ARMY INSTALLATIONS STRATEGY

Supporting the Army in Multiple Domains

U.S. ARMY

DECEMBER 2020

"It's all about taking care of People. Installations must be in a position to allow the Army to do its job. As we transform the Army, we have to transform installations along with it."

—GEN James C. McConville, Chief of Staff, Army

FOREWARD

Installations are the platforms from which we build Army culture, care for our People, and project and sustain forces. They provide critical capabilities essential to strategic readiness and the Army's ability to *"Deploy, Fight and Win our Nation's wars,"* enabling operations synchronization, training, critical research, maintenance, and production activities essential for Army Modernization and strategic sustainment.

In the current operating environment, we expect adversary actions directed against the homeland Installations are no longer sanctuaries. Together, we must ensure installations have the ability to care for our Soldiers, Families and Civilians, while remaining resilient, and ready for Multi-Domain Operations (MDO). This strategy provides the framework to achieve those outcomes.

Current and emerging trends require us to examine installations and infrastructure through a new lens— we will revise doctrine, training, and investments accordingly. We will define the critical installation capabilities required to support Army operations in a persistently contested homeland, while providing services to meet the expectations of the all-volunteer force. Installations should serve to enhance recruitment and retention efforts, while supporting the Army's most important asset, its People.

This document takes a long-term view to build and harness the full capabilities required of installations, and enable the Army to compete, deter, and win in a complex security environment. The Army Installations Strategy describes how installations will transform by 2035 into MDO-ready platforms that protect, support, and enable the Total Army.

Supporting the Army priorities of People, Readiness, and Modernization, together we, the Army Team, will transform our installations to meet the Army's needs today, tomorrow, and into the future. People first! Winning Matters! Army Strong!

Michael A. Grinston
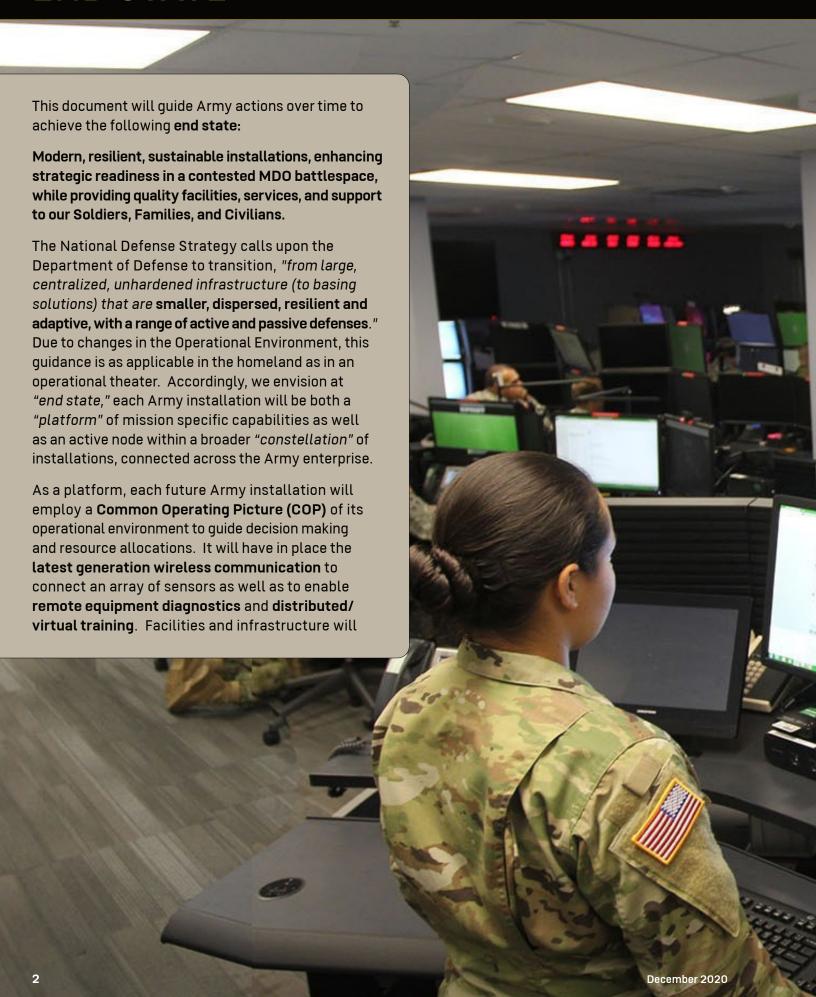Sergeant Major of the Army

James C. McConville
General, United States Army
Chief of Staff

Ryan D. McCarthy
Secretary of the Army

END STATE

This document will guide Army actions over time to achieve the following **end state:**

Modern, resilient, sustainable installations, enhancing strategic readiness in a contested MDO battlespace, while providing quality facilities, services, and support to our Soldiers, Families, and Civilians.

The National Defense Strategy calls upon the Department of Defense to transition, *"from large, centralized, unhardened infrastructure (to basing solutions) that are* **smaller, dispersed, resilient and adaptive, with a range of active and passive defenses***."* Due to changes in the Operational Environment, this guidance is as applicable in the homeland as in an operational theater. Accordingly, we envision at *"end state,"* each Army installation will be both a *"platform"* of mission specific capabilities as well as an active node within a broader *"constellation"* of installations, connected across the Army enterprise.

As a platform, each future Army installation will employ a **Common Operating Picture (COP)** of its operational environment to guide decision making and resource allocations. It will have in place the **latest generation wireless communication** to connect an array of sensors as well as to enable **remote equipment diagnostics** and **distributed/ virtual training**. Facilities and infrastructure will

be **adaptable**, and **multi-purpose by design**, able to accommodate multiple tenants, systems, and missions. To the maximum extent feasible, each installation will have **resilient power, water** and **communications system**s—prioritized by mission requirement. There will be both **passive and active defenses** in place across multiple domains. These installations will **integrate with surrounding communities** and civil authorities, providing **information enabled public services and lifestyle-oriented features** to the Total Army.

As a node within a constellation, each future Army installation will connect across the Army enterprise through a shared COP and secure communications. This will allow the constellation to form and reform quickly, shifting mission and focus between installations based on function, contingency, and local conditions, thereby creating adaptability and resilience across the Army enterprise. The nature of a constellation of installations will permit distributed training over wide areas and the ability to combine "live" training with virtual, augmented and/or synthetic training. Similarly, this approach will support knowledge sharing and collaboration between the Army's scientific and testing communities, as well as in tele-medicine, remote learning and distributed work.

This document sets strategic direction for Army installations to be MDO-ready for the Army of 2035 and beyond. It will guide decision making at all echelons across the Army regarding policies, planning, and practices. This document will provide stable, long-term direction to resource decisions that affect installation services, organizations, infrastructure, and capabilities. It applies to all Army installations in the Strategic Support Area (SSA), which the Army Training and Doctrine Command (TRADOC) describes as the area of cross-combatant command coordination that includes the strategic sea and air lines of communication and the homeland.

This strategy seeks to achieve four outcomes, each with a supporting line of effort.

These outcomes and lines of effort derive from characteristics of the Operational Environment (OE) to include: current and emerging threats, a technology influenced future, and the requirements of MDO.

Strategic Outcomes	Lines of Effort	
1. Attract, Retain, and Enable People	Take Care of People	
2. Project Combat Power and Sustain Operations from a Contested Environment	Strengthen Readiness and Resilience	
3. Modernized Installations Supporting the Modernized Army	Modernize and Innovate	
4. Healthy, Sustainable Training, Working, Living Environment	Promote Stewardship	

Figure 1: Army Installations Strategy – Strategic Outcomes and Lines of Effort

The National Defense Strategy (NDS) states the *"homeland is no longer a sanctuary."* Threat assessments and national level strategic guidance make it clear Army activities in the homeland and on our installations are at increasing risk of disruption and attack. Army installations also often depend on infrastructure and services in surrounding communities, both subject to adversarial actions:

NDS 2018:

It is now undeniable that the *homeland is no longer a sanctuary*. America is a target, whether from terrorists seeking to attack our citizens; malicious cyber activity against personal, commercial, or government infrastructure; or political and information subversion. New threats to commercial and military uses of space are emerging, while increasing digital connectivity of all aspects of life, business, government, and military creates significant vulnerabilities. During conflict, attacks against our critical defense, government, and economic infrastructure must be anticipated.

The Army anticipates that adversaries will use sophisticated intelligence, surveillance, and reconnaissance (ISR) networks to target both military installations and soft targets associated with friendly forces, including private sector organizations, civilian infrastructure, institutional Army and joint targets, communication networks, and Service members' families. Increasing access to cyberspace, space capabilities, and to weapons of mass effects dramatically increases both the uncertainty and the risk from adversary operations in the homeland.

In addition to deliberate and directed attacks from adversaries, Army installations exist within a natural environment increasingly characterized by the effects of climate change, extreme weather events, pandemics, and environmental degradation. Such conditions will require adaption of existing infrastructure.

A key feature of the OE is the accelerating rate of technological change. Future Soldiers will expect installations to modernize at pace with civilian sector smart cities initiatives. Opportunities that leverage technology through creation of data-informed, smart installations will allow the Army to pivot from an industrial-age paradigm, characterized by rigidity and purpose-built specialization, to a data-rich, reconfigurable, and technology-enhanced information-age construct. The Army must

take advantage of American ingenuity, innovation, and culture of performance to learn and adapt in real time to rapidly evolving conditions enabling commanders to make better decisions about installation operations and quality of life for our People.

Installations facilitate the Army's ability to mobilize, deploy and sustain forces in support of Combatant Commanders. TRADOC Pamphlet 525-3-1, *The U.S. Army in Multi-Domain Operations 2028* (MDO 2028), redefined the battlespace, adding the SSA. The strategic importance of Army installations in the execution of the National Security Strategy through multi-domain power projection will continue to be a critical dimension of the military element of national power. The challenge for the Department of Defense and the Army is establishing the necessary conditions to ensure that installations will be fully capable of supporting their increasingly critical role as Power Projection Platforms (PPPs).

Installations often work with outside agencies and organizations, both private and public sector, at the local, State, and Federal levels to support operations. Capabilities, such as real-time awareness of activities affecting operations, strategic sustainment, and installation/homeland defense, require in-depth analysis and evaluation for potential gaps, seams, and solutions. Currently, the Army does not have a comprehensive capabilities development effort underway to ensure the survivability and resilience of installations in the emerging operational environments.

Smart Cities

"Smart cities" around the world are modernizing their infrastructure to improve the social, economic, and environmental wellbeing of their communities. These cities use information and communication technologies to increase operational efficiency, share information, and enhance the delivery of public goods and services. Examples include providing citizens with real-time information on weather, air quality, traffic conditions, and road hazards. Real-time requirements, not repeated inefficient routines, drive key city services such as garbage collection and public safety. Many smart cities are creating a single information portal for access to all municipal functions, serving as a one-stop shop to register for city services and community activities. Citizens in these cities often (or will soon) enjoy access to on-demand, app-enabled provision of transportation, food, and entertainment.

ASSUMPTIONS AND RISKS

The following assumptions concerning the OE and future Army operations will affect strategy implementation, timeline, and resourcing.

1. Adversaries will subject continental U.S. homeland, overseas installations, and surrounding communities to Anti-Access (A2) efforts by conventional and unconventional means, including but not limited to, cyber attacks, foment protests, and criminal activity.

2. Per the Army Modernization Strategy (AMS), installations are expected to modernize *"at pace"* with the rest of the Army.

3. The Army will have to compete for human capital: installation conditions and services are a factor in this competition.

4. American public will expect mitigation of environmental risks.

5. Climate change and extreme weather will impose adaptation costs.

6. Internet of Things (IoT) technologies will become embedded, pervasive, and ubiquitous: it will be impossible to buy or build infrastructure that is not "connected".

7. The Army's requirement to mobilize and deploy formations in support of combatant commanders will remain or increase over time.

RISK: Failure to modernize and enhance installation capabilities to project power, defend capabilities, create efficiencies, and preserve and protect resources risks the Army's ability to deploy forces in support of MDO to meet the requirements of the National Military Strategy.

Climate Change

Likely impacts that climate change will have on Army installations include damaged infrastructure (sea level rise, flooding, extreme weather, land degradation, wildfire), reduced access to training ranges, and/or loss of testing and training days, ...heat-related illnesses, ...increased energy and water demand (heat, drought), and loss of energy and water supply...

Report on Effects of a Changing Climate to the Department of Defense. DoD Report to Congress, January 2019.

STRATEGIC APPROACH

This Installations Strategy nests with the priorities of *The Army Strategy*; and complements and supports *The Army People Strategy and The Army Modernization Strategy.* The strategy specifically addresses people, readiness, modernization, and reform in the context of Army installations.

To achieve our end state, the Army Installation Strategy pursues four strategic outcomes, supported by two critical enablers and organized along four Lines of Effort: Take Care of People; Strengthen Readiness and Resilience; Modernize and Innovate; and Promote Stewardship. See Figure 2 for a diagram of the strategy framework.

ARMY INSTALLATIONS STRATEGY FRAMEWORK

LINES OF EFFORT	ENABLERS		STRATEGIC OUTCOMES	END STATE
1 **Take Care of People** • Adapt Quality/Functional Facilities • Deliver Modern Services • Conduct Safe Operations	D A T A A N A L Y T I C S	P A R T N E R S H I P S	Attract, Retain, and Enable People	Modern, resilient, sustainable installations, enhancing strategic readiness, assuring operations in a contested MDO battlespace, and offering quality facilities and services to support the All-Volunteer Army
2 **Strengthen Readiness and Resilience** • Operationalize Installations • Expand Protection • Adopt Resilient Systems • Educate/Train the Team			Project Combat Power and Sustain Operations from a Contested Environment	
3 **Modernize and Innovate** • Modernize and Secure the Information Backbone • Support Army Modernization Initiatives in the AMS • Transform Installation Operations • Reward Innovation			Modernized Installations Supporting the Modernized Army	
4 **Promote Stewardship** • Preserve Natural Resources/ Sustain the Mission • Remediate Contaminants • Implement Risk-Informed Metrics and Modern Technologies			Healthy, Sustainable Training, Working and Living Environment	

Figure 2: Army Installations Strategy Framework

STRATEGIC OUTCOMES

Strategic Outcome 1

Attract, Retain, and Enable People. The Army wins through its People; they are the Army's greatest strength. Safe operations and adaptable and tailorable quality of life programs for Soldiers and Families improve Army readiness and reduce uncertainty. Modern, robust, and efficient facilities; training and education; and modern services, are critical to the productive employment and development of Army talent. The Army People Strategy will only succeed with sufficient and trained professionals who provide key services and infrastructure. Our People promote the Army as a great team to join, and installations as the best places to work and live. Facility conditions; safe operations; modern services supporting the mind, body and spirit; Family programs and Morale, Welfare, and Recreation (MWR) functions, are essential components to take care of People and help the Army compete and win the fight for talent.

Strategic Outcome 2

Project Combat Power and Sustain Operations from a Contested Environment. As the Army's initial maneuver platforms, installations must be able to operate and meet power projection requirements in and from a contested environment. Army installations support Total Army operations to mobilize and project forces and capabilities anywhere in the world at any time, even if contested. Installations must be *"operationalized"* to address their new requirements, through integrated protection and defense, resilient to disruptions with a staff trained to operate in wartime conditions. To ensure readiness, resilience, and Army mission success, installations must sustain critical capabilities and support dynamic projection of warfighter capabilities while simultaneously securing people, formations, and equipment from attack.

Strategic Outcome 3

Modernized Installations Supporting the Modernized Army. As indicated in the Army Modernization Strategy, installations must modernize 'at pace' with the rest of the Army to support a modernized MDO Army by 2035. To do this, installations must provide facilities, ranges, airfields, and support infrastructure that possess the appropriate physical characteristics required by new Army systems. Proactively, installations will strive to achieve the lowest feasible life-cycle costs through adaptive and integrative approaches to design, construction, and operations. Modernized installations will require a command and control structure and COP to predict and act on the operational environment and emerging conditions. Coordination, integration, and synchronization among Army Modernization Enterprise stake-holders are critical to the installation enterprise and Army success. The information environment must have sufficient connectivity to support fully instrumented and integrated virtual, synthetic, and distributed training and testing as well as the ability to support real-time, remote equipment diagnostics and maintenance. Finally, installations must modernize and streamline all base operations functions, processes, and services, and incentivize innovation and fiscal responsibility.

Strategic Outcome 4

Healthy, Sustainable Training, Working, Living Environment. The Army's readiness posture, modernization efforts and our duty to protect the safety, health, and welfare of our Soldiers and their Families are key to the overall success of the Army. All reasonable and risk-informed actions must be taken to protect Soldiers, their Families, and the Department of the Army Civilians who live and work on Army installations. We must preserve Army training lands, ensuring the protection of wildlife, critical habitats, and key ecosystems. The Army will maintain its commitment to all environmental protection.

Two enablers support all four strategic outcomes: data analytics and partnerships, both reflected within and across each line of effort.

Data Analytics

The Army Enterprise and Data Analytics Strategy (EDAS 2018-2022) identifies the incredible potential of big data analytics to drive innovation, accelerate operational improvement, and advance the achievement of organizational goals and objectives. The capability for the Army to see itself through data analysis will allow prioritized resource investment over the long-term. Success across all four lines of effort requires increased use of data science techniques, to include artificial intelligence and machine learning. We will apply these techniques to connect resource allocation decisions to measurable outcomes as well as to create a data-informed COP across the Army's installation enterprise. This data driven enterprise will demonstrate the EDAS characteristics of VAUTIS (Visible, Assessable, Understandable, Trusted, Interoperable, and Secure), with the support of a secure, latest generation broadband network, sensors, and a robust information technology infrastructure.

Partnerships:

The Army has a long history of leveraging public-public, public-private and/or 3rd party partnerships to optimize use of other than appropriated funds, improve Army readiness, and address underfunded requirements. These partnerships come in a variety of forms, but generally lead to increased investment on Army installations, enhanced provision of services, modernized infrastructure, and improved cooperation with other Services and organizations. Partnerships with Joint bases, major corporations, other government agencies, and local communities and businesses all provide benefit to the Army. Recognizable partnership programs include the privatization of utilities, privatized Army housing and lodging, deployment of energy savings/generation technologies financed by reduced energy bills, Installation Support Agreements with Joint and Federal agency partners and Intergovernmental Support Agreements with local and State governments for the improvement of facilities, and provision of base operations, maintenance, and sustainability services. The Army also seeks opportunities to work in a collaborative space with academia and private industry to find new and innovative partnerships to create efficiencies, save money, and modernize the Army. These shared resources and services enable enhanced protection and freedom of maneuver in the SSA by synchronizing installation measures with communities, DOD and federal agencies.

The need for continued support of the Army's partnership efforts will increase over time; partnerships can enable each line of effort outlined in this strategy. Partnerships allow installations to benefit from expertise and experience found in the private sector and/or local communities to overcome budget constraints, expand capacity of shared services, and build integrated public systems and services. The Army requires both expertise and sophistication to protect its interests during initial partnership development. Appropriate oversight mechanisms must be in place to protect Army interests over potentially multi-decade agreements. Cooperation and partnerships with local communities to enhance Quality of Life (QOL) initiatives and environmental stewardship will build resilience within the Army enterprise. As the program continues to grow, installations and communities will work more closely to identify strategic partnerships.

Implementation Lead: Deputy Chief of Staff, G-9
Execution Lead: Army Materiel Command (AMC)

The Army priorities remain people, readiness, and modernization. It is People—Soldiers, Families, Civilians, Retirees, and Veterans—who will deliver them. People are the Army's greatest strength, and we must take care of them. Quality of life (QOL) initiatives appear in both the Army People and the Army Installation Strategies to improve the full range of Army care, support, and enrichment programs. QOL efforts provide Soldiers and their Families safe, quality family and unaccompanied housing; accessible, affordable, and quality childcare; Family programs; fitness facilities; services; and MWR opportunities.

Adapt Quality/Functional Facilities. The condition of Army facilities—living and working spaces—must rival the commercial sector in functionality, quality, resilience, and sustainability. Housing and dining facilities are critical components of Soldiers' experienced QOL. Similarly, Families should have ready access to quality childcare facilities and chapel facilities to accommodate diverse spiritual needs. Ancillary facilities and green spaces that enhance living and work environments—such as walkable development patterns, fitness centers, and recreation areas—contribute to wellness and resilience. The Army must provide quality facilities whether owned and operated by the Army or shared or leased facilities on or off the installation, that enable the readiness of Soldiers, Families and Department of Army Civilians in an MDO environment.

TAKE CARE OF PEOPLE

Deliver Modern Services. Installations provide key QOL services and programs that acclimate Soldiers and Families into the military community. Future recruits will increasingly come from "smart cities" that streamline the provision of public goods and services in a responsive, user-centric environment. This next generation of potential Soldiers will expect similar levels of information, convenience, and choice when it comes to Soldier and Family programs and services offered on an Army installation. The Army will make all efforts to ensure its services and programs are easily accessible, customer focused, data enabled and protected.

Conduct Safe Operations. The Total Army expects safe activities and operations on installations. The Army's systematic approach for management and execution of its safety, occupational, and environmental health (SO&EH) program emphasizes use of modern SO&EH practices and technology systems to better anticipate, recognize, evaluate, and control hazards that pose risks to the people who live, train, work on, and visit our installations. Initiatives include implementation of the Army Safety Occupational Health Management System (ASOHMS); increased oversight of Army housing to ensure the most effective and efficient safety, occupational, and environmental health services; and establishing or identifying Army centers, laboratories, and commands whose mission it is to explore future technology opportunities that improve mishap prevention and risk reduction.

Implementation Lead: DCS, G-9
Execution Lead: AMC

AR 525-30 defines Strategic Readiness as, *"the Army's ability to provide adequate forces to meet the demands of the National Military Strategy."* Installations, as part of the SSA, are critical to the Army's ability to train, equip, mobilize, deploy, and sustain forces in support of Dynamic Force Employment and homeland defense. They support military operations preparation and execution, providing sustainable and secure infrastructure and services. Adversaries challenge these functions when they seek to extend A2/AD capabilities to the SSA to undermine operations and our ability to mobilize and deploy. The Army must "operationalize installations" and apply the same traditional battlefield formations and capabilities development analysis to installations.

Operationalize Installations. The Army must holistically address the need to operationalize installations. The first step is a comprehensive Doctrine, Organizations, Training, Materiel, Leadership and Education, People, Facilities, Policy (DOTMLPF-p) analysis. Analysis outcomes will inform the capability development process, and assess installation operations (IO) in a contested environment. An Initial Capabilities Document to identify and address key capability gaps, required doctrine, and solution options, will then move the Army forward toward *"operationalizing installations."* At the core of requirements for an MDO-ready Army is the ability to project power. Supported by Mobilization Force Generation Installations (MFGIs) and PPPs, multi-domain power projection encompasses the Army's ability to move and sustain troops and equipment over or through ports, roads, airfields, rail heads and via Army Prepositioned Stocks (APS) to meet critical timelines associated with Army Operational Plans. All types of installations (power projection, forward based, training, organic industrial base, research laboratories) will all require a thorough capabilities assessment to ensure their support of an MDO-ready Army.

Expand Protection. To enhance strategic readiness, Army installations must possess both active and passive protection measures that preserve critical capabilities, assets, and activities essential to meeting NDS requirements. To achieve

this, the Army will develop comprehensive risk-based assessments for installations and reflect these risks in a COP at echelon. These assessments should inform a prioritized list of protection capabilities required to anticipate, prevent, or mitigate adversary actions.

Adopt Resilient Systems. Army energy and water systems will be resilient, cyber-secure, and efficient. Federal law mandates the Secretary of Defense *"carry out military construction projects for military installation resilience"* and *"ensure readiness of the armed forces for their military missions by pursuing energy security and energy resilience"* (10 U.S.C. 2815 and 2911, respectively). Electrical, water, and communications systems on Army installations and surrounding communities are essential to mission success, but remain vulnerable to natural and man made disruptions, creating a weak link in the Army's ability to generate strategic readiness. The Army will take actions to ensure the robustness of key systems and capabilities, including facility and industrial control systems of all types. Initial steps will determine the risks and cost of losing power/water (i.e., putting a 'price' on resilience); develop appropriate return-on-investment metrics to guide investments; and then prioritize those investments based on contributions to mission accomplishment.

Educate and Train the Team. Just as the Army expects every unit and formation to train as it fights, the Army should expect the same from its installations. Army education and training must acknowledge the critical roles installations play in mission accomplishment, and begin to change the Army culture to consider installation requirements in support of readiness preparation. The installation workforce must receive the education and training required to achieve Army modernization objectives as well as operate increasingly complex, IoT-enabled infrastructure. Training events based on new or existing doctrine, that exercise inter-operability with local, State, Federal and host nation entities will improve installation readiness and adaptability in the face of constant change. In addition, installations' abilities to support operations in a contested environment require new models and simulation tools as well as active participation in training events and exercises to ensure systems function as intended.

Implementation Lead: DCS, G-9
Execution Leads: AMC/CIO

Army modernization requires installations provide the facilities, systems, and connectivity to support the Army on its path toward full MDO readiness by 2035. Installation management practices must transform to accommodate new information-era technologies. Innovation efforts support the Army priority of Reform. We will prioritize those that create efficiencies, expand workforce productivity, and generate resilience.
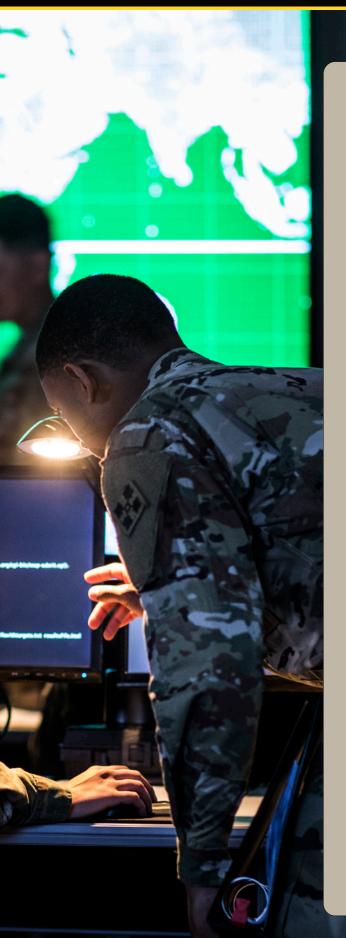
Modernize and Secure the Information Backbone. Army facilities systems and support infrastructure, including infrastructure funded through alternative finance methods, shall be cyber-secure and resilient through the full system life cycle. Execution of the Army Network Implementation Plan is essential to all installation and Army modernization efforts. Deployment of 5G and *"next-Gen"* communications networks must be able to handle massive amounts of data with near real-time production. A resilient and secure communications and network infrastructure is essential to defense of the homeland against adversarial threats and natural adverse events. The backbone should enable key military applications such as augmented and virtual reality training, autonomous vehicles, Command and Control (C2), and remote diagnostics. At the same time, this infrastructure is critical to realize the benefits of *"smart cities"* technologies and create connected constellations of installations.

Support Army Modernization Initiatives in the AMS.
The AMS states, *"The Army will plan for upgrades to maintenance facilities, motor pools, (ranges), network infrastructure, administrative facilities, housing, barracks, secure facilities, and utilities upgrades to keep pace with other modernization efforts."* Force projection requirements also require assessment of roads and highways, bridges, ramps, marshaling yards, ammunition supply points, railways, and airfields. Real property master plan processes will expand in technical sophistication, using data informed analysis and modeling to accommodate new specifications for modern equipment and fulfill requirements of the National Environmental Policy Act.

Transform Installation Operations. Installations must modernize operations, use data-driven *"smart city"* approaches to transform the delivery of goods, and modernize services and mission support. Sensors, scheduling applications, and remote monitors will create a COP of real-time conditions, occupancy, and availability of stationing capacity across an installation. Using Artificial Intelligence/Machine Learning (AI/ML) tools, installations will operate in a proactive manner. The installations enterprise will place increased emphasis on modeling and simulation to support master planning and education of garrison personnel. Partnerships with the private sector will allow pilots and testing of new technologies. We must update facility standards and materials to adopt a total life-cycle cost mindset, resilience, modularity, and safety by *"prevention through design."* Multi-use, multi-tenant, adaptable, modular buildings are a means to achieve balance between standardization and demands for future flexibility. Divestiture and modification of physical spaces will accommodate increases in remote or distributed work, reduce operating costs, and allow staff enhanced capability to customize work areas. Tailored services will match the mission, characteristics and requirements of each installation.

Reward Innovation. Innovation occurs and must be encouraged and rewarded at every echelon. We must align incentives to inspire local, regional, and Army Command (ACOM)-wide initiatives to improve readiness, create efficiencies, and pilot potential capabilities for Army-wide deployment in support of modernization and effectiveness. Army/LOE leads will evaluate proposed installation investments through the lens of return on investment to drive modernization, readiness, and savings, to reflect total cost of ownership and life-cycle costs for financial planning. We will promote versatility in design/build (vs purpose built) infrastructure to speed restoration and construction and consolidate unit footprints. The Army will continue to pursue innovative acquisition methods, partnerships, and financial and performance analysis and management practices to enable modernization in the most strategic and fiscally responsible way. Utility cost reductions and energy resilience improvements accomplished with tools like cost-sharing initiatives and third-party financed contracts illustrate the dual benefits of infrastructure modernization and budget balancing achieved by innovative business practices. Collectively, we must cultivate and disseminate knowledge and best practices across the installation operations community to optimize innovation, efficiency, and modernization.

Implementation Lead: DCS, G-9
Execution Leads: AMC

The value of the Army's natural capital is immense and includes not only the worth of physical assets such as land, water, and bio-stock, but derived benefits like a healthy environment, recreation and goodwill. Preserving these assets in a safe, sustainable manner is critical not only to Army readiness, but to the well-being of the Total Army and those communities that surround and support Army installations.

Preserve Natural Resources/Sustain the Mission. Training land is limited, and requirements for expanded range complexes are growing. Army installations and facilities must comply with environmental laws, meet sustainable design and development mandates, conserve natural and cultural resources. The Army must also address the concerns of stakeholders and federally recognized entities to mission critical training areas and ranges which are statutorily protected natural and cultural areas. The Army will ensure that the testing, training, sustaining, and fielding of weapon systems and supporting platforms occur within environmental restrictions. Early planning and strong community partnerships with engaged and informed cross-functional teams are required to address complex environmental issues.

Remediate Contaminants. The Army recognizes its responsibility to protect Soldiers, Families, and the public from identified hazards associated with military operations, past and present. Essential to QOL on and around our installations is the ability to limit installation and community exposure to contaminants released by Army activities into the air, land, and water. The Army implements remediation to protect human health and the environment, in compliance with applicable environmental laws and regulations, to investigate and respond to hazards posed by contaminants. The Army identifies and prioritizes sites for cleanup that represent the greatest risk to human health and the environment.

Implement Risk-Informed Metrics and Modern Technologies. The key to proactive stewardship on installations is understanding risk through identification, analysis, and prioritization. The Army will use existing risk-informed metrics to streamline reports, reduce waste, and enable mission modernization by advancing environment, safety and occupational health technologies. The Army will use an array of innovative virtual and analytic tools to address high-priority environmental quality technology requirements to reduce total ownership costs, enhance mission capabilities, and fulfill the Army's environmental sustainability and stewardship responsibilities. New processes, tools, and materials are all pre-cursors to ensure freedom to act, train, and sustain the mission.

GOVERNANCE

The installation enterprise relies on numerous commands and supporting organizations to ensure operation and provision of capabilities consistent with Army priorities. To provide oversight and strategic direction for the Army Installation Enterprise, the II PEG co-chairs, (the ASA(IE&E), and the Commanding General (CG), AMC), will prioritize and synchronize implementation and execution of this strategy, and ensure integration into the Planning, Programming, Budgeting, and Execution (PPBE) process, the Army Campaign Plan, the Army Review Council, and other decision forums as required. The G-3/5/7 will validate and approve prioritization requirements derived from Operation Plans (OPLAN's) and Posture requirements. The DCS, G-9 will implement/integrate governance activities. The CIO, COE, G-3/5/7, and other providers and stakeholders will attend collective governance forums as needed. Requirements, prioritization, and funding associated with II PEG programs will remain a function of the II PEG co-chairs.

ARMY INSTALLATIONS STRATEGY FRAMEWORK

LINES OF EFFORT & FOCUS AREAS	EXECUTION/OCRs
Take Care of People	**AMC**
• Adapt Quality/Functional Facilities • Deliver Modern Services • Conduct Safe Operations	IE&E M&RA FM&C G-4 G-8 G-9 COE/USACE ACOMs ASCCs DRUs USAR ARNG MEDCOM
Strengthen Readiness and Resilience	**AMC**
• Operationalize Installations • Expand Protection • Adopt Resilient Systems • Educate/Train the Team	IE&E FM&C CIO G-3/5/7 G-2 G-4 G-6 G-8 G-9 OPMG COE/USACE ACOMs ARNORTH USAR ARNG ARCYBER PEO-EIS
Modernize and Innovate	**AMC/CIO**
• Modernize and Secure the Information Backbone • Support Modernization Initiatives in the AMS • Transform Installation Operations • Reward Innovation	IE&E FM&C AL&T CIO G-3/5/7 G-2 G-4 G-6 G-8 G-9 COE/USACE ACOMs USAR ARNG ARCYBER PEO-EIS
Promote Stewardship	**AMC**
• Preserve Natural Resources/Sustain Mission • Remediate Contaminants • Implement Risk-Informed Metrics/ Modern Technologies	IE&E FM&C AL&T G-9 COE/USACE ACOMs Land Holding Commands

*G-9 is the supported organization/implementation lead

IMPLEMENTATION AND EXECUTION

The Army Installations Strategy covers years 2021–2035 and beyond, recognizing that decisions made today will have implications well into the middle of the century. The DCS, G-9, will develop the initial Army Installations Strategy Implementation Plan, ensuring integration with the Army Campaign Plan and coordination across each line of effort. The DCS, G-9 will be the supported organization in this role, with the establishment of a formal operational planning team consisting of all installation operations

stakeholders. AMC is the ACOM execution lead for all LOEs responsible for developing an execution plan with metrics and associated outcomes. The G-9 will coordinate activities between the LOEs and establish an implementation framework and schedule, including periodic briefings to the governance body outlined above as needed, but not less than twice annually.

Figure 3 (below) summarizes the strategy's initial guide for implementation and execution.

Initial Guide for Execution* Planning

NEAR TERM: 2021 – 2024+	MID TERM: 2025 – 2030+	FAR TERM: 2030 - 2035+
• Improve QOL Facilities IAW FIP • Document/Improve Services IAW QOL TF Objectives • Document Safety Objectives/Plans IAW SO&EH Strategy 2028 Objectives	• Improve QOL Facilities IAW FIP • Improve Services IAW ASL approved QOL TF Objectives • Implement/Monitor Safe IO	• QOL TF Initiatives Implemented • Automated Services • Culture of Safety SOP
• Develop Implementation Plans for IO • IO DOTMLPF-p Analysis & CBA • Defender 22 & POM Plan Task Inform IO • Determine Installation Capabilities/Gaps • ICD(s) for Solutions • Pilot Promising Technologies • Initial Sensors link Protection/Facilities • Ensure Current Systems function	• Solutions Selected, Prioritized, Initiate prioritized fielding • Sensors - COP integration • Army Control System program • Initiate/execute IO training • Document IO in AS, Doctrine • Enhance IO protection worldwide • Systems function; link to COP	• Prioritized Army-wide solution fielding • Continue Sensor - COP integration; Control system monitoring • Enhance IO education/training • Enhance SOH education/training • Enhance IO protection worldwide
• Define/Prioritize IT Requirements • Begin fielding 5G Capability - Protection • Initial fielding of COP/VTIME/Other • ID AMS sites for early NEPA coordination • Facilities plans/designs ISO AMS • Establish Innovation Mechanisms • ID consolidation opportunities • Share Best Practices thru COP forum • R&M for critical AMS Requirements • Publish SOH Enterprise Modernization	• Execute Changes to IO processes • Consolidate infrastructure; Initiate IO Capability Constellations • R&M for PPP/Ranges ISO AMS • Continue 5G prioritized fielding • ID Innovative efficiencies–adapt worldwide • New Construction designs reflect modular adaptive infrastructure • Execute SOH Enterprise Mod	• Mob/Deployment Assurance • Culture of Innovation • R&M/MILCON ISO AMS • Tech/Processes Promulgated • COP - Promulgated • Installation Constellations SOP for capabilities • Community of Practice SOP
• Test/ID Remediation Requirements • Prioritized PFAS Remediation initiated • NEPA for identified AMS sites • ID Metrics/Improved solutions for safe operations	• Continue Tests/ID Remediation Requirements • Remediation/Coordination • Pilot Tech Solutions	• Continue Tests/ID Remediation Requirements • Remediation/Coordination • Promulgate Tech Solutions

d to synchronize and integrate all LOE activities

CONCLUSION

Installations, as capability-based platforms, provide the foundations for the Army's individual and unit readiness and resilience. Army People **live, train,** and **work** on installations, which provide the services that support them whether at **home** or **abroad**. The Army forges its culture on installations. Connected into constellations, installations provide enterprise-wide resilience and flexibility. Installations are a visible marker for the Army's transformation to an information-age organization, leveraging new technologies to support modern equipment, and connected across the enterprise to project Army power world-wide. Installations will work in partnership with local communities, State, Federal, and other agencies to improve value to the Army, generate efficiencies, and create a living and working environment that is safe, secure, and sustainable. This vision will require deliberate decisions, focused resourcing, and action over the long-term to build the right capabilities and enable the Army to compete, deter, and win in a complex security environment.

Together, the Army Team will modernize and maintain installations and their diverse capabilities long into the future to keep the **Army Strong** and our People ready and resilient. **People First! Winning Matters! Army Strong!!**

GLOSSARY

Section I – Abbreviations

5G	5th Generation mobile broadband network	**DCS, G-9**	Deputy Chief of Staff, G-9
A2/AD	Anti-access/Area Denial	**DOTMLPF-p**	Doctrine, organization, training, materiel, leadership and education, personnel, facilities, and policy
AMC	U.S. Army Materiel Command		
ASA (IE&E)	Assistant Secretary of the Army (Installations, Energy and Environment)	**IGSA**	Inter-Governmental Support Agreement
		IoT	Internet of Things
ASA (M&RA)	Assistant Secretary of the Army (Manpower and Reserve Affairs)	**MDO**	Multi Domain Operations
		SSA	Strategic Support Area
COP	Common Operating Picture		

Section II – Terms

Anti-access – Action, activity, or capability, usually long-range, designed to prevent an advancing enemy force from entering an operational area. Also called A2. (JP 3-0)

Area denial – Action, activity, or capability, usually short-range, designed to limit an enemy force's freedom of action within an operational area. Also called AD. (JP 3-0)

Army Military Installation – The real property of a base, camp, post, station, yard, center, or other activity under the jurisdiction of the Secretary of the Army, including any leased facility, or, in the case of an activity in a foreign country, under the operational control of the Secretary of the Army, without regard to the duration of operational control. Army installations may consist of one or more real property sites. The term includes federally owned Army National Guard sites and facilities designated as depots, arsenals, ammunition plants, hospitals, terminals, and other special mission activities. It does not include any state-owned National Guard installation or facility. Such term does not include any facility used primarily for civil works, rivers and harbors projects, or flood control projects. (AD 2020-11)

Army Organic Industrial Base – The privately owned and government-owned industrial capability and capacity available for manufacture, maintenance, modification, overhaul, and/or repair of items required by the U.S. and selected allies, including the production base and maintenance base. The Army's Organic Industrial Base comprises manufacturing arsenals, maintenance depots, and ammunition plants in the U.S. (AR 700-90)

Battlespace – The area where military operations are conducted to achieve military goals consisting of all domains (air, land, maritime, space, and cyberspace), the electromagnetic spectrum, and the information environment (including human cognitive aspects). (TRADOC Pamphlet 525-3-1)

Climate change – Variations in average weather conditions that persist over multiple decades or longer that encompass increases and decreases in temperature, shifts in precipitation, and changing risk of certain types of severe weather events. (DODD 4715.21)

Enterprise – A unit of economic organization or activity.

Fifth Generation (5G) – A new global wireless standard for broadband capabilities after 1G, 2G, 3G, and 4G networks. 5G enables smart sensor technologies to connect machines, objects, and devices.

Force projection – The ability to project the military instrument of national power from the United States or another theater, in response to requirements for military operations. (JP 3-0)

Force protection – Preventive measures taken to mitigate hostile actions against Department of Defense personnel (to include family members), resources, facilities, and critical information. Also called FP. (JP 3-0)

Installation Enterprise – The commands and organizations involved in oversight, direction, supervision, implementation, and execution of installation functions. (AD 2020-11)

Inter-Governmental Support Agreement – A legal instrument reflecting a relationship between the Army (Secretary) and a State or local Government that contains such terms and conditions as the Army (Secretary) considers appropriate to provide, receive, or share installation support services and protect United States interests.

Mobilization Force Generation Installations (MFGIs) – Army installations including federally activated State-operated installations designated to provide continuous Regular Component/RC power projection, combat preparation, post-mobilization training, sustainment capabilities, and pre-mobilization training support. (AR 525-93)

Multi-Domain Operations – Operations conducted across multiple domains and contested spaces to overcome an adversary's (or enemy's) strengths by presenting them with several operational and/or tactical dilemmas through the combined application of calibrated force posture; employment of multi-domain formations; and convergence of capabilities across domains, environments, and functions in time and spaces to achieve operational and tactical objectives. (TRADOC Pamphlet 525-3-1)

GLOSSARY (continued)

Multi-Domain Power Projection – The exercise of the military element of national power beyond the homeland through, into, and across all domains, the information environment, and the electromagnetic spectrum. It synchronizes the projection of forces with the projection of the physical, virtual, and cognitive effects created by capabilities that remain in the homeland.

Operationalize – To enhance an organization's role and capabilities to take a more operational approach to achieving stated objectives.

Operational approach – A broad description of the mission, operational concepts, tasks, and actions required to accomplish the mission. (JP 5-0)

Operational environment – A composite of the conditions, circumstances, and influences that affect the employment of capabilities and bear on the decisions of the commander. Also called OE. (JP 3-0)

Platforms – An Army Military Installation that supports unit deployment, re-deployment, training exercises, or related power projection activities. (AR 525-93)

Power Projection Platforms – An installation capable of deploying a brigade-sized force or larger upon notification to meet CCMD OPLAN requirements within 10 days or less. (AR 525-93)

Protection – Preservation of the effectiveness and survivability of mission-related military and nonmilitary personnel, equipment, facilities, information, and infrastructure deployed or located within or outside the boundaries of a given operational area. (JP 3-0)

Readiness – The ability of U.S. military forces to fight and meet the demands of the National Military Strategy. Readiness is the synthesis of two distinct, but interrelated levels: unit readiness and Joint readiness.

Resilience – The ability to prepare for and recover from disruptions that impact mission assurance on military installations. (DoDI 4170.11)

Stakeholder – In public affairs, an individual or group directly impacted by military operations, actions, and/or outcomes, and whose interests positively or negatively motivate them toward action. (JP 3-61)

Strategic Support Area – The area of cross-combatant command coordination, that includes the strategic sea and air lines of communications, and the homeland. (TRADOC Pamphlet 525-3-1)

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TAKE CARE OF PEOPLE

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MODERNIZE & INNOVATE

PROMOTE STEWARDSHIP