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Contributions of the Military to the Monterey County Economy



Middlebury Institute of
International Studies at Monterey
Center for the Blue Economy

PREFACE

This economic impact report was commissioned by the Monterey Bay Defense Alliance (MBDA), a 501c (3) pending non profit organization, dedicated to preserving, strengthening and expanding DOD related missions in our region. The board is made up of community leaders, including active and retired military, municipal, educational and private sector members.

The report allows us to establish a baseline of data, useful as we work with other organizations and the community, showcasing the economic impact of a robust DOD presence in our county.

Many in our community never recovered from the closure of Fort Ord in the 90's, but at the same time many who are leading us today were not here at that time. Without a visible reminder, it is difficult to portray the economic devastation that would be created with a diminished DOD presence. With this report, we are delivering a reminder of the past, but more importantly, the data, proving the contributions this 5th largest industry cluster makes to our region. As an aside, during this past 15 months, the monetary impact, and number of overall employed moved this cluster to 4th largest contributor due to the severe reduction suffered by our hospitality sector.

Please join us as we work to expand the opportunities to get involved, make the DOD assets stronger in contributions to the fabric of our region, and work to maintain the infrastructure required to support their missions. We need to ensure a sufficient water supply, quality schools, abundant job opportunities for dependents, workforce housing, and a welcoming community. It will take all of us to pull together our collective skills and resources.

We ask that you get involved. Join us as a member today and work toward a better future for all the residents of Monterey County. On behalf of the board, thank you to those who have become members and to those who have contributed to the sponsorship of this report and our activities. Our sponsors are listed below and without them, we would not be here today.

Regards,



Fred Meurer

Chair

Monterey Bay Defense Alliance

THank you to our report sponsors: Avila Construction, Monterey Regional Airport, Hal Leffel, Dan Oliver, Monterey Marriott and the City of Monterey





EXECUTIVE SUMMARY

The military has a long history in Monterey, both city and county, dating back to the 18th century. The county became a major training and education center for the military beginning in World War I and expanding greatly in World War II. But closure of Fort Ord in 1994 removed what was by far the largest part of military operations. Since that time the military has retained a smaller but still vital role in the Monterey County economy, centered around both a number of installations providing education, training, research and administrative services to the Department of Defense and the armed services. A number of private companies in the county also provide services to the Department of Defense. Today Monterey County ranks 7th among California's 58 counties in total military employment and 6th in percent of the county employment in the military.

The role of the military in the Monterey County economy is examined in this report prepared for the Monterey Bay Defense Alliance by the Center for the Blue Economy at the Middlebury Institute of International Studies at Monterey. The study examines the relationship between military operations and contracting to the employment and economic output in the broader county economy. It also examines the role that distinctive populations associated with the military play.

The level of directly military-related economic activity is difficult to measure because it consists of a mix of armed service and civilian employment which may be both short and long term. Details for many of the installations are not publicly available. The estimates here are assembled from various public sources and information from the Department of Defense.

The employment related to the military in Monterey County for 2017 is estimated at 15,700, comprising:

- **Military employment**

These are military personnel stationed in one of the Monterey County installations as their permanent duty station. **5,100**

- **Active duty military**

These are military personnel stationed in Monterey County for short periods; the majority are students at the Defense Languages Institute. **6,200**

- **Civilian employment**

These are civilian employees of the Department of Defense working primarily at the Naval Support Activity and the Defense Manpower Data Center. **4,400**

- **Contracts with Monterey County-based firms**
\$50 million

Populations related to the military are estimated at 11,400, consisting of

- **Military dependents**

These are wives and children of military personnel who reside in Monterey County, primarily those categorized as military employment: **6,600**

- **Military retirees**

Former service members who reside in Monterey County and are on record as taking military pensions, plus their spouses, and dependents: **4,900**

Using an econometric model of the Monterey County economy, the total military related activity in Monterey County is estimated at:

- 18,300 jobs, of which 7,700 are in the private sector that are directly or indirectly dependent on the military
- 28,000 residents of Monterey County depend directly or indirectly for all or part of their incomes.
- The military and related industries generate \$2.6 billion in value added to the county economy, \$4.3 billion in gross sales and \$1.4 billion in personal income per year.
- Total military related economic activity represents:
 - 7.3% of county employment
 - 4.2% of county population
 - 6.4% of personal income
 - 13.1% of county gross domestic product

Of the 7,700 private sector jobs related to the military, the largest share (19% or 1,420) is in the construction sector, followed by retail trade (16% or, 1,200), professional services and health care (both at 12% or ~900). Accommodation and food services accounts for 10% (750) of private sector employment impacts in part because of the large number of temporary visitors to Monterey for events such as seminars and graduations.

The types of jobs related to the military tend to be high skilled jobs in management, the sciences, and professions. These occupations comprise 30% (3,800) of the related jobs. Sales, office, and administrative support comprise another 21% (2,700).

A particular feature of the military in Monterey County is that the younger population making up most of the military personnel is more likely to have children of K-12 age, which is important in maintaining schools in the region in the face of a long-term decline in school populations. If the military activities were to be removed from the County, the school population would fall by nearly 9,000 over a decade.

The role of the military in Monterey County has changed over the decades, declining from a peak nearly 30 years ago, but afterwards stabilizing and then growing and diversifying. Today the military, civilian employment in the Department of Defense and in private sector firms serving the Department of Defense comprise both directly and indirectly a significant share of the county's economy, supporting jobs across the county and across the private sector. Understanding and capitalizing on the military's diverse economic roles are critical elements in shaping Monterey County's economic future.

INTRODUCTION

The military has been integral to the Monterey economy since the founding of the Presidio Real de San Carlos de Monterey by the Spanish government in 1770. In the 19th Century, the Army gradually expanded its presence, particularly at the old Spanish Presidio of Monterey. In the 20th century, the U.S. military transformed the communities around southern Monterey Bay into a major center of training and education for the military. Training centers were established at the Presidio and Camp Gigling, which became Fort Ord just before U.S. entry in World War II. From 1940 to its closure in 1994, Fort Ord was a major location for training troops in artillery, infantry, and armor. Other Army training facilities were set up during World War II for pilots in King City and Salinas, and for armor and artillery training at Camp Roberts and Fort Hunter Liggett in southern Monterey County.

The Navy arrived in a significant way In World War II, taking over an airport the community was building for flight training and establishing a school for Naval aviators and electronics technicians at what had once been the centerpiece of the Southern Pacific Railroad's tourism business. After the war, the Naval Postgraduate School (NPS) was founded at the Del Monte Hotel location. Also after World War II, the Army Language School was relocated to the Presidio of Monterey, joining the Army Garrison of the Presidio. The Army Language School became the Defense Language Institute serving all the services in 1963.

To the education and training missions of Fort Ord, NPS, Fort Hunter Liggett and Camp Roberts (for the California National Guard) have been added operational units such as the 514th Signal Company and Coast Guard Station Monterey. as well as a number of administrative support facilities serving all of the Department of Defense and the services. The Defense Manpower Data Center was founded in 1971 to provide personnel record services. The Defense Personnel Security Research Center was added in 1986 to improve security policies for national security personnel. Naval Support Activity Monterey (NSAM) combined the umbrella

organization for a number of facilities including the Naval Postgraduate School, the Fleet Numerical Meteorological and Oceanography Center (1959), and the Naval Research Laboratory- Marine Meteorology Division

When Fort Ord's closure was announced in 1991, the military alone directly accounted for nearly 15% of the employment in Monterey County and there were fears that what had been a cornerstone of the county economy would all but disappear. But that did not happen. An energetic response by the Monterey military and business communities to additional consideration of facility closures in BRAC (Base Realignment and Closure Commissions) in 1993, 1995, and 2005 forestalled additional reductions in the military presence and laid the groundwork for today's diverse array of defense-related activities.

Presently those activities directly employ about 15,700 people in military and civilian positions in Monterey County, accounting for about **7% of total county employment and 6% of earnings**. This makes it the 5th largest industry in the county behind agriculture and food products, accommodation and food services, retail, and health care. One way to appreciate the importance of the military in Monterey County is to see it in the context of California. California has more military employment than any state, and Monterey County ranks **7th among California's 58 counties in total military employment and 6th in percent of the county employment in the military**.

But this simple description of the economic role of the military does not do full justice to the complex and extensive interactions between the military and the Monterey County economy. Those interactions are explored in depth in this analysis, focusing on the relationships between the military and national defense operations and the various industries in the county. Moreover, the military is more than an employer. It is also a significant part of communities in the county through the large number of spouses, dependents, and retirees living in the area.

KEY FACTS¹

- 18,300 jobs, of which 7,700 are in the private sector that are directly or indirectly dependent on the military
- 28,000 residents of Monterey County depend directly or indirectly for all or part of their incomes.
- The military and related industries generate \$2.6 billion in value added, \$4.3 billion in gross output and \$1.4 billion in personal income per year.
- Direct and Indirect represent:
 - 7.3% of county employment
 - 4.2% of county population
 - 6.4% of personal income
 - 13.1% of county gross domestic product

¹ Employment includes both full and part time employment. Population is resident population on July 1 of each year. Personal income includes wages & salaries, benefits and other compensation, income from self-employment, and both farm and nonfarm proprietors' income. Gross domestic product is total value added by all economic activities within Monterey County. Gross output is total sales of businesses in Monterey County.

THE MILITARY IN MONTEREY COUNTY TODAY

Both historically and today, the military establishment of Monterey County has played a distinct role in education and training in support of America's global defense missions. The largest of the military installations in Monterey County all have education, training and research as their primary missions:



DLIFLC
DEFENSE LANGUAGE INSTITUTE
FOREIGN LANGUAGE CENTER



Primary Education and Training Missions

The Naval Postgraduate School
The Defense Languages Institute Foreign Language Center
Fort Hunter Liggett
Camp Roberts

Research, Administrative and Operational Support

Defense Manpower Data Center
Fleet Numerical Meteorology and Oceanography Center
Naval Support Activity Monterey (includes NPS, Fleet Meteorology Center, Naval Research Lab)
Presidio of Monterey

Research and Development

Naval Research Laboratory
Defense Personnel Security Research Center

Operations

Coast Guard Station Monterey
514th Signal Company (Fort Hunter Liggett)

Health Care

Gourley VA-DOD Outpatient Clinic



THE ECONOMIC ROLE OF THE MILITARY IN MONTEREY COUNTY

Estimating the economic role of the military is similar to estimating the role of any industry. First the size of the military activity is measured; these are called the “direct” effects. Direct effects are connected to other economic activity through a complex web. The military installations purchase goods and services from other businesses, while their employees spend a substantial part of their incomes on locally provided goods and services. The

businesses who supply these goods and services to both the military organizations and their employees have similar relationships to other businesses and employees².

These indirect effects are collectively known as the multiplier effect. Combining measures of the direct and indirect effects provides a complete picture of the role of the military in Monterey County.

THE DIRECT ROLE OF THE MILITARY

Assessing the economic role of this diverse array of organizations begins with a measurement of the annual employment in each. This is a challenge because employment can vary in several different ways. There is a difference between military personnel permanently and temporarily stationed in Monterey County, particularly at the DLIFLC and NPS. Some, particularly, at NPS are stationed in Monterey for 2-3 years and are economically equivalent to people who move to Monterey County for their job. Others are stationed for shorter periods of time, such as those at DLIFLC who come for short courses.

In addition, as is true throughout the federal government, civilian employees may be divided between government employees and contract employees who work for private sector firms but perform duties similar to the government employees. There are also private firms who supply goods and services to the military installations. Administrative employment records are also difficult to translate into data suitable for economic analysis. Thus “civilian employment” related to the military may be employees of the Department

of Defense or of private sector firms who supply personnel who perform tasks similar to those performed by DOD personnel. Some of these have been accounted for in this analysis but precise estimates are not available.

In addition to employment, it is critical to understand the population related to military installations. Those employed in the military are somewhat different than other employees in that they tend to be younger and are somewhat more likely to have younger children. At the same time, centers of military employment tend to attract retirees from the military to take up permanent residence in the region. Military related population thus tends to be both a little younger and a little older than the population as a whole with distinct economic characteristics.

For this analysis, a variety of sources were consulted to estimate the current information about employment and population related to the military; this information was then analyzed using a regional econometric model that identifies the interactions across the economy to yield estimates of the total economic role. It should be noted,

² As used here, “indirect” effects combine two different economic processes: indirect and induced effects. The technical term “indirect” refers to the purchase of goods and services within the region by the military installations and their employees (and dependents). The increase in sales, along with the employment making those sales possible, in the industries selling to the military are the “indirect” sales and employment calculated by the model. These indirect effects cause another round of sales (and employment) called the “induced effects”.



however, that many important details about the economic size of the Monterey County military installations were not available for this study so the estimates used should be considered as being based on the best available information. Missing and misreported data likely has the effect of *underestimating* the size the military impact on Monterey County by an unknown amount.

For more information about the data and methods, consult the paper available at Center for the Blue Economy website at www.middlebury.edu/institute/academics/centers-initiatives/center-blue-economy/research/research-papers This process yielded the following estimates of military-related employment and population:

Employment

• Military employment

These are military personnel stationed in one of the Monterey County installations as their permanent duty station. **5,100**

• Active duty military

These are military personnel stationed in Monterey County for short periods; the majority are students at DLIFLC. **6,200**

• Civilian employment

These are civilian employees of the Department of Defense working primarily at the Naval Support Activity and the Defense Manpower Data Center. **4,400**

Total Employment: 15,700

Related Populations

• Military dependents

These are wives and children of military personnel who reside in Monterey County, primarily those categorized as military employment. **6,600**

• Military retirees

Former service members who reside in Monterey County and are on record as taking military pensions, plus their spouses, and dependents. **4,900**

Total Related Population: 11,400

Contracting Activity

The military installations of Monterey County purchase goods and services from a variety of county businesses, which are measured as the indirect effects of the military-related activities. These are measured in part in the econometric model used for the analysis using national level relationships adjusted to the county level, but these estimates can be refined with specific local data. Such data is limited in Monterey County but estimates of \$10 million in spending on construction activities and \$40 million in various professional and technical services were included in the analysis.

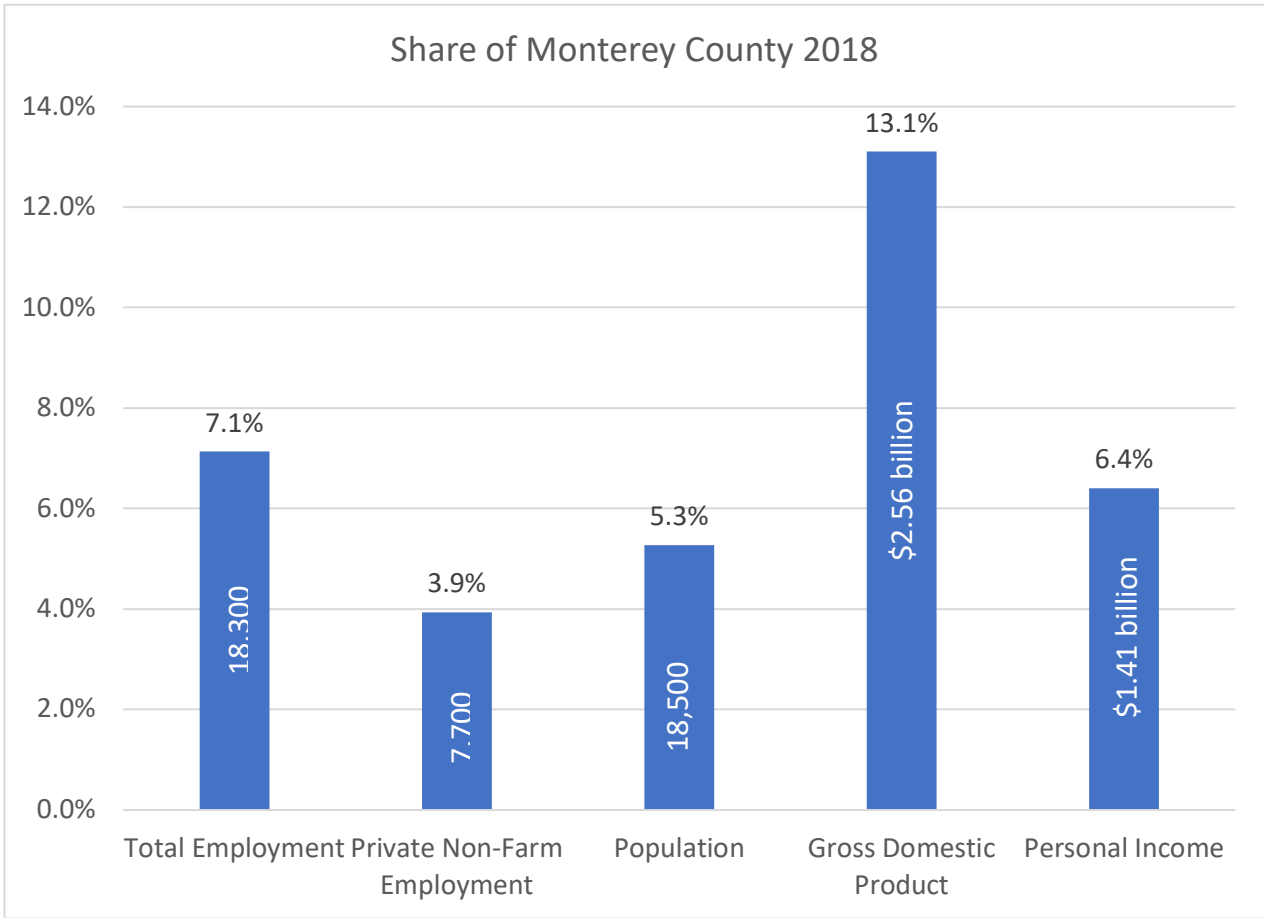
Total Contracting Activity: \$50 million

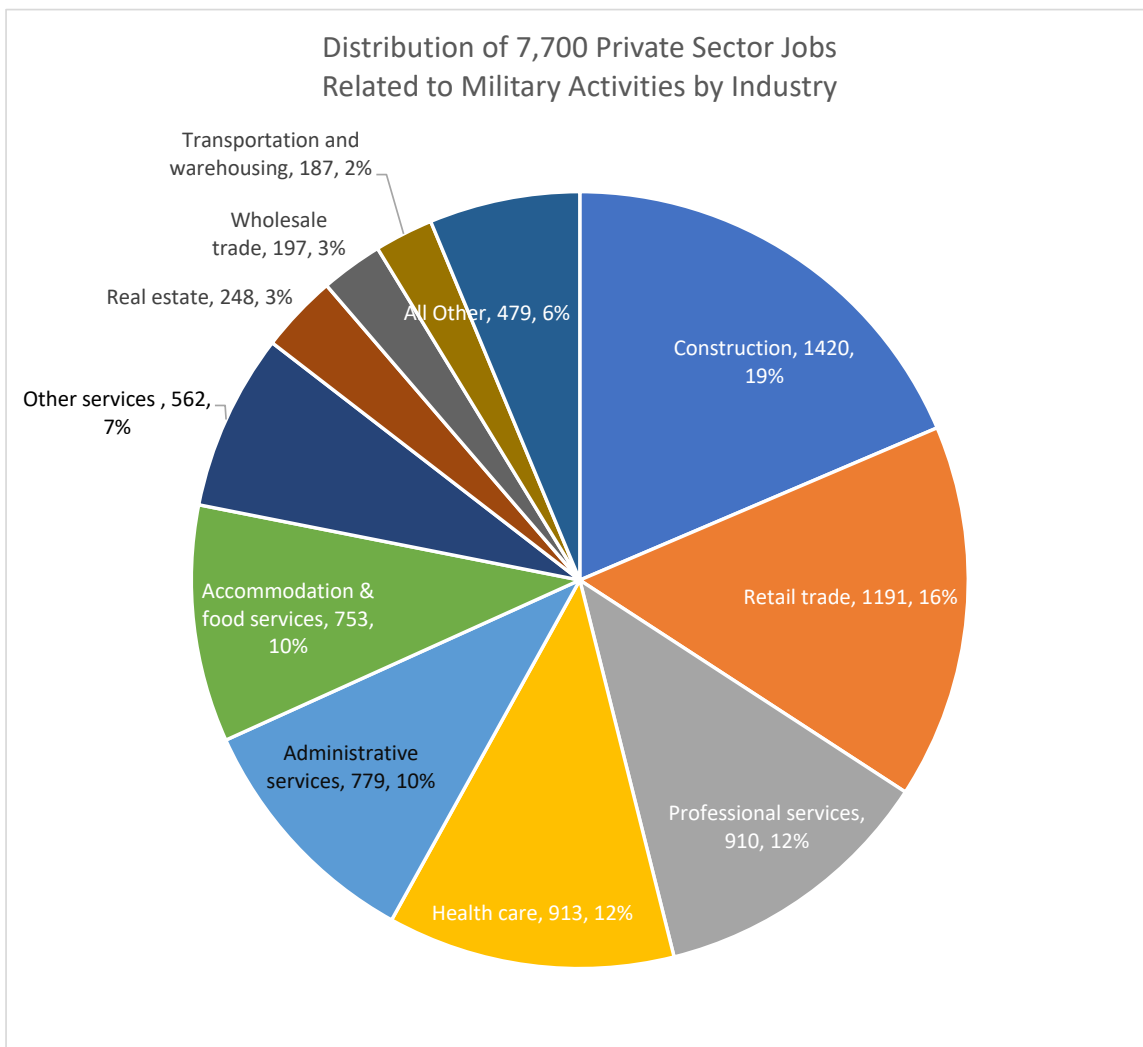
Total Economic Effects in Monterey County

The combined direct and indirect effects of the military activities in Monterey County total over 18,300 employees, of which 7,700 are in the private sector. These are suppliers of goods and services to the military as well as to military employees and their families. Over 18,500 people over and above the service members are related to the military presence, including the families of service members as well as retirees and their families. Taken together the economic output of the military and its

related industries and populations generates over \$2.5 billion, more than 13% of the Monterey County total. Personal income (wages, salaries, certain business income, and retirement) totals more than \$1.4 billion.

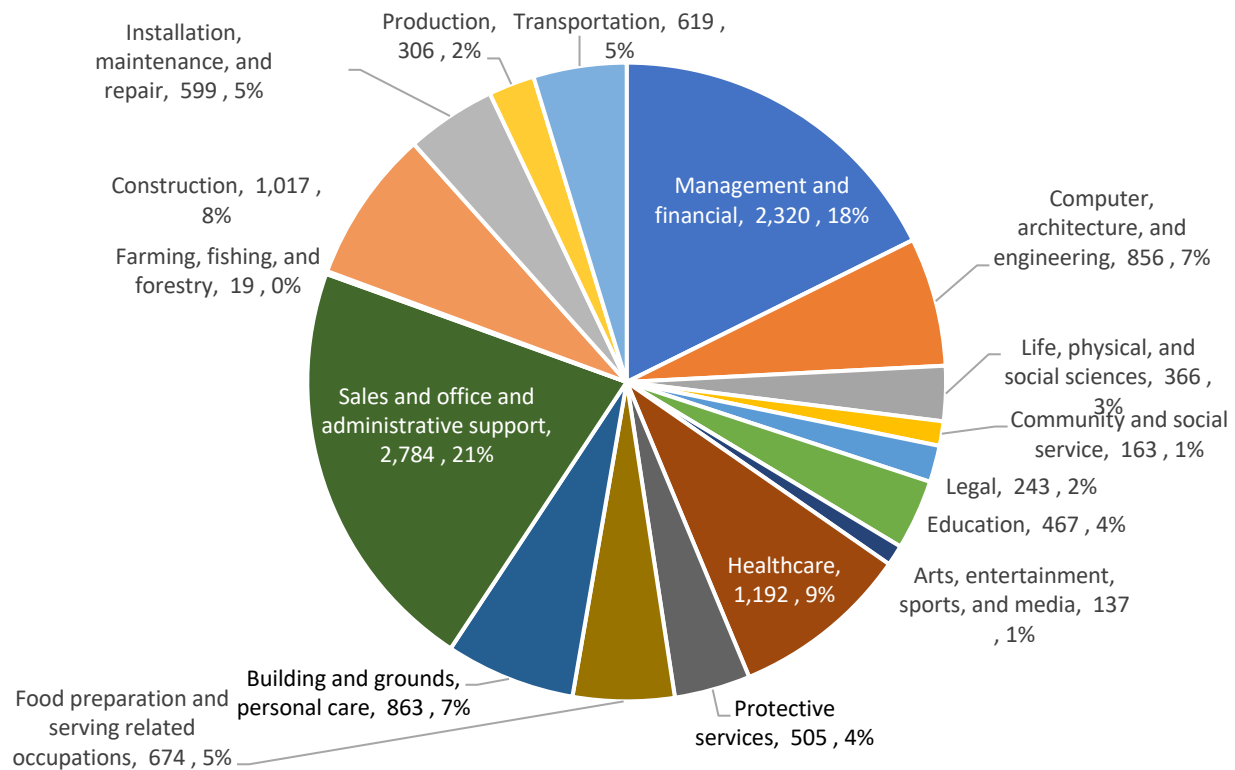
Through its direct and indirect effects, the military in Monterey touches all of the major industries in the private sector.





- Construction is the industry with the largest dependence on the military, though it should be noted that this relationship can vary greatly from year depending on whether any installation is undertaking a major building project.
- Retail is the second most dependent on the military; the large military and military related population consumes a substantial amount of goods and services.
- Professional services, health care, and administrative services, together with construction and retail, comprise more than three quarters of the employment related to the military.
- Ten percent of the jobs impacts are in the hospitality industries of accommodations (hotels, bed and breakfasts, etc.) and food services (restaurants, bars, etc.) Both NPS and DLIFLC are host to numerous events throughout the year that bring visitors to Monterey, including conferences, graduations, and seminar series.

**Distribution of 7,700 Private Sector Jobs
Related to Military Activities by Occupation**



Another perspective on the employees whose jobs are related, at least in part, to military activity is to look at the types of jobs affected as opposed to the industry in which the jobs are located. The largest of the major occupational groups affected is sales, office, and administrative support, a large category of jobs that are found across many industries. These occupations account for about 1 in 5 of the jobs affected by the military. But more than 1 in 4 of the jobs affected are in relatively high skill-high income positions in finance, management, engineering and the sciences.

Populations

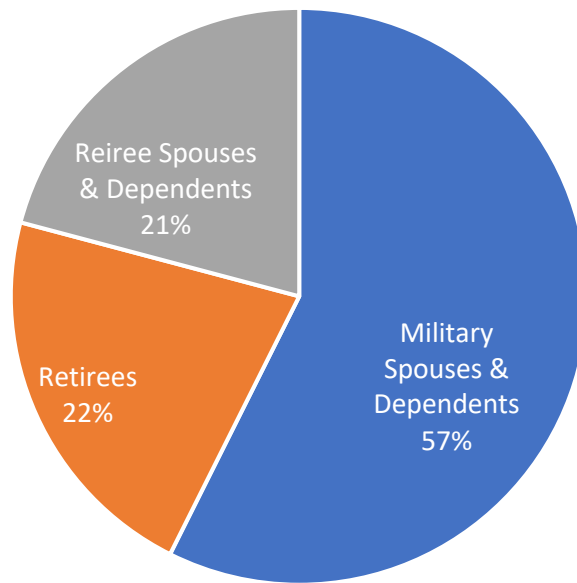
Over 11,500 residents of Monterey County are connected to the military activities but are not employees of those installations. The majority of these are spouses and dependents of those employed by the military, with the remainder being retirees, their spouses and dependents.



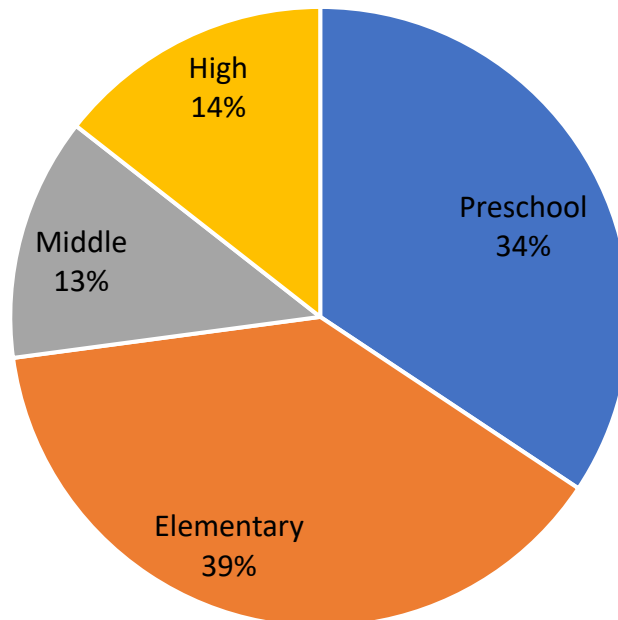
Of particular note in population issues is the military related school age population. This population is estimated as being just over 4,100, of which 2,400 are in elementary school in the county, 800 in middle school, and 900 in high school. In addition to those in schools, there are 2,100 military-related children in pre-school ages, which will feed into the school system over a five-year period. As with many places, the school age population of Monterey is undergoing a gradual decline as the overall population grows older; in

this context, the younger population of the military is an important stabilizing force. Without that population, Monterey County would lose only the estimated 6,200 students, and the loss would accelerate over a decade as there are fewer and fewer students coming into the schools. The result would be that in ten years the combination of reduced military and civilian employment would loss of an additional 2,600 students, for a total decline in school populations of 8,800.

Distribution of 11,500 Military Related Population



Distribution of 6.200 Military Related School-Age Population



CONCLUSIONS

This analysis shows that the military directly and indirectly supports over 18,000 jobs in Monterey County, a third of which are in the private sector. These jobs represent about 6% of county employment and personal income, and over 12% of the county's gross domestic product. Over 3% of population is related to the military, but this figure understates the military-related population's importance because of the large number of young people. Without the military, the school and college age population in the county would fall by over 11,000 in ten years, almost all in the Monterey Bay area.

When Fort Ord was designated for closure in 1991, there were over 22,000 military employees in Monterey County. The closure of Fort Ord in 1994 resulted in a rapid and significant decline in the military's presence in the county, but the military has not disappeared from Monterey County the way that it has from many of the counties where bases were closed during that period and later. The Monterey County military, with installations responsible for national, statewide, and local missions, remains one of the cornerstones of the Monterey County economy along with agriculture and tourism.



ACKNOWLEDGEMENTS

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