

# **ECONOMIC IMPACT ANALYSIS**

**FISCAL YEAR 2016**



**Nellis Air Force Base  
Creech Air Force Base  
Nevada Test and Training Range**

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## PREFACE

### Commander's Foreword

Nellis Air Force Base, Creech AFB, and the Nevada Test and Training Range have played an important role in southern Nevada since the early 1940s, with 2016 marking the 75th anniversary of Air Power in southern Nevada. Nellis' primary missions are operational testing of our most advanced aircraft and weapons systems; tactics development for warfighters around the globe; and advanced training to fly, fight and win utilizing the 2.9-million-acre NTTR.

Nellis will further prove itself to be an indispensable leader in air tactics and combat aircrew training development. In January 2015, the U.S. Air Force Weapons School welcomed its first F-35 Lightning II, the latest fifth-generation stealth multi-role fighter jet.

As an operator of Predator and Reaper Remotely Piloted Aircraft, Creech is a critical resource continuously tasked by our nation's leadership. From extensive combat operations to quick-reaction humanitarian missions, the latest satellite technology allows Creech Airmen to fly RPAs around the globe, supporting America's objectives.

In support of these missions, Nellis is home to Air Combat Command's largest medical center as well as civil engineer, communications, logistics readiness and force support squadrons. The 2016 Economic Impact Analysis illustrates the influence of Nellis, Creech and the NTTR on the local economy by providing a better understanding of the Air Force's missions, and their importance to southern Nevada and neighboring communities.

In Fiscal Year 2016, our combined operations and maintenance outlays totaled more than \$550 million. There were approximately 10,148 military and 3,432 civilians employed between the two bases and the NTTR, with a combined payroll of more than \$983 million. On any given day, over 1,000 temporary-duty personnel conduct business at Nellis, Creech or the NTTR. There were an estimated 6,933 indirect jobs created with an approximate annual dollar value of \$292 million. Simultaneously, the Las Vegas metropolitan area counted 28,081 military retirees among its residents. The combined retirement payroll of 14,233 Air Force, 5,481 Army, 6,458 Navy, 1,533 Marines and 376 Coast Guard retirees amounted to a yearly salary of \$741 million.

Using the prescribed parameters provided in this report, the total economic impact of Nellis, Creech and NTTR operations in Fiscal Year 2016 amounted to approximately \$5.2 billion. The Financial Analysis Office of the 99th Comptroller Squadron is responsible for collecting and validating information for this report and can be reached for questions concerning this product at 702-652-9835 or 702-652-0723.



PAUL J. MURRAY  
Colonel, USAF  
Installation Commander

## The Nellis Legacy

Nellis Air Force Base began in 1929 as a private airstrip for Nevada Airlines. After a survey in late 1940, the City of Las Vegas bought the field in January 1941 and leased most of it to the Army. In turn, the Army designated it Las Vegas Army Airfield (LV AAF) and began construction in March 1941.

The base was primarily used as a training field for enlisted bomber gunners during World War II, training nearly 60,000 gunners in the B-17 and B-29 as well as providing B-17 co-pilot training. At the end of WWII, the base became a separation center for returning veterans until it was placed in standby status in early 1947.

Standby was short-lived. By late 1948, LV AAF became a pilot training base after commercial operations moved to the new McCarran Field. Additionally, a gunnery school was established to perform research, testing and advanced tactics instruction. The first gunnery competition was held in 1949 and won by the Tuskegee Airmen assigned to the 332d Fighter Group.

On May 20, 1950, the LV AAF was renamed to Nellis in honor of local WWII hero Lt William H. Nellis. With the start of the Korean War June 25, the mission changed to support advanced combat-crew training in the F-80 and F-86. The advanced training missions still continue today through the U.S. Air Force Weapons School. The mission expanded and popularity rose with the arrival of the Air Force Aerial Demonstration Squadron, Thunderbirds, in 1956.

In 1958, Nellis was transferred from the Air Training Command to the Tactical Air Command to support the improved F-100 combat aircraft. By the 1960s, the command change brought the F-105 Thunderchief, F-4 Phantom, F-111 Aardvar aircraft and training mission to prepare crews for combat in Southeast Asia.

By 1975, the F-15 Eagle was assigned, and is still flying at Nellis today. Over the next several years, the base continued to receive various aircraft to include the A-10 (1977), F-16 (1980), the F-22 (2004) and F-35 (2013) and hosted initial operations for the RQ-1 Predator.

Since WWII, Nellis continues to use much of southern and central Nevada for combat training, an area now designated the Nevada Test and Training Range. As aerial threats in combat became more technologically complex, the Air Force developed Red Flag exercises in 1975, increasing the combat skills and readiness of the fighter aircrews. Today's Red Flag exercises include fighter aircraft, bombers, tankers, airlift, rotary wing, and Intelligence, Surveillance, and Reconnaissance platforms within the Department of Defense and international partners.

The late 1980s saw Air Warrior training exercises between Army ground components, and Air Force aircrews transfer from George AFB, California, to Nellis. The exercise was redesignated as Green Flag in 2006, preparing Army and Air Force units for combat and contingency operations prior to deployment.

Today, Nellis is home to the U.S. Air Force Warfare Center, 57th Wing, 99th Air Base Wing, Nevada Test & Training Range, 926th Wing (Air Force Reserve Command), elements of the 53d Wing, 505th Command and Control Wing and 352d ISR Wing as well as more than 52 tenant units and agencies. Nellis is a linchpin of mission readiness for today's U.S. Air Force, leading the way with tactics development and training for the F-22 and F-35.

## The Creech Legacy

Creech Air Force Base began as an air-to-air gunnery training sub-post for Las Vegas Army Air Field, located near Indian Springs, in the wake of Pearl Harbor in early 1942. Known as the Indian Springs Airport after the February 1943 completion of a concrete landing field and fixed facilities, it also supported four-engine ground training for B-17 bomber co-pilots. It also served as a divert base for LV AAF before closing at the end of 1945 following the World War II drawdown.

The base reopened in 1949 and was redesignated Indian Springs AFB in 1950. As such, the base supported new Independent U.S. Air Force and Cold War missions, including the monitoring of atomic tests during the 1950s and 1960s over the Nevada Test Site.

Beginning in the mid-1950s, the U.S. Air Force Aerial Demonstration Squadron, Thunderbirds, became an enduring presence at Indian Springs, honing their crowd-thrilling routines in relative obscurity at the edge of the vast Nellis Test and Training Range. The base became the Indian Springs Air Force Auxiliary Field in April 1964, hosting many visitors in the 1970s and 1980s, with no singular operational mission. In 1988, it became a desolate post devoid of assigned military personnel and managed by contract.

A new era began in the 1990s. On Dec. 13, 1996, with the first flight of the RQ-1 Predator at the airfield, the U.S. Air Force planted the first seed of the Remotely Piloted Aircraft Enterprise. The base began to take root in earnest with the first successful firing of a Hellfire missile from a Predator on the Nellis AFB range in February 2001. The Air Force acknowledged the contributions and potential of the RPA home at Indian Springs AFAF and on June 20, 2005, redesignated it as Creech AFB in honor of U.S. Air Force Gen. Wilbur L. Creech, a combat veteran, former Thunderbird and visionary airpower leader.

A decade of transformation began with the arrival of the first MQ-9 Reaper at the base March 12, 2007. The service quickly gave the mission new flags to rally around at Creech with the activation of the 432d Wing May 1, 2007, and the 432d Air Expeditionary Wing May 15, 2008. Base infrastructure and logistical demands grew apace, prompting the Air Force to raise another flag at Indian Springs.

In August 2012, the 799th Air Base Group under the host 99th Air Base Wing, became the nexus for “Team Creech” efforts to support the global RPA mission. In the years to follow, the total force components of the RPA community had grown alongside the active-duty elements at Creech. Accordingly, in December 2014, the 726th Operations Group unfurled its flag as a visual reminder of that steadfast alliance. Today, the old outpost’s purpose and prospects are stronger than ever.



## The NTTR Legacy

The physical Nevada Test & Training Range first took shape as the Tonopah Bombing and Gunnery Range, created by the Executive Order of President Franklin D. Roosevelt Oct. 29, 1940. Roosevelt set aside nearly 3 million acres of land for use by the War Department.

Concurrently, construction began on Tonopah Army Airfield, which is currently Nye County Airport. With some homesteads on the land as well as issues over mining and grazing rights, it was late 1941 before the range was ready for use. In addition, Las Vegas had been selected as an aerial gunnery school and, after extended discussion, the range was divided, giving Las Vegas use of the southern half of the range. Units at Las Vegas (some assigned to Indian Springs) and Tonopah conducted extensive training across the range through the end of World War II.

The range remained under military control after the war ended. Las Vegas Air Force Base -- now Nellis AFB -- assumed control for advanced pilot training and gunnery testing as well as and training when it reopened in 1949.

In December 1950, President Harry S. Truman authorized the Atomic Energy Commission to take over a 680 square mile portion, which has since expanded to the current 1,360 sq. mile portion, of the NTTR to serve as a test site for nuclear weapons. The AEC and Air Force shared use of range airspace, although AEC activities had precedence with Indian Springs AFB serving as a primary support site; above-ground testing halted in 1962.

Over the following several years, Congress designated adjoining land for range use; today's NTTR encompasses approximately 3.1 million acres.

Various Air Force squadrons and groups managed range operations over the years. With continuing growth of training activities on and over the range, the 98th Range Wing was activated Oct. 29, 2001. It was finally redesignated the Nevada Test and Training Range June 21, 2011.

**ECONOMIC IMPACT TABLES**

**Table 1**  
Executive Summary

<b>Expense Category</b>	<b>Line Amount</b>
<i>Base Employment</i>	
Active-Duty Military	9,098
Dependents	24,378
Reserve/Air National Guard	1,050
Appropriated Funds Civilians	1,074
Non Appropriated Funds Civilians	473
On-Site Contract Civilians	1,273
Other Civilians	612
<b>Subtotal for Nellis, Creech &amp; NTTR</b>	<b>37,958</b>
<i>Base Payroll</i>	
Active-Duty Military	\$641.9M
Reserve/Air National Guard	\$30.4M
Appropriated Funds Civilians	\$75.0M
Non Appropriated Funds & On-Site Contract Civilians	\$236.0M
<b>Subtotal for Nellis, Creech &amp; NTTR</b>	<b>\$983.3M</b>
<i>Expenditures</i>	
Annual Retiree Payroll	\$741.0M
Annual Base Expenditures	\$3,138.8M
Estimated Dollar Value of Jobs Created	\$291.7M
<b>Total for Nellis, Creech &amp; NTTR</b>	<b>\$5,154.8M</b>



**Table 2**  
Total Personnel by Classification and Housing Location

Appropriated Fund Military	Living On-Base	Living Off-Base	Total
Active-Duty	1,984	7,114	9,098
Reserve/Air National Guard	-	1,050	1,050
Dependents	3,968	20,410	24,378
<b>Total</b>	<b>5,952</b>	<b>28,574</b>	<b>34,526</b>

**Table 3**  
Annual Payroll by Classification and Housing Location

Appropriated Fund Military	Living On-Base	Living Off-Base	Total
Active-Duty	\$100.2M	\$541.7M	\$641.9M
Reserve/ANG	-	\$30.4M	\$30.4M
<b>Total</b>	<b>\$100.2M</b>	<b>\$572.1M</b>	<b>\$672.3M</b>

**Table 4****Total Civilian Personnel by Appropriated and Non-Appropriated Funds**

<b>Appropriated Fund Civilians</b>	<b>Total</b>
General Schedule	901
Federal Wage Board	173
Other APF Civilians	-
<b>Total</b>	<b>1,074</b>
<b>Non-Appropriated Fund AF Civilians</b>	
Civilian NAF	473
Civilian Base Exchange	360
Contract Civilians	1,273
Private Businesses	252
<b>Total</b>	<b>2,358</b>

**Table 5****Annual Payroll by Appropriated and Non-Appropriated Funds**

<b>Appropriated Fund Civilians</b>	<b>Payroll</b>
General Schedule	\$63.1M
Federal Wage Board	\$11.9M
Other APF Civilians	-
<b>Total</b>	<b>\$75.0M</b>
<b>Non-Appropriated Fund Civilians</b>	
Civilian NAF	\$12.3M
Civilian Base Exchange	\$7.5M
Contract Civilians	\$211.3M
Private Businesses	\$4.9M
<b>Total</b>	<b>\$236.0M</b>

**Table 6**  
Expense Report

<b>Expense Category</b>	<b>Amount</b>
Commissary (Inventory)	\$1.8M
Army Air Force Exchange Service (Inventory)	\$16.0M
Health (Tricare)	\$110.0M
Education (Tuition Assistance)	\$0.5M
Temporary Duty	\$245.5M
Other Materials Equipment Supplies	\$703.8M
Government Purchase Card Expenses	\$15.9M
Utilities	\$12.6M
Service Contracts	\$90.5M
Construction Military Construction Non-Appropriated Funds Operation & Maintenance	\$78.7M
<b>Subtotal</b>	<b>\$1,275.3M</b>
<b>Multi-Year Capital Assets</b>	<b>Amount</b>
Existing Equipment (Inventory)	\$678.8M
Multi-Year Contracts	\$681.8M
Miscellaneous Contracts	\$502.9M
<b>Subtotal</b>	<b>\$1,863.4M</b>
<b>Total Annual Expenditure</b>	<b>\$3,138.8M</b>



**Table 7**  
Indirect Jobs Created

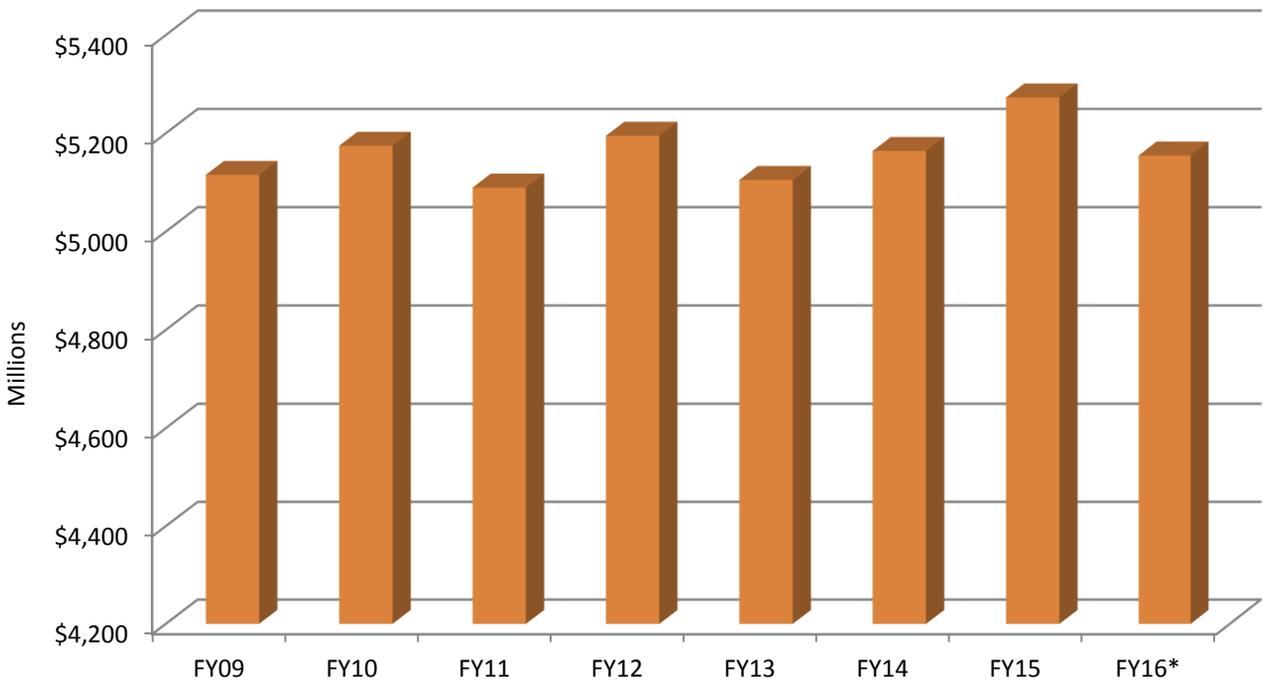
Personnel Type	# of Base Jobs	Jobs Created	New Job Salaries
Active Duty	9,098	4,549	\$191.4M
Reserve/Air National Guard	1,050	221	\$9.3M
APF Civilians	1,074	677	\$28.5M
Other Civilians	2,358	1,486	\$62.5M
<b>Total</b>	<b>13,580</b>	<b>6,933</b>	<b>\$291.7M</b>

**Table 8**  
Las Vegas Retiree Data

Branch	# of Retirees	Payroll
Air Force	14,233	\$386.1M
Army	5,481	\$140.0M
Navy	6,458	\$165.9M
Marines	1,533	\$44.7M
Coast Guard	376	\$4.4M
<b>Total</b>	<b>28,081</b>	<b>\$741.0M</b>

**Table 9****Economic Impact Estimate**

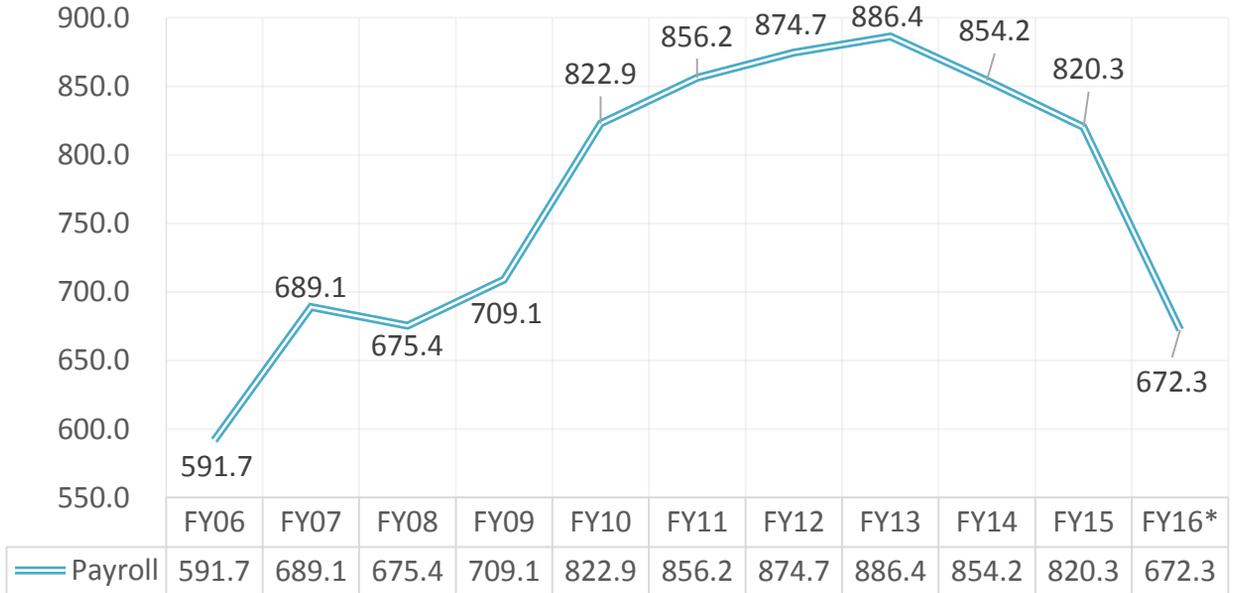
Expense Category	Amount
Annual Payroll	\$983.3M
Retiree Payroll	\$741.0M
Annual Expenditures	\$3,138.8M
Annual \$ Value of Jobs Created	\$291.7M
<b>Total</b>	<b>\$5,154.8M</b>

**ECONOMIC IMPACT CHARTS****Chart 1****Annual Economic Impact Estimates (FY09-FY16)**

\*FY16 EIA contains adjusted payroll data

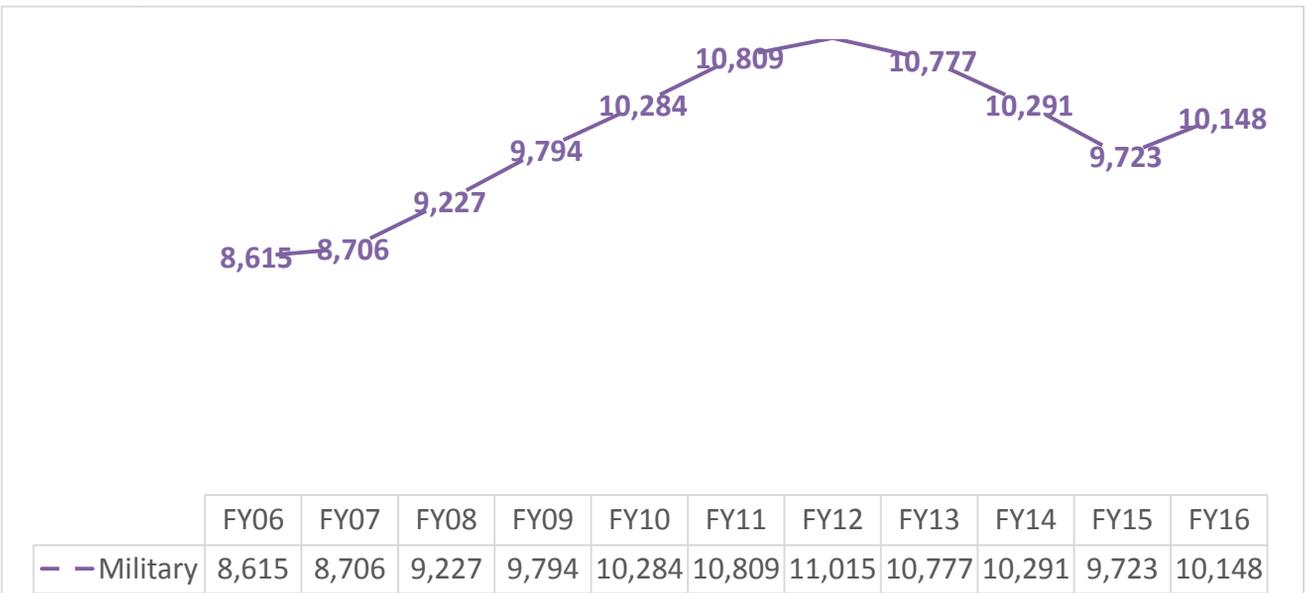
### Chart 2

Appropriated Fund Military Payroll Chart FY06-FY16 (\$M)



### Chart 3

Appropriated Fund Military Assigned Chart FY06-FY16



Military compensation amounts were overstated by retirement accruals from FY06-FY15. FY16 military compensation includes only basic pay, basic allowance for housing, incentive special pay, and miscellaneous per AFMAN 65-506

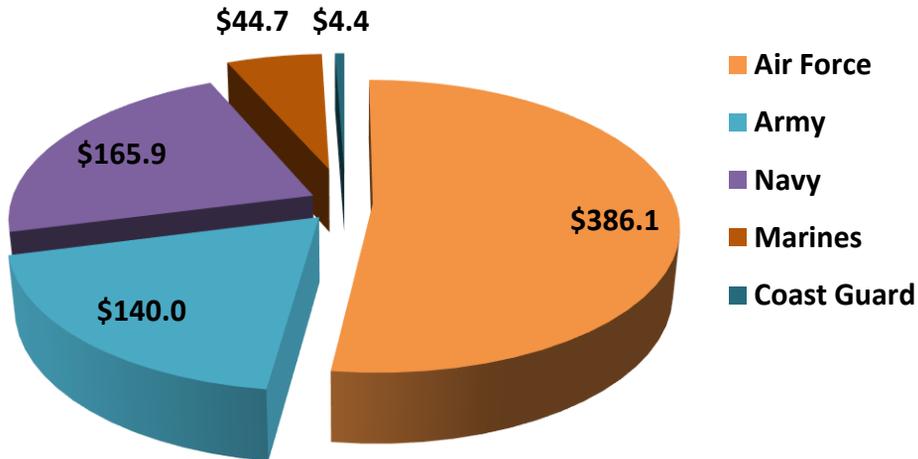
### Chart 4

Appropriated Fund Civilian Payroll Chart



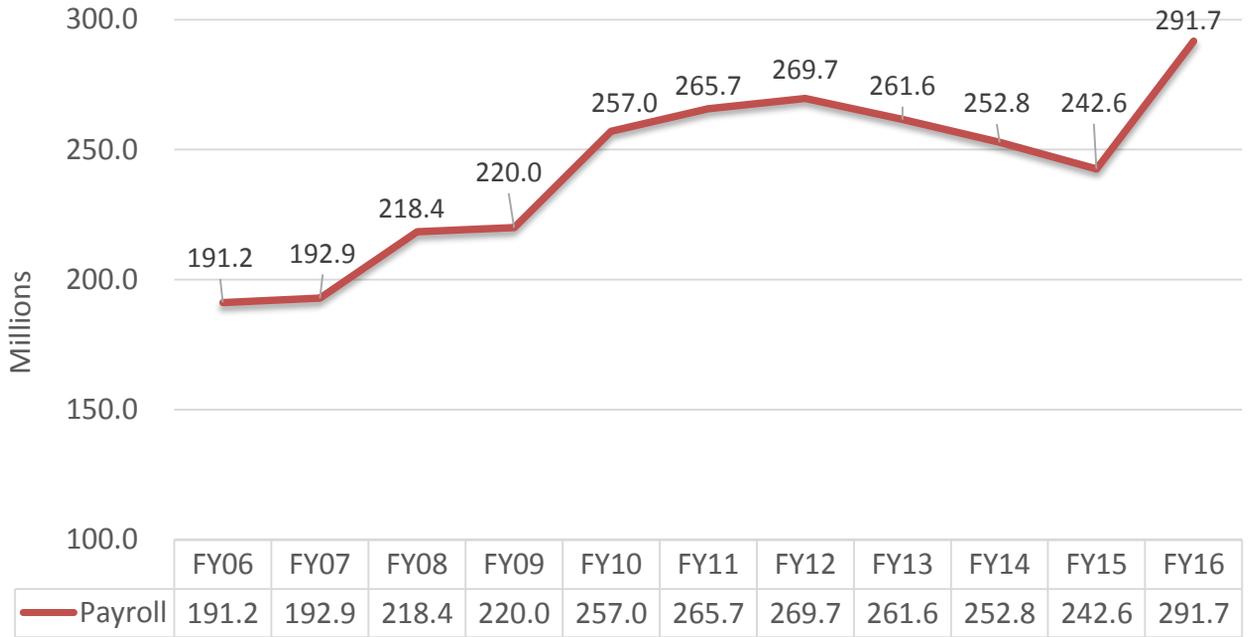
### Chart 5

Military Retiree Payments

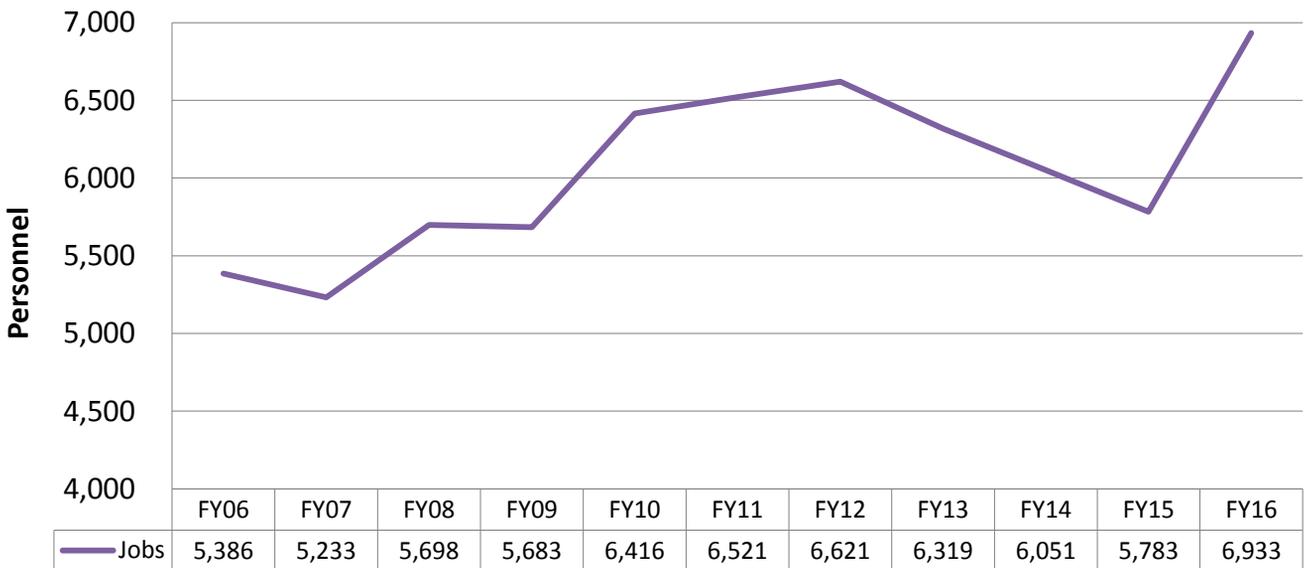


Service	Air Force	Army	Navy	Marines	Coast Guard
Recipients	14,233	5,481	6,458	1,533	376
Disbursement	\$386.1M	\$140.0M	\$165.9M	\$44.7M	\$4.4M

**Chart 6**  
Annual Estimated Jobs Created (\$M)

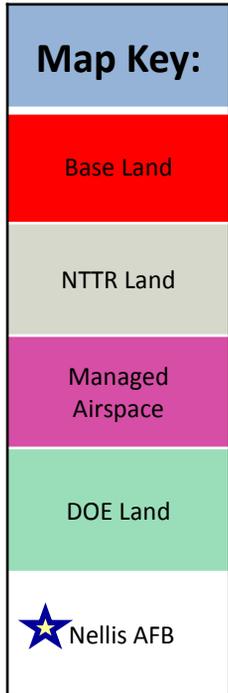
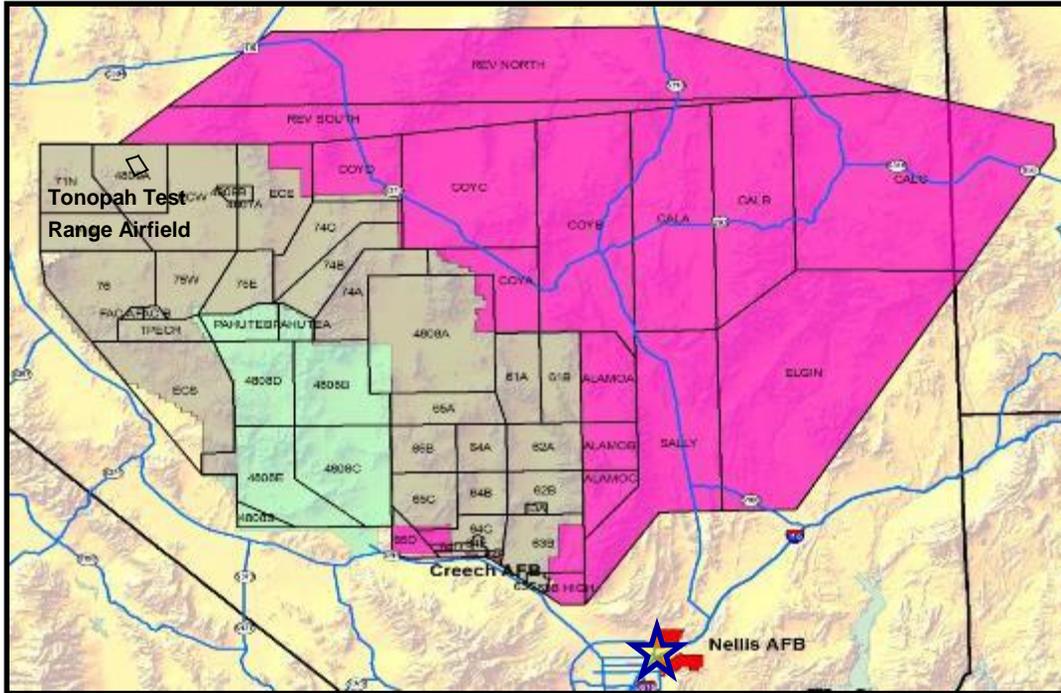


**Chart 7**  
Annual Estimated Jobs Created (Jobs)

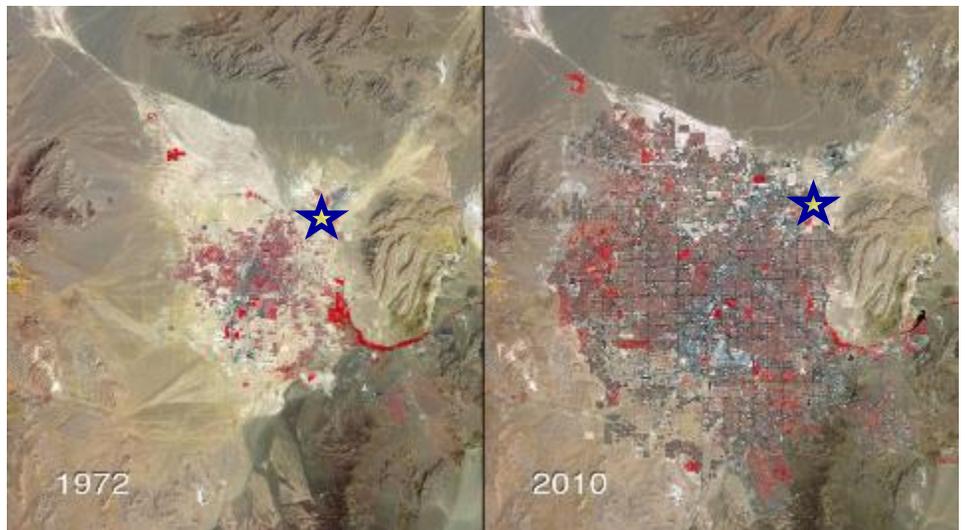


# ECONOMIC IMPACT APPENDICES

## Appendix 1 Installation Map



## Appendix 2 Las Vegas Area Growth 1972-2010



Source: Nasa, <https://svs.gsfc.nasa.gov/10715>



# **Economic Impact Analysis Fiscal Year 2016**

Nellis Air Force Base  
Creech Air Force Base  
Nevada Test and Training Range