002 to 2012



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

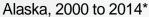
an even bigger effect than the influx of troops. (See Exhibit 4.) Nearly all of the state's installations underwent complete makeovers, and Fort Greely received a new anti-ballistic missile facility. According to the Army Corps of Engineers, the combined value of these projects went from \$201 million in 2001 to a peak of \$599 million in 2008. Between 2003 and 2010, the military spent approximately \$500 million a year on construction in Alaska.

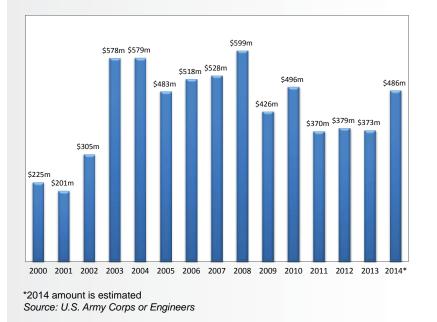




Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

Defense Spending Booms for Decade





According to Alaska's Associated General Contractors, 10 percent or more of all construction between 2005 and 2009 was defense-related, peaking at 19 percent in 2006.

Army dominates in Alaska

Nearly all of the 22,438 servicemen in Alaska in 2012 were Army, Air Force, or Coast Guard, with a very small number of Navy and Marines. The Air Force was dominant in the state prior to the buildup in the 2000s, but the Army moved into the No. 1 spot with nearly all of the growth over the last decade.

Because Alaska has so few Marines or Navy personnel, its share of Army and Air Force is much larger than the national average. Only 38 percent of the nation's servicemen were Army, versus 59 percent in Alaska.

Although Kodiak is home to one of the nation's largest Coast Guard stations and Alaska has the most extensive coastline in the country, only 9 percent of Alaska's service personnel were Coast Guard compared to 8 percent for the nation.

A large civilian branch

The military's economic reach extends into a large federal civilian workforce. In 2012, Alaska had more than 7,000 defense-related civilian jobs with a payroll of \$452 million and average earnings of \$62,278. (See Exhibit 5.) Civilians often provide base support and range from highly specialized professionals working for the Corps of Engineers to retail workers in the commissaries.

The military has increasingly outsourced or sought private contracts over the years. It's difficult to get reliable numbers of employees these contractors use, but in 2010, the most recent year available, \$1.8 billion in military contracts were awarded in Alaska. In 2009, Arctic Slope Regional Corporation topped the Alaska contactors list at \$151 million.

These contracts include janitorial services, utilities, specialized technical support, security, food services, and housing. In the early 2000s, the military began to privatize much of its housing. For example, JL Properties of Anchorage currently owns and operates 3,262 housing units on Joint Base Elmendorf-Richardson. JL Properties' 75 employees maintain



Defense-Related Civilian Jobs and Wages Alaska, 2012

		Payroll	Average Annual
	2012	Year 2012	Earnings
Department of Defense* (Civilian only)	5,446	\$413,068,614	\$75,848
Services (SVS/SVF)	843	\$23,385,070	\$26,554
Army/Air Force/Coast Guard Exchange (retail)	674	\$5,463,641	\$23,900
Installation Morale, Welfare, and Recreation Fund Personnel	292	\$9,906,833	\$33,928
Total	7,255	\$451,824,158	\$62,278

*Includes Coast Guard civilians, although they operate under the Department of Homeland Security Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

Geographic concentrations

Given its size and economic clout, the military affects the entire state but its presence varies dramatically. Anchor-

this housing and subcontract for additional maintenance. Fort Wainwright and Eielson Air

Force Base, near Fairbanks, have

a similar housing arrangement with a private contractor.

age and Fairbanks are home to 90 percent of all uniformed military and their dependents. (See Exhibit 6.)

Fairbanks is a "military town," with military families representing nearly a quarter of the borough's population in 2012, and including federal civilians and contractors brings that share to over a third.

The Fairbanks Economic Development Corporation ties 39 percent of all area jobs to the military, with approximately 25 percent of those jobs connected to Eielson and the rest affiliated with Fort Wainwright. This makes the military the largest employer in Fairbanks by far. According to the U.S. Bureau of Economic Analysis, the military represented 21 percent of Fairbanks' GDP in 2011 — nationally, it's just 5 percent.

Though Fairbanks' large military percentage might be expected, the place with the second-largest percentage of military in its population might come as a surprise. The small Denali Borough is 21.9 percent military because of Clear Air Station, which is off the Parks Highway in a sparsely populated area near Anderson. (See Exhibit 7.)

Though Juneau is the state's Coast Guard command center, its largest base is on Kodiak Island. Kodiak's base is one of the largest in the nation, ranking second in the Kodiak Borough's economy after fishing. The Kodiak base also ranks third in the state both for the number of uniformed personnel and percentage of the surrounding area's population. The Coast Guard operates several other smaller stations and moors its vessels in various ports along Alaska's coast.

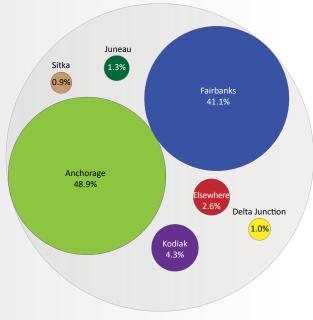
In terms of numbers, Anchorage has the largest base and military population in the state. In 2012, 30,933 uniformed military and dependents lived in Anchorage, representing 10 percent of the population. The Department of Defense estimated that in addition to the military jobs on base in Anchorage, there were an additional 5,111 military-related jobs and 6,000 jobs with indirect defense ties.

The Department of Defense also estimated the annual payroll for active duty military on Joint Base Elmendorf-Richardson at \$869 million in 2012, making the average pay for a soldier \$71,774, including a housing allowance. The indirectly related jobs paid \$53,880 on average.

These jobs' influence extends beyond Anchorage,

Where Military Families Live

Percentage of total by area, 2012



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

with many of the joint base's workers and contractors commuting from the Matanuska-Susitna Borough, which has no direct military presence. Approximately 1,045 uniformed personnel and civilians from the base lived in Mat-Su last year.

Fort Greely near Delta Junction had just 10 uniformed personnel when it was reactivated in 2004

Over a Fifth of Fairbanks is Military

Percent of area population, 2012

	Active duty	Active duty plus dependents	Percent of population
Fairbanks North Star Borough	9,216	22,296	22.8%
Denali Borough	102	402	21.9%
Kodiak Island Borough	974	2,492	18.0%
Anchorage, Municipality of	10,967	30,933	10.4%
Alaska	22,438	59,003	8.2%
Southeast Fairbanks Census Area	214	423	5.9%
Sitka, City and Borough of	197	503	5.6%
Valdez-Cordova Census Area	170	412	4.2%
Ketchikan Gateway Borough	185	439	3.2%
Juneau, City and Borough of	282	824	2.5%
Petersburg Census Area	32	56	1.4%
Kenai Peninsula Borough	92	207	0.4%
Aleutians West Census Area	7	16	0.3%

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

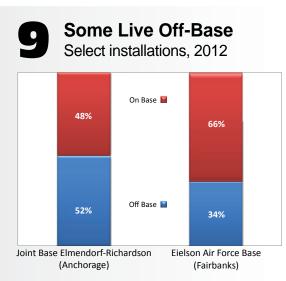
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Demographics of Those Living on Alaska's Bases

Characteristics of military personnel and families, 2007 to 2011

	Fort Richardson	Elmendorf Air Force Base	Fort Wainwright	Eielson Air Force Base	Kodiak Coast Guard Station	Alaska Average
Median age	21.7	20.9	21.8	22.6	22.7	33.8
	0.7	0.7	0.4	0.4		0.0
Average family size	3.7	3.7	3.4	3.4	4	3.2
Born in Alaska, percent	11.4%	8.4%	7.3%	8.8%	14.6%	39.1%
Men 18 and over, percent	64.0%	54.0%	59.0%	55.0%	61.0%	52.0%
Women 18 and over, percent	36.0%	46.0%	42.0%	46.0%	39.0%	48.0%
Race (one race), percent						
White	70.0%	75.0%	74.0%	80.0%	76.0%	67.0%
African American	13.0%	13.0%	14.0%	10.0%	3.0%	3.0%
Native American/Alaska Native	2.0%	1.0%	1.0%	0.0%	7.0%	14.0%
Asian Hawaiian/Pacific Islander	3.0%	4.0%	2.0%	1.0%	0.0%	5.0%
Some other race	4.0%	4.0%	3.0%	2.0%	1.0%	1.3%
Two or more races	9.0%	4.0%	4.0%	7.0%	12.0%	8.0%
Hispanic, percent	12.0%	15.0%	13.0%	7.0%	12.0%	6.0%
Median household income	\$52,824	\$58,100	NA	\$59,125	\$66,176	\$69,014
Median family income	\$52,824	\$59,750	NA	\$60,489	\$65,000	\$80,178

Note: Fort Wainwright's median family and household income data were not available. *Source: U.S. Census Bureau, American Community Survey, 2007-2011 estimates*



Note: Joint Base Elmendorf-Richardson and Eielson Air Force Base were the only Alaska installations for which this information was available.

Source: U.S. Department of Defense

and designated one of the two missile defense complexes in the nation. By 2012, its military population reached 423. The fort has 26 interceptor missiles but due to threats from Iran and North Korea, the U.S. plans to increase the number to 40.

Influence on state demographics

Military personnel and their dependents are 8 percent of the state's population, which has a powerful influence on the state's demographic makeup. Over the past decade, 15 percent of Alaska's population growth came from the military.

Although the military was unable to provide any demographic details, census tract data for a number of the state's installations gives some insight into the makeup of the populations who live on the bases. (See Exhibits 8 and 9.)

• Alaska's military population is young, with a median age between 21 and 23 compared to the state's 34. (It's possible that the off-base population figures, if they were available, would increase the median age.) They also have more

See MILITARY, page 19

Safety Minute

The "Fatal Four" causes of death in construction

Construction work in Alaska includes residential construction, bridge erection, roadway paving, excavation, demolition, and large-scale painting jobs. This type of work often involves exposure to a range of hazards — including falls from rooftops, unguarded machinery, being struck by heavy equipment, electric shock, silica dust, and asbestos — and requires constant vigilance by employers as well as employees.

According to the U.S. Bureau of Labor Statistics, 19.6 percent of private-industry deaths in 2012 were in construction. To help the construction industry avoid such loss, the Occupational Safety and Health Administration, or OSHA, identified four leading causes of worker death. Because 56 percent of deaths in construction resulted from these four causes, the industry nickname "Fatal Four" seems appropriate.

- 1. Falls: 36 percent
- 2. Struck by Object: 10 percent
- 3. Electrocutions: 9 percent
- 4. Caught in/between: 2 percent

Though these statistics are specific to construction, the "Fatal Four" apply to all industries. These causes may seem obvious, but apathy and a lack of situational awareness are often what make the "Fatal Four" so destructive. These four steps can help employers counteract these statistics:

- **Plan ahead:** Determine how the job will unfold. Assess potential hazards and determine which engineering controls and personal protective equipment are necessary.
- Train: Train employees to recognize and evaluate hazards and the potential for creating hazards during a specific job.
- Provide the right equipment: Provide equipment as well as train employees to select and use the equipment before starting work.
- Reassess: As work progresses, reevaluate existing hazards and the possibility of new ones.

Safety Minute is written by the Labor Standards and Safety Divison of the Alaska Department of Labor and Workforce Development.

MILITARY

Continued from page 8

dependents and larger family sizes than the state average.

- Though more women are serving in the military than at any time in history, the ratio of men to women is still much higher than in the civilian population.
- Historically, the military increased the racial and ethnic diversity of the state, but this is no longer true — Alaska's civilian population is now more diverse. The military tends to have proportionately larger white, African American, and Hispanic populations, and the state has larger percentages of Alaska Natives, Asians, and those who identify as mixed race.

15 percent in Alaska are veterans

In Alaska, you are more likely to meet a veteran

than anywhere else in the country. Nearly 15 percent of the state's adult population are veterans versus 10 percent nationwide.

In 2012, the U.S. Department of Veterans Affairs listed 74,500 veterans in Alaska, on whom they spent \$410 million. The largest share was \$178 million for compensations and pensions, followed closely by \$167 million for health care — expenditures that doubled over the past decade. Also in 2012, the department employed 643 civilians in Alaska with a payroll of \$49 million.

Possible cutbacks in the future

Alaska may be at another turning point for its military with the end of the Iraq war, the winding down of missions in Afghanistan, and strains on the federal budget. Although how deep or long-lasting the cuts might be isn't yet known, future downsizing is suggested by possible base consolidations, sequestration, and some decline in military-related new construction.