The estimated cost of this report or study for the Department of Defense is approximately $5,000 in Fiscal Year 2016. This includes $850 in expenses and $4,150 in DoD labor.

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For over two centuries, the United States Army has continued to proudly serve the Nation by winning its wars and securing the peace. We must be able to accomplish our missions in a world defined by uncertain, adverse, and dynamic conditions. Maintaining our tactical and strategic edge heavily depends upon the wise use of our resources — energy, water, and land — to preserve future choices through superior knowledge, technologies, and execution.

Building on the Assistant Secretary of the Army for Installations, Energy and Environment (ASA (IE&E))’s Installations, Energy and Environment Strategy 2025, the Army Installations 2025 represents a foundation to assess our investments in our installations. The Army is evolving from a historic framework that viewed resource considerations as constraints on operational effectiveness to a perspective that considers the critical role of land, facilities, and infrastructure as mission enablers. This integrated perspective requires balanced decisions to achieve the greatest military for today and into the future.

Measuring performance is vital to ensuring acceptable outcomes. Headquarters, Department of the Army organizations and Army Commands will continue to track metrics that monitor progress and ensure stewardship in their areas of responsibility.

Katherine Hammack
Assistant Secretary of the Army
Installations, Energy, and Environment

2016 07 05
Date
# Table of Contents

I. Introduction 1  
II. Purpose 2  
III. Vision 4  
IV. Strategic Design 5  
V. Goals and Objectives 7  
1. Enhance Installation Resiliency 7  
2. Prioritize Facility Investments 10  
3. Optimize Infrastructure 13  
4. Set Conditions for a Future BRAC 16  
5. National Museum of the United States Army 18  
6. Enhance Contingency Basing Capabilities 20  
VI. Installations of the Future 22  
VII. Conclusions 23  
VIII. Appendices 24  
A. References 24  
B. Definitions 26  
C. Acronyms 28  
D. Planning Considerations for Installations of the Future 30
I. Introduction

Emerging from years of persistent combat operations, amid an uncertain and unpredictable budget, and confronted with an increasingly complex security environment, we must assess what kind of Army the Nation will need for the future. The uncertainties of today’s world, the evolution of new adversarial military technologies, and the staying power of viable threats to Americans and their way of life will challenge the Army’s readiness to respond to contingencies and to maintain its dominance over potential adversaries. Compounding these trends is the budgetary uncertainty and downturn in resourcing and spending caps with which the Army must contend.

As the Army considers these challenges, it must be prepared to prevent conflict, facilitate national objectives, and ultimately defeat adversaries across the full range of military operations. The complexities and uncertainties of the future require the Army of 2025 and beyond to remain the world’s premier land force—an agile organization applying sustained expeditionary land power, and serving as the integrator of U.S. and allied efforts in defense of the Nation and its interests. The Army installations of today must continue to evolve to meet the demands of 2025 and beyond. As key providers of the services and capabilities the Army needs, the Installation Community must have a flexible strategy that keeps pace with this transition. Today’s funding models may not be the most adept at funding the Army’s installations and infrastructure of tomorrow.

Army Installations 2025 provides an implementing framework supporting the ASA (IE&E)’s Installations, Energy and Environment Strategy 2025, which develops the foundation and vision to support the Army as it transitions, adapts, and improves to meet the demands of the future. The Army Installations 2025 provides a holistic strategy for the future by incorporating the Army’s Facility Investment Strategy (FIS) and other policies and programs to support the Army’s critical mission requirements. This strategy aligns to overarching National, Department of Defense, and Army strategies and, as a strategic framework, is intended to guide and shape current and future program actions at all levels within the Army.
II. Purpose

Army Installations 2025 presents the Army’s strategy to ensure our installations remain ready, resilient, and capable of meeting the demands placed upon them. In order to fight and win our nation’s wars, we must ensure the Army remains ready as the world’s premier combat force. Our collective strength depends on how we take care of our Soldiers, Civilians, and Families. Without question, these are our most important resource. The ASA (IE&E)’s Installations, Energy and Environment Strategy 2025 identified three Key Business Drivers (KBD): Installations, Energy, and Environment.

Installations Strategy 2025 addresses six goals of the Installations KBD:

• Enhance installation resiliency
• Prioritize the Army’s Facility Investments
• Optimize infrastructure to support force structure requirements
• Set conditions for a future BRAC round
• Oversee development of the National Museum of the United States Army (NMUSA)
• Enhance Contingency Basing Capabilities

The following are brief explanations of key program areas contained and/or nested within the six goals:

Privatized Army Lodging (PAL) - A partnership between the Army and private industry to improve the condition of on-post lodging facilities and provide for their long-term sustainment. The PAL program is comprised of 41 installations (combined into one lease agreement) and over 12,343 guest rooms—99% of the Army’s lodging inventory in CONUS, Alaska, Hawaii and Puerto Rico. PAL gives the Army the ability to leverage private sector capital, save travel funds, and realize best business practices, providing quality facilities today that will be sustained throughout the next 50 years.

Residential Communities Initiative (RCI) - A partnership between the Army and private industry to provide quality Residential Communities for Military Families & Single Senior Soldiers (Staff Sergeants & above). RCI leverages the private sector for expertise, creativity, and capital and applies best business practices, providing quality housing today that will be sustained throughout the next 50 years. The RCI program is comprised of 44 installations (combined into 34 projects) and over 86,000 homes—98% of the Army’s family housing inventory in CONUS, Alaska and Hawaii.

Utilities Privatization (UP) - A partnership between the Army and private industry by which military installations can obtain safe, technologically current, and environmentally sound utility systems, at a relatively lower cost than under continued Government ownership. In the privatization process, military installations shift from the role of owner-operators to that of smart utility service customers. There are currently 42 sites with utilities partnerships and the goal is to add a minimum of three sites or services per year.

Facility Sustainment (FS) - The maintenance and repair activities necessary to keep an inventory of facilities in good working order over an established service life. It includes major repairs or replacement of facility components (usually accomplished by contract) that are expected to occur periodically throughout the life-cycle of facilities.

Facility Restoration and Modernization (FRM) - Facility Restoration is the restoration of real property to such a condition that it may be used for its designated purpose and occurs approximately every 25 years. Facility Modernization is the alteration or replacement of facilities solely to implement new or higher standards, to accommodate new functions, or to replace building components that typically last more than 50 years (such as, the framework or foundation).

Military Construction (MILCON) - Any construction, development, conversion, or extension of any kind
carried out with respect to a military installation under the provisions of the Military Construction Codification Act (see 10 USC 2801).

**Additional program areas that have significant impact on these six goals include:**

**Base Realignment and Closure (BRAC)** - BRAC is a process used within the Department of Defense (DoD) to reorganize its installation infrastructure to more efficiently and effectively support its force structure. It utilizes an independent Commission, authorized by law, which evaluates DoD recommendations for realignment and closure of bases (AKA installations) and whose final recommendations are implemented as approved by the President. More than 500 Army installations and Reserve Component Centers have been closed during five BRAC rounds initiated in 1988, 1991, 1993, 1995, and 2005, resulting in $2 billion of annual recurring savings. The Army and the Defense Department have strongly endorsed the authorization of an additional BRAC round to reduce excess infrastructure and efficiently realign Army force structure to installations with the highest military value.

**Facility Investment Strategy (FIS)** - FIS addresses the Army’s effort to efficiently sustain, dispose of, improve the quality of, and build out the critical shortfall of facilities throughout the Army. FIS is the Army’s enterprise approach across the Active and Reserve components, and establishes guidelines to assist commanders and planners to “right size” installations’ facilities.

**European Infrastructure Consolidation (EIC)** - The European Infrastructure Consolidation is a base closure process of the Department of Defense which focuses on restructuring forces in Europe. While the processes used were similar to the 2005 BRAC round, the EIC analysis process was not subject to congressional authorization unlike BRAC; realignment and closure decisions were made by DoD. Although the EIC analysis, recommendation, development, and approval phases are complete, its implementation will continue through 2021. Semi-annual Business Plan updates and updates to Senior Leaders will continue until implementation is complete.

**Government Owned and Leased Housing Facilities** - These include both Family and unaccompanied Soldier housing, which are owned or controlled by the Government. A majority of the Government-owned Family housing inventory is largely overseas. Domestically, Government-owned family housing inventory is found where there is a shortage of adequate and affordable housing. Government-owned unaccompanied housing is found both overseas and domestically. In instances where there is a shortage of adequate and affordable housing off-post, the Government may lease for both accompanied and unaccompanied Soldiers. Additional criteria considered for leasing includes length of lease, cost-benefit-analysis for alternative options and hardships.

**Demolition/Disposal Operations** - Part of the FIS is to demolish or dispose of excess facilities that have met the end of their service life. These efforts require resources that are either budgeted in the program or part of the MILCON requirement.

**Contingency Basing** - Contingency Bases (CBs) are evolving locations that support military operations by deployed units and provide the necessary support and services for sustained operations. While not permanent bases or installations per se, the longer the duration of the supported operation, the more they require facilities similar to permanent/enduring bases and installations (e.g., enhanced infrastructure). Improving efficiency and reliability at CBs represents a significant opportunity to increase operational effectiveness by improving mission continuity and reducing the need to divert manpower to deliver fuel, and to operate, maintain, and respond to outages in energy systems.
Our Installations Vision is to enhance the Army’s mission effectiveness and resilience in a prudent, efficient, and forward-thinking manner. To this end, we must create and maintain sustainable installations that support the missions of a transformed Army with land, facilities, and infrastructure, providing excellent quality of life support for Soldiers and their Families.

This vision upholds the vision of the Army’s senior leadership. Recently published documentation supporting The Army Plan (TAP), to include the Army’s Vision Statement and the Army’s Programming Guidance Memorandum (APGM), discusses the use of efficiencies, innovation, and creativity in finding solutions to maintaining the viability and relevancy of the Army. The same factors apply to Installations. During this unprecedented time of discretionary programming and resourcing uncertainty, we must find efficient, innovative, and creative ways to meet emerging challenges.

Army Installations 2025 represents the means by which we will inform and engage our stakeholders and partners around the globe. It pertains to installations on which Soldiers, Civilians, and Families work and live and will be in place from Fiscal Year (FY) 2016—FY 2025.

Because we routinely adapt to change, this strategy will be updated as required to ensure relevance and currency with the Army’s planning and resourcing efforts.

AR 525-30 Army Strategic Readiness
Installations - The Total Force’s ability to provide excellence through streamlined processes, strategic partnerships, and good stewardship of resources that address Army priorities and meet the mission requirements of Senior Commanders. This translates into the ability to provide a growing and transforming Army with the infrastructure and support services it needs to remain a highly effective, expeditionary and campaign-quality force, today and in the future.
IV. Strategic Design


MISSION: Establish policy, provide strategic direction and supervise all matters pertaining to infrastructure, Army installations and contingency bases, energy, and environmental programs to enable global Army operations.

1 INSTALLATIONS

Major Objectives:
1.1 - Enhancing installation resiliency
1.2 - Nest FIS with OSD policy
1.3 - Optimize infrastructure to support force structure
1.4 - Set the conditions for future BRAC
1.5 - Provide oversight for NMUSA
1.6 - Advance Army contingency basing capabilities

OUTCOME: Sustainable installations that support missions of the Army

VISION: Enhance Army mission effectiveness and resilience in a prudent, efficient, and forward-thinking manner.

2 ENERGY

Major Objectives:
2.1 - Inform decisions - Leverage Army culture
2.2 - Optimize use - Increase efficiency
2.3 - Assure access - Provide reliable access
2.4 - Build resiliency - Advance capabilities
2.5 - Drive innovations - Encourage new concepts

OUTCOME: A ready and resilient Army, strengthened by secure access to energy, water, and land resources

3 ENVIRONMENT

Major Objectives:
3.1 - Enhancing the Army Safety Program
3.2 - Transform the Army OEH Program
3.3 - Enable readiness thru policies & programs
3.4 - Transform Army Environmental Program
3.5 - Enable technology acquisition
3.6 - Promote strategic environmental priorities

OUTCOME: Services that protect Soldiers, Families, Civilians and contribute to a stronger, leaner and more ready, responsive fighting force

Strategic Environment - The word that best describes our strategic environment is “uncertainty.” In the Preface of the U.S. Army Operating Concept, “Win in a Complex World,” General David Perkins, Commanding General, Training and Doctrine Command asserts “the environment the Army will operate in is unknown. The enemy is unknown; the location is unknown; and the coalitions involved are unknown.” The uncertainties of today’s environment, the evolution of new military technologies, and the staying power of viable threats to Americans and their way of life will challenge the Army’s ability to remain prepared for any contingency and to maintain its dominance over potential adversaries.

This ASA (IE&E) strategy is aligned with AR 525-30 Army Strategic Readiness, which describes the key readiness tenet of installations as the Total Force’s ability to provide excellence through streamlined processes, strategic partnerships, and good stewardship of resources that address Army priorities and meet the mission requirements of Senior Commanders. This translates into the ability to provide a growing and transforming Army with the infrastructure and support services it needs to remain a highly effective, expeditionary and campaign-quality force, today and in the future. This tenet is the cornerstone of Army Installations 2025, and is portrayed in the chart above.
KBD1 has 6 Goals:
The resulting Installations Strategic Design, nested within the ASA (IE&E) Strategic Design, is portrayed below:

**MISSION:** Provide worldwide policy, programming, and oversight of the Secretary of the Army's Title 10 U.S. Code responsibilities in the areas of real estate, military construction, engineering, housing and base realignments and closures; and provides oversight reviews, approvals, congressional testimony, and notifications as required by statutes.

**MO 1.1**
Enhance Installation Resiliency
- 1.1.1 - RCI program oversight
- 1.1.2 - IGSA/Partnerships
- 1.1.3 - Utilities Privatization
- 1.1.4 - Soldier Housing
- 1.1.5 - Family Housing
- 1.1.6 - IT Services
- 1.1.7 - Security
- 1.1.8 - Logistics

**OUTCOME:** Sustainable installations that support missions of the Army

**MO 1.2**
Facility Investment Strategy (FIS)
- 1.2.1 - Improve Conditions of Mission Support Facilities
- 1.2.2 - Improve Condition of Unaccompanied Housing
- 1.2.3 - Improve Condition of Family Housing
- 1.2.4 - Repurpose Facilities
- 1.2.5 - Dispose of Excess Facilities
- 1.2.6 - Dispose of Relocatable Buildings
- 1.2.7 - Build Out Critical Army Shortfalls

**OUTCOME:** Informed and Nested IAW Army Policies

**MO 1.3**
Optimize Infrastructure
- 1.3.1 - Disposition of Excess Infrastructure
- 1.3.2 - Develop an IA&E Standard Operating Procedure
- 1.3.3 - Infrastructure Consolidation Strategies
- 1.3.4 - European Infrastructure Consolidation
- 1.3.5 - Stakeholder Dialogue

**OUTCOME:** Infrastructure that effectively and efficiently supports the Army

**MO 1.4**
Set Conditions for Future BRAC
- 1.4.1 - Publish Data Requirements Policy
- 1.4.2 - Development of Shortcoming Action Plans
- 1.4.3 - BRACEXORD
- 1.4.4 - Conveyance
- 1.4.5 - Fair Market Value
- 1.4.6 - Strategic Engagements

**OUTCOME:** Favorable conditions for a future BRAC

**MO 1.5**
National Museum of the United States Army
- 1.5.1 - Complete Critical Tasks
- 1.5.2 - Oversee Completion
- 1.5.3 - Exhibit Fabrication
- 1.5.4 - Plans & Ops

**OUTCOME:** Informed and Nested IAW Army Policies

**MO 1.6**
Contingency Basing
- 1.6.1 - Mission Continuity; improved Operational Effectiveness & Efficiency
- 1.6.2 - Integrate Contingency Base Design Principles
- 1.6.3 - Develop Training & Manning Policies and CB Strategy

**OUTCOME:** Contingency installations that support COCOMs

**VISION:** Enhance the Army’s mission effectiveness and resilience in a prudent, efficient, and forward-thinking manner. To this end, create and maintain sustainable installations that support missions of a transformed Army with land, facilities, and infrastructure, providing excellent quality of life support for Soldiers and their Families.
V. Goals and Objectives

Goal 1.1: Enhance Installation Resiliency

**Installation Resiliency**

Enhance Installation Resiliency by planning and programming for infrastructure sustainment, utility upgrades, and by leveraging the authority for intergovernmental support agreements codified in Title 10 U.S.C. § 2679.

Sustainable installations must support missions of the transformed Army with land, facilities, network, and infrastructure providing the Army with standard support and services for Soldiers, Civilians, and Families. Installations will be more efficient, sustainable, secure, and adaptive to the changing environment and needs of the Army, to include the ability to absorb surges and contractions in personnel, while maintaining focus on fiscal responsibility, valued return on investment, and Army Readiness.

The ASA (IE&E) provides strategic guidance and supervision of policies, plans and programs for facilities investment executed by the Assistant Chief of Staff for Installation Management (ACSIM), United States Army Reserve (USAR) and Army National Guard (ARNG).

**1.1.1 RCI Program Oversight:** As an Army Partner in public-private and public-public ventures, ASA (IE&E) will continue to foster and oversee Project Development opportunities and negotiations.
financing, and major decisions which leverage the ability to use alternative financing to support business development opportunities at Army installations, and sustain maximum funding for approved manpower requirements for project level asset management oversight of RCI Privatized Housing.

(1.1.2) IGSA/Partnerships: By developing and establishing continued Partnership Agreements we can mitigate budget shortfalls, create efficiencies, and effect cost avoidance. One example includes the community library in Sierra Vista, AZ shared with Fort Huachuca, a partnership that has proven very effective to date.

(1.1.3) Utilities Privatization/Utility upgrades and modernization: With many legacy systems near the end of their service life, the Army must develop replacement solutions that are both sustainable and affordable. Through third party financing and creative capital investment, upgrades have been possible throughout the Army, and our privatization programs speak for themselves. We strive to increase the quality rating for all Army utilities. The Utilities Modernization Program (UMP) focuses on those utility systems that are either exempt from privatization or pending exemption from privatization. Modernization, as part of the DoD Recapitalization program, is a way to implement new or higher standards, to accommodate new functions, to increase efficiencies, and to replace building components that are at or beyond their service life. The Army is harnessing techniques to use these programs to make our utilities more efficient, more reliable, and compliant with all federal and state laws.

(1.1.4, 1.1.5) Soldier and Family Housing Management: Ensuring quality housing and services to Soldiers and Families is a top priority for the Army. Families that are secure and well supported increase Soldier readiness and deployability. Quality housing includes the management, support, and operation of housing-related services that enable Soldiers to focus on the mission and promote installation resiliency. These services touch the areas of Army Family Housing (AFH), Unaccompanied Housing (UH), RCI, PAL, and Furnishings. The ultimate purpose of these services are to execute what is required by law and policy, carry out family and barracks housing missions, and find innovative ways to provide and fund housing programs. Fully aligned and resourced Army Housing programs are necessary to ensure alignment of business strategies and foster a business relationship between the RCI developers and the Army.

The DoD Strategic Plan calls for the military services to maintain at least 90% of worldwide Government-owned AFH and Permanent Party (PP) UH at facility condition index (FCI) of 80% or higher. The Army anticipates meeting its goal for AFH by 2018 and its goal for UH by 2021. While these are aggressive time lines, the Army plans to attain these goals by using Restoration and Modernization (R&M), disposal of excess, or building new facilities where deficits exist. In addition, the Army seeks to complete the training barracks buyout program in order to address the shortage of facilities, modernization, and program construction by FY 2022. In keeping with the predominantly digital methods of communication, we will seek to increase the use of electronic interface between Soldiers/Families and the Army ensuring housing service offices continue to meet the needs of Families.
(1.1.6, 1.1.7, 1.1.8) Infrastructure Sustainment. A key aspect of sustainability is managing and improving the Army’s installation infrastructure. All Land Holding Commands (LHC) will maintain infrastructure using sustainable practices. The Facilities Sustainment Model (FSM) generates the annual sustainment funding required to keep real property facilities serviceable throughout their expected service life and covers major repairs or replacement of facility components which are expected to occur periodically throughout the facility life cycle. Given resource constraints, adaptive facility investment strategies must be implemented that look at innovative ways to reduce costs while optimizing savings and mitigating overall risk to the Army.
Goal 1.2: Prioritize the Army’s Facility Investments

Facility Investment Strategy (FIS)

Prioritize Facility Investments. Achieve the right balance of funding for maintaining needed facilities and eliminating excess, as reflected in accurate real property accountability records. Fully utilize the related resource streams available for success, to include: Facility Sustainment, Facilities Restoration and Modernization (R&M), Facilities Reduction, Military Construction (MILCON), and Unspecified Minor Military Construction (UMMC) programs.

The Army Facility Investment Strategy (FIS) provides a holistic approach to determine the optimal investment to sustain, restore, modernize, and construct facilities. This strategy encompasses Facility Sustainment (FS) and Facility Restoration & Modernization (FRM), Facilities Reduction, Military Construction (MILCON), and Unspecified Minor Military Construction (UMMC) programs.

FIS optimizes Army enterprise application of resources. FIS incorporates Army Senior Leader priorities and emphasis for FS, FRM and MILCON investment. As the Army works to align end strength with current and future resources, we must take advantage of this opportunity to improve readiness while making the best use of our existing buildings by taking unnecessary facilities out of the funding stream and apply Army resources where they are truly needed.

It is the Army’s intent to sustain needed facilities, dispose of excess facilities, improve the quality of retained facilities and build-out the most critical facility shortfalls. FIS is the guide for investing in facilities to meet mission requirements at least cost with acceptable quality, functionality, and quantity. FIS considers the full range of facilities solutions by utilizing R&M funding to the maximum possible extent prior to considering UMMCA or MILCON investment.

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<tr>
<th>1.2</th>
<th>FACILITY INVESTMENT STRATEGY</th>
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<tr>
<td>#</td>
<td>MAJOR OBJECTIVE</td>
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<tr>
<td>1.21.</td>
<td>Improve Condition of Mission Support Facilities</td>
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<td>1.22.</td>
<td>Improve Condition of Unaccompanied Housing Assets</td>
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<tr>
<td>1.23.</td>
<td>Improve Condition of Family Housing Assets</td>
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<tr>
<td>1.24.</td>
<td>Repurpose Facilities no longer required for original purpose</td>
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<tr>
<td>1.25.</td>
<td>Dispose of Excess Facilities via Demolition</td>
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<tr>
<td>1.26.</td>
<td>Dispose of Relocatable Buildings (acquired as personal property)</td>
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<tr>
<td>1.27.</td>
<td>Build Out Critical Army Shortfalls (FS, FRM, MILCON)</td>
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Goals and Objectives (continued)

By maintaining an appropriate balance between Sustainment, R&M, MILCON, leasing oversight, demolition, and space utilization, the Army can meet mission requirements, enhance readiness and lower costs. This requires detailed analysis at the installation level that is nested and accurately informed by Army Senior Leader priorities. Installation leaders must focus MILCON requests on these Army priorities to construct facility shortfalls that most affect readiness and provide potential cost savings.

FIS provides a vision for our future Army that stresses making informed decisions on which facilities should be; demolished, retained though underutilized, reduced to seasonal usage or converted to meet needs currently being met through the use of relocatables, temporary facilities, and off-post leases.

A succinct Annual Work Plan optimizes investments in our facilities. The annual work plan ensures limited Sustainment and R&M funding is wisely invested. Pressures on the Army budget will almost certainly bring lower levels of MILCON funding for the foreseeable future, increasing the importance of sustainment funds to our success in maintaining our facilities. Properly maintaining our inventory is our most sound investment to maintain quality and save energy. Preventive Maintenance (PM) is a subset of sustainment and provides for the systematic care, servicing and inspection of equipment, utility plants and systems, buildings and structures, and grounds facilities for the purpose of detecting and correcting incipient failures and accomplishing minor maintenance.

Senior Commanders must develop facility solutions that meet future requirements. Although current projections indicate a much smaller Army, a few select installations must be prepared to provide facilities should the need arise to rapidly rebuild combat power through growth of the Active Component. Army leaders will select a limited number of installations that will maintain excess capacity.

As part of the Real Property Master Planning (RPMP) process, Army Commands (ACOMs), Army Service Component Commands (ASCCs), and Direct Reporting Units (DRUs) are required to assess, in coordination with their respective Land Holding Command (LHC), all available courses of action to meet facility requirements before submitting a MILCON project for funding consideration.

(1.2.1, 1.2.2, 1.2.3) Improve Condition of Army Assets: Although we have witnessed some improvement in the facility condition of Army assets, there is much work to be done. Using the Installation Status Report (ISR) and frequent performance management reviews, we can ensure continued visibility of Army asset ratings, and with steadfast leadership and stewardship down to the installation level, we can honor our commitment of improving our assets, suitable for intended purpose, while seizing the opportunity to simultaneously reduce excess and deficits by using R&M to repurpose excess facilities.

(1.2.4) Repurpose Facilities: Senior Commanders (SCs) are required to develop and certify their installation’s facility reduction plan, and in collaboration with Garrison Commanders, develop RPMPs to consolidate into their best facilities and repurpose or divest of un-needed assets through FY 21.

(1.2.5) Dispose of Excess Facilities: Preliminary reports from recent parametric capacity analyses and other authoritative data bases reveal that we have the opportunity to dispose of additional space in excess of 47M square feet. Disposal is essential to achieving the reductions in pure and occupied excess facilities and reducing infrastructure sustainment requirements. Additionally, all facilities
with a Facility Condition Index (FCI) below 60 should first be evaluated as candidates for disposal. If any of these facilities are required for long term use, they should be demolished and replaced, or restored to a functional purpose. Annually the Army will develop or update disposal or restoration plans for facilities with an FCI below 60.

(1.2.6) Dispose of Relocatable Buildings (RLBs): RLBs have placed a tremendous strain on scarce sustainment funds, adversely impacting the Army’s ability to adequately maintain enduring facilities. RLB’s acquired as personal property for interim use will be disposed as personal property by Defense Logistics Agency (DLA) Disposition Services upon end of mission or end of economic life. Accountability of RLBs must be updated in the quarterly RLB report and captured by the approval number, square footage (SF), quantity of units and the RLB identification number in the DD Form 1391 support documentation. The ASA (IE&E) goal is the disposal of all relocatable buildings by FY2021. Disposal of RLBs will end the drain on base operations and sustainment funding.

(1.2.7) Build Out: Building out critical Army shortfalls as prescribed in our annual FIS is essential. The Master Planning process is crucial to ensure that MILCON is the best solution for a deficit and the programming must reflect the approved RPMP. Project rankings will be based on compliance with the tenets of the FIS approved by the Undersecretary of the Army (USA) and Vice Chief of Staff, Army (VCSA). Adequately tracking the current condition of Army assets using authoritative data bases will improve our overall process efficiency, making the timeliness and accuracy of ISR critical. Working with multiple echelons throughout the enterprise, transparent sharing of information, and seamless collaboration will ensure our FIS becomes the cornerstone of right-sizing the Army infrastructure.

Resources to accomplish our mission have been reduced significantly. The Army spends over $3.0B to sustain installation facilities annually. It is imperative that we reduce our footprint commensurate with operating force end strength, and through optimization of infrastructure we can look at ways to close, transfer, or repurpose facilities to meet the Army’s requirement while minimizing excess. Working closely with all stakeholders throughout the Joint community, especially within the Installation Management Enterprise is critically important. Together, we see ourselves as exceptional stewards of our facilities and visualize enterprise cost reduction by better management of the Army’s real property assets. Army Installations throughout the world will consolidate facility use consistent with Army standards to the minimum space needed to accomplish the mission.
Goals and Objectives (continued)

Goal 1.3: Optimize Infrastructure

Optimize Infrastructure

The ability to assess an organization’s infrastructure across capabilities using various tools and models. The Army’s current Analytical Process includes: Capacity Analysis, Military Value and Environmental/Economic Impact Analysis, and Scenario Development.

(1.3.1) Align Infrastructure: Having a good idea of the excess currently on hand, and in conjunction with diverse analyses techniques, we continue to analyze, evaluate, and develop solutions for disposition of excess property. In CY15 we conducted several parametric capacity analyses that confirmed what we already know—excess capacity exists—but working with LHCs and other stakeholders is critical to proper condition setting for this effort. The Master Planning analysis of installations’ proposed reduction strategy will identify the optimum solution for retaining the facilities with the minimum impact on roads and utilities. Application of sustainability, mixed use solutions, and energy conservation and compact development techniques combined with identification of opportunities for reduction or energy or renewable energy will enable the installations to reduce the cost of providing the installation with utilities.

(1.3.2, 1.3.3, 1.3.4) Develop Infrastructure Consolidation Procedures and Strategies: In January 2013, the Secretary of Defense directed an European Infrastructure Capacity (EIC) analysis to be conducted, with a focus on reducing long-term expenses through footprint consolidations, which resulted in the establishment of the Army’s Infrastructure Analysis and Evaluation (IA&E) team stand-up. An additional intent of this EIC analysis was to build Congressional support for conducting a future Base Realignment and Closure (BRAC) round.

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<th>1.3</th>
<th>OPTIMIZE INFRASTRUCTURE</th>
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<tr>
<td>#</td>
<td>MAJOR OBJECTIVE</td>
</tr>
<tr>
<td>1.3.1</td>
<td>Align infrastructure with major force structure decisions</td>
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<tr>
<td>1.3.2</td>
<td>Develop a Standard Operating Procedure (SOP) that documents the process for large-scale infrastructure analysis and evaluation</td>
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<td>1.3.3</td>
<td>Identify, develop, and purpose infrastructure consolidation strategies</td>
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<td>1.3.4</td>
<td>During the course of each FY, achieve 90% completion of the European Infrastructure Consolidation (EIC) Approved Actions List for the year of execution</td>
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<tr>
<td>1.3.5</td>
<td>Increase Stakeholder Dialogue for actions to reduce infrastructure by planning, advising, and directing at least two quality Communications efforts per year</td>
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While the Army’s ongoing European Transformation Plan had already reduced Army infrastructure significantly, consistent with force structure reductions, the EIC analysis was the first opportunity for DoD to compare existing infrastructure capacity to actual (and surge) requirements across the entire DoD European theater. Through EIC, the Army completed a comprehensive analysis using a strategic framework that produced over 20 scenarios that were approved by the Senior Steering Group (SSG) and another 16 Quick Win scenarios that resulted in one-time costs of $358 million across FY 16-21, yielding annual recurring savings of $163 million by FY 21. EIC is a present-day example of successful infrastructure optimization using analytical rigor to justify hard, yet defensible courses of action for divestment of legacy requirements. Completion of EIC continues as business plan refinement and implementation oversight are ongoing.
(1.31-5) Optimize Infrastructure: Consistent with the optimization of infrastructure, IH&P continues to analyze, evaluate, and develop recommendations and initiatives for disposition of the current level of the Army’s excess infrastructure. IA&E is developing a Standard Operating Procedure (SOP) that documents the process to plan, prepare, and execute large-scale infrastructure analysis and evaluation projects, using lessons learned from efforts like BRAC and EIC, and integrated with the Master Planning process and AR 420-1, Chapter 10 (Master Planning). Ensure stakeholder dialogue is documented through development of white papers that outline possible/proposed actions to achieve a meaningful reduction in excess and underutilized property while continuously increasing stakeholder dialogue for actions to reduce infrastructure.

Comprehensive Analytical Process

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<tr>
<th>Capacity Data Call</th>
<th>Capacity Analysis</th>
<th>Military Value Data Call</th>
<th>Military Value Analysis</th>
<th>Economic Value Analysis</th>
<th>Scenario Development</th>
<th>Scenario Analysis</th>
<th>Finalize Recommendations</th>
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<tr>
<td>Capacity Analysis</td>
<td>Military Value Analysis</td>
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<tr>
<td>Inventory</td>
<td>Selection Criteria</td>
<td>Potential Value</td>
<td>• Guiding Principles</td>
<td>• Objectives</td>
<td>• Feasible Courses of Action</td>
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<tr>
<td>What</td>
<td>What’s Important</td>
<td>Threat Risk</td>
<td>Potential Value</td>
<td>• Operational Impacts</td>
<td>• Cost and Benefits</td>
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<td>Where</td>
<td>How to Measure</td>
<td>Access to Water</td>
<td>• Geopolitical</td>
<td>• Present COAs to</td>
<td>• Decisions Makers</td>
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<tr>
<td>How Big</td>
<td>How to Weight</td>
<td>Access to Energy</td>
<td>• Military Judgment</td>
<td>•Military Judgment</td>
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<td>Usage</td>
<td>Rank Order 1-N</td>
<td>Marketable Commodities Financials</td>
<td>• Current Costs</td>
<td>• Implementation Costs</td>
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Analysis can be sequential and/or overlapping - Capacity Analysis provides the foundation for divestment scenarios.
Goal 1.4: Set Conditions for Future BRAC

Condition Setting for Future BRAC

Provide the capability to plan for, prepare for, and ultimately execute a Base Realignment and Closure (BRAC).

A BRAC Congressional authorization will allow the Army to make better use of scarce resources under current law budget caps. This constrained budget environment is likely to persist, and the short-term Army budget strategy of funding unit readiness and equipment modernization at the expense of installations is nearing the end of its utility. The Army conservatively estimates that excess installation and facility inventory costs approximately $500 million on an annually recurring basis – money that could be used to improve readiness, meet warfighting needs, and fund other high priority initiatives. At an active component of 450,000, the Army has over 170 million square feet of underutilized facilities, for an average of 21% excess capacity. Depending on the facility type, excess capacity can range from 18% to as much as 39% (at an active component of 490,000, excess averages 18%).

Further, reducing DoD’s inventory of military facilities was among the recommendations made by the National Commission on the Future of the Army earlier this year (Recommendation #5). Without the ability to close and realign bases, the Army is forced to make deep cuts at high military value installations to maintain and operate lower military value installations. BRAC is the only proven process that would allow the Army to reduce excess installation inventory and resulting overhead costs for operations and maintenance.

Given the time required to prepare for and conduct the analysis and recommendation development, setting conditions for a future BRAC round prior to legislative authorization is critical. Conducting a BRAC analysis is a multi-disciplined endeavor which requires extensive planning and execution. In over 10 years since the last BRAC analysis was

<table>
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<th>1.4</th>
<th>SET CONDITIONS FOR FUTURE BRAC</th>
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<td>#</td>
<td>MAJOR OBJECTIVE</td>
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<tr>
<td>1.41.</td>
<td>Publish ASA (IE&amp;E) and OACSIM approved BRAC data requirements policy guidance</td>
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<tr>
<td>1.42.</td>
<td>Review BRAC After Action Reports (AARs)</td>
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<td>1.43.</td>
<td>Develop a BRAC EXORD</td>
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<tr>
<td>1.44.</td>
<td>Develop and achieve 100% of approved property conveyance goals</td>
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<tr>
<td>1.45.</td>
<td>Negotiate and obtain 100% of reasonable fair market value consideration for excess BRAC property</td>
</tr>
<tr>
<td>1.46.</td>
<td>Increase quantity of strategic engagements with community support organizations related to setting the conditions for future BRAC round</td>
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completed, policies, procedures and systems used in that analysis have changed dramatically and will all require detailed review and updates. Ideally, such a work effort would be executed prior to BRAC enactment. This would allow a more thorough examination of the requirements and reduce the costs of any database configuration changes required. Additionally, building a nucleus for the teams that produce the Army’s recommendations is a big part of BRAC condition setting.

**1.4.1** Publish BRAC Data Requirements: Data requirements and policy guidance must be both relevant and current. Many Army regulations are tied to established authoritative databases from which data is drawn and BRAC analysis begins. Current facilities databases require updating along with several systems interface and data entry problems. These data shortcomings result in extensive data validation by LHC. Where algorithm adjustments are required, policy must ensure processes are implemented to ensure completion. Appropriate requirement edits must be developed, approved or adjusted, and included in the system in a timely fashion. With ongoing force structure changes, it is particularly crucial that we understand what is in our inventory, measured the inventory against valid requirements (i.e., RPLANS), identify the quality and status of our inventory (i.e., ISR), and accurately portray who is assigned to an installation (i.e., ASIP). Real Property Master Plans (RPMP) must be up to date to ensure that any BRAC analysis can account for the full impact of any proposed scenario. Partnering at all echelons is imperative.

**1.4.2** Ensure Accuracy of Databases of Record (RPLANS, HQIIS, GFEBS, ASIP, ISR): The essential ingredient in making BRAC decisions is accurate information, on both forces and facilities. Databases of record must be compared and reflect reality on the ground in order to maximize the Army’s funding and efforts.

**1.4.3** BRAC Execution Order (EXORD): Develop a BRAC EXORD for the Army to publish as a planning directive for Army-wide preparations to conduct a future BRAC analysis. This EXORD will include activities required to establish an Army Basing Study (TABS) or similar working group, and tasks to various Army echelons to ensure the Army has the plans written, the resources in place, and all other needed steps have been taken to successfully execute the next round of BRAC analysis.

**1.4.4-5** Conduct Property Conveyance and Continued success in conveying excess property from prior BRAC rounds will demonstrate the Army’s commitment to quickly realizing the intent of the law by rapidly reducing caretaker costs and allocating these savings and any land sale revenues against enduring infrastructure and operational requirements. This will illustrate the benefits of BRAC to both internal and external stakeholders. Obtaining reasonable fair market value for excess BRAC 2005 property has been challenging but very successful, especially relative to BRAC 1995. Continued strong, consistent, rigorously thorough, fair and equitable negotiating strategies will continue to reap significant land revenues for reinvestment by the Department.
Goals and Objectives (continued)

Goal 1.5: Oversee development of the National Museum of the United States Army (NMUSA) Project

The National Museum of the United States Army will be located approximately 20 miles south of Washington, DC in Fairfax County, Virginia. Public access to the NMUSA Center will be through its grand entrance on Fairfax County Parkway just 3 miles east of the I-95 corridor. Visitors may also use public transportation via Fairfax County bus service from the Franconia-Springfield metro station. The NMUSA Center will provide a 21st century museum of excellence with 185,000 square feet of exhibit, educational, and event space. A 13,000 square foot facility known as Founders Hall will be constructed on the Center grounds serving as a marketing, educational, and venue space. Prominent exterior features including a Parade Field, Memorial Garden, Amphitheater, and Army Trail will complement the museum facilities allowing for a variety of experiences for museum visitors. The NMUSA will tell the history of America’s oldest military service comprehensively, from the earliest days of the colonial militia to the present day. NMUSA will honor the service and sacrifice of American Soldiers who have committed their lives to the protection of our nation; educate visitors from all over the country and around the world, as well as inspire our current and future servicemen and women. It will feature state-of-the-art, interactive exhibits, multimedia presentations, and programs to engage and educate the estimated 750,000 visitors a year. Told through the stories of Soldiers visitors will hear and see the history, traditions and accomplishments of the Army, showcasing the undeniable fact that America’s Army has been and continues to be a reflection of the very society it serves.

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<th>OVERSEE DEVELOPMENT OF THE NATIONAL MUSEUM OF THE UNITED STATES ARMY (NMUSA) PROJECT</th>
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<td>#</td>
<td>MAJOR OBJECTIVE</td>
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<tr>
<td>1.5.1.</td>
<td>Complete all required critical tasks necessary to successfully complete the MCA Project w/in established timeline &amp; budget.</td>
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<td>1.5.2.</td>
<td>Oversee completion of Museum Center Construction elements in order to open NMUSA by CY 2019.</td>
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<td>1.5.3.</td>
<td>Complete Exhibit Fabrication and Installation w/in timelines and budget in order to open NMUSA by CY 2019.</td>
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<tr>
<td>1.5.4.</td>
<td>Prior to opening, complete all planning for Operations and Programs necessary to operate NMUSA.</td>
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Goals and Objectives (continued)

(1.5.1) Complete Critical Tasks: The MILCON project for road and infrastructure site preparation is one of three major construction elements at the NMUSA Center site. Ensure design completion, contract award and timely execution as they are critical to the progression of Founders Hall and the NMUSA.

(1.5.2) Oversee Completion: The NMUSA Center construction elements include a 13,000 square foot facility known as Founders Hall, a 62,000 square foot Baseline Museum, a 56,000 square foot Exhibit Wing, and prominent exterior features that include a Parade Field, Memorial Garden, Amphitheater, and Army Trail. Completion of these elements in a timely manner is critical to ensure the museum opening in 2019.

(1.5.3) Exhibit Fabrication: The NMUSA will not only house an Exhibit Wing but also an Experiential Learning Center and Theater. All elements require extensive fabrication efforts. This includes micro and macro artifact conservation and restoration, artifact case fabrication and installation, audio visual elements, the application of information technology, lighting, show control, the fabrication of designed tableaus, and all graphics. All exhibits must be completed and installed in time for the museum opening in 2019.

(1.5.4) Plans and Operations: Prior to opening, the NMUSA’s operational and programming elements must be developed and ready for implementation. This element includes the development of all SOPs, educational programming, volunteer registration and training, and staff training. This element also contains the requirement for the transition of the National Museum Project Office staff into the NMUSA staff responsible for the operational control of an accredited museum. The National Museum staff will transfer from ASA (IE&E) to the Center of Military History, under the Office of the Administrative Assistant to the Secretary of the Army, in 2019.
**Goal 1.6: Enhance Contingency Basing**

**Enhance Contingency Basing Capabilities**

Enhance the Army’s ability to provide scalable capabilities in support of Regional Alignment of Forces by advancing contingency basing strategies, policies and investments.

Army contingency basing is a critical enabler for a range of military operational capabilities. Army contingency bases will provide the greatest operational benefit as expeditionary projection platforms by enabling mission commanders to concentrate their efforts to employ combat power.

Contingency basing is a complex, cross-functional undertaking that includes planning, operations, logistics, engineering, construction, security, operational energy and water resources, environment, safety, health, garrison management, personnel management and quality of life, and command and control. Contingency basing requires improved capabilities across the life-cycle process of planning, designing, constructing, operating, managing, and transitioning or closing Army contingency bases/base camps in supporting a Combatant Commander’s requirements.

The installation management enterprise understands and has expertise in the complexity of managing and operating Army installations and it is this broad subject matter expertise that must be brought to bear to enhance the contingency basing capabilities of an expeditionary Army and to support Force 2025 and beyond. To achieve this end, the installation management enterprise must be an active participant in the contingency basing community and partner across the Army Staff, Army Commands, and Army Service Component Commands (ASCCs) to contribute to the development of standards for contingency base operations to enhance effectiveness and efficiency, including compliance with environmental requirements and operational energy efficiency, and coordinating development, implementation and evaluation of policies, plans and strategies for military facilities investment requirements.

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<th>1.6</th>
<th>PROVIDE CONTINGENCY BASING</th>
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<tr>
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<td>MAJOR OBJECTIVE</td>
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<tr>
<td>1.6.1</td>
<td>Ensure mission continuity by improving operational effectiveness and efficiency at contingency bases</td>
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<td>1.6.2</td>
<td>Integrate contingency base design principles that incorporate local materials, reduce energy and water requirements, reduce waste streams, and minimize environmental impacts</td>
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<td>1.6.3</td>
<td>Develop training and manning policies and strategies for contingency bases</td>
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<tr>
<td>1.6.4</td>
<td>Develop policy and Doctrine for transition of contingency bases to enduring bases</td>
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The Army requires capabilities to effectively execute mission command across all the nodes/locations of the command post thus enabling expeditionary maneuver as envisioned in the Army Operating Concept. To meet the needs of Force 2025 and beyond, Army installations and other enduring locations outside the United States, may serve as home station command posts for higher echelon (theater, corps, division) operational forces executing expeditionary missions. Installations may be required to support basic command post functions related to the mission command network, physical infrastructure, uninterrupted energy supply, as well as the scalability and flexibility to meet the needs of operational Commanders.

(1.6.1) Ensure Mission Continuity: Army installation management enterprise must enhance continuity in garrison operations and capabilities on contingency bases/base camps. The intent of this effort is to provide reach back capability for the ASCCs and to provide garrison support teams to enhance training and provide hands on assistance to operational units that have the responsibility to manage a contingency bases/base camps.

(1.6.2) Integrate Contingency Base Design Principles: Army contingency basing requires integrated materiel and non-materiel solutions that result in reduced risk, reduced manpower requirements, better energy and water efficiency, waste reduction, increased security, and reduced tooth to tail and troop to task ratios. Planning, design, and construction capabilities and elements promote interoperability, sustainability, modularity, and scalability (in function and footprint). More efficient energy, water, and waste capabilities provides for a lighter, faster, more maneuverable and more resilient force, an increased ability to operate in austere environments, and increased agility, freedom of action, and operational tempo.

(1.6.3) Develop Training and Manning Policies: Expeditionary capabilities must be resident within available and trained, regionally aligned Army forces to conduct extended operations in deployed locations. Leaders at all levels need the capability to consider and integrate contingency basing requirements in order to establish contingency bases/base camps for future operations. The installation management enterprise can contribute to the development of military occupational specialties/additional skill identifiers; produce training programs deploying operational units and for contingency basing management staff roles; and, support professional development of contingency base garrison commanders and staff in accordance with Force 2025.

(1.6.4) Develop Policy and Doctrine for Transition of Contingency Bases to Enduring Bases: Contingency bases are defined as those that have been in operation for a duration of 60 months or less. The Joint Staff validates the mission for enduring bases for locations that have a security interest or strategic access is required for the foreseeable future. A lead service is identified based upon predominant use. Enduring bases identified as Forward Operating Sites (FOS) have a sustained presence of allocated US forces as well as infrastructure and Quality of Life amenities in support of extended assignments. Main Operating Bases (MOB) have permanently assigned US forces with a correspondingly robust infrastructure and amenities including family support.
VI. Installations of the Future

While technology has revolutionized some elements of the Army mission and operations, other elements such as Army installations have experienced more limited, incremental changes. Building materials and methods remain similar to those employed during the major expansion of the Army’s footprint during World War II. Indeed, much of the Army’s current facility inventory dates from that era. The average age of the current inventory is reported to be between 35 and 40 years old, and aging. While rapid changes will occur in other areas of the Army mission, the Army’s real property and its management will evolve incrementally. Decisions from decades past will continue to exert major influence on the state of Army installations, and current decisions will have long-ranging impacts. This heightens the need for careful and flexible planning.

During the second half of the twentieth century, the scope of installation facilities and operations became significantly more robust. Mission facilities today are highly sophisticated and customized as compared to their predecessors. Community support facilities are more widespread, and in many cases match and exceed the types of facilities that are found in surrounding communities. Another trend particularly visible since the start of this century is a focus on outsourcing – in both mission areas and in mission support. Contractors are integrated on installations, maintaining weapons systems as well as the facilities that house them. In areas such as family housing and lodging, the Army has acquired long-term turnkey solutions where a private party builds, owns, and operates facilities on the installation.

These two major trends, aging facilities and outsourcing, are likely to continue, and must be managed pro-actively. Installation plans and operations will need to accommodate a diverse set of activities on post, many of which will be operated by contract or through partnering agreements. While being mindful of quality-of-life considerations, managers should ensure that facilities on post are supporting needed missions, rather than needlessly duplicating existing off-post capabilities. Managers should also anticipate outsourcing scenarios where service providers have substantial experience.

A third, more recent trend is in building technology. Looking forward, technology will provide managers with more information on which to make decisions. For example, technical control systems that work with HVAC systems and other metering technologies will change as smart technology advances. At the same time, technology will add to the complexity of the installations mission. Managers will be challenged to keep facilities updated at the same pace as technological change. By maintaining flexibility and implementing incremental change, installations managers of the future will best position themselves to support the evolving Army mission.

Appendix D expands on this topic and identifies a number of issues to be considered in planning for installations of the future.
VII. Conclusion

The Army Installations Strategy 2025 implements the Assistant Secretary of the Army for Installations, Energy and the Environment (ASA IE&E)'s Directives. It provides a holistic strategy for the future as we know it today. With resource uncertainty for the foreseeable future, it is particularly important that we continually update our policies and plans based on the operating and resource environments. Goals and objectives can and will change. We must continually reassess and apply tools accordingly.
Appendix A: References

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Charter, the Army Basing Study (TABS) Group, 15 January 2003

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Office of the Assistant Secretary of the Army (Installations, Energy & Environment), Strategy 2025, December 2014

Training and Doctrine Command Pamphlet 525-3-1, the U.S. Army Operating Concept (Win in a Complex World) 2020-2040, 31 October 2014


AUSA 2015 Fall Symposium, ILW Contemporary Military Forum #5: Enabling Victory in a Complex World: Resilient Army Installations, comments from panel member Maureen Ehrenberg, First Vice Chair, International Facility Management Association


UFC 2-100-01, Installation Master Planning

10 USC 2864, Master Planning for Major Military Installations

Memorandum, Secretary of the Army, Subj: Army Operational Energy Policy, 30 April 2013
Appendix B: Definitions

**BOS - Base Operations Support:** Base operations are those common-service support functions listed in chapter 5, section XII, AR 37–100–XX, Army Management Structure (AMS), regardless of the appropriation or fund account from which they are financed.

**BRAC - Base Realignment and Closure:** BRAC is a process used within DoD to reorganize its installation infrastructure to more efficiently and effectively support its force structure. It utilizes an independent Commission established by Public Law 101-510 as amended, which evaluates DoD recommendations for realignment and closure of bases and whose final recommendations become law.

**Contingency Base -** A location that supports military operations by deployed units and provides the necessary support and services for sustained operations. Although not permanent bases or installations, the longer the duration of the supported operation, the more the contingency base requires facilities and services similar to main operating bases or permanent installations (such as enhanced infrastructure). A contingency base generally has a defined perimeter and established access controls.

**EUL - Enhanced Use Lease:** Title 10, USC § 2667, provides the Military Departments of the Department of Defense the authority to lease available, non-excess real property to non-federal parties.

**EIC - European Infrastructure Consolidation:** The European Infrastructure Consolidation is a base closure process of the Department of Defense which focuses on restructuring forces in Europe. While the processes used were similar to the 2005 Base Realignment and Closure (BRAC), the analysis process was not subject to the BRAC or any other laws so the realignment and closure decisions were DoD’s to make.

**FIS - Facility Investment Strategy:** The Army’s effort to efficiently sustain, dispose of, improve the quality of, and build out critical shortfall of facilities throughout the Army. FIS is the Army’s enterprise approach across the Active and Reserve components, and establishes guidelines to assist commanders and planners to “right size” installations’ facilities.

**FSM - Facility Sustainment Model:** The Sustainment Model programs support for critical worldwide operations, activities and initiatives necessary to maintain (sustain) the Army’s facilities; to meet the full range of tasks necessary to provide relevant and ready land power for this Nation.

**Installation Resiliency -** The ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions.

**Installations Strategy 2025 -** This provides a holistic strategy for the future by incorporating the Army’s Facility Investment Strategy (FIS) and other policies and programs to support the Army’s critical mission requirements. This strategy aligns to overarching National, Department of Defense, and Army strategies, and is intended to guide and shape current and future program actions at all levels within the Army.

**IGSA - Intergovernmental Support Agreement:** Support agreements authorized under Section 2679 of Title 10 U.S. Code. Services may enter into an intergovernmental support agreement with a State or local government to provide, receive, or share installation-support services if the Service Secretary determines that the agreement will serve the best interests of the department by enhancing mission efficiency or creating efficiencies or economies of scale, including a reduction in cost. In general, IGSA’s
Appendix B: Definitions (continued)

may be entered into on a sole-source basis, may be for a term not to exceed five years, and may use wage grades for installation-support services provided by a State or local government, who are normally paid by that State or local government.

Military Construction - Any construction, development, conversion, or extension of any kind carried out with respect to a military installation under the provisions of the Military Construction Codification Act (see 10 USC 2801).

Operational Energy - The energy required for training, moving, and sustaining military forces and weapons platforms for military operations. This term includes energy used by tactical power systems and generators, as well as by weapons platforms themselves.

Optimize Infrastructure - The ability to assess an organization’s infrastructure across capabilities using various tools and models. The Army’s current Analytical Process includes: Capacity Analysis, Military/Economic Value Analysis, and Scenario Development.

PAL - Privatized Army Lodging: A partnership between the Army and private industry to improve the condition of on-post lodging facilities and provide for their long-term sustainment. PAL gives the Army the ability to leverage private sector capital and best business practices, providing quality facilities today that will be sustained throughout the next 50 years.

RCI - Residential Communities Initiative: Quality Residential Communities for Military Families & Single Senior Soldiers (Staff Sergeants & Above). RCI leverages the private sector for expertise, creativity, and capital. The RCI program is comprised of 44 installations (combined into 34 projects) and over 86,000 homes – 98% of Army’s family housing inventory in the U.S.

RPMP - Real Property Master Plan: The installation blueprint for real property development and real estate actions.

Strategy (IE&E) 2025 - Office of the Assistant Secretary of the Army for Installations, Energy & Environment December 2016 document that provides the foundation and vision to pro-actively support the Army as it transitions, adapts, and improves to meet the demands of the future.

UP - Utilities Privatization: Utilities privatization is a method by which military installations can obtain safe, technologically current, and environmentally sound utility systems at a relatively lower cost than they would under continued Government ownership. In the privatization process, military installations shift from the role of owner-operators to that of smart utility service customers.

RGB - Realty Governance Board: The ASA(IE&E) RGB was created in 2010 to administer the Business Clearance process. The RGB is chaired by the DASA(IH&P) with members appointed on an ad hoc basis by appropriate senior leadership and key stakeholders.
## Appendix C: Acronyms

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<th>Acronym</th>
<th>Full Form</th>
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<td>AAR</td>
<td>After Action Review/Report</td>
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<td>ADC</td>
<td>Association of Defense Communities</td>
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<td>ACOM</td>
<td>Army Command</td>
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<td>ACSIM</td>
<td>Assistant Chief of Staff for Installation Management</td>
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<td>ACP</td>
<td>Army Campaign Plan</td>
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<td>AFH</td>
<td>Army Family Housing</td>
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<td>Army Materiel Command</td>
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<td>Army National Guard</td>
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<td>Assistant Secretary of the Army</td>
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<td>Center for Army Analysis</td>
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<td>COMRS</td>
<td>Commander Resolute Support</td>
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<td>Deputy Assistant Secretary of the Army</td>
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<td>DOD</td>
<td>Department of Defense</td>
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<td>DOTMLPF</td>
<td>Doctrine, Organization, Training, Materiel, Leadership, Personnel, Facilities</td>
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<td>IE&amp;E</td>
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Appendix C: Acronyms (continued)

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<th>Acronym</th>
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<td>IPT</td>
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<td>OASA</td>
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<td>ODASA</td>
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<td>OYP</td>
<td>Out-years Program</td>
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<td>PAL</td>
<td>Privatized Army Lodging</td>
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<td>POM</td>
<td>Program Objective Memorandum</td>
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<td>PP</td>
<td>Permanent Party</td>
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<td>RCI</td>
<td>Residential Communities Initiative</td>
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<td>R&amp;M</td>
<td>Restoration and Modernization</td>
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<td>Real Property Planning and Analysis System</td>
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<td>RPMP</td>
<td>Real Property Master Plan</td>
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<td>SE</td>
<td>Strategic Effort</td>
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<td>Sustainment, Restoration and Modernization</td>
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<td>Total Army Basing Study</td>
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<td>Training and Doctrine Command</td>
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<td>UH</td>
<td>Unaccompanied Housing</td>
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<td>UMMCA</td>
<td>Unspecified Minor Military Construction, Army</td>
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<td>UP</td>
<td>Utilities Privatization</td>
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<td>USAR</td>
<td>United States Army Reserve</td>
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Appendix D: Planning Considerations for Installations of the Future

Welcome to the Army installation of 2025

Planning Considerations for Installations of the Future

Army installations have changed greatly over time. A majority of Army installations were established as camps during WWI or WWII. These wartime camps were isolated and largely self-sustaining, characterized by expedient construction and populations of transient personnel. Today most of the Active Army population is assigned to major permanent settlements that have many of the characteristics of modern cities. While the Active component is primarily assigned to large installations, the Reserve components are necessarily dispersed throughout the country, close to the population centers in which their membership lives. Urban growth has dramatically changed the landscape surrounding many installations. As installations have become more permanently established, they have relied on off-post services, and spurred economic development in the surrounding areas. While installations will remain tightly connected with their surrounding communities, security concerns create real barriers to greater integration.

Most installations today are “specialized” in the primary mission that they support such as: individual training, force generation, industrial base, or test and evaluation. Within those categories, assigned unit missions may include aviation, artillery, maneuver, and the like. These characteristics largely determine the land areas and infrastructure needed to support the assigned missions. These requirements have evolved over time as well – for example, modern weapons systems and tactics often require larger land areas than those of the past. At the same time, virtual and constructive training can take the place of some training that previously could only be done in live environments.

Going forward, the Army footprint will continue to evolve along with changes in missions, changes to the surrounding landscape, and changes in the delivery of services. Just as the operational Army has transformed to a modular force in the last decade, the supporting infrastructure and
services at Army installations must adapt to meet future operating paradigms and requirements. Army facilities will have changes in use and occupancy during their useful lives. The trend toward outsourcing of both services and assets may continue at its current pace or dramatically increase. At the same time, there will also be interest in shared use of Army resources by the local community. Anticipating such changes will facilitate adaptation and efficient asset management.

**Strategic Facility Planning** - The Army’s combat mission is paramount, and installation services and infrastructure must support readiness for that mission. Facilities that are traditionally found on installations which support the Army mission can be divided into broad categories. Future plans for facilities in each of these categories must be considered somewhat differently as the Army footprint and operating paradigm evolves.

**Mission-unique facilities and infrastructure** - Including training facilities, operational facilities, ranges, airfields, and deployment infrastructure. These form the nucleus of Army installations. These facilities are purpose-built to the mission and are generally difficult to repurpose. Equivalent facilities are generally not available off-installation, and there is limited or no private sector need for such facilities. These must generally continue to be built, owned, and maintained by the Army with appropriated funding.

**Non-unique mission facilities and infrastructure** - Such as facilities for administration, research and development, troophousing, and feeding. These facilities support primary missions, but are not linked solely to that mission. The facilities can often be repurposed for another unit with a similar mission, or are generally comparable to facilities that may be found in or used by the local community. These mission facilities will normally be built, owned, and maintained by the Army with appropriated funding. Nevertheless, consideration should be given to future reuse scenarios, as well as the potential provision of facilities or services by the private sector.

**Community support facilities** - Such as family housing, child care, recreational facilities, and retail establishments. These facilities provide indirect mission support, and are highly similar to facilities found in the commercial market. In remote locations, such facilities provide substitutes for what is normally provided by the local economy. Elsewhere, such facilities may be provided to complement services that are locally available, and to enhance quality of life for assigned personnel. Whether such facilities are built and maintained by the Army will depend in large part on local conditions. Needs assessments should carefully survey what capabilities exist in the local community. Where Army facilities are planned, strong consideration should be given to locations that would facilitate future outsourcing or public use.

**Facility Utilization and Operations** - Harnessing current and emerging technology will enable more efficient management of facilities and their utilization. Tracking facility conditions will enable well-informed decision-making in an installation’s sustainment, restoration, and modernization program. Monitoring facility utilization at the asset level allows local managers to improve utilization across an installation’s portfolio. Aggregating utilization data at the enterprise level allows for informed decision-making regarding capital investments, stationing, and base realignment and closure actions.
Appendix D: Planning Considerations for Installations of the Future (continued)

Infrastructure and force protection - Site access and security have major implications for installation master planning and operations. Installations will always need to facilitate movement of both DoD and non-DoD personnel on and off post, securely and efficiently. At the same time, careful planning can result in a layered strategy, where less sensitive areas of the installation are not subject to high-level security requirements reserved for mission facilities. Some facilities can be considered for placement outside the secure perimeter, or can be planned for future divestment by moving the perimeter. This planning also supports outsourcing initiatives that involve greater public access to designated portions of the installation.

Outsourcing, contracting, and shared municipal services - Army use of outsourcing and contracting for the provision of facilities and services has grown considerably in recent decades. Both in the “life support” arena and in mission operations, contractors provide a broad suite of services. Successful outsourcing results in efficiencies and in eliminating non-core functions from Government performance. Where asset ownership vests in a contractor, the Government also loses control over those assets and their operation. As existing outsourcing contracts mature, and as installations pursue such new initiatives, proper incentives and controls are necessary to ensure delivery of needed services at expected levels. In pursuing future outsourcing, deliberate planning should consider whether associated facilities are best placed off-post or on-post, and whether special provisions for public access may be needed.

Sustainable development - Sustainable development is more than an environmental mandate, it is a mission prerogative. New development must be “lasting” development. Conserving land conserves training capabilities and provides for future growth. Transit-oriented and mixed-use development can reduce infrastructure costs while conserving energy and avoiding pollution. Future environmental regulation may constrain the ability to operate and expand current installation footprints. Together, these factors heighten the importance of efficient utilization of existing facilities and careful long-range planning of cantonment areas.

Energy and water security - Provision of adequate energy and water resources is a critical requirement for installations to support a ready force. A separate Energy Security and Sustainability strategy provides primary guidance for meeting those objectives. Infrastructure planning must nevertheless account for those goals. In particular, on-site generation and provision of resources may require land and integration with existing distribution systems. Here, land use planning should take into consideration whether such facilities would be owned and operated by the Government or the private sector, and the long-term implications of dedicating land for such use.

Boundary encroachment - Urbanization around Army installations has constrained missions at many locations and will continue to do so. As the capabilities of weapons systems increases, Army ranges and training areas will be strained to support them without creating conflicts with adjacent land uses. Opportunities to expand installations are uncertain in the current planning horizon. Attention must focus on retaining existing capabilities and working with local communities to avoid new development that would conflict with existing uses.