

How military shaped Fairbanks

The history and local roles of Fort Wainwright, Eielson

By SARA TEEL

The U.S. military was a cultural and economic mainstay for Alaska well before statehood, with nearly 50 percent of Alaska's population tied to the armed forces by the 1950s. While that percentage has fallen, the military remains integral to some communities and their economies. That's especially true of Fairbanks.

About 7.5 percent of the Fairbanks North Star Borough's population were active-duty in 2019, which was more than three times the statewide average. Including family pushes the percentage to 19. While military retiree numbers are no longer collected, the borough had 2,376 at last count in 2018.

The bulk of the state's military personnel are

stationed in Anchorage at Joint Base Elmendorf-Richardson. The Fairbanks North Star Borough is second at 36 percent with two military installations: Fort Wainwright in Fairbanks and Eielson Air Force Base near North Pole. Two others are close but outside the borough: Fort Greely outside Delta Junction and Clear Air Force Station in the Denali Borough.

The rise of military in Alaska and how it came to Fairbanks

In 1867, the United States bought Alaska from Russia for \$7.2 million. The territory had several types

Text continues on page 6



This 1943 public domain photo shows Bell P-39 Airacobras at Ladd Field in Fairbanks, which became Ladd Air Force Base and is now Fort Wainwright. The Army took over the base in 1961.

Military contract, personnel spending in Alaska

Military spending in Alaska doesn't rank that high in dollar terms, but its economic muscle is bigger here than in most states.

In 2019, the most recent year available, the \$3.5 billion Alaska received for contracts and payroll ranked 33rd and made up just 0.6 percent of total U.S. defense spending. Of that amount, \$1.97 billion went to Anchorage and \$964 million went to Fairbanks.

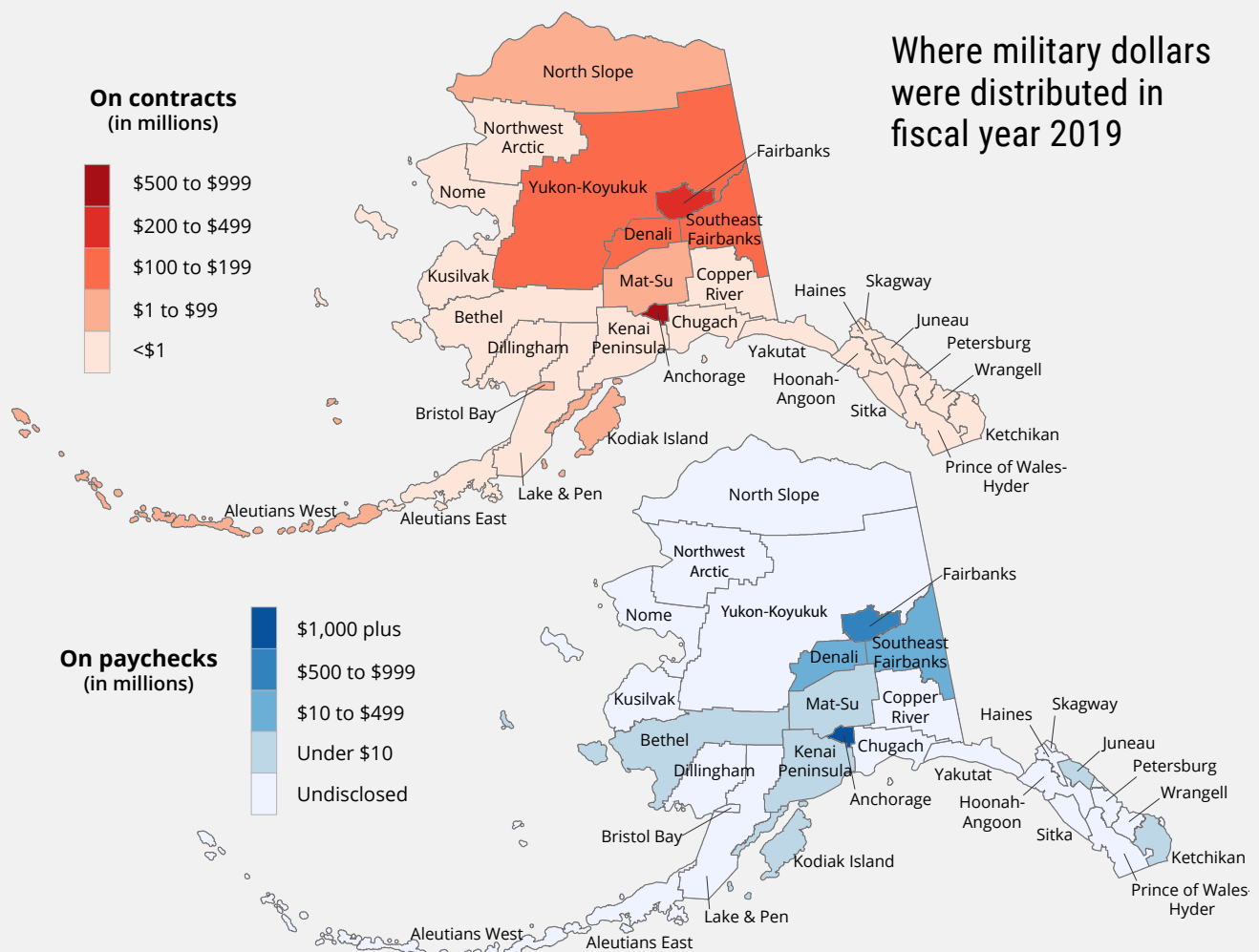
Alaska's dependence on military spending is high, however. For military spending as a total share of state gross domestic product, Alaska ranked fifth at 6.4 percent. Alaska also ranked fifth nationally for the amount

spent per resident, \$4,804, because of our small population.

Contract spending is a smaller proportion of military spending in Alaska than it is nationwide, but it's on the rise, climbing 50 percent here from federal fiscal years 2016 to 2019.

In 2019, 51 percent of Alaska's defense dollars went to contracts for products such as aircraft, ships, weapons, and services, and 49 percent went to military and civilian personnel salaries. Nationally it was 73 percent and 27 percent, respectively.

Continued on the next page



Source: U.S. Department of Defense, Defense Spending by State, Fiscal Year 2019



A Fort Wainwright soldier assigned to the 1st Stryker Brigade Combat Team, 25th Infantry Division, performs railhead operations in subzero weather in January 2018 at Joint Base Elmendorf-Richardson in Anchorage for a short-notice rapid deployment exercise. Photo by Justin Connahey, U.S. Air Force

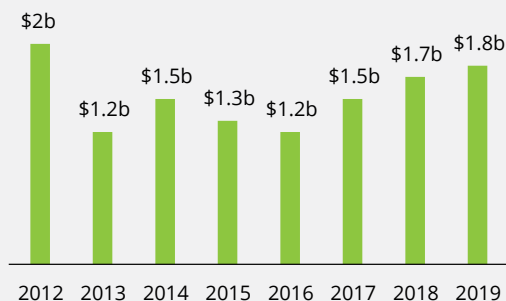
MILITARY SPENDING

Continued from page 5

Alaska is also unique in that Native corporations are its largest beneficiaries of military contract spending. In 2019, the Arctic Slope Regional Corporation received \$173.5 million, the highest single amount allocated. The second-highest was the Chugach Alaska Corporation at \$119.1 million.

One Fairbanks subsidiary, Doyon Utilities, ranked in the top 10. Other Native corporations in the top 10 included the Calista Corporation and the Bering Straits Native Corporation.

Military contract spending in Alaska rose in recent years



Source: U.S. Department of Defense, Defense Spending by State, Fiscal Year 2019

of governance, including military rule, until the U.S. established a territorial government in 1912.

Alaska's population surged during the Gold Rush, and the need for communication between military forts in Alaska and with the contiguous states led the Army to build the Washington-Alaska Military Cable and Telegraph System, or WAMCATS.

Fairbanks wasn't part of the original plan but was linked to the system shortly after Felix Pedro discovered gold in the Tanana Valley in 1902. At the same time, the Fairbanks-to-Valdez Trail was under construction, further connecting Fairbanks to the outside world. The trail is now the Richardson Highway.

WAMCATS was completed in 1905, and while it was owned and operated by the military, Congress mandated civilian access. Eventually, most WAMCATS traffic was civilian, and the military sold the system to RCA (the Radio Corporation of America) in 1970. Today, it's AT&T Alaska.

WAMCATS was one of the first large-scale military infrastructure improvements in Alaska, and more were soon to come. By the 1920s, the Army's contribution to Alaska's initial infrastructure aided the development of the commercial aviation industry and allowed the Alaska Railroad to reach the interior.

The Army's Fort Wainwright, 'Home of the Arctic Warriors'

Fort Wainwright's founding and history

The military began to scout for potential airfield locations in Alaska in 1934, and the Army Air Corps recommended Fairbanks for cold-weather testing and a supply post.

Construction began on Ladd Field a few years later, and the first Air Corps attachment of 50 men arrived in Alaska in April 1940. Living in temporary shelters until barracks were built, they tested clothing and equipment during the winters until U.S. involvement in World War II.

Ladd Field became a transfer point for the Lend-Lease Program in 1942. Under President Franklin D. Roosevelt's administration, this program provided temporary military aid to any country whose military interests aligned with the United States. For Ladd Field, this meant the delivery of almost 8,000 aircraft to the Soviet Union to help defeat the Germans.

Ladd Field also hosted Women's Army Corps members who worked as medics, office workers, and airplane mechanics until December 1945 when the Lend-Lease Program ended.

Proximity to the Soviet Union increased Ladd Field's value as the Cold War ramped up. When the National Securities Act created the Air Force as a separate military branch in 1947, Ladd Field became Ladd Air Force Base, specializing in air defense that included photo, electronic, and weather reconnaissance; logistic supports; and arctic research. The Arctic Aeromedical Laboratory was set up during this time.

The Army took over the base in 1961, renaming it Fort Wainwright after General Jonathan M. Wainwright, a celebrated World War II general. In 1985, portions of Ladd Field were designated National Historic Landmarks because of their role in WWII. Ladd Air Force Base is also a Cold War Historic District.

Fort Wainwright today

Fort Wainwright lies within Fairbanks city limits on approximately 13,500 acres. As of the first half of 2021, about 6,700 active duty service members were stationed there with almost 6,000 family members.

Today, the base includes infantry, field artillery, engineers, logistical support, and medical staff and has hosted multiple brigades and divisions. These included the 172nd Infantry Brigade, 6th Infantry Division; the 1st Brigade, 6th Infantry Division; the 172nd Infantry Brigade; 172nd Stryker Brigade Combat Team; and now the 1st Stryker Brigade Combat Team, 25th Infantry Division. Fort Wainwright is also home to Task Force 49, a brigade-sized aviation unit that includes CH-4 Chinooks, UH-60 Black Hawks, and OH-58 Kiowas.

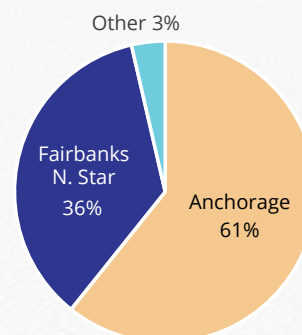
Fort Wainwright is almost a city unto itself. It has an auto center, youth and fitness centers, child care, parenting and school support services, a library, restaurants, a bowling alley, and Arctic Light Elementary School, which is part of the Fairbanks North Star Borough School District. After elementary school, kids from Fort Wainwright attend school in Fairbanks.

Over the last several years, Fort Wainwright's population ranged from a high of 14,151 in the first months of 2018 to a low of 11,536 in the last quarter of 2020. Some of the flux came from typical troop movements, but starting in September 2019, about 2,000 soldiers — seven Stryker battalions — deployed. Roughly half left for a nine-month tour in Iraq. Because most military families are not from



A gun crew from Battery B, 2nd Battalion, 8th Field Artillery Regiment sends a 155 mm howitzer round down range in the Yukon Training Area in March 2018. The regiment is part of the 1st Stryker Brigade Combat Team, 15th Infantry Division, at Fort Wainwright. Photo by John Pennell, U.S. Army

Where personnel are stationed



Notes: Includes National Guard. The other 3 percent are mainly at Coast Guard bases in Kodiak and Juneau, Clear Air Force Station in Anderson, and Fort Greely near Delta Junction.

Source: U.S. Department of Defense for federal fiscal year 2019



Members of the 354th Fighter Wing inspection team walk toward first responders in January 2015 during a major accident response exercise at Eielson Air Force Base. Photo by U.S. Air Force Staff Sgt. Joshua Turner

Alaska, they sometimes move temporarily during a deployment. The population began growing again in early 2021.

Eielson Air Force Base, 'Ready to go at 50 below'

Eielson's founding and history

Eielson Air Force Base's location was chosen for its flat terrain, encompassing about 19,700 acres on the Tanana River floodplain and the slopes of the Yukon-Tanana uplands, 26 miles southeast of

Fairbanks and 10 miles south of North Pole.

Originally Eielson Airfield, the base was set up as "Mile 26" in 1943 to support Ladd Field. Carl Ben Eielson was an arctic bush pilot who flew the first airmail in Alaska from Fairbanks to McGrath. He died in a 1929 rescue mission in Siberia at age 32.

Initial construction included several runways, an operations building, and a dispensary. Mile 26 shut down when World War II ended but reopened a year later as Eielson Air Force Base. The 5010th Wing, formed in 1949, served as host for more than 30 years. Major construction began in the 1950s, with some buildings and dormitories still in use today.

Also early in the Cold War, Eielson disassociated from Ladd Air Force Base when the Alaskan Air Command took control to support arctic training for the U.S. Air Force and its own base defense.

In 1981, the 343d Composite Wing replaced the 5010th Wing as host, and it too was replaced 12 years later by the 354th Fighter Wing. In December 1998, the 354th flew combat missions in Operation Desert Fox, the first combat experience for an Alaska-based fighter unit since World War II.

With a drop in military spending in the 1990s and a high operating cost, Eielson faced closure by 2005. The Department of Defense Base Realignment and Closure Commission proposed withdrawing 2,821 airmen and transferring the 354th Fighter Wing to



Staff Sgt. Seth Reab, an Arctic Survival School instructor, creates a small fire during training at Eielson Air Force Base. Photo by U.S. Air Force Staff Sgt. Vernon Young Jr.

Nevada, Georgia, and Louisiana. State and local leaders and Alaska's congressional delegation helped avert the closure.

Eielson Air Force Base today

Eielson still hosts the 354th Fighter Wing, the world's northernmost U.S. fighter wing, and supports or hosts multiple operations such as the 168th Air Refueling Group, the Alaska Air National Guard, the USAF Arctic Survival School, the Alaska Air National Guard Search and Recovery Detachment 1, and the 13th Space Warning Squadron at Clear Air Force Station.

A 2016 development breathed new life into the base. Eielson was chosen to receive F-35A Lightning II stealth fighter jets, partly because of its proximity to the Arctic, the Korean Peninsula, and the South China Sea. Each F-35A fighter jet costs \$94.3 million, can fly at 1,200 miles per hour, and has a combat radius of 680 miles.

Often referred to as a bed-down, 54 total F-35A fighter jets will be stationed at Eielson by this spring. As of October, 32 had arrived.

The first jets arrived in April 2020 with a wave of new personnel and their families. In total, about 3,500 additional people will settle in and around Eielson, increasing the base population by over 50 percent and North Pole by at least 10 percent.

Eielson's population was just a fifth of Fort Wainwright's before 2020, but the arrival of the F-35As boosted Eielson from fewer than 3,000 people in 2018 to more than 7,000 as of October 2021.

Much of the increase has been in family and contractors, reducing the active duty percentage at the base from 60 percent to 48 percent. That created new challenges, such as providing adequate housing, schools, and child care. The number of family child care programs grew from one to 20 in the last year alone.

Many base buildings are as old as 70 and need refurbishment. About \$550 million was slated for new construction or renovation of existing infrastructure such as dormitories, child care facilities, and a maintenance hangar. A flight simulator is already complete.

Eielson has 1,077 homes and Fort Wainwright has 2,454 — not nearly enough to house all military families.

Fairbanks rental vacancy dropped



Source: Fairbanks North Star Borough Community Planning Rental Survey, 2017-2021. Note that Research and Analysis also produces annual rental survey data, but the borough's series provides data by quarter.

Eielson has three public schools: Crawford Elementary, Anderson Elementary, and Ben Eielson Junior/Senior High School. All three are part of the Fairbanks North Star Borough School District.

The U.S. military funded infrastructure improvements all over Alaska in past decades, and now the state benefits from the military's technological innovations. For example, last October, Eielson was selected to receive its first nuclear microreactor by 2027 under the National Defense Authorization Act.

The reactor will power and heat remote domestic military bases and reduce the coal needed for Eielson's plant. This technology could eventually help Alaska's off-road communities that rely on expensive diesel, where generator breakdowns can be life-threatening in the winter.

Military influence on the borough economy and housing market

When active-duty personnel relocate, they bring substantial purchasing power that can drive sales for grocery stores, restaurants, and car lots. This generates local jobs as well as revenue for the borough.

The military further boosts area employment by hiring civilians for on-base positions such as child care providers and contractors for military construction projects.

Bases also shape housing and rental markets. Eielson has 1,077 homes and Fort Wainwright has 2,454, but those aren't nearly enough to house all military families. The demand for off-base housing pushes up home prices and rents and lowers vacancy rates.

Fairbanks' yearly vacancy rates fluctuate because of the University of Alaska Fairbanks and the military, and the population influx from the F-35As at Eielson tightened the market. That, combined with the federal eviction moratorium during the pandemic, pushed the Fairbanks area vacancy rate down from 18.5 percent in early 2020 to 6.0 percent in 2021.

Low interest rates were another influence, having sparked demand for home ownership after falling to 2.68 percent in December 2020 for a 30-year fixed-rate mortgage. Fairbanks' home sales prices jumped more than 10 percent in the second quarter of 2021 relative to the same quarter the year before, and the number of houses sold rose 23 percent.

Eielson personnel and families are in a particularly difficult position. The Eielson dormitories are 96 percent full, and family housing is privatized with a waitlist that pushes airmen and families primarily into the North Pole area. New subdivisions have been and are being built to accommodate them, but housing remains in short supply and more personnel are coming.

In addition to the F-35As, Eielson will receive four KC-135 Stratotankers — refueling aircraft — in October. This will require an additional 132 housing units for 220 personnel. Because 69 percent of Air Force personnel prefer to rent, this will put additional pressure on the North Pole market.

The borough hasn't seen large multi-unit housing construction in decades, so the assembly is considering a tax break for that type of construction. The North Pole mayor's office is also encouraging property owners to build guest houses.

How demographics compare

Overall, the military population is younger and its racial makeup differs from Alaska as a whole, although Fort Wainwright and Eielson demographics

How demographics at the bases compare to Alaska as a whole

	Fort Wainwright	Eielson AFB	Alaska
Median age	22.6	23.7	34.3
Average family size	3.4	3.4	3.4
Average household size	3.4	2.9	2.8
Born in Alaska	9.3%	7.1%	41.8%
Median family income	\$56,052	\$73,357	\$92,588
Median household income	\$57,524	\$68,583	\$77,640
Men, 18 and over	60.4%	60.6%	52.8%
Women, 18 and over	36.0%	39.4%	47.2%
Race (one race)			
White	72.7%	85.4%	64.6%
Black/African American	14.0%	3.0%	3.3%
American Indian/AK Native	1.1%	0.8%	14.9%
Asian	3.8%	3.5%	6.2%
Hawaiian/Pacific Islander	0.5%	0%	1.2%
Other race	1.7%	1.5%	1.5%
Two or more races	6.2%	5.9%	7.2%
Hispanic ethnicity (any race)	15.9%	11.8%	7.0%

Notes: In the Census Bureau's data sets, Fort Wainwright is listed as Census Tract 11. A household can be any combination of people living in one home, related or not. May not sum because of rounding.

Source: U.S. Census Bureau, American Community Survey 2015-2019

also differ from each other.

As most active-duty personnel are young adults, the average age of someone living at Fort Wainwright is 22.6 and for Eielson, it's 23.7. That's about 11 years younger than the average Alaskan.

In terms of race, 64.6 percent of Alaska residents identify as White only, and at Fort Wainwright and Eielson, it's 72.7 percent and 85.4 percent. However, 14 percent at Fort Wainwright are Black compared to just 3 percent statewide and at Eielson. Nationwide, 43 percent of active-duty personnel are Black.

While Eielson's median family income is more than \$17,000 higher than Fort Wainwright's, both are well below the statewide median of \$92,588. However, housing is included when service members live on base. When living off base, they receive a housing subsidy that isn't reported as income, calculated by rank, location, and family size.

Sara Teel is an economist in Juneau. Reach her at (907) 465-6027 or sara.teel@alaska.gov.