

January 2009

# DEFENSE INFRASTRUCTURE

Army's Approach for  
Acquiring Land Is Not  
Guided by Up-to-Date  
Strategic Plan or  
Always  
Communicated  
Effectively



GAO

Accountability \* Integrity \* Reliability



Highlights of [GAO-09-32](#), a report to congressional requesters

## Why GAO Did This Study

Recently, the Army forecast that it would experience a 4.5-million-acre training land shortfall by 2013 and proposed to purchase additional land adjacent to certain existing training ranges. In response to a congressional request, GAO reviewed the Army's approach for acquiring training land. This report (1) evaluates the Army's approach to the acquisition of training land, (2) describes the Army's consideration of alternatives and assessment of the environmental and economic effects, and (3) analyzes the Army's effectiveness in communicating its approach for making decisions to pursue these acquisitions before the Office of the Secretary of Defense's (OSD) approval. GAO reviewed the Army strategic plan for training lands and other relevant documents, and focused on all five land acquisitions since 2002 at Fort Irwin, California; three training sites in Hawaii; and the proposed expansion of the Piñon Canyon Maneuver Site in Colorado.

## What GAO Recommends

GAO recommends that (1) the Army develop and implement a process to update periodically its strategic plan for training ranges to reflect current needs and (2) OSD and the Army jointly review their strategies for communicating major land acquisitions and agree on a common practice that would address concerns about early disclosure and provide the Army and the other services some flexibility to engage the public. DOD generally agrees with the recommendations.

To view the full product, including the scope and methodology, click on [GAO-09-32](#). For more information, contact Brian J. Lepore at (202) 512-4523 or [leporeb@gao.gov](mailto:leporeb@gao.gov).

## DEFENSE INFRASTRUCTURE

### Army's Approach for Acquiring Land Is Not Guided by Up-to-Date Strategic Plan or Always Communicated Effectively

#### What GAO Found

The Army has established an extensive, analytical approach to making decisions regarding training land acquisitions, but has not ensured that its strategic plan remains current. The Army's approach uses as its basis a strategic plan for training ranges and an analytically based range requirements model. In addition, the Army has a process during which training land shortfalls and capabilities are analyzed in multiple ways, by multiple parties, and at multiple times. However, the Army has not updated its strategic plan since it was developed in 2004. As a result, new initiatives that affect training land needs, such as base realignment and closure actions, are not explained in the plan. This is because the Army does not have a mechanism to ensure that the strategic plan is updated at regular intervals to reflect up-to-date training land requirements resulting from new initiatives. As a result, the training land needs articulated in the strategic plan are now 4 years out of date.

To support the Army's requests to pursue major land acquisitions to support training, it conducted initial conceptual analyses in which it identified potential alternatives and assessed environmental and economic effects of its proposed land acquisitions at Fort Irwin, three sites in Hawaii, and Piñon Canyon Maneuver Site. After OSD approved the Army's land acquisition proposals, the National Environmental Policy Act of 1969 and Council on Environmental Quality regulations required the Army to conduct additional assessments, which it did at Fort Irwin and in Hawaii. The Consolidated Appropriations Act, 2008, stated that none of the funds made available in the act may be used for the expansion of the Piñon Canyon Maneuver Site. Army officials stated that they did not start the National Environmental Policy Act process at Piñon Canyon because of uncertainly over congressional support for the expansion and redirected their efforts to respond to the National Defense Authorization Act for Fiscal Year 2008, which required the Army to submit a report containing an analysis of the existing facilities at Fort Carson and Piñon Canyon. The Army delivered the required report in July 2008.

Because of a lack of specificity in OSD and Army communication strategies, the Army has not been consistent or always effective in communicating its approach to acquire training land. According to OSD's policy, no major land acquisition proposal may be made public through official notice until OSD has approved the acquisition. The policy is unclear what public notification, such as informal community outreach, is permissible prior to approval. While the Army's strategic plan emphasizes that it is important to engage the public early in the process, it lacks specificity as to when and in what form this outreach should take place. In California and Hawaii, the Army followed the strategy articulated in its plan, openly explaining why it was acquiring land, which helped ease the start of the acquisition process. Army officials and community groups said that the Army did not adequately explain its reasoning for the proposed expansion at Piñon Canyon. In this case, the public at times relied on rumors and leaked documents. These information sources often did not provide clear, complete, or accurate data. Without a consistent and clear DOD-wide practice that both addresses concerns about early disclosure of land acquisitions and permits some flexibility to engage the public, the Army and other services are likely to experience communication problems similar to those encountered at Piñon Canyon.

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## **Abbreviations**

|      |                                    |
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| BRAC | base realignment and closure       |
| DOD  | Department of Defense              |
| OSD  | Office of the Secretary of Defense |

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United States Government Accountability Office  
Washington, DC 20548

January 13, 2009

The Honorable Solomon P. Ortiz  
Chairman  
The Honorable J. Randy Forbes  
Ranking Member  
Subcommittee on Readiness  
Committee on Armed Services  
House of Representatives

The Honorable Mark Udall  
United States Senate

The Honorable Elizabeth Helen Markey  
House of Representatives

In a July 2008 mandated report, the Army forecast that it would experience a 4.5-million-acre training land shortfall by 2013.<sup>1</sup> This forecast followed decades of reports by Army officials that the Army faces increasing difficulties carrying out realistic training at military installations and training ranges—the land and air space used for live fire and maneuver training—due to encroachment and emerging capabilities of new weapons systems that require additional land for training. As one way to address the increasing training land shortfall, the Army proposed to expand certain training areas by acquiring, through purchase or lease, additional land adjacent to existing training ranges in cases where the Army found expansion to be feasible, affordable, and compatible with mission goals and environmental conditions and requirements. However, the Army's efforts to acquire land have often been met with opposition from landowners and groups who questioned the basis for pursuing land expansions.

In 1989 and 1991, we reported that the Army pursued land acquisitions without a rational strategy and instead made acquisition decisions on the basis of targets of opportunity, such as the availability of land for sale, making it difficult for the Army to justify its land acquisitions to Congress

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<sup>1</sup>Department of the Army, *Department of the Army Response to the National Defense Authorization Act 2008; Section 2829: Report on Utilization and Potential Expansion of Army Operational Ranges* (Washington, D.C., July 24, 2008).

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and the public.<sup>2</sup> Subsequently, the Army Audit Agency reiterated the findings in our reports and the Rand Arroyo Center recommended that the Army publish a national land strategy.<sup>3</sup> In September 1990, the Office of the Secretary of Defense (OSD) issued a departmentwide moratorium on major land acquisitions—those exceeding 1,000 acres or costing more than \$1 million—for installations in the United States<sup>4</sup> and updated and provided further instruction on the moratorium in October 1993, December 1994, November 2002, and July 2005.<sup>5</sup> OSD’s memorandum was also incorporated into the Department of Defense (DOD) guidance in January 2005.<sup>6</sup> Waivers to this moratorium may be granted by OSD on a case-by-case basis. After a waiver to this moratorium is granted and before the final decision to acquire the land, the department must ensure compliance with applicable provisions of the National Environmental

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<sup>2</sup>GAO, *Army Training: Need to Improve Assessments of Land Requirements and Priorities*, [GAO/NSIAD-90-44BR](#) (Washington, D.C.: Dec. 1, 1989) and *Army Training: Various Factors Create Uncertainty About Need for More Land*, [GAO/NSIAD-91-103](#) (Washington, D.C.: Apr. 22, 1991).

<sup>3</sup>Army Audit Agency, *Real Estate Acquisitions, Audit Report: AA 98-92* (Alexandria, Va., Mar. 9, 1998) and RAND Arroyo Center, *Does the Army Have a National Land Use Strategy?* (Washington, D.C., 1999).

<sup>4</sup>OSD’s policy currently states that the moratorium does not apply to civil works programs managed by the U.S. Army Corps of Engineers; renewals of existing leases, withdrawals, permits, or other use agreements (other than those at bases being closed or realigned); or the acquisition of a negative, nonpossessory easement by a military department using the authority granted by Section 2684a of Title 10, U.S. Code.

<sup>5</sup>Secretary of Defense, *Land Acquisition and Leasing of Office Space in the United States* (Washington, D.C., Sept. 13, 1990) and *Land Acquisition and Leasing of Office Space in the United States* (Washington, D.C., Nov. 17, 2002). The policy requires that major land acquisition proposals and their public disclosure must be approved by the Secretary of Defense or the Deputy Secretary of Defense. Also, the Under Secretary of Defense for Acquisition, Technology, and Logistics may approve major land acquisitions proposals inside the Washington, D.C. area (generally the geographic area that falls within 100 miles of the Pentagon) and their public disclosure.

<sup>6</sup>DOD Instruction 4165.71, *Real Property Acquisition* (Washington, D.C., Jan. 6, 2005). Section 6.1 states: “Proposals for [major land acquisitions] must be approved by the Under Secretary of Defense for Acquisition, Technology, and Logistics prior to any public announcement, request for proposals, notice of intent to perform environmental analysis, request for legislation or budget item, press release, or other official notice, in accordance with the Secretary of Defense memorandum.”

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Policy Act of 1969,<sup>7</sup> and the Congress must appropriate the funds for the acquisition. Since the moratorium was updated in 2002, the Army has obtained OSD waiver approval to undertake four major training land acquisitions—involving the National Training Center at Fort Irwin, California, and three sites in Hawaii known as the South Range, West Pohakuloa Training Area, and Parcel 1010. Army officials said that the Army has acquired parcels of land at these four locations. Also, in February 2007, the Army announced that OSD had granted a moratorium waiver and that the Army could pursue a fifth acquisition—expansion of the existing 235,300-acre training range, known as the Piñon Canyon Maneuver Site, near Fort Carson, Colorado, by an additional 418,577 acres. This potential expansion has drawn criticism from some affected landowners and interest groups and, in July 2008, the Army reported that it planned to limit the potential expansion of the maneuver site to 100,000 acres instead of the initially proposed area.<sup>8</sup>

In response to your request, we reviewed the Army's approach for acquiring training land and focused on the Army's approach to obtaining OSD waiver approval in four recent major acquisitions at Fort Irwin and in Hawaii and the potential expansion of the Piñon Canyon Maneuver Site. This report (1) evaluates the Army's approach for making decisions regarding the acquisition of training land, (2) describes the Army's consideration of alternatives and assessment of the environmental and economic effects of acquiring training land, and (3) analyzes the Army's effectiveness in communicating to Congress and the public the approach used for making decisions to pursue these acquisitions prior to OSD moratorium waiver.

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<sup>7</sup>The National Environmental Policy Act of 1969, codified as amended at 42 U.S.C. § 4321-4347, establishes environmental policies and procedures that shall be followed by all federal agencies to the fullest extent possible. In accordance with these requirements and the regulations for implementing the National Environmental Policy Act of 1969 established by the Council for Environmental Quality, agencies typically evaluate the likely environmental effects of a project they are proposing to undertake with an environmental assessment and/or environmental impact statement.

<sup>8</sup>Department of the Army, *Department of the Army Response to the National Defense Authorization Act 2008; Section 2831(a): Report on the Piñon Canyon Maneuver Site, Colorado* (Washington, D.C., July 18, 2008). Section 2831(b) of Pub. L. No. 110-181 (2008) requires us to review the Army's report and the justification for the potential expansion of the Piñon Canyon Maneuver Site and issue the results of our review within 180 days of the Army report's submission to the congressional defense committees. See GAO, *Defense Infrastructure: Additional Information Is Needed to Better Explain the Proposed 100,000-Acre Expansion of the Piñon Canyon Maneuver Site*, [GAO-09-171](#) (Washington, D.C.: Jan. 13, 2009).

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During our review, we met with officials from the Office of the Under Secretary of Defense for Acquisitions, Technology, and Logistics and the Department of the Army to discuss the Army's approach for making decisions regarding the acquisition of training land and to identify the Army's major training land acquisitions and proposals. We focused on five major training land acquisitions—expansion of the National Training Center at Fort Irwin; three sites in Hawaii known as the South Range, West Pohakuloa Training Area, and Parcel 1010; and the potential expansion of the Piñon Canyon Maneuver Site, because they are the only completed or planned major land acquisitions since OSD updated its moratorium in 2002. To evaluate the Army's approach for making decisions regarding the acquisition of training land, we evaluated DOD's regulations that govern land acquisition and the Army's directives, policies, and procedures that implement and clarify those regulations. We identified the methods Army planning and budgeting officials use to address training shortfalls and the model Army officials at the installation level use to project and determine land acquisition requirements. Specifically, we examined the Army's strategic plan for training ranges, called the Range and Training Land Strategy,<sup>9</sup> and the training doctrine and policy,<sup>10</sup> data elements, and formulas used in the Army Range Requirements Model—the Army's analytically based approach for calculating training land requirements and shortages. To determine whether the range requirements model provided a consistent and reasonable framework for estimating training land requirements and whether it used accurate inputs, we reviewed the

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<sup>9</sup>Department of the Army, *Range and Training Land Strategy* (Washington, D.C., Feb. 11, 2004). The strategy addresses increasing training land deficits through focused land management; acquisition of buffers through partnerships to mitigate encroachment; utilization of other federal lands; and when necessary, land acquisition.

<sup>10</sup>Army training doctrine and policy are provided in four key documents: Army Training Circular 25-1, *Training Land*, U.S. Army Chief of Staff (Washington, D.C., Mar. 15, 2004); Army Training Circular 25-8, *Training Ranges*, U.S. Army Chief of Staff (Washington, D.C., Apr. 5, 2004); Army Pamphlet 350-38, *Standards in Training Commissions*, U.S. Army Chief of Staff (Washington, D.C., July 24, 2008); and Army Pamphlet 415-28, *Real Property Category Codes*, U.S. Army Chief of Staff (Washington, D.C., Apr. 11, 2006). Army Training Circular 25-1 provides doctrinal land requirements by unit and information from the circular provides range configuration by type of range. Army Training Circular 25-8 provides information on how each type of training range is to be configured by showing the doctrinal number of lanes, objectives, and firing points required for each standard range. Army Pamphlet 350-38 defines the type of weapons to be used in training exercises including the required number of rounds to be fired for each weapon or weapon system as part of training exercises. Army Pamphlet 415-28 provides guidance on how property is to be tracked across the department, specifically the use of category codes for each type of property including training land and ranges.



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documentation supporting the model's analytic framework, including the model's calculations and assumptions.<sup>11</sup> To determine whether the Army considered alternatives to acquiring training land and the potential effects, we compared Army's policies, procedures, and practices for acquiring land with the actual practices followed at the five sites we visited. We learned about these practices by interviewing officials at each site and reviewing pertinent documents. To analyze the Army's effectiveness in communicating to Congress and the public the approach used for making decisions to pursue an OSD waiver, we compared and contrasted the OSD policy<sup>12</sup> that specifies that no major land acquisition proposals may be made public through a request for proposals, notice of intent to perform environmental analysis, request for legislation or budget item, press release, or other official notice until OSD has approved a waiver to the department's major land acquisition moratorium,<sup>13</sup> and the Army strategic plan that emphasizes that key stakeholders must be engaged early in the strategic planning process and that the public must be included in the decision-making process. We also discussed communication strategies, approved waiver requests, and public outreach efforts prior to OSD waiver approval with OSD and Army headquarters officials and installation personnel at each of the five sites we visited. We used Army and public records to develop a list of affected groups and nongovernmental organizations that have supported or opposed these acquisitions. From the list, we selected key groups and landowners to meet with who had participated regularly in Army's planning and acquisition processes prior to OSD waiver approval by attending public outreach meetings or by providing written comments to the Army. We did not meet with groups involved in ongoing litigation associated with the acquisitions.

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<sup>11</sup>Data sources used by the Army Range Requirements Model that influence training land requirements include the Operational Range and Inventory Sustainment, Army Stationing and Installation Plan, Total Ammunition Management Information System, National Guard Bureau Unit Training Database, U.S. Army Reserve Command Unit Training System, Army Master Range Plan, and Army Training Requirements and Resources System. These data sources are discussed in appendix II.

<sup>12</sup>See *Land Acquisition and Leasing of Office Space in the United States*.

<sup>13</sup>Section 6.1 of the Department of Defense Instruction 4165.71 states: "Proposals for [major land acquisitions] must be approved by the Secretary of Defense for Acquisition, Technology, and Logistics prior to any public announcement, request for proposals, notice of intent to perform environmental analysis, request for legislation or budget line item, press release, or other official notice, in accordance with Secretary of Defense memorandum."

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We conducted this performance audit from October 2007 through January 2009 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. See appendix I for more information on our scope and methodology.

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## Results in Brief

The Army uses an extensive, analytical approach to making decisions regarding training land acquisitions, but the approach does not include a process to ensure that the 2004 Range and Training Land Strategy—the strategic plan Army officials use to address training land shortfalls—is current. The Army’s approach uses as its basis this strategic plan and the Army Range Requirements Model that was implemented in 2006. The strategic plan stipulates that acquiring training land is one among several ways to mitigate training land shortfalls, and the range requirements model uses Army training doctrine and policy and data elements from numerous databases that affect training land needs to calculate training land requirements and shortfalls. Along with the strategic plan and the range requirements model, the Army has a six-step process during which training land shortfalls and capabilities are analyzed in multiple ways, by multiple parties, and at multiple times. However, although Army officials said that basing a strategic plan on current information is essential for ensuring that major land acquisitions respond to up-to-date training needs, the Army has not updated its strategic plan since it was initially developed in 2004. This is because the Army does not have a process to ensure that the strategic plan is updated at regular intervals to reflect up-to-date training land requirements resulting from recent initiatives, such as Grow the Force,<sup>14</sup> base realignment and closure (BRAC), and Global Defense Posture realignments.<sup>15</sup> In addition, while the range requirements model calculates each installation’s training needs based on a variety of factors

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<sup>14</sup>In January 2007, the President announced the Grow the Force initiative to increase the end strength in the Army by more than 74,000 soldiers by 2013 (and the Marine Corps by 27,000 marines by 2011) to enhance U.S. forces, reduce stress on deployable personnel, and provide necessary forces for success in the global war on terrorism.

<sup>15</sup>Under the Global Defense Posture initiative, DOD is realigning its overseas basing structure to more effectively support current allies and strategies in addition to addressing emerging threats. Included in this rebasing effort is the expected return of about 70,000 military and civilian personnel to the United States by 2011.

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that include recent initiatives and updates these data at regular intervals, the model's calculations are not reflected in the strategic plan. As a result, the training land needs articulated in the Army's strategic plan are now 4 years out of date, diminishing the plan's effectiveness as a tool to ensure land acquisitions are based on current training needs.

In an effort to support its request for a waiver to the department's moratorium on major land acquisitions, the Army conducted an initial conceptual analysis in which it identified potential alternatives to and assessed environmental and economic effects of its acquisition of training land at Fort Irwin, the three sites in Hawaii, and the Piñon Canyon Maneuver Site. After OSD approved the waiver requests, the Army addressed the National Environmental Policy Act of 1969 and the regulations established by the Council on Environmental Quality, which require, in part, that all federal agencies, including the Army, evaluate the likely environmental effects of projects they are proposing using an environmental assessment or, if the proposed project constitutes a major federal action significantly affecting the quality of the human environment, a more detailed environmental impact statement.<sup>16</sup> Army officials stated that they developed and issued an environmental impact statement addressing the potential expansion at Fort Irwin. Army officials also developed and issued a programmatic environmental impact statement and site-specific environmental impact statement analyzing the impacts of the proposed Army transformation of the 2nd Brigade, 25th Infantry Division to a Stryker Brigade Combat Team, which included the acquisition of land located at all three sites in Hawaii. The original environmental impact statements pertaining to the Hawaii acquisitions were initially subject to litigation, but Army officials stated that the Army has since prepared a new site-specific environmental impact statement pursuant to the court's order.<sup>17</sup> However, Army officials stated that the Army has not issued an environmental impact statement for the potential expansion of the Piñon Canyon Maneuver Site. The Consolidated Appropriations Act, 2008, stated that none of the funds appropriated or otherwise made available in the act may be used for any action that is related to or promotes the expansion of the boundaries or size of the

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<sup>16</sup>If the agency determines that activities of a proposed project fall within a category of activities the agency has already determined has no significant environmental impact—called a categorical exclusion—then the agency generally need not prepare an environmental assessment or an environmental impact statement.

<sup>17</sup>See pages 28-30 for a description of this litigation.

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maneuver site.<sup>18</sup> Army officials told us that upon the passage of the act, they redirected contract employees that had been working on the potential expansion efforts to instead support the Army's response to Section 2831 of the National Defense Authorization Act for Fiscal Year 2008, which required the Army to submit a report containing several different elements of analyses regarding Piñon Canyon, such as an analysis of whether existing training facilities at Fort Carson and the Piñon Canyon Maneuver Site are sufficient to support the training needs of the units stationed or planned to be stationed at Fort Carson. Army officials said that for the purposes of the preparation of this mandated report, they used operations and maintenance funds that, in their view, were not subject to the above-referenced prohibition. The Army delivered the report required by the National Defense Authorization Act for Fiscal Year 2008 to Congress in July 2008. Army officials stated that because the funding restrictions in the Consolidated Appropriations Act, 2008, and Division E, Title 1 of the Consolidated Security, Disaster Assistance, and Continuing Appropriations Act, 2009,<sup>19</sup> apply only to Military Construction Appropriations, this does not preclude the Army from further studying the 100,000-acre site or starting the National Environmental Policy Act process using other appropriations. However, the officials stated that, to date, the Army has voluntarily declined to spend other appropriated funds to begin the National Environmental Policy Act process due to congressional concerns. The officials further stated that uncertainty over congressional support for the contemplated expansion made a delay in expending funds to start the National Environmental Policy Act process appear to be prudent.

Because of a lack of specificity in OSD and Army communication strategies, the Army has not been consistent or always effective in communicating its approach for deciding to pursue acquisitions of training land. According to OSD's policy, no major land acquisition proposals may be made public through a request for proposals, notice of intent to perform environmental analysis, request for legislation or budget item, press release, or other official notice until OSD has approved a waiver to the department's major land acquisition moratorium. However, although OSD's policy clearly prohibits potential major land acquisitions being publicized in the specific manner described above, it is unclear what, if any, stakeholder notification (such as informal community outreach) is

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<sup>18</sup>Pub. L. No. 110-161, Division I, Title IV, § 409 (2007).

<sup>19</sup>Pub. L. No. 110-329, Division E, Title I, § 127 (2008).

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permissible under OSD's policy prior to waiver approval. OSD officials said they were concerned that early public announcement of a potential land acquisition would be misinterpreted as an approved acquisition and that early disclosure would affect land values in and around the potential acquisition. On the other hand, the Army's strategic plan emphasizes that it is important to engage key stakeholders—people living near the potential land acquisition site, elected officials, nongovernmental groups, and others—early in the planning process and that the public must be included in the decision-making processes, because early engagement is a critical step in signaling the right message and sustaining positive interaction with the public. However, the Army's strategic plan lacks specificity as to when, and in what form, this early outreach should take place. During the initial phase of the land acquisitions that took place in California and Hawaii, when the Army was in the process of preparing its submission to OSD for waiver approval, it followed the communications strategy articulated in its strategic plan, which states that early engagement is a critical step in sustaining positive interaction with the public. In Hawaii, the Army also included a congressional delegation and other stakeholders early in the planning process and secured their support before the request for waiver to the department's moratorium was submitted. However, for the potential expansion of the Piñon Canyon Maneuver Site, the Army did not follow an approach similar to that in the previous four acquisitions with regard to early communication with key stakeholders. Army officials and community groups we interviewed said that the Army did not adequately explain its reasoning for the proposed expansion prior to obtaining OSD waiver approval. Army officials at Fort Carson explained that, in their view, OSD's policy precluded proposed major land acquisitions from being made public in any manner and from being discussed until the Secretary or Under Secretary approved a waiver to the department's moratorium on major land acquisitions. Without adequate explanations, key stakeholders at times relied on rumors and leaked documents. These information sources often did not provide a clear, complete, or accurate explanation of the Army's need for and approach to acquiring additional land or of the Army's plans to also use other strategies to meet critical training needs. Without a consistent and clarified DOD-wide practice that both addresses OSD's concerns about early disclosure of potential major land acquisitions and, at the same time, permits the Army and the other military services some flexibility to engage key stakeholders early in the decision-making process, the Army and other military services are likely to experience communication problems similar to those encountered during the potential expansion of the Piñon Canyon Maneuver Site.

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We are recommending that (1) the Army develop and implement a process to update periodically its strategic plan—Range and Training Land Strategy—to reflect current training needs and (2) OSD and the Army jointly review their strategies for communicating potential major land acquisitions to the public and agree upon a common practice that would address OSD’s concerns about early disclosure and, at the same time, permit Army and the other military services some flexibility to engage key stakeholders earlier in the decision-making process. In written comments to a draft of this report, DOD generally agreed with our recommendations. We discuss DOD’s comments in detail later in this report.

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## Background

For decades, senior OSD and Army officials have reported that they face increasing difficulties in carrying out realistic training at military installations and training ranges due to training constraints, such as those resulting from encroachment and emerging technological advances that improve the capabilities of new weapons systems. One proposed solution to overcome training difficulties has been to expand training areas by acquiring, through purchase or lease, sufficient land adjacent to the affected installations and training ranges. However, the Army’s efforts to acquire land have often been met with opposition from individuals and groups who questioned the Army’s justification for pursuing the land expansions.

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## Training Land Shortfalls Can Be Addressed by a Variety of Strategies

The Army reports that it will have a 4.5-million-acre shortfall in training land by 2013 from the combined effects of the Global Defense Posture realignments, Grow the Force initiative, BRAC actions, and Army transformation and modularity.<sup>20</sup> Still, Army officials stated they have no plans to acquire 4.5 million acres of land in the United States to meet this need, but rather plan to address the training land shortfall through four major strategies identified in the Army’s 2004 strategic plan—the Range

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<sup>20</sup>In October 1999, the Chief of Staff of the Army announced plans to transform the Army from its current Cold War organization and equipment to a lighter, more strategically responsive force—the Stryker brigade concept—to fill what it sees as a strategic gap in warfighting capabilities. The key elements of the Army’s transformation and modularity efforts are the standardization of unit structure to modular brigade combat teams and the integration of new technology and equipment to make the Army more deployable, flexible, lethal, and adaptive. According to the Army, the implementation of transformation and modularity has resulted in significant changes to Army training doctrine and increases in training support requirements—units are required by doctrine to operate across a much larger area.

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and Training Land Strategy. The strategies include (1) focused land management; (2) acquisition of buffers to mitigate encroachment; (3) utilization of other federal lands; and (4) when necessary, land acquisition. The strategic plan also serves as the mechanism to prioritize Army training land investments and helps optimize the use of all Army range and training land assets by determining the capability, availability, and accessibility of land.

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## Management of Land Acquisition Process

Within DOD, the Under Secretary of Defense for Acquisition, Technology, and Logistics and the Deputy Under Secretary of Defense for Installations and Environment prescribe policies and procedures governing the acquisition of land for military use. Within the Army, the Office of the Assistant Secretary of the Army for Installations and Environment has responsibility for policy development, program oversight, and coordination of a wide variety of Army activities, including management of Army installations. Within this office, the Deputy Chief of Staff for Operations is responsible for developing and coordinating policy, programs, and initiatives to achieve the directed levels of training readiness for the Army. As part of those responsibilities, the Deputy Chief of Staff establishes priorities and requirements for Army ranges and training lands. Under the Deputy Chief of Staff, the Office of the Assistant Chief of Staff for Installation Management is responsible for program management on all matters relating to overall management of Army installations, including real property inventory and budget authority for the execution of Army installations' operations and of the U.S. Army Corps of Engineers' military construction and land acquisition functions. The Installation Management Command, under the Assistant Chief of Staff for Installation Management, is responsible for ensuring efficient and effective base operations services and facilities, including providing and maintaining high-quality training areas, ranges, and facilities. U.S. Army garrisons provide everyday management of the training areas and ranges. The Army Management Office for Training Simulations is responsible for the Army Range Requirements Model.

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## Moratorium on Major Land Acquisitions

On September 13, 1990, OSD issued a departmentwide moratorium on major land acquisitions—those exceeding 1,000 acres or costing more than \$1 million—for installations in the United States. OSD updated and provided further instruction on this moratorium on October 24, 1990; December 1, 1994; November 17, 2002; and July 28, 2005. Currently, waivers of this moratorium may be granted at the OSD level on a case-by-case basis if a military service can justify to OSD a need to acquire more

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land. Army guidance sets forth requirements regarding the preparation and submission of a military land acquisition proposal, which summarizes, where applicable, information detailed in the range complex master plan, range development plan, and analysis of alternatives study. The military land acquisition proposal is forwarded to the major army command and coordinated with the appropriate installation management agency, and the major command forwards the information to the Chief, Training Support Systems Division for staffing, coordination, and approval by the Deputy Assistant Secretary (Installation and Housing). Army guidance further states that final concept approval of the military land acquisition proposal must be provided by the Under Secretary of Defense for Acquisition, Technology, and Logistics before an installation issues any official notices to the public, including a notice of intent or a finding of no significant impact.

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## Army's Recent and Potential Major Training Land Acquisitions

Since DOD's 2002 update to the moratorium on major land acquisitions, the Army has proposed or completed the following five major training land acquisitions:

- **National Training Center at Fort Irwin, California.** In December 2003, OSD approved the Army's waiver request to acquire about 222,000 acres of land to expand the National Training Center site. At that time, about 110,000 acres of public land had already been withdrawn for military purposes, and the Army initially planned to purchase an additional 112,000 acres from private and state land owners. The purpose of the additional training land is to create a second brigade-sized maneuver corridor to be utilized to meet training requirements. Army officials said that, after revising the maneuver area to support endangered species management and other factors, they completed the acquisition of a 49,000-acre parcel in 2006 and a 23,000-acre parcel in 2008. According to the Army, the acquisition of a 78,000-acre parcel is scheduled to be completed in 2010.
- **South Range, Schofield Barracks, Hawaii.** In December 2002, OSD approved the Army's waiver request to acquire an additional 1,402 acres at the South Range of Schofield Barracks on the island of Oahu, Hawaii. The stated purpose of the expansion was to support Army training requirements including the designation of the 2nd Brigade, 25th Infantry Division as a Stryker brigade combat team. According to the Army, the land was needed to provide additional space for such things as maneuver training and a brigade-size motor pool. In September 2004, the United States of America filed a complaint for the taking of this property under its power of eminent domain, and for the ascertainment and award of just compensation to the parties in interest in the amount of \$15.9 million.



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While a Hawaiian citizens group sought to set aside a stipulated judgment to finalize the condemnation of the South Range acquisition area, the 9th Circuit Court of Appeals ruled in October 2006 that the condemnation could proceed without judicial interference,<sup>21</sup> but that the use to which the land may be put would be determined pending compliance with the National Environmental Policy Act in another 9th Circuit Court of Appeals decision related to the original environmental impact statements analyzing the impacts of the proposed Army transformation.<sup>22</sup> Army officials stated that the Army has since prepared a new site-specific environmental impact statement pursuant to the court's order, and that they completed the acquisition of this land.

- **West Pohakuloa Training Area, Hawaii.** In February 2004, OSD approved the Army's waiver request to acquire 22,675 acres of land adjacent to the Pohakuloa Training Area on the island of Hawaii. The Army had been leasing the land and using it for training since the 1940s and the owner wanted to sell it. The stated purpose of the expansion was to support training requirements for the 25th Infantry Division, the Hawaii Army National Guard, U.S. Army Reserve, the 3rd Marine Regiment, and the Stryker Brigade Combat Team. After obtaining OSD waiver approval, Army officials also developed and issued a programmatic environmental impact statement and site-specific environmental impact statement analyzing the impacts of the proposed Army transformation of the 2nd Brigade to a Stryker Brigade Combat Team, which included the acquisition of land located at all three sites in Hawaii. These original environmental impact statements were initially subject to litigation, but Army officials stated that the Army has since prepared a new site-specific environmental impact statement pursuant to the court's order. Further, Army officials stated that they completed the acquisition of this land in 2006.
- **Parcel 1010, Hawaii.** In October 2001, OSD approved the Army's request for a waiver to acquire 1,010 acres of land adjacent to the Pohakuloa Training Area on the island of Hawaii. The Army had been leasing the land and using it for training since the 1940s and the owner wanted to sell it. The stated purpose of the expansion was to support training requirements for the 25th Infantry Division. Subsequently, the 2nd Brigade, 25th Infantry Division, was designated as a Stryker Brigade Combat Team. After obtaining OSD waiver approval, Army officials also developed and issued a

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<sup>21</sup>*United States of America v. 1,402 Acres of Land*, 203 Fed. App. 70 (9th Cir. 2006).

<sup>22</sup>*Ilio'Ulaokalani Coalition v. Rumsfeld*, 464 F.3d 1083 (9th Cir. 2006), *affg in part, rev'g in part*, 369 F.Supp.2d 1246 (D. Haw., 2005). See pages 30-33 for additional information.

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programmatic environmental impact statement and site-specific environmental impact statement analyzing the impacts of the proposed Army transformation of the 2nd Brigade to a Stryker Brigade Combat Team, which included the acquisition of land located at all three sites in Hawaii. These original environmental impact statements were initially subject to litigation, but Army officials stated that the Army has since prepared a new site-specific environmental impact statement pursuant to the court's order. Further, Army officials stated that they completed this acquisition in 2006.

- **Piñon Canyon Maneuver Site, Colorado.** Located about 150 miles southeast of Fort Carson, Colorado, the Piñon Canyon Maneuver Site opened in 1985 and is a training asset for Fort Carson, other installations, and National Guard and Reserve units in the area. The maneuver site's 235,896 acres combined with Fort Carson's training areas comprise maneuver training lands second only to the National Training Center at Fort Irwin in size. However, according to the July 2008 Army report, the total population of soldiers at Fort Carson will increase from 14,500 to 28,500 by 2011, when the majority of stationing decisions resulting from the Grow the Force initiative, BRAC actions, Global Defense Posture realignments, and Army transformation and modularity are scheduled to be completed.<sup>23</sup> In February 2007, OSD approved the Army's request for a waiver to acquire an additional 418,577 acres of land to expand Piñon Canyon Maneuver Site, which drew criticism from some local landowners, elected officials, and nongovernmental groups. In July 2008, the Army reported that, although it had revalidated the requirement for at least 418,577 additional acres at the maneuver site, in response to community, cost, and other concerns it proposed to limit the potential acquisition of additional training land to 100,000 acres lying south of the existing maneuver site. The Army also proposed to acquire land from willing sellers; invest in training facilities; and work with the local community on a variety of cultural, land use, and land management issues.

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## Prior Reports on Army's Land Acquisitions

In 1989 and 1991, we reported that the Army pursued land acquisitions without a rational strategy and, therefore, the decision process for Army land expansions was being made in isolation from the full range of training land needs.<sup>24</sup> We noted several shortcomings in the Army's plans and

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<sup>23</sup>As we previously reported, there is a lack of consistent and detailed information about planned defense personnel moves. See GAO, *Defense Infrastructure: High-Level Leadership Needed to Help Communities Address Challenges Caused by DOD-Related Growth*, [GAO-08-665](#) (Washington, D.C.: June 17, 2008).

<sup>24</sup>See [GAO/NSIAD-90-44BR](#) and [GAO/NSIAD-91-103](#).

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procedures for establishing land acquisition priorities, identifying land requirements, and examining alternatives. At that time, the Army approach to land acquisitions was motivated by targets of opportunity—land was being acquired when it was available. This made it difficult for the Army to justify its land acquisition efforts. We recommended that the Army develop an overall strategy to guide its land acquisitions, which it did in its 2004 Range and Training Land Strategy.

In 1998, an Army Audit Agency report reiterated our findings.<sup>25</sup> Specifically, the audit agency reported that the process the Army used to justify training land acquisitions did not provide a comprehensive assessment of the Army's total land requirements. Essentially, the process identified training land requirements as the total shortfalls reported at each installation and, because the Army had not established its total training land requirements and the capabilities of the land it controlled, it could not adequately evaluate acquisition requests and set priorities. The audit agency recommended analyzing overall Army-wide land requirements and establishing a priority system for land initiatives, which the Army included in its 2004 Range and Training Land Strategy.

In 1999, a Rand Arroyo Center report assessed the Army's land policy and approaches to fulfilling Army needs for training lands, including establishing training land requirements.<sup>26</sup> The report concluded that the Army had developed a coherent land use strategy, but that it was an implicit one and had not been explained inside or outside the Army. The center recommended that the Army publish a national land strategy to help clarify the need for land, which the Army did in its 2004 Range and Training Land Strategy.

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<sup>25</sup>Army Audit Agency, *Real Estate Acquisitions*, Audit Report: AA 98-92 (Alexandria, Va., Mar. 9, 1998).

<sup>26</sup>RAND Arroyo Center, *Does the Army Have a National Land Use Strategy?* (Washington, D.C., 1999).

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## Army's Approach to Training Land Acquisitions Is Extensive, but Based on a Strategic Plan That Is Outdated

The Army's extensive, analytical approach to making decisions for pursuing training land acquisitions is based on (1) the Army's strategic plan for training ranges—Range and Training Land Strategy—that Army officials use to address training land shortfalls and (2) the Army Range Requirements Model, an analytical computerized decision support tool that gathers data at the installation level to determine training requirements and capabilities. The Army uses the strategic plan and model as starting points for a complex, six-step process in which decisions to pursue training land acquisitions are analyzed in multiple ways, by multiple parties, and at multiple times to ensure that the Army's pursuit of land acquisitions is based on an adequate assessment of training land needs and existing capabilities. Missing from this process, however, is a mechanism to ensure that the Army's strategic plan is updated regularly to reflect changes in training land requirements, such as those resulting from the Grow the Force initiative, BRAC actions, and Global Defense Posture realignments. Although these updates have never been incorporated in the strategic plan, the range requirements model has been updated on a regular basis since it was implemented Army-wide in 2006 to reflect changing requirements resulting from major initiatives.

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## Army's Approach to Making Land Acquisition Decisions Is Based on the Strategic Plan for Training Ranges and the Range Requirements Model

The strategic plan for training ranges—Range and Training Land Strategy—and the Army Range Requirements Model are the key tools the Army uses in its approach to making decisions about land acquisitions. The 2004 strategic plan identifies training land requirements and shortfalls based on the results of the range requirements model at that time, prioritizes the shortfalls, and describes four ways the Army planned to address these shortfalls, one of which is training land acquisition. Because the strategic plan is based on pre-2004 data, it reflects requirements resulting from the Army's transformation to a modular force, but does not reflect force structure changes announced since then. The model calculates training land requirements and shortages based on Army doctrine and policy and installation data and, because its data are updated on a regular basis, the model reflects force structure changes that have taken place since 2004, such as the more recent Grow the Force initiative, BRAC actions, and Global Defense Posture realignments. When the Army updates its strategic plan in the future, Army officials said that it will use the model's calculations as the basis to estimate training land requirements and shortfalls for the updated plan.

The Army developed the Range and Training Land Strategy as the strategic plan that Army planning and budgeting officials use to select the most appropriate course of action to address training land shortfalls at specific

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Army installations. Published by the Army in 2004, the strategic plan states that the Army will inventory its training land assets, optimize the use of all range and land assets, identify short- and long-term land acquisition opportunities, and prioritize installations where acquiring land is both feasible and affordable. The plan also provides a framework and methodology to address training land needs through focused land management, buffering through partnerships, utilization of other federal lands, and, where possible, land acquisition. The Army is to purchase training land only where the following conditions are present: large land holdings are available, acquisition is cost effective, land is compatible with environmental conditions and requirements, land is contiguous to existing training facilities, and population density in the surrounding area is low. According to Army officials, a strategic plan with a well-defined approach to determining land requirements and basing those requirements on up-to-date information is essential for ensuring that major land acquisitions respond to training needs.

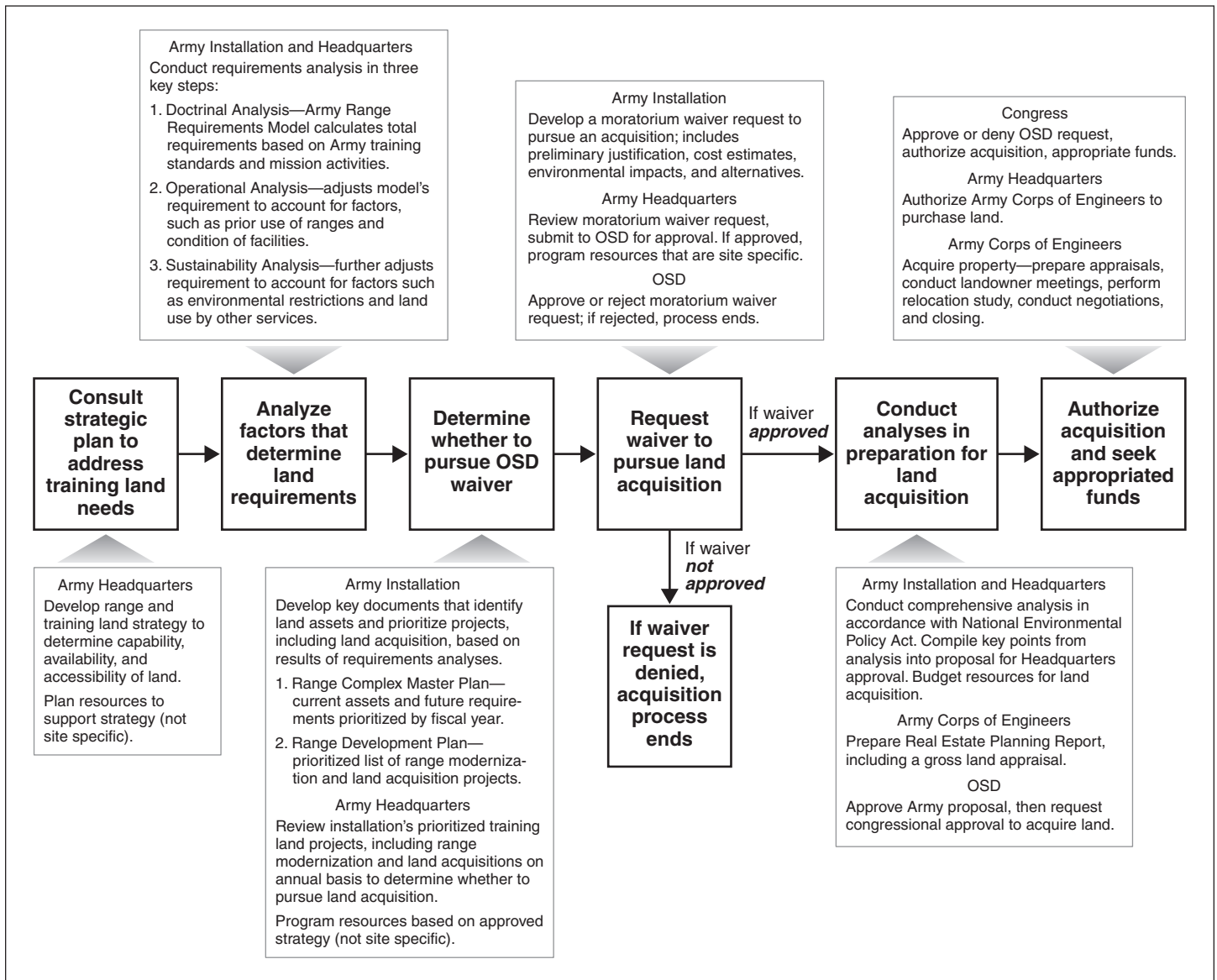
The Army Range Requirements Model provides a consistent and reasonable framework for Army headquarters, major commands, and installations to use to calculate training land capability and requirements at individual installations—just one step in the Army’s overall process for determining land needs and acquiring land for training. The model uses Army training doctrine in conjunction with data from seven administrative and operational databases, such as range inventories, unit locations, planned acquisitions, and training courses, to calculate an installation’s annual training requirements. These requirements can indicate either an adequate supply of land and ranges, a surplus, or a shortfall. In addition, the data used by the model to calculate these requirements reflect training and land requirements resulting from recent initiatives, including Army transformation and modularity, the Grow the Force initiative, BRAC actions, and Global Defense Posture realignments. Not reflected in the model are training lands that are not used due to environmental and cultural considerations and other factors, all of which the Army addresses through separate analyses at the end of the model’s calculation process. As such, the model does not provide the entire analysis required for validation of training land needs and is not intended to do so. Appendix II describes the Army Range Requirements Model in more detail.

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**Army's Approach to  
Deciding Whether to  
Pursue Training Land  
Acquisitions Consists of  
Complex, Six-Step Process**

To ensure the Army's pursuit of land acquisition is justifiable and based on need, the Army's uses a six-step process beginning with consultation with the strategic plan and ending with the purchase of training land. Figure 1 illustrates this process.

**Figure 1: The Army's Six-Step Process for Determining Whether to Pursue Training Land Acquisitions**



Source: GAO analysis of information provided by DOD.

Each of the six steps in the boxes illustrated in figure 1 is discussed below.

- **Consult strategic plan to address training land needs.** The strategic plan advocates maximizing the capability, availability, and accessibility of all Army training lands so that training land shortfalls can be addressed in

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a number of ways, one of which is land acquisition. The strategy serves as the mechanism to prioritize Army training land investment and helps to optimize the use of all Army range and training land assets.

- **Analyze factors that determine land requirements.** An Army installation works with Army headquarters to determine land requirements through doctrinal, operational, and sustainability analyses. The Army Range Requirements Model completes a doctrinal analysis using Army training doctrine and land data that determines training land requirements. The model calculates how much land is needed to train a unit for a specific task and how much land is needed based on Army doctrine and data from several administrative and operational data systems. The model's calculation of training land requirements is simply a baseline of what the Army needs and is not the final result, because the model does not take into account certain factors that can impact training, such as compliance with environmental regulations, protection of cultural resources, and condition of facilities. The operational and sustainability analyses adjust the model's calculations to account for those factors that the model itself does not consider. For example, outside the model, Army officials complete an operational analysis by comparing the doctrinal requirement to the current training land assets and the condition of the facilities to determine which facilities included in the model's calculation are not suitable for training due to environmental and cultural considerations and other factors. These officials also complete a sustainability analysis by comparing results from the doctrinal and operational analyses to factors, such as the use of training lands by other military services, to further refine the model's calculation of the training land requirement.
- **Determine whether to pursue OSD waiver.** The results of the land requirements analyses drive two key documents that identify land assets and prioritize training land projects at an installation, including potential land acquisitions. First, the range complex master plan is updated annually and identifies an installation's current assets and future requirements prioritized by fiscal year. Second, the range development plan is a prioritized list of range modernization and land acquisition projects that identifies training area users and their training requirements based on Army doctrine and regulations, such as Army's Sustainable Range Program.<sup>27</sup> Army headquarters reviews installation training projects,

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<sup>27</sup>Department of the Army Regulation 350-19, *The Army Sustainable Range Program*, U.S. Army Chief of Staff (Washington, D.C., Aug. 30, 2005). The Sustainable Range Program is the Army's overall approach for improving the way in which it designs, manages, and uses its ranges to meet its training responsibilities.



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including range modernization and training land acquisitions, on an annual basis to determine whether a potential acquisition should be pursued.

- **Request waiver to pursue land acquisition.** The Army installation prepares and coordinates a proposal for a major land acquisition in order to request a waiver to the department's moratorium on major land acquisitions and submits the request to Army headquarters for review and approval.<sup>28</sup> If the request is approved, Army headquarters then submits the waiver request to OSD for approval to proceed with the land acquisition. The waiver request includes detailed information from the range complex master plan and the range development plan, together with a preliminary justification for the acquisition, estimate of cost, assessment of the potential environmental impacts, and consideration of alternatives. If the waiver request is denied by OSD, the process ends.
- **Conduct analyses in preparation for land acquisition.** If the waiver request is approved by OSD, the Army completes the applicable environmental analysis required by the National Environmental Policy Act of 1969. Concurrently, the appropriate U.S. Army Corps of Engineers district office prepares a real estate planning package, which includes the real estate planning report, the gross land appraisal, legal documents for title transfer, and other related documents. The district office forwards the final real estate package to Army headquarters, which then reviews the package and forwards it to OSD for final approval.
- **Authorize acquisition and seek appropriated funds.** OSD then requests congressional approval to acquire the land. If the request is approved, Congress authorizes the land acquisition and appropriates the necessary funds. Army headquarters authorizes the U.S. Army Corps of Engineers to purchase the land and the Corps acquires the property after completing a series of land appraisals, landowner meetings, relocation studies, negotiations, and closings.

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<sup>28</sup>According to Army Regulation 350-19, a military land acquisition proposal is series of questions intended to provide senior leadership with the essential information to make a decision about a major land acquisition. When preparing the proposal, the proponent installation should summarize, where applicable, information detailed in the range complex master plan, range development plan, and analysis of alternatives study. The proposal should include a map of the proposed acquisition, the purpose of the acquisition, and potential effects on surrounding communities. When Army officials submit a waiver request, they sometimes refer to a military land acquisition proposal as a major land acquisition request.

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## Strategic Plan Does Not Reflect Land Requirements Associated with Recent Initiatives

Although the Army's 2004 strategic plan for training ranges provides a well-defined approach to determining land requirements, the plan does not reflect the 4.5-million-acre training land shortfall that the Army reported to Congress in July 2008. The Army developed the strategic plan to address training land shortfalls resulting from the Army's transformation to a modular force. However, because the Army does not have a process in place to routinely and systematically update the plan, the plan has not been updated since 2004 and does not include the training land needs resulting from more recent initiatives, such as those from the Grow the Force initiative, BRAC actions, and Global Defense Posture realignments. In 2007, the Army announced its participation in the Grow the Force initiative, which is expected to increase the Army's troop strength by 74,200 soldiers by 2013 and add a total of six infantry brigade combat teams. According to the Army, a heavy brigade combat team requires 170,000 acres and an infantry brigade combat team requires 112,000 acres to conduct a free-flowing exercise. A free-flowing exercise area will allow a brigade combat team to train without stopping to reposition forces during the training event, enhancing realism and effectiveness. In addition, the Army must implement the recommendations of the 2005 BRAC Commission by 2011. BRAC stationing changes will concentrate Army units and service schools at key installations. Under the Global Defense Posture realignments, units are to be moved from overseas locations in Europe and Asia back to the United States. As part of the initiative, the Army plans to implement shorter rotations of forces to more remotely located forward operating sites so that the troops can spend more time in the United States. This latter initiative adds to the need for training land because there are no new Army installations being created to accommodate these additional soldiers in the United States. Although these recent initiatives have never been incorporated into the strategic plan, the range requirements model has been updated on a regular basis since it was established in 2002 to reflect the effects of these initiatives on training land needs. As a result, the model may generally accurately identify the training land requirements. However, the current strategic plan cannot be used to address the full range of training land needs or to develop the approach to acquiring additional land, because the plan is out of date, omitting several significant force structure changes since 2004.

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## Army Considered Alternatives and Prepared Assessments of Environmental and Economic Effects before Pursuing OSD Waiver Approval

The Army considered alternatives and prepared assessments of the environmental and economic effects of the proposed land acquisitions in an effort to address the requirements of OSD and Army policies and regulations before pursuing OSD waiver approval at Fort Irwin, three sites in Hawaii, and the Piñon Canyon Maneuver Site. After OSD approves the waiver request, the Army must also address the National Environmental Policy Act of 1969 and the regulations established by the Council on Environmental Quality, which require, in part, that all federal agencies, including the Army, evaluate the likely environmental effects of projects they are proposing using an environmental assessment or, if the project constitutes a major federal action significantly affecting the quality of the human environment, a more detailed environmental impact statement.<sup>29</sup> Army officials stated that they developed and issued an environmental impact statement addressing the potential expansion at Fort Irwin. Army officials also developed and issued a programmatic environmental impact statement and site-specific environmental impact statement analyzing the impacts of the proposed Army transformation of the 2nd Brigade to a Stryker Brigade Combat Team,<sup>30</sup> which included the acquisition of land located at the three sites in Hawaii. These original environmental impact statements were initially subject to litigation, but Army officials stated that the Army has since prepared a new site-specific environmental impact statement pursuant to the court's order.<sup>31</sup> However, the Army has not yet started the analysis of potential alternatives and effects pursuant to the National Environmental Policy Act for the potential expansion of the Piñon Canyon Maneuver Site. Army officials stated that because the funding restrictions in the Consolidated Appropriations Act, 2008, and Division E, Title 1 of the Consolidated Security, Disaster Assistance, and Continuing Appropriations Act, 2009, apply only to Military Construction Appropriations, this does not preclude the Army from using other appropriations to further study the 100,000-acre site or starting the National Environmental Policy Act process. However, the officials stated

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<sup>29</sup>See 40 C.F.R. Part 1500.

<sup>30</sup>In this case, the Army prepared both a programmatic and site-specific environmental impact statement because it adopted a tiered approach in addressing the requirements of the National Environmental Policy Act of 1969 and the associated Council on Environmental Quality regulations. Tiering "refers to the coverage of general matters in broader environmental impact statements . . . with subsequent narrower statements or environmental analyses (such as . . . site specific statements) incorporating by reference the general discussions and concentrating solely on the issues specific to the statement subsequently prepared." 40 C.F.R. Part 1508.28.

<sup>31</sup>See pages 28-30 for more details on this litigation.

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that the Army has voluntarily declined to spend other appropriated funds to begin the National Environmental Policy Act process due to congressional concerns. The officials further stated that uncertainty over congressional support for the potential expansion made a delay in spending funds to start the National Environmental Policy Act process appear to be prudent.

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### Requirements for Army to Consider Alternatives and Assess Environmental and Economic Impacts before Acquiring Land

Before proceeding with a major land acquisition, the Army performs assessments of alternatives to the proposed land acquisition and of the potential environmental and economic impacts in two phases. In the first phase, the Army conducts initial conceptual assessments of the alternatives, potential environmental impacts, and cost in order to support the request for a waiver to the department's major land acquisition moratorium. The second phase occurs after OSD approves the waiver request when the Army conducts the assessments of alternatives and potential environmental and economic impacts in an effort to address requirements contained in the National Environmental Policy Act of 1969 and the regulations established by the Council on Environmental Quality.

DOD guidance requires that an economic analysis be used to help decide among the alternative methods to acquire real property and provide guidance to the military services on how to proceed with the economic analysis.<sup>32</sup> Army guidance for the acquisition of training land provides overall guidance for Army installations and reiterates DOD policy by requiring Army installations to, among other things, evaluate the economic feasibility of each alternative for all potential training land acquisition projects.<sup>33</sup> In addition, the regulation requires an assessment of anticipated environmental impacts and requires that Army installations develop a major land acquisition proposal document that includes, where applicable, a summary of the feasibility analysis as well as a list of potential environmental impacts that must be submitted to the Under Secretary of Defense for Acquisition, Technology, and Logistics before an installation issues any official notices to the public.

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<sup>32</sup>See the Department of Defense Instruction 4165.71 and the Department of Defense Instruction 7041.3, *Economic Analysis for Decisionmaking*, Under Secretary of Defense, Comptroller (Nov. 7, 1995).

<sup>33</sup>See Army Regulation 350-19.

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Following OSD approval, the Army is then required to address the provisions of the National Environmental Policy Act of 1969. The act establishes environmental policies and procedures that shall be followed by all federal agencies to the fullest extent possible.<sup>34</sup> One such requirement states that federal agencies shall “include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official” regarding: (1) the environmental impact of the proposed action, (2) any adverse environmental effects which cannot be avoided should the proposal be implemented, (3) alternatives to the proposed action, (4) the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity, and (5) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.<sup>35</sup> In accordance with these requirements and the regulations for implementing the National Environmental Policy Act of 1969 established by the Council for Environmental Quality, agencies evaluate the likely environmental effects of a project they are proposing to undertake with an environmental assessment or, if the projects likely would significantly affect the environment, a more detailed environmental impact statement. If, however, the agency determines that activities of a proposed project fall within a category of activities the agency has already determined has no significant environmental impact—called a categorical exclusion—then the agency generally need not prepare an environmental assessment or environmental impact statement. If an environmental impact statement is required for a particular acquisition, it must include a purpose and need statement, a description of all reasonable project alternatives and their associated environmental impacts (including a “no action” alternative), a description of the environment of the area to be affected or created by the alternatives being considered, and an analysis of the environmental impacts of the proposed action and each alternative.<sup>36</sup>

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<sup>34</sup>The National Environmental Policy Act of 1969 also established the Council on Environmental Quality, which is responsible for, among other things, issuing guidelines and reviewing agencies’ policies and procedures to ensure compliance with the act. Council on Environmental Quality regulations implementing the National Environmental Policy Act of 1969 appear at 40 C.F.R. Part 1500.

<sup>35</sup>42 U.S.C. § 4332(2)(C).

<sup>36</sup>40 C.F.R. § 1502.13-1502.16.

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Additionally, after preparing a draft environmental impact statement, federal agencies such as DOD are required to obtain the comments of any federal agency which has jurisdiction by law or certain special expertise, and request the comments of appropriate state and local agencies, Native American tribes, and any agency which has requested that it receive such statements. Until an agency issues a final environmental impact statement and record of decision, an agency generally may not take any action concerning the proposal which would either have an adverse environmental impact or limit the choice of reasonable alternatives. OSD officials stated that analyses conducted pursuant to the National Environmental Policy Act of 1969 and its associated regulations are more in-depth than those initially prepared in order to obtain OSD waiver approval, and comprise the second phase of the Army's process to consider alternatives and assess environmental impacts.

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### Army Prepared Analyses Required to Obtain OSD Waiver Approval and the Environmental Impact Statements for Fort Irwin Parcels and Hawaiian Sites

The Army prepared the analyses required to obtain OSD waiver approval at Fort Irwin and the three sites in Hawaii. After obtaining OSD waiver approval, the Army also issued an environmental impact statement related to the expansion at Fort Irwin and environmental impact statements related to the transformation of the 2nd Brigade, which included the acquisition of land located at the three sites in Hawaii.

### National Training Center at Fort Irwin, California

In February 2003, the Army developed a request for a waiver to the department's moratorium, stating that it needed an additional 222,000 acres in training land at Fort Irwin for an estimated cost of \$34 million to meet doctrinal training requirements and reduce its maneuver training land shortfall. The waiver request included an initial analysis of the potential environmental impacts resulting from the expansion, such as the loss of habitat for the desert tortoise and Lane Mountain milk-vetch plant—both endangered species—and the Army proposed to purchase some land elsewhere to be used to protect the desert tortoise and the milk-vetch. The Army noted that no community development had been planned for the area the Army wanted to acquire, so it believed that economic impacts to the surrounding community would be negligible. In addition, the Army considered alternatives to the proposed land acquisition, such as expanding in different locations adjacent to the National Training Center and taking no action.

Following OSD's approval of the waiver request, the Army developed a final environmental impact statement for the proposed acquisition, which

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provided a description of alternatives, such as modifications to the amount of land to be acquired and a no action alternative. The environmental impact statement reiterated the conclusions of the initial analyses in regards to the environmental impacts, noting that the potential losses of the desert tortoise and Lane Mountain milk-vetch plant were the most significant consequences to the environment. However, the Army proposed various mitigation efforts and concluded that any costs of such mitigation efforts should be offset by the value added to the National Training Center's mission. The Army also considered economic impacts in the environmental impact statement, indicating that any private property acquired by the Army would restrict future private and commercial development. Further, the Army considered constructing improvements to the area prior to training there through private subcontractors in the surrounding community. However, the Army considered that any potential economic impacts from increased employment and revenue to the area from this construction would not be significant due to the short-term nature of the contracts. The Army also considered alternatives to the acquisition for the environmental impact statement, such as expanding in different locations near Fort Irwin and a no action alternative. Army officials said that they completed the acquisition of a 49,000-acre parcel in 2006 and a 23,000-acre parcel in 2008. According to the Army, the acquisition of a 78,000-acre parcel is scheduled to be completed in 2010.

South Range, Schofield Barracks, Hawaii

For the expansion of South Range, the Army requested a waiver to department's moratorium in August 2002 to acquire 1,402 acres for an estimated \$21 million to meet doctrinal training requirements resulting from Army transformation and from the establishment of the Stryker brigades in Hawaii. The request included an initial analysis of the impacts resulting from the expansion, which indicated that the acquisition of the land itself would not have any significant impact on the environment or economy. In addition, the Army considered alternatives, such as using training ranges at Fort Lewis, Washington, and the National Training Center at Fort Irwin, California; employing computer-based simulation; and taking no action.

Following OSD's approval of the waiver request, the Army prepared and issued a programmatic environmental impact statement in February 2002 and a site-specific environmental impact statement in May 2004 analyzing the impacts of the proposed Army transformation of the 2nd Brigade to a Stryker Brigade Combat Team (the proposed transformation included the acquisition of land located at South Range at Schofield Barracks) with an associated record of decision following in July 2004 that recommended the

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transformation of the 2nd Brigade in Hawaii to a Stryker Brigade Combat Team.

In September 2004, the United States of America filed a complaint for the taking of the property under its power of eminent domain, and for the ascertainment and award of just compensation to the parties in interest in the amount of \$15.9 million. Although a Hawaiian citizens group sought to set aside a stipulated judgment to finalize the condemnation of the South Range acquisition area, the 9th Circuit Court of Appeals ruled that the condemnation could proceed without judicial interference,<sup>37</sup> but that the use to which the land could be put would be determined pending compliance with the National Environmental Policy Act in another 9th Circuit Court of Appeals decision pertaining to the environmental impact statements prepared for the transformation of the 2nd Brigade, which is discussed below. Army officials said that they completed the acquisition of this land in 2006.

Following the issuance of the site-specific environmental impact statement and record of decision referenced above, several Hawaiian citizen groups brought action against DOD and the Army in the U.S. District Court, Hawaii, alleging inadequate environmental review of the Army's transformation of the combat teams. The U.S. District Court ruled, in part, that the programmatic and site-specific environmental impact statements fulfilled the National Environmental Policy Act requirements.<sup>38</sup> The Hawaiian citizens group appealed the District Court's decision, and the U.S. Court of Appeals for the 9th Circuit affirmed the district court's denial of summary judgment to the Hawaiian citizens groups on their claim that the defendants did not satisfy the National Environmental Policy Act's notice requirements, but reversed the District Court's decision with respect to its finding that the environmental impact statements considered all reasonable alternatives to the transformation of the 2nd Brigade in Hawaii, and remanded the action to DOD and the Army to prepare a supplemental site-specific environmental impact statement with attention to alternative locations.<sup>39</sup> Army officials stated that the Army has since prepared a new environmental impact statement pursuant to the court's order.

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<sup>37</sup>*United States of America v. 1,402 Acres of Land*, 203 Fed. App. 70 (9th Cir. 2006).

<sup>38</sup>*Ilio'Ulaokalani Coalition v. Rumsfeld*, 369 F.Supp.2d 1246 (D. Hawaii 2005).

<sup>39</sup>*Ilio'Ulaokalani Coalition v. Rumsfeld*, 464 F.3d 1083 (9th Cir. 2006).



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West Pohakuloa Training Area,  
Hawaii

For the acquisition at the Pohakuloa Training Area, the Army submitted a waiver request to the department's moratorium in July 2003. At that time, the Army indicated that it wanted to acquire 22,675 acres of training land adjacent to Pohakuloa Training Area for an estimated \$15.3 million to address doctrinal training requirements from Army transformation and to help address a training land shortfall of 32,249 acres in Hawaii. The request included an initial analysis of the potential environmental and economic impacts resulting from the expansion, which indicated that increased dust, vehicle emissions, surface runoff, and erosion may occur due to the potential expansion. The request identified budgetary savings through the avoidance of costs associated with transporting troops from Hawaii to other training locations, such as those at Fort Lewis, Washington, and Fort Chaffee, Arkansas, although the Army did not elaborate on these costs.

Following OSD's approval of the waiver request, the Army prepared and issued a programmatic environmental impact statement in February 2002 and a site-specific environmental impact statement in May 2004 analyzing the impacts of the proposed Army transformation of the 2nd Brigade to a Stryker Brigade Combat Team (the proposed transformation included the acquisition of land located at the Pohakuloa Training Area, as well as land located at the other two Hawaii sites discussed in this report) and an associated record of decision in July 2004 that recommended the transformation of the 2nd brigade in Hawaii to a Stryker Brigade Combat Team. These environmental impact statements were subject to litigation, as discussed above, and the U.S. Court of Appeals for the 9th Circuit ultimately directed DOD and Army to prepare a supplemental site-specific environmental impact statement with attention to alternative locations. Army officials stated that the Army has since prepared a new environmental impact statement pursuant to the court's order, and that they have acquired this land.

Parcel 1010, Hawaii

For the Parcel 1010 acquisition, the Army developed a waiver request in September 2001. In the request, the Army stated that it wanted to acquire an additional 1,010 acres of Parcel 1010 for an estimated \$1.5 million that the Army had been leasing since the 1940s. The request included an initial analysis of the potential environmental effects of the potential expansion, which stated that increased dust, vehicle emissions, surface runoff, and erosion may occur due to expansion. The Army reported that acquiring the land was most the viable option because, if the property was sold for nonmilitary use, the Army would have to clear it for unexploded ordnance, which would cost \$14 million. No economic impacts were identified from the proposed Parcel 1010 acquisition in the waiver request. The Army also considered alternatives to the acquisition, such as using other military

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installations and computer-based simulation for training, restationing of units, and taking no action in its waiver request.

Following OSD's approval of the waiver request, the Army prepared and issued a programmatic environmental impact statement in February 2002 and a site-specific environmental impact statement in May 2004 analyzing the impacts of the proposed Army transformation of the 2nd Brigade to a Stryker Brigade Combat Team (the proposed transformation included the acquisition of land located at Parcel 1010, as well as land located at the other two Hawaii sites discussed in this report), and an associated record of decision in July 2004 that recommended the transformation of the 2nd Brigade in Hawaii to a Stryker Brigade Combat Team. These environmental impact statements were subject to litigation, as discussed above, and the U.S. Court of Appeals for the 9th Circuit ultimately directed DOD and Army to prepare a supplemental site-specific environmental impact statement with attention to alternative locations. Army officials stated that the Army has since prepared a new environmental impact statement pursuant to the court's order, and that they acquired this land in 2006.

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### Army Conducted Initial Analyses to Pursue the Acquisition at Piñon Canyon Maneuver Site

In July 2006, the Army completed the initial analysis for deciding whether to pursue the acquisition of training land at the Piñon Canyon Maneuver Site and used the results of this analysis to support its request for a moratorium waiver. The Army indicated that it needed up to 418,577 acres of additional land in order to support doctrinal training requirements and to replicate the conditions of potential combat theaters. The request included an initial analysis of the potential environmental impacts, such as erosion and dust problems, cleanup of possible contaminated sites prior to training use, water quality concerns, and damage to cultural sites. The request also identified potential economic impacts that could result from the acquisition—including the loss of tax base and threat to the ranching economy—but did not attach a dollar amount to the impacts. In addition, the Army considered alternatives to the proposed acquisition, such as the use of the training ranges at Camp Guernsey, Wyoming; Yakima Training Center, Washington; and Fort Irwin, California; use of computer-based simulation; expanding nearby Fort Carson training ranges; purchase or lease of smaller, noncontiguous sites; and taking no action.

Although OSD approved the waiver request, the Consolidated Appropriations Act, 2008, stated that none of the funds appropriated or otherwise made available in the act may be used for any action that is related to or promotes the expansion of the boundaries or size of the

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Piñon Canyon Maneuver Site. Army officials told us that upon the passage of the act, they redirected contract employees that had been working on the potential expansion efforts to instead support the Army's response to Section 2831 of the National Defense Authorization Act for Fiscal Year 2008, which required the Army to submit a report containing an analysis of whether existing training facilities at Fort Carson and the Piñon Canyon Maneuver Site are sufficient to support the training needs of units stationed or planned to be stationed at Fort Carson, a report of need for any proposed addition of training land to support units stationed or planned to be stationed at Fort Carson, and an analysis of alternatives for enhancing economic development opportunities in southeastern Colorado at the current site or through any proposed expansion. Army officials told us that for the purposes of the preparation of this mandated report, they used operations and maintenance funds that, in their view, were not subject to the above-referenced prohibition. The Army delivered the report required by the National Defense Authorization Act for Fiscal Year 2008 to Congress in July 2008. After reassessing its initial plans, the Army reported that it now identifies a potential acquisition of 100,000 acres rather than the previously identified 418,577 acres for a variety of reasons including budgetary restraints, concerns about historic and culturally sensitive sites, and that a smaller expansion would affect a fewer number of landowners. According to Army officials, because the funding restrictions in the Consolidated Appropriations Act, 2008, and Division E, Title 1 of the Consolidated Security, Disaster Assistance, and Continuing Appropriations Act, 2009, apply only to Military Construction Appropriations, this does not preclude the Army from further studying the 100,000-acre site or starting the National Environmental Policy Act process using other appropriations. However, the officials stated that, to date, the Army has voluntarily declined to spend funds to begin the National Environmental Policy Act process due to congressional concerns. The officials further stated that uncertainty over congressional support for the potential expansion made a delay in expending funds to start the National Environmental Policy Act process appear to be prudent.

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## Army Has Not Always Been Effective in Communicating Its Approach to Training Land Acquisitions

Because of the lack of specificity in OSD and Army communication strategies, the Army has not been consistent or always effective in communicating its approach for deciding to pursue acquisitions of training land. According to OSD's policy, no major land acquisitions may be made public through a request for proposals, notice of intent to perform environmental analysis, request for legislation or budget line item, press release, or other official notice without OSD approval. While OSD's policy clearly prohibits potential major land acquisitions being publicized

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through the official notices described above, it is unclear what, if any, stakeholder notification (such as informal community outreach) is permissible under OSD's policy prior to OSD waiver approval. OSD officials said they were concerned that early public announcement of a potential land acquisition would be misinterpreted as an approved acquisition and that early disclosure would affect land values in and around the potential acquisition. On the other hand, the Army has a communication strategy that emphasizes stakeholder involvement. Specifically, in its strategic plan, the Army states that key stakeholders—people living near the potential land acquisition site, elected officials, nongovernmental groups, and others—must be engaged early in the planning process and that the public must be included in the decision-making processes because early engagement is considered a critical step in communicating its message and sustaining positive interaction with the public. However, the Army strategic plan lacks specificity as to when, and in what form, this early outreach should occur.

During recent and ongoing land acquisitions, the Army inconsistently implemented these OSD and Army communication strategies prior to obtaining OSD waiver approval. In the cases of Fort Irwin and at the three sites in Hawaii, the Army involved stakeholders before OSD granted waivers to its land acquisition moratorium. At Fort Irwin, Army officials said that a congressional delegation was involved in planning and determining which land areas were to be acquired and that they had met with landowners and local groups before the Army submitted its waiver request. Similarly, Army officials involved key stakeholders early in the planning process for the acquisition of training land in Hawaii. According to Army officials, support from a congressional delegation was obtained before the waiver requests were submitted. Also, the landowners in the three acquisitions were willing sellers that worked with the Army to actively communicate with and engage the support of people living near the potential land acquisition sites, elected officials, and nongovernmental groups. Army officials stated that open communication with the public during the initial phase of the acquisition process allowed them to proceed with the acquisitions with the support of key stakeholders.

By contrast, in the case of the potential expansion of the Piñon Canyon Maneuver Site, while Army officials informed the congressional delegation that the Army was considering a potential expansion of the maneuver site, it did not inform the public of its land acquisition plans until after OSD approved the Army's request for a waiver to pursue the expansion. While OSD's policy clearly prohibits potential major land acquisitions being made public through a request for proposals, notice of intent to perform

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environmental analysis, request for legislation or budget line item, press release, or other official notice, it is unclear what, if any, stakeholder notification (such as informal community outreach) is permissible under OSD's policy prior to OSD waiver approval. Army officials at Fort Carson said that, in an effort to comply with OSD policy, they did not communicate openly with the public or fully explain the Army's reasoning for the proposed expansion prior to OSD waiver approval. These officials explained that, in their view, OSD's policy required that proposed land acquisitions not be made public or discussed in any way until after OSD had approved a moratorium waiver. Affected landowners and community groups at times relied on rumors and leaked documents as their only available source of information, but these sources did not necessarily provide a clear, complete, or accurate explanation of the Army's need for and approach to acquiring additional land or of the Army's plans to also use other strategies to meet critical training needs. For example, some landowners and community groups near Piñon Canyon incorrectly assumed that the Army's initial consideration of potential alternatives to the land acquisition and assessment of the environmental and economic impacts constituted the Army's final analysis justifying the expansion.

In another example, a coalition of nearby landowners approached the Army in the fall of 2006 with inquiries about a leaked map, proposing a 1-million-acre expansion of the Piñon Canyon Maneuver Site. Army officials explained to the Colorado citizens that the leaked map was a planning map and did not represent Army's intentions for expansion. However, coalition members stated their belief that the map represented the Army's long-range land acquisition plan. They also said that the Army's message was not consistent with the lack of a decision to pursue land acquisition at other installations, such as Fort Hood, Texas, and Fort Stewart, Georgia, where large numbers of Army units are located and trained. Coalition members explained that training land shortages existed at these installations and yet, the Army has not proposed acquisition of additional training land at either installation.<sup>40</sup>

Army officials said that they could not fully explain their reasoning in concluding that the proposed Piñon Canyon expansion was justified because of OSD's policy restricting public disclosure and that the Army's

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<sup>40</sup>A spokesperson for the coalition stated that the coalition believes the Army's proposed expansion is wrong and completely "unjustifiable" and that its opposition to the proposed expansion goes beyond the way the Army communicated its proposal.

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silence may have been misinterpreted as an unwillingness to explain the Army's needs and plans. Without a consistent and clarified DOD-wide practice that both addresses OSD's concerns about early disclosure of potential major land acquisitions and, at the same time, permits the Army and the other military services some flexibility to engage key stakeholders early in the decision-making process, the Army and other military services are likely to experience communication problems similar to those encountered during the acquisition of additional land at the Piñon Canyon Maneuver Site.

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## Conclusions

The Army has improved its land acquisition process in recent years so that it has a rational approach for determining land requirements and alternatives rather than relying on targets of opportunity as it did in the past when making major land acquisition decisions. However, the Army's 2004 strategic plan for training ranges does not reflect up-to-date training land needs, such as those associated with the Grow the Force initiative, BRAC actions, and Global Defense Posture realignments. Without a current strategic plan, Army officials charged with planning and budgeting do not have a priority list of training land shortages that helps them to strategically address these shortages. The training land needs articulated in the 2004 strategic plan are out of date because the Army does not have a process to routinely and systematically update the plan. As a result, the strategic plan has not been updated. Therefore, training land needs articulated are 4 years out of date and will remain so, diminishing the plan's effectiveness as a tool to ensure land acquisitions are based on current training needs.

Because of the lack of specificity in OSD and Army communication strategies, the Army has not been consistent or always effective in communicating its approach for deciding to pursue acquisitions of training land during the initial phase of the process. While early and open communication helped the start of the acquisition process at Fort Irwin and the three sites in Hawaii, the type of miscommunication that occurred in the case of the proposed Piñon Canyon Maneuver Site expansion before OSD waiver approval contributed to the opposition the Army experienced in explaining to the public the justification for the acquisition of training land at the site. Because OSD's policy states that no major land acquisitions may be made public through a request for proposals, notice of intent to perform environmental analysis, request for legislation or budget line item, press release, or other official notice without OSD approval of the moratorium waiver during the land acquisition process, the Army has sometimes felt it has been unable to adequately address the views and

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concerns of key stakeholders—people living near the proposed land acquisition site, elected officials, nongovernmental groups, and others—during the initial phase of the acquisition process when explaining its reasons that a potential land acquisition is justified. Furthermore, while OSD’s policy clearly prohibits potential major land acquisitions being publicized through the official notices described above prior to waiver approval, it is unclear what, if any, stakeholder notification (such as informal community outreach) is permissible under OSD’s policy prior to OSD waiver approval. Without a consistent and clarified DOD-wide practice that both addresses OSD’s concerns about early disclosure of potential major land acquisitions during the initial phase of the process and, at the same time, permits the Army and the other military services some flexibility to engage key stakeholders early in the decision-making process, the Army and other military services are likely to experience communication problems similar to those encountered during the potential acquisition of additional land at the Piñon Canyon Maneuver Site.

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## Recommendations for Executive Action

To help planning and budgeting officials prioritize their efforts to mitigate training land shortages and to improve the effectiveness with which the military services communicate their approach for deciding whether to pursue major training land acquisitions, we recommend that the Secretary of Defense take the following two actions:

- Direct the Secretary of the Army to develop and implement a process to update periodically its strategic plan—the Range and Training Land Strategy—to reflect current training land needs.
- Direct the Under Secretary of Defense for Acquisition, Technology, and Logistics and the Assistant Secretary of the Army for Installations and Environment to jointly review their strategies for communicating potential major land acquisitions to the public prior to OSD waiver approval and agree upon a common practice that would address OSD’s concerns about early disclosure and, at the same time, permit the Army and the other military services some flexibility to engage key stakeholders—people living near the proposed land acquisition site, elected officials, nongovernmental groups, and others—earlier in the decision-making process. Such a common practice should specifically address what kinds of public outreach, if any, are permissible prior to OSD’s waiver determination.

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## Agency Comments and Our Evaluation

The Deputy Under Secretary of Defense (Installations and Environment) provided written comments to a draft of this report. DOD's comments are reprinted in their entirety in appendix III. DOD generally agreed with our recommendations, although it did not indicate what, if any, specific steps it would take to implement them.

In commenting on our recommendation for the Army to develop and implement a process to update periodically its strategic plan, DOD stated that the Army agrees with the recommendation, but DOD expressed concern that the title of the report and the discussion on the highlights page create the impression that the land acquisitions at the Piñon Canyon Maneuver Site and in Hawaii were unsound or not valid. We did not assess the soundness or validity of the Army's proposed or completed land acquisitions. However, to ensure the Army's pursuit of land acquisition is justifiable and based on need, we identified and assessed the Army's six-step process beginning with the strategic plan and ending with the purchase of training land. DOD also commented that the Army's strategic plan was not out of date when the Army developed the Piñon Canyon Maneuver Site expansion proposal in 2006 and explained that the Grow the Army initiative had not been announced by the time that the Army prepared the 2004 strategic plan.<sup>41</sup> Nonetheless, as we stated in our draft report, the BRAC and Global Defense Posture realignments had been announced, directly affected Fort Carson, and were being implemented after 2004 but before the 2006 Piñon Canyon planned expansion was announced, thus the strategic plan was out of date by 2006 even though the Grow the Army initiative was still to be announced. Moreover, the Grow the Army initiative adds to the degree of change not reflected in the Army's current 2004 strategic plan, thus the need for the update as we recommended. In its comments on a draft of this report, DOD did not indicate what, if any, specific steps it would take to implement this recommendation. Hence, we continue to believe that the Army should make plans in a timely manner to develop and implement a process to update periodically its strategic plan to reflect current training land needs.

DOD also commented that the draft report did not accurately reflect Army officials' statements to us regarding congressional funding restrictions involving the proposed Piñon Canyon Maneuver Site expansion and

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<sup>41</sup>The Army refers to its planned force structure expansion as Grow the Army. DOD generally refers to the planned force structure expansion of the Army and Marine Corps as Grow the Force.



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proposed revised language to clarify the Army' position on the restrictions. We have revised our report to respond to this comment.

In commenting on our recommendation for a review of OSD and Army strategies for communicating potential major land acquisitions to the public prior to OSD waiver approval, DOD stated that when outreach is desired in advance of waiver approval, the Deputy Secretary of Defense or Under Secretary of Defense for Acquisition, Technology and Logistics can approve early disclosure and permit the military services to engage key stakeholders, elected officials, nongovernmental groups, and others early in the decision-making process. While we recognize that the DOD instruction permits some early engagement with stakeholders through a process for requesting a waiver to the prohibition on early engagement, our work showed that the Army's strategy is in conflict with DOD's instruction, as we stated in our draft report. Due to the conflicts we identified, we continue to believe that effective coordination of OSD's and Army's policies will help to avoid such problems in the future, hence the need for our recommendation.

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We are sending copies of this report to the Secretary of Defense; the Secretaries of the Army, the Navy, and the Air Force; the Commandant of the Marine Corps; and the Director, Office of Management and Budget. The report will be available at no charge on our Web site at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-4523 or [leporeb@gao.gov](mailto:leporeb@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. The GAO staff members who made key contributions to this report are listed in appendix III.



Brian J. Lepore, Director  
Defense Capabilities and Management

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# Appendix I: Scope and Methodology

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In conducting our work, we met with and obtained data from officials in the Office of the Under Secretary of Defense, Acquisitions, Technology, and Logistics, and the Department of the Army. We limited our review to those major training land acquisitions that the Army undertook or that had been ongoing since the Office of the Secretary of Defense (OSD) updated its policy moratorium on major land acquisitions in 2002. The Department of Defense (DOD) defines “major land acquisitions” as those larger than 1,000 acres or costing more than \$1 million. Our initial research found that because land values vary widely in the United States, small land parcels in big cities would be compared with much larger ones in other areas. Therefore, in an effort to make a more accurate comparison of land acquisitions, we focused on acquisitions and proposed acquisitions larger than 1,000 acres since DOD’s updated policy on the moratorium went into effect in November 2002, which included the National Training Center at Fort Irwin, California; South Range, West Pohakuloa Training Area, and Parcel 1010 in Hawaii; and Piñon Canyon Maneuver Site, Colorado. We did not include the Navy, Marine Corps, or Air Force in this review, because they had no major land acquisitions in process or planned at the time of our review.

To evaluate the Army’s approach for making decisions regarding the acquisition of training land, we evaluated DOD regulations that govern land acquisition and Army directives, policies, and procedures that implement and clarify DOD’s land acquisition regulations. To determine whether Army land acquisition plans link acquisitions to requirements, we compared OSD and Army strategic training ranges reports and the training requirements mentioned in them with the Army’s ability to meet such requirements with the major training land acquisitions made or ongoing since 2002. We also met with OSD and Army officials to discuss the link between ongoing and planned acquisitions and current and future training requirements and the Army’s approach for making decisions regarding the acquisitions in California and Hawaii and potential expansion of the Piñon Canyon Maneuver Site. To identify the benefits of the land acquisitions firsthand, we visited Fort Irwin, California; South Range, West Pohakuloa Training Area, and Parcel 1010 in Hawaii; and Piñon Canyon Maneuver Site, Colorado. To evaluate how the Army determined land acquisition requirements at each site, we met with Army officials to discuss the procedures they followed and challenges encountered during the land acquisition process and develop a chronology of the process. Further, we met with officials from the U.S. Army Corps of Engineers headquarters in Washington, D.C.; the Hawaii District at Fort Shafter, Hawaii; and the Los Angeles District, Los Angeles, California, to determine the steps taken to purchase the land once the waiver request is granted.

In addition, we identified the methods Army planning and budgeting officials use to address training shortfalls and evaluated the Army Range Requirements Model—the Army’s analytically based approach for calculating training land requirements and shortages. Specifically, we examined the Army’s strategic plan for training ranges—Range and Training Land Strategy. We also examined the training doctrine and policy, data elements, and formulas used in the Army Range Requirements Model—the Army’s analytically based approach for calculating training land requirements and any shortages. To determine whether the range requirements model provided a consistent and reasonable framework for estimating training land requirements and whether it used accurate inputs, we reviewed the documentation supporting the range requirements model’s analytic framework—including the model’s calculations and assumptions—and identified the methods Army planning and budgeting officials use to address training shortfalls. To determine whether the Army complied with the DOD guidelines in the development, testing, and validation of the range requirements model, we met with subject matter experts who developed the model’s methodology, including Army officials and contractors. We also interviewed and obtained information from representatives of key data systems that provide data to the model including the Army’s Operational Range and Inventory Sustainment database, the Army Stationing and Installation Plan, the Training Ammunition Management Information System, the National Guard Bureau Unit Training Database, the Army Reserve Unit Training System, the Army Training Requirements and Resources System, and the Army Master Range Plan. We evaluated the justifications for and consistency of the Army’s adjustments and modifications, if any, to estimates of training range land requirements and shortfalls computed by the model and the specific rationale for determining training land requirements and shortfalls at Fort Irwin, the three sites in Hawaii, and Piñon Canyon Maneuver Site. To determine the reliability of the annual requirements estimates generated by the range requirements model, we reviewed the documentation supporting the model’s analytic framework—including the model’s inputs, calculations, and assumptions—to determine whether the model provides a consistent and reasonable framework for estimating training land requirements. In addition, we assessed the accuracy of the model’s key inputs—such as the range inventory and the unit training requirements. Although we found that there are minor effects on the model’s estimates based on inaccuracies or discrepancies in the model’s input data sources, we believe the model provides reasonable information for use as a part of the Army’s overall process for determining land needs and acquiring land for training. Regarding range inventory, we reviewed DOD regulations that require periodic verification of the accuracy of range inventory

information, determined the extent to which the Army had complied with these regulations, and discussed with Army officials any reasons for noncompliance. During our site visits, we compared the range inventory information contained in selected installation property records with the range inventory information used by the model and had Army installation officials explain any discrepancies. We discussed and corroborated our observations on the Army's policies and procedures used to determine training land requirements during meetings with OSD, Army headquarters, and installation officials.

To determine whether the Army considered potential alternatives to acquiring training land and the potential environmental and economic effects before deciding to pursue OSD waiver approval, we reviewed OSD guidance and Army policies, procedures, and practices for acquiring land and compared them with the actual practices followed at the sites we visited. We identified the requirements to consider alternatives and the environmental and economic effects by reviewing OSD guidance on requesting waivers to the department's major land acquisition moratorium and OSD and Army guidance that prescribe the training land acquisition process. We also reviewed the requirements of the National Environmental Policy Act of 1969. We learned about the actual practices followed by interviewing Army headquarters officials and officials at Fort Irwin, the three sites in Hawaii, and Piñon Canyon Maneuver Site. At each site visited, we documented and reviewed the initial conceptual analysis the Army conducted to support requests for waivers to the department's major land acquisition moratorium and to evaluate potential alternatives, possible environmental effects, and costs. We discussed our observations with Army officials to ensure that our observations effectively addressed actual practices.

To analyze the Army's effectiveness in communicating to Congress and the public the approach used for making decisions to pursue OSD waiver approval, we discussed approved waiver requests and public outreach efforts with officials from OSD, Army headquarters, and officials at each site we visited. We reviewed OSD and the Army communication strategies to identify their differences, Army documents and public records to identify public questions and concerns, and evaluated the Army's responses to the public. In addition, we reviewed Army documents and public records to identify a list of affected groups and nongovernmental organizations that have supported or opposed the acquisitions in California, Hawaii, or Colorado. From the list, we met with key groups and landowners who have participated regularly in Army's planning and acquisition processes by attending public outreach meetings or by

providing written comments about an acquisition to the Army. We documented Army responses to groups opposed to the land acquisitions by interviewing Army and installation officials at Fort Irwin, California; Fort Shafter, Schofield Barracks, and Wheeler Air Force Base, Hawaii; and Fort Carson, Colorado. We also interviewed members of the Sierra Club and Defenders of Wildlife in California and the Piñon Canyon Expansion Opposition Coalition in Colorado to determine their reasons for opposing the land acquisitions and obtain their suggestions for improving the Army's approach to communicating to Congress and the public. We did not meet with groups involved in ongoing litigation associated with the acquisitions. We discussed our observations with OSD and Army officials to obtain their perspective on our initial observations and obtain their suggestions for improving the Army's effectiveness in communicating the approach it uses for making decisions to pursue major land acquisitions.

We conducted this performance audit from October 2007 through January 2009 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

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# Appendix II: Army Range Requirements Model

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The Army Range Requirements Model provides a consistent and reasonable framework for Army headquarters, major commands, and installations to use to calculate training land requirements—just one step in the Army’s overall process for determining land needs and acquiring land for training. The model calculates the amount of land and the number of days needed to complete training tasks by using the Army training doctrine and policy in conjunction with input data from seven of the Army’s administrative and operational databases. The Army has several quality assurance safeguards to ensure that the model is reliable and updated regularly to help ensure that input data are accurate. The process to update the model includes multilevel reviews by the Army Management Office for Training Support Systems Division, subject matter experts, and authorized users of the model, such as range and training managers, that check for discrepancies between prior and updated calculations and current conditions at individual installations. With respect to the input data used by the model, Army officials are aware of weaknesses associated with some of the Army’s administrative and operational databases that provide these data and routinely take steps to mitigate their effect on the model’s calculations. For example, users have the opportunity to review the model’s calculations and data for accuracy and discrepancies and to address any issues. If any inaccuracies or discrepancies in the data sources are identified, users can extract the model data, request the data source program managers to make the necessary modifications and corrections, recalculate the training land needs, and send the recalculations to the model’s program office for validation and correction. As a result, we believe the effects of the minor weaknesses in the Army’s administrative and operational databases on the model’s calculations of the overall training land needs are minimal.

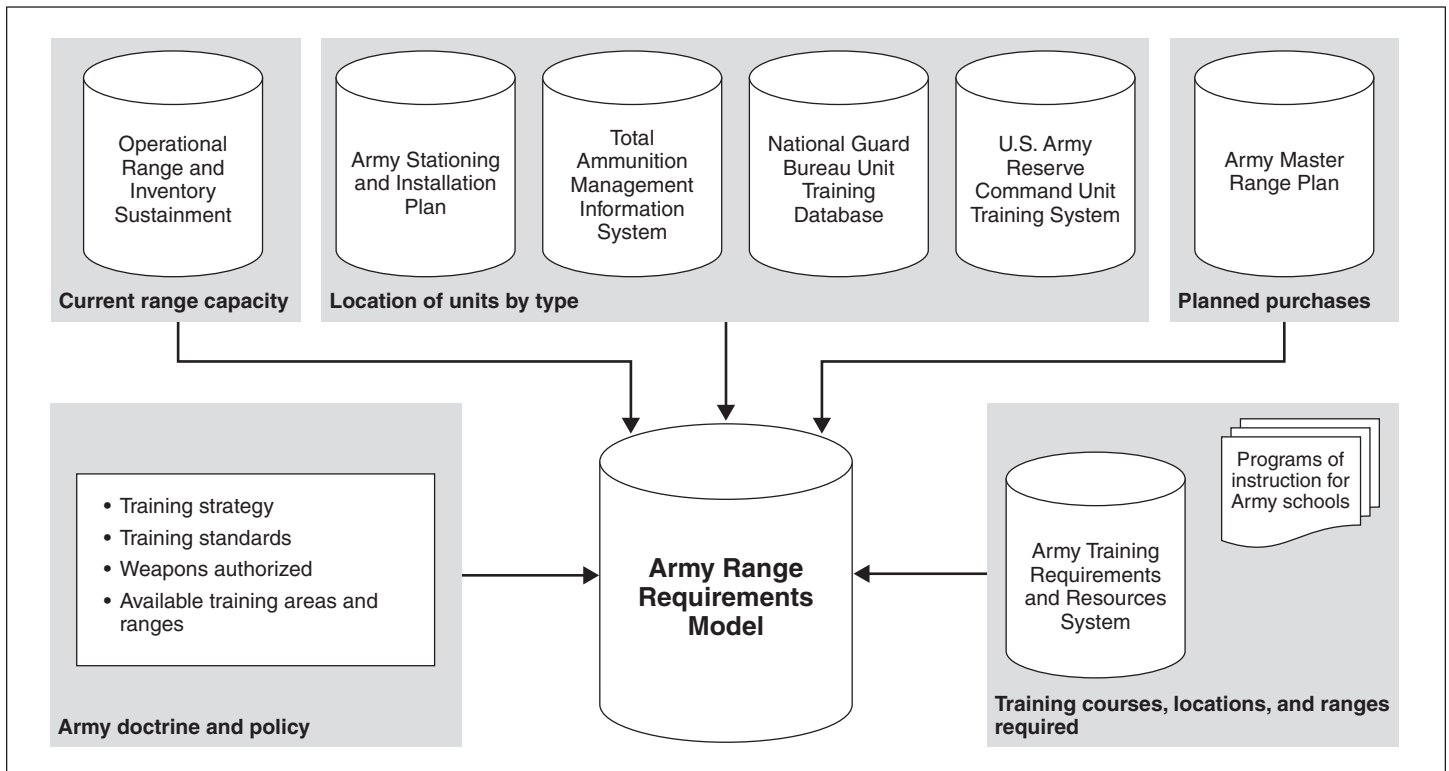
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## Army Range Requirements Model Uses Multiple Inputs to Determine Training Land Requirements

Using Army’s training doctrine and policy as its basis, the Army Range Requirements Model uses data from seven administrative and operational databases that provide information on training range inventories, unit locations, planned purchases, and training courses to calculate the optimum or maximum amount of land needed to train to doctrinal standards and policy. Not reflected in the model are training lands that are not used due to environmental and cultural considerations, condition of facilities, and other factors, all of which the Army addresses through separate analyses at the end of the model’s calculation process. As such, the model’s calculations are not the entire analysis required for validation of training land needs and are not intended to be so. Figure 2 describes the model’s multiple inputs—the training doctrine and policy are depicted on

the left and the administrative and operational databases are depicted as cylinders.

**Figure 2: Army Range Requirements Model's Multiple Inputs**



Source: GAO analysis of Army Range Requirements Model architecture.

### Model Requirements Based on Army Doctrine and Policy

The range requirements model uses Army doctrine and policy—specifically training strategy, training standards, weapons authorized for training, and available training areas and ranges—as its basis for generating training land requirements.

- Army Training Circular 25-1 provides training land requirements per unit, which includes the amount of maneuver training land necessary to meet

training requirements specific to unit size and echelon.<sup>1</sup> The model uses this data to determine the amount of land needed for maneuver training at each of its installations.

- Army Training Circular 25-8 provides data on how each type of training range is to be configured, such as the number of maneuver lanes, objectives, and firing points required for each standard range.<sup>2</sup> The model uses this information to determine whether an installation's training ranges are configured properly to meet training requirements and to calculate the amount of land needed for maneuver training at each Army installation.
- Army Pamphlet 350-38 provides training standards for the types of weapons and weapon systems to be used during training exercises and defines the required number of rounds to be fired for each weapon or weapon system to meet training requirements.<sup>3</sup> The model uses this data to determine the types of ranges and training land needed for different training events. Upon release of new training standards, the Army reviews them for clarity before entering them into the model. The latest version of this policy was published in July 2008 and is currently being revised for fiscal year 2009. After the updates are complete, they will be incorporated into the model.
- Army Pamphlet 415-28 provides specific guidance on how property is to be tracked across the Army, specifying the use of category codes for each type of property including training land and ranges.<sup>4</sup> These category codes allow the Army to determine what types of training land and ranges are available across all its installations. The model uses the categorization codes to identify and define a specific range or type of maneuver training land when generating training requirements. The Army ensures that any updates to these codes are reflected in the model by incorporating them as soon they are published. The pamphlet was last updated in April 2006.

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<sup>1</sup>Army Training Circular 25-1, *Training Land*, U.S. Army Chief of Staff (Washington, D.C., Mar. 15, 2004).

<sup>2</sup>Army Training Circular 25-8, *Training Ranges*, U.S. Army Chief of Staff (Washington, D.C., Apr. 5, 2004).

<sup>3</sup>Army Pamphlet 350-38, *Standards in Training Commissions*, U.S. Army Chief of Staff (Washington, D.C., July 24, 2004).

<sup>4</sup>Army Pamphlet 415-28, *Real Property Category Codes*, U.S. Army Chief of Staff (Washington, D.C., Apr. 11, 2006).



According to Army officials, the above Army doctrine and policies do not reflect the increases in unit training and the use of training ranges as a result of ongoing contingency operations. As more units, including National Guard units, are mobilized for contingency operations, they require more training than would have happened at a greater frequency than in peacetime. Because the range requirements model is based on doctrine that reflects peacetime assumptions, its calculations do not reflect the current increased training. For instance, in peacetime, most ranges are used 242 days a year (which is the timeframe used by the range requirements model to calculate training land needs). With increased training due to contingency operations and mobilization of troops, many ranges are being used almost year-round.

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### Model Uses Data from Seven Administrative and Operational Databases

The Army Range Requirements Model uses data from seven administrative and operational databases and relies on these data sources to provide the initial quality assurance over these data:

- **Operational Range and Inventory Sustainment** to track the Army's range inventory. This inventory provides geospatial data on each range, lists the type of munitions used at each range, and describes range conditions. Data in this inventory are required to be updated every 5 years. Army officials said that they would like to have the inventory updated more often, but, since the range inventory is relatively stable and does not change significantly, they believe that the system's data have a minimal effect on the reliability of model's calculations. Still, Army headquarters has asked that the inventory be updated more frequently and has provided funding in order to do so. The data are reviewed by both the U.S. Army Environmental Command, the Army office responsible for oversight of the inventory, and by installations, who are the primary users of the data.
- **Army Stationing and Installation Plan** to track the number of military personnel on an installation. This plan, which is a database, contains data on civilian and military personnel stationed at individual Army installations. For example, the database shows the number of units stationed on a specific installation during a given fiscal year. These data undergo a quarterly multistep validation, verification, and update process. The Army Assistant Chief of Staff for Installation Management, the office responsible for oversight of the database, performs a data integration process to normalize information provided to the system by other Army data sources. Updated data are sent to users, such as Army Installation Management Command and other Army commands, for review and validation. The database's management office controls data entered, limits access to the data to authorized users only, validates all data edits, and

integrates the validated data edits into the database. According to an Army official, the data are around 75 to 80 percent accurate even though they undergo a multistep review process on a regular basis. Still, we believe the effects of the database's 75 to 80 percent accurate rate on the model's calculations are minimal, because users of the range requirements model have the opportunity to review the database's data for accuracy and discrepancies and to address any issues with any inaccurate data used in model.

- **Total Ammunition Management Information System** to track the organization of units training at an installation. This system provides data needed to manage training ammunition requirements, authorizations, forecasts, and expenditures. Because these data are categorized by Army's hierarchical structure, they can be used to identify the organization of units per Army echelon. Data are manually validated each time the system is updated, which is usually twice a year.
- **National Guard Bureau Unit Training Database** to ensure that installations used by National Guard units are accounted for when calculating training land requirements. The database contains data on installations where National Guard units have trained and are scheduled to train, the type of training completed, as well as account for increased training due to contingency operations. Data are collected in a spreadsheet that is manually verified through two levels of review, both done within the National Guard Bureau Training Support Branch, the office with oversight of the database. The first review is by the person entering the data and the other by his or her supervisor. In addition, data are verified using a separate data system, the Range Facility Management Support System, which tracks historical usage of training land and ranges by National Guard units. National Guard officials said that historical training data are not used by the active Army to predict future training requirements, so the data from this database must be edited to fit the model's business rules. As such, the National Guard reviews the data and edits it to fit the model's business rules.
- **U.S. Army Reserve Command Unit Training System** to ensure that installations used by reserve units are accounted for when calculating training land requirements. The system provides reserve unit data, such as unit names and home stations, and serves as the central database for approved training activities within U.S. Army Reserve Command. The system provides data on annual training exercises involving more than one unit but does not include regular training for individual units. While Reserve Command training is underrepresented in the model, Army officials are aware and account for this lack of data by estimating regular

training for individual Reserve units. Data in this database are reviewed periodically to reflect updates and access to the data is limited to authorized users only. Most data are entered at the major command level and the major command has authority to grant access to users. In addition, the data undergoes a multilevel review process when entered into the system. The major command is responsible for an initial review of new data entered into the system, which are then reviewed for accuracy by subject matter experts. The final validation of any edits made to the data is performed by the Reserve Command Training Directorate, which maintains the system. Any issues resulting can be addressed when the model requirements are reviewed by Reserve users, who can identify discrepancies and notify the model program office about them. We believe this should sufficiently minimize any potential issues in training requirements calculated by the model.

- **Army Master Range Plan** to compare calculated land or range shortfalls with programmed modernization projects and range or land acquisitions. This comparison allows users to see when new training ranges or land will be ready for use to meet training requirements. The plan is the Army's database of record for approved range modernization and training land acquisition projects, including when modernization projects will begin and end, how much they will cost, what type of funding will be used for them, and where they will be located. Data in this database are verified and validated by installations, which develop prioritized lists of their range modernization and training land projects. These lists are first validated at the major command level followed by validation at the Army Office of the Deputy Chief of Staff, Training Support Systems Division, which has ultimate oversight over the database.
- **Army Training Requirements and Resources System** to assist in projecting range and training land requirements for various Army schools. This system is the Army's central repository for all school-related training courses and includes detailed information on requirements, programs, costs, and personnel. The Assistant Secretary of the Army for Manpower and Reserve Affairs has oversight over the system, which can be accessed only by authorized users. The system is a transactional database and any edits to the data in the system are recorded and can be traced back to the user who changed the data. An Army official said that, because the system can be accessed by a large number of users and has vast quantities of data, Army schools and other users are relied on to ensure that their class schedules are correct and up to date. Another official explained that, because training projections are estimated based on course schedules, they may not be correct for many installations, as courses are added or canceled throughout the year, including after the range requirements

model calculates training land needs. They added that this can potentially cause model calculations to be inaccurate. However, the model's quality assurance procedures allow users to note changes made to course schedules, and account for any inaccuracies in the model's calculations. We believe this should sufficiently mitigate any issues associated with the range requirements model use of the data from this system.

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### Army Range Requirements Model Has Several Quality Assurance Safeguards

The Army Range Requirements Model has quality assurance safeguards to ensure that the requirements it produces are valid. These include limited access to the model, prohibiting users from permanently altering or deleting the data, and transparency. In addition, the process of updating the data used by the model also includes quality assurance procedures, including multilevel reviews of the data. For example, the range requirements model provides for authorized users at an individual installation to identify and verify the source data used by the model for their installation, which they routinely do. If the authorized users find errors or discrepancies they cannot update the data in the model themselves but rather provide the correct data to the range requirements model program manager which researches the issue and notifies the responsible data source manager of the correction. This installation quality check is in addition to the quality and reliability checks and procedures that exist within each of the data sources. We believe that any potential errors or discrepancies are sufficiently minimized before the data is used by the model to calculate its final training land requirements for an individual installation.

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### Model Quality Assurance Includes Limited Access, Inability to Permanently Alter Data, and Provides Transparency

The range requirements model can be used only by certain individuals who are granted access by the model's management office, such as installation range officers or training officers. These authorized users can review their installations' training requirements, which include detailed information on requirement calculations and associated data sources and provide a level of transparency to help ensure computation quality and accuracy. However, the users can not make any substantive changes to the model's data and calculations. This helps ensure that no data are accidentally deleted or permanently altered from the data sources. In those instances where authorized users may be concerned that the range requirements model does not take into account certain factors, such as environmental or cultural considerations, condition of facilities including ranges, and use of land by other services, instead of making edits directly to the model, they can extract data from the model and manipulate them to account for these factors. Any edits to the model's calculations are then forwarded to

the installation command and the model’s management office for validation. If validated, a record is kept of these changes at the installation level, though no modifications are made to the baseline data. This allows users to identify needed changes to their installation training requirement while not disrupting the overall system. In addition, this level of transparency is important, because the model’s management office relies on users to determine whether model requirements for their installations are adequate and correct.

**Updates to Model Include Quality Assurance Procedures**

In addition to the above quality assurance safeguards, updates to the model are part of a multistage process that provides an additional layer of quality assurance to data used by the model when generating training land requirements. Table 1 provides information on the steps used to update information in the model.

**Table 1: Process for Updating Data in the Army Range Requirements Model**

| Step  | Action taken  |
|---|---|
| 1. Upload new data                              | New data are manually uploaded from data sources into a temporary database.   |
| 2. Identify problems with updated data          | An analysis is performed on the temporary database to identify data that do not fit model procedures and business rules. Subject matter experts then manually review the data to determine why it does not fit model procedures and business rules. |
| 3. Compute new data in the model                | Data are incorporated to a test version of the model and prospective training range requirements are computed.  |
| 4. Identify inconsistencies in new computations | Results of the test model are reviewed to check for inconsistencies. Subject matter experts determine whether they are valid or due to a flaw in the calculations.  |
| 5. Review computations                          | Results from the test model are circulated to select members of the model user community to ensure any inconsistencies not found in step 4 are identified.  |
| 6. Transfer updates                             | Data transferred from the test model to the actual model. During the transfer data are tested to ensure they are identical.   |

Source: DOD.

The entire update process is performed by the model’s management office and consists of several steps that can take from 2 to 10 weeks to complete depending on the complexity of the source data and the number of discrepancies found in such data. The first step involves collecting data from the seven data systems and manually uploading them into a temporary database. These data are uploaded manually because, as officials noted, most Army systems were developed at different times for a variety of purposes, so are not designed to communicate electronically. The second step of the update process identifies any problems with the newly uploaded data. This includes applying the model’s business rules to

the temporary database to see if the data can function in the model. Any data that appear to cause problems are then reviewed by subject matter experts in the model's management office to determine what is wrong with the data. In the third step, the data are uploaded to a test version of the model, which is used to calculate prospective training requirements. The fourth step involves reviewing the results of the test model for inconsistencies. For example, an installation for which training requirements for a particular type of range increase or decrease by more than 20 percent would be identified for further review. Subject matter experts would then review all the noted discrepancies to determine whether they are valid. The fifth step includes another layer of review of the test model results. After the subject matter experts are finished with their review, the test model results are then forwarded to select members of the model user community at the installation level. These users examine the test model results to determine whether any inconsistencies exist; these would have been inconsistencies not found in step four. The sixth and final step in the update process involves transferring the data in the test model to the actual model. During the transfer, the data are tested to make sure they are the same in both models. Once the data are uploaded to the actual model, they are used to determine official training requirements and are available to the entire user community.

The update process helps ensure that the data used to determine training land requirements are as accurate as possible. Although the model relies on the quality of the data provided by the source systems, the quality assurance procedures that are part of the update process can help mitigate any potential problems with the source data. For example, inaccuracies in any of the source systems, such as units or ranges incorrectly labeled, would likely be caught in the second step of the update process as the model's business rules would not be able to identify such units or ranges. Moreover, if errors cause large discrepancies in training requirements for certain installations, they would likely be noted and examined to determine what caused them. Further, users can review the test model calculations in step four, which allows them to determine whether requirements for their installations as well as for others appear to be inaccurate.

# Appendix III: Comments from the Department of Defense



ACQUISITION  
TECHNOLOGY  
AND LOGISTICS

OFFICE OF THE UNDER SECRETARY OF DEFENSE  
3000 DEFENSE PENTAGON  
WASHINGTON, DC 20301-3000

DEC 23 2008

Mr. Brian J. Lepore  
Director, Defense Capabilities and Management  
U.S. Government Accountability Office  
441 G Street, N.W.  
Washington, DC 20548

Dear Mr. Lepore,

This is the Department of Defense (DoD) response to the GAO draft report, GAO-09-32, entitled, "DEFENSE INFRASTRUCTURE: Army's Approach for Acquiring Land Is Not Guided by Up-to-Date Strategic Plan or Always Communicated Effectively," dated November 20, 2008 (GAO Code 351105).

The Department appreciates the opportunity to comment on the draft report. The Department's comments on the two specific recommendations in the report are outlined in the enclosure. We continue to appreciate the audit work performed by the GAO.

Sincerely,

Wayne Army  
Deputy Under Secretary of Defense  
(Installations and Environment)

Enclosure: As stated



GAO DRAFT REPORT – DATED NOVEMBER 20, 2008.  
GAO CODE 351105/GAO-09-32

“DEFENSE INFRASTRUCTURE: Army’s Approach for Acquiring Land Is Not Guided by  
Up-to-Date Strategic Plan or Always Communicated Effectively”

DEPARTMENT OF DEFENSE COMMENTS  
TO THE RECOMMENDATIONS

**RECOMMENDATION 1:** The GAO recommends that the Secretary of Defense direct the Secretary of the Army to develop and implement a process to update periodically its strategic plan – Range and Training Land Strategy – to reflect current training land needs.

**DOD RESPONSE:** Partially Concur. The Army agrees with the recommendation to regularly update its strategic plan for training ranges. However, the title of the GAO report, as well as the discussion on the “Highlights” page, create the implication that the currently contemplated land acquisitions at Pinion Canyon Maneuver Site(PCMS) and in Hawaii are somehow unsound or not valid. Recommend the title be changed to better reflect GAO’s actual findings that the Army’s land acquisition process was fundamentally sound and well supported (“an extensive, analytic approach” – GAO draft report, page 6) . We propose as the new title: “Army’s Approach to Acquiring Land is Sound but Could Benefit from Regularly Updated Strategic Plans, and Communicated More Effectively.”

At the time PCMS expansion proposals were developed (2006), the Strategic Plan was not outdated (Grow the Army had not yet been announced). Additionally, the major events that would be updated into the Strategic Plan (Grow the Army) have not invalidated the need to expand at PCMS, but have, in fact, made the case for expansion at PCMS even more pressing and urgent. Moreover, there is no indication (either by GAO or by the Army) that any of the four key elements of the Army’s *Range and Training Land Strategy* would change in an updated Strategic Plan (i.e., (1) focused land management, (2) buffers to prevent encroachment, (3) utilize other federal lands, and (4) land acquisition would still remain the same set of tools in an updated Strategic Plan). Thus, while it is preferable and desirable to regularly update the Strategic Plan, (a recommendation with which the Army concurs), the Army does not concur with the implication in the title, “Highlights”, and “Results in Brief” that the failure to update the Strategic Plan in the past four years makes any difference in the requirement to expand PCMS, or in any way renders the rest of the “extensive, analytic” process invalid or unsound.

Also with respect to the discussion of Recommendation 1, the information on page 8 of the GAO report does not accurately reflect what Army officials told GAO auditors regarding congressional funding restrictions. The report states: “The Army has elected to treat the funding restrictions...as a prohibition on the use of funds for any action related to the potential expansion of [PCMS], effectively putting the potential acquisition process (including any potential [NEPA] analysis) on pause.” That is incorrect. What Army officials actually told auditors was that the funding ban was limited to Military Construction Appropriations and did not prevent the



expenditure of Operations and Maintenance funding on the National Environmental Policy Act (NEPA) process. The Army voluntarily decided to delay the NEPA process because of uncertainty over congressional support for the expansion. The Department therefore requests that the description of the Army statements of its position be revised to read as follows: "Army officials stated that because the funding restrictions apply only to Military Construction Appropriations, this does not preclude the Army from further studying the 100,000-acre site or starting the NEPA process using other appropriations. However, to date the Army has voluntarily declined to spend other appropriated funds to begin NEPA due to Congressional concerns. Uncertainty over Congressional support for the contemplated expansion made a delay in expending funds to start an expansion NEPA appear to be prudent."

**RECOMMENDATION 2:** The GAO recommends that the Secretary of Defense direct the Under Secretary of Defense for Acquisition, Technology, and Logistics and the Assistant Secretary of the Army for Installations and Environment to jointly review their strategies for communicating potential major land acquisitions to the public prior to OSD waiver approval and agree upon a common practice that would address OSD's concerns about early disclosure and at the same time, permit the Army and the other military services some flexibility to engage key stakeholders – people living near the proposed land acquisition site, elected officials, nongovernmental groups, and others – earlier in the decision making process. Such a common practice should specifically address what kinds of public outreach, if any, are permissible prior to OSD's waiver determination.

**DOD RESPONSE:** Partially Concur. DoDI 4165.71, Real Property Acquisition, Paragraph 6.1. Land Acquisition Approval, explicitly states that "proposals for 1000 or more acres of land, or land with an estimated purchase price or annual lease that exceeds \$1M, must be approved ... prior to any public announcement, request for proposals, notice of intent to perform environmental analysis, request for legislation, or budget line item, press release or other public notice." When outreach is desired in advance of waiver approval, the Department offers a two-step approval process whereby the Deputy Secretary of Defense (DSD) or Under Secretary of Defense for Acquisition, Technology and Logistics (USD[AT&L]), as appropriate, approves going forward with some of the actions/studies listed above and, upon completion, directs the military service to obtain final DSD/USD(AT&L) approval to either enter into the lease or acquire the land. The Department believes that this two-step approval process provides early disclosure and permits military services some flexibility to engage key stakeholders, elected officials, nongovernmental groups, etc., early in the decision making process.

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# Appendix IV: GAO Contact and Staff Acknowledgments

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## GAO Contact

Brian J. Lepore, (202) 512-4523 or leporeb@gao.gov

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## Acknowledgments

In addition to the contact named above, Mark Little, Assistant Director; Mae Jones; Ron La Due Lake; Katherine Lenane; Josh Margraf; Dave Martin; Julia Matta; Charles Perdue; Courtney Reid; and Roger Tomlinson made major contributions to this report.

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