MILITARY ECONOMIC IMPACT ANALYSIS FOR EAST TENNESSEE | APRIL 2014



EAST TENNESSEE MILITARY AFFAIRS COUNCIL (ETMAC)

ETMAC is a non-profit organization that was founded in 1990 to recognize, encourage, support and advocate on behalf of military activities in East Tennessee. In cooperation with the Knoxville Chamber, ETMAC:

- Informs community, business, education, and government leaders about East Tennessee military units, their missions, and their contribution to the local economy.
- Serves as a liaison between military units, military-related organizations, and the public.
- Helps the community avoid "loss by default" of military offices, detachments, and installations.
- Helps military people and their families understand that East Tennessee values them as members of the community.
- Promotes and supports military events and functions.
- Supports area military recruiters.
- Promotes the Employer Support of the Guard and Reserve (ESGR) Program.
- Supports charitable, scientific, and educational programs and events.

ETMAC sponsors and supports several military-related activities including:

- Annual Knoxville Veteran's Day Luncheon
- Colonel Jack K. Westbrook (USAF, Ret.) Army and Air Force ROTC Scholarships, University of Tennessee
- Veteran's Day Parade
- HonorAir Knoxville
- Tennessee Veterans Business Association Vendor Day and Job Fair
- Pearl Harbor Day Remembrance Ceremony
- Mountain Man Memorial March
- 2014 Medal of Honor Society Convention Knoxville
- Military Units' Family Days and Special Events

ETMAC membership is open to any individual, business, or organization. Visit the ETMAC website at www.ETMAC.org or contact the Knoxville Chamber at 865-637-4550 and ask for the "ETMAC representative."

EXECUTIVE SUMMARY

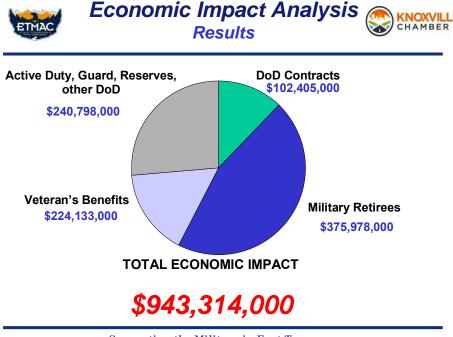
This Military Economic Impact Analysis is an update of the last analysis completed in early 2011. Like the previous three analyses, the purpose is to provide business and civic leaders, and the public at large, a complete picture of the very significant contribution that the military and defense programs make to the economy of East Tennessee.

<u>Methodology</u>: The analysis follows standard Department of Defense methodology for determining the cumulative economic impact within fifty miles of Knoxville. The following factors are included:

- Annual payroll of Active Duty, Guard and Reserve, and civilian personnel.
- Expenditure for construction, supplies, services, contracts, and materials.
- Indirect jobs resulting from the personnel and their salaries.
- Military contracts to private businesses.
- Other military expenditures, including pay to military retirees, veterans' benefits, etc.

We included Active Duty, National Guard, and Reserve components of the Air Force, Army, Navy, and Marine Corps, and other Department of Defense related expenditures such as retiree benefits, assistance to veterans, and DoD contracts. The Department of Energy activities at Oak Ridge that support the Department of Defense were not included as their impact is well publicized elsewhere.

The total impact of the military activity in East Tennessee is estimated to be \$943.3 million for 2013.



The economic impact has increased steadily since we completed the first analysis in 2000. For several reasons, the amount above is more than \$80 million larger than 2011. First, we try to make each analysis more complete and accurate. This year we included activities that were not in previous analyses. In addition to the expenditures for military-related educational benefits at the University of Tennessee, we have added similar expenditures for Pellissippi, Roane, and Walters State Community Colleges, as well as South and Virginia Colleges. Also new to this analysis is DoD-related spending for Army and Air Force Junior ROTC High school programs in our area, plus the Civil Air Patrol. Second, the number of military retirees and their annual pensions continues to grow. Finally, there continues to be a steady increase in military and civilian salaries, as well as an approximate \$5,000 increase in the average salary for the indirect jobs created as compared to 2011.

The military continues to be one of the major drivers of the economic activity in our area. As such, business and civic leaders should consider policies and actions that attract and retain this valuable resource to East Tennessee.

TABLE OF CONTENTS

The East Tennessee Military Affairs Council	1
Executive Summary	ii
Purpose of the Analysis	1
Methodology and Scope of the Analysis	1
Results and Conclusions	5
Appendix 1 DoD Economic Impact Analysis Model	9
Appendix 2	10
Data Tables	
Appendix 3 Acronyms	30

PURPOSE OF THE ANALYSIS

This Military Economic Impact Analysis is an update of the last ETMAC analysis completed in early 2011. Its purpose is to estimate the economic effect the military bases, installations, and other related military activities have on the local community. It can provide business and civic leaders, and the public at large, a complete picture of the very significant contribution that the military and defense programs make to the economy of East Tennessee.

Unlike some areas that have a very large Active Duty military installation, the military presence in East Tennessee is characterized by a number of small- to medium-sized military units. The largest units are part of the Guard or Reserve components of their respective services. As such, the scope of their activities and number of personnel assigned may not be apparent on a daily basis since many of the personnel serve "part time." There are relatively few Active Duty military personnel in the area. While there are a number of small contractors who perform DoD work, there is no large-scale defense contractor in the region. (The Department of Energy facility at Oak Ridge does support the Department of Defense; the DOE facility financial impact is included in other reports and therefore excluded here.).

Given the unique situation described above, one of ETMAC's goals is to collect the various military and military-related economic data into a single document and then explain the cumulative effect. It is hoped that this analysis will raise the awareness of the importance of the military units to the economy of East Tennessee and also increase the appreciation of the public at large for the critical national defense missions these units perform.

METHODOLOGY AND SCOPE

This economic analysis uses the standard methodology and parameters of the DoD Economic Impact Analysis (EIA) Model. The total economic impact is computed by summing the payroll of all personnel, annual base/installation/activity expenditures for services, supplies, construction, maintenance, etc., and the estimated annual dollar value of indirect jobs created. As in the DoD model, the impact area is assumed to be within fifty miles of Knoxville. Appendix 1 contains additional details on the DoD EIA model.

We included Active Duty, National Guard, and Reserve components of the Air Force, Army, Navy, and Marine Corps as applicable, plus DoD contracts, various veterans' benefits, and military retiree pay. Data was provided by the individual units and organizations over the past several months; we have tried to obtain the most accurate, up-to-date information available.

Detailed data sheets for each unit included in the analysis can be found in Appendix 2. The Department of Energy activities at Oak Ridge that support the DoD was not included, as their impact is well publicized elsewhere.

The following units, organizations, and activities in Table 1 were included in the analysis:

Table 1 Units, Organizations and Activities Included

Service	Unit	Location	Mission
US Army			
Active Duty	Army ROTC – Rocky Top	University of Tennessee -	Officer training and commissioning
	Battalion	Knoxville	
	US Army Recruiters	Throughout the Area	Recruit officer & enlisted members for the
			Army
National Guard	278 Armored Cavalry Regiment	Knoxville – Sutherland Ave and	Reconnaissance, surveillance, and security
	(including the 1-230 th Air Cavalry	McGhee Tyson ANGB	
	Squadron		
Reserves	489 th Civil Affairs Battalion	Army Reserve Center –	Assist other military units – Create, restore,
		Middlebrook Pike	and maintain public order
	844 th Engineer Combat Battalion	Army Reserve Center –	Heavy construction
		Middlebrook Pike	
	1 st Battalion, 100 th Regiment, 3 rd	Army Reserve Center –	Engineer training
	Brigade, 100 th Division	Middlebrook Pike	
	AMSA 148	Army Reserve Center –	Heavy vehicle maintenance
		Middlebrook Pike	
Other	Army High School Junior ROTC	Gibbs, Jefferson County,	Educate and train HS cadets in citizenship,
		Campbell County, Grainger	promote community service, instill
		County, and South Doyle HS	responsibility, character, and self-discipline

Units, Organizations and Activities Included (con't)

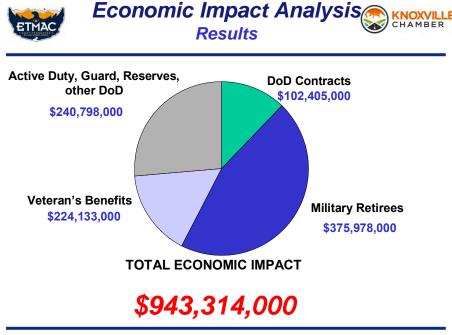
Service	Unit	Location	Mission
US Navy			
Active Duty	USN Recruiters	Throughout the Area	Recruit officer & enlisted members for the Navy
Reserves	Naval Operations Support Center	Alcoa Highway – Reserve Center	Training, logistical, & administrative support to the fleet
US Marine Corps			
Active Duty	USMC Recruiters	Throughout the Area	Recruit officer & enlisted members for the Marine Corps
Reserves	Company D, 4 th Combat Engineer Battalion (includes some A/D)	Alcoa Highway – Reserve Center	Combat engineer support
	Detachment, Surgical Company A, 4 th FSSG	Alcoa Highway – Reserve Center	Medical support
US Air Force			
Active Duty	AFROTC Detachment 800	University of Tennessee	Officer training and commissioning
	USAF Recruiters	Throughout the Area	Recruit officer & enlisted members for the USAF
National Guard	134 th Air Refueling Wing	McGhee Tyson ANGB	Aerial refueling
	119th Command and Control	McGhee Tyson ANGB	Support to US Space Command/US Strategic
	Squadron		Command – satellite imagery, warning systems, communications
	I.G. Brown ANG Training and Education Center	McGhee Tyson ANGB	Professional military education such as the Non-Commissioned Officer (NCO) Academy
	572 nd Air Force Band	McGhee Tyson ANGB	Support for USAF; public relations and recruiting
Other	Junior ROTC	William Blount, Heritage, Karrns, and Austin East HS	Educate and train HS cadets in citizenship, promote community service, instill responsibility, character, and self-discipline
	Civil Air Patrol	Throughout area	Support search and rescue, disaster relief and other emergencies and contingencies.

Units, Organizations and Activities Included (con't)

Service	Unit	Location	Mission
Other DoD			
Active Duty	Military Entrance Processing Station (MEPS)	Knoxville	Process and enlist members into all branches of the service
Various DoD Agencies	University of Tennessee	University of Tennessee	Research and Development, Executive Education and Training, etc.
Defense Contracts	Various	Counties within 50 miles of Knoxville	Manufacturing and services for DoD in 2010
Other Military			
Department of Veterans Affairs	VA Medical Center – Outpatient Clinic	Knoxville – Ray Mears Blvd.	Primary care, specialty care, extended care and related services for veterans
	Veteran's Affairs – Advisor/Registrar	University of Tennessee – Knoxville, Pellissippi, Roane, and Walters Sate Community Colleges, and South and Virginia Colleges	Montgomery GI Bill and other education benefits
	Other Benefits	Knoxville Area	Veterans' rehabilitation, disability benefits, etc.
TN Department of Veterans Affairs	Ben Atchley State Veterans Nursing Home	Knoxville – One Veterans Way	Safe, secure, and pleasant home for veterans
Retirees	Retired Military Personnel	Within 50 miles of Knoxville	Retired pay

RESULTS AND CONCLUSIONS

The total economic impact for 2013 of the military activities is estimated at \$943.3 million as shown below.



Supporting the Military in East Tennessee

What has Changed: For several reasons, the amount above is more than \$80 million larger than in 2011. First, we try to make each analysis more complete and accurate. This year we included activities that were not in previous analyses. In addition to the expenditures for military-related educational benefits at the University of Tennessee, we have added similar expenditures for Pellissippi, Roane, and Walters State Community Colleges, as well as South College and Virginia Colleges. US News and World Report recently named the University of Tennessee among the top 15 schools in the nation for military veterans in its *BEST COLLEGES for Veterans* 2014 Report (November 13, 2013).

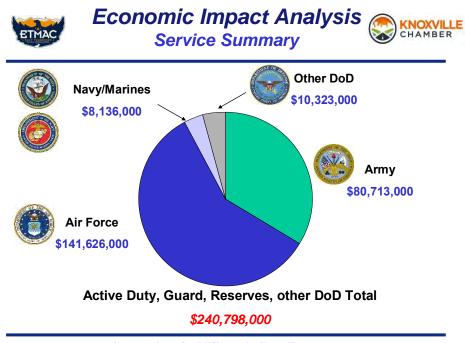
Also new to this analysis is DoD-related spending for Army and Air Force Junior ROTC High school programs in our area, as well as the Civil Air Patrol, an auxiliary of the USAF. Second, the number of military retirees and their annual pensions continues to grow. Finally, there continues to be a steady increase in military and civilian salaries, as well as an approximate \$5,000 increase in the average salary in the Knoxville area for the indirect jobs created as compared to 2011.

Retirees: The military retiree population is a major contributor to economic activity. More than 8,500 military retirees now live within a 50 mile radius of Knoxville, and this speaks volumes to the desirability of this area. Several organizations rank Tennessee in the "top ten" most desirable places for military retirees, based on such factors as: the state's cost of living; taxes imposed by the state, city, and county; the availability of military base and veterans administration facilities; primary care facilities; dentists; shopping stores; banking services; senior citizen services; as well as having a variety of recreational activities. Also, *Forbes Magazine* ranks Knoxville as fifth among America's most affordable cities. Most retirees could live anywhere they choose, but more and more are coming to East Tennessee. Their retirement pay and associated indirect jobs created account for about one-third of the total economic impact.

<u>Veterans' Benefits.</u> Included in this benefit are the Ben Atchley State Veterans Nursing Home, the Knoxville VA Outpatient Clinic, students attending the University of Tennessee and other colleges on the Montgomery GI Bill and other veterans' educational assistance, and expenditures for other veteran's benefits such as disability and rehabilitation services.

<u>Military Contracts</u>. The amount for military contracts in the area decreased by about \$70 million as compared to the 2011 analysis. We believe this is largely due to the winding down of the war in Afghanistan, and also as a result of the late 2013 government shutdown.

Service Summary:



 $Supporting\ the\ Military\ in\ East\ Tennessee$

Again for this analysis, the U.S. Air Force is the largest service from an economic standpoint, and the combined units at McGhee Tyson ANGB contribute about \$138 million of the USAF total.

The 278th Armored Cavalry Regiment is the largest Army contributor with over \$61 million. The Naval Operations Support Center represents the bulk of the Navy/Marine economic impact. The "Other" category includes the DoD Military Entrance Processing Station, and two programs at the University of Tennessee: the Aerospace and Defense Masters of Business Administration, and the National Defense Business Institute and Center for Executive Education. All told, these units incorporate more than 7,000 uniformed personnel.

Comparison to Other Businesses: While it is difficult to directly compare the results of this analysis to other activities in the area, it is clear that the military is among the largest economic drivers in the area. Shown below is a list of Knoxville Area major Employers ranked according to number of employees is shown below. The number of individuals included in our analysis (Active Duty, Guard, Reserve, retirees, and civilian employees) would rank tops on this list. To make a reasonable comparison, the *JobsEQ* model was used which differs from the DoD Economic Impact Model shown in Appendix 1. Therefore, the \$748 million for the military differs from the results of this report.

Employers	<u>Direct</u> <u>Jobs</u>	<u>Indirect</u> <u>Jobs</u>	Total Jobs	\$ Economic Impact
U.S. DOE – Oak Ridge	14,350	6,321	20,671	\$2,331,618,000
Covenant Health	9,122	4,062	13,184	\$1,332,708,000
Knox County Schools	7,066	8,264	15,330	\$368,235,000
University of Tennessee	6,550	8,425	14,975	\$605,226,000
Walmart Stores	5,776	7,318	13,094	\$624,991,000
University Health Systems	4,061	1,808	5,869	\$593,305,000
K-VA-T Food Stores	3,857	875	4,732	\$364,832,000
Denso Manufacturing	3,400	2,869	6,269	\$1,514,277,000
Tennova Healthcare	3,124	1,391	4,515	\$456,410,000
Knox County Government	2,991	1,220	4,211	\$492,132,000
Military *	18,482	4,917	23,399	*\$748,439,000

^{*}Military personnel total here does not include: UT Research, Montgomery GI Bill students, & others receiving VA Veterans Benefits.

<u>Sources</u>: Jobs numbers from Knoxville News Sentinel, January 5, 2014. Economic impact dollars computed using JobsEQ; Chmura Economics.

<u>Military Impact – Beyond Dollars</u>: In addition to the purely economic factor, the military presence pays big dividends to the community in several other ways. Military personnel know the value of "service to others" and are valuable members of the community. In short, they "get involved." Listed below are examples of the civic activities the Active Duty, Guard, Reserve personnel, as well as veterans and retirees, are supporting on a daily basis:

- Boy and Girl Scouts
- Boys and Girls Clubs
- Charity runs/walks
- Church leadership roles
- Civic events/color Guards
- Combined Federal Campaign/United Way
- Habitat for Humanity
- High School Career Counseling
- High School Junior ROTC
- Homeless Veterans Stand Down Volunteers
- Honor Air Knoxville
- Keep Knoxville Beautiful Clean-up Program
- Military funerals
- Mountain Man Memorial March
- President's Reading Program children in schools
- Red Cross Armed Forces Emergency Services Committee
- Salvation Army
- Service clubs such as Kiwanis and Rotary
- Tennessee Veterans Business Association Vendor Day and Job Fair
- Toys for Tots
- United Way
- Veterans Day Luncheon
- Veterans Day Parade
- Youth mentoring
- Youth sports

Military veterans and retirees are skilled, reliable, hard working, motivated, well educated and quickly become active in the local community. In most cases, the government will pay the relocation costs of a veteran moving into our area.

Clearly, the military is one of the major drivers of the economic activity in our area. As such, business and civic leaders must consider policies and actions that attract and retain this invaluable resource to East Tennessee.

Appendix 1

DoD ECONOMIC IMPACT ANALYSIS MODEL

<u>PAYROLL</u>	
# ACTIVE DUTY PERSONNEL # GUARD/RESERVE PERSONNEL # CIVILIAN PERSONNEL	
OTHER EXPENDITURES	\$TOTAL PAYROLL
CONSTRUCTION SERVICES MATERIALS CONTRACTS UTILITIES RENT SUPPLIES ENVIRONMENTAL OTHER	
	\$TOTAL OTHER EXPENDITURES
INDIRECT JOBS*	
#ACTIVE DUTY x 0.41 = #GUARD/RESERVE x 0. 16 = #CIVILIANS x 0.55 =	INDIRECT JOBS CREATED INDIRECT JOBS CREATED INDIRECT JOBS CREATED
JOBS CREATED x \$ 42,839 * =	\$IMPACT OF JOBS CREATED
TOTAL ECONOMIC IMPACT = PAYROL	L + EXPENDITURES + INDIRECT JOBS

*Notes

- 1. Indirect jobs multipliers were obtained from the DoD EIA model and are based on the size of the employment base for each region. (AFMAN 65-506 Economic Impact Analysis).
- 2. The annual salary estimates for the indirect jobs are from the Bureau of Labor Statistics (BLS) files for Knoxville 2012 through www.bls.gov.

Appendix 2

Data Tables

ARMY ROTC		2013	ARMY Active Duty Unit
	Personnel	Payroll	Comments
ACTIVE DUTY	8	\$507,528	
GUARD/RESERVE	2	\$159,444	
CIVILIAN	4	\$228,000	
SCHOLARSHIP CADETS	40	\$509,159	Includes stipends (scholarship & non-scholarship), books, tuition, fees
Totals	54	\$1,404,131	
INDIRECT JOBS	6	\$257,034	Indirect Jobs x \$42,839 (Area Avg. Annual Pay)
Active Duty x 0.41	3.28		
Guard/Reserve x 0.16	0.32		
Civilian x 0.55	2.20		
EXPENDITURES			No expenditure data was available.
Contract Services			
Materials/Supplies/Equip			
Utilities			
Healthcare			
Education			
TDY/TAD Expenses			
Other			
TOTAL ECO. IMPACT	60	\$1,661,165	Total Impact = Payroll + Indirect Job \$ + Expenditures
Source: U.S. Army ROTC - Rocky Top Battalion		University of Tennessee	

ADMY IDOTO (loveion DOTO)		2042	ADMY Other Heit
ARMY JROTC (Junior ROTC)		2013	ARMY – Other Unit
	Personnel	Payroll	Comments
ACTIVE DUTY	0		Data covers five units at area high schools including: Campbell Co., Gibbs, Grainger Co., Jefferson Co., and South-Doyle. Includes only DoD funding.
GUARD/RESERVE	0		<u> </u>
CIVILIAN	5	\$500,000	
CADETS	750		
Totals	755	\$500,000	
INDIRECT JOBS	3	\$128,517	Indirect Jobs x \$42,839 (Area Avg. Annual Pay)
Active Duty x 0.41	0.00		
Guard/Reserve x 0.16	0.00		
Civilian x 0.55	2.75		
EXPENDITURES			No expenditure data was available.
Contract Services			
Materials/Supplies/Equip			
Utilities			
Healthcare			
Education			
TDY/TAD Expenses			
Other			
TOTAL ECO. IMPACT	758	\$628,517	Total Impact = Payroll + Indirect Job \$ + Expenditures
Source: LTC Bill Woodcock; Senior Army Instructor; South-Doyle High School			

Americ De ameitana		0040	ADMV Active Duty Heit
Army Recruiters		2013	ARMY Active Duty Unit
	Personnel	Payroll	Comments
ACTIVE DUTY	29	\$1,490,056	
GUARD/RESERVE	4	\$236,064	
CIVILIAN	1	\$19,500	
OTHER			
Totals	34	\$1,745,620	
INDIRECT JOBS	13	\$556,907	Indirect Jobs x \$42,839 (Area Avg. Annual Pay)
Active Duty x 0.41	11.89		
Guard/Reserve x 0.16	0.64		
Civilian x 0.55	0.55		
EXPENDITURES		\$406,597	
Contract Services		\$54,342	
Materials/Supplies/Equip		\$95,000	
Utilities		\$58,000	
Healthcare			
Education			
TDY/TAD Expenses			
Rent		\$199,255	
TOTAL ECO. IMPACT	47	\$2,709,124	Total Impact = Payroll + Indirect Job \$ + Expenditures
Source: U.S. Army - Knoxville Recruiting Company			

	2013	ARMY National Guard Unit
Personnel	Payroll	Comments
310	\$23,686,813	Active Duty includes full-time Guard personnel.
2,023	\$15,852,997	Army National Guard numbers include the 278th Armored Cavalry Regiment & the 1-230th Air Cavalry Squadron in the First, Second & Third Congressional districts of Tennessee.
0	\$0	
0	\$0	
2,333	\$39,539,810	
451	\$19,320,389	Indirect Jobs x \$42,839 (Area Avg. Annual Pay)
127.10		
323.68		
0.00		
	\$1,523,345	
	\$1,523,345	
2,784	\$60,383,544	Total Impact = Payroll + Indirect Job \$ + Expenditures
	310 2,023 0 0 2,333 451 127.10 323.68 0.00	310 \$23,686,813 2,023 \$15,852,997 0 \$0 0 \$0 2,333 \$39,539,810 451 \$19,320,389 127.10 323.68 0.00 \$1,523,345 \$1,523,345

ARMY Reserve		2013	ARMY Reserve Unit
ARIWIT Reserve		2013	ARWI Reserve Offit
	Personnel	Payroll	Comments
ACTIVE DUTY	40		Reserve units include: 489th Civil Affairs Battalion; 844th Engineer Battalion; 1-100th Engineer Battalion; and AMSA # 148.
GUARD/RESERVE	442		
CIVILIAN	17		
OTHER	0		
Totals	499	\$10,931,196	
INDIRECT JOBS	96	\$4,112,544	Indirect Jobs x \$42,839 (Area Avg. Annual Pay)
Active Duty x 0.41	16.40		
Guard/Reserve x 0.16	70.72		
Civilian x 0.55	9.35		
EXPENDITURES		\$286,497	
Contract Services & Supplies		\$24,749	
Rent		\$55,144	
Utilities		\$42,031	
Construction		\$164,573	
TOTAL ECO. IMPACT	595	\$15,330,237	Total Impact = Payroll + Indirect Job \$ + Expenditures
Source: U.S. Army Reserve - Electronic Congressional Data Reporting System			

Navy Recruiters		2013	NAVY Active Duty Unit
	Personnel	Payroll	Comments
ACTIVE DUTY	5	\$418,000	
GUARD/RESERVE	0	\$0	
CIVILIAN	0	\$0	
OTHER	0	\$0	
Totals	5	\$418,000	
INDIRECT JOBS	2	\$85,678	Indirect Jobs x \$42,839 (Area Avg. Annual Pay)
Active Duty x 0.41	2.05		
Guard/Reserve x 0.16	0.00		
Civilian x 0.55	0.00		
EXPENDITURES		\$13,700	
Contract Services		\$0	
Materials/Supplies/Equip		\$4,200	
Utilities		\$0	
Healthcare		\$0	
Education		\$0	
TDY/TAD Expenses		\$9,500	
Rent		\$0	
TOTAL ECO. IMPACT	7	\$517,378	Total Impact = Payroll + Indirect Job \$ + Expenditures
Source: U.S. Naval Operations Support Center - Knoxville			

Novel Operations Support Contar		2013	NAVY - Reserve Unit
Naval Operations Support Center		2013	NAV F - Reserve Unit
	Personnel	Payroll	Comments
ACTIVE DUTY	10		
GUARD/RESERVE	200		
CIVILIAN	1		
OTHER	0		
Totals	211	\$2,200,000	
INDIRECT JOBS	37	\$1,585,043	Indirect Jobs x \$42,839 (Area Avg. Annual Pay)
Active Duty x 0.41	4.00		
Guard/Reserve x 0.16	32.00		
Civilian x 0.55	0.55		
EXPENDITURES		\$678,500	
Contract Services		\$230,000	
Materials/Supplies/Equip		\$100,000	
Utilities/Healthcare/Education		\$340,000	
TDY/TAD Expenses		\$8,500	
Other			
TOTAL ECO. IMPACT	248	\$4,463,543	Total Impact = Payroll + Indirect Job \$ + Expenditures
Source: U.S. Naval Operations Support Center - Knoxville			

LICAGO De como / De como ideas		2042	MADINES Active Duty 9 December Unite
USMC Reserve/Recruiters		2013	MARINES – Active Duty & Reserve Units
	Personnel	Payroll	Comments
ACTIVE DUTY	18	\$918,668	
GUARD/RESERVE	172	\$524,431	
CIVILIAN	0	\$0	
OTHER	0	\$0	
Totals	190	\$1,443,099	
INDIRECT JOBS	35	\$1,499,365	Indirect Jobs x \$42,839 (Area Avg. Annual Pay)
Active Duty x 0.41	7.38		
Guard/Reserve x 0.16	27.52		
Civilian x 0.55	0.00		
EXPENDITURES		\$213,200	
Contract Services		\$13,700	
Supplies		\$32,000	
Construction		\$48,000	
Materials		\$15,500	
Rent		\$92,000	
Other		\$12,000	
TOTAL ECO. IMPACT	225	\$3,155,664	Total Impact = Payroll + Indirect Job \$ + Expenditures
Source: U.S. Marine Corps. Company D, 4th CEB Reserve Unit			Includes "D" Company Marines, "A" Detachment Marines, & RS Knoxville Recruiter

AFROTC - UT		2013	USAF Active Duty Unit
	Personnel	Payroll	Comments
ACTIVE DUTY	6	\$506,964	Includes AFIT students (1)
GUARD/RESERVE	0	\$0	
CIVILIAN	0	\$0	
SCHOLARSHIP CADETS		\$700,854	Includes stipends (scholarship & non-scholarship), books, tuition, fees
Totals	6	\$1,207,818	
INDIRECT JOBS	2	\$85,678	Indirect Jobs x \$42,839 (Area Avg. Annual Pay)
Active Duty x 0.41	2.46		
Guard/Reserve x 0.16	0.00		
Civilian x 0.55	0.00		
EXPENDITURES		\$112,000	
Contract Services		\$14,000	
Materials/Supplies/Equip		\$98,000	
Utilities			
Healthcare			
Education			
TDY/TAD Expenses			
Other			
TOTAL ECO. IMPACT	8	\$1,405,496	Total Impact = Payroll + Indirect Job \$ + Expenditures
Source: U.S. Air Force - ROTC Detachment 800, University of Tennessee			

AFJROTC (Junior ROTC)		2013	USAF - Other Unit
	Personnel	Payroll	
ACTIVE DUTY			Data covers 4 AFJROTC units within 50 miles of Knoxville, and includes only DoD funding.
GUARD/RESERVE			
CIVILIAN	8	\$492,000	Instructors at four units within 50-mile radius of Knoxville.
CADETS	540		
Totals	548	\$492,000	
INDIRECT JOBS	4	\$171,356	Indirect Jobs x \$42,839 (Area Avg. Annual Pay)
Active Duty x 0.41	0.00		
Guard/Reserve x 0.16	0.00		
Civilian x 0.55	4.40		
EXPENDITURES		\$402,000	
Supplies		\$13,200	
Uniforms		\$183,600	
Utilities			
Rent			
Education			
TDY/TAD Expenses			
Other		\$205,200	
TOTAL ECO. IMPACT	552	\$1,065,356	Total Impact = Payroll + Indirect Job \$ + Expenditures
Source: U.S. Air Force - Greg Winn, HQ AFJROTC			

AF Recruiters		2013	USAF Active Duty Unit
	Personnel	Payroll	Comments
ACTIVE DUTY	7	\$219,457	
GUARD/RESERVE	0	\$0	
CIVILIAN	1	\$31,681	
Totals	8	\$251,138	
INDIRECT JOBS	3	\$128,517	Indirect Jobs x \$42,839 (Area Avg. Annual Pay)
Active Duty x 0.41	2.87		
Guard/Reserve x 0.16	0.00		
Civilian x 0.55	0.55		
EXPENDITURES		\$69,043	
Contract Services		\$2,486	
Supplies		\$8,730	
Utilities		\$3,187	
Construction		\$16,601	
Rent		\$38,039	
TDY/TAD Expenses		\$0	
Other		\$0	
TOTAL ECO. IMPACT	11	\$448,698	Total Impact = Payroll + Indirect Job \$ + Expenditures
Source: U.S. Air Force - 332nd Recruiting Command			

McGhee-Tyson ANGB All Units		2013	USAF Air National Guard Unit
	Personnel	Payroll	Comments
ACTIVE DUTY	174	\$12,361,902	
GUARD/RESERVE	1,180	\$25,822,492	
CIVILIAN	516	\$33,939,525	Includes federal civilians, BX & Club, and other civilians
TRAINEES/CADETS	3,027	\$21,027,200	
Totals	4,897	\$93,151,119	
INDIRECT JOBS	544	\$23,304,416	Indirect Jobs x \$42,839 (Area Avg. Annual Pay)
Active Duty x 0.41	71.34		
			Four units located at this base include: 134th Air Refueling Wing; 119th Command & Control Squadron; I G Brown Training Education
Guard/Reserve x 0.16	188.80		Center; 572nd Air Force Band
Civilian x 0.55	283.80		
EXPENDITURES		\$21,931,628	
Contract Services		\$4,783,426	
Construction		\$10,103,139	
Materials, Equipment & Supplies		\$7,045,063	
TOTAL ECO. IMPACT	5,441	\$138,387,163	Total Impact = Payroll + Indirect Job \$ + Expenditures
Source: U.S. Air Force - McGhee Tyson Air National Guard Base			

Civil Air Patrol		2013	USAF Civil Air Patrol – Other Unit
	Personnel	Payroll	Comments
ACTIVE DUTY	0	\$0	
GUARD/RESERVE	0	\$0	
CIVILIAN	1	\$27,000	
TRAINEES/CADETS	0	\$0	
Totals	1	\$27,000	
INDIRECT JOBS	1	\$42,839	Indirect Jobs x \$42,839 (Area Avg. Annual Pay)
Active Duty x 0.41	0.00		
Guard/Reserve x 0.16	0.00		
Civilian x 0.55	0.55		
EXPENDITURES		\$250,000	
Training		\$22,000	East Tennessee Search & Rescue Training
Construction		\$98,000	Renovation of headquarters
Miscellaneous Expenses		\$130,000	Includes office expenses, local travel, educational outreach
TOTAL ECO. IMPACT	2	\$319,839	Total Impact = Payroll + Indirect Job \$ + Expenditures
Source: Dent Young, Lt. Col., Civil Air Patrol, Tennessee Wing			

Military Entrance Processing Station		2013	Other DoD Active Duty Unit
	Personnel	Payroll	Comments
ACTIVE DUTY	7	\$994,072	
GUARD/RESERVE	0	\$0	
CIVILIAN	28	\$1,090,160	
OTHER	0	\$0	
Totals	35	\$2,084,232	
INDIRECT JOBS	18	\$771,102	Indirect Jobs x \$42,839 (Area Avg. Annual Pay)
Active Duty x 0.41	2.87		
Guard/Reserve x 0.16	0.00		
Civilian x 0.55	15.40		
EXPENDITURES		\$1,537,586	
Contract Services		\$855,477	
Materials/Supplies/Equip		\$51,833	
Rent		\$630,276	
Utilities			
TDY/TAD Expenses			
Other Expenditures			
Other Services			
TOTAL ECO. IMPACT	53	\$4,392,920	Total Impact = Payroll + Indirect Job \$ + Expenditures
Source: Knoxville Military Entrance Processing Station			

Aerospace & Defense MBA Program -			
UT		2013	Other DoD
	Personnel	Expenses	Comments
STUDENTS	25	\$1,600,000	Student expenses include: tuition, fees & meals.
EXPENDITURES		. , ,	,
TDY/TAD Expenses		\$90,000	Student lodging
TOTAL ECO. IMPACT	25	\$1,690,000	
Source: Andrew W. White; Director, Aerospace & Defense MBA Programs; Graduate & Executive Education; UT College of Business Administration			
National Defense Rusiness Institute 9			
National Defense Business Institute & Center for Executive Education - UT EXPENDITURES		2013	Other DoD
Center for Executive Education - UT	Personnel	2013 Expenses	
Center for Executive Education - UT	Personnel		Comments The University of Tennessee provides research, development, training, and studies to the U.S. Air Force in three major areas: (1) Acquisition & Integrated Life-Cycle Management System (ILCMS); (2) Continuous Process Improvement (CPI); (3) Leadership &
Center for Executive Education - UT EXPENDITURES	Personnel	Expenses	Comments The University of Tennessee provides research, development, training, and studies to the U.S. Air Force in three major areas: (1) Acquisition & Integrated Life-Cycle Management System (ILCMS); (2) Continuous Process Improvement (CPI); (3) Leadership &
Center for Executive Education - UT EXPENDITURES UT Research	Personnel	Expenses \$4,200,000	Comments The University of Tennessee provides research, development, training, and studies to the U.S. Air Force in three major areas: (1) Acquisition & Integrated Life-Cycle Management System (ILCMS); (2) Continuous Process Improvement (CPI); (3) Leadership &
Center for Executive Education - UT EXPENDITURES UT Research	Personnel	Expenses \$4,200,000	Comments The University of Tennessee provides research, development, training, and studies to the U.S. Air Force in three major areas: (1) Acquisition & Integrated Life-Cycle Management System (ILCMS); (2) Continuous Process Improvement (CPI); (3) Leadership &
Center for Executive Education - UT EXPENDITURES UT Research	Personnel	Expenses \$4,200,000	Comments The University of Tennessee provides research, development, training, and studies to the U.S. Air Force in three major areas: (1) Acquisition & Integrated Life-Cycle Management System (ILCMS); (2) Continuous Process Improvement (CPI); (3) Leadership &

Ben Atchley State Veterans Home		2013	State Veterans' Services
	Personnel	Payroll	Comments
ACTIVE DUTY	0	\$0	
GUARD/RESERVE	0	\$0	
CIVILIAN	200	\$8,560,528	
OTHER	0	\$0	
Totals	200	\$8,560,528	
INDIRECT JOBS	110	\$4,712,290	Indirect Jobs x \$42,839 (Area Avg. Annual Pay)
Active Duty x 0.41	0.00		
Guard/Reserve x 0.16	0.00		
Civilian x 0.55	110.00		
EXPENDITURES		\$3,684,878	
Contract Services		\$979,707	
Materials/Supplies/Equip		\$2,270,354	
Utilities		\$434,817	
TDY/TAD Expenses			
Other Expenditures			
Other Services			
TOTAL ECO. IMPACT	310	\$16,957,696	Total Impact = Payroll + Indirect Job \$ + Expenditures
Source: Ben Atchley State Veterans' Home			

DoD Prime Contracts within 50-miles		0040	Other De D
of Knoxville		2013	Other DoD
		Total Dollars	The Contract Asserted above are total asserted are suite from the Arrest
	88		The Contract Awards shown are total award amounts from the Army, Air Force, Navy, Defense Logistics Agency and all other defense
Total Area Dollars	contractors	\$102,404,959	agencies for FY 2013
TOTAL ECO. IMPACT		\$102,404,959	Does not include any DOE contracts or spending.
Source: USAspending.gov			
Top 20 Contractors \$\$		2013	
	_	Total	
Contractor	County	Amounts	Products
Wellco Enterprises	Hamblen	\$17,753,017	Footwear
Valley Apparel	Knox	\$13,616,527	Military clothing
Avisco	Anderson	\$12,066,732	Roads & bridge construction
Aqua-Chem	Knox	\$10,475,837	Water purification equipment
Sword & Shield Enterprise Security	Knox	\$8,830,095	ADP software/components/support equipment
Wright Contracting	Knox	\$4,154,300	Commercial contractor - building maintenance
HGW & Associates	Knox	\$3,604,744	Education & training
Information International Associates	Anderson	\$3,542,084	Applied research & exploratory development
Short Bark Industries	Monroe	\$2,908,594	Personal armor & gear
DPRA	Knox	\$2,499,908	IT/Telecom systems development
Rick Cox Construction	Roane	\$2,398,480	Airport runway maintenance
Canberra Industries	Anderson	\$2,274,484	Electrical/electronic equipment repair & rebuilding
Nucsafe	Anderson	\$1,721,076	Research and development - applied defense
C2RL Engineering	Blount	\$1,376,090	Architectural & engineering services - general
Security Walls	Knox	\$1,340,268	Security detection systems
University of Tennessee	Knox	\$1,159,989	Research and development/education & training
Camel Manufacturing	Campbell	\$1,084,382	Tents & tarpaulins
Protech Metal Finishing	Monroe	\$1,000,493	Weapons & equipment repair & maintenance
Remotec	Anderson	\$968,034	Hazardous duty robots
Hickory Construction	Blount	\$752,142	Commercial contractor - building maintenance
Source: USAspending.gov			

VA Veterans' Benefits - Knoxville		2013	U.S. Veterans Administration
	Personnel	Payroll	Comments
VETERANS			Veteran population in 16-county region within 50 miles of Knoxville is 104,457.
VETERANS (Montgomery G.I. Bill)	1,898	\$7,815,889	Montgomery G.I. Bill & other veteran data was gathered from 6 area colleges including: University of Tennessee, Pellissippi State, Roane State, Walters State, South College, & Virginia College.
VA Outpatient Clinic Employees	157	\$11,695,126	
VA Outpatient Clinic Contract Employees	3	\$126,000	
VA Outpatient Clinic INDIRECT JOBS	88	\$3,769,832	Indirect Jobs (Employees x 0.55) x \$42,839 (Area Avg. Annual Pay)
VA Outpatient Clinic EXPENDITURES		\$2,640,140	
			There were also 22,525 unique patients. These are patients who received treatment at a VA healthcare facility.
Other VA Benefits EXPENDITURES		\$181,128,058	Other VA benefits expenditures include: compensation & pensions, vocational/rehabilitation/employment, general operating expenses, insurance/indemnities, & other medical care.
TOTAL ECO. IMPACT	2,146	\$207,175,045	
Sources: U.S. Veterans Administration; VA Office of the Actuary; VA Financial Mgt. System; Veterans Benefits Administration Insurance Center; USAspending.gov; Allocation Resource Center			Note: The total spending reported on USASpending.gov was reduced to avoid double counting of benefits.

Military Retirees		2013	Other - DoD
	Personnel	Payroll	Comments
		•	
RETIREES	8,546	\$225,869,676	Data from DFAS - Cleveland, OH - (50-mile radius of Knoxville)
INDIRECT JOBS	3,504	\$150,107,856	Indirect Jobs = Retirees x 0.41 (Payroll = Ind Job x \$ \$42,839)
TOTAL ECO. IMPACT	12,050	\$375,977,532	
Source: Defense Finance and Accounting			
Service			

ETMAC Economic Impact		2013	Summary
Unit	Total Jobs	Total \$ Impact	Comments
Army ROTC	60	\$1,661,165	
Army JROTC	758	\$628,517	
Army Recruiters	47	\$2,709,124	
Army National Guard	2,784	\$60,383,544	
Army - Reserves	595	\$15,330,237	
			Army Total = \$80,712,587
Navy Recruiters	7	\$517,378	
Naval Operations Support Center	248	\$4,463,543	
			Navy Total = \$4,980,921
Marine Reserve/Recruiters	225	\$3,155,664	
			Marines Total = \$3,155,664
Air Force ROTC - UT	8	\$1,405,496	
Air Force JROTC	552	\$1,065,356	
Air Force Recruiters	11	\$448,698	
Air ForceMcGhee-Tyson ANGB	5,441	\$138,387,163	
Air Force Auxiliary - Civil Air Patrol	2	\$319,839	
•			Air Force Total = \$141,626,552
Knoxville Military Entrance Processing Stn	53	\$4,392,920	
Aerospace & Defense MBA Program - UT	25	\$1,690,000	
National Defense Business Institute/Center for Executive Education - UT		\$4,240,000	
			Other DoD Total = \$10,322,920
Ben Atchley State Veterans' Home	310	\$16,957,696	
•			State Veterans Services Total = \$16,957,696
DoD Prime Contracts		\$102,404,959	. , ,
			Contracts Total = \$102,404,959
VA Veterans' Benefits	2,146	\$207,175,045	
	,	, , ,	VA Benefits Total = \$207,175,045
Retirees	12,050	\$375,977,532	
			Retiree Total = \$375,977,532
Total Impact (All Units/Categories)	25,322	\$943,313,876	
i (-,	20	

Appendix 3

Acronyms

AASF Army Aviation Support Facility

ACR Armored Cavalry Regiment

A/D Active Duty (personnel)

AFIT Air Force Institute of Technology

AFMAN Air Force Manual

AFROTC Air Force Reserve Officer Training Corps

AMSA Area Maintenance Support Activity

ANG Air National Guard

ANGB Air National Guard Base

ARW Air Refueling Wing

BLS Bureau of Labor Statistics

DoD Department of Defense

DOE Department of Energy

EIA Economic Impact Analysis

ESGR Employer Support for the Guard and Reserve

ETMAC East Tennessee Military Affairs Council

FSSG Force Service Support Group

JROTC Junior Reserve Officer Training Corps (High School)

MEPS Military Entrance Processing Station

MILCON Military Construction

MGIB Montgomery GI Bill

NCO Non-Commissioned Officer

ROTC Reserve Officer Training Corps

RPM Real Property Maintenance

TAD Temporary Assigned Duty

TDY Temporary Duty

TEC Training and Education Center

USAF United States Air Force

USMC United States Marine Corps

USN United States Navy

UT University of Tennessee

VA (Department of) Veteran's Affairs