

ENVIRONMENTAL ASSESSMENT

Closure of Four Corners Gate

U.S. Army Garrison Fort Riley, Kansas

Approved by:


HERBERT J. ABEL
Chief, Environmental Division

Date: 17 August 2016

Approved by:


JOHN D. LAWRENCE
Colonel, US Army
Garrison Commander

Date: 17 Aug 2016

ENVIRONMENTAL ASSESSMENT
CLOSURE OF FOUR CORNERS GATE
U.S. ARMY GARRISON FORT RILEY, KANSAS

EXECUTIVE SUMMARY

The purpose of the Proposed Action is to close the Four Corners Gate and thus enable Fort Riley to return the Soldiers that currently operate that gate to mission-related activities.

Fort Riley regulates entry to its cantonments at Access Control Points (ACPs). Soldiers, Family members, civilian employees, and visitors must show valid identification to gain entrance. Fort Riley maintains eight ACPs: Henry Gate, Ogden Gate, Trooper Gate, Grant Gate, Rifle Range Road Gate, Four Corners Gate, Estes Gate, and 12th Street Gate. These gates provide controlled access through the security perimeter that protects Fort Riley's main cantonments. Fort Riley proposes to close the Four Corners Gate.

This Environmental Assessment (EA) analyzes potential environmental consequences of the Proposed Action to close the Four Corners Gate at Fort Riley. This is the Preferred Alternative. A "No Action" Alternative also is considered, and serves to illustrate the baseline condition of Fort Riley's environment. This EA analyzes the effects of each alternative to natural and cultural resources, and the sociological environment.

The Department of Defense, the Department of the Army, and the U.S. Army Garrison Fort Riley are committed to following all applicable environmental regulations while performing activities that would result from the Proposed Action. This EA was conducted in compliance with the NEPA, Council on Environmental Quality Regulations, 40 Code of Federal Regulations (CFR) 1500 et seq., and 32 CFR 651 (*Environmental Analysis of Army Actions*). Fort Riley would not initiate the Proposed Action until the garrison completed the NEPA process.

The proposed closure of the Four Corners Gate would enable the military personnel who operate the Four Corners Gate to return to mission-related duties. That outcome would enhance training and readiness. Under the Proposed Action, Fort Riley anticipates beneficial effects to the military mission. Closure of the Four Corners Gate would adversely affect three environmental elements, but those effects would remain below thresholds considered significant. The installation anticipates minor adverse effects to infrastructure and traffic, operational noise, and safety.

Under the "No Action" Alternative, Fort Riley would not close the Four Corners Gate, and ACP activities would remain at the baseline condition. A decision of "No Action" would not fully support training and readiness, and thus, the Fort Riley would forego the Proposed Action's anticipated benefit to the military mission. Therefore, the "No Action" Alternative is not favored.

ENVIRONMENTAL ASSESSMENT
CLOSURE OF FOUR CORNERS GATE
FORT RILEY, KANSAS

1.0	PURPOSE AND NEED FOR THE PROPOSED ACTION	1-1
1.1.	Scope of the Analysis.....	1-1
1.2.	Issues and Public Concerns.....	1-2
1.3.	Regulatory Compliance	1-2
2.0	ALTERNATIVES CONSIDERED	2-1
2.1.	Introduction.....	2-1
2.2.	Alternative 1 – Closure of the Four Corners Gate	2-1
2.3.	Alternative 2 – No Action.....	2-1
3.0	DESCRIPTION OF FORT RILEY	3-1
3.1.	Location	3-1
3.2.	Setting	3-1
3.3.	Topography and Geology	3-1
3.4.	Climate.....	3-3
4.0	AFFECTED ENVIRONMENT	4-1
4.1.	Environmental Elements Dismissed from Further Analysis.....	4-1
4.2.	Affected Environment.....	4-1
4.2.1.	Infrastructure and Traffic	4-1
4.2.2.	Operational Noise	4-1
4.2.3.	Safety	4-1
4.2.4.	Military Mission.....	4-2
4.2.4.1.	Fort Riley Garrison	4-2
	Overview.....	4-2
	Garrison Objectives	4-3
4.2.4.2.	1 st Infantry Division	4-3
5.0	ENVIRONMENTAL CONSEQUENCES	5-1
5.1.	Definition of Key terms	5-1
5.1.1.	Direct versus Indirect Effect	5-1

5.1.2.	Short-term versus Long-term Effect	5-2
5.1.3.	Significance.....	5-2
5.2.	Effects of Alternative 1 – Closure of the Four Corners Gate	5-3
5.2.1.	Infrastructure and Traffic	5-3
5.2.2.	Operational Noise	5-4
5.2.3.	Safety	5-4
5.2.4.	Military Mission.....	5-4
5.3.	Effects of Alternative 2 – No Action	5-4
5.3.1.	Infrastructure and Traffic	5-5
5.3.2.	Operational Noise	5-5
5.3.3.	Safety	5-5
5.3.4.	Military Mission.....	5-5
5.4.	Cumulative Effects.....	5-5
5.4.1.	Alternative 1 – Closure of the Four Corners Gate	5-5
5.4.2.	Alternative 2 - No Action	5-6
6.0	CONCLUSION	6-1
7.0	REFERENCES.....	7-1
8.0	LIST OF PREPARERS.....	8-1
9.0	DISTRIBUTION LIST	9-1

LIST OF APPENDICES

Appendix A: Acronyms Defined	A-1
------------------------------------	-----

LIST OF FIGURES

Figure 2-1 Four Corners Gate and Vicinity	2-2
Figure 3-1 Location of Fort Riley	3-2

LIST OF TABLES

Table 5-1 Anticipated Effects of the Closure of Four Corners Gate	5-3
Table 5-2 Anticipated Effects of the No Action Alternative	5-5

ENVIRONMENTAL ASSESSMENT
CLOSURE OF FOUR CORNERS GATE
FORT RILEY, KANSAS

1.0 PURPOSE AND NEED FOR THE PROPOSED ACTION

Fort Riley regulates entry to its cantonments at Access Control Points (ACPs). Soldiers, Family members, civilian employees, and visitors must show valid identification to gain entrance. Fort Riley maintains eight ACPs: Henry Gate, Ogden Gate, Trooper Gate, Grant Gate, Rifle Range Road Gate, Four Corners Gate, Estes Gate, and 12th Street Gate. These gates provide controlled access through the security perimeter that protects the main cantonments of Fort Riley.

The Four Corners Gate screens vehicular traffic seeking to pass through the security perimeter that separates Fort Riley cantonments from maneuver lands to the north. Much of the traffic passing through the Four Corners Gate is work-related, consisting of government vehicles driven by military personnel or Army civilian employees. Currently, Fort Riley uses military personnel to operate the Four Corners Gate.

Military personnel assigned to gate duty forego mission-related training, which negatively affects training and readiness. Military Commanders propose to return the military personnel that now operate the Four Corners Gate to their normal mission activities. Budget and staffing constraints would dictate closing the Four Corners Gate if that were to happen. This Environmental Assessment (EA) analyzes the anticipated effects of the Proposed Action to close the Four Corners Gate.

1.1. Scope of the Analysis

Analysis of the Proposed Action to close the Four Corners Gate constitutes the scope of this EA. The EA will identify, discuss, and analyze:

- The Proposed Action to close the Four Corners Gate,
- Positive and negative environmental effects of the Proposed Action and the No Action alternative, and
- The anticipated cumulative environmental effect of each alternative course of action.

The discussion in this EA includes the Proposed Action to close the Four Corners Gate; a No Action alternative; the local and regional environment as affected by each alternative; and results to facilitate informed decision-making. Fort Riley analyzes the potential effect of the Proposed Action alternative to natural and cultural resources, human health and safety, land use, the sociological environment, and the military mission. The EA will analyze the potential implementation effects of each alternative, and will then analyze each alternative in relation to other reasonably foreseeable actions to examine potential cumulative effects.

1.2. Issues and Public Concerns

A team of Fort Riley civilians and military personnel prepared the proposal to close the Four Corners Gate. The team developed the Proposed Action alternative during a series of planning sessions. Those sessions helped identify the alternative's environmental issues and potential public concerns, which Fort Riley analyzed in detail during the writing of this EA. Sources included Army trainers and Command, Department of Defense (DoD) civilian employees, published literature, stakeholders, and customers.

The identified issues include:

- The potential for the Proposed Action to adversely affect infrastructure and traffic,
- The potential for the Proposed Action to adversely affect operational noise, and
- The potential for the Proposed Action to adversely affect public safety.

1.3. Regulatory Compliance

As required by law, the purpose of this EA is to evaluate positive and negative environmental effects of the Proposed Action to close the Four Corners Gate. This EA complies with the National Environmental Policy Act (NEPA), Council of Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations (CFR) 1500 et seq.), and 32 CFR 651, *Environmental Analysis of Army Actions*.

The NEPA of 1969, as amended (Public Law 91-190, 42 United States Code 4321 et seq.) and implemented by the CEQ regulations, was created to prevent, eliminate, or minimize negative environmental effects from federal projects and activities during the planning stages through mitigation, avoidance, or both. Any action that could have an effect on human health, any natural system (air, water, soil, plant, animal, or other resources) or any social or economic system, upon which there is an expenditure of federal funds, must receive some level of environmental analysis to determine the effects of that action.

2.0 ALTERNATIVES CONSIDERED

2.1. Introduction

This section includes the following elements:

- A description of the process used to formulate the alternatives that were analyzed in detail,
- A description of the Proposed Action alternative and the No Action alternative, and
- The identification of the preferred alternative.

An interdisciplinary Fort Riley team formulated feasible alternatives based on: the garrison's commitment to the military mission and sustainment of the environment; guidance provided by military personnel and DoD civilians; and input from staff of the Environmental Division, Directorate of Public Works (DPW), Fort Riley. Other critical factors taken into account during the development of alternatives included public concerns and issues.

2.2. Alternative 1 – Closure of the Four Corners Gate

Under the Proposed Action, Fort Riley would close the Four Corners Gate and modify procedures at other gates to manage the anticipated changes to traffic flow and gate staffing requirements.

Fort Riley would reroute vehicle traffic between the cantonments and northern maneuver lands after the proposed closure of the Four Corners Gate. Wheeled government vehicles (including wheeled tactical vehicles) and privately owned vehicles seeking to move to and from maneuver lands would utilize Old Highway 77 and Estes Gate. Fort Riley would expand the hours of operation at Estes Gate to 24 hours per day to accommodate the anticipated traffic flow change. Tracked tactical vehicles, and some heavy equipment such as tractors, would enter northern maneuver lands via Red Trail and Gate 18C. Those vehicles would return to the cantonments via the same route. Fort Riley does not continuously staff Gate 18C; military units or civilian employees would use keys to open the gate, pass through, and then close the gate immediately (military units would control access at the gate if it were to remain open during a training exercise). Figure 2-1 shows the gates at Four Corners, Estes Road, and Gate 18C as well.

The proposed action includes a secondary modification to gate procedures at Fort Riley. The 12th Street Gate, which links Camp Funston to Kansas Highway 18, would change its procedures. The gate would remain a key entry point for commercial vehicles that Fort Riley extensively vets and searches. Privately owned vehicles would no longer be able to enter Fort Riley quickly through an expedited lane at 12th Street (privately owned vehicles could still enter through the typically much slower commercial lane). No traffic would exit Fort Riley through the 12th Street Gate under the proposed new procedures.

2.3. Alternative 2 – No Action

Under the No Action alternative, Fort Riley would not close the Four Corners Gate or modify procedures at the 12th Street Gate. Thus, traffic conditions would remain at current, or baseline, levels. The No Action alternative serves to define the existing condition of Fort Riley, and contributes to the description of the environmental baseline as is required by the CEQ.

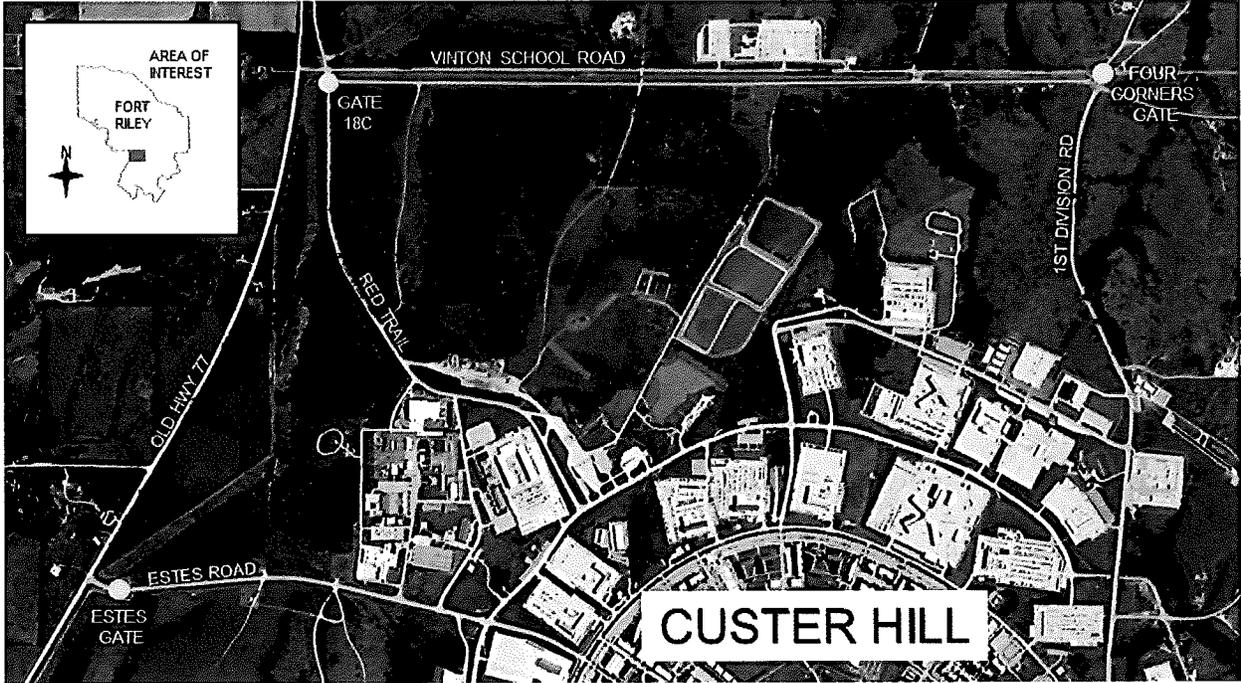


Figure 2-1 Four Corners Gate and Vicinity

3.0 DESCRIPTION OF FORT RILEY

This section describes those Fort Riley attributes that the Proposed Action would not affect. These are physical attributes such as location, setting, geology, and climate.

3.1. Location

Fort Riley is an Army garrison located in Geary, Riley, and Clay counties of northeastern Kansas (Figure 3-1) approximately 135 miles west of Kansas City and 130 miles north-northeast of Wichita.

3.2. Setting

The general character of the area surrounding Fort Riley is rural with small farm communities. Lands north of Fort Riley support row crop and cereal grain production. Lands to the south are predominantly rangeland. The Republican, Smoky Hill, and Kansas rivers form part of the southern boundary of the garrison. Milford Lake, a 15,000-acre impoundment of the Republican River, forms part of the garrison's west boundary. Fort Riley is adjacent to one sizeable community to the southwest (Junction City) and lies near another sizeable community to the east (Manhattan).

The ecoregional province in which Fort Riley lies is Prairie Parkland (temperate) (Bailey, 1995). Fort Riley's parkland system is maintained primarily by anthropogenic (human-produced) influences and, secondarily, by natural factors. The grasslands are interspersed by linear communities of woodlands, highly variable in width, that are associated with streams, other woodland plantings, relatively small, man-made water impoundments, and structures. The closer the tributary streams are to the Republican or Kansas rivers, the greater their influence on flora and fauna. The flora and fauna in some locations are further influenced by their proximity to Milford Lake.

3.3. Topography and Geology

Fort Riley lies within the Osage Plains section of the Central Lowlands physiographic province. It is bordered by the Great Plains on the west and the Ozark Plateau on the east. Elevations on Fort Riley vary from 1,025 to 1,365 feet above mean sea level. Terrain varies from alluvial bottomlands along the Republican and Kansas rivers on the southern portion of the garrison, through the hilly to steep lands in the central and east portions, to the high uplands in the north and west portions.

Fort Riley consists of three types of topographical-physiographic area: 1) high upland prairies; 2) alluvial bottomland flood plains; and 3) broken and hilly transition zones. The high upland prairies consist of alternating layers of very gently dipping (less than one degree) Permian limestone and shale. The uplands often contain various shale units that cover the escarpment-forming limestones. The cutting action of streams on the thick shale units has sculpted much of the area into a rolling plateau. Two types of alluvial bottomlands exist at Fort Riley: wide meandering floodplains of major rivers, with associated terraces; and areas created by smaller creeks and streams that cut the uplands. The transitional areas, extending from the uplands down to the valley floors are broken, sloping to steep country composed of alternating limestones and shales.

Fort Riley and Vicinity

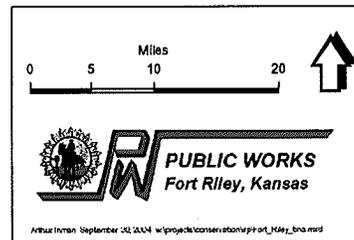
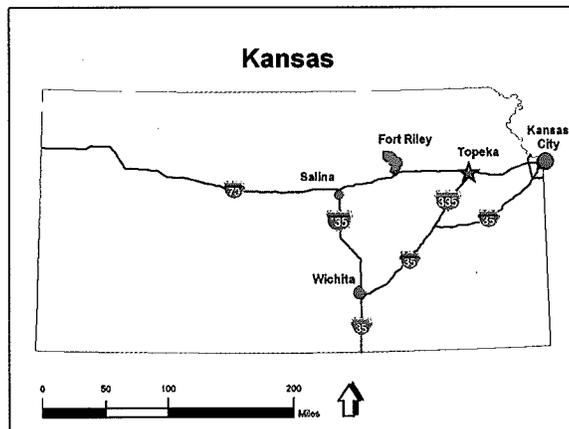
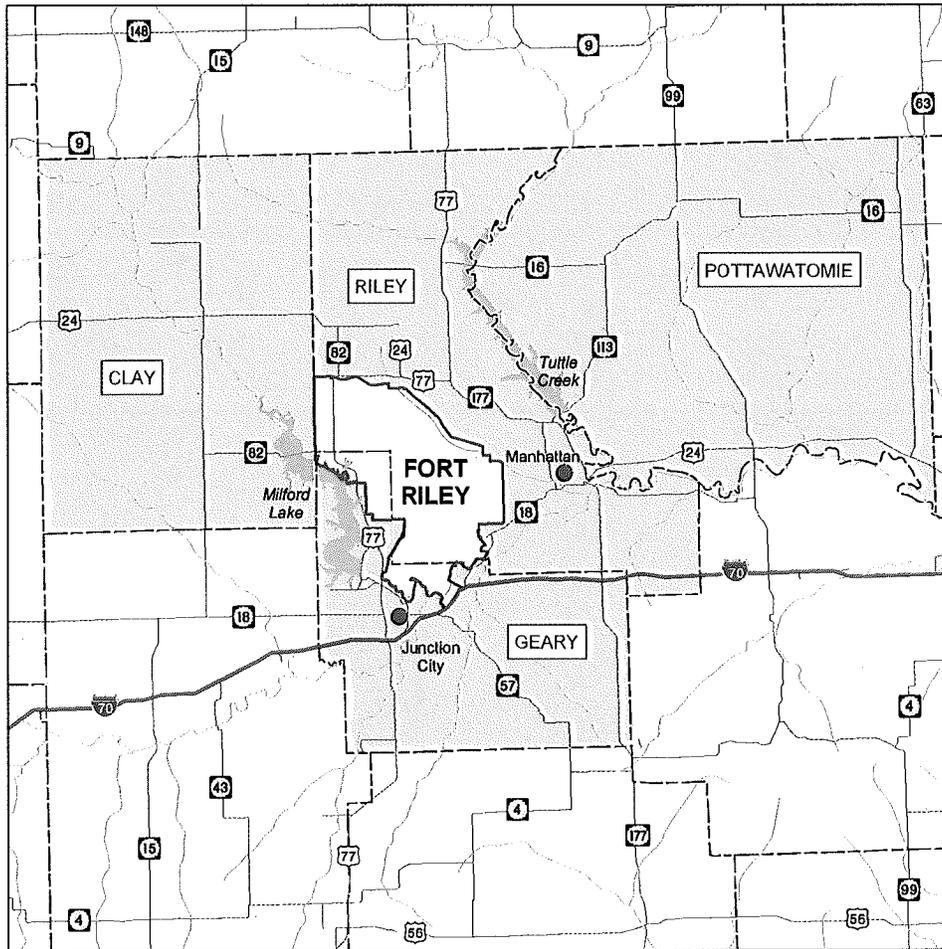


Figure 3-1 Location of Fort Riley

Fort Riley is located within an area that has the possibility of earthquakes producing moderate structural damage. A small fault located northeast of Fort Riley near Tuttle Creek Lake appears to be inactive. No other identified geologic hazards exist in the Fort Riley area.

3.4. Climate

The description of Fort Riley's climate is taken from the U.S. Department of Agriculture (USDA) soil survey for Riley County (USDA, 1975) and is based on 60- to 100-year data. Although these data were published in 1975, they continue to be reflective of the Fort Riley region. Fort Riley has a temperate continental climate characterized by hot summers, cold, dry winters, moderate winds, low humidity, and a pronounced peak in rainfall late in the spring and in the first half of summer. Prevailing winds are from the south to southwest during most of the year. During February and March, the prevailing winds are from the north.

Temperatures in the Fort Riley area vary widely and often fluctuate abruptly throughout the year. July and August are the hottest months, averaging 80° F. January is the coldest month, averaging 26° F. The average date of the last killing frost in spring is 22 April, and the average date of the first killing frost of the fall is 17 October. The area has an average of 180 frost-free days per year.

Average yearly precipitation is 31.64 inches (in.) and most of the precipitation (75%) falls within the six-month period from April through September. The three highest rainfall months (May, June, and July) each average more than 4 in. per month. Much of this precipitation occurs during severe thunderstorms, when 2 in. or more of rain may fall in one storm. December, January, and February are the driest. An average of about 22 in. of snowfall occurs annually.

Insufficient precipitation is one of the major limiting factors to plant growth at Fort Riley. Spring rains normally are adequate to recharge soil moisture before the summer months when evapotranspiration rates typically exceed precipitation rates. This is especially the case during the latter half of the summer. Soil moisture in the upper soil levels is depleted, which stresses shallow rooted plants during years of below average rainfall.

4.0 AFFECTED ENVIRONMENT

4.1. Environmental Elements Dismissed from Further Analysis

For most elements of the environment, Fort Riley anticipates negligible or no effect to the baseline condition from the proposed alternatives. Anticipated low-effect elements of the environment for this EA include land use, airspace, air quality, soils, water resources, flora and fauna (including endangered species), contaminated sites, pest management, cultural resources, protection of children, environmental justice, and the sociological environment. Thus, this EA does not describe or analyze those elements.

4.2. Affected Environment

Pursuant to 32 CFR 651, this section focuses on those elements of the environment that could potentially sustain a discernible effect from the Proposed Action. For this analysis, these environmental elements include infrastructure and traffic, operational noise, safety, and the military mission.

4.2.1. Infrastructure and Traffic

Fort Riley has 984 buildings (excluding Housing) totaling 12,550,281 square feet, and 312 miles of paved roads (Plans, Analysis, and Integration Office, FY15). The primary paved roads that connect Fort Riley's population and activity centers are Huebner Road, Trooper Drive, Henry Drive, McCormick Road, and 1st Division Road (U.S. Army Military Surface Deployment and Distribution Command, 2010). Secondary paved roads are Williston Point Road, Caisson Hill Road, Estes Road, and Rifle Range Road.

Highways that link Fort Riley to local and regional communities include Interstate 70, U.S. Highway 77, Old Highway 77, Kansas Highway 18, and Kansas Highway 114. Inbound to the Fort Riley cantonment, properly screened vehicles pass through a security perimeter at one of eight security gates.

4.2.2. Operational Noise

The noise environment created by operations at Fort Riley is similar to the noise environment at many other Army garrisons. Noise falls in two basic categories: noise from military training and noise from community activities. Fort Riley military training noise with the potential to cause annoyance most often results from large caliber weapons firing, demolitions, and rotary-wing aircraft operations. Noise from small arms firing at Fort Riley has little potential to cause annoyance in local communities. Fort Riley community activities that produce noise include construction and demolition, industrial processes, and traffic.

4.2.3. Safety

The Army provides service-wide oversight for safety through its Army Safety Office (ASO), commanded by the Director of Army Safety (DASAF). For all safety matters, the DASAF is the principal advisor to the Secretary of the Army (SA), the Chief of Staff, Army (CSA), and Headquarters, Department of Army (DA) unified staff. Additionally, the DASAF directs the Army Safety Program and serves as the Army's primary advocate for Composite Risk Management (CRM).

The Army Safety Program encompasses several spheres of mission support: military training, work-related activities, and recreation associated with the Army or its lands. Aspects of the

program often apply to personnel while on- or off-duty, or on- or off-post. Thus, the Army Safety Program regulates safety not only for Soldiers, but for government employees, contractors, and the public as well. To ensure safety, the Army uses the CRM process to identify, assess, and control risk arising from operational factors, and to make decisions that balance risk cost with mission benefits.

Fort Riley implements the Army Safety Program through its Garrison Safety Office (GSO). The Fort Riley GSO provides Army safety policy, programs, and expertise to military units and garrison organizations on post. The garrison follows safety guidelines established by Army Regulation (AR) 385-10, *The Army Safety Program* and DA Memo 385-3, *HQDA MACOM Safety Program*.

4.2.4. Military Mission

An element of the affected environment is Fort Riley's mission. The Army separates garrison activities from military training and readiness activities at its posts in order to ensure the constancy of management and funding priorities for each entity. The Installation Management Command (IMCOM) directs garrison activities and U.S. Army Forces Command (FORSCOM) directs the training and readiness mission.

4.2.4.1. Fort Riley Garrison

Overview

Fort Riley is a permanent U.S. Army garrison that exists in support of, principally, the 1st ID. Its basic function is to ensure that the 1st ID and other mission units have the training resources and facilities needed to meet their mission requirements. Wide ranges of activities occur on a regular basis at Fort Riley to conduct and support the military mission. Many "ongoing activities" are essentially public works and commercial service functions required to allow people to live and work on the garrison. Many of these activities are similar to those conducted in any non-military community of equal size, and include the following types:

- Administrative operations;
- Facilities repair, maintenance, construction, and alteration;
- Fuel storage and dispensing;
- Grounds maintenance;
- Hospital, medical, and dental clinic operations;
- Garrison and community support services;
- Natural and cultural resources management and environmental protection;
- Recreation;
- Road and right-of-way maintenance;
- Utility operations including infrastructure maintenance, repair, construction, and alteration;
- Warehousing and supply storage; and

- Vehicle and equipment maintenance or repair.

Garrison Objectives

The IMCOM has established a series of objectives for Fort Riley. Those objectives most pertinent to this EA are well-being, stewardship, and mission support. Wellness on Fort Riley consists of morale, welfare, and recreation. The aspect of well-being most relevant to the Proposed Action is that the garrison will “provide...safe environment in which to live, work, train and visit”. One of the stewardship objectives is to meet all U.S. Army environmental goals. One of the critical mission support objectives of the Fort Riley garrison is to “actively participate in mission needs development”. Others are to support the 1st ID and other mission units in meeting contingency requirements, deployments, and participation in Army Transformation.

4.2.4.2. 1st Infantry Division

1st Infantry Division and Fort Riley build and maintain combat ready forces; on order deploys these forces in an expeditionary manner to conduct Decisive Action to fight and win in complex environments as members of a Joint, Inter-organizational, and Multinational (JIM) team.

Two maneuver brigades: 1st Brigade, 1st ID; and 2nd Brigade, 1st ID; as well as the 1st Sustainment Brigade and the Combat Aviation Brigade (CAB), 1st ID; and the 1st ID Division Artillery; report to and receive guidance from the Commanding General (CG), 1st ID. They will, on order, deploy with or without equipment, build combat power, conduct military operations in support of the full range of worldwide contingency operations, and then redeploy. These organizations conduct the preponderance of their training at Fort Riley.

5.0 ENVIRONMENTAL CONSEQUENCES

During the planning and assessment phase of this project, Fort Riley developed alternative courses of action to fully investigate potential environmental effects of the Proposed Action:

- Closure of the Four Corners Gate (preferred alternative), and
- No Action.

This section describes probable consequences (effects) of both alternatives on selected environmental resources and associated attributes. The resources and their attributes that are assessed are those directly linked to the relevant issues listed in Section 1.0, *Purpose and Need*.

Effects are changes from the current situation. The expected changes are described in quantitative and qualitative terms to aid in evaluating and contrasting the alternatives. The degree of change is described in terms of significance, duration and magnitude. The section includes discussion of:

- Direct effects and their significance.
- Indirect effects and their significance.
- Cumulative effects and their significance.
- Long- and short-term effects.
- Unavoidable effects and any mitigation measures that would be implemented.
- Possible conflicts between the Proposed Action and the objectives of federal, regional, state, and local land use plans, policies and controls for Fort Riley.
- Any irreversible and irretrievable resource commitments.

The Environmental Consequences section is the scientific and analytical basis for comparison of the alternatives. The Army will use the information in this section to help determine which of the identified alternatives will be implemented.

Section 5.0 is organized by alternative, and the effect associated with each alternative. Resource effect assessment matrices have been included near the beginning of each subsection to summarize the effect of proposed actions and related alternatives. The reader should refer to the text narrative for information regarding the specific nature and extent of effect illustrated in these generalized summary matrices. The presence of effect, however, does not necessarily equate to significant effect. Effect can be minor and localized and not rise to the level of significance. Significance is determined based on magnitude and duration.

Each "Alternative" section is divided into subsections evaluating effects to natural resources related attributes (abiotic and biotic), cultural resources, the sociological environment, and the military mission.

5.1. Definition of Key terms

5.1.1. Direct versus Indirect Effect

The terms consequences, impact and effect are synonymous as used in this EA. Effect may be determined to be beneficial or adverse, and may apply to the full range of natural, aesthetic, historic, cultural, and economic resources of the garrison and its environs. Where applicable, effect may be classified as direct or indirect. Definitions and examples of direct and indirect

effect as used in this document are as follows:

- **Direct Effect.** *A direct effect is caused by the Proposed Action, and occurs at the same time and place.* For example, loss of tree cover would be classified as a direct effect associated with construction of a new building on an existing woodland site.
- **Indirect Effect.** *An indirect effect is caused by the Proposed Action and is later in time or farther removed in distance, but still reasonably foreseeable.* Indirect effect may include induced changes in the pattern of land use, population density or growth rate, and related effects on air, water, and other natural and social systems. Referring to the direct effect described above, the clearing of trees for new development may have an indirect effect on area streams by increasing the amount of soil erosion and sediment that reaches these streams during construction.

5.1.2. Short-term versus Long-term Effect

In addition to indicating whether effect is direct or indirect, the environmental consequence analysis also distinguishes between short-term and long-term effect. In this context, short-term and long-term do not refer to any rigid time period and are determined on a case-by-case basis. In cases where both short-term and long-term effect is expected, the effect evaluation matrices generally illustrate the long-term consequences. Referring to the direct and indirect effect examples described above, the clearing of trees on a new construction site would be classified as a long-term effect, while erosion and siltation in nearby streams during the construction period would be classified as a short-term effect.

5.1.3. Significance

The term “significant”, as defined in Paragraph 1508.27 of the regulations for implementing NEPA (CEQ 40 CFR 1500 et seq.), requires consideration of both the context and intensity of the effect evaluated. Significance can vary in relation to the context of the Proposed Action, and thus the significance of an action must be evaluated in several contexts and this varies with the setting of the Proposed Action. For example, context may include consideration of effects on a national, regional, and/or local basis depending upon the action proposed. Both short-term and long-term effects may be relevant.

In accordance with Paragraph 1508.27 of the regulations and the CEQ implementing guidance, effect also is evaluated in terms of its intensity or severity. Factors contributing to the evaluation of the intensity of an effect include, but are not limited to:

- The degree to which the action affects public health or safety.
- Unique characteristics of the geographic area where the action is proposed such as proximity to parklands, historic or cultural resources, wetlands, prime farmlands, wild and scenic rivers, or ecologically critical areas.
- The degree to which the effects on the quality of the human environment are likely to be controversial.
- The degree to which the effects of the action on the quality of the human environment are likely to be highly uncertain or involve unique or unknown risks.
- The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.
- Whether the action is related to other actions with individually insignificant but

cumulatively significant effect. Significance exists if it is reasonable to anticipate a cumulatively significant effect on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

- The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places (NRHP) or may cause loss or destruction of significant scientific, cultural, or historical resources.
- The degree to which the action may adversely affect an endangered or threatened species, or its habitat, that was determined to be critical under the Endangered Species Act of 1973.
- Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment.

An Environmental Impact Statement (EIS) would be required if it is determined, as part of this EA, that the alternative chosen for implementation would create significant effect. The EIS would investigate effect in more detail as well as identify mitigation strategies designed to minimize effect.

5.2. Effects of Alternative 1 – Closure of the Four Corners Gate

Fort Riley anticipates beneficial effects to the military mission that remain below threshold levels considered significant under the Proposed Action (Table 5-1). The proposed closure of the Four Corners Gate would adversely affect three local environmental elements, but those effects would also remain below threshold levels considered significant. The garrison anticipates minor adverse effects to infrastructure and traffic, operational noise, and safety.

Implementation of the Proposed Action would support Fort Riley's mission to provide for operational readiness. The Proposed Action would not compromise the commitment of Fort Riley to maintain, protect, and improve human health and welfare; and to protect and enhance biological communities, particularly those of sensitive, rare, threatened and endangered species. Therefore, the Proposed Action is the preferred alternative. Discussion of specific resource areas and environmental consequences under the Proposed Action follows.

Table 5-1 Anticipated Effects of the Closure of Four Corners Gate

	Direct Effects	Indirect Effects	Short-Term Effects	Long-Term Effects
Infrastructure and Traffic	-	-	-	-
Operational Noise	-	-	-	-
Safety	-	-	-	-
Military Mission				
1 st Infantry Division	+	+	+	+
Fort Riley Garrison	-	-	-	-
Effect expected: (+) positive (-) negative (0) none				

5.2.1. Infrastructure and Traffic

Fort Riley anticipates minor, direct and indirect, short and long-term adverse effects to traffic

under the Proposed Action. The proposed closure of the Four Corners Gate would increase traffic on Old Highway 77 and at the Estes Gate as wheeled vehicles that once used the Four Corners Gate would adjust their routes (Directorate of Emergency Services, FY16). Combined inbound and outbound traffic on Old Highway 77 could increase by about 300 to 350 vehicles per day on high-traffic days. The proposed changes at the 12th Street Gate would divert privately owned vehicle traffic to other gates (Directorate of Emergency Services, FY16). Fort Riley anticipates that for combined inbound and outbound traffic, about 900 more privately owned vehicles per day on high-traffic days would use Ogden Gate or Henry Gate if the 12th Street Gate were no longer available.

Outcomes of the Proposed Action could mean longer wait times and longer traffic lines at the Estes, Ogden, and Henry Gates during peak travel times. Traffic on Old Highway 77, on Riley Street in Ogden, and at the Henry Drive exit at Interstate 70 (Exit 301) would increase, most notably during peak travel times.

5.2.2. Operational Noise

Fort Riley anticipates minor, direct and indirect, short and long-term adverse effects to operational noise under the Proposed Action. Traffic patterns would change, and some local roadways would carry more wheeled vehicle traffic. Traffic increases would produce higher frequencies of vehicular noise events. Community annoyance could occur where there are residential noise receptors along Old Highway 77 and Riley Street in Ogden.

5.2.3. Safety

Fort Riley anticipates minor, direct and indirect, short and long-term adverse effects to safety under the Proposed Action. Emergency response time to some of Fort Riley's Training Areas could increase under the Proposed Action.

5.2.4. Military Mission

Overall, Fort Riley anticipates minor, direct and indirect, short-term and long-term beneficial effect to the 1st ID under the Proposed Action. The proposed closure of the Four Corners Gate would enable the military personnel who operate the Four Corners Gate to return to mission-related duties.

Closing the Four Corners Gate would trigger a few minor adverse effects for the 1st ID and the garrison. The Proposed Action would eliminate a contiguous and convenient pathway between northern maneuver lands and the cantonments. Units would have to shoulder the responsibility for operating Gate 18C during training exercises. National Guard and Reserve units billeting at Camp Funston would have longer drive times to reach northern maneuver lands.

5.3. Effects of Alternative 2 – No Action

Under the No Action alternative, Fort Riley would not close the Four Corners Gate. Fort Riley anticipates that the No Action alternative would yield adverse effects to the military mission (Table 5-2). The No Action alternative would fail to allow the military personnel who operate the Four Corners Gate to return to mission-related activities. Thus, the No Action alternative would not enhance the capability of Fort Riley to accomplish its mission. Implementation of the No Action alternative is not favored.

Table 5-2 Anticipated Effects of the No Action Alternative

	Direct Effects	Indirect Effects	Short-Term Effects	Long-Term Effects
Infrastructure and Traffic	0	0	0	0
Operational Noise	0	0	0	0
Safety	0	0	0	0
Military Mission				
1 st Infantry Division	-	-	-	-
Fort Riley Garrison	0	0	0	0
Effect expected: (+) positive (-) negative (0) none				

5.3.1. Infrastructure and Traffic

Fort Riley anticipates no effect to infrastructure and traffic under the No Action alternative, because garrison activities with the potential to effect traffic would remain at the baseline level.

5.3.2. Operational Noise

Fort Riley anticipates no effect to operational noise under the No Action alternative, because garrison activities with the potential to effect noise would remain at the baseline level.

5.3.3. Safety

Fort Riley anticipates no effect to safety under the No Action alternative, because garrison activities with the potential to effect safety would remain at the baseline level.

5.3.4. Military Mission

Fort Riley anticipates minor, direct and indirect, short-term and long-term adverse effect to the military mission under the No Action alternative. The No Action alternative would fail to allow the military personnel who operate the Four Corners Gate to return to mission-related activities.

Gate duty is not the primary mission of the military units that would continue to staff the Four Corners Gate. Commanders would have less than optimal conditions for achieving their training objectives while short of personnel assigned to the Four Corners Gate. That outcome would not support the mission of the 1st ID, and would not contribute to the viability of Fort Riley as a training center in the future.

5.4. Cumulative Effects

A cumulative effect is defined as an effect on the environment that results from the incremental effect of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place locally or regionally through time.

5.4.1. Alternative 1 – Closure of the Four Corners Gate

The Proposed Action is consistent with Fort Riley's mission to provide training and operational readiness in defense of the Nation. The closure of the Four Corners Gate would allow military units to focus on their primary missions by relieving those units of a requirement to provide Soldiers for gate duty. Ultimately, that outcome would contribute to the viability of Fort Riley as

a training facility over the long term.

The Proposed Action to close the Four Corners Gate; in combination with other Army actions to support, train, and deploy effective fighting forces; is expected to result in a cumulative, long-term beneficial effect to the military mission.

No other actions that would individually generate minor or moderate effects, that could combine to generate significant effects, are foreseeable.

5.4.2. Alternative 2 - No Action

The No Action alternative is inconsistent with Fort Riley's mission to provide training and operational readiness in defense of the Nation. The implementation of the No Action alternative would fail to allow the military personnel who operate the Four Corners Gate to return to mission-related activities. Ultimately, that outcome would not support the training mission of the 1st ID, and would not contribute to the long-term viability of Fort Riley as a military facility.

Fort Riley anticipates no beneficial cumulative effects under the No Action alternative. Anticipated cumulative benefits from the Proposed Action (preferred alternative) to the military mission would not occur under the No Action alternative. The garrison anticipates no cumulative adverse effects under the No Action alternative.

6.0 CONCLUSION

This EA was conducted in compliance with the NEPA CEQ Regulations, 40 CFR 1500 et seq., and 32 CFR 651 (*Environmental Analysis of Army Actions*). The results of this EA indicate the following conclusions:

The Proposed Action to close the Four Corners Gate is consistent with the garrison's mission to provide training and operational readiness in defense of the Nation. The Proposed Action does not compromise the commitment of Fort Riley to maintain, protect, and improve human health and welfare; and to protect and enhance biological communities, particularly sensitive, rare, threatened and endangered species. The anticipated absorption of minor adverse effects to infrastructure and traffic, operational noise, and safety would enable Fort Riley to realize the anticipated beneficial effect to the military mission. Therefore, the Proposed Action is the preferred alternative.

Under the No Action alternative, Fort Riley would not close the Four Corners Gate. That outcome would not support Fort Riley's efforts maximize the number of Soldiers assigned to their primary missions. Ultimately, implementation of the No Action alternative would not enhance the viability of Fort Riley as a long-term military facility. The garrison anticipates that the No Action alternative would result in adverse effects to the military mission. Thus, a decision to implement the No Action alternative is not in the best interest of Fort Riley, the surrounding community, and the Nation.

Fort Riley anticipates that no significant environmental effects would result from the Proposed Action, and thus, preparation of an EIS is not required. Therefore, a Finding of No Significant Impact (FNSI) and a Notice of Availability (NOA) have been prepared for this action.

7.0 REFERENCES

Bailey, R.G. 1995. *Descriptions of the Ecoregions of the United States*. 2d ed. Rev and expanded. Misc. Publ. No. 1391. U.S. Department of Agriculture, Forest Service, Washington, D.C.

U.S. Army, Fort Riley, Kansas, - Directorate of Emergency Services. 2016. *Traffic Study* (June 2016).

U.S. Army, Fort Riley, Kansas, - Directorate of Plans, Analysis, and Integration. 2015. *Economic Impact Summary* (1 Oct 14 – 30 Sep 15).

U.S. Army Military Surface Deployment and Distribution Command. 2010. *Fort Riley, Kansas. Basewide Transportation Study*. Prepared by Gannett Fleming.

U.S. Department of Agriculture - Soil Conservation Service. 1975. *Soil Survey of Riley County and Part of Geary County, Kansas*.

8.0 LIST OF PREPARERS

Herbert J. Abel
Chief, Environmental Division
Fort Riley Directorate of Public Works

William J. Watson
Chief, Engineering Resource Management Division
Fort Riley Directorate of Public Works

Alan E. Hynek
Branch Chief, Conservation Branch
Fort Riley Directorate of Public Works

B. Craig Phillips
Branch Chief, Pollution Prevention and Cleanup Branch
Fort Riley Directorate of Public Works

Harry F. Hardy, Jr.
Senior Attorney and Environmental Law Attorney
Office of the Staff Judge Advocate

Theresa A. de la Garza
Historic Architect
Fort Riley Directorate of Public Works

Fiona K. Price
Archeologist
Fort Riley Directorate of Public Works

Mike Houck
Threatened and Endangered Species Biologist
Fort Riley Directorate of Public Works

Monte A. Metzger
NEPA Coordinator
Fort Riley Directorate of Public Works

9.0 DISTRIBUTION LIST

Kansas Department of Wildlife, Parks and Tourism
Chris Berens, Environmental Services Section
Kansas Department of Wildlife, Parks and Tourism
512 SE 25th Ave
Pratt, KS 67124

United States Fish and Wildlife Service
Jason Luginbill
Field Supervisor
U. S. Fish and Wildlife Service
2609 Anderson Avenue
Manhattan, Kansas 66502-2801

Kansas Biological Survey
Kelly Kindscher, Asst. Scientist
The University of Kansas
2041 Constant Ave.
Lawrence, Kansas 66047-2906

Natural Resources Conservation Service
Eric B. Banks
State Conservationist
760 S. Broadway
Salina, KS 67401-4642

U.S. EPA Region 7
Mark J. Hague, Regional Administrator
11201 Renner Blvd
Lenexa, KS 66219

Kansas Forest Service
Larry Biles, State Forester
2610 Claflin Rd.
Manhattan, KS 66502

Kansas Department of Health and Environment
Susan Mosier, Secretary
1000 SW Jackson, Suite 540
Topeka, KS 66612

Kansas Department of Agriculture
Jeff Vogel, Administrator
Plant Protection & Weed Control Program
1320 Research Park Drive
Manhattan, KS 66502

State Historic Preservation Office
Jennie Chinn
State Historic Preservation Officer
Kansas State Historical Society
6425 Southwest 6th Ave.
Topeka, KS 66615-1099

Riley County Planning and Development
Monty Wedel, AICP, Planning and Special Projects Director
110 Courthouse Plaza
Manhattan, KS 66502

Junction City/Geary County Planning & Zoning
David L. Yearout, AICP, Director
700 North Jefferson P.O. Box 287
Junction City, KS 66441

Randy Teboe
Tribal Historic Preservation Officer
Ponca Tribe of Nebraska
PO Box 288
Niobara, NE 68760

Andrew Knifechief
Tribal Historic Preservation Officer
Pawnee Nation of Oklahoma
PO Box 470
Pawnee, OK 74058

Halona Clawson
Tribal Historic Preservation Officer
Ponca Tribe of Oklahoma
Tribal Affairs Building
20 White Eagle Drive
Ponca City, Oklahoma 74601

Dr. Andrea Hunter
Director
The Osage Nation Historic Preservation Office
627 Grandview Avenue
Pawhuska, Oklahoma 74056

Crystal Douglas
Tribal Historic Preservation Officer
Kaw Nation of Oklahoma
Drawer 50
Kaw City, Oklahoma 74641

Steven Vance
Tribal Historic Preservation Officer
Cheyenne River Sioux Tribe
CRST Preservation Office
PO Box 590
Eagle Butte, SD 57625

Amie Tah-Bone
Tribal Historic Preservation Officer
Kiowa Tribe of Oklahoma
100 Kiowa Way
PO BOX 369
Carnegie, OK 73015

Galen Springer
Tribal Historic Preservation Officer
Otoe-Missouria Tribe of Oklahoma
8151 Hwy 177
Red Rock, OK 74651

Gary McAdams
Tribal Historic Preservation Officer
Wichita and Affiliated Tribes
P.O. Box 729
Anadarko, OK 73005

Kevin Burnison
Tribal Historic Preservation Officer
Sac & Fox Nation of Missouri in Kansas and Nebraska
305 N. Main Street
Reserve, KS 66434

Fred Thomas
Tribal Historic Preservation Officer
Kickapoo Tribe in Kansas
1107 Oldfitch Road
Horton, KS 66439

Hattie Mitchell
Tribal Historic Preservation Officer
Prairie Band Potawatomi Nation
16281 Q Road
Mayetta, KS 66509

Appendix A: Acronyms Defined

ACP	Access Control Point
ASO	Army Safety Office
CAB	Combat Aviation Brigade
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CG	Commanding General
CRM	Composite Risk Management
CSA	Chief of Staff, Army
DA	Department of the Army
DASAF	Director of Army Safety
DoD	Department of Defense
DPW	Directorate of Public Works
EA	Environmental Assessment
EIS	Environmental Impact Statement
FNSI	Finding of No Significant Impact
FORSCOM	U.S. Army Forces Command
FY	Fiscal Year
GSO	Garrison Safety Office
ID	Infantry Division
IMCOM	Installation Management Command
JIM	Joint, Inter-organizational, and Multinational
NEPA	National Environmental Policy Act
NOA	Notice of Availability
NRHP	National Register of Historic Places
SA	Secretary of the Army
USDA	U.S. Department of Agriculture