

Department of Defense



Department of Defense Infrastructure Capacity OCTOBER 2017

The estimated cost of this report or study for the Department of Defense is approximately \$258,000 in Fiscal Years 2016 - 2017. This includes \$66,000 in expenses and \$192,000 in DoD labor. Generated on December 19, 2016. RefID: 3-2E4B8DE

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Appendices (On CD)

- A. Inventory of Worldwide Installations**
- B. Inventory of Leases for Military Departments, Defense Logistics Agency, and Washington Headquarters Service**

I. Executive Summary

This report is provided in response to section 2815 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2016 (Public Law 114-92), and is a follow-on to the interim capacity report submitted in March 2016. The report contains the following: a force structure plan for each Military Service informed by the Secretary's assessment of probable threats to national security and the end-strength levels and major military force units authorized in the NDAA for FY 2012 (Public Law 112-81); and a world-wide inventory of installations for both the active and reserve forces. Based on the force structure plan and inventory, the report includes a description of the infrastructure necessary to support the FY 2012 force structure; a discussion of categories of excess infrastructure and infrastructure capacity; and an assessment of the value of retaining certain excess infrastructure to accommodate contingency, mobilization, or surge requirements. This report demonstrates the Department of Defense (DoD) has 19 percent excess capacity using a FY 2012 force structure.

To avoid identifying individual installations, the Department completed a parametric analysis similar to our three previous analyses undertaken in response to similar congressional language (April 1998, March 2004, and March 2016). All of the reports used a 1989 baseline of categories of force structure to infrastructure to develop a ratio (e.g., ratio of aircraft to apron space) and compared the 1989 ratio to a ratio of the same categories using a FY 2012 force structure to determine the percent excess for each category. Choosing a 1989 baseline assumes that the facilities were properly sized, at least in overall capacity, to support assigned missions and forces even when accounting for the land and facility requirements of newer weapon systems. This analysis does not account for operational requirements or military value. The only logical way to do that analysis is within the statutorily structured process of an authorized Base Realignment and Closure (BRAC) round that treats all bases equally and places primary emphasis on military value.

The Department recognizes the limitations of comparing categories over time rather than detailing excess by installation. However, this approach is the most logical way outside of the BRAC process to provide an indication of the Department's excess capacity without identifying individual installations. Specifying excess at a particular installation could cause unnecessary and premature concern by the affected community. The Government Accountability Office's (GAO) May 2004 report on the Department's capacity analysis stated, "While clear limitations exist in DOD's assessment of excess capacity, it does nonetheless point to some areas that warrant additional analysis—and the current BRAC process is an appropriate forum for doing so." We agree with GAO, and the analysis contained in this report is strictly used to identify potential excess capacity that can be analyzed more thoroughly and independently during the formal BRAC process.

DoD has not been authorized to undertake a BRAC analysis for over 14 years. In those years, the Department has undergone considerable changes that have impacted the force structure, mission requirements, and threats facing the United States. In addition, budget constraints imposed by the Budget Control Act have further strained existing resources and forced the Department to trim costs of sustaining the infrastructure it does maintain. Specifically, the recent Government Accountability Office report, "Defense Facility Condition

Revised Guidance Needed to Improve Oversight of Assessments and Ratings (16-369),” notes that “for fiscal years 2009 through 2014, the Military Services reported collectively spending on average 79 percent (\$40 billion for those years) of the facilities sustainment model’s estimated requirements (of \$51 billion for those years).” This underscores the fiscal reality that the Department cannot fully fund all sustainment requirements. Limited construction and maintenance funding is better used at enduring locations with the highest military value rather than keeping installations the Department does not need. Reality and common business sense dictate that infrastructure should be reconfigured to meet specific needs and changing threats.

On April 14, 2016, the Deputy Secretary of Defense sent the congressional defense committees an interim report which documents that the DoD has 22 percent excess infrastructure capacity compared to projected FY 2019 force levels. The weighted average of 22 percent excess infrastructure capacity was distributed as follows in table 1: Army – 33 percent; Navy – 7 percent; Air Force – 32 percent; and the Defense Logistics Agency – 12 percent. The analysis compared base loading from 1989 to base loading in 2019, using 32 metrics of infrastructure.

Employing an analysis to compare base loading from 1989 to base loading in 2012 (as required by section 2815) using 32 metrics tied to force structure plans indicates that the Department has 19 percent infrastructure excess distributed as follows in table 1: Army – 29 percent excess; Navy – 6 percent; Air Force – 28 percent; and the Defense Logistics Agency (DLA) – 13 percent.

Table 1

Department	Estimated Percentage of Excess Capacity (above 1989 baseline) FY 2019 Force Structure	Estimated Percentage of Excess Capacity (above 1989 baseline) FY 2012 Force Structure
Army	33	29
Navy	7	6
Air Force	32	28
DLA	12	13
Total DoD	22	19

As indicated above, the Department has significant excess capacity. Therefore, Congress should authorize the Department to undertake a BRAC 2021 round as it has requested. As will be discussed in this report, DoD requires a comprehensive BRAC process to reduce excess while enhancing military value, achieving recurring savings, and ensuring retention of excess space for contingency and surge requirements such as changed missions, tactics, and technology. While both the March report and this report clearly show significant excess capacity, neither provides the detail necessary to identify specific infrastructure for elimination; instead, they only provide an indicator of the categories of excess. Moreover, a future BRAC round will not eliminate all identified excess, as that is not what it is intended to do. In fact, the previous five BRAC rounds have each, on average, only reduced Plant Replacement Value by 5 percent; however, they did provide the Department with significant annual recurring savings.

II. Force Structure

Tables 2 and 3 outline the force structure for the Army, Navy, Marine Corps, and Air Force as it existed in FY 2012 along with the force structure that is programmed for FY 2019 as of the President's Budget (PB) for 2016. The Military Departments and DLA used these force structures as the basis to indicate categories of excess.

Table 2 – Major Military Force Units

Service Force Units	FY12	FY19*
Army BCTs		
Active	44	30
Reserve	28	26
Maneuver Battalion Equivalents	140	119
Aircraft Carriers	11	11
Carrier Air Wings		
Active	10	10
Reserve	1	1
Battle Force Ships	293	300
Air Force		
Total Aircraft Inventory	5,587	5,332
Marine Corps Divisions		
Active	3	3
Reserve	1	1

Table 3 - End Strength Levels

End Strength (in thousands)	FY12	FY19*
Army		
Active	562	450
Reserve	563	530
Army Active Component Divisions	10	10
Navy		
Active	326	330
Reserve	66	59
United States Marine Corps		
Active	202	182
Reserve	40	39
Air Force		
Active	333	311
Reserve	71	67

*The FY 2019 Force levels are as of PB FY 2016 as was reported in the Department's March 2016 Capacity Report

III. Assessment of Probable Threats

A. Range of Challenges

The strategic environment has undergone fundamental changes. In spite of our unique position as a global power with worldwide interests and military capabilities this change has redefined the range of challenges we must confront. Uncertainty is inherent in assessing future threats. Therefore, the potential for surprise should inform all planning efforts.

In general, opponents understand they cannot conventionally match U.S. military power. Therefore, they will take time to identify U.S. vulnerabilities and act accordingly. We expect current and future adversaries, both state and non-state, will adopt a range of asymmetric and grand strategic capabilities and methods intended to circumvent our military advantages. Future opponents will seek to engage us by acting both indirectly and directly along a vast spectrum of domains, including cyber, economic, space, air, land, sea, and undersea. Above all, the enemy will seek to do the most harm with the least amount of risk.

Our principal challenges are represented by an array of traditional, irregular, catastrophic, and disruptive methods and capabilities employed by state and non-state actors. Combined, these reflect the four persistent challenges we must prevail against in this uncertain era. There are often no hard boundaries distinguishing one of these categories from another. While the capabilities and methods within each differ, the most dangerous circumstances are those in which we are facing, or will face, multiple challenges simultaneously.

B. Traditional Challenges

Traditional challenges come largely from states employing military forces in well-known forms of military competition and conflict. While traditional forms of military competition remain important, trends suggest these challenges will receive lesser priority in the planning of adversaries vis-a-vis the United States. This can be attributed, in part, to U.S. and allied superiority in traditional forms of warfare and the enormous cost to develop, acquire, and maintain conventional capabilities. But it is also explained by the increasing attractiveness of irregular methods as well as the increasing availability of catastrophic capabilities. Even where adversaries possess considerable capacity in traditional domains, they often seek to reinforce their position with catastrophic, irregular, and disruptive methods and capabilities. Therefore, some strictly traditional threats are giving way to hybrid challenges as seen in Ukraine when Russia's traditional invasion of Crimea was combined with disruptive cyber-attacks and irregular units' employment.

C. Irregular Challenges

Irregular challenges are characterized as "unconventional" methods employed by state and non-state actors to counter stronger state opponents. Irregular methods of increasing sophistication, including terrorism, insurgency, civil war, and third-party coercion, will challenge U.S. security interests to a greater degree than they have in the past. Our adversaries are likely to

exploit a host of irregular methods to erode U.S. power, influence, and national will over a period of time. Two factors in particular have intensified the rapid growth and potential danger of irregular challenges: the rise of extremist ideologies and the erosion of traditional sovereignty. Worldwide political, religious, and ethnic extremism continue to fuel deadly and destabilizing conflicts. Particularly threatening are extremist ideologies and religious denominations that sanction violence against civilians and other noncombatants. Areas in Latin America, Africa, the Middle East, throughout Asia, and even in some urban centers of Europe have become safe havens for terrorists, criminals, insurgents, and other groups that threaten global security. Many governments in these areas are vulnerable to hostile exploitation. Irregular challenges in and from these areas will grow more intense over time and are likely to challenge the security of the United States and its partners for the indefinite future.

D. Catastrophic Challenges

Catastrophic challenges involve terrorist or rogue employment of weapons of mass destruction (WMD). A number of state and non-state actors are vigorously seeking to acquire dangerous and destabilizing catastrophic capabilities. States seek these capabilities to offset perceived regional imbalances or to hedge against U.S. military superiority. Terrorists seek them because of the potential they hold for greater physical and psychological impact on targeted audience.

Porous international borders, weak controls over weapons-related materials and expertise, and ongoing revolutions in information technology are increasingly enabling this trend. Particularly troublesome is the nexus of transitional terrorists, WMD proliferation, and rogue states such as North Korea. Unchecked, this confluence raises the prospect of direct WMD employment against the United States or our allies and partners. Indeed, many would-be adversaries likely believe the best way to check American reach and influence is to develop the capability to threaten the U.S. homeland directly. Catastrophic attacks could arrive via a number of delivery means, including the rogue use of WMD-armed ballistic missiles, surreptitious delivery through routine commercial channels, and innovative attacks similar to those of 9/11.

Elements of the U.S. national infrastructure are vulnerable to catastrophic attack. The interdependent nature of the infrastructure creates more vulnerability; attacks against one sector, such as the power grid, would have an impact on other sectors. Parts of the defense-related critical infrastructure are vulnerable to a wide range of attacks, especially those that rely on commercial sector elements with multiple single points of failure.

E. Disruptive Technologies

Disruptive technologies are those posed by competitors employing breakthrough technology that might counter or negate our current advantages in key operational domains. In doing so, competitors seek to provide themselves new military options that offset our advantages in niche areas and threaten our ability to operate from the strategic commons—space, sea, air, undersea, and cyberspace. Developments in these domains have changed possible enemy advantages from temporary to possibly decisive. Future disruptive challenges could easily become catastrophic if we are not prepared for them. New domains, including biotechnology,

directed-energy, economic warfare, and other emerging fields have few ready countermeasures. Although such developments are unpredictable, resources and defenses must be researched and prepared.

IV. Inventory of Installations

This report provides a comprehensive inventory of military installations for the active and reserve forces for each Military Department, including the number and the types of facilities in Appendix A. The inventory was derived from the Department's Real Property Asset Database (RPAD), which is updated annually by the Military Departments. The Military Departments verified the data contained in the report was accurate. The Military Departments, DLA, and Washington Headquarters Services also provided data for their respective leases separately and are contained in Appendix B. The inventory identifies 438,057 owned facilities. These owned facilities have been arranged into 10 categories with summary tables provided below in table 4. Leases are also summarized in table 5. (Note: the report includes a CD for the over 600 page installation inventory and lease appendices).

Facilities include the following ten basic types:

1. Administrative
2. Hospital and medical
3. Maintenance and production
4. Operations and training
5. Research, development, test, and evaluation
6. Supply
7. Utilities and grounds improvements
8. Family housing
9. Community
10. Troop housing and mess

Within each of these facility types, the inventory arrays the facilities by state (or country for non-U.S. locations), Defense Department component, and installation. It also shows whether the facilities are primarily active or reserve facilities.

The comprehensive inventory of worldwide installations summarized in table 4, and in the detailed data contained at Appendix A, provides a perspective of the size and variety of the Department's real property assets. The Department used portions of this data and other sources (e.g., number of maneuver battalions) to assess whether categories of excess exist for DoD. A working inventory of 251 major installations within the United States was used as the basis for the Assessment of Capacity and the Value of Retaining Excess.

Inventory of Owned Facilities

Table 4

1. Number of Administrative Facilities		
Area	Component	Owned
U.S./U.S. Territories	Army - Active	6,367
	Army - Guard	1,591
	Army - Reserve	1,603
	Navy - Active	2,782
	Navy - Reserve	78
	Air Force - Active	3,482
	Air Force - Guard	418
	Air Force - Reserve	138
	Marine Corps - Active	1,474
	Marine Corps - Reserve	73
	Washington Headquarters Services	27
U.S./U.S. Territories Total		18,033
Non-US	Army - Active	1,285
	Navy - Active	618
	Air Force - Active	474
	Marine Corps - Active	169
Non-U.S. Total		2,546
Grand Total		20,579

2. Number of Hospital and Medical Facilities		
Area	Component	Owned
U.S./U.S. Territories	Army - Active	606
	Army - Guard	42
	Army - Reserve	13
	Navy - Active	244
	Air Force - Active	423
	Air Force - Guard	2
	Air Force - Reserve	2
	Marine Corps - Active	87
	Marine Corps - Reserve	1
U.S./U.S. Territories Total		1,420
Non-US	Army - Active	104
	Navy - Active	69
	Air Force - Active	95
	Marine Corps - Active	15
Non-U.S. Total		283
Grand Total		1,703

3. Number of Maintenance & Production Facilities		
Area	Component	Owned
U.S./U.S. Territories	Army - Active	7,759
	Army - Guard	750
	Army - Reserve	1,251
	Navy - Active	3,703
	Navy - Reserve	64
	Air Force - Active	4,442
	Air Force - Guard	1,049
	Air Force - Reserve	201
	Marine Corps - Active	1,418
	Marine Corps - Reserve	52
	Washington Headquarters Services	4
U.S./U.S. Territories Total		20,693
Non-US	Army - Active	784
	Navy - Active	484
	Air Force - Active	653
	Marine Corps - Active	128
Non-U.S. Total		2,049
Grand Total		22,742

4. Number of Operations and Training Facilities		
Area	Component	Owned
U.S./U.S. Territories	Army - Active	23,842
	Army - Guard	6,600
	Army - Reserve	2,613
	Navy - Active	12,284
	Navy - Reserve	227
	Air Force - Active	17,989
	Air Force - Guard	3,688
	Air Force - Reserve	842
	Marine Corps - Active	5,452
	Marine Corps - Reserve	156
	Washington Headquarters Services	109
U.S./U.S. Territories Total		73,802
Non-US	Army - Active	3,522
	Navy - Active	2,041
	Air Force - Active	3,747
	Marine Corps - Active	629
Non-U.S. Total		9,939
Grand Total		83,741

5. Number of Research, Development, Test, and Evaluation Facilities		
Area	Component	Owned
U.S./U.S. Territories	Army - Active	3,541
	Army - Guard	4
	Army - Reserve	2
	Navy - Active	3,397
	Navy - Reserve	2
	Air Force - Active	1,583
	Air Force - Guard	9
	Air Force - Reserve	-
	Marine Corps - Active	35
	Marine Corps - Reserve	-
	Washington Headquarters Services	4
U.S./U.S. Territories Total		8,577
Non-US	Army - Active	11
	Navy - Active	53
	Air Force - Active	19
	Marine Corps - Active	-
Non-U.S. Total		83
Grand Total		8,660

6. Number of Supply Facilities		
Area	Component	Owned
U.S./U.S. Territories	Army - Active	28,851
	Army - Guard	3,341
	Army - Reserve	970
	Navy - Active	8,195
	Navy - Reserve	25
	Air Force - Active	7,974
	Air Force - Guard	1,356
	Air Force - Reserve	318
	Marine Corps - Active	2,428
	Marine Corps - Reserve	71
	Washington Headquarters Services	20
U.S./U.S. Territories Total		53,549
Non-US	Army - Active	3,254
	Navy - Active	897
	Air Force - Active	1,790
	Marine Corps - Active	251
Non-U.S. Total		6,192
Grand Total		59,741

7. Number of Utilities and Grounds Improvements Facilities		
Area	Component	Owned
U.S./U.S. Territories	Army - Active	35,505
	Army - Guard	22,904
	Army - Reserve	11,600
	Navy - Active	23,536
	Navy - Reserve	586
	Air Force - Active	30,823
	Air Force - Guard	6,300
	Air Force - Reserve	798
	Marine Corps - Active	9,215
	Marine Corps - Reserve	705
	Washington Headquarters Services	305
U.S./U.S. Territories Total		142,277
Non-US	Army - Active	9,376
	Navy - Active	4,430
	Air Force - Active	6,616
	Marine Corps - Active	1,489
Non-U.S. Total		21,911
Grand Total		164,188

8. Number of Family Housing Facilities		
Area	Component	Owned
U.S./U.S. Territories	Army - Active	1,387
	Army - Guard	39
	Army - Reserve	164
	Navy - Active	3,404
	Navy - Reserve	-
	Air Force - Active	1,042
	Air Force - Guard	110
	Air Force - Reserve	-
	Marine Corps - Active	57
	Marine Corps - Reserve	3
	Washington Headquarters Services	-
U.S./U.S. Territories Total		6,206
Non-US	Army - Active	1,620
	Navy - Active	1,333
	Air Force - Active	5,032
	Marine Corps - Active	806
Non-U.S. Total		8,791
Grand Total		14,997

9. Number of Community Facilities		
Area	Component	Owned
U.S./U.S. Territories	Army - Active	14,164
	Army - Guard	1,232
	Army - Reserve	837
	Navy - Active	7,865
	Navy - Reserve	17
	Air Force - Active	10,103
	Air Force - Guard	505
	Air Force - Reserve	241
	Marine Corps - Active	3,592
	Marine Corps - Reserve	35
	Washington Headquarters Services	214
U.S./U.S. Territories Total		38,805
Non-US	Army - Active	3,459
	Navy - Active	1,942
	Air Force - Active	2,101
	Marine Corps - Active	542
Non-U.S. Total		8,044
Grand Total		46,849

10. Number of Troop Housing and Mess Facilities		
Area	Component	Owned
U.S./U.S. Territories	Army - Active	3,649
	Army - Guard	1,658
	Army - Reserve	489
	Navy - Active	1,064
	Navy - Reserve	4
	Air Force - Active	2,245
	Air Force - Guard	299
	Air Force - Reserve	76
	Marine Corps - Active	1,259
	Marine Corps - Reserve	1
	Washington Headquarters Services	-
U.S./U.S. Territories Total		10,744
Non-US	Army - Active	1,047
	Navy - Active	2,508
	Air Force - Active	492
	Marine Corps - Active	66
Non-U.S. Total		4,113
Grand Total		14,857

Number of Leases

Table 5

Organization	Number of Leases
Army	3,504
Air Force	469
Navy	476
DLA	42
WHS	84
Total	4,575

V. Assessment of Capacity and the Value of Retaining Excess

A. Methodology

To be consistent with the previous capacity reports, the Department elected for this report to measure capacity against a 1989 baseline. As stated in the 2004 and March 2016 reports and noted by GAO, choosing a 1989 baseline assumes the facilities were properly sized, at least in overall capacity, to support assigned missions and forces. In fact, the bases were most likely not all properly sized and had excess. As was the case in the prior reports, using 1989 as a baseline indicates the excess found in this report is likely conservative because significant excess existed in 1989, as evidenced by the subsequent BRAC closures.

As was the case in prior reports, the Military Departments and DLA examined their installations inventory to develop 32 metrics that described the infrastructure necessary to support their force structure. For example, as one of its metrics, the Army chose to compare the ratio of base acres for major training area installations to number of maneuver battalion equivalents contained in its force structure. Similarly, the Navy chose to compare available pier space (as measured by cruiser equivalents) at its naval bases to the ships (normalized to cruiser equivalents) in its inventory. The Air Force chose parking apron to aircraft and DLA attainable cubic feet at its distribution depots compared to occupied cubic feet. Section VI describes each of these metrics in detail.

In this updated report, the Military Departments and DLA had the option to modify, add, or eliminate categories and metrics (taking into account availability of comparable 1989 data). The Military Departments and DLA were also able to determine the particular installations that support each metric. This enabled them to re-examine the prior methodology to reflect current operations, changes in their base structure as a result of BRAC (including Joint Basing), and other factors, such as changed business practices (e.g., conducting maintenance at the tactical level). Where necessary, the Military Departments and DLA also had the option to modify the 1989 baseline to better approximate these changing factors, helping to ensure that excess was not overstated. Such an approach also allowed the metrics to be tailored to the differing operating principles of the Military Departments. The Military Departments and DLA derived the data for this report using the most current data available from existing records. It is important to note that this methodology purposely focused on 251 installations selected by the Military Departments and DLA. The Department believes this approach is analytically sound because the analysis is only designed to indicate whether excess capacity exists in the aggregate, not to identify excess capacity at individual installations or make decisions about closing or realigning specific bases.

In calculating a percentage of excess capacity, the Military Departments and DLA established metrics (e.g., small aircraft parking apron space) for their respective base categories and compared those metrics to an applicable measurement of force structure or requirements (e.g., number of small aircraft) to establish a simple ratio for 1989 and 2012 in each category. The 1989 metrics are then compared to the 2012 metrics to determine a level of excess capacity. 2012 was selected for this analysis based on NDAA requirements. This comparison calculated the amount of infrastructure necessary to support the 2012 force structure at the same level of

infrastructure usage as in 1989. Increases were then reduced to percentages and expressed as excesses. If there was no increase, the excess capacity was characterized as “No Increase.”

B. Findings

The report’s analysis indicates that assessing categories of excess capacity produces a range of excess capacity between 19 and 22 percent depending on what force structure is used, as shown in table 6.

Using FY 2012 force structure (as required by section 2815) and 32 metrics (as tied to force structure plans) the analysis indicates the Department has 19 percent infrastructure excess distributed as follows: Army – 29 percent; Navy – 6 percent; Air Force – 28 percent; and the Defense Logistics Agency – 13 percent.

Using the FY 2019 force structure (as projected in PB FY 2016) and 32 metrics tied to force structure plans, the analysis indicates that the Department has 22 percent excess infrastructure capacity compared distributed as follows: Army – 33 percent; Navy – 7 percent; Air Force – 32 percent; and the Defense Logistics Agency – 12 percent.

Table 6

Department	Estimated Percentage of Excess Capacity (above 1989 baseline) FY 2019 Force Structure	Estimated Percentage of Excess Capacity (above 1989 baseline) FY 2012 Force Structure
Army	33	29
Navy	7	6
Air Force	32	28
DLA	12	13
Total DoD	22	19

As stated in Section I, this excess capacity coupled with budget constraints has negatively impacted installations across the Department. A future BRAC round would allow the Department to close facilities that are unnecessary and a drain on valuable resources, and to relocate their missions to newer facilities at locations with higher military value.

Having demonstrated the existence of significant excess capacity, Congress should authorize the Department to undertake a round of BRAC so it can reduce excess while enhancing military value, achieving recurring savings and in balance with the need to have excess space for contingency and surge requirements, such as changed missions, tactics, and technology. While the report clearly shows excess capacity, it does not provide the detail necessary to identify specific infrastructure for elimination, instead only providing an indicator of the categories of excess. Only through a BRAC round can the Department undertake the detailed analysis necessary to make detailed closure and realignment recommendations. That is not to say that a future BRAC round will eliminate all identified excess, as that is not what it is intended to do.

In fact, each of the previous five BRAC rounds have on average only reduced Plant Replacement Value by five percent; however, they provided the Department with significant annually recurring savings that it could direct at operational priorities.

C. Value of Retaining Excess

During the BRAC analytical process, the Department takes great strides in ensuring operations are not adversely impacted and military value is increased, which is why military value considerations are the top four criteria in the BRAC process. As was done with all the previous BRAC rounds, the value of retaining excess capacity for military value is a priority to account for mission requirements, including mobilization, contingency, and surge capabilities.

In a November 1999 DoD study on BRAC impacts to remobilization, it was noted that “Our review of past BRAC actions identified that the Services evaluated the infrastructure’s military value, and focused on closing assets we characterize as ‘reconstitutable.’ When past closures involved bases which had ‘difficult to reconstitute’ assets, in almost all cases these assets were retained by the Service for continued use.” The report also noted that it is more cost-effective to rebuild a capability rather than to continually maintain unnecessary assets. Furthermore, the report stated, “It is expected that any future BRAC process would continue to use military value as a predominant factor in determining BRAC actions. Military value analysis considers the importance of retaining ‘difficult to reconstitute’ assets to meet potential reconstitution requirements.” A criticism of BRAC is the permanent nature of base closures and the inability to reconstitute that capability if needed. The remobilization study and recent experience in fighting two wars and ongoing contingency operations across the globe demonstrate that, after five rounds of BRAC, DoD is successfully completing the missions assigned. BRAC rounds retain ‘difficult to reconstitute’ assets and experience and the report have shown that it is actually more cost-effective to rebuild capacity versus continually maintaining unnecessary assets. Absent BRAC, the Department’s infrastructure remains in a status quo configuration that prevents more effective and joint use of its assets. Similar to the commercial industry, businesses often close down older and lower performing factories or buildings in favor of relocating to, and modernizing, new or more cost-effective locations.

GAO noted in its 1998 report on the BRAC capacity report that “DOD took several actions to minimize potential negative impacts to military capability in previous BRAC rounds, including stressing military value in deciding on bases to recommend for closure and realignment. In addition, the Joint Chiefs of Staff and Combatant Commanders reviewed the Secretary’s closure and realignment recommendations to prevent degradation of military capability and endorsed the recommendations. Using such an approach in the future, should the Congress decide to authorize any future BRAC rounds, may help to avoid long-term adverse effects on military capabilities.” Any future BRAC process will continue to stress military value in all decisions being approved, which is why the Department has wanted to maintain the legislative process that has been successful in five previous BRAC rounds.

VI. Detailed Results

A. Understanding Capacity Table Calculations

The following six steps explain the calculations used in the Military Departments and DLA capacity tables. The corresponding letters can be found in the headings for each table.

1. For each Category Type of facilities, we defined a metric. A metric is an equation that reflects the ratio of a measure of capacity over a measure of force structure. For example, the Army used Base Acres (measure of capacity) over Maneuver Battalion Equivalents (measure of force structure) to determine the level of excess for their Maneuver category.
2. The Military Departments and DLA then collected data for the capacity and force structure measures for FY 1989 (A)/(B) and FY 2012 (C)/(D). The Input column shows the data collected for each measure.
3. Once the data is entered into the metric equation, a capacity index is calculated for FY 1989 (E) and FY 2012 (F) by dividing the capacity measure by the force structure measure. For the Army Maneuver category, the FY 1989 capacity measure of 4,494,585 Base Acres (A) is divided by the 1989 force structure measure of 193 Maneuver Battalion Equivalents (B) to get a FY 1989 capacity index of 23,288 (E). The same calculation is done with the metrics in (C)/(D) to determine the capacity index for FY 2012 (F).
4. In order to determine how much capacity is needed to support the force structure in FY 2012, using the same ratio of capacity to force structure in FY 2012 as we did in FY 1989, we multiplied the FY 1989 index by the force structure measure for FY 2012. We used the FY 1989 index because the ratio of capacity to force structure in FY 1989 represented the largest force structure accommodated by that infrastructure. The result is referred to as Proportional Capacity (G). In the Maneuver category, the FY 1989 index of 23,288 (E) is multiplied by the FY 2012 force structure measure of 140 Maneuver Battalion Equivalents (D).
5. We then estimated the change in capacity relative to force structure from FY 1989 to FY 2012 by subtracting the capacity measure for FY 2012 (C) from the Proportional Capacity (G), which takes into account the infrastructure reductions from prior BRAC rounds. This change in capacity is shown as (H). In the Maneuver category, the Delta 1,547,837 (H) is calculated by subtracting 3,260,321 (G) from 4,808,157 (C). When the Delta is an increase in capacity relative to force structure from 1989 to 2012, it is expressed as a positive number. When the Delta is a decrease in capacity relative for force structure from 1989 to 2012, it is expressed as “No Increase.”
6. Finally, we determined the percentage of FY 2012 capacity that is excess by dividing the Delta (H) (if there was an increase) by the FY 2012 capacity measure (C) and multiplying the result by 100. In the Maneuver category, the Delta 1,547,837 (H) is divided by the FY 2012 capacity measure (C) of 4,808,157 to get 0.32, which, when multiplied by 100, shows a 32 percent excess in the Category for 2012.

B. Department of the Army

The Army's force structure is composed of multifunctional divisions and units in the Active Component, National Guard, and U.S. Army Reserve. Army units perform six different types of warfighting functions, defined as a group of tasks and systems (people, organizations, information, and processes) united by a common purpose that commanders use to accomplish missions. The six warfighting functions are linked to Joint functions: Mission Command, Movement and Maneuver, Intelligence, Fires (indirect fire support and air defense), Sustainment, and Protection. Army Active Component and National Guard Divisions are composed of modular Army Brigade Combat Teams (BCTs). The Army has three types of BCTs: Armor, Infantry (to include Airborne), and Stryker. The Army utilized BRAC 2005 to complete an Army Transformation that shifted significant warfighting function capabilities from Divisions to individual BCTs so that each BCT is capable of operating autonomously in its assigned area of responsibility. The Army identified nine categories of supporting installation infrastructure key to assessing its ability to support its forces: Maneuver, Major Training Active, Major Training Reserve, Schools, Depots, Other Industrial Base, Arsenals/Industrial Manufacturing, Test and Evaluation/Labs, and Administration. Table 7 provides the overall capacity results by category.

1. Description of Army Installation Categories

Administration. This category includes active component installations that support headquarters or administrative organizations stationed there or to provide base operations, family housing, and other support to units in the region.

Depots. This category includes Government Owned, Government Operated installations that support the full range of Army depot maintenance activities, from tanks and helicopters to electronics.

Other Industrial Base. This category includes Government Owned, Government Operated installations that support a broad range of industrial functions, including ammunition production, weapons systems component production or assembly, and transshipment of units and materiel.

Arsenals/Industrial Manufacturing. This category includes Government Owned, Government Operated installations involved in manufacturing and research of weapons systems, chemical-biological defense systems, specialized metallurgy, and pyrotechnic munitions for the Army.

Major Training–Active. This category includes installations that are owned by the active component and support higher unit level training that cannot be accomplished at home station (typically, brigade-level events prior to deployment).

Major Training–U.S. Army Reserve. This category includes installations that are owned and managed by the U.S. Army Reserve primarily to support unit and individual training for the Reserve and similar training for the National Guard as necessary. Many of the Army's warfighting functions are provided by the U.S. Army Reserve.

Maneuver. This category includes installations that support Army fighting forces. Divisions, BCTs, and associated tactical units are the primary tenants of these installations.

Schools. This category includes installations that have as their primary mission support to institutional training. The type of school ranges from the U.S. Military Academy and initial entry training to branch schools and professional military education.

Test and Evaluation/Labs. This category includes installations that support a range of research, development, and test and evaluation, such as basic research, research and development engineering, or test and evaluation.

2. Results for the Department of the Army

Table 7

Category Type/Metric	Metric Values from Military Department		Ratios ((A)/(B) and (C)/(D) as ratio values)		Proportional Capacity (G) = (E) X (D)	Change in Capacity Relative to Force Structure Since 1989	
	FY89 (A) / (B)	FY12 (C) / (D)	FY89 (E)	FY12 (F)		Delta from FY12 Capacity (H) = (C) - (G)	Excess FY12 Capacity (H)/(C)
Administration							
<u>Administrative Space (Square Feet (000s))</u> ^{1, 17, 19, 27}	<u>6.627</u>	<u>12.940</u>	0.0691	0.0977	9,151	3,789	29%
Military/Civilian Authorized ^{19, 20, 21, 27}	95,880	132,402					
Depots							
<u>Capacity Direct Labor Hours (000s)</u> ^{2, 4, 5}	<u>29,000</u>	<u>16,232</u>	1.3810	1.2527	17,894	No Increase	
Budgeted/Programmed Direct Labor Hours (000s)	21,000	12,958					
Other Industrial Base ^{3, 4, 5}							
<u>Capacity Direct Labor Hours (000s)</u>	<u>2,270</u>	<u>4,385</u>	1.3810	1.2675	4,777	No Increase	
Budgeted/Programmed Direct Labor Hours (000s)	1,644	3,459					
Arsenals/Industrial Manufacturing ⁶							
<u>Total Facilities Square Feet (000s)</u>	<u>34,707</u>	<u>12,804</u>	1.4524	2.0177	9,217	3,588	28%
Military/Civilian Authorized	23,897	6,346					
Major Training Active ⁷							
<u>Base Acres</u>	<u>1,509,334</u>	<u>945,900</u>	7,820	6,756	1,094,854	No Increase	
Maneuver Battalion Equivalents ^{12, 13, 14, 15}	193	140					
Major Training Reserve ^{8, 11}							
<u>Base Acres</u> ¹⁶	<u>258,413</u>	<u>333,724</u>	0.8101	1.6279	166,065	167,659	50%
End Strength ¹⁰	319,000	205,000					
Maneuver							
<u>Base Acres</u> ^{9, 16, 24}	<u>4,494,585</u>	<u>4,808,157</u>	23,288	34,344	3,260,321	1,547,837	32%
Maneuver Battalion Equivalents ^{12, 13, 14, 15}	193	140					
Schools							
<u>Instructional Space (Square Feet (000s))</u> ^{18, 22}	<u>14,964</u>	<u>14,997</u>	0.0407	0.0694	8,795	6,202	41%
Military/Civilian Authorized ²³	367,613	216,075					
Test and Evaluation/Labs							
<u>Total Facilities Square Feet (000s)</u> ²⁵	<u>48,924</u>	<u>60,895</u>	0.4793	0.8236	35,434	25,460	42%
Military/Civilian Authorized ²⁶	102,079	73,933					

Notes:

- 1) Ft Knox in FY2012 coded as "Administrative" (was categorized as a "School" prior to BRAC 2005)
- 2) Depot FY2012 Capacity: 1-shift actual Direct Labor Hours for FY2004.
- 3) Other OIB FY2012 Capacity: = 1-shift actual Direct labor Hours for FY2004; FY1989 Capacity = FY2000 actual DLH multiplied by 1.381
- 4) FY12 budgeted workload = FY2016 Budget Estimate Submission (BES) projected new orders for each OIB installation. (SIAD programmed at average of 2000-2007 execution)
- 5) No 1989 data for workload was available, broken out by installation.
- 6) Arsenal population = Army Stationing and Installation Plan (ASIP) Army Military + Army Civilians
- 7) Ft Polk has acquired ~41.5K acres of training land for JRTC since FY2009; YTC (~323K acres) is now part of JBLM (included in maneuver)
- 8) Ft Dix transferred to Air Force JBMDL but is still included in Army analysis because there is no comparable Air Force category/metric
- 9) Ft Bliss was a "School" prior to BRAC 2005 (~1.1M acres) and YTC (~323K acres) was "Major Training - Active". YTC now part of JBLM; 1989 acres adjusted to include Bliss and YTA.
- 10) US Army Reserve end strength in FY2012: 205,000 per National Defense Authorization Act.
- 11) ARNG is not included in analysis.
- 12) FY1989 combat service/combat service support enabler functions were held at the division level; Modular BCTs are larger than 1989 BDEs (more enablers in BCTs).
- 13) FY2012 Army BCTs = 2 maneuver battalions (+ RSTA) for Armor and Infantry; Stryker BCTs = 3 maneuver battalions (+ RSTA); total; Germany Heavy Brigade had 3 maneuver battalions but no RSTA;
- 14) Force Structure calculated in "maneuver battalion equivalents" and counts cavalry squadrons (RSTA) as BNs. 1989 force structure: <http://www.history.army.mil/books/dahsum/1989/CH5.htm>
- 15) FY12 maneuver battalion equivalents = 140 (with 44 BCTs)
- 16) Acreage was reviewed to remove obvious non-maneuverable parcels (i.e., cemeteries, museums, Nike sites, recreation areas, closed BRAC property, buffer areas at Ft Bragg, etc.)
- 17) Admin Space used HQIS FAC = 6100 (Gen Purpose Admin)
- 18) Instruction Facilities used HQIS FCG = F17119, F17120, F17131 thru F17139
- 19) FY2012 Population Data source: historical data tab for FY15 Q3 LOCKED ASIP DATA 31 JULY 2015 (this includes the force structure announcements of 09 July 2015)
- 20) MIL POPULATION: All Military (all services); CIV POPULATION: All Civilians (including defense agencies and contractors)
- 21) 1989 Admin installation population was increased by 17.618 percent to reflect an estimated proportion of other service military, civilians, and contractors
- 22) SCHOOL POPULATION: Army MIL, Army PCS Students, TDY Students and Trainees, Army Civilians, and Army Contractors
- 23) 1989 School population increased by 5 percent to reflect contractor population (FY2012 = 11.1 percent contractor)
- 24) Ft Richardson is part of an Air Force Joint Base (JBER) but its acreage is still included as "Maneuver" installation acreage (AF has no comparable category/metric).
- 25) RDT&E facilities square footage for FY2012 was adjusted to remove closed BRAC installations (i.e. Camp Evans, Ft Wingate, WRAMC, and Ft Monmouth)
- 26) RDT&E population 1989 baseline is based on 1993 ASIP data, adjusted backwards to 1989; FY2012 RDT&E population includes Army MIL + Army CIV + Army CTR
- 27) Admin square footage and population in leased space was not captured in the 1989 or 2012 data (similar to 1998 and 2004 DoD reports to Congress).

C. Department of the Navy

The basic warfighting elements of the Navy are surface combatants (battle force ships and aircraft carriers) with their Active and Reserve air wings and submarines. For the Marine Corps, the principal fighting element is the division, both Active and Reserve. The Navy and Marine Corps identified 11 categories of supporting infrastructure key to assess their ability to support naval and marine forces: Naval Bases; Marine Corps Bases; Air Stations; Ordnance Stations; Supply Installations; Aviation Maintenance; Depot Maintenance (United States Marine Corps (USMC)); Shipyards; Research, Development, Test and Evaluation (RDT&E); Training Air Stations; and Training Installations. Table 8 provides the overall capacity results by category.

1. Description of Navy and Marine Corps Installation Categories

Naval Bases. This category includes those activities that have a principal mission to homeport, support, maintain, and train Navy ships and assigned crews.

Marine Corps Bases. This category includes those activities that have a primary mission to house, support, and provide training areas for operating forces of the Fleet Marine Force.

Air Stations. This category includes those activities that have a principal mission to homeport, support, and operate a base from which operational missions can be flown by Navy and Marine Corps aircraft squadrons.

Ordnance Stations. This category includes those activities that provide secure storage for the full range of naval ordnance, support the safe receipt of that ordnance from other activities and the delivery of that ordnance to fleet units, and perform maintenance and inspection functions on ordnance.

Supply Installations. This category includes those activities providing consolidated supply services and logistics support of afloat and ashore operating forces and industrial activities.

Aviation Maintenance. This category includes those activities that perform depot maintenance and repair across all aviation component mission areas.

Depot Maintenance (USMC). This category includes those activities that provide the full range of depot and intermediate maintenance support for Marine Corps amphibious and ground equipment to the Atlantic and Pacific Fleet Marine Forces.

Shipyards. This category includes those activities that function to satisfy the major maintenance and overhaul requirements of the operating fleet and to provide depot-level emergent and voyage repair to those ships.

RDT&E. This category includes those activities responsible for maintaining a technological advantage against the threat, for rapid crisis response, and for maintaining unique facilities, capabilities, and corporate knowledge required for national security.

Training Air Stations. This category includes those Navy activities that have undergraduate pilot training (UPT) as their primary mission. UPT refers to the flight training student pilots and naval flight officers undergo to earn their wings before being assigned to fleet replacement squadrons.

Training. This category includes those activities that provide professional training, from recruit training to postgraduate degree programs for all levels of enlisted and officer personnel.

2. Results for the Department of the Navy

Table 8

Category Type/Metric	Metric Values from Military Department		Ratios ((A)/(B) and (C)/(D) as ratio values)		Proportional Capacity (G) = (E) X (D)	Change in Capacity Relative to Force Structure Since 1989	
	FY 89 (A) / (B)	FY 12 (C) / (D)	FY 89 (E)	FY 12 (F)		Delta from FY12 Capacity (H) = (C) - (G)	Excess FY12 Capacity (H)/(C)
Naval Bases ¹							
<u>Cruiser Equivalent Available</u>	637	431	1.0670	1.4913	308	123	28%
Cruiser Equivalent Assigned	597	289					
Marine Corps Bases ²							
<u>Base Acres</u>	802,522	1,035,977	4.1367	5.1261	836,029	199,948	19%
End Strength	194,000	202,100					
Air Stations ³							
<u>Hangar Modules Available</u>	363	310	1.1748	0.9422	386	No Increase	
Hangar Modules Required	309	329					
Ordnance Stations							
<u>Available Storage (000 sf)</u>	3,619.9	4,659	1.0000	0.8802	5,293	No Increase	
Inventory (000 sf)	3,619.9	5,293					
Supply Installations ⁴							
<u>Potential Workyears</u>	9,896	2,733	1.0181	0.9627	2,890	No Increase	
Budgeted/Programmed Workyears	9,720	2,839					
Aviation Maintenance (formerly Aviation Depots) ⁴							
<u>Capacity Direct Labor Hours (000s)</u>	26,000	12,260	1.1454	1.1000	12,765	No Increase	
Budgeted/Programmed Direct Labor Hours (000s)	22,700	11,145					
Depot Maintenance (formerly Logistics Bases) (USMC) ⁴							
<u>Capacity Direct Labor Hours (000s)</u>	2,057	2,898	1.0506	0.7043	4,323	No Increase	
Budgeted/Programmed Direct Labor Hours (000s)	1,958	4,115					
Shipyards ⁴							
<u>Potential Direct Labor Man-Years</u>	48,400	15,928	1.3596	0.8459	25,599	No Increase	
Budgeted/Programmed Direct Labor Man-Years	35,600	18,829					
Research, Development, Test and Evaluation (RDT&E) ⁴ (formerly Test and Evaluation/Labs)							
<u>Maximum In-House Workyears</u>	72,000	47,260	1.0976	1.0545	49,189	No Increase	
In-House Workyears	65,600	44,817					
Training Air Stations							
<u>Available Throughput (Students Per Year)</u>	5,032	2,986	1.0000	0.8274	3,609	No Increase	
Students Per Year	5,032	3,609					
Training							
<u>Available Throughput (Students Per Year)</u>	765,000	711,821	1.0479	1.0695	697,484	14,337	2%
Students Per Year	730,000	665,573					
<u>Degree Granting Maximum (Classroom Hrs)</u>	460,000	630,266	1.0000	1.0997	573,106	57,160	9%
Classroom Hours	460,000	573,106					

Note:

- 1) All ships in the Navy inventory were equated to a CG-47 class ship and converted to a Guided Cruiser Equivalent (CG-E). The CG-E capacity metric means an installation has the pier space, power, dredge depth, and other resource requirements to berth a CG-47 class ship.
- 2) In this category, the Marine Corps is acquiring additional acreage to address documented shortfalls in training area requirements. This metric therefore overstates excess capacity.
- 3) The Fleet Response Plan, with its goal to increase readiness, has resulted in an increased requirement for hangars.
- 4) The measure of capacity is expressed in workload rather than in physical space.

D. Department of the Air Force

The Air Force structure supports five core missions: air and space superiority; intelligence, surveillance, and reconnaissance; rapid global mobility; global strike; and command and control. There are eight categories that describe the key infrastructure necessary to support these five core missions and the integrated Air Force approach to its current force structure. These eight categories include the Air Force Reserve; Air National Guard; Depots; Education and Training; Large Aircraft; Small Aircraft; Space Operations; and Product Centers, Labs, and Test and Evaluation. Table 9 provides the overall capacity results by category.

1. Description of Air Force Installation Categories

Air Force Reserve. This category comprises Air Force Reserve Command (AFRC) major installations that support an AFRC operational wing where the Air Force has responsibility for the entire installation's real property.

Air National Guard. This category comprises Air National Guard (ANG) major installations that support an ANG wing where the Air Force has real property responsibility for the entire installation.

Depots. This category includes those installations that conduct depot level maintenance, to include software maintenance, performed at the depot level.

Education and Training. This category consists of installations that conduct formal education and training: basic military training; operational training at technical schools; professional military education; and undergraduate and advanced pilot training, navigator training, and foreign student pilot training.

Large Aircraft. This category includes installations with assigned operational wings and large primary mission aircraft, such as tankers, bombers, reconnaissance, and airlift aircraft.

Small Aircraft. This category includes installations with assigned operational wings that have primary mission fighter aircraft as well as smaller footprint reconnaissance aircraft.

Space Operations. This category includes installations with space launch operations and/or space operations control and management as their primary missions.

Product Centers, Labs, and Test and Evaluation. Product Center installations develop, acquire, and support in-service engineering and design of weapon systems. They provide resources and acquisition expertise to support successful program execution. Laboratories are installations that conduct discovery, development, and transition of affordable, integrated technologies. Test and Evaluation installations include ground and open-air ranges, facilities, and chambers to test manned and unmanned aerospace vehicles; conduct ground test, flight evaluation and recovery of research vehicles; and simulate and evaluate products and services applications.

2. Results for the Department of the Air Force

Table 9

	Metric Values from Military Department		Ratios ((A)/(B) and (C)/(D) as ratio values)		(G) = (E) X (D)	Change in Capacity Relative to Force Structure Since 1989	
	FY 89 (A) / (B)	FY 12 (C) / (D)	FY 89 (E)	FY 12 (F)		Delta from FY12 Capacity (H) = (C) - (G)	Excess FY12 Capacity (H)/(C)
Air Force Reserve							
<u>Parking Apron Space (Square Yards)</u>	<u>1,421,429</u>	<u>3,374,219</u>	29,613.10	36,676.29	2,724,406	649,813	19%
Reserve Aircraft	48	92					
Air National Guard							
<u>Parking Apron Space (Square Yards)</u>	<u>2,512,185</u>	<u>769,995</u>	17,206.75	15,399.90	860,337	No Increase	
National Guard Aircraft	146	50					
Depots							
<u>Capacity Direct Labor Hours</u>	<u>46,403</u>	<u>25,929</u>	1.18	1.02	30,152	No Increase	
Budgeted/Programmed Direct Labor Hours	39,172	25,453					
Education & Training							
<u>Parking Apron Space (Square Yards)</u>	<u>7,227,994</u>	<u>5,923,642</u>	4,597.96	5,380.24	5,062,355	861,287	15%
Training Aircraft	1,572	1,101					
<u>Classroom Space (Square Feet)</u>	<u>7,943,941</u>	<u>9,437,319</u>	9.51	18.19	4,935,822	4,501,497	48%
Military/Civilian Authorized	834,939	518,774					
Large Aircraft							
<u>Parking Apron Space (Square Yards)</u>	<u>24,918,585</u>	<u>14,920,059</u>	14,623.58	20,809.01	10,485,109	4,434,950	30%
Large Aircraft	1,704	717					
Small Aircraft							
<u>Parking Apron Space (Square Yards)</u>	<u>11,093,787</u>	<u>7,968,341</u>	7,455.50	11,964.48	4,965,364	3,002,977	38%
Small Aircraft	1,488	666					
Space Operations							
<u>Total Facilities Square Feet (000s)</u>	<u>12,028</u>	<u>16,514</u>	0.50	1.03	8,011	8,503	51%
Military/Civilian Authorized	24,007	15,989					
Product Centers, Labs and Test & Evaluation							
<u>Total Facilities Square Feet (000s)</u>	<u>37,159</u>	<u>39,522</u>	0.62	0.65	37,653	1,869	5%
Military/Civilian Authorized	60,274	61,075					

E. Defense Logistics Agency

DLA provides support to all Military Departments and is not separately identified in the Force Structure Plan. DLA identified two categories of infrastructure key to assess its ability to support the Military Departments: Distribution Depots and Supply Centers. Table 10 provides the overall capacity results by category.

1. Description of Defense Logistics Agency Installation Categories

Distribution Depots. This category includes covered general purpose wholesale warehouse storage facilities storing material regardless of material owner/commodity.

Supply Centers. This category includes installations that manage and procure consumable items of supply in support of the Military Services' missions.

2. Results for the Defense Logistics Agency

Table 10

Category Type/Metric	Metric Values from Military Department		Ratios ((A)/(B) and (C)/(D) as ratio values)		Proportional Capacity (G) = (E) X (D)	Change in Capacity Relative to Force Structure Since 1989	
	FY89 (A) / (B)	FY12 (C) / (D)	FY89 (E)	FY12 (F)		Delta from FY12 Capacity (H) = (C) - (G)	Excess FY12 Capacity (H)/(C)
Distribution Depots							
<u>Attainable Cubic Feet (millions)</u>	<u>693.92</u>	<u>232.85</u>	1.1855	1.3887	198.78	34.07	14.6%
Occupied Cubic Feet (millions)	585.33	167.68					
Supply Centers							
<u>Total Administrative Space (GSF)</u>	<u>3,993,500</u>	<u>2,033,696</u>	327.98	265.70	2,510,359	No Increase	
Military/Civilian Assigned	12,176	7,654					

F. Results for All DoD

DoD developed an estimate of excess capacity for each Military Department, DLA, and all of DoD by weighting the individual category excess figures by the number of bases in each category. Table 11 shows the Department’s current estimated percentages of excess capacity for each Military Department, DLA, and all of DoD, using the FY 2012 and FY 2019 force structure (as projected in PB FY 2016).

Table 11

Department	Estimated Percentage of Excess Capacity (above 1989 baseline) FY 2019 Force Structure	Estimated Percentage of Excess Capacity (above 1989 baseline) FY 2012 Force Structure
Army	33	29
Navy	7	6
Air Force	32	28
DLA	12	13
Total DoD	22	19

VII. Conclusion

This report addresses congressional concerns by complying with section 2815 of the FY 2016 NDAA and providing an analysis using the FY 2012 force structure; an assessment of probable threats; a worldwide installations inventory; and, based on that force structure plan and inventory, an assessment of capacity and the value of retaining excess for contingency, mobilization, or surge requirements. The results of these analyses—the Department has 19-22 percent excess infrastructure overall, and over 50 percent excess in certain categories—reemphasizes why the Department believes authorization of another BRAC round is essential.

The Department has worked with Congress to provide suggested changes to the BRAC legislation that would maintain the benefits of BRAC while addressing congressional concerns with the “transformational” BRAC 2005 round. Our legislative proposal addresses congressional concerns while maintaining the core tenets of a process that has worked in five previous BRAC rounds. The first four BRAC rounds focused on efficiencies while the BRAC 2005 round was more of a transformational BRAC across the Department. To ensure the next BRAC round is focused on saving money and maximizing efficiency, the Department’s revised BRAC legislation adds a requirement for the Secretary of Defense to certify the BRAC round will have the primary objective of eliminating excess infrastructure to maximize efficiency and reduce cost. Similar to the existing requirement to certify the need for a BRAC round, this certification occurs at the outset of the BRAC process and is a precondition to moving forward with development of recommendations. Additionally, subject to the requirement to give priority consideration to the military value selection criteria, the proposed legislation would require the Secretary to emphasize those recommendations that yield net savings within 5 years of

completing the recommendation, and would limit the Secretary's ability to make recommendations that do not yield savings within 20 years. In order to make a recommendation that does not yield savings within 20 years, the Secretary must expressly determine that the military value of such recommendations supports or enhances a critical national security interest of the United States.

The Department believes we have addressed all congressional concerns. We have looked at overseas installations first and successfully completed an efficiency-like BRAC in Europe that will save \$500 million a year; completed an updated excess capacity assessment based on a FY 2012 force structure; demonstrated the transformative nature of BRAC 2005 and how a future BRAC will be focused on efficiency; programmed costs and projected savings into the budget; and provided proposed legislative changes to the BRAC law.

The time to authorize another BRAC round is now. The BRAC process requires considerable time to analyze and develop recommendations, have those recommendations reviewed by the independent BRAC Commission, and then implemented over a six-year period of time. The longer authorization is delayed, the longer the Department will be forced to expend valuable resources on unnecessary facilities instead of weapons systems, readiness, and other national security priorities.

Appendices (On CD)

A. Inventory of Worldwide Installations

**B. Inventory of Leases for Military Departments, Defense Logistics Agency, and
Washington Headquarters Service**