

Supplemental Programmatic Environmental Assessment for Army 2020 Force Structure Realignment



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1.0 PURPOSE, NEED, AND SCOPE

1.1 Introduction

Current budget projections require the United States (U.S.) Department of the Army (Army) to analyze force reductions to a lower end-strength than previously planned. Previous expectations were initially addressed in January 2011, when the Secretary of Defense announced that the Army would move forward with a force reduction of 27,000 Soldiers from the Army's Fiscal Year (FY)² 2012 end-strength of 562,000. Reductions and realignments were required to achieve the savings specified in the 2011 Budget Control Act. To achieve these savings, the Army proposed to reduce the size of its force from a post-9/11 peak of about 570,000 in 2010 to 490,000.³ To provide an updated defense strategy that protects and advances U.S. interests and sustains U.S. leadership within the fiscal constraints of decreased DoD funding, the Army must consider how best to make trade-offs between programs and operations, while strategically moving forward to preserve mission capabilities and modernize the force to meet future threats. To meet national security and defense requirements, enhance Army operational effectiveness, and maintain training and operational readiness (while preserving a high quality of life for Soldiers and Families within sustainable levels of resourcing), the Army identified the need to reduce, reorganize, and rebalance (collectively, "realign") its force structure. This Proposed Action is a continuation and expansion of the reductions addressed above and would continue through FY 2020.

To analyze the potential environmental and socioeconomic impacts associated with the FY 2013 budget request, the Army prepared the *Programmatic Environmental Assessment for Army 2020 Force Structure Realignment* in 2013 (2013 PEA) (U.S. Army, 2013). The 2013 PEA analyzed a proposed action consisting of a reduction in end-strength from 562,000 to 490,000. While the 2013 PEA assessed reductions greater than required to reach an end-strength of 490,000, the 2013 PEA indicated that analyzing the larger numbers provided flexibility to decision makers over the ensuing years as conditions changed, including fiscal, policy, and security considerations beyond the scope of the Army to control (U.S. Army, 2013).

As discussed in the 2013 PEA, the Army's proposed action (Army 2020 realignment) was to conduct force reductions and force realignment to a size and configuration that was capable of meeting national security and defense objectives, implement the 2010 Quadrennial Defense Review (QDR) recommendations, sustain unit equipment and training readiness, and preserve a high quality of life for Soldiers and their Families. The Army's civilian workforce would also be reduced. Army 2020 realignment also allowed for the adjustment of forces to meet requirements in high demand military occupational specialties, while rebalancing the number and types of

² The federal fiscal year runs from October 1 to September 30.

³ See *Defense Budget Priorities and Choices* (DoD, 2012).

units in lower priority military occupational specialties. Implementation of Army 2020 realignment enabled the Army to reduce its operational costs with a smaller force that still could meet the mission requirements of the then-current and future global security environment.

Reductions and realignments required as a result of the Budget Control Act of 2011 are ongoing with the first of multiple force structure decisions having been announced in June 2013, which included the inactivation of 10 Regular Army Brigade Combat Teams (BCTs) in the continental U.S. Reductions were also achieved through elimination of unstructured end-strength and drawdown of overseas forces, the latter of which reduced the impact of these force reductions on U.S. installations.

When the 2013 PEA was completed, DoD was operating in accordance with the 2010 QDR. The 2010 QDR was truly a wartime QDR. Its first objective was to further rebalance the capabilities of America's Armed Forces to prevail in the country's wars, while building the capabilities needed to deal with future threats. The second objective was to further reform DoD's institutions and processes to better support the urgent needs of the warfighter; purchase weapons that are usable, affordable, and truly needed; and ensure taxpayer dollars are spent wisely and responsibly.

By comparison, the 2014 QDR expressly recognizes that DoD faces a changing and uncertain fiscal environment. It is principally focused on preparing for the future by rebalancing defense efforts during a period of increasing fiscal constraint. The 2014 QDR advances three important initiatives. First, it builds on the 2012 Defense Strategic Guidance, by outlining an updated defense strategy that protects and advances U.S. interests and sustains U.S. leadership. Second, the QDR describes how DoD is responsibly and realistically taking steps to rebalance major elements of the Joint Force given the changing fiscal environment. Third, the QDR demonstrates the intent to rebalance the DoD institution as part of the effort to control internal cost growth that is threatening to erode our combat power during this period of fiscal austerity.

Since the 2013 PEA was completed, DoD mission and fiscal considerations have continued to change, and the future end-strength of the Army must be reduced below the 490,000 considered in the 2013 PEA. The 2014 QDR states that the active Army will reduce from its wartime high force of 570,000 to 440,000–450,000 Soldiers. The 2014 QDR also states if sequestration-level cuts are imposed in FY 2016 and beyond, active component end-strength would be reduced to 420,000. These potential reductions, therefore, call for an environmental and socioeconomic impact analysis of approximately two times the reductions analyzed in the 2013 PEA. Consequently, the Army is preparing this supplement, building on the information and analysis contained in the 2013 PEA (the 2013 PEA is incorporated by reference) to assess the environmental and socioeconomic impacts of a substantial increase in potential reductions. The Proposed Action for this Supplemental PEA (SPEA) is very similar to the reduction alternative in the 2013 PEA but is both broader in scope and allows for deeper potential reductions. The

Army recognizes that these cuts down to 420,000 Soldiers could have serious impacts to the communities that host the Nation's force, and this document is intended to determine and disclose those impacts.

1.2 Purpose and Need of the Proposed Action

The 2014 QDR indicated the Army needs to meet its national security mission with potentially reduced levels of funding and personnel. The Army's national security mission, along with the other U.S. Armed Forces, is to (1) counter terrorism and irregular warfare; (2) deter and defeat aggression; (3) project power despite anti-access/area denial challenges; (4) counter weapons of mass destruction; (5) operate effectively in cyberspace and space; (6) maintain a safe, secure, and effective nuclear deterrent; (7) defend the homeland and support civil authorities; (8) provide a stabilizing presence; (9) conduct stability and counter-insurgency operations; and (10) conduct humanitarian disaster relief and other operations (see 2013 PEA, pages 1-3 to 1-6 for a more complete explanation of the Army's mission). The end-strength of the Army as a whole and the future Soldier and Army civilian population at individual installations continue to be uncertain. In addition to the 10-year, \$487 billion cut in spending instituted under the Budget Control Act of 2011, the Budget Control Act also instituted a sequestration mechanism requiring additional cuts of about \$50 billion annually through FY 2021. While the Bipartisan Budget Act of 2013 provided some relief from sequestration, the annual sequestration cuts are set to resume in FY 2016, unless Congress passes legislation to stop sequestration from going into effect (DoD, 2014). In response to the fiscal constraints and recognizing that the Joint Force is currently out of balance, the 2014 QDR, which "seeks to adapt, reshape, and rebalance our military to prepare for the strategic challenges and opportunities we face in the years ahead," indicates the Army must reduce its active component strength from a war-time high of 570,000 to 440,000–450,000 Soldiers, and, possibly, active component Army end-strength would need to be further reduced to 420,000 (DoD, 2014).

The potential reduction in active Army force end-strength to 420,000 if sequestration-level cuts resume in FY 2016 is about double the 72,000 reduction in end-strength required as part of the FY 2013 defense budget request and considered in the 2013 PEA. Because the current potential force reduction numbers are more extensive than those envisioned in the 2013 PEA, further National Environmental Policy Act (NEPA) analysis is required to provide force structure decision makers information on the potential environmental and socioeconomic impacts at those installations where a cut of 1,000 or more Soldiers and Army civilians combined may occur. As explained in Section 1.4 of the 2013 PEA, the 1,000 Soldier/Army civilian threshold is an appropriate threshold for determining whether reductions should be analyzed programmatically. The Army must meet its national security mission under the potential budgetary constraints while accomplishing the purpose of sustaining, manning, training, equipping, stationing, deployment, and readiness activities to achieve the Nation's strategic security and defense objectives. This purpose includes (1) matching Army force structure and capabilities with mission requirements; (2) sustaining force readiness; (3) preserving Soldier and Family quality

of life and the all-volunteer force; and (4) adapting the force to reduce Army expenditures (see 2013 PEA, pages 1-6 to 1-7, for a more complete explanation of these goals).

1.3 Scope of the Analysis

This SPEA has been prepared in accordance with NEPA—the regulations issued by the Council on Environmental Quality (CEQ)—40 Code of Federal Regulations (CFR) Parts 1500–1508, and the Army’s procedures for implementing NEPA, published in 32 CFR Part 651, *Environmental Analysis of Army Actions*. This SPEA addresses the potential environmental impacts of the proposed further reductions in the active component Soldier and Army civilian workforce to enable force structure decisions for the potential end-strengths outlined in the 2014 QDR. Military installations in the U.S. that could potentially lose 1,000 or more active component Soldiers and full-time Army civilians are included in the scope of this supplemental analysis. As part of the NEPA process, this SPEA will provide information about the significance of environmental and socioeconomic impacts of the Proposed Action, and will determine whether a Finding of No Significant Impact (FNSI) or an environmental impact statement (EIS) is an appropriate outcome. This SPEA will also provide the force structure decision makers important information regarding potential environmental and socioeconomic impacts associated with the Proposed Action.

In general terms, a change in the number of Army civilian employees is anticipated to occur in conjunction with Soldier reductions. A decrease from 562,000 to 420,000 Soldiers (approximately a 25 percent reduction) would result in some level of reduction in Army civilian positions across the Army, although there could be variations among installations. The scope of the analysis, therefore, includes potential reductions to full-time Army civilians, in addition to reductions of active component Soldiers.

In June 2013, the Army announced its stationing plan to draw down to 490,000 active component Soldiers, which included inactivating 10 BCTs in the U.S. This drawdown was analyzed in the 2013 PEA. The Army has not yet determined how to implement a reduction in end-strength of an additional 70,000 Soldiers. Options to achieve this additional force restructure are too numerous for analysis at this time; therefore, analysis of reductions related to specific units or organizations are not within the scope of this SPEA. The Army will identify specific units and organizations to be affected by reductions during future force structure decisions. These decisions could include changes in number and type of units, structural changes to units, or combinations of these actions at a given stationing location.

Once force structure decisions are made at Headquarters, Department of the Army (HQDA) and specific installations and joint bases know which units stationed at their location would be affected, determinations can be made regarding the need for potential follow-on NEPA documentation to support the implementation of stationing decisions. See Section 1.6 for an explanation of the relationship between the force structure decision making process and NEPA.

1 This analysis does not address changes at locations outside the U.S. The Army determined that
2 units permanently stationed outside the U.S. were not within the scope of both the 2013 PEA and
3 this SPEA because these reductions were already underway. Army forces outside the U.S. will
4 continue to be considered for realignment, but these decisions represent a different set of
5 stationing decisions with separate factors for consideration. Overseas realignments will continue
6 according to the overall reductions of the QDR and budget restrictions discussed above.

7 As with the 2013 PEA, this SPEA looks at Army installations that have the potential to lose
8 1,000 or more full-time, active component Soldiers and Army civilians from FY 2013 to FY
9 2020. The 2013 PEA focused on installations with operational forces (i.e., BCTs). Because the
10 2014 QDR calls for additional cuts, the Army must consider more than operational forces for
11 reductions; therefore, more installations now fit into this 1,000-person threshold than did for the
12 reduction alternative of the 2013 PEA. The 1,000-Soldier/Army civilian threshold was chosen
13 because it represents a level of reduction at a majority of installations that requires additional
14 analysis under the Army's NEPA regulations (USAEC, 2007). It also represents, as it did in the
15 2013 PEA, a number that Army planners thought could produce significant economic impacts.
16 The information in this SPEA will assist the Army in complying with other Congressional
17 notifications required when the Army plans to reduce more than 1,000 military members at an
18 installation (10 United States Code §993). Although this SPEA analyzes only installations that
19 have the potential to lose 1,000 or more full-time, active component Soldiers and/or Army
20 civilians, all Army organizations have the potential to be affected by the Army's force reduction.

21 Changes to the number of Army trainees, transients, holdees, and students (categories of Soldiers
22 who are, for various reasons, not permanently assigned at a given installation) as a result of force
23 reduction are unknown; therefore, any analysis can only be discussed generally and qualitatively
24 in this SPEA. Some of the installations analyzed for reductions conduct training for students
25 assigned to training units or commands at the installation (see Table 1.3-1). Until final decisions
26 are made as to where force reductions will be made, the Army Training and Doctrine Command
27 cannot make any decision about training loads or the frequency of training to be conducted at the
28 installations indicated in Table 1.3-1. Neither can the Army Medical Command (MEDCOM)
29 make similar decisions regarding those in medical specialties training programs. Therefore,
30 impacts resulting from changes to student populations under the Proposed Action are analyzed
31 qualitatively, instead of quantitatively, in this SPEA.

32 Similarly, changes to the number of Army contractors as a result of force reductions are
33 unknown; therefore, any analysis can only be discussed generally and qualitatively in this SPEA.
34 Reductions in contract support to the Army are also not necessarily in the same Region of
35 Influence (ROI) of the affected installations, making it impossible to analyze all impacts when it
36 is unknown how contracts will be affected.

Table 1.3-1. Installations with Major Army Training Missions

Installations	
Fort Benning, Georgia	Fort Leonard Wood, Missouri
Fort Gordon, Georgia	Fort Rucker, Alabama
Fort Huachuca, Arizona	Fort Sill, Oklahoma
Fort Jackson, South Carolina	Joint Base Langley-Eustis, Virginia
Fort Leavenworth, Kansas	Joint Base San Antonio-Fort Sam Houston, Texas
Fort Lee, Virginia	

The future end-strength of the Army as a whole and the future strength at individual installations are in flux at the moment. For example, while the 2014 QDR calls for reductions in the Army's active component end-strength, the 2014 QDR also says that the DoD will invest in new and expanded cyber capabilities and forces to enhance its ability to conduct cyberspace operations to support Combatant Commanders as they plan and execute military missions and to counter cyber-attacks against the U.S., potentially resulting in increases in military employee strength at some installations.

For instance, at Fort Gordon, Georgia, the Army analyzed the stationing of Army Cyber Command there, prepared an environmental assessment (EA), and reached a FNSI. The Army subsequently determined that the Cyber Command will be located at Fort Gordon to support the expanded cyber capabilities identified in the QDR. Currently, Fort Gordon is preparing a comprehensive EA that will look at other possible gains at the installation, an action that is reasonably foreseeable even though Fort Gordon is also being considered for reductions under this SPEA. Fort Gordon is just one example of an installation whose future force size is unknown and may include growth or reduction. Similar growth scenarios, while anticipated to be rare, may occur at other installations for various reasons. Regardless, force structure decisions will consider potential environmental and socioeconomic impacts. Until force reduction decisions are made, it is unknown which installations would actually be affected. Again referring to Fort Gordon, it is quite possible that the Signal School will have fewer students in the future as the Army as a whole reduces in size. As a result, the number of permanent instructors at the installation may be reduced, potentially offsetting any gains that Fort Gordon would have as a result of cyber initiatives and delaying or eliminating other proposed initiatives.

Fort Belvoir is another example of an installation in a similar situation. It is now included in this SPEA because it could lose more than 1,000 active component Soldiers and Army civilians; however, Fort Belvoir is also preparing an EIS that analyzes a revised master plan that would accommodate additional growth. Because so many non-Army and even non-DoD organizations are tenants of Fort Belvoir, growth could occur despite overall Army force structure reductions. Similar to Fort Gordon, possible overall reduction and growth are being examined at the proper level of NEPA analysis.

Evaluating potential losses at an installation as part of a nationwide programmatic approach while it is currently experiencing gains in personnel appears somewhat conflicting. Because neither set of actions will necessarily be implemented in the future, the predicted personnel numbers cannot be offset against each other. Just as the 2014 QDR highlights highly specific areas of expanded capability at the same time it outlines overall reductions, it is important for this nationwide programmatic SPEA and site-specific studies of mission-driven gain scenarios to proceed simultaneously.

The Army did not evaluate speculative impacts to the environment or safety and health based on potential cuts to environmental, hospital, military police, or fire and rescue personnel. Regardless of any drawdown in military or civilian personnel, the Army is committed to implementing required environmental compliance and meeting health and safety requirements. Specific future reductions in the level of Army staff that could result in potential impacts to the environment would be the subject of appropriate site-specific, follow-on NEPA analysis. Similarly, potential impacts resulting from any reductions in other staffing levels at the Air Force managed joint bases included in this SPEA could be analyzed in separate, future NEPA analyses, as appropriate, although these reductions would not be related to the Army 2020 reductions analyzed herein.

It is also possible that if force structure decisions result in a substantial reduction at one or more of the analyzed installations, underuse of training areas, cantonment facilities, and utilities could occur, including both government-owned and privatized housing and utilities. Because force structure decisions are yet to be made, the determination of whether specific land or facilities will become surplus, and eventually be transferred to other owners is not possible at this time and is not within the scope of this analysis. Also not within the scope of this analysis for the same reason is whether reductions would require buildings to be demolished or placed in caretaker status ("mothballed"). In the 2013 PEA, the proposed action largely only involved potential impacts at BCTs, so any building demolition at that installation would likely only include BCT-related facilities. Therefore, it was reasonable to assume that some demolition of existing facilities and structures could occur under the 2013 PEA's proposed action. Since there are no specific units or programs identified for potential cuts with the current Proposed Action in this SPEA, it is impossible to determine any facilities or buildings that have the potential to be affected by any proposed cuts. Site-specific NEPA analysis of these potential impacts would be performed, as needed, following the force structure decisions. If Army reductions should result in impacts to the utilization of facilities and/or training areas at the Air Force managed joint bases, the Air Force could conduct any required site-specific NEPA analysis, as appropriate, and make the final determinations regarding disposition of these affected facilities and/or training areas.

Similar to the 2013 PEA, the reduction in force structure analyzed in this SPEA is not related to past or potential future Base Realignment and Closure (BRAC) actions. The current need to

consider changes to force structure and reduce the Army's end-strength is being driven by national defense strategy and budget considerations. Force structure reductions are not driven or caused by BRAC. Rather, the reverse is true. BRAC is a response to force structure reductions and is the way to address excess capacity that is created by force structure reductions. The recent DoD request to seek authorization for an additional base-closure round in FY 2017 is not addressed in this SPEA. BRAC-related recommendations would only occur if and after Congress authorized a future BRAC round and only after a long and thorough analysis. At this time, Congress has not authorized any future BRAC rounds, and the Army has not analyzed or developed future BRAC recommendations. In addition, the determinations made in this SPEA and the stationing decisions that may follow do not dictate or preclude recommendations that might be made under a future BRAC process. Finally, BRAC includes its own NEPA requirements to which the Army would be subject if its facilities were involved. The realignments considered in this SPEA and any future BRAC recommendations are not "connected" actions for purposes of NEPA.

The scope of this analysis excludes any potential reductions in the Army National Guard (ARNG) and U.S. Army Reserve. Under existing conditions, ARNG will continue its downsizing from a war-time high of 358,000 to 335,000 Soldiers, and the U.S. Army Reserve will reduce from 205,000 to 195,000 Soldiers (DoD, 2014). If sequestration-level cuts are imposed in FY 2016 and beyond, the ARNG will be further reduced to 315,000, and the U.S. Army Reserve will be further reduced to 185,000 (DoD, 2014). Soldiers in these components are generally not serving full time at installations. They serve at a variety of locations, including many installations not analyzed for reductions in this SPEA. It is currently not known how or where reductions in ARNG and U.S. Army Reserve forces would be enacted; therefore, they are not included in the analysis of this SPEA.

This SPEA does not analyze any potential reductions in other military departments. U.S. Air Force, U.S. Navy, and U.S. Marine Corps service members are tenants on some of the Army-managed installations analyzed in this SPEA. Three installations affected by the Proposed Action analyzed in this SPEA are joint bases managed by the Air Force—Joint Base Elmendorf-Richardson, Joint Base Langley-Eustis, and Joint Base San Antonio-Fort Sam Houston. Joint Base Lewis-McChord is managed by the Army. In addition to Army end-strength, the 2014 QDR also discusses reductions for other military services; however, specific information regarding these other services' force reductions was not available for incorporation in this SPEA.

1.4 Public Involvement

As part of the NEPA process, the Army has made this SPEA and Draft FNSI available to the public and interested stakeholders. The Notice of Availability of the SPEA and Draft FNSI was published in the *Federal Register*, announced nationally in USA Today, and announced locally in newspapers providing service to the affected installations and surrounding communities. The public will be given 60 days to comment on this SPEA and Draft FNSI. Public comments

submitted on the SPEA and Draft FNSI will be made part of the administrative record and will be considered prior to the Army documenting its decision on this NEPA process.

This SPEA and Draft FNSI are available for review on the U.S. Army Environmental Command website at: <http://aec.army.mil/Services/Support/NEPA/Documents.aspx>. Please submit comments to U.S. Army Environmental Command, ATTN: SPEA Public Comments, 2450 Connell Road (Building 2264), Joint Base San Antonio-Fort Sam Houston, TX 78234-7664 or via email to: usarmy.jbsa.aec.nepa@mail.mil. Inquiries may also be made via phone by calling 210-466-1590 or toll-free 855-846-3940.

1.5 Army NEPA Decision

This NEPA process will end with an Army decision documented in a FNSI or a Notice of Intent to prepare an EIS. The NEPA decision maker will consider both the environmental and socioeconomic impacts analyzed in this SPEA, along with all other relevant information, such as public issues of concern that arose during the comment period, prior to making a final decision. If the decision maker determines that there are no significant environmental impacts, that decision will be documented in a FNSI, which will be signed no earlier than the end of the public comment period. The Army may initiate a Notice of Intent for an EIS if new information warrants the need for additional analysis of potentially significant environmental impacts.

As with the 2013 PEA, the socioeconomic impacts analyzed in this SPEA are of particular concern to the Army. Socioeconomic impacts analyzed within this SPEA may approach or exceed significance thresholds. CEQ and Army NEPA regulations, however, do not require preparation of an EIS when the only significant impacts are socioeconomic. CEQ's regulation states: "economic or social effects are not intended by themselves to require preparation of an environmental impact statement" (40 CFR Part 1508.14). In the same vein, the Army's NEPA regulations do not require preparation of an EIS for realignment or stationing actions where the only significant impacts are socioeconomic with no significant environmental impact [32 CFR Part 651.42(e)]. Absent significant environmental impacts, the exceedance of significance thresholds for socioeconomic impacts alone would not require the Army to issue a Notice of Intent to prepare an EIS.

1.6 Force Structure Decision Making Process

It is important to understand the programmatic nature of the action alternative analyzed in this SPEA and the severity of the force reduction decisions to be made by the Army through FY 2020. This SPEA looks at possible losses at select installations using the greatest anticipated possible population loss. This does not mean that these losses will actually occur to the full extent analyzed or that each installation analyzed will incur losses. These scenarios, however, are being evaluated because force structure decision makers need information about potential environmental and socioeconomic impacts, along with other input, as they analyze force structure alternatives to rebalance the Army's capability, capacity, and readiness through FY

2020. This SPEA will provide the Army force structure decision makers with an understanding of the impacts to the human environment that would occur under the Proposed Action.

The force structure decision process is a complex process designed to assist Army leaders in reaching difficult decisions. The start of the force structure decision process includes specific guidance from DoD and Senior Leadership used to begin shaping possible outcomes. The 2014 QDR and current defense strategy are among the documents used to guide the force structure decision process. During the process, input is also received on operational and strategic considerations, mission readiness requirements and capabilities, Soldier and Family quality of life, past and future investment costs, statutory requirements, and community input. These and other inputs are all considered as part of the force structure decision process.

The analysis in this SPEA is only one of the military analysis factors considered. Separate and apart from the NEPA process, the Army will also conduct listening sessions for the communities surrounding the affected installations as was previously done during the decision making process for the Army 2020 realignment in 2013. These sessions will provide the opportunity for Army force management personnel to receive information related to the full spectrum of issues—not just environmental—that will be used in making force structure decisions. While the listening sessions are not public meetings related to the NEPA process, they give the affected communities the opportunity to provide input to the Army's force structure reduction decisions. The focus of the listening sessions is to capture community input for Army leaders to consider as part of the Army's overall force structure analysis before making any decisions on force structure reductions.

If this NEPA process ends in a FNSI, the FNSI will not identify the specific installations at which the actual losses would occur. The specific units to be affected by reductions and the specific installations and joint bases to which affected units are assigned will be identified during the force structure decision process. As noted, the Army will be able to make decisions on future force restructuring at the appropriate time with supporting information from not only this SPEA but also public feedback, strategic and operational requirements, and a military value analysis of installations.⁴

⁴ A military value analysis is a decision analysis tool designed to rank-order installations based on attributes that the Army identifies as being operationally important to the type of unit in question for each stationing decision. The Army has generally used the military value analysis model "in stationing decisions with a large impact, potentially greater risk, and requirement for more rigorous analytical underpinning, such as in stationing decisions involving brigade combat teams" (GAO, 2013).

2.0 DESCRIPTION OF THE PROPOSED ACTION

2.1 Introduction

This section provides a description of the Proposed Action. The Proposed Action for this SPEA, which addresses the above-described purpose and need, is to further reduce the Army's end-strength beyond that analyzed in the 2013 PEA.

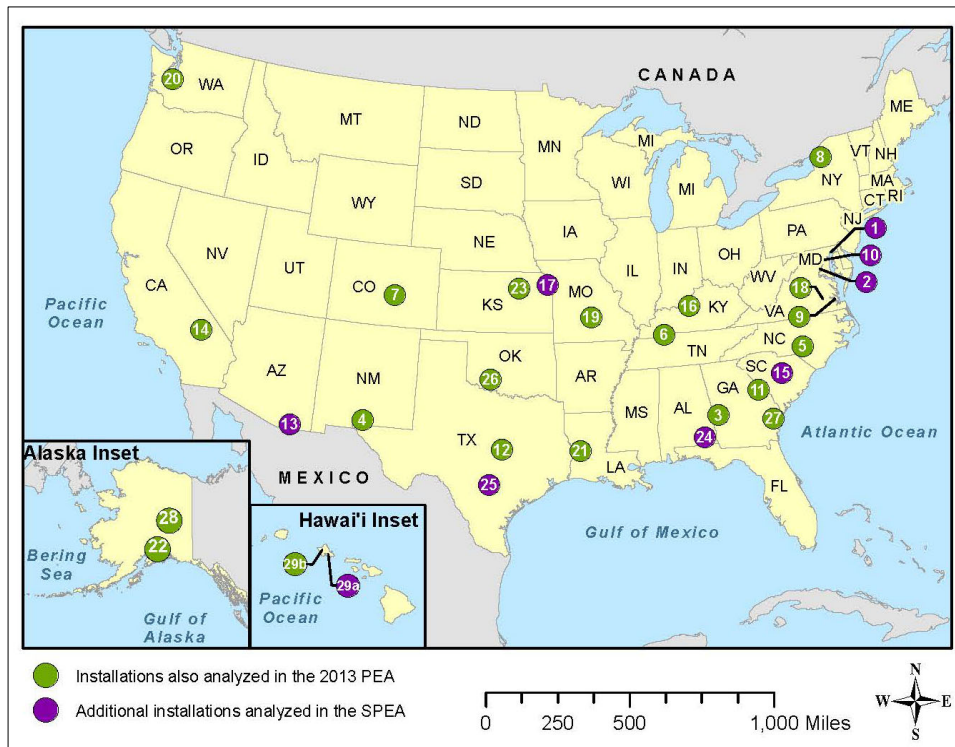
2.2 Proposed Action

The Army's Proposed Action is to reduce and realign its forces, both active component Soldiers and Army civilian employees, to a potential end-strength of 420,000 Soldiers, as outlined in the 2014 QDR.

As force structure decisions must take into account many factors other than potential environmental and socioeconomic impacts, the Proposed Action uses potential population losses at installations which far exceed the reductions called for in the 2014 QDR. This has been done to provide force structure decision makers the greatest flexibility to take other factors into consideration during the force structure decision process. The Proposed Action includes potential reductions at 30 locations across the continental U.S., Alaska, and Hawai'i (Figure 2.2-1). Installations included are those with the potential to lose a minimum of 1,000 active component Soldiers and full-time Army civilian employees.

The implementation of Army 2020 realignment to reach the reduced Army end-strength, as indicated in the 2014 QDR, will allow the Army to field a smaller force within budget constraints.

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Notes:

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|-----------------------------------|-----------------------------------|--|
| 1 – Aberdeen Proving Ground, MD | 11 – Fort Gordon, GA | 21 – Fort Polk, LA |
| 2 – Fort Belvoir, VA | 12 – Fort Hood, TX | 22 – Joint Base Elmendorf-Richardson, AK |
| 3 – Fort Benning, GA | 13 – Fort Huachuca, AZ | 23 – Fort Riley, KS |
| 4 – Fort Bliss, TX | 14 – Fort Irwin, CA | 24 – Fort Rucker, AL |
| 5 – Fort Bragg, NC | 15 – Fort Jackson, SC | 25 – Joint Base San Antonio-Fort Sam Houston, TX |
| 6 – Fort Campbell, KY | 16 – Fort Knox, KY | 26 – Fort Sill, OK |
| 7 – Fort Carson, CO | 17 – Fort Leavenworth, KS | 27 – Fort Stewart, GA |
| 8 – Fort Drum, NY | 18 – Fort Lee, VA | 28 – Fort Wainwright, AK |
| 9 – Joint Base Langley-Eustis, VA | 19 – Fort Leonard Wood, MO | 29a – USAG Hawaii, Fort Shafter, HI |
| 10 – Fort Meade, MD | 20 – Joint Base Lewis-McChord, WA | 29b – USAG Hawaii, Schofield Barracks, HI |

Figure 2.2-1. Installation Locations for Potential Reductions under the Proposed Action

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3.0 ALTERNATIVES AND SCREENING CRITERIA

3.1 Introduction

This section discusses the alternatives the Army is considering to implement the Proposed Action. The purpose and need described in Chapter 1 provides the context within which to analyze the viability of alternatives. The purpose and need define necessary elements of the Proposed Action and allow consideration of alternatives for realignment and restructuring of Army forces. In addition, this section discusses the screening criteria used to select candidate installations for stationing actions to support the further reduction in end-strength.

One Army-wide action alternative and the No Action Alternative have been analyzed for 30 locations within the continental U.S., Alaska, and Hawai'i.

3.2 Alternatives Carried Forward for Analysis

One action alternative is analyzed in this SPEA—the further reduction in Army end-strength below the 490,000 Soldiers in the 2013 PEA to 420,000 Soldiers. Included in the one action alternative are related cuts to full-time Army civilian personnel. This reduction represents approximately twice the reduction of Soldiers and Army civilians previously analyzed in the 2013 PEA.

3.2.1 Alternative 1—Implement Force Reductions

Under Alternative 1, the Army would reduce its end-strength to as low as 420,000 as indicated in the 2014 QDR (assuming sequestration-level cuts are resumed in FY 2016). Table 3.2-1 presents the potential active component Soldier and Army civilian employee reductions that are analyzed at each of 30 locations considered under Alternative 1. These reductions are used as the maximum potential force reduction thresholds for each installation, thereby providing force structure decision makers with options as they consider what best serves the Nation's defense prior to determining the units and locations to be affected by reductions. As with the 2013 PEA, the total maximum potential reduction numbers presented in Table 3.2-1 far exceed what is needed to achieve the required reductions. Accordingly, it is important to realize that maximum potential reductions will not occur at all installations. The studied reductions for all 30 locations, if added together, would reduce the Army's active force to well below 400,000. However, because such deep reductions are not envisioned, the nationwide cumulative effects analysis aligns with the net reductions potentially needed per the QDR. Analyzing the potential reductions at each of the 30 locations as indicated in Table 3.2-1 will provide HQDA flexibility in making future decisions about how and where to make cuts to reach the necessary end-strength as dictated by current fiscal, policy, and strategic conditions.

This SPEA approximately doubles the reductions assessed in the 2013 PEA. To achieve the approximate reduction of 72,000 Soldiers resulting in an end-strength of 490,000, the following

assumptions were made in the 2013 PEA (see Section 3.2.1 of the 2013 PEA). For each installation with one or more BCT, the 2013 PEA assumed the loss of that BCT (approximately 3,450 Soldiers for Infantry BCTs [IBCTs], 3,850 for Armored BCTs [ABCTs], and 4,200 for Stryker BCTs), as well as 30 percent of the installation's non-BCT Soldiers and 15 percent of the Army civilian workforce. Because it was deemed unlikely that any one installation would be selected to sustain a force reduction of more than 8,000 military employees, the potential reduction was capped at 8,000 in the 2013 PEA reduction alternative. For installations with no BCTs, the 2013 PEA assumed a loss of 35 percent of the installation's Soldiers and 15 percent of the Army civilian employees. To achieve a potential Army end-strength of 490,000, 21 locations were identified in the 2013 PEA, with its focus on BCTs, as having the potential to lose 1,000 or more Soldier and Army civilian employees.

The further reduction in active component Army Soldiers to 420,000, as indicated in the 2014 QDR, is approximately double that analyzed in the 2013 PEA (142,000 compared to 72,000) assuming the same baseline, although, unlike the 2013 PEA, the types of units to be affected by further reductions are unknown and therefore not discussed. For analysis in this SPEA, to achieve the increase in force reductions under current fiscal, policy, and strategic conditions, the Army is doubling the maximum reduction scenarios that were presented in the 2013 PEA with one change. The formula for doubling the military employees to be lost at installations with only one BCT has changed. Installations with only one BCT cannot lose a second BCT. If the numerical reduction was doubled from that in the 2013 PEA, with no consideration of unit type, the number of non-BCT Soldiers would be reduced even further by the equivalent of the size of a BCT, and this is not a realistic scenario. Thus, in this SPEA, the formula for calculating the reduction of active component personnel at installations with only one BCT is the loss of one BCT and doubling the number of non-BCT Soldiers and Army civilian workforce (i.e., loss of one BCT plus two x (30 percent of non-BCT Soldiers + 15 percent of Army civilians). Table 3.2-2 provides a breakdown of permanent party Soldier and Army civilian reductions assessed in this SPEA.

For the numbers presented in Table 3.2-1, it is important to remember that these numbers represent the maximum reduction scenarios at these installations; they are not currently being proposed by the Army. Rather the numbers are analyzed to provide the Army flexibility as it continues to review and determine how best to structure its forces in response to changing fiscal, policy, and strategic conditions during the FY 2014 to FY 2020 time frame. This continued review recognizes that some installations have already seen some reductions in numbers based on force structure decisions analyzed under the 2013 PEA, while others have had force structure decisions announced but not yet completed. Additionally, the continued review recognizes that other stationing actions not foreseen at the time of the 2013 PEA (e.g., the establishment of Army Cyber Command at Fort Gordon) have already been implemented or are in the process of being implemented. To ensure consistency in the presentation of population figures and analysis, the reduction numbers in Table 3.2-1 are not additive to the numbers analyzed in the 2013 PEA,

1 **Table 3.2-1. Alternative 1—Force Reductions**

Installation Name	Fiscal Year of Baseline Population	Baseline Permanent Party Soldier and Army Civilian Population ^a	Potential Population Loss Analyzed in the 2013 PEA	Potential Population Loss Analyzed in the SPEA ^b	Lowest Potential Fiscal Year 2020 Baseline Permanent Party Soldier and Army Civilian Population
Aberdeen Proving Ground, Maryland	2013	12,335	--	4,300	8,035
Fort Belvoir, Virginia	2013	9,721	--	4,600	5,121
Fort Benning, Georgia	2011	17,501	7,100	10,800	6,701
Fort Bliss, Texas	2011	31,380	8,000	16,000	15,380
Fort Bragg, North Carolina	2011	52,975	8,000	16,000	36,975
Fort Campbell, Kentucky	2011	32,281	8,000	16,000	16,281
Fort Carson, Colorado	2011	25,702	8,000	16,000	9,702
Fort Drum, New York	2011	19,011	8,000	16,000	3,011
Fort Gordon, Georgia	2011	8,142	4,300	4,600	3,542
Fort Hood, Texas	2011	47,190	8,000	16,000	31,190
Fort Huachuca, Arizona	2013	5,841	--	2,700	3,141
Fort Irwin, California	2011	5,539	2,400	3,600	1,939
Fort Jackson, South Carolina	2013	5,735	--	3,100	2,635
Fort Knox, Kentucky	2011	13,127	3,800	7,600	5,527
Fort Leavenworth, Kansas	2013	5,004	--	2,500	2,504
Fort Lee, Virginia	2011	6,474	2,400	3,600	2,874
Fort Leonard Wood, Missouri	2011	9,161	3,900	5,400	3,761
Fort Meade, Maryland	2013	6,638	--	3,500	3,138

Installation Name	Fiscal Year of Baseline Population	Baseline Permanent Party Soldier and Army Civilian Population ^a	Potential Population Loss Analyzed in the 2013 PEA	Potential Population Loss Analyzed in the SPEA ^b	Lowest Potential Fiscal Year 2020 Baseline Permanent Party Soldier and Army Civilian Population
Fort Polk, Louisiana	2011	10,836	5,300	6,500	4,336
Fort Riley, Kansas	2011	19,995	8,000	16,000	3,995
Fort Rucker, Alabama	2013	4,957	--	2,500	2,457
Fort Sill, Oklahoma	2011	11,337	4,700	6,800	4,537
Fort Stewart, Georgia	2011	18,647	8,000	16,000	2,647
Fort Wainwright, Alaska	2011	7,430	4,900	5,800	1,630
Joint Base Elmendorf-Richardson, Alaska	2011	6,861	4,300	5,300	1,561
Joint Base Langley-Eustis, Virginia	2011	7,382	2,700	4,200	3,182
Joint Base Lewis-McChord, Washington	2011	36,222	8,000	16,000	20,222
Joint Base San Antonio-Fort Sam Houston, Texas	2013	12,256	--	5,900	6,356
USAG Hawaii (Fort Shafter), Hawai'i	2013	7,431	--	3,800	3,631
USAG Hawaii (Schofield Barracks), Hawai'i	2011	18,441	8,000	16,000	2,441

Note: These reductions are used as the maximum potential force reduction thresholds for each installation, thereby providing force structure decision makers with options as they consider what best serves the Nation's defense prior to determining the units and locations to be affected by reductions. As with the 2013 PEA, the total maximum potential reduction numbers presented in this table far exceed what is needed to achieve the goals of the 2014 QDR.

^a Populations include: Army military and Army civilians (excludes Army students and other military service personnel, contractors, and transients); population reduction numbers include full-time military and civilian employees only. Source of data is the Army Stationing Installation Plan (February 2012 for FY 2011 data and October 2013 for FY 2013 data). Where baseline populations differ from that in the 2013 PEA, differences represent corrections to data (e.g., removal of student populations because they are not part of the permanent party population). The population numbers do not include non-appropriated fund personnel.

^b Potential population losses to be analyzed in this SPEA are inclusive of the numbers previously analyzed in the 2013 PEA.

1 **Table 3.2-2. Alternative 1 Breakout of Reduction Scenarios by Permanent Party Soldiers and Army Civilians**

Installation Name	Fiscal Year of Baseline Population	Permanent Party Soldiers		Army Civilians		Total Assessed Installation Reduction ^a
		Baseline Population	Assessed Reduction	Baseline Population	Assessed Reduction	
Aberdeen Proving Ground, Maryland	2013	1,428	1,000	10,907	3,272	4,300
Fort Belvoir, Virginia	2013	4,121	2,885	5,600	1,680	4,600
Fort Benning, Georgia	2011	13,256	9,493	4,245	1,274	10,800
Fort Bliss, Texas	2011	28,194	15,044	3,186	956	16,000
Fort Bragg, North Carolina	2011	45,051	13,623	7,924	2,377	16,000
Fort Campbell, Kentucky	2011	29,683	15,221	2,598	779	16,000
Fort Carson, Colorado	2011	23,353	15,295	2,349	705	16,000
Fort Drum, New York	2011	17,067	15,417	1,944	583	16,000
Fort Gordon, Georgia	2011	5,604	3,922	2,538	761	4,600
Fort Hood, Texas	2011	42,545	14,606	4,645	1,394	16,000
Fort Huachuca, Arizona	2013	2,466	1,726	3,375	1,013	2,700
Fort Irwin, California	2011	4,658	3,260	881	264	3,600
Fort Jackson, South Carolina	2013	3,376	2,363	2,359	708	3,100
Fort Knox, Kentucky	2011	7,624	5,954	5,503	1,651	7,600
Fort Leavenworth, Kansas	2013	2,555	1,789	2,449	735	2,500
Fort Lee, Virginia	2011	3,988	2,792	2,486	746	3,600
Fort Leonard Wood, Missouri	2011	6,423	4,496	2,738	821	5,400
Fort Meade, Maryland	2013	3,772	2,640	2,866	860	3,500

Installation Name	Fiscal Year of Baseline Population	Permanent Party Soldiers		Army Civilians		Total Assessed Installation Reduction ^a
		Baseline Population	Assessed Reduction	Baseline Population	Assessed Reduction	
Fort Polk, Louisiana	2011	9,298	6,039	1,538	461	6,500
Fort Riley, Kansas	2011	17,853	15,357	2,142	643	16,000
Fort Rucker, Alabama	2013	2,505	1,754	2,452	736	2,500
Fort Sill, Oklahoma	2011	8,603	6,022	2,734	820	6,800
Fort Stewart, Georgia	2011	16,370	15,317	2,277	683	16,000
Fort Wainwright, Alaska	2011	6,342	5,485	1,088	326	5,800
Joint Base Elmendorf-Richardson, Alaska	2011	6,316	5,169	545	164	5,300
Joint Base Langley-Eustis, Virginia	2011	4,872	3,410	2,510	753	4,200
Joint Base Lewis-McChord, Washington	2011	31,084	14,459	5,138	1,541	16,000
Joint Base San Antonio-Fort Sam Houston, Texas	2013	5,641	3,949	6,615	1,985	5,900
USAG Hawaii (Fort Shafter), Hawai'i	2013	3,893	2,725	3,538	1,061	3,800
USAG Hawaii (Schofield Barracks), Hawai'i	2011	16,420	15,394	2,021	606	16,000

Note: Source of data is the Army Stationing Installation Plan (February 2012 for FY 2011 data and October 2013 for FY 2013 data).

^a Total is rounded to an adjacent 100.

but are inclusive of those numbers. For example, the population loss of 16,000 for Fort Bliss includes the 8,000 analyzed in the 2013 PEA; it is not being added to the previously analyzed figure of 8,000.

The Army has already made some decisions based on the 2013 PEA that will result in reductions at various installations. The first of these was announced in June 2013. In most cases, the actual changes will occur in fall 2014 and the year following. A few have occurred already. Using the example of Fort Bliss, as described in the previous paragraph, the 16,000 potential reduction includes some losses for which decisions have already been made. By analyzing the loss in total rather than incrementally, this analysis provides a look at the impacts of the entire Army process, rather than eliminating from consideration reductions that have previously been decided upon, to provide decision makers and communities a more complete picture of what could happen. In the case of the nine installations not previously considered, the baseline population is October 2013. If reductions have occurred prior to October 2013, this will be noted and taken into account in the analysis for that installation.

If some installations were to realize 100 percent of the reductions indicated in Table 3.2-1, they would end up with a large Army civilian population supporting a small Soldier population. This apparent imbalance in populations is due to the programmatic nature in the application of the reduction formulas and the analysis. Examples where this could occur are installations where the Army civilians work in research and development or support non-Army tenants. Force structure outcomes will be inherently tied to future budget decisions and future national defense requirements. It is also important to remember that the realignment would occur over a number of years and that it could change during that period because of external events.

3.2.2 No Action Alternative

As described in the 2013 PEA, the No Action Alternative would retain the Army at a FY 2012 end-strength of about 562,000 active component Soldiers and more than 320,000 Army civilians. The No Action Alternative generally assumes that units would remain stationed where they were stationed at the end of FY 2012. Under the No Action Alternative, no additional Army personnel would have been realigned or released from the Army to balance the composition of Army skill sets to match current and projected future mission requirements or to address budget requirements. No BCT restructuring would have occurred as proposed under Alternative 2 of the 2013 PEA, and no unit inactivations would have occurred.

While no longer reasonable because force reductions and restructuring have occurred since FY 2012, as published in the Army Stationing and Installation Plan in FY 2012, the inclusion of the No Action Alternative within this SPEA provides a baseline against which to compare the potential environmental and socioeconomic impacts of the Proposed Action as required by CEQ regulations.

The No Action Alternative uses the 2011 baseline population for those installations analyzed for potential reductions in the 2013 PEA. This enables a comparison, for force structure decision makers, of the potential environmental and socioeconomic impacts of the 2013 PEA reduction alternative against the potential impacts of the reduction alternative analyzed in this SPEA. In general, any active component Soldier and Army civilian population reductions that have occurred between February 2012 and October 2013 at these 21 locations are part of the total Proposed Action reductions.

For those nine additional locations analyzed in this SPEA that were not analyzed in the 2013 PEA, the baseline is October 2013. Active component Soldier and Army civilian population changes that occurred at these nine additional locations from February 2013, published in the Army Stationing and Installation Plan in October 2013, are separate from and not part of the total Proposed Action reductions; therefore, it is not reasonable to have 2011 as the baseline for the nine additional locations.

3.3 Alternatives Considered but not Carried Forward for Analysis

The Army could reduce its number of active component Soldiers by having each installation and major unit reduce the same percentage of Soldiers across the board. For a reduction from 490,000 to 420,000, this would be a 14 percent reduction. Each BCT, for instance, would lose 14 percent of its Soldiers. While this solution would be easy to plan, its results would not support the purpose and need of the Proposed Action. Some units would have to be brought up to 100 percent for deployment, leaving others with even less than 86 percent strength. These units could not properly train and could not maintain their equipment. This situation would create a “hollow Army” with units existing in name only and not prepared for deployment, reducing the overall Army readiness and preventing it from meeting national security requirements. This method would also eliminate the flexibility the Army needs in planning force reductions, so the Army can build fewer but more mission capable units. World events, for instance, may require that Soldiers and units in some areas be maintained at current strengths. The military value analysis may indicate that the best possible path forward is to eliminate more forces at some locations than others. Because of these issues, this alternative would not support the purpose and need of the Proposed Action and was not carried forward for full analysis.

A potential alternative not carried forward for analysis was to evaluate a total reduction to an end-strength of either 440,000 or 450,000 because the 2014 QDR states that the active Army will reduce from its wartime high force of 570,000 to 440,000–450,000 Soldiers without considering potential sequestration level cuts. It was determined that because the 2013 PEA analyzed cuts of 126,000 that would have resulted in an end-strength of 436,000 (well below the required end-strength of 490,000); this alternative had already been assessed and was not required for this SPEA.

3.4 Screening and Evaluation Criteria used to Identify a Range of Potential Installations for Additional Force Reductions

Now that the second part of the 2011 Budget Control Act, commonly referred to as sequestration, was implemented in FY 2013 and may return in FY 2016, the Army needs to plan for reductions in both the operational and generating forces and to plan for additional overall reductions. In the 2013 PEA, the reductions were primarily focused on the “operational forces” or Soldiers in units subject to deployment. At that time, the “generating force,” the organizations that establish doctrine and train Soldiers, was thought to be largely exempt from reductions because only the first budget cuts in the Budget Control Act of 2011 were thought to be taking effect, and the generating force would not be affected. This is no longer the case. With these deeper reductions that may affect both the operational and generating forces, 21 locations and 9 additional locations are included in this SPEA because each could possibly lose more than a combined 1,000 active component Soldiers and Army civilian employees.

Three of the locations now being analyzed were specifically excluded in the 2013 PEA with reasons given in Section 3.4.1—Joint Base San Antonio-Fort Sam Houston, Fort Meade, and Fort Huachuca (U.S. Army, 2013). They were excluded because their populations consisted of special missions and few operational forces. Those attributes no longer exclude these three installations.

This SPEA does not include installations whose mission is primarily run by the Army Materiel Command, such as depots, arsenals, and army ammunition plants, or installations used primarily for test and evaluation. Their missions are managed by the Army Materiel Command and the Army Test and Evaluation Command, and it is not now anticipated that they could have a combined reduction of 1,000 Soldiers or Army civilian employees. The exception is Aberdeen Proving Ground, which has 1,428 Soldiers, and is included in this analysis. U.S. Military Academy West Point Military Reservation is also excluded because it is not yet clear how its mission will be affected by overall force reduction. It is possible, for instance, that the Cadet training at West Point will continue at its current levels and that the Army will reduce its accession of officers from other commissioning sources.

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4.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL EFFECTS

4.0.1 Introduction

This section presents a consolidated discussion of the affected environment (baseline environmental conditions assessed) at each installation, and the environmental and socioeconomic impacts anticipated as a result of the implementation of the alternatives. The baseline for the Proposed Action for the 21 installations analyzed in the 2013 PEA is the same as the 2013 PEA (as well as in this SPEA), and the baseline is the end of 2013 for the 9 new installations assessed in this SPEA. Discussions in the installation sections of this SPEA will acknowledge HQDA stationing decisions that have been announced that are part of the total, deeper reduction now being analyzed.

4.0.2 Differences Between the SPEA and the 2013 PEA

The analyses conducted in this document and the 2013 PEA are mostly similar in nature, but important differences should be highlighted. The 2013 PEA assessed the effects of the Proposed Action on only 21 of the 30 locations covered in this document. The baseline for those 21 locations was based on environmental conditions at that time and the 2011 populations (Tables 3.3-1 and 3.3-2). Those baseline conditions and populations are carried over in this document because this document is a supplement to the original assessment. The nine new locations will be assessed based on current conditions and the 2013 installation populations (Tables 3.3-1 and 3.3-2).

As discussed in Section 3.3.1, the Army announced decisions following the 2013 PEA for force structure reductions currently scheduled between October 2013 and September 2015, with some already completed or in progress. On June 25, 2013, the Army announced that 12 BCTs would be inactivated by the end of FY 2017, including 10 BCTs in the U.S. at installations assessed in this SPEA—Fort Bliss, Texas; Fort Bragg, North Carolina; Fort Campbell, Kentucky; Fort Carson, Colorado; Fort Drum, New York; Fort Hood, Texas; Fort Knox, Kentucky; Fort Riley, Kansas; Fort Stewart, Georgia, and Joint Base Lewis-McChord, Washington (Feickert, 2014). Any future force structure decisions based on this SPEA will take into consideration those previous decisions. In the case of the nine locations not previously considered, the baseline population is October 2013. If there have been reductions that occurred prior to that baseline date, these reductions will be noted and taken into account in the analysis for that installation.

The methodology used to estimate the socioeconomic impacts has slight differences from the approach used in the 2013 PEA. These differences and a description of the updated Economic Impact Forecasting System (EIFS) model and inputs are provided in the remainder of this section. The version of EIFS used to complete the socioeconomic evaluation in the 2013 PEA included demographic and economic data through the year 2000 only. Because the evaluation in the 2013 PEA did not include updated demographic and economic data, the Army used the Regional Economic System (RECONS) model, which included more recent federal data to verify

the EIFS results. The EIFS model was recently updated and now includes census data through 2011 and was used for this analysis and it was not necessary to use the RECONS model to validate the results in the SPEA.

The entire EIFS system of models, tools, and databases is available to assess potential impacts to four elements of a local economy: sales, income, employment, and population. EIFS calculates income and employment multipliers based on the user defined ROI. Using the Bureau of Economic Analysis time series data, the Rational Threshold Value model within EIFS produces thresholds for assessing the significance of impacts. This model establishes a rate of change over time for each variable by estimating a straight line average between the first year of record and the last year of record. Then, each yearly deviation from that growth rate is calculated and converted to a percentage. The largest historical changes (both increase and decrease) are used to define significance thresholds. The significance thresholds for decreases are reduced further to ensure that negative impacts are fully recognized. The negative significance threshold for sales is set at 75 percent of the maximum decrease, for income and employment at 66 percent of the maximum decrease, and for population at 50 percent of the maximum decrease.

The 2000 EIFS model contained historical data from 1969 to 2000. The updated model contains historical data from 1969 to 2011. As a result, the updated EIFS model will have different ROI multipliers as well as revised significance thresholds. The more recent information in the updated EIFS model changes the average trends for the four impact variables, which, in turn, changes the significance threshold values for each parameter for each ROI.

The EIFS tool is a web-based modeling and information system that provides regional economic analyses to planners and analysts and has been used by the Army for more than 20 years. While the system algorithms are simple and easy to understand, they are firmly based on regional economic theory. It draws information from a tailored socioeconomic database for every county (or multi-county area) in the U.S. The model estimates economic impacts and significance of any project proposal as defined by the user. The database items are extracted from: Economic Censuses (wholesale, retail, services, and manufacturers), Census of Agriculture, the Bureau of Economic Analysis employment and income time series, the Bureau of Economic Analysis labor force time series, and the County Business Patterns. Extracted data elements are stored, by county, in the EIFS database.

Inputs used by the EIFS model in estimating impacts for the SPEA are change in military and civilian employment, average income of affected military and civilian employees, percentage of civilian employees expected to relocate with the proposed project, percentage of Soldiers living on-installation, and within the ROI. For each installation, the estimated number of Soldiers and Army civilians affected by force reductions at each installation is summarized in Table 3.2-2. The average salary for a Soldier in an IBCT is \$46,760. This figure was used for the average

1 salary of all Soldiers who could potentially be eliminated at installations.⁵ Because the Army
2 does not know which units would be involved, it is impossible to determine the precise salaries.
3 The IBCT serves as a good representative example of units that may be eliminated. Included in
4 the \$46,760 amount is Base Pay, a nationwide average amount for Basic Allowance for Housing,
5 and Basic Allowance for Subsistence.

6 For Army civilian employees, the analysis uses an average salary as estimated for each state
7 where an installation is located. The average is based on the prevailing General Schedule and
8 Wage Grade rates at the midpoint of seniority for the installation area and the distribution by
9 grade of Army civilians within that state. Again, the Army does not know which civilian
10 employees would be involved in reductions, but computing a statewide average salary is
11 appropriate for assessing the impact of potential civilian reductions. In all states the average
12 civilian salary was above the average Soldier salary.

13 In addition to the salaries of the personnel affected by the potential reductions, the EIFS model
14 requires inputs of the percent of Soldiers living on the installation and the percent of civilians
15 expected to leave the area in the event of a job loss. To ensure the potential impacts were
16 captured to the greatest extent possible, all Soldiers were assumed to be living off the installation
17 and 100 percent of the civilians were assumed to leave the area in the event of a job loss.

18 Finally, the sales tax approach in the SPEA is different from that of the 2013 PEA. The 2013
19 PEA applied the state sales tax to the total sales to estimate the changes in sales tax receipts.
20 Because sales taxes do not apply to the majority of economic output or sales, national data from
21 the U.S. Economic Census were used to estimate the proportion of sales to which sales and use
22 taxes would apply. Using the data from the 2012 U.S. Economic Census, the following industries
23 were identified to which sales and use taxes are usually applied: retail sales; arts, entertainment
24 and recreation; and accommodations and food services. Across the Nation, these industries
25 account for 16 percent of total sales. This percentage was applied to the total change in sales
26 associated with the force reductions to estimate a reduction sales tax receipts to state and local
27 government entities. Additionally, current sales tax rates were used from the Tax Foundation,
28 which provides combined state average and local sales tax rates together. The 2013 PEA used
29 state sales tax rates only.

30 **4.0.3 Valued Environmental Component Impact Ratings**

31 As with the 2013 PEA, this SPEA adopts an analytic methodology similar to that used in the
32 Army's Programmatic EIS for Army Transformation (USACE, 2002) and the Programmatic EIS

⁵ Exceptions to this salary figure were made for installations located in Alaska and Hawai'i. The average salaries for Soldiers on these installations were increased to account for the Overseas Cost of Living Allowance they receive. The salaries included in the EIFS model were \$53,989 for Joint Base Elmendorf-Richardson; \$60,735 for Fort Wainwright; and \$55,374 for USAG Hawaii.

for Army Growth and Force Structure Realignment (U.S. Army, 2007). The Army used the process in the Army's NEPA Analysis Guidance Manual (USAEC, 2007) for evaluating impacts to each environmental media area or valued environmental component (VEC) for each of the analyzed installations and their associated maneuver sites. A general description of these VECs is provided in Section 4.0.4 of the 2013 PEA. Through coordination with installation staff and subject matter experts at each location, current VEC ratings were identified and verified, and are described in this section. VEC ratings are the basis for determining whether the impact is significant or not. VEC ratings range from beneficial to significant:

- Beneficial—A positive net impact.
- No Impact/Negligible—An environmental impact that could occur but would be less than minor and might not be perceptible.
- Minor, Adverse—While impacts would be perceptible, they would clearly not be significant.
- Less than Significant—An impact that is not significant, but is readily apparent. Additional care in following standard procedures, or applying precautionary measures to minimize adverse impacts, may be called for.
- Significant but Mitigable—A significant impact is anticipated, but the Army can implement management actions or other mitigation measures to reduce impacts to less than significant.
- Significant—An adverse environmental impact, which, given the context and intensity, violates or exceeds regulatory or policy standards or otherwise exceeds the identified threshold. The significant impact, however, cannot be mitigated with practical means to a level below significance.

A summary of environmental impacts is provided in Section 4.30 and presented in consolidated tables of anticipated impacts in Tables 4.30-1 (No Action Alternative), and 4.30-2 (Alternative-1). Each installation sub-section also includes a table of anticipated impacts. A summary of potential socioeconomic effects comparing all of the analyzed locations can be found in Table 4.30-3 and Table 4.30-4.

Additional installation site-specific NEPA analyses will be conducted, as appropriate, to address actions necessary to implement Army 2020 realignment decisions. This is appropriate given the extended duration and numerous decisions that this SPEA is designed to support.

4.0.4 Valued Environmental Components and Thresholds of Significance

The Army uses a standardized methodology to complete NEPA analysis that is outlined in the Army's NEPA Guidance Manual (USAEC, 2007). The discussion that follows provides an overview description of each VEC evaluated in this document and provides a discussion of thresholds of significance.

To maintain consistent evaluation of impacts in this SPEA, thresholds of significance were established for each resource area. The Army developed these thresholds to take into account substantive environmental regulations and ensure an objective analysis of anticipated impacts. Although some thresholds have been designated based on legal or regulatory limits or requirements, others reflect some discretionary judgment on the part of the Army. Quantitative and qualitative analyses have been used, if appropriate, in determining whether, and the extent to which, a threshold is exceeded.

It is important to note, however, that significance is a matter of context and intensity. Loss of a small number of trees in an arid area with few trees could be significant while loss of the same number of trees in a forested area might not. Any variation in the significance criteria is set out in the discussion of impacts for specific locations.

An impact may trigger one of these thresholds, but mitigation could reduce the impact to less than significant. Also, note that ROIs for different VECs may vary at installations because of specific circumstances. In addition, the context of the affected environment at a given installation may mean that a site-unique threshold is applicable. Section 4.04 of the 2013 PEA provides a description of the individual resource areas as covered in the Army's NEPA Guidance Manual. The following text describes what conditions resulting from a proposed action or alternative would result in a significant impact under each resource category.

- **Air Quality**—An impact would be considered significant if it led to a violation of a Title V operating permit or synthetic minor permit.
- **Airspace**—An impact would be considered significant if it led to a violation of Federal Aviation Administration (FAA) regulations that undermines aviation safety or results in substantial infringement of private or commercial flight activity.
- **Cultural Resources**—An impact would be considered significant if there were substantial concerns raised by Indian Tribes or Native Hawaiian Organizations regarding potential impacts to properties of religious and cultural significance to those tribes or organizations; or direct or indirect alteration of the characteristics that qualify a property for inclusion in the National Register of Historic Places (NRHP) (may include physical destruction, damage, alteration, removal, change in use or character within setting, neglect causing deterioration, transfer, lease, sale) without appropriate mitigation.
- **Noise**—Significant impacts generally include noise impacts causing reclassification of Noise Zones (NZ) to NZ II or III around sensitive receptors (e.g., residences, schools, hospitals, churches, or daycare facilities), within the decibel (dB) limits of each NZ as defined in Army Regulation 200-1, a definition that is more current and accurate than that explained in Section 4.0.4 of the 2013 PEA.
- **Soils**—Significant impacts generally include soil loss or compaction from Army training to the extent that natural reestablishment of native vegetation within two growing seasons

is precluded on a land area greater than a total of 1,000 acres; or loss of soil productivity due to construction activities, which converts the soil to improved infrastructure on more than 5 percent of land under administrative control of the installation.

- **Biological Resources (Vegetation, Wildlife, Threatened and Endangered Species)**—Significant impacts would include substantial permanent conversion or net loss of habitat at landscape scale; long-term loss or impairment of a substantial portion of local habitat (species-dependent); and unpermitted “take” of threatened and endangered species.
- **Wetlands**—Significant impacts would include unpermitted loss or destruction of more than 1 acre of jurisdictional wetlands.
- **Water Resources**—Significant impacts would include the exceedance of total maximum daily loads for sediments that causes a change in surface water impairment status, or an unpermitted direct impact to a water of the U.S.
- **Facilities**—Significant impacts would occur if the capacity of current infrastructure or available space could not support the Proposed Action or if violation of regulatory limits occurs.
- **Socioeconomics**—Significant impacts would include indication from the EIFS that a change in Sales, Income, Employment, or Population would exceed the Rational Threshold Value.
- **Energy Demand and Generation**—Significant impacts would occur if the energy demands of the Proposed Action exceed the capacity of existing transmission infrastructure or the generating capacity of the energy provider.
- **Land Use Conflicts and Compatibility**—Significant impacts generally would occur when more than 5,000 acres of land is removed from public use. This amount is a matter of context and intensity, however, and could vary depending on the size of the installation.
- **Hazardous Materials and Hazardous Waste**—Significant impacts would occur when substantial additional risk to human health or safety would be attributable to Army actions.
- **Traffic and Transportation**—Significant impacts would generally occur when a reduction by more than two Levels of Service (LOS) at roads and intersections within the ROI occurs.

4.0.5 Cumulative Effects Analysis Methodology

CEQ regulations implementing NEPA define a “cumulative impact” as follows:

Cumulative impact is the impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR §1508.7).

U.S. Environmental Protection Agency (EPA) guidance to reviewers of cumulative impacts analyses further adds:

...the concept of cumulative impacts takes into account all disturbances since cumulative impacts result in the compounding of the effects of all actions over time. Thus, the cumulative impacts of an action can be viewed as the total effects on a resource, ecosystem, or human community of that action and all other activities affecting that resource no matter what entity (federal, non-federal or private) is taking the action (EPA, 1999).

For the purposes of this SPEA, significant cumulative impacts would occur if incremental impacts of the Proposed Action, added to the environmental impacts of past, present, and reasonably foreseeable actions, would exceed significance thresholds for resources at an installation and the surrounding regions. The Army considered a wide range of past, present, and reasonably foreseeable future actions by researching existing literature and information provided by installations to identify other projects in the region of each installation that could contribute to cumulative environmental impacts. The Army considered other past, present, or foreseeable future actions regardless of whether the actions are similar in nature to the Proposed Action or outside the jurisdiction of the Army. As part of this analysis, the Army acknowledges the non-federal investment of private companies and local communities to support Army installations. These investments were made given the prediction of growth at the time; however, the Army could not predict the potential changes in Army forces being evaluated in the SPEA. The impact these decisions will have on non-federal investments is beyond the scope of the SPEA.

Cumulative impacts are addressed within each installation section following the discussion of environmental effects for each alternative. Each installation’s cumulative effects analysis offers a fuller understanding of resource conditions that implementation of the Proposed Action might magnify, amplify, or otherwise exacerbate or cause beneficial or adverse impacts to resources on a regional or long-term scale. There are few impacts from actions proposed for installations that when taken together have the potential to cause a nationwide cumulative impact; these potential impacts are discussed in Section 4.32.

Generally, installation analyses includes past and present impacts in the discussion of the affected environment, and, therefore, most of the cumulative impacts discussion addresses reasonably foreseeable future actions.

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