

# Draft Environmental Impact Statement for the Fort Lewis Army Growth and Force Structure Realignment



Volume 1

July 2009





**DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE  
FORT LEWIS ARMY GROWTH AND FORCE STRUCTURE REALIGNMENT  
FORT LEWIS AND YAKIMA TRAINING CENTER, WASHINGTON**

*Prepared by:*  
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*Recommended for Approval by:*



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*Approved by:*



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Fort Lewis, Washington

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July 2009

**Re: Release and review of the Draft Environmental Impact Statement (DEIS) for the Fort Lewis Army Growth and Force Structure Realignment**

Dear Reader,

In 2007, the Department of the Army (Army) analyzed the environmental effects of an addition of units (Army Modularity and Global Defense Posture Realignment (GDPR) and growth of new units by up to six Active component BCTs). These effects were documented in the Final Programmatic Environmental Impact Statement (FPEIS) for Army Growth Structure Realignment (Grow-the-Army). This growth is intended to mitigate shortages in units, Soldiers, and time to train that would otherwise inhibit the Army from meeting readiness goals and supporting strategic requirements.

In December 2007, the Deputy Chief of Staff of the Army, G-3/5/7 (Operations, Plans, and Training), signed the Record of Decision (ROD) for the 2007 GTA FPEIS. This ROD validated the Army's plan to grow by approximately 74,200 Active and Reserve component Soldiers and to station these additional Soldiers at various specified installations. Specifically, the ROD states that the Army will proceed with the preferred alternative (Alternative 3) identified in the GTA FPEIS to:

1. Implement realignments and associated activities between Fiscal Year (FY) 2008 and FY 2013 to support the Army's decisions on Modular Transformation and GDPR,
2. Add approximately 30,000 Combat Support (CS) and Combat Service Support (CSS) Soldiers to the Active and Reserve components of the Army to address critical shortfalls in high-demand military skills, and
3. Grow the Army by up to six Active Brigade Combat Teams (BCTs).

Decisions in the ROD about specifically where growth and realignments would occur include stationing about 560 additional Active Duty Soldiers at Fort Lewis and augmenting Fort Lewis' existing units by approximately 1,320 Soldiers, for a total of approximately 1,880 additional Soldiers. Finally, the decisions about stationing actions were made with the understanding that site-specific analysis under the National Environmental Policy Act (NEPA) would be undertaken at the affected installations before the actions were implemented.

This Environmental Impact Statement (EIS) documents the site-specific analysis of adding approximately 1,880 Active Duty Soldiers at Fort Lewis as directed by the ROD for the GTA FPEIS. In addition, it analyzes the potential stationing at Fort Lewis of additional CSS units (consisting of up to 1,000 Soldiers) and a medium Combat Aviation Brigade (consisting of approximately 2,800 Soldiers) to support the Stryker Brigade Combat Teams (SBCTs). The EIS also documents the analysis of effects from pertinent, past, present, and reasonably foreseeable future actions interconnected to the GTA actions. Reasonably foreseeable future actions include updating the Fort Lewis and Yakima Training Center (YTC) Area Development Plans. These actions also include the training of three SBCTs simultaneously at Fort Lewis and YTC with the GTA-directed new units being stationed and the other units already training at Fort Lewis and YTC. The analysis also considers construction of the facilities necessary to support these units.

The public comment period will run for 45 days beginning the day that the U.S. Environmental Protection Agency's Notice of Availability is published in the Federal Register. During that time, you are welcome to submit written comments to the Army at the address listed below. Also during this period, but after at

1 least 15 days following publication of the Notice of Availability of the DEIS for review, the Army will  
2 hold public meetings to provide an opportunity for the public, organizations, and regulatory agencies to  
3 provide comments on the DEIS. Notices about the meetings will be placed in local newspapers near Fort  
4 Lewis and YTC.

5 Following the comment period, the Army will prepare a Final EIS (FEIS). The Army is required to  
6 respond in the FEIS to all substantive comments on the DEIS. The comment period mentioned above  
7 provides you, the public, with an opportunity to make an impact on the content of the document and,  
8 therefore, potentially affect the decision that will be made after the final EIS is released. We ask that your  
9 comments relate directly to the EIS, that you are as specific as possible, and that you cite the location(s)  
10 in the document on which you are commenting.

11 If you have any questions or wish to obtain additional copies of this document, please contact:

12 DEPARTMENT OF THE ARMY  
13 PUBLIC WORKS,  
14 ATTN: IMWE-LEW-PWE (B VAN HOESEN),  
15 BLDG 2012 LIGGETT AVENUE,  
16 BOX 339500, MS 17  
17 FORT LEWIS, WA 98433-9500.  
18  
19 Telephone: 253-966-1780, Facsimile: 253-966-4985,  
20 email: [bill.vanhoesen@us.army.mil](mailto:bill.vanhoesen@us.army.mil).  
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# Draft Environmental Impact Statement

**Lead Agency:** Department of the Army, Office of the Secretary of the Army, Washington, D.C.

**Cooperating Agencies:** None.

**Title to Proposed Action:** Fort Lewis Army Growth and Force Structure Realignment

**Affected Jurisdictions:** Kittitas, Pierce, Thurston, and Yakima Counties

**Review:** Copies of the DEIS may be obtained from:

DEPARTMENT OF THE ARMY  
PUBLIC WORKS,  
ATTN: IMWE-LEW-PWE (B VAN HOESEN),  
BLDG 2012 LIGGETT AVENUE,  
BOX 339500, MS 17  
FORT LEWIS, WA 98433-9500.

Telephone: 253-966-1780, Facsimile: 253-966-4985, email: [bill.vanhoesen@us.army.mil](mailto:bill.vanhoesen@us.army.mil),

Online: [http://www.lewis.army.mil/publicworks/sites/envir/EIA\\_2.htm](http://www.lewis.army.mil/publicworks/sites/envir/EIA_2.htm).

**Document Designation:** Draft Environmental Impact Statement

**Abstract:** The Proposed Action is to implement those actions from FY 2010 through 2015 needed to support the Army's decisions on growth and realignment at Fort Lewis and YTC. These actions would allow the Army to achieve a size and composition that is better able to meet national security and defense requirements, modify the force in accordance with Army Transformation, sustain unit equipment and training readiness, and preserve quality of life for the Soldiers and their Families. Fort Lewis and YTC must take actions to support the strategic deployment and mobilization requirements of the nation's combatant commanders to ensure they will have the forces necessary to support regional contingency operational requirements.

This EIS examines four alternatives:

Alternative 1 — No Action,

Alternative 2 — Take Actions Necessary to Implement GTA Actions and Those Actions Interconnected to GTA,

Alternative 3 — All Actions under Alternative 2 and the Addition of up to 1,000 Combat Service Support Soldiers to Fort Lewis/YTC, and

Alternative 4 — All Actions under Alternative 3 and the Addition of a Medium Combat Aviation Brigade to Fort Lewis/YTC.

This EIS will assist the Army in arriving at a decision for the Fort Lewis Army Growth and Force Structure Realignment. The Army has not identified a preferred alternative at this time.



# Preface

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An Environmental Impact Statement (EIS) usually is not read like a book — from chapter one to the end. The best way to read an EIS depends on your interests. You may be more interested in effects, whereas others might have more interest in the details of the proposed project or be more concerned about what opportunities were made available to the public to be involved in the environmental assessment process. Many readers probably just want to know what is being proposed and how it will affect them.

This document follows the format established in the National Environmental Policy Act’s regulations (Title 40 Code of Federal Regulations Parts 1500 to 1508). The following paragraphs outline information contained in the chapters and appendices so readers may find the parts of interest without having to read the entire document.

- *Summary*: contains a short, simple discussion to provide the reader and the decision makers with a sketch of the more important aspects of the EIS. The reader can obtain additional, more-detailed information from the actual text of the EIS.
- *Chapter 1 — Purpose, Need, and Scope*: identifies the proposed action and describes the purpose of and need for the proposed action, decisions to be made by the Army, and the National Environmental Policy Act (NEPA) process.
- *Chapter 2 — Description of the Proposed Action and Alternatives*: describes the Proposed Action and the alternatives that were carried forward for evaluation. Three alternatives for implementing the proposed action were identified by the Army as reasonable alternatives capable of meeting the Army’s need criteria described in Chapter 1 and screening criteria described in Chapter 2. In addition, the No Action Alternative was defined for evaluation in detail.
- *Chapter 3 — Affected Environment for Fort Lewis*: describes the present condition of the environment that would be affected by implementation of the proposed action or any action alternative at Fort Lewis.
- *Chapter 4 — Environmental Consequences at Fort Lewis*: describes the probable direct, indirect, and cumulative effects to the human environment that would result from implementing the Proposed Action or alternatives at Fort Lewis.
- *Chapter 5 — Affected Environment for Yakima Training Center*: describes the present condition of the environment that would be affected by implementation of the proposed action or any action alternative at the Yakima Training Center.
- *Chapter 6 — Environmental Consequences at the Yakima Training Center*: describes the probable direct, indirect, and cumulative effects to the human environment that would result from implementing the Proposed Action or alternatives at the Yakima Training Center.
- *Chapter 7 — References Cited*: lists the references cited in the DEIS.
- *Chapter 8 — Preparers and Contributors*: identifies the people involved in the research, writing, and internal review of the DEIS.
- *Chapter 9 — Distribution and Review of the Draft EIS*: lists the agencies, organizations, and individuals who received a copy of the DEIS.
- *Index*: contains cross references and identifies the pages where key topics can be found.
- *Appendices*: contain information that is important to full comprehension of the NEPA analysis, but that was too long to be included in the primary chapters. The appendices also include the Army’s summary of public comments on the DEIS and its responses to those comments.

## 1 Acronyms and Abbreviations used in this EIS

Acronym	Spelled Out
$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
AAFES	Army Air Force Exchange Service
ACP	access control point
ACSIM	Assistant Chief of Staff for Installation Management
ACUB	Army Compatible Use Buffer
ADA	average daily attendance
ADNL	A-weighted day-night sound level
ADP	Area Development Plan
AERMOD	American Meteorological Society/EPA Regulatory Model
AFB	Air Force Base
AH	attack helicopter
AIA	artillery impact area
AICUZ	Air Installation Compatible Use Zone
AIRFA	American Indian Religious Freedom Act
AMF	Army Modular Force
AQCR	air quality control region
AR	Army Regulation
ARFF	Aircraft Rescue Fire Fighting
Army	Department of the Army
ARPA	Archaeological Resources Protection Act
ASIL	acceptable source impact level
ATC	Air Traffic Control
ATTACC	Army Training and Testing Area Carrying Capacity
AUL	Authorized Use List
AVIM	Aviation Intermediate Maintenance
BA	Biological Assessment
BAX	Battle Area Complex
BCT	Brigade Combat Team
BEA	Bureau of Economic Analysis
BMP	best management practice
BNSF	Burlington Northern Santa Fe
BPA	Bonneville Power Administration
BRAC	Base Realignment And Closure
BSA	brigade support area
ca	circa
CAB	Combat Aviation Brigade
CACTF	Combined Arms Collective Training Facility
CALFEX	combined arms live-fire exercise
CC	compliance-related cleanup
CDC	child development center
CDNL	C-weighted day-night sound level

Acronym	Spelled Out
CEMML	Center for Environmental Management of Military Lands
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation And Liability Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CH	cargo helicopter
CIA	central impact area
CIS	capital investment strategy
cm	centimeter
CNRMP	Cultural and Natural Resource Management Plan
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
COF	Company Operations Facility
CRM	Cultural Resources Manager
CS	Combat Support
CSAIA	central small arms impact area
CSS	Combat Service Support
CUA	Controlled Use Area
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DCA	Directorate of Community Activities
DEIS	Draft EIS
DERP	Defense Environmental Restoration Program
DES	Directorate of Emergency Services
DFMWR	Directorate of Family and Morale, Welfare, and Recreation
DHSVM-HEM	Distributed Hydrology Soil Vegetation Model – Hillslope Erosion Model
DMPRC	Digital Multipurpose Range Complex
DMPTR	Digital Multipurpose Training Range
DNL	day-night sound level
DoD	Department of Defense
DoDI	Department of Defense Instructions
DOE	Directorate of Environment
DOIM	Director of Information Management
DPS	distinct population segment
DPTM	Director of Plans, Training and Mobilization
DPTMS	Directorate of Plans, Training, Mobility and Security
DPW	Directorate of Public Works
DRMO	Defense Reutilization and Marketing Office
DU	depleted uranium
e.g.	for example

Acronym	Spelled Out
EA	Environmental Assessment
ED	Environmental Division
EEAP	Energy Engineering Analysis Program
EFH	Essential Fish Habitat
EIFS	Economic Impact Forecast System
EIS	Environmental Impact Statement
EMS	Environmental Management System
ENMP	Environmental Noise Management Program
ENRD	Environment and Natural Resources Division
EO	Executive Order
EOD	explosives ordnance disposal
EPA	U.S. Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ESA	Endangered Species Act
ESC	Expeditionary Sustainment Command
ESU	evolutionary significant unit
FAA	Federal Aviation Administration
FAC	Fire Alarm Central
FARRP	forward area rearming and refueling point
FEIS	Final EIS
FEMA	Federal Emergency Management Agency
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FIRM	Flood Insurance Rate Map
FM	Field Manual
FMTV	family of medium tactical vehicle
FONSI	Finding of No Significant Impact
FPEIS	Final Programmatic Environmental Impact Statement
FRP	Facility Response Plan
ft/s	feet per second
FY	fiscal year
g/p/d	gallons per person per day
GAAF	Gray Army Airfield
GDPR	Global Defense Posture Realignment
GHG	greenhouse gases
gpd	gallons per day
gpm	gallons per minute
GPP	Green Procurement Program
GTA	Grow the Army
ha	hectares
HABS	Historic American Building Survey
HAP	hazardous air pollutant
HBCT	Heavy Brigade Combat Team
HCM	Highway Capacity Manual

Acronym	Spelled Out
HEMTT	heavy expanded mobility tactical truck
HET	heavy equipment transport
HIMARS	High Mobility Artillery Rocket System
HMCC	hazardous materials control center
HMMP	Hazardous Material Management Plan
HMMWV	high mobility multi-wheeled vehicle
HOV	high-occupancy vehicle
HQ	Headquarters
HQDA	Headquarters, Department of the Army
HVAC	heating, ventilating, air conditioning
Hz	Hertz
i.e.	that is
I-405	Interstate 405
I-5	Interstate 5
I-82	Interstate 82
I-90	Interstate 90
IAFF	International Association of Fire Fighters
IBCT	Infantry Brigade Combat Team
ICP	Installation contingency plan
ICRMP	Integrated Cultural Resource Management Plan
ICS	incident command system
ICUZ	installation compatible use zone
IFR	instrument flight rules
INRMP	Integrated Natural Resource Management Plan
IPM	Integrated Pest Management
IPMP	Integrated Pest Management Plan
IRP	Installation Restoration Program
ISO	International Organization for Standardization
ISWM	integrated solid waste management
ITAM	Integrated Training Area Management
IWFMP	Integrated Wildland Fire Management Plan
JGA and AMEC	John Gallup and Associates and AMEC Earth and Environmental, Inc.
kg	kilogram
km	kilometer
kph	kilometers per hour
kV	kilovolt
L	liter
L/min	liters per minute
L/p/d	liters per person per day
LAV	Light Armored Vehicle
LBP	lead-based paint
LCTA	Land Condition Trend Analysis
L <sub>dn</sub>	day-night average sound level

Acronym	Spelled Out
LEED	Leadership in Energy and Environmental Design
$L_{eq}$	equivalent noise levels
$L_{max}$	maximum noise level event
LOS	level of service
LRC	long-range component
LUPZ	Land Use Planning Zone
m	meter
$m^3$	cubic meters
MAD	management action decision
MAMC	Madigan Army Medical Center
MBTU	million British thermal unit
MCL	maximum contaminant level
METL	Mission Essential Task List
mgd	million gallons per day
MGS	mobile gun system
MH or MVH	Medivac helicopters
$mi^3$	cubic miles
MIA	main impact area
MIL-CLASS	Military Class
MILCON	military construction
min	minute
mm	millimeter
MMRP	Military Munitions Response Program
MOA	Military Operations Area
mph	miles per hour
MPMG	multi-purpose machine gun
MPRC	Multi-purpose Range Complex
MPTR	Multi-purpose Training Range
MRF	modified record fire
MSDS	Material Safety Data Sheet
MSL	mean sea level
mVA	megavolt-ampere
MW	megawatt
MWH	megawatt hour
NAAQS	National Ambient Air Quality Standard
NAGPRA	Native American Graves Protection and Repatriation Act
NCO	non-commissioned officer
NEPA	National Environmental Policy Act
NESHAP	national emission standards for hazardous air pollutants
NHPA	National Historic Preservation Act
NLR	noise level reduction
NMFS	National Marine Fisheries Service
$NO_2$	nitrogen dioxide

Acronym	Spelled Out
NOA	Notice of Availability
NOE	Nap-of-the-Earth
NOI	Notice of Intent
NOTOM	Notice to Airmen
NO <sub>x</sub>	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSAIA	north small arms impact area
NTC	National Training Center
ORTC	Operational Readiness Training Center
P2	pollution prevention
PA	Programmatic Agreement
PBMS	Performance-based Management Strategy
PBT	persistent bioaccumulative toxic
PCB	polychlorinated biphenyl
PK15	unweighted peak, 15% metric
PM	particulate matter
PM <sub>10</sub>	particulate matter less than 10 microns
PM <sub>2.5</sub>	particulate matter less than 2.5 microns
POL	petroleum, oils, and lubricants
PPA	Pollution Prevention Act
ppb	parts per billion
ppm	parts per million
PSCAA	Puget Sound Clean Air Agency
PSD	prevention of significant deterioration
PSE	Puget Sound Energy
psi	pounds per square inch
PSWQA	Puget Sound Water Quality Authority
PX	Post Exchange
QRP	Qualified Recycling Program
QTR	Qualification Training Range
RCO	Residential Communities Office
RCRA	Resource Conservation and Recovery Act
RCW	Revised Code of Washington
RDN	Robert D. Niehaus, Inc.
RFFA	reasonably foreseeable future action
RMO	Fort Lewis Resource Management Office
RNA	Research Natural Area
ROD	Record of Decision
ROI	Region of Influence
ROTC	Reserve Officer Training Corps

Acronym	Spelled Out
RPMP	Real Property Master Plan
RSTA	reconnaissance, surveillance, and target acquisition
RTLA	Range and Training Land Assessment
RTV	rational threshold values
RUL	Restricted Use List
RUSLE	Revised Universal Soil Loss Equation
SARA	Superfund Amendments Reauthorization Act
SAS	school aged services
SAW	squad automatic weapon
SBCT	Stryker Brigade Combat Team
SDZ	surface danger zone
SEL	sound exposure level
SF	square feet
SFF	sniper field fire
SHPO	State Historic Preservation Office
SIMDSS	Spreadsheet Implemented Multi-objective Decision Support System
SIP	State Implementation Plan
SO <sub>2</sub>	sulfur dioxide
SOF	Special Operations Forces
SOP	standard operating procedure
SO <sub>x</sub>	sulfur oxides
SPCCP	Spill Prevention, Countermeasure, and Control Plan
SR	State Route
SRC	short-range component
SRKW	southern resident killer whale
SSAIA	south small arms impact area
STRAC	Standards in Training
SUA	Special Use Airspace
SWPPP	Stormwater Pollution Prevention Plan
t/ac/y	tons per acre per year
TA	training area
TAA	training assembly area
TC	Training Circular
TCE	trichloroethylene
TCP	traditional cultural properties
TIP	Transportation Improvement Program
TMDL	total maximum daily loads
TOC	tactical operations center
tpy	tons per year
TRI	Toxic Release Inventory
TSCA	Toxic Substances Control Act
UAS	unmanned aerial system
UESC	Utility Energy Savings Contract

Acronym	Spelled Out
UFGS	United Facilities Guide Specifications
UH	utility helicopter
UMTU	Unexploded Munitions Treatment Unit
USAAAD	U.S. Army Air Ambulance Detachment
USACE	U.S. Army Corps of Engineers
USACHPPM	U.S. Army Center for Health Promotion and Preventive Medicine
USC	United States Code
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Service
UXO	unexploded ordnance
VAH	Vagabond Army Heliport
VEC	Valued Environmental Component
VFR	visual flight rules
VOC	volatile organic compound
WAARNG	Washington Army National Guard
WAC	Washington Administrative Code
WAU	watershed administrative units
WDFW	Washington Department of Fish and Wildlife
WDNR	Washington Department of Natural Resources
WFPM	Wildland Fire Program Manager
WHPA	wellhead protection areas
WNHP	Washington Natural Heritage Program
WRIA	water resource inventory area
WSDOT	Washington State Department of Transportation
WTU	Warrior Transition Unit
YRCAA	Yakima Regional Clean Air Agency
YRS	Yakima Research Station
YTC	Yakima Training Center



# EXECUTIVE SUMMARY

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This Environmental Impact Statement (EIS) analyzes the addition of Soldiers at Fort Lewis and the potential stationing of additional units to support Army Growth and transformation. The Department of the Army (Army) is in a period of critical transition. It has embarked on a 30-year process to transform its forces. This transformation includes modernizing its doctrine, equipment, leadership, organizational structure, facilities, business processes, and virtually every component of its operations.

Since the Record of Decision (ROD) for the Final Programmatic Environmental Impact Statement (FPEIS) for Army Transformation was signed in 2002, the Army has been implementing the Transformation process. Organizationally, the Army is transitioning from large powerful, fixed organizations constituted at the Division level (10,000 to 12,000 personnel) to an Army designed around smaller, standardized, self-contained, rapidly deployable Brigade Combat Teams (BCTs) (3,500 to 4,000 personnel). There are three types of modular BCTs: Heavy BCTs (HBCTs), Infantry BCTs (IBCTs), and Stryker BCTs (SBCTs). Each type of BCT has different needs for equipment, training, maneuver, and support.

The Army has almost completed the transformation to a modular or standardized force structure designed around the three types of BCTs. Subsequent phases of Transformation are focusing on analyzing and realigning Combat Support (CS) and Combat Service Support (CSS) units. This realignment of CS and CSS units will ensure the Army is fielding the proper force to support its modular BCTs and its operational mission requirements.

Recently, the Army identified the need to increase its overall size while continuing to restructure its forces in accordance with modular Transformation decisions:

- to further Army Transformation,
- to meet the 21<sup>st</sup> Century's requirements for increased national security and defense,
- to maintain training and operational readiness levels of the force, and
- to preserve a high quality of life for Soldiers and their Families.

This increase in the numbers and configurations of units will enhance operational readiness by allowing Soldiers more time to train and maintain their equipment. It also will afford Soldiers and Families more time together at home station while providing the nation with greater capability to respond to the increased challenges to national defense and security.

In 2007, the Army analyzed the environmental effects of an addition of units (to support Army Modularity and Global Defense Posture Realignment [GDPR], and growth of new units by up to six Active component BCTs). These effects were documented in the FPEIS for Army Growth and Force Structure Realignment (Grow-the-Army or GTA). This growth is intended to mitigate shortages in units, Soldiers, and time to train that would otherwise inhibit the Army from meeting readiness goals and supporting strategic requirements.

In December 2007, the Deputy Chief of Staff of the Army, G-3/5/7 (Operations, Plans, and Training), signed the ROD for the 2007 GTA FPEIS. This ROD validated the Army's plan to grow by approximately 74,200 Active and Reserve component Soldiers and to station these additional Soldiers at various specified installations. Specifically, the ROD states that the Army will proceed with the preferred alternative (Alternative 3) identified in the GTA FPEIS to:

- 1 1. Implement realignments and associated activities between Fiscal Year (FY) 2008 and FY 2013
- 2 to support the Army's decisions on Modular Transformation and GDPR,
- 3 2. Add approximately 30,000 CS and CSS Soldiers to the Active and Reserve components of the
- 4 Army to address critical shortfalls in high-demand military skills, and
- 5 3. Grow the Army by up to six Active BCTs.

6 Decisions in the ROD about where growth and realignments would occur include stationing about 560  
7 additional Active Duty Soldiers at Fort Lewis and augmenting Fort Lewis' existing units by  
8 approximately 1,320 Soldiers, for a total of approximately 1,880 additional Soldiers. Finally, the  
9 decisions about stationing actions were made with the understanding that site-specific analysis under the  
10 National Environmental Policy Act (NEPA) would be undertaken at the affected installations before the  
11 actions were implemented (Thurman 2007).

12 This EIS documents the site-specific analysis of adding approximately 1,880 Active Duty Soldiers at Fort  
13 Lewis as directed by the ROD for the GTA FPEIS. In addition, it analyzes the potential stationing at Fort  
14 Lewis of additional CSS units (consisting of up to 1,000 Soldiers) and a medium Combat Aviation  
15 Brigade (CAB) (consisting of approximately 2,800 Soldiers) to support the SBCTs. The EIS also  
16 documents the analysis of effects from pertinent, past, present, and reasonably foreseeable future actions  
17 connected to the GTA actions. These actions also include the training of three SBCTs simultaneously at  
18 Fort Lewis and Yakima Training Center (YTC) with the GTA-directed new units being stationed and the  
19 other units already training at Fort Lewis and YTC. The analysis also considers construction of the  
20 facilities necessary to support these units.

21 To accommodate GTA actions and other changes at Fort Lewis, the newly developed Area Development  
22 Plans (ADPs) are being prepared as part of the Fort Lewis and YTC Master Plans. NEPA analysis of such  
23 master plan changes are required by Army Regulation (AR) 210-20.

24 This EIS provides decision-makers, regulatory agencies, and the public information on the potential  
25 environmental and socioeconomic effects of implementing the 2007 GTA stationing decision at Fort  
26 Lewis and YTC. Decision-makers will be able to compare the alternatives analyzed in detail and assess  
27 their environmental and socioeconomic effects to make informed decisions.

## 28 **Purpose of and Need for the Proposed Action**

29 The purpose of the Proposed Action is to implement the decisions made in the ROD for the 2007 GTA  
30 FPEIS as well as other potential Army decisions to station additional CSS and CAB Soldiers at Fort  
31 Lewis. Fort Lewis must provide adequate permanent administrative facilities, ranges, and training areas to  
32 support all Soldiers assigned to Fort Lewis given the assignment of new units to Fort Lewis and the  
33 likelihood that all three SBCTs will be present at Fort Lewis simultaneously. Fort Lewis must ensure that  
34 sufficient firing ranges are available to support these units. It must also meet the Army's goals of  
35 sustaining global force readiness. Fort Lewis' Soldiers must be able to train as they fight. Fort Lewis must  
36 also preserve/enhance Soldier and Family quality of life. This includes analyzing the requirements for  
37 units like 1,000 CSS Soldiers and a medium CAB that have not yet been designated to come to Fort  
38 Lewis. This enables the Army to anticipate possible needs. The information also will be made available to  
39 Army decision makers and planners who might be considering the assignment of additional units to Fort  
40 Lewis.

41 Fort Lewis is designed and configured to house and train about 34,000 Soldiers, and all those recent past  
42 and (reasonably foreseeable) future actions (including now having the three SBCTs present and training  
43 simultaneously at Fort Lewis and YTC) will add about 1,880 Soldiers (and about 2,860 Family members),

1 which would stretch current facilities. Fort Lewis must provide adequate cantonment area and training  
2 area resources for all of the Soldiers that will be assigned to it.

3 The Army already supports the following primary units and organizations at Fort Lewis:

- I Corps Headquarters
- 4<sup>th</sup> Brigade, 2<sup>nd</sup> Infantry Division SBCT
- 555<sup>th</sup> Engineer Brigade
- 62<sup>nd</sup> Medical Brigade
- 17<sup>th</sup> Fires Brigade
- 4-6 Air Cavalry Squadron
- 2<sup>nd</sup> Battalion, 75<sup>th</sup> Ranger Regiment
- 6<sup>th</sup> Military Police Group (CID)
- Madigan Army Medical Center
- US Army Garrison
- 81<sup>st</sup> Infantry Brigade Combat Team, Heavy (Washington Army National Guard)
- 191<sup>st</sup> Infantry Brigade, U.S. Army Reserve
- 41<sup>st</sup> Infantry Brigade Combat Team (Oregon Army National Guard)
- 3<sup>rd</sup> Brigade, 2<sup>nd</sup> Infantry Division SBCT
- 5<sup>th</sup> Brigade, 2<sup>nd</sup> Infantry Division SBCT
- 42<sup>nd</sup> Military Police Brigade
- 593<sup>rd</sup> Sustainment Brigade
- 201<sup>st</sup> Battlefield Surveillance Brigade
- 4<sup>th</sup> Battalion, 160<sup>th</sup> Special Operations Aviation Regiment (Airborne)
- 20<sup>th</sup> Support Command
- 404<sup>th</sup> Army Field Support Brigade
- 1<sup>st</sup> Special Forces Group (Airborne)
- 1<sup>st</sup> Joint Mobilization Brigade
- 66<sup>th</sup> Combat Aviation Brigade (Washington Army National Guard)
- 8<sup>th</sup> Brigade, U.S. Army Cadet Command

4  
5 Although three SBCTs have been stationed at Fort Lewis since April 2007, there has never been a period  
6 during which all three were training simultaneously at full intensity at Fort Lewis or YTC. This is because  
7 at least one of the SBCTs has been deployed in combat or to an Army Training Center outside of Fort  
8 Lewis and YTC or was in an Army Force Generation “Reset” mode following return from a combat  
9 deployment at any given time since the third SBCT arrived. These serial deployments will not last  
10 indefinitely. Part of the purpose of the proposed action is to support the presence of and full-intensity  
11 training requirements for all three SBCTs simultaneously. The associated need is to upgrade infrastructure  
12 in the cantonment area for the third SBCT so that it meets current standards and improves the training  
13 range capability to meet the collective firing range requirements for all three SBCTs at Fort Lewis and  
14 YTC.

15 In addition, since the SBCTs were stationed at Fort Lewis, their annual training requirements have  
16 increased from roughly 44,000 miles (71,000 kilometers [km]) per year to 529,000 miles (851,000 km)  
17 per year (totals include all vehicles with the three SBCTs driving on Military Class 4 and 5 roads and off  
18 road). This is due to evolving doctrine for the SBCT as the Army has determined how it should be  
19 employed. Much of the requirements are based on lessons learned from SBCT deployments to Iraq and  
20 Afghanistan.

21 As described above, the ROD for the Army’s 2007 GTA PFEIS assigned about 1,880 additional Soldiers  
22 to Fort Lewis, with stationing to occur between FY 2008 and FY 2013. The same decision also chose to  
23 keep at Fort Lewis several units that were scheduled to leave Fort Lewis, totaling about 380 Soldiers.  
24 Because stationing was to begin in 2008, some of these new Soldiers have already arrived.

25 Army Growth was extremely important to the war efforts in Iraq and Afghanistan and had to occur  
26 throughout the United States before full planning and analysis could take place at installations such as  
27 Fort Lewis. The new units that have arrived were placed in existing buildings and have trained on existing  
28 ranges within previously approved range capacities. Eventually, however, the units will require additional  
29 cantonment area construction. Upon the return of all three SBCTs to Fort Lewis, the 1,880 GTA Soldiers  
30 will also contribute to the need for new ranges and increased training area use. So another part of the

1 purpose of the proposed action is to support the presence of, and training requirements for the GTA  
2 Soldiers, whether their units have already arrived or not. The associated need is to upgrade infrastructure  
3 in the cantonment area for the units so that it meets current standards and improves the training range  
4 capability to meet the collective firing range requirements for all units scheduled to be assigned to Fort  
5 Lewis, including those GTA Soldiers who have already arrived.

6 In addition to the stationing actions at Fort Lewis directed by the ROD for the GTA FPEIS, the growth at  
7 the installation may include the stationing of CSS units and stationing of a medium CAB. The CSS units  
8 perform logistic (sustainment) functions and could consist of transportation, quartermaster, medical,  
9 headquarters, or other CSS units. The CSS units would include as many as 1,000 Soldiers (and about  
10 1,520 Family members), and they would support operations at Fort Lewis and YTC.

11 The medium CAB is the standard design for Army aviation brigades under the Army Modular Force  
12 (AMF) plan. Formerly called the multi-functional aviation brigade, the medium CAB is part of Army  
13 Transformation. Stationing a medium CAB to support the three SBCTs and other units already stationed  
14 at Fort Lewis would enhance integrated training at Fort Lewis and YTC. The Army is considering Fort  
15 Lewis and several other locations for stationing of a medium CAB in the 2010 to 2013 timeframe.  
16 Because of this, the Army has included an evaluation of the potential impacts of stationing a medium  
17 CAB at Fort Lewis in this EIS.

18 Stationing these 1,000 CSS Soldiers and the medium CAB (about 2,800 Soldiers and 4,260 Family  
19 members) would involve constructing new facilities to support additional Soldiers and their Families,  
20 upgrading existing training ranges, constructing new training ranges, and continuing the use of training  
21 ranges and maneuver areas. Facilities for training, garrison operations, and Soldiers' quality of life are  
22 critical for supporting the operations of the new units that would be stationed at Fort Lewis and those  
23 units already at Fort Lewis undergoing strength increases from GTA-directed augmentations. Current  
24 facilities at Fort Lewis or YTC are not adequate to accommodate the new units. Therefore, construction of  
25 facilities would be required.

## 26 **Scope of the Analysis**

27 This EIS addresses environmental and socioeconomic impacts at Fort Lewis and YTC because of  
28 stationing Soldiers at the installation. This site-specific EIS has been developed in accordance with  
29 NEPA; the regulations issued by the Council on Environmental Quality (CEQ), 40 Code of Federal  
30 Regulations (CFR) Parts 1500–1508; and the Army's implementing procedures published in 32 CFR Part  
31 651, *Environmental Analysis of Army Actions*. The potential stationing of additional CSS units and a  
32 medium CAB is also analyzed in this document for the reasons stated in **Section 1.2**. Additional analysis  
33 may be required to evaluate the site-specific components and effects of these actions that cannot be  
34 projected currently, such as the proportional distribution of the 1,000 CSS Soldiers among the various  
35 CSS units (e.g., transportation, medical, quartermaster, and headquarters).

36 The decisions on these stationing actions have been made at Department of the Army, many in the ROD  
37 for the 2007 GTA FPEIS. Future decisions on the 1,000 CSS Soldiers and medium CAB will also be  
38 made at the Department of the Army. Although the *decisions* themselves whether to send these units to  
39 Fort Lewis are outside the scope of the proposed action and the analysis in this EIS, we have analyzed the  
40 *impact* of stationing these units at Fort Lewis should the decision be made to do so.

41 This EIS incorporates the analysis of the 2007 GTA FPEIS by reference and provides the baseline  
42 conditions of the No Action Alternative.

## 1 Public Involvement

2 On December 22, 2008, the Army published in the *Federal Register* an NOI to prepare an EIS for GTA  
3 actions at Fort Lewis, Washington (73 *Federal Register* 78336). In addition, letters were sent to parties on  
4 a mailing list of those interested in activities and actions at Fort Lewis and YTC. Notices of three public  
5 scoping meetings were published in local newspapers.

6 Public scoping meetings were held at the Lacey Community Center in Lacey on January 20, 2009, the Hal  
7 Holmes Community Center in Ellensburg on January 21, 2009, and the Howard Johnson Plaza in Yakima  
8 on January 22, 2009. All three scoping meetings were conducted in an open house format during the  
9 hours of 6:00 to 8:00 p.m. Approximately two weeks before the public scoping meetings, notices of the  
10 meetings were published in the following seven general circulation papers: Seattle Times, Seattle Post  
11 Intelligencer, The News Tribune, Olympian, Yakima Herald Republic, Ellensburg Daily Record, and  
12 Columbia Basin Herald. These public notices provided information on the background and purpose of the  
13 Proposed Action, requested public comments, and provided information on the public scoping meetings.

14 At each meeting, the Army was represented by Fort Lewis and YTC staff. Approximately 20, 3, and 7  
15 members of the public, including local media representatives, attended the three meetings, respectively.

16 At each of the meetings, the members of the public were greeted upon arrival; requested to sign an  
17 attendance record form listing their name, address, and affiliation (if any); and given an information sheet.  
18 All attendees were given comment forms to provide written comments or concerns that they would like  
19 addressed in the EIS. They were asked to either complete and return the forms before leaving the meeting  
20 or return the forms to the Army no later than the close of the scoping period on February 5, 2009.

21 Individuals, organizations, and governmental representatives provided written comments on the scope of  
22 the EIS during the scoping period. Comments received were grouped based on comment threads or topics,  
23 and a primary issue statement was prepared for each group of comments. Twelve issues were  
24 incorporated into the NEPA analysis. They are:

- 25 • The effects of increased military usage of YTC on deer and elk hunting
- 26 • Traffic impacts resulting from increased military personnel and civilian employment at Fort  
27 Lewis
- 28 • The effects of Army Growth and Force Structure Realignment on surface water resources  
29 (waters of the United States and waters of the state) at Fort Lewis and YTC
- 30 • The effects of construction and demolition activities and long-term operations on surface and  
31 groundwater quality, including drinking water sources, and hydrology
- 32 • The effects on air quality, and resulting effects on human health and climate change, from  
33 proposed construction/demolition activities and long-term operations associated with GTA  
34 actions at Fort Lewis and YTC
- 35 • The effects on the environment from a potential release of hazardous/toxic chemicals during  
36 operations or because of an accident
- 37 • The effects of increased training activities at Fort Lewis and YTC on rare species and habitats  
38 on the installations
- 39 • The effects of GTA actions on the spread of noxious weeds/invasive species, and their  
40 resulting environmental effects
- 41 • Temporary and permanent land use effects from implementing the GTA initiative

- 1 • The effects of Army expansion at Fort Lewis on the availability of off-post housing and  
2 community facilities
- 3 • The potential for increased fire danger resulting from increased live-fire training use of YTC
- 4 • The potential for disproportionate adverse impacts to minority and low-income populations  
5 from implementation of the project

6 Additional details regarding the scoping process and results are available in the *Scoping Summary for the*  
7 *Fort Lewis Army Growth and Force Structure Realignment Environmental Impact Statement* (ARCADIS  
8 2009).

## 9 **Proposed Action**

10 The proposed action is to implement those actions from FY 2010 through 2015 needed to support the  
11 Army's decisions on growth and realignment at Fort Lewis and YTC. These actions would allow the  
12 Army to achieve a size and composition that is better able to meet national security and defense  
13 requirements, modify the force in accordance with Army Transformation, sustain unit equipment and  
14 training readiness, and preserve quality of life for the Soldiers and their Families. Fort Lewis and YTC  
15 must take actions to support the strategic deployment and mobilization requirements of the nation's  
16 combatant commanders to ensure they will have the forces necessary to support regional contingency  
17 operational requirements.

18 Specifically, the Proposed Action includes:

- 19 • training of all three SBCTs simultaneously with other currently stationed major subordinate  
20 units at Fort Lewis and YTC,
- 21 • stationing the new units and accommodating the augmented units identified in the Fort Lewis  
22 portions of the ROD for the 2007 GTA FPEIS,
- 23 • upgrading infrastructure in the cantonment area for the third SBCT and GTA units so that it  
24 meets current standards,
- 25 • updating the Fort Lewis and YTC ADPs to accommodate these defined and potential  
26 stationing actions,
- 27 • potentially stationing at Fort Lewis and YTC CSS units with up to 1,000 Soldiers, and
- 28 • potentially stationing at Fort Lewis and YTC a medium CAB with up to 2,800 Soldiers.

29 The Proposed Action would:

- 30 • **Troop-Level Increase** – Accommodate an overall increase in Soldiers who would work, live,  
31 and train at Fort Lewis and YTC. Under the proposed action, up to 5,800 new Soldiers (new  
32 GTA units, existing units augmented under GTA, new CSS units, and a medium CAB) would  
33 be stationed at Fort Lewis. In addition, Fort Lewis must construct the facilities needed to  
34 support the additional Soldiers and to replace substandard facilities currently occupied by the  
35 third SBCT stationed at Fort Lewis with facilities meeting Army standards. An SBCT  
36 consists of approximately 4,100 Soldiers, 1,000 unit vehicles, and all accompanying  
37 equipment.
- 38 • **Staged Stationing of Troops** – Include continuous stationing and transformation of Fort  
39 Lewis' force structure. Implementation of full stationing and transformation is expected to be

1 complete by 2013. As the Army proceeds with Transformation planning, the total unit  
2 strength may vary throughout the implementation period (although these variations relate to  
3 smaller units below the BCT level). Troop arrival schedules at Fort Lewis from stationing and  
4 deployment, and availability of facilities for the SBCT, would affect the timing of  
5 implementing new training requirements.

- 6 • **Facility Construction/Renovation and/or Deconstruction/Demolition** – Remove facilities  
7 and infrastructure that are no longer needed, relocate facilities to support new construction,  
8 construct new facilities and infrastructure, and renovate existing facilities and infrastructure  
9 to support the new population and training activities. Construction under the proposed action  
10 would take place at Fort Lewis and at YTC.
- 11 • **Timing of Construction Projects** – Accomplish construction in phases throughout the  
12 implementation period. The timing of construction projects would be contingent upon  
13 funding availability and priorities.
- 14 • **Live-Fire Training and Maneuvers** – Provide for training for existing and new units  
15 stationed at Fort Lewis while balancing additional or different maneuver training, live-fire  
16 training, and environmental management to meet the Army’s integrated goals of maintaining  
17 military training readiness and sustaining lands for continued use. Live-fire training and  
18 maneuver activities under the proposed action would be similar to those described for the No  
19 Action Alternative. The requirements of training three SBCTs simultaneously with all other  
20 major units, however, could result in increased frequency of use of maneuver training areas  
21 and weapons firing ranges. YTC is anticipated to support most of the requirements for  
22 maneuver training at the battalion level and above.
- 23 • **Training Strategy** – Continue training under the proposed action throughout Fort Lewis and  
24 YTC in accordance with the suitability of the land for different training activities (e.g.,  
25 maneuver or live-fire) and the ability to sustain the land.
- 26 • **Environmental and Training Conditions** – Change in response to factors beyond the  
27 Army’s control, such as troop deployments, and climatic conditions, affect the  
28 implementation of training. Because environmental and training conditions are dynamic, the  
29 Army would monitor training activity under the proposed action and respond to changing  
30 conditions to sustain the land for training and provide maximum troop readiness.

## 31 **Alternative 1 — No Action Alternative**

32 The No Action Alternative serves as the baseline condition for analysis and includes those stationing  
33 decisions that have already been made by the Army, including stationing actions recommended by the  
34 2005 Base Realignment and Closure (BRAC) Commission, as well as Army GDPR actions that took  
35 place prior to 2009. The addition of upgraded SBCT facilities and approximately 1,880 GTA Soldiers, the  
36 potential stationing of CSS units, and the potential stationing of a medium CAB would not be  
37 implemented. Force structure, assigned personnel, and equipment would remain as they exist at Fort  
38 Lewis and YTC.

39 Although none of the facilities required for the new and augmented units under the GTA ROD, the  
40 potential CSS units, or the potential medium CAB would be constructed under this Alternative, a  
41 substantial number of other projects would be constructed. Fort Lewis is undergoing substantial  
42 modernization of its facilities, and many projects have been constructed recently, are being constructed,  
43 or are planned for construction. Projects include replacing outdated buildings and improving  
44 infrastructure. These actions have previously been evaluated and are not further analyzed under this EIS.

1 A variety of known projects is included in the No Action Alternative. Nonetheless, additional and yet  
2 unidentified facility construction and training activities may be required in the future to support current  
3 activities. These projects would undergo separate NEPA review before implementation in accordance  
4 with regulations and current practice.

## 5 **Alternative 2 — Take Actions Necessary to Implement GTA** 6 **Actions and Those Actions Interconnected to GTA**

7 Under this alternative, Fort Lewis would take the actions necessary to implement GTA and  
8 Transformation decisions. This alternative would require supporting the training of all three SBCTs at one  
9 time along with all support and other BCTs on Fort Lewis and YTC. In addition to the GTA unit changes,  
10 this alternative includes the proposal to house (in facilities that meet current standards), train, and supply  
11 support services for three SBCTs and all other Major Subordinate Commands on Fort Lewis and YTC.  
12 This alternative would also implement the cantonment area planned construction for FY 2010 through FY  
13 2015 as well as updating the Fort Lewis and YTC ADPs.

## 14 **Alternative 3 — All Actions under Alternative 2 and the** 15 **Addition of up to 1,000 Combat Service Support Soldiers to** 16 **Fort Lewis/YTC**

17 Under this alternative, Fort Lewis would take the necessary actions to implement GTA and  
18 Transformation decisions as identified in Alternative 2 and the actions needed for the stationing of up to  
19 1,000 CSS Soldiers and their Families at Fort Lewis and YTC. This alternative provides for the  
20 construction of facilities and the necessary live-fire and maneuver training to support the stationing of the  
21 CSS Soldiers and their Families.

## 22 **Alternative 4 — All Actions under Alternative 3 and the** 23 **Addition of the Realignment of a Medium Combat Aviation** 24 **Brigade to Fort Lewis/YTC**

25 Under this alternative, Fort Lewis would take the necessary actions to implement GTA and  
26 Transformation decisions as identified in Alternative 2, the actions needed for the stationing of up to  
27 1,000 CSS Soldiers and their Families as stated in Alternative 3, and the stationing of a medium CAB to  
28 Fort Lewis and YTC. This alternative provides for the construction of facilities and the necessary live-fire  
29 and maneuver training to support the stationing of the medium CAB Soldiers and their Families.

## 30 **AFFECTED ENVIRONMENT**

31 Fort Lewis is an 86,176-acre (34,874 hectares [ha]) military reservation located in western Washington, in  
32 Pierce and Thurston Counties, approximately 35 miles (56 km) south of Seattle and 7 miles (10 km)  
33 northeast of Olympia. Interstate 5 (I-5), which is the main transportation corridor in the Puget Sound  
34 region, runs through the installation. Fort Lewis is bordered on the north by McChord Air Force Base  
35 (AFB) and suburban and commercial development; on the east and south by rural areas, forestland, and  
36 several small communities; and on the west by Puget Sound, the Nisqually Indian Reservation, and rural  
37 areas that surround Olympia.

38 YTC is a training installation located in central Washington northeast of the City of Yakima and west of  
39 the Columbia River. YTC encompasses approximately 327,231 acres (132,426 ha) in Yakima and Kittitas









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