



July 31, 2014

Congressional Committees

**Active and Reserve Unit Costs: DOD Report to Congress Generally Addressed the Statutory Requirements but Lacks Detail**

During the past decade, the Department of Defense (DOD) has had to rely heavily upon its reserve components—the Army National Guard, Army Reserve, Air Force Reserve, Air National Guard, Marine Corps Reserve, and Navy Reserve—to meet operational requirements. The extended use of, and high demand for, reserve-component forces for operations over the past 11 years has meant that their role evolved from serving primarily as a strategic reserve, used to supplement active-duty forces, to being used operationally in ongoing rotational deployments. Facing a reduction in demand from the drawdown of operations in Afghanistan and Iraq and anticipated budget constraints, DOD has proposed reducing the military end strength of both the active and reserve components. The President's fiscal year 2015 budget submission for DOD recommended reducing active duty Army end strength to between 440,000 to 450,000 soldiers,<sup>1</sup> Army National Guard end strength to 335,000 soldiers, and Army Reserve end strength to 195,000 soldiers. However, the defense strategic guidance,<sup>2</sup> issued in January 2012, states that such reductions must be balanced with preparation for future challenges and protection of the broad range of U.S. national security interests. One key to achieving this balance is determining the most appropriate and cost-effective mix of active and reserve forces within the total force.

The National Defense Authorization Act for Fiscal Year 2012, Section 1080A,<sup>3</sup> required the Secretary of Defense to submit to the congressional defense committees a report describing the costs of units of the reserve and active components of the armed forces and required DOD to include certain statutory elements, including the following:

1. An analysis of the costs of a sample of deployable units of the active components of the Armed Forces and the costs of a sample of similar deployable units of the reserve components of the Armed Forces. Units of the active components and reserve components shall be treated as similar if such units have the same table of organization and equipment or, as applicable, the same size, structure, personnel, or deployed mission.

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<sup>1</sup>Department of Defense, *United States Department of Defense Fiscal Year 2015 Budget Request Overview* (March 2014).

<sup>2</sup>Department of Defense, *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense* (January 2012).

<sup>3</sup>Pub. L. No. 112-81, §1080A (2011). DOD was mandated to submit its report 180 days after enactment of the National Defense Authorization Act for Fiscal Year 2012 or by June 28, 2012. DOD submitted its report to Congress December 20, 2013.

2. An assessment of the advisability of retaining, decreasing, or increasing the number and capability mix of units and end strengths of the reserve components of the Armed Forces within the total force structure of the Armed Forces.
3. The current and most likely anticipated demands for military capabilities in support of the National Military Strategy, including the capability and deployment timeline requirements of the contingency plans of the combatant commands.
4. Authorities available to access the reserve components of the Armed Forces for Federal missions.
5. Personnel, equipment, and training readiness, and the cost to sustain, mobilize, achieve required pre-deployment readiness levels, and deploy active component units and reserve component units.

The Fiscal Year 2012 National Defense Authorization Act further mandated GAO to submit to the congressional defense committees an evaluation of DOD's report.<sup>4</sup> We examined the extent to which DOD's report addressed the required statutory elements and the report's strengths and potential limitations. We provided a briefing on our results to the congressional defense committees' staffs on June 18, 2014. This report formally transmits the results of our work in response to this mandate (see enclosure).

To assess the extent to which DOD's report addressed the statutory requirements, we used a scorecard methodology in which two analysts independently assessed the extent to which the report's content addressed, partially addressed, or did not address each of the required elements.<sup>5</sup> To inform our analysis, we met with officials from Office of the Director, Cost Assessment and Program Evaluation (CAPE); Office of the Assistant Secretary of Defense (Reserve Affairs); National Guard Bureau; Air Force; Army; and Navy to discuss the process by which the report content was developed. When we found instances where DOD's report partially addressed or did not address the statutory requirements, we met with DOD officials to obtain their perspectives on the possible reasons for the omission and the potential effects on force-structure planning. To determine the report's strengths and potential limitations, we identified alternative approaches for analyzing active and reserve force structure and compared these approaches with DOD's report. To identify alternative approaches, we conducted a literature review and interviewed agency officials and external experts. We used an expert referral sampling approach to determine the most relevant studies and experts to include in our analysis.<sup>6</sup> The studies we reviewed included related DOD reports, such as the *Comprehensive Review of the Future Role of the Reserve Component*; external studies, such as RAND's *Assessing the Army's Active/Reserve Force Mix (FOUO)*; RAND's *Costs of Flying Units in Air*

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<sup>4</sup> DOD, *Unit Cost and Readiness for the Active and Reserve Components of the Armed Forces* (December 2013).

<sup>5</sup> We defined our scoring methodology as follows: *Addressed*: A statutory reporting requirement was scored as addressed when DOD's report explicitly addressed all parts of the individual requirement. *Partially addressed*: A statutory reporting requirement was scored as partially addressed when DOD's report explicitly addressed at least one or more parts of the requirement but not all parts. *Not addressed*: A statutory reporting requirement was scored as not addressed when DOD's report did not explicitly address any part of the required statutory element.

<sup>6</sup> An expert referral sample includes an initial list of experts, each of whom is asked for referrals to additional people, who are then interviewed and asked for referrals, and so on. We repeated this process until the same studies and experts were consistently being identified. Because this is a nongeneralizable sample, our review cannot be used to make inferences about the full range of expert analysis on force structure cost alternatives. We also did not validate the findings and recommendations of these studies.

*Force Active and Reserve Components*; Institute for Defense Analyses' *Analyzing the Costs of Alternative Army Active/Reserve Force Mixes*; National Commission on the Structure of the Air Force's *Report to the President and Congress of the United States*; and prior GAO work.<sup>7</sup> We also met with Army and Air Force officials to discuss how the principles described in DOD's report are applied in their active and reserve force-mix decision making process. We focused this work on the Army and Air Force because their reserve components are large in proportion to their active components, unlike the Navy and Marine Corps.

We conducted this performance audit from February 2014 to July 2014 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.

In summary, DOD's report addressed or partially addressed the statutory reporting requirements, but could have included more detailed information to give policymakers better insight into affordability and other active and reserve force-mix issues. DOD's report addressed two elements by including a cost analysis of one similar, deployable active and reserve unit for each of the armed services, and by identifying all of the major Title 10 U.S. Code statutes available to access the reserve component for federal missions. However, DOD's report partially addressed other statutory elements; for example, DOD's report did not include detail about the specific capabilities that are in demand today, nor did it specifically identify the most likely anticipated demands for military capabilities in the future. Table 1 summarizes the results of our analysis.

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<sup>7</sup>See in particular GAO, *Human Capital: Opportunities Exist to Further Improve DOD's Methodology for Estimating the Costs of Its Workforces*, GAO-13-792 (Washington, D.C.: Sept. 25, 2013); and *Reserve Forces: Army Needs to Reevaluate Its Approach to Training and Mobilizing Reserve Component Forces*, GAO-09-720 (Washington, D.C.: July 17, 2009).

**Table 1: GAO’s Assessment of DOD’s Report Addressing Statutory Requirements**

Element	GAO assessment	Assessment summary
1	Addressed	The report includes a yearly average cost analysis of one similar, deployable active and reserve unit for the Army, Air Force, Navy, and Marine Corps.
2	Partially addressed	DOD’s report discusses the active- and reserve-component capability mix across a variety of mission areas in the services and provides a rationale for the mix. The report does not explicitly discuss the advisability of retaining, decreasing, or increasing the size or capability mix of the reserve component.
3	Partially addressed	DOD’s report addresses the current and most likely anticipated demands for military capabilities in broad terms. The report does not include detail about the specific capabilities that are in demand today and does not specifically identify the most likely anticipated demands for military capabilities or identify the capability and deployment timeline requirements of the contingency plans of the combatant commands.
4	Addressed	The report identifies all of the major Title 10 U.S. Code statutes available to access the reserve component for federal missions and states the intended utilization requirements as provided by law for each.
5	Partially addressed	The report identifies the costs to sustain and the incremental costs to achieve predeployment readiness for the sample of active- and reserve-component units in the aggregate and identifies what portion of the costs to sustain are attributable to personnel. The report does not include the cost to deploy active- and reserve-component units, nor does it include equipment costs in its unit-cost calculations.

Source: GAO analysis. | GAO-14-711R

Note: *Addressed*: A statutory reporting requirement was scored as addressed when DOD’s report explicitly addressed all parts of the individual requirement; *Partially addressed*: A statutory reporting requirement was scored as partially addressed when DOD’s report explicitly addressed at least one or more parts of the requirement but not all parts.

In addition, we found that DOD’s report exhibited four strengths. First, the report provides a basic framework for understanding force mix and identifies the factors that play a key role in force-mix decisions. Next, it includes a comparable, relevant example unit from each service in its respective active and reserve unit-cost analysis, and the Army, Air Force, and Marine Corps examples are considered pacing units, or units that critically impact the service’s primary mission or the wartime tasks within the service’s operational domain. Third, the report uses a “burdened personnel cost” that includes noncompensation costs, such as health care and family housing, in order to more fully illustrate defense-related active and reserve personnel costs. DOD officials told us that the burdened cost they developed included the most readily available and agreed-upon cost elements for making force-mix cost comparisons. Finally, DOD reached consensus among the services and other stakeholders regarding the conclusions and data in the report, which DOD officials told us was a strength of the report given the significant differences among how the different services use their reserve components.

We also identified two limitations of the report:

- First, the report does not address the relative costs of active- and reserve-component units to achieve a similar operational capacity, or ability to meet a given level of demand, under DOD rotational policy. Individual reserve-component units are generally less costly than similar active-component units but, due to DOD rotational policy, more than one reserve-component unit is needed to achieve the same output as a single active-component unit.

Therefore, in some cases, using reserve units to achieve the same operational capacity over time may be more costly than using active units.

- Second, the report does not consider or comment on the effectiveness of either active- or reserve-component units when compared to each other. DOD officials told us that there are differences across the services in the way that reserve-component units are employed, so it would be difficult to generalize about their relative effectiveness. The officials told us that it is a generally accepted principle that in most cases, similar active and reserve units should have comparable levels of effectiveness after completing sufficient training; however, they added that data for measuring active- and reserve-unit effectiveness are limited and inconsistently collected. Because the report does not include a discussion of active- and reserve-unit effectiveness, the extent to which the unit-cost comparisons presented in the report can be used to inform force-mix decisions is limited.

We are not making recommendations in this report.

### **Agency Comments**

DOD reviewed a draft of this report but did not provide formal agency comments. DOD did provide technical comments, and we incorporated those changes where appropriate.

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We are sending copies of this report to the appropriate congressional committees and to the Secretary of Defense. The report is also available at no charge on the GAO website at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-3489 or [PendletonJ@gao.gov](mailto:PendletonJ@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report include Kevin O'Neill, Assistant Director; Shawn Arbogast; Tracy Barnes; Timothy Carr; Pat Donahue; Mary Pitts; Terry Richardson; and Cheryl Weissman.



John H. Pendleton  
Director  
Defense Capabilities and Management

Enclosure

*List of Committees*

The Honorable Carl Levin  
Chairman  
The Honorable James Inhofe  
Ranking Member  
Committee on Armed Services  
United States Senate

The Honorable Richard J. Durbin  
Chairman  
The Honorable Thad Cochran  
Ranking Member  
Subcommittee on Defense  
Committee on Appropriations  
United States Senate

The Honorable Howard P. "Buck" McKeon  
Chairman  
The Honorable Adam Smith  
Ranking Member  
Committee on Armed Services  
House of Representatives

The Honorable Rodney Frelinghuysen  
Chairman  
The Honorable Pete Visclosky  
Ranking Member  
Subcommittee on Defense  
Committee on Appropriations  
House of Representatives

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# Active and Reserve Unit Costs

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**DOD Report to Congress Generally Addressed the  
Statutory Requirements but Lacks Detail**

*Briefing for Congressional Defense Committees  
June 2014*



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## Overview

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- Introduction
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## Introduction

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- During the past decade, the Department of Defense (DOD) has had to rely heavily upon its reserve components—the Army National Guard, the Army Reserve, the Air Force Reserve, the Air National Guard, the Marine Corps Reserve, and Navy Reserve—to meet operational requirements.
- The extended use of, and high demand for, reserve-component forces for operations over the past 11 years has meant that their role has evolved from serving primarily as a strategic reserve, used to supplement active-duty forces, to being used operationally in ongoing rotational deployments.
- Facing a reduction in demand from the drawdown of operations in Afghanistan and Iraq and anticipated budget constraints, DOD has proposed reducing the military end strength of both the active and reserve components. However, the defense strategic guidance,<sup>1</sup> issued in January 2012, states that such reductions must be balanced with preparation for future challenges and protection of the broad range of U.S. national security interests.
- One key to achieving this balance is determining the most appropriate and cost-effective mix of active and reserve forces within the total force.

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<sup>1</sup>Department of Defense, *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense* (January 2012).



## Introduction (cont.): National Defense Authorization Act Requirement

The National Defense Authorization Act for Fiscal Year 2012, Section 1080A, required the Secretary of Defense to submit to the congressional defense committees a report describing the costs of units of the reserve and active components of the armed forces and required DOD to include certain statutory elements, as shown in table 1:

**Table 1: Required Statutory Elements for DOD Report to Congress on Active and Reserve Unit Costs**

Element 1	Element 2	Element 3	Element 4	Element 5
<i>An analysis of the costs of a sample of deployable units of the active components of the Armed Forces and the costs of a sample of similar deployable units of the reserve components of the Armed Forces. Units of the active components and reserve components shall be treated as similar if such units have the same table of organization and equipment or, as applicable, the same size, structure, personnel, or deployed mission.</i>	<i>An assessment of the advisability of retaining, decreasing, or increasing the number and capability mix of units and end strengths of the reserve components of the Armed Forces within the total force structure of the Armed Forces.</i>	<i>The current and most likely anticipated demands for military capabilities in support of the National Military Strategy, including the capability and deployment timeline requirements of the contingency plans of the combatant commands.</i>	<i>Authorities available to access the reserve components of the Armed Forces for Federal missions.</i>	<i>Personnel, equipment, and training readiness, and the cost to sustain, mobilize, achieve required predeployment readiness levels, and deploy active component units and reserve component units.</i>

Source: Pub. L. No.112-81, §1080A (2011). | GAO-14-711R

## Introduction (cont.): DOD's Report

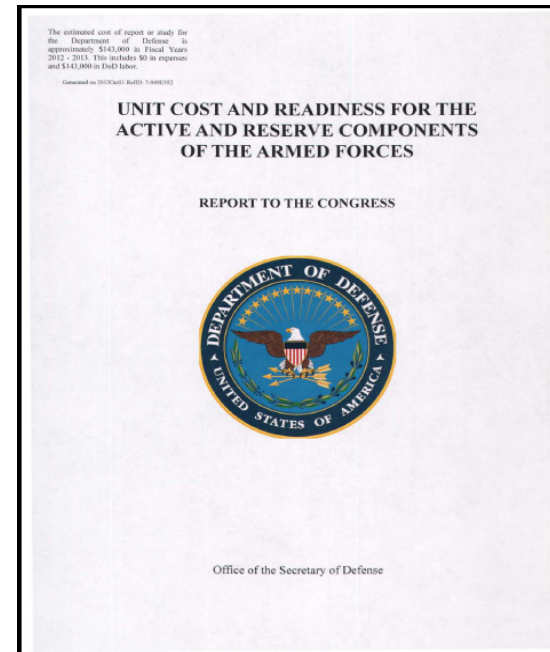
DOD's report, submitted to Congress in December 2013, consists of two main sections:

- Active and Reserve Component Mix: Describes how DOD determines the right mix of its active and reserve forces and the factors that DOD considers in force-mix decisions.
- Cost: Compares individual and unit costs for active-component and reserve-component units.
  - Provides individual cost comparisons for active and reserve members using three different pay grades as examples (O-5, E-7, and E-4).
  - Provides unit-cost comparisons using one unit from each service that is similar in both the active and reserve component as examples.

DOD's report lays out three overall conclusions:

- Cost is one factor among many in force-mix decisions. Mission accomplishment is paramount, so mission-related factors are typically given priority. Cost can be useful in situations where the mission-related factors do not point to a clear choice.
- When not in use, reserve-component personnel are about 15 percent the cost of active-component personnel. When used, reserve-component personnel are 80 to 95 percent the cost of active-component personnel.
- Active and reserve unit costs vary widely based on unit type.

**Figure 1: Department of Defense (DOD) Report on Unit Cost and Readiness for the Active and Reserve Components**



Source: DOD. | GAO-14-711R



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## Objective

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The National Defense Authorization Act for Fiscal Year 2012 further mandated GAO to submit to the congressional defense committees an evaluation of the DOD report.




Our specific objective is to examine the following question:

**To what extent does DOD's report address the required statutory elements, and what are the report's strengths and potential limitations?**

## Scope and Methodology

- To assess the extent to which DOD's report addressed the statutory requirements, we use a scorecard methodology in which two analysts independently assessed the extent to which the report's content addressed each one of the requirements (see figure 2 for our scoring methodology).

**Figure 2: GAO Scoring Methodology**

	<i>Addressed:</i> A statutory reporting requirement was scored as addressed when the Department of Defense's (DOD) report explicitly addressed all parts of the individual requirement.
	<i>Partially addressed:</i> A statutory reporting requirement was scored as partially addressed when DOD's report explicitly addressed at least one part of the requirement but not all parts.
	<i>Not addressed:</i> A statutory reporting requirement was scored as not addressed when DOD's report did not explicitly address any part of the required statutory element.

Source: GAO. | GAO-14-711R

- To inform our analysis, we met with officials from Office of the Director, Cost Assessment and Program Evaluation (CAPE); Office of the Assistant Secretary of Defense (Reserve Affairs); National Guard Bureau; Air Force; Army; and Navy to discuss the process by which the report content was developed.
- When we found instances where DOD's report partially addressed or did not address the statutory requirements, we met with DOD officials to obtain their perspective on the possible reasons for the omission and the potential effects on force-structure planning.

## Scope and Methodology (cont.)

- To determine the report's strengths and potential limitations, we identified alternative approaches for analyzing active and reserve force structure and compared these approaches with DOD's report.
- To identify alternative approaches, we conducted a literature review and interviewed agency officials and external experts. We used an expert referral sampling approach to determine the most relevant studies and experts to include in our analysis.
  - An expert referral sample includes an initial list of experts, each of whom is asked for referrals to additional people, who are then interviewed and asked for referrals, and so on. We repeated this process until the same studies and experts were consistently being identified.
- The studies we reviewed included the following:
  - related DOD reports, such as *Comprehensive Review of the Future Role of the Reserve Component*;
  - external studies, such as RAND's *Assessing the Army's Active/Reserve Force Mix (FOUO)*; RAND's *Costs of Flying Units in Air Force Active and Reserve Components*; Institute for Defense Analyses' *Analyzing the Costs of Alternative Army Active/Reserve Force Mixes*; and National Commission on the Structure of the Air Force's *Report to the President and Congress of the United States*; and
  - prior GAO work, such as GAO-13-792<sup>2</sup> and GAO-09-720.<sup>3</sup>

<sup>2</sup>GAO, *Opportunities Exist to Further Improve DOD's Methodology for Estimating the Costs of Its Workforces*, GAO-13-792 (Washington, D.C.: Sept. 25, 2013).

<sup>3</sup>GAO, *Army Needs to Reevaluate Its Approach to Training and Mobilizing Reserve Component Forces*, GAO-09-720 (Washington, D.C.: July 17, 2009).

## Scope and Methodology (cont.)

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- Because this is a nongeneralizable sample, our review cannot be used to make inferences about the full range of expert analysis on force-structure cost alternatives.
- We also did not validate the findings and recommendations of these studies.
- We also met with Army and Air Force officials to discuss how the principles described in DOD's report are applied in their active and reserve force-mix decision making process.
  - We focused this work on the Army and Air Force because their reserve components are large in proportion to their active components, unlike the Navy and Marine Corps.
- We reviewed our methodology and preliminary findings contained in this draft with the DOD official responsible for preparing DOD's report.
  - The official agreed that our methodology was reasonable.
  - We incorporated technical comments as appropriate.

# Summary of Findings

## Addressing Statutory Requirements

- DOD's report addressed or partially addressed the statutory requirements but could have included more detailed information to give policymakers better insight into affordability and other active and reserve force-mix issues (figure 3).

Figure 3: Summary of GAO's Assessment of the Department of Defense (DOD) Report: Addressing Statutory Requirements

Element	GAO assessment	Summary
1	●	The report includes a yearly average cost analysis of one similar, deployable active and reserve unit for the Air Force, Army, Marines Corps, and Navy.
2	◐	DOD's report discusses the active- and reserve-component capability mix across a variety of mission areas in the services and provides a rationale for the mix. The report does not explicitly discuss the advisability of retaining, decreasing, or increasing the size or capability mix of the reserve component.
3	◐	DOD's report addresses the current and most likely anticipated demands for military capabilities in broad terms. The report does not include detail about the specific capabilities that are in demand today and does not specifically identify the most likely anticipated demands for military capabilities or identify the capability and deployment timeline requirements of the contingency plans of the combatant commands.
4	●	The report identifies all of the major Title 10 U.S. Code statutes available to access the reserve component for federal missions and states the intended utilization requirements as provided by law for each.
5	◐	The report identifies the costs to sustain and the incremental costs to achieve predeployment readiness for the sample active- and reserve-component units in the aggregate and identifies what portion of the costs to sustain are attributable to personnel. The report does not include the cost to deploy active- and reserve-component units. The report also does not include equipment costs in its unit-cost calculations.

Source: GAO analysis of DOD's report. | GAO-14-711R

● Addressed ◐ Partially addressed ○ Not addressed



## Summary of Findings (cont.)

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### Strengths and Potential Limitations

- Among its strengths, DOD's report was effective in discussing personnel and unit costs, the factors that play a key role in active and reserve force-mix decisions, and the services' current force structure.
  - For example, the report develops a "burdened personnel cost" that includes noncompensation costs, such as health care and family housing, in order to more fully illustrate defense-related active and reserve personnel costs.
  - Using this burdened personnel cost, the report concludes that reserve-component personnel cost less than active-component personnel, even when in use.
- However, in addition to the partially addressed reporting elements, we identified other potential limitations.
  - The report does not address the relative costs for active- and reserve-component units to achieve a similar operational capacity and does not address whether active- and reserve-component units are equally effective in performing the same mission.
  - Because of these potential limitations, the extent to which the unit-cost comparisons presented in the report can be used to inform force-mix decisions is limited.

## Background

- A significant number of armed forces personnel are in the reserve component, as shown in table 2.

**Table 2: Fiscal Year 2014 Authorized Active and Reserve End Strength, by Service**

	Air Force	Army	Marine Corps	Navy
Active	327,600	520,000	190,200	323,600
Reserve (All)	175,800	559,200	39,600	59,100
National Guard	105,400	354,200	—	—
Reserves	70,400	205,000	39,600	59,100

Source: Public Law 113-66, Sec. 401, 411. | GAO-14-711R

- The President's fiscal year 2015 budget submission for DOD recommended reducing active-duty Army end strength to between 440,000 to 450,000 soldiers, Army National Guard end strength to 335,000 soldiers, and Army Reserve end strength to 195,000 soldiers.
- Although active-duty service members are full-time—365 days per year—military personnel, reserve-component members in drill status are required to train for at least 1 weekend a month plus 2 additional weeks per year, for a minimum total of 39 days of training a year. The actual number of days an individual reserve-component member serves per year will vary based on skill, unit type, and service readiness goals.
- When routine operational deployments are needed, DOD's rotational policy states that the rotational goal for the active component is no more than 1 year of deployment in every 3-year period. The goal for the reserve component is no more than 1 year of mobilization in every 6-year period. These goals, known as deploy-to-dwell or mobilization-to-dwell ratios, are typically written as 1:2 (active) and 1:5 (reserve) and can vary depending on operational demands.



# Addressing Statutory Requirements

Figure 4: GAO's Assessment of Statutory Element 1


Department of Defense (DOD) Report on Unit Cost and Readiness for the Active and Reserve Components		GAO Assessment
<i>Element 1: An analysis of the costs of a sample of deployable units of the active components of the Armed Forces and the costs of a sample of similar deployable units of the reserve components of the Armed Forces. Units of the active components and reserve components shall be treated as similar if such units have the same table of organization and equipment or, as applicable, the same size, structure, personnel, or deployed mission.</i>		
What DOD Reported		
The report includes a yearly average cost analysis of one similar, deployable active and reserve unit for the Air Force, Army, Marine Corps, and Navy. The units selected for comparison either have similar tables of organization and equipment, structure, personnel, or deployed mission, or are the same size. In addition, the report presents unit-cost data, notes differences between the active and reserve unit costs, and provides information about the incremental costs associated with the deployment of the active- and reserve-component example units.		
What GAO Found		
We determined that this element was addressed, as the report includes a comparison of similar unit types in the active and reserve components.		
DOD could have provided a larger sample of units, which would have improved the depth and quality of its analysis. DOD officials told us that including more unit examples would have provided additional support for the report's conclusion that unit costs vary widely based on unit type. DOD considered including more sample units in the analysis, but decided to include one example unit from each service branch for two reasons: (1) DOD wanted to represent each service equitably in the report by depicting the same number of unit comparisons for each service; and (2) the services varied in their abilities to provide useful cost comparisons between active and reserve units. For example, the Army had existing models that could provide unit-cost data for a variety of comparable active and reserve unit types, but the other services did not have models that could readily generate this information. Each service was responsible for developing the unit-cost example used to illustrate its respective costs in the report; therefore, to treat them equitably without imposing a data-collection burden, DOD decided that using one example unit from each service was an appropriate way to illustrate the unit cost and readiness process. However, without a representative sample from each of the services, the extent to which conclusions about unit costs can be generalized to the larger population of units is unclear.		

Source: GAO analysis of DOD's report. | GAO-14-711R


Addressed   Partially addressed   Not addressed

# Addressing Statutory Requirements (cont.)

Figure 5: GAO's Assessment of Statutory Element 2

<b>Department of Defense (DOD) Report on Unit Cost and Readiness for the Active and Reserve Components</b> <i>Element 2: An assessment of the advisability of retaining, decreasing, or increasing the number and capability mix of units and end strengths of the reserve components of the Armed Forces within the total force structure of the Armed Forces.</i>	<b>GAO Assessment</b>
<b>What DOD Reported</b>  DOD's report discusses and provides a rationale for the programmed future active and reserve component capability mix across a variety of mission areas in the services at the time of the President's fiscal year 2013 budget submission. The report discusses why certain mission duties are better suited to an active or reserve unit and quantifies the reserve presence in the largest mission areas for each service type. The report states that mission duties that are most appropriate for the active component are those that involve collective training for large capital-intensive units, unpredictable or frequent deployments, or perishable military skills that degrade if not used regularly, such as special operations forces. In the Army, combat maneuver units are predominantly in the active component because they require a level of readiness that cannot be maintained in the reserve component because of their extensive large-unit training demands. According to the report, activities that are most appropriate for the reserve component are those involving individual or small-unit skills, those that are predictable, do not require forward stationing, or those that are transferrable to or from civilian life. In the Army, the majority of such units—including engineers, military police, transportation, and medical—are in the reserve components.	
<b>What GAO Found</b>  We determined that this element was partially addressed, as the report does not explicitly discuss the advisability of retaining, decreasing, or increasing the size or capability mix of the reserve component.  DOD officials agreed with our assessment but stated that analyzing the advisability of retaining, decreasing, or increasing the size or capability mix of the reserve component would have been redundant to DOD's budget process. Officials stated that, when preparing the annual budget request, the services and DOD assess the advisability of increasing, decreasing, or retaining the number and capability mix of units and end strengths of the reserve component. Therefore, according to DOD, the budget estimate represents DOD's best estimate of the appropriate active - and reserve-component mix. However, DOD's report does not convey this rationale to the reader, or otherwise comment on the advisability of adjusting the reserve-component force structure. Because it does not discuss or analyze potential changes to the size and capability mix of the reserve component, the report does not inform the reader about the tradeoffs and choices involved in active and reserve force-mix decision making and does not inform the reader about the effect of changes in the active and reserve force mix on the overall capability or effectiveness of the military.	

Source: GAO analysis of DOD's report. | GAO-14-711R

 Addressed
 Partially addressed
 Not addressed



## Addressing Statutory Requirements (cont.)

Figure 6: GAO's Assessment of Statutory Element 3

Department of Defense (DOD) Report on Unit Cost and Readiness for the Active and Reserve Components <i>Element 3: The current and most likely anticipated demands for military capabilities in support of the National Military Strategy, including the capability and deployment timeline requirements of the contingency plans of the combatant commands.</i>	GAO Assessment
<b>What DOD Reported</b>  DOD's report addresses the current and most likely anticipated demands for military capabilities in broad terms. The report states that the defense strategic guidance requires "a force large enough to deny the objectives of, or impose unacceptable costs on, an opportunistic aggressor in a second region while forces are committed to large-scale operations in another region."  The report addresses the capability requirements of the combatant commands in similarly broad terms. It describes the types of demand for military capabilities for which the services plan and asserts that these are the capability requirements. These include: forward presence, homeland defense, surge, and postsurge or stability operations.	
<b>What GAO Found</b>  We determined that this element was partially addressed, as the report does not include detail about the specific capabilities that are in demand today, and does not specifically identify the most likely anticipated demands for military capabilities or identify the capability and deployment timeline requirements of the contingency plans of the combatant commands. In addition, the report does not specifically identify how demand for military capabilities is expected to change in the future.  DOD officials told us that they did not include such details because they wanted the report to focus on active and reserve force-mix factors and cost. Additionally, according to DOD officials, during the period the report was being written, the services had not reached consensus on how to implement the new defense strategic guidance, which was issued in January 2012. They also told us that including information about current and anticipated capability demands would have required a classified annex which, according to the officials, would have detracted from the overall message of the report and its focus on force-mix decision making. However, the statutory reporting requirements did not preclude DOD from including a classified annex, if such was needed to complete the report. Because it offers limited detail about current demands and does not address future demands for military capabilities, the report cannot inform decision makers about the effect that changes in the active and reserve force mix might have on the military's ability to meet ongoing and future demands.	

Source: GAO analysis of DOD's report. | GAO-14-711R



Addressed



Partially addressed




Not addressed



## Addressing Statutory Requirements (cont.)

Figure 7: GAO's Assessment of Statutory Element 4


Department of Defense (DOD) Report on Unit Cost and Readiness for the Active and Reserve Components <i>Element 4: Authorities available to access the reserve components of the Armed Forces for Federal missions.</i>	GAO Assessment
<b>What DOD Reported</b>  The report identifies all of the major Title 10 U.S. Code statutes available to access the reserve component for federal missions and states the intended utilization requirements as provided by law for each. For example, 10 U.S.C. 12302, <i>Involuntary recall requiring Presidential Declaration of National Emergency</i> , is a partial mobilization authority designed to augment the active component in support of an external threat to national security or a domestic emergency. This authority was used to provide reserve-component forces during a number of recent military operations, including in Iraq and Afghanistan. According to the report, the size and duration of the military force required determine which statute best applies.	
<b>What GAO Found</b>  We determined that this element was addressed in that the report identifies and thoroughly describes all of the relevant authorities available to access the reserve components. Based on our review, the report provides more detail than required by the statute, including information about how the authorities relate to one another, their intended uses and limitations, and a graphical description of the seven major Title 10 U.S.C statutes.	

Source: GAO analysis of DOD's report. | GAO-14-711R



 Addressed     Partially addressed     Not addressed

# Addressing Statutory Requirements (cont.)

Figure 8: GAO's Assessment of Statutory Element 5

<b>Department of Defense (DOD) Report on Unit Cost and Readiness for the Active and Reserve Components</b> <i>Element 5: Personnel, equipment, and training readiness, and the cost to sustain, mobilize, achieve required predeployment readiness levels, and deploy active component units and reserve component units.</i>	<b>GAO Assessment</b>
<b>What DOD Reported</b>  <p>The report identifies the cost to sustain and the incremental cost to achieve predeployment readiness for the sample active- and reserve-component units in the aggregate and identifies what portion of the costs to sustain are attributable to personnel. For example, the Marine Corps estimated the cost to man and train an active infantry battalion at over \$60 million, with an incremental cost to prepare to deploy of about \$4 million. By comparison, the Marine Corps estimated the cost to man and train a reserve infantry battalion in drill status at \$13 million, with an incremental cost to prepare to deploy at \$30 million after it had been activated. The report provided similar comparisons for Army, Air Force, and Navy units.</p>	
<b>What GAO Found</b>  <p>We determined that this element was partially addressed, as the report does not include the cost to deploy active- and reserve-component units. The report also does not include equipment costs in its unit cost calculations.</p> <p>Regarding the cost to deploy units, the report considered two scenarios—the average cost to sustain readiness in a unit for 1 year and the incremental costs for predeployment preparations. DOD officials told us that reserve component mobilization costs are included in the cost of predeployment preparations. The officials added that, because active- and reserve-component units require different amounts of training or maintain different levels of readiness, the costs of active- and reserve-component units in each scenario are materially different. However, according to DOD, the cost to deploy similar types of active- and reserve-component units would generally be the same.</p> <p>With respect to equipment costs, DOD officials told us that when considered on a unit by unit basis, equipping costs are roughly identical for active and reserve units and therefore add little to the discussion of marginal active and reserve units costs. In addition, Army and DOD officials told us that properly allocating equipment costs to the active and reserve component would include accounting for depreciation and other complicating factors and was too complex to present concisely in the report. However, under current DOD utilization policy, equipment costs do become relevant when the services are required to sustain rotational output over long periods of time. Under the 1:2 deploy-to-dwell and 1:5 mobilization-to-dwell goals set by the Secretary of Defense in 2007, it takes more than one reserve unit—and therefore more equipment sets—to achieve the same operational output as is achieved by a comparable active unit. Excluding equipment costs limits the utility of the report because it cannot be used to compare the costs of active and reserve units in rotational use.</p>	

Source: GAO analysis of DOD's report. | GAO-14-711R

 Addressed
  Partially addressed
  Not addressed

## Report Strengths

We identified four overall strengths of the report:

- 1. Active and reserve force mix:** The report provides a basic framework for understanding force mix and identifies four factors that play a key role in force-mix decisions: (1) sourcing for continuous operations, (2) mission predictability and frequency, (3) responsiveness of the force, and (4) retention and sustainment. The report explains how the services' current force structure reflects these factors and gives examples in each service branch of active- and reserve-component composition by mission area.
  - For example, tactical airlift units have a large presence in the Air Force reserve component because they include individual or small-unit skills with close civilian parallels and can be quickly mobilized for surge and other operations from locations in the continental United States.
- 2. Unit cost:** Each service was able to select a comparable, relevant example unit to use in its respective active- and reserve-unit cost comparison (table 3). The Air Force, Army, and Marine Corps examples are considered pacing units, or units that critically affect the services' primary mission or the wartime tasks within the services' operational domain.

**Table 3: Unit Cost Examples by Service**

Service	Example unit	Reason for selection
Air Force	F-16 Squadron	Unit has significant reserve presence in tactical Air Force
Army	Infantry Brigade Combat Team	Key combat maneuver unit
Marine Corps	Infantry Battalion	Key combat maneuver unit
Navy	Mobile Construction Battalion	Best option with comparable unit in active and reserve

Source: DOD, *Unit Cost and Readiness for the Active and Reserve Components of the Armed Forces* (Dec. 20, 2013). | GAO-14-711R



## Report Strengths (cont.)

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3. **Personnel cost:** The services agreed to use a “burdened personnel cost” in the report, which goes beyond basic composite pay and includes noncompensation costs such as health care and family housing. Using this burdened cost—illustrated with an airman example at three different pay grades—the report demonstrates the cost differences between active and reserve servicemembers. DOD officials told us that they included the most readily available and agreed-upon cost elements in their burdened cost examples.
  - With this approach, DOD concludes that reserve-component personnel generally cost less than active-component personnel, even when in use. For example, according to DOD, a reserve-component servicemember on active duty for a year costs about 80 to 95 percent as much as an active-component servicemember, depending on rank, service branch, and the extent to which all compensation costs are included in the calculation.
4. **DOD consensus:** DOD officials told us that a key strength of the report is that they were able to reach a consensus among the services, Air National Guard, Army National Guard, National Guard Bureau, Army Reserve, Joint Staff, CAPE, and the Office of the Assistant Secretary of Defense (Reserve Affairs) regarding the conclusions and data in the report.
  - According to CAPE, two principles guided the development of the report. First, statements and conclusions in the report needed to be supportable and verifiable with data. Second, findings and conclusions in the report needed to be general enough to be applicable to the services and DOD broadly.
  - Because there are significant differences in how the services use the reserve component, achieving even limited consensus around these issues is an achievement, according to DOD officials.

## Report Potential Limitations

In addition to statutory elements that were partially addressed, we identified two additional potential limitations.

1. The report does not address the relative costs of active- and reserve-component units to achieve a similar operational capacity, or ability to meet a given level of demand, under DOD rotational policy.
  - Reserve-component units are generally less costly than similar active-component units. However, due to DOD rotational policy, it takes more than one reserve-component unit to achieve the same output as a single active-component unit. Therefore, in some cases, using reserve units operationally may be more costly than using active units.
  - Although concurring with the report, the Secretary of the Army commented that the omission of an analysis of relative operational capacity in DOD's report could lead a reader to the inaccurate conclusion that a reserve-component unit can achieve the same level of output as a similar active-component unit for less cost.
  - DOD's report was conducted using a single unit as the level of analysis. By not highlighting the issue of capacity, DOD may be oversimplifying the active and reserve unit-cost comparison. There are alternative approaches to unit-cost analysis, such as those undertaken by RAND and Institute for Defense Analyses, that do consider capacity. DOD officials are aware of these approaches and told us that they each have strengths and potential limitations.

## Report Potential Limitations (cont.)

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2. The report does not address the question of whether active- and reserve-component units are equally effective at performing the same mission.
  - The report does not consider or comment on the effectiveness of either active- or reserve-component units when compared to each other, in part because the report does not specify whether the active- and reserve-unit examples presented in the report are typically employed for the same types of missions.
  - DOD officials told us that there are differences across the services in the way the reserve-component units are employed and so it would be difficult to generalize about their relative effectiveness.
  - The officials told us that it is a generally accepted principle that in most cases, similar active and reserve units should have comparable levels of effectiveness after completing sufficient training. However, according to DOD officials, data for measuring active- and reserve-unit effectiveness is limited and inconsistently collected.
  - Because the report does not address potential differences in effectiveness between active- and reserve-component units, the extent to which the unit-cost comparisons presented in the report can be used to inform force-mix decisions is limited.

## Concluding Observations

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- DOD's report explains how cost and other factors such as mission predictability are used in determining active and reserve force mix. Although the report generally addressed the statutory reporting requirements, more detailed information may have benefitted the congressional defense committees as they examine DOD's force-structure proposals during their authorization and appropriation deliberations.
- By not addressing the advisability of retaining, decreasing, or increasing the number of and capability mix of the reserve component, or providing details on the relative capacity or effectiveness of active and reserve units, the report does not provide Congress with an analytically rigorous approach for considering the trade-offs and choices involved in force-mix decision making.
- A more thorough and detailed report could have promoted greater understanding of DOD's force-structure proposals within Congress, and a better-informed consideration of alternatives for executing the nation's defense strategy.

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