

Army Modernization

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Agenda

- Army Modernization Defined
- Modernization Priorities
- Army Vision
- Thoughts on the Way Ahead

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What is Army Modernization?

The U.S. Army's modernization strategy has one focus: make Soldiers and units more lethal to win the nation's wars, and come home safely. The modernization process will leverage commercial innovations, cutting-edge science and technology, prototyping and warfighter feedback.

– Army Stand-To, January 2018

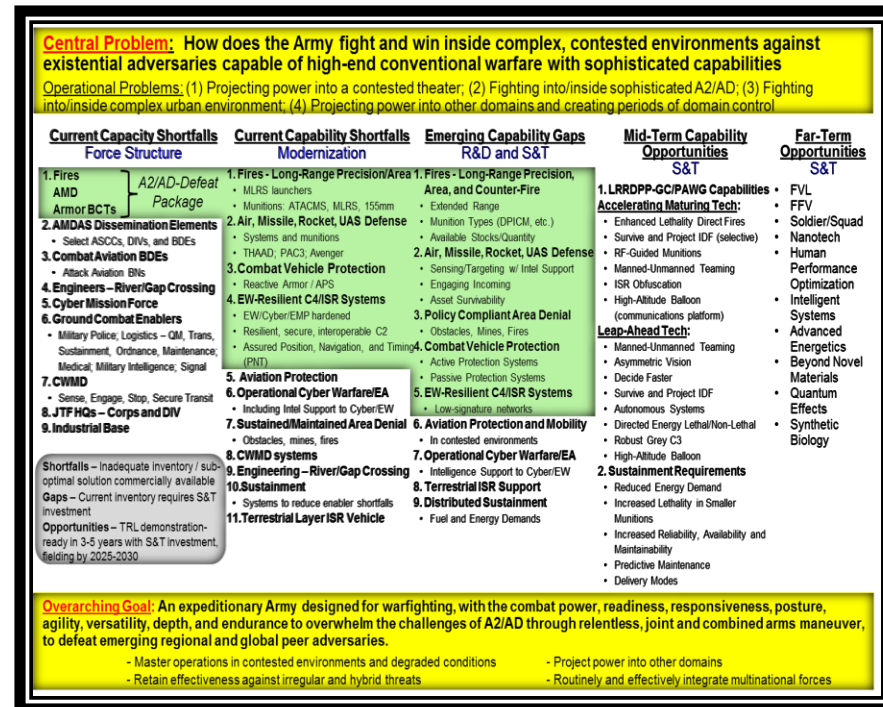
Army Modernization Defined

Definition and Structure

The ability to sustain, improve, or replace combat systems in order to ensure *formation based* tactical overmatch and technological superiority in the current and future fight. To accomplish this, given current resource guidance, the U.S. Army will:

- Continue to make *incremental improvements* to existing combat systems to ensure the U.S. can fight and win in the near term (now to ~2025).
- *Focus our Science and Technology* investments, on a *limited number* of prioritized portfolios, to guarantee our Soldiers have formation based tactical overmatch and technological superiority in the mid to long term (~2025 to ~2050).
- Begin prototyping a select number of next generation combat system technologies and vehicles. Begin development as soon as the technologies are mature enough we can rapidly move from prototype to production.
- *Sustain* current combat support and combat service support equipment to extend useful life.
- Continue to *divest* less important capabilities to free up resources for higher priorities.

This is the construct guiding the Army's modernization strategy



Modernization Priorities



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OCT 03 2017



Modernization Priorities for the United States Army

We have the most skilled, ethical, and combat hardened Army in our Nation's history. Our Army remains globally engaged in a complex, dynamic and increasingly uncertain world and we stand ready to fight and win our nation's wars.

The competitive advantage that the United States has long enjoyed, however, is eroding. We are being challenged in every domain of warfare: land, maritime, air, cyber and space, and the challenges are growing in scale and complexity. Our recent focus on fighting wars of insurgency and terrorism allowed our adversaries to make improvements on their modernization efforts and erode our advantages enjoyed since World War II. Our Army must regain our overmatch and competitive advantage against emerging threats, competitors, and adversaries. We have worked hard in recent years to increase our readiness and strengthen our formations and now must modernize our capabilities to increase our lethality against emerging regional and global near-peer adversaries.

This modernization strategy has one simple focus: make Soldiers and units more lethal. To be successful, we must turn ideas into actions through continuous experimenting and prototyping, improving acquisition business processes, pursuing appropriate commercial/off-the-shelf options, and improving training. Additionally, our modernized capabilities must have interoperability with allies built-in.

The American people expect us to win, and we win on the offense by mastering the fundamentals of shoot, move, communicate and sustain better than any other Army. We mass fires with precision, we seize and retain the initiative, we retain the mobility to maneuver while protecting our forces, and we gain critical information to think and act decisively, all of this backed up by world-class logistics, and led by world class leaders.

Based on these fundamentals, our modernization priorities are:

1. A Long-Range Precision Fires capability that restores US Army dominance in range, munitions, and target acquisition.
2. A Next Generation Combat Vehicle – along with other close combat capabilities in manned, unmanned, and optionally-manned variants – with the most modern firepower, protection, mobility, and power generation capabilities, to ensure our combat formations can fight and win against any foe.
3. Future of Vertical Lift platforms – attack, lift, recon – in manned, unmanned, and optionally-manned variants that are survivable on the modern and future battlefield.
4. An Army Network with hardware, software, and infrastructure – sufficiently mobile and expeditionary – that can be used to fight cohesively in any environment where the electromagnetic spectrum is denied or degraded.



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MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Implementing the Army's Modernization Priorities

1. While readiness remains our top priority, the Army has made great improvements by filling unit end strength, building new force structure, and implementing new training policies to achieve and sustain higher readiness levels. While commanders continue to prepare their forces for the challenges of today, the Institutional Army will transition our modernization focus to prepare the Future Army for tomorrow.
2. The future will present a range of challenges driven by urbanization, environmental changes, and technological advances that will lead to a fundamental change in the character of war. We must invest now to design an Army that can overcome these challenges and maintain landpower dominance against any military challenger.
3. On 3 October 2017, the Acting Secretary of the Army and the Chief of Staff of the Army published new Modernization Priorities for the U.S. Army (enclosure 1) to restore dominance and transition the Army to the future. These priorities are:
 - a. Long Range Precision Fires
 - b. Next Generation Combat Vehicle
 - c. Future Vertical Lift
 - d. Network/CSI
 - e. Air and Missile Defense
 - f. Soldier Lethality
4. The enclosed implementation guidance (enclosure 2) for these modernization priorities describes how the Army will coordinate its modernization approach over time to deliberately transition from its current combat vehicle fleet to its future fleet while selectively modernizing the minimum amount of units to deter and, if necessary, defeat existential threats to our nation that exist now.
5. Landpower capability, unlike other domains, is a function of capacity, systems, and the training required to employ them effectively. To implement the Army's Modernization Priorities, the Army will proceed with its equipment modernization plan along with associated changes in force structure, training, and doctrine required to realize the full lethality of these new systems.

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Report on the
U.S. Army Modernization Strategy
Directed by Section 1061 of the
National Defense Authorization Act for Fiscal Year 2018

REPORT TO CONGRESS



HEADQUARTERS, DEPARTMENT OF THE ARMY

April 30, 2018

The estimated cost of this report for the Department of Defense (DoD) is approximately \$39,000 for the fiscal year 2019. This includes \$3,000 for expenses and \$36,000 for labor.
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What is the Army Doing?

The Army published its modernization strategy and priorities on Oct. 3, 2017. Eight Cross-Functional Teams (CFTs) were created to address the six modernization priorities, with two of the priorities, Army Network and Soldier Lethality being further divided into focus areas:

- Long-Range Precision Fires
- **Next Generation of Combat Vehicles**
- **Future Vertical Lift Platforms**
- **Army Network**
 - Network Command, Control, Communications and Intelligence
 - Assured Position Navigation and Timing
- Air and Missile Defense Capabilities
- **Soldier Lethality**
 - Soldier Lethality
 - Synthetic Training Environment

Army Directive 2017-33, published on Nov. 7, 2017, established the Army Futures Command Task Force, to explore all options to establish unity of command and unity of effort that consolidates the Army's modernization process under one roof.



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Army Vision

- **Army Mission**: To deploy, fight, and win our Nation's wars by providing ready, prompt, and sustained land dominance by Army forces across the full spectrum of conflict as part of the Joint Force.
- **Army Vision**: The **Army of 2028** will be ready to deploy, fight, and win decisively against any adversary, anytime and anywhere, in a **joint, multi-domain, high-intensity conflict**, while **simultaneously deterring others and maintaining its ability to conduct irregular warfare**. The Army will do this through the employment of **modern manned and unmanned ground combat vehicles, aircraft, sustainment systems, and weapons**, coupled with robust combined arms formations and tactics based on a modern warfighting doctrine and centered on exceptional Leaders and Soldiers of unmatched lethality.
- **Objectives**:
 - **Man**. Grow the Regular Army above 500,000 Soldiers.
 - **Organize**. Ensure warfighting formations have sufficient infantry, armor, engineer, artillery, and air defense assets.
 - **Train**. Focus training on **high-intensity conflict**, with emphasis on operating in **dense urban terrain, electronically degraded** environments, and under constant **surveillance**.
 - **Equip**. Modernize the force by first **reforming the current acquisition system** and **unifying** the modernization enterprise under a single command to focus what Soldiers need when they need it, **experimenting** with and developing autonomous systems with **less logistical dependence**.
 - **Lead**. Develop smart, thoughtful, and **innovative leaders** of character.



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Thoughts on the Way Ahead

- **Innovation:**
 - Novel / disruptive technology
 - Use what you have better – *how do we do this?*
- **Increase Artificial Intelligence**
 - Power Commander's Decision Making
 - Increase Soldier competency and capability
- **Increase Autonomy** across the CBRN Mission Portfolio
 - More than just unmanned or remote sensors
 - Automated decon using non-aqueous technologies
 - Must operate in a contested electro-magnetic environment
- **Reduce Warfighter Burden**
 - Technology and training overload for CBRN Soldiers
 - Sustainment and Logistics
 - Applique is better

Where do CBRN capabilities fit in the Army's Modernization Priorities?