

Making (Some) Sense of the DoD Budget

SYFA Fall Conference
November 2019



OVERVIEW FOR DEPARTMENT OF DEFENSE



A New Strategy

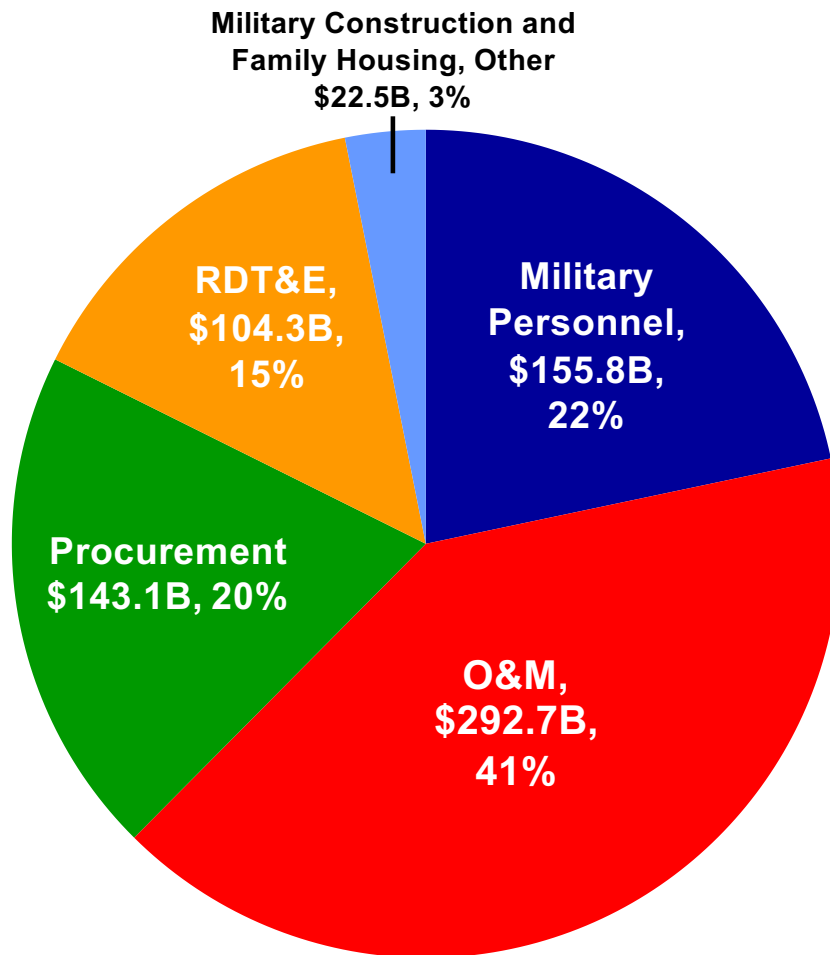
- As the Cold War ended the United States enjoyed a period of military dominance
- Since then, the United States has experienced damaging trends in readiness caused by budget instability, the decades-long campaign against violent extremism, and an unfocused strategic vision
- China and Russia began developing military capabilities to prepare for future, high-end conflict and to undermine U.S. influence
- DoD developed a new strategy to change course and drive our decisions



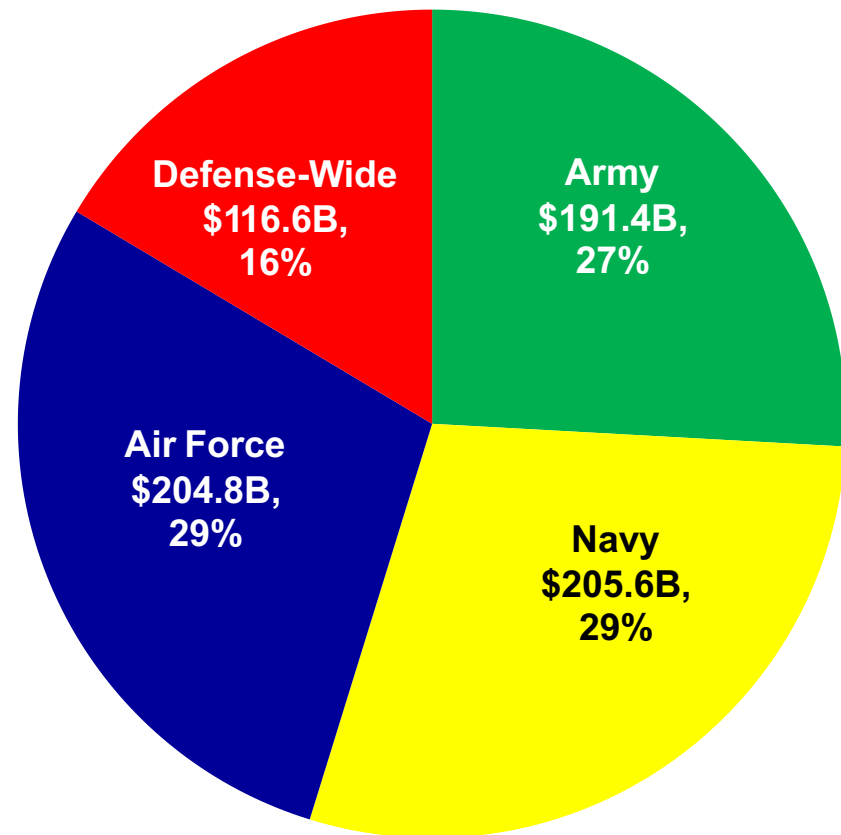
The United States faces a fundamentally different challenge

FY 2020 Total Base and OCO Funding

By Appropriation Title



By Military Department



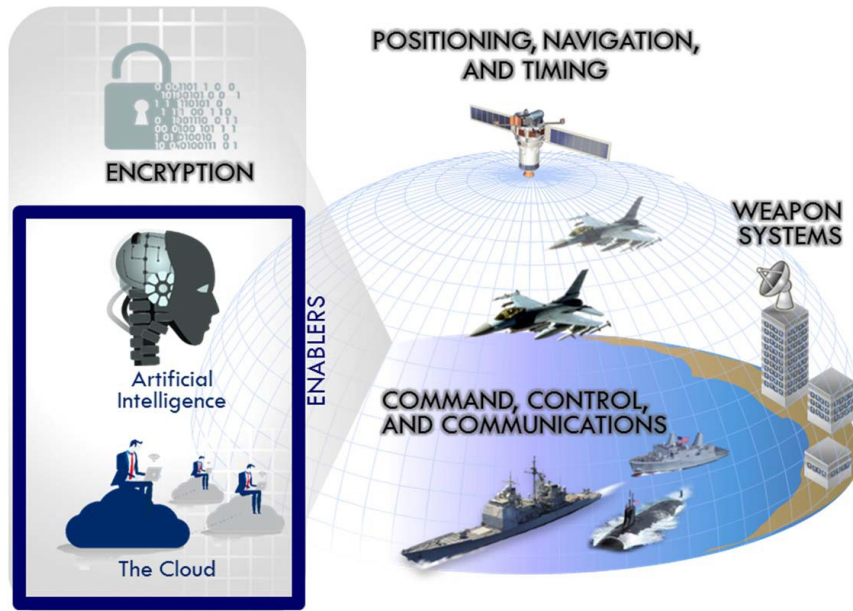
FY 2020 Request: \$718 billion

Numbers may not add due to rounding

Enhance Competitiveness Through Emerging Warfighting Domains

Space Domain: \$14.1 Billion

- Resources the new U.S. Space Force and associated organizations
- Improves satellite communications capabilities; space-based warning, and space launch capacity



Cyber Domain: \$9.6 Billion

- Offensive and defensive cyberspace operations; resilient DoD networks, systems; modern multi-cloud environment

Prepare for a complex, unpredictable, and multi-domain security environment

Develop and Field Innovative Technologies

Unmanned / Autonomous: \$3.7 Billion

- Enhances freedom of maneuver and lethality in contested environments

Artificial Intelligence / Machine Learning (AI/ML): \$927 Million

- Expands military advantage through the Joint Artificial Intelligence Center (JAIC) and Advanced Image Recognition

Hypersonics: \$2.6 Billion

- Air Force prototyping, Navy Sea-Launched Conventional Prompt Strike, and Army Land-Launched Conventional Prompt Strike

Directed Energy: \$235 Million

- Implementation of directed energy for base defense; testing and procurement of multiple types of lasers; R&D for scalable high-power density applications



Largest research and development request in 70 years

FY 2020 National Defense Budget Request

	(\$ in Billions)
• DoD – Total	\$718
– Base	545
– Overseas Contingency Operations (OCO) for Base	98
– Overseas Contingency Operations (OCO)	66
– Emergency	9
• Department of Energy & Other Agencies	<u>\$32</u>
• National Defense – Total	\$750
• \$718 Billion, 4.9 percent (2.8 percent real growth) over DoD's FY 2019 Enacted	
• Budget request complies with the Budget Control Act while supporting the National Defense Strategy priorities	

Budget operationalizes the National Defense Strategy

FY 2020 Budget Priorities



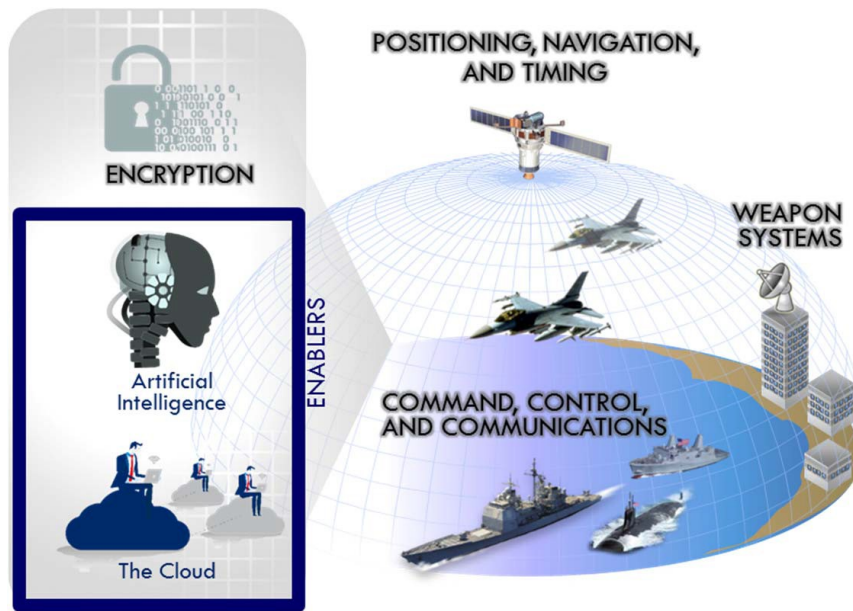
- Operationalize the National Defense Strategy and strengthen our competitive advantage for long-term American greatness and security
 - Investing in the emerging space and cyber warfighting domains
 - Modernizing air, maritime, and land domains
 - Innovating rapidly in key operational areas to strengthen our competitive advantage
 - Sustaining and building on readiness gains

Prioritize investments for long-term competitive advantage

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Prepare for a complex, unpredictable, and multi-domain security environment

Modernize in Air, Maritime, Land Domains

Air Domain: \$57.7 Billion

- 5th Generation aircraft and extended range missiles
- 4th Generation aircraft capacity

Maritime Domain: \$34.7 Billion

- Increase strike options including unmanned
- Grow the Battle Force fleet

Land Domain: \$14.6 Billion

- Next-generation combat and tactical vehicles, Future Vertical Lift
- Enhance Close Combat Lethality

Multi-Domain: \$31.0 Billion

- Ground-Based Strategic Deterrent, B-21 Bomber, Long-Range Stand Off Weapon, Columbia class submarine, missile warning, and NC3
- Ground-Based Missile Defense, Terminal High Altitude Area Defense, advanced technology missile defense
- Directed Energy, AC/MC-130J aircraft, CV-22 tilt rotor aircraft, and other maritime craft systems



Largest Shipbuilding request in more than 20 years

Develop and Field Innovative Technologies

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Largest research and development request in 70 years

Sustaining Our Forces

Competitive Compensation Package

- 3.1% military pay raise – largest increase in 10 years
- Modernizes and transforms the Military Health System
- Sustains family support initiatives – invests nearly \$8B
 - Spousal/community support
 - Child care for over 180K children and youth programs serving over 1 million dependents
 - DoD Dependent Schools educating over 76K students
 - Commissary operations at 236 stores



Largest military pay raise in 10 years

FY 2020 President's Budget Military End Strength

Military Component	FY 2018 ^{1/}	FY 2019 ^{2/}	FY 2020	FY 2024	Δ FY19-20	Δ FY19-24
Active Components (AC)						
Army	476,179	478,000	480,000	488,000	+2,000	+10,000
Navy	329,867	338,877	340,500	354,000	+1,623	+15,123
Marine Corps	185,518	186,100	186,200	186,400	+100	+300
Air Force	325,880	330,308	332,800	338,800	+2,492	+8,492
TOTAL AC	1,317,444	1,333,285	1,339,500	1,367,200	+6,215	+33,915
Reserve Components (RC)						
Army Reserve	188,811	189,250	189,500	190,500	+250	+1,250
Navy Reserve	58,196	59,074	59,000	59,000	-74	-74
Marine Corps Reserve	38,333	38,369	38,500	38,500	+131	+131
Air Force Reserve	68,703	70,000	70,100	70,300	+100	+300
Army National Guard	335,204	335,500	336,000	338,000	+500	+2,500
Air National Guard	107,469	107,100	107,700	108,600	+600	+1,500
TOTAL RC	796,716	799,293	800,800	804,900	+1,507	+5,607
Army AC + RC	1,000,194	1,002,750	1,005,500	1,016,500	+2,750	+13,750
Navy AC + RC	388,063	397,951	399,500	413,000	+1,549	+15,049
Marine Corps AC + RC	223,851	224,469	224,700	224,900	+231	+431
Air Force AC + RC	502,052	507,408	510,600	517,700	+3,192	+10,292
TOTAL AC + RC	2,114,160	2,132,578	2,140,300	2,172,100	+7,722	+39,522

1/ FY 2018 Actuals

2/ FY 2019 Projected. FY 2019 NDAA (P.L. 115-232 Authorized Army (Active 487.5K; Reserve 199.5K; Guard, 343.5K); Navy Active 335.4K; AF Active 329.1K).

Capacity & Lethality – 39.5K increase by FY 2024

Major Investments in the FY 2020 Budget

(Base + OCO)

	FY 2019 Enacted		FY 2020 Request	
	Qty	\$B	Qty	\$B
Aircraft				
F-35 Joint Strike Fighter (Air Force, Marine Corps, Navy)	93	\$11.6	78	\$11.2
KC-46 Pegasus (Air Force)	15	\$2.4	12	\$2.3
F/A-18E/F Super Hornet (Navy)	24	\$2.1	24	\$2.0
AH-64E Apache Attack Helicopter (Army)	66	\$1.5	48	\$1.0
VH-92 Presidential Helicopter (Marine Corps)	6	\$0.9	6	\$0.8
P-8A Poseidon (Navy)	10	\$2.2	6	\$1.5
CH-53K King Stallion (Marine Corps)	8	\$1.5	6	\$1.5
F-15EX	-	-	8	\$1.1
Shipbuilding				
COLUMBIA Class Ballistic Missile Submarine	-	\$3.9	-	\$2.2
CVN-78 FORD Class Aircraft Carrier	-	\$1.7	1	\$2.6
VIRGINIA Class Submarine	2	\$7.4	3	\$10.2
DDG-51 ARLEIGH BURKE Class Destroyers	3	\$6.2	3	\$5.8
Littoral Combat Ships (LCS) FY 2019 / Frigate (FFG(X)) FY 2020	3	\$1.9	1	\$1.3
Fleet Replenishment Oiler (T-AO)	2	\$1.1	2	\$1.1
Unmanned Surface Vehicles (USV)	-	\$0.1	2	\$0.4
Towing, Salvage, and Rescue Ship (T-ATS)	1	\$0.1	2	\$0.2

Includes Procurement and Research, Development, Test and Evaluation (RDT&E) funding

Numbers may not add due to rounding

Major Investments in the FY 2020 Budget

(Base + OCO)

	FY 2019 Enacted		FY 2020 Request	
	Qty	\$B	Qty	\$B
Space				
National Security Space Launch (NSSL) (aka EELV) (Air Force)	5	\$2.1	4	\$1.7
Global Positioning System (GPS) III and Projects (Air Force)	2	\$1.4	1	\$1.8
Space Based Overhead Persistent Infrared (OPIR) Systems (Air Force)	5	\$0.8	-	\$1.6
Ground Systems				
Joint Light Tactical Vehicle (Army, Marine Corps, Air Force)	5,093	\$1.9	4,090	\$1.6
M-1 Abrams Tank Modifications/Upgrades (Army)	168	\$2.7	165	\$2.2
Amphibious Combat Vehicle (Marine Corps)	30	\$0.2	56	\$0.4
Armored Multi-Purpose Vehicle (Army)	197	\$0.8	131	\$0.6
Munitions				
Joint Direct Attack Munition (JDAM) (Navy, Air Force)	43,594	\$1.1	40,388	\$1.1
Guided Multiple Launch Rocket System (GMLRS) (Army, Marine Corps)	8,101	\$1.1	10,193	\$1.4
Standard Missile-6 (SM-6) (Navy)	125	\$0.7	125	\$0.7
Small Diameter Bomb II (SDB II) (Navy, Air Force)	1,260	\$0.4	1,925	\$0.4
Hellfire Missile (Army, Navy, Air Force)	6,066	\$0.5	9,000	\$0.7
Joint Air-to-Surface Standoff Missile (Air Force)	360	\$0.6	430	\$0.6
Long Range Anti-Ship Missile (LRASM) (Air Force, Navy)	50	\$0.3	48	\$0.2

Includes Procurement and Research, Development, Test and Evaluation (RDT&E) funding

Numbers may not add due to rounding

Funded preferred munitions at the maximum production rate

Major Investments in the FY 2020 Budget

(Base + OCO)

	FY 2019 Enacted		FY 2020 Request	
	Qty	\$B	Qty	\$B
Nuclear Deterrence				
B-21 Long Range Strike Bomber (Air Force)	-	\$2.3	-	\$3.0
COLUMBIA Class Submarine - (<i>Advance Procurement + RDT&E</i>) (Navy)	-	\$3.9	-	\$2.2
Long-Range Stand-Off (LRSO) Missile (Air Force)	-	\$0.7	-	\$0.7
Ground Based Strategic Deterrent (GBSD) (Air Force)	-	\$0.4	-	\$0.6
Missile Defeat and Defense Programs				
AEGIS Ballistic Missile Defense (SM-3)	44	\$1.6	37	\$1.7
Support for Missile Defense Review (e.g., Land-Launched Conventional Prompt Strike, Extended Range Weapon, Space-based Discrimination Sensor Study)	-	-	-	\$1.5
Ground Based Midcourse Defense (Silos/Interceptors)	4/12	\$1.8	-	\$1.7
Terminal High Altitude Area Defense (THAAD) Ballistic Missile Defense	96	\$1.5	37	\$0.8
Patriot Advanced Capability (PAC-3) Missile Segment Enhancement	280	\$1.1	147	\$0.7

Includes Procurement and Research, Development, Test and Evaluation (RDT&E) funding

Numbers may not add due to rounding

Supports the Missile Defense Review priorities

Army FY 2020 Overview





U.S. ARMY

Deploy, Fight, and Win:

Retain overmatch in order to deter, and defeat if necessary, all potential adversaries

Where we are

- **Deployed and Committed: 179K**
- **In more than 140 countries**
- **Across 6 continents**
- **Army SOF: 4K deployed in 80 countries**
- **Worldwide Support to CT Operations**

The Army's purpose— remains constant: *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.*

Strategic Environment

- **Great Power Competition: China and Russia**
- **Regional State Adversaries: North Korea and Iran**
- **Other Threats: VEOs, trans-national criminal organizations, cyber hackers**
- **Economic Uncertainty**
- **Dynamic International Operating Environment**

Strategic Approach

- **Build readiness for prompt and sustained ground combat**
- **Modernization to ensure overmatch in a fundamentally different future environment**
- **Reform to free up time, money, and manpower for our highest priorities**
- **Strengthen Alliances and Partnerships and seek new strategic partners as the operating environment changes**

"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

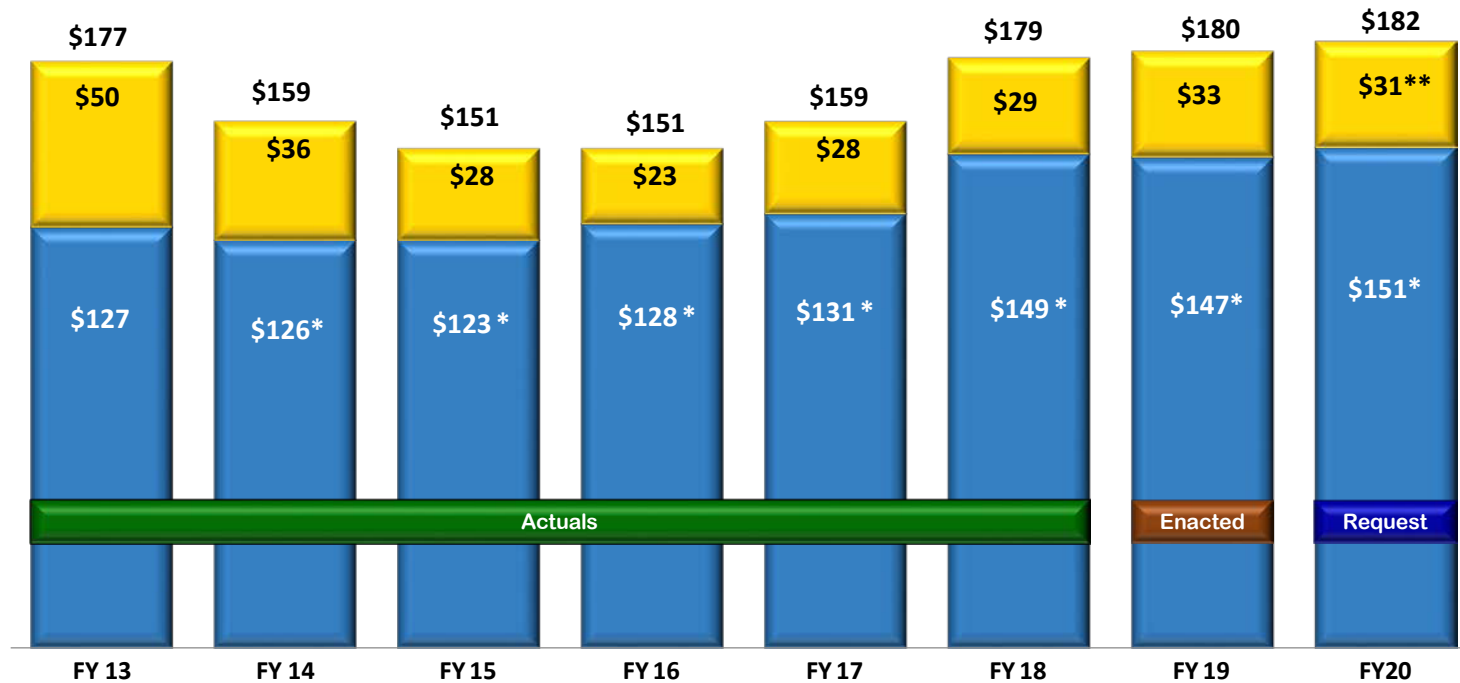
Army Vision 2018



Budget Trends

FY13 - FY20 (\$B)
Base and OCO

Overseas Contingency Funding (OCO)
Base Funding



* Includes OCO for Base purposes

** Does not include \$9.2B Emergency funding

FY14: \$3.1B OCO for Base Transfer

FY15: \$0.85B OCO for Base Transfer

FY16: \$2.7B OCO for Base Transfer

FY17: \$6.0B OCO for Base Transfer

FY18: \$1.0B OCO for Base Transfer

FY19: \$0.6B OCO for Base Transfer

FY20: \$31.4B OCO for Base Transfer

The FY20 Budget starts the Modernization Renaissance which builds on Readiness Improvements started in FY17



FY20 Budget Request

(Base Funding Program)

\$B	FY18 Actuals	FY19 Enacted	FY20 Request
Military Personnel	57.0	59.3	60.4
Operation and Maintenance ¹	60.0	50.9	52.9
Procurement/RDTE	37.0	33.2	34.0
Military Construction/Family Housing/BRAC	2.7	2.2	2.3 ⁴
Other Base (CAMD/AWCF/ANC)	1.4	1.4	1.1
Totals	149.0 ²	147.0 ³	150.7 ⁵

Numbers may not add due to rounding

Other Base: Chemical Agent and Munitions Destruction, Army Working Capital Fund, and Arlington National Cemetery

1: Includes Environmental Restoration Account (ERA) funding

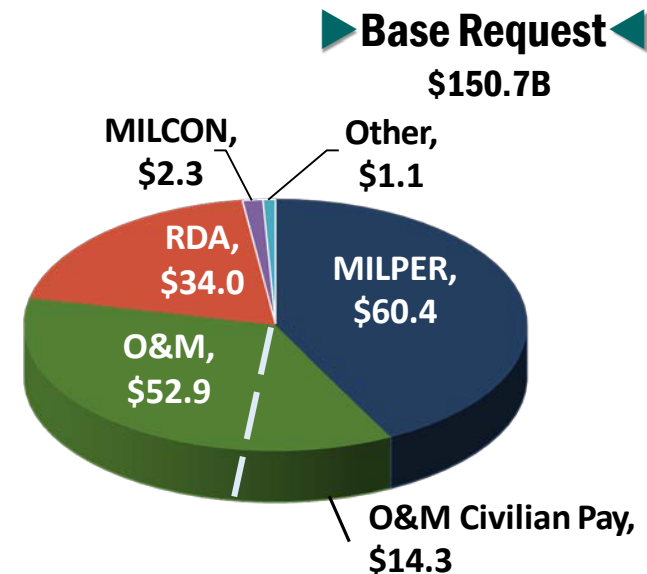
2: Includes \$0.4B Missile Defeat and Defense Enhancement Includes \$0.6B in OCO for Base purposes

3: Includes \$0.6B in OCO for Base purposes

4: Does not include \$9.2B Emergency funding

5: Includes \$31.4B in OCO for Base purposes

- ❖ The Army's topline base funding grew by 2.5% from the total FY19 Enacted
- ❖ The FY20 base budget funds the Army's readiness requirements and the higher end strength:
 - Military Personnel 1.9% ▲
 - Procurement/RDTE (RDA) 2.4% ▲





Military End Strength

Component	FY18 Actuals	FY19 Enacted	FY19 Updated	FY20 Request
Regular Army	476,179	487,500	478,000	480,000
Army National Guard	335,204	343,500	335,500	336,000
Army Reserve	188,811	199,500	189,250	189,500
Totals	1,000,194	1,030,500	1,002,750	1,005,500 ¹

1: Authorized in the FY 2019 National Defense Authorization Act, Public Law No: 115-232

- ❖ Supports a Total Army end strength of 1,005,500 Soldiers
- ❖ Modest growth to enable the Army to continue to achieve readiness in a challenging recruiting environment
- ❖ Maintains Active Guard Reserve (AGR) full-time support for the Army National Guard and the Army Reserve



Soldiers of the 503rd Infantry Regiment, 173rd Airborne Brigade, stand in formation during the closing ceremony of Exercise Noble Partner



Military Personnel

\$B	FY18 Actuals	FY19 Enacted	FY20 Request
Regular Army	40.4	42.7	43.3
Army National Guard	8.5	8.6	8.8
Army Reserve	4.7	4.8	5.0
Medicare Eligible Ret Health Care Fund	3.5	3.2	3.3
Totals	57.0	59.3	60.4

Numbers may not add due to rounding

Requested Rate Increases	FY20
Basic Pay	3.1%
Basic Allowance for Housing	3.2%
Basic Allowance for Subsistence	2.4%

- ❖ Includes adjustments for pay, subsistence, housing allowances; continues to address retirement compensation
- ❖ Increases funding for Reserve Component Soldiers on active duty supporting missions
- ❖ Provides incentives to recruit and retain the All-Volunteer Force; includes recruiting and retention bonuses and education benefits



A Cyber-Electromagnetic Activities Teams Soldier assists Brigade Combat Teams at the National Training Center in Fort Irwin, California



Operation and Maintenance (Regular Army)

\$B	FY18 Actuals	FY19 Enacted	FY20 Request
Regular Army (OMA)	40.8 ¹	40.8 ²	42.0 ³

1: Includes \$0.6B in OCO for Base purposes
2: Includes \$0.6B in OCO for Base purposes

3: Includes \$19.2B in OCO for Base purposes

❖ Trains the Force

- Resources 25 decisive action CTC Rotations
- Increases One Station Unit Training (OSUT) from 14 to 22 weeks for Infantry Soldiers (Armor and Cavalry Scout in pilot)
- Funds home station training at Brigade Combat Team (BCT) - level proficiency for a more lethal, capable force
- Increases flying hour program from 10.8 hours to 11.6 hours

❖ Operates the Force – Strengthens Alliances and Partnerships

- Supports lethal, agile, and resilient global posture
- Maintains 31 Brigade Combat Teams, 5 Security Force Assistance Brigades, 11 Combat Aviation Brigades
- Funds multi-lateral exercises to strengthen alliances

❖ Sustains the Force

- Sustains prepositioned stocks throughout the world
- Increases depot maintenance programs (Aviation, Electronics, Post-Production Software)

❖ Installation/Enterprise Support

- Substantial growth in facility restoration and modernization; sustainment increases to 85%
- Supports modernization effort by resourcing Army Futures Command HQ



U.S. Soldiers conduct training: Kuwait



Operation and Maintenance (Reserve Components)

\$B	FY18 Actuals	FY19 Enacted	FY20 Request
Army National Guard (OMNG)	7.3	7.1	7.6 ¹
Army Reserve (OMAR)	2.9	2.8	3.0 ²

1: Includes \$4.3B in OCO for Base purposes

2: Includes \$1.9B in OCO for Base purposes

❖ Operation and Maintenance, Army National Guard

- Funds 27 Brigade Combat Teams, 4 Attack Recon Battalions, 1 Security Force Assistance Brigade, and 1 Cyber Brigade
- Resources 4 CTC rotations to achieve company-level proficiency; 11 ARNG units provide enabler support to 7 ACCTCs
- Increases the flying hour program to 6.7 hrs; Platoon (+)
- Substantial growth in facility restoration and modernization; sustainment to 85%; Base Operations Support (BOS) at 94%



30th Armored Brigade Combat Team N.C. Army National Guard

❖ Operation and Maintenance, Army Reserve

- Funds 24 Geographic and Functional Commands, 4 Mission Command Training Centers, 4 Readiness Divisions and 1 Futures Innovation Command
- Resources over 600 Focused Readiness Units/50,000 Soldiers ready to deploy within 0-90 days
- Increases the flying hour program to 6.2 hrs; Platoon (+)
- Provide enabler support for 28 Combat Training Exercises: JRTC (9), NTC (10), and MCTP (9) Rotations
- Resources sustainment to 85%; BOS to 94%



U.S. Army Reserve medical Soldiers conduct training



Army Modernization Plan

- ❖ Requires a bold shift to fulfill the 2018 National Defense Strategy (NDS) and put the Army on course to achieve its vision of 2028 – an Army with next generation combat systems, modernized doctrine and reorganized formations to fight and win against Great Power Competition.
- ❖ Acknowledges our Army is at a strategic inflection point requiring a shift from irregular warfare to large-scale ground combat operations.
- ❖ Acknowledges our strategic competitors are building weapons and developing technologies that reduce our long-held advantages and addresses our need to modernize faster than our adversaries.
- ❖ Re-assesses Army modernization investment priorities cognizant of downward budgetary pressures and the need to take immediate action with the FY20 President's Budget
 - Reviewed all programs under the lens of its contribution to lethality realigning from lower to higher return
 - Acknowledged continued upgrades to select legacy combat systems provided marginal improvements

Established 8 CFTs to focus on 6 Modernization Priorities

1. Long Range Precision Fires
2. Next Generation Combat Vehicle
3. Future Vertical Lift
4. Network
5. Assured Positioning, Navigation, and Timing
6. Air and Missile Defense
7. Soldier Lethality
8. Synthetic Training Environment

"A significant challenge in the modernization effort is that the fundamental difference in how adversaries and the U.S. view conflict (ongoing competition versus cycles of peace and warfare) ultimately shapes their associated acquisitions cultures and processes."

- GEN Murray, Commander, Army Futures Command



Research, Development, and Acquisition

(RDA) Summary

\$B	FY18 Actuals	FY19 Enacted	FY20 Request
RDT&E Total	11.4	11.1	12.2
Procurement Total	25.6 ¹	22.1	21.8 ²
Totals	37.0	33.2	34.0

Numbers may not add due to rounding

1: Includes \$0.4B in OCO for Base purposes

2: Includes \$5.9B in OCO for Base purposes

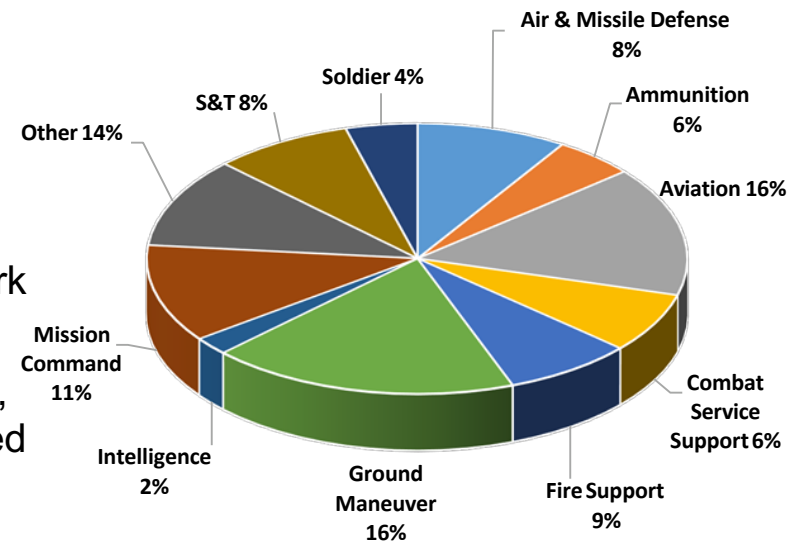


Electronic Warfare Specialist communicates to team via portable manpack radio

- ❖ Fills critical capability gaps and improves lethality in munitions, and air and ground combat platforms
 - Increases modernization of Bradley, Stryker, Abrams and Paladin
 - Increases procurement of critical missiles, M-SHORAD Systems and Blackhawk
 - Accelerates procurement of Manpack Radios, Ground Soldier System, and Signal Modernization Program in support of the Integrated Tactical Network
- ❖ RDT&E: Land-Based Hypersonic Missile, Manned Ground Vehicle, Future Attack Reconnaissance Aircraft, Lower Tier Air and Missile Defense Capability, Integrated Visual Augmentation System (IVAS) Advanced Development

► **\$34.0 B** ◀

Capability Portfolios

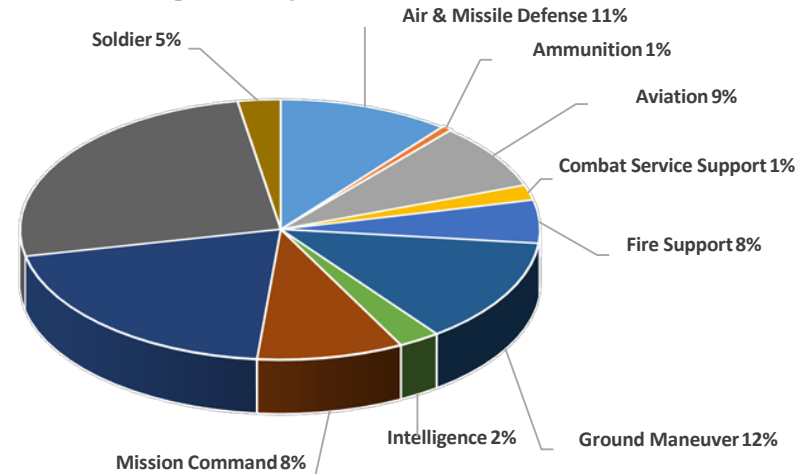




RDT&E Summary

► **\$12.2 B** ◀

Capability Portfolios



\$B	FY18 Actuals	FY19 Enacted	FY20 Request
Basic Research	0.5	0.4	0.4
Applied Research	1.2	0.9	0.9
Advanced Technology Dev.	1.4	1.1	1.1
S&T Subtotal	3.1	2.4	2.4
Demonstration/Validation	1.6	1.2	2.9
Engineering Manufacturing Dev.	3.3	3.1	3.5
Testing & Management Support	1.6	1.7	1.3
Operational System Development	1.8	1.7	2.0
Totals	11.4	11.1	12.2

Numbers may not add due to rounding

- ❖ Aligns 80% of S&T funding towards the Secretary's six Modernization Priorities in order to deliver concepts and capabilities at the Speed of Innovation
- ❖ Focuses on modernization of Land-Based Hypersonic Missile, Manned Ground Vehicle, Future Attack Reconnaissance Aircraft, Lower Tier Air and Missile Defense Capability, and Integrated Visual Augmentation System (IVAS) Advanced Development to enhance our competitive advantage
- ❖ Continues development of 155mm Self-Propelled Howitzer Improvements, Mobile Protected Firepower, Improved Turbine Engine Program, and Indirect Fire Protection Capability in order to build a more lethal force today against great power competition



Procurement Summary



► **\$21.8 B** ◀
Capability Portfolios

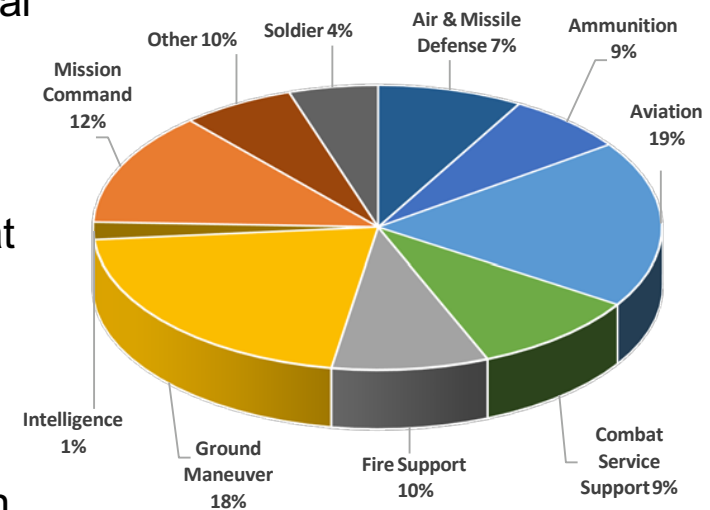
\$B	FY18 Actuals	FY19 Enacted	FY20 Request
Aircraft	5.6	4.3	3.7
Missiles	4.4	3.1	3.2
Weapons & Tracked Combat Vehicles	4.6	4.5	4.7
Ammunition	2.5	2.3	2.7
Other Procurement	8.5	7.9	7.5
Totals	25.6¹	22.1	21.8²

Numbers may not add due to rounding

1: Includes \$0.4B in OCO for Base purposes

2: Includes \$5.9B in OCO for Base purposes

- ❖ Maximizes procurement of select munitions: Hellfire Missiles; Guided MLRS Rockets, and the Army Tactical Missile Systems (ATACMS)
- ❖ Sustains Apache Remanufacture, Abrams, Chinook Remanufacture and Paladin Integrated Management
- ❖ Accelerates modernization of Stryker Brigade Combat Teams by upgrading Stryker fleets with mobility and lethality enhancements and equips the first of four M-SHORAD battalions
- ❖ Increases procurement of Manpack Radios, Ground Soldier System, and Signal Modernization Program in support of the Integrated Tactical Network





Select Procurement Quantities (Base and OCO)



Abrams



Bradley



Paladin



Hellfire



JLTV



GMLRS



AMPV

Program	Quantities	
	FY19	FY20
AH-64E Apache Remanufacture	48	48
UH-60M Black Hawk	58	73
CH-47 Chinook	7	9
Abrams Upgrade	168	165
Bradley Upgrade/ MOD	167	128
Armored Multi-Purpose Vehicle (AMPV)	197	131
Paladin Integrated Management (PIM)	51	53
Joint Light Tactical Vehicle (JLTV)	3,393	2,530
Guided MLRS Rocket (GMLRS)	7,818	9,570
MSE Missile	240	147
ATACMS	320	320
Stryker Upgrade	82	152
Hellfire	2,309	5,112



Apache



Black Hawk



Chinook



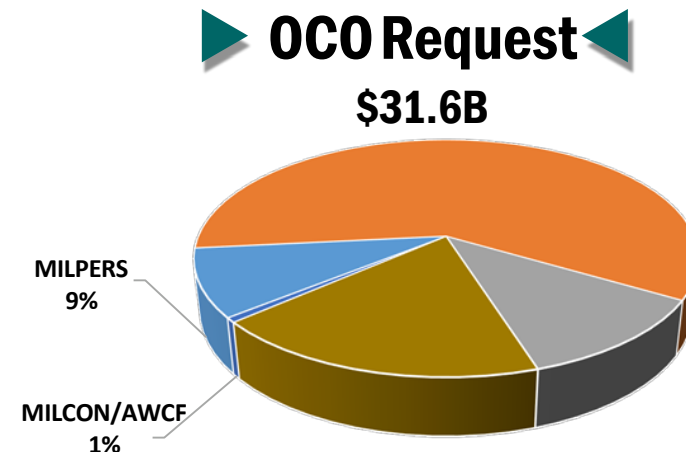
Overseas Contingency Operations

(\$M)	FY18 Actuals	FY19 Enacted	FY20 OCO Dir. and Enduring Request
Military Personnel (MILPERS)	2,878	3,161	2,981
Operation & Maintenance (O&M)	17,094	18,101	18,894
Research, Development, & Acquisition (RDA)	2,856	5,134	3,657
Military Construction, Army (MCA)	146	192	189
Working Capital Fund (AWCF)	70	7	20
Army Subtotal	23,044	26,595	25,741
Counter-Islamic State of Iraq and Syria Train and Equip Fund	1,769	1,352	1,045
Afghan Security Forces Fund	4,667	4,920	4,804
Passthrough / Transfer Accounts Subtotal	6,436	6,272	5,849
Totals	29,479	32,868	31,590 ¹

Numbers may not add due to rounding

1: Does not Include \$31.4B in OCO for Base funding; \$9.2B Emergency funding

- ❖ Operation FREEDOM's SENTINEL
- ❖ Operation INHERENT RESOLVE (Iraq)
- ❖ European Deterrence Initiative (EDI)
- ❖ Operation Spartan Shield
- ❖ Horn of Africa
- ❖ Counter-ISIS Train & Equip Fund
- ❖ Afghan Security Forces Fund





Reform

The Army's Senior Leaders instituted deliberate reform initiatives yielding \$3.6B in FY20

❖ Business Process Improvements: -\$277.9M in FY20

- Contract management – On track to save millions of dollars by reducing contract redundancies and improving competition processes
- Command Accountability and Execution Review (CAER) – a full spectrum approach leveraging monthly venues focusing on supply chain, transportation and contract management enterprise-wide

❖ Policy Reform: -\$177.9M in FY20

- Army Internally realigned its civilian workforce to establish Army Future Command.

❖ Better Alignment of resources with the NDS: -\$717.9M in FY20

- Army Senior Leaders streamlined Army Logistical Support Operations by eliminating duplicative effort across organizations

❖ Divestment: -\$2,468.8M in FY20

- Army Reduced/Delayed 93 programs and Eliminated 93 programs

"We will need to reform the way we do business. In today's environment, we must make difficult choices and prioritize what is most important to modernize the Army."

- Mark T. Esper, Secretary of The Army

Examples of Reform

- ❖ **Section 809 Study**
- ❖ **Accelerated Procurement Processes and Program Reviews (OTAs, REF, Night Court)**
- ❖ **Emphasis to Command Post Mobility and Agility**
 - ❖ **Smaller Footprints**
 - ❖ **Less Tentage**
 - ❖ **Increased Mobility**
 - ❖ **Signal Management Is A Critical Capability**

YOUR FUTURE IS AWESOME

Figures Represent Five-Year Outlook (In Millions)	APPLIED RESEARCH	ADVANCED TECHNOLOGY DEMONSTRATION
Body Armor	43.2	35.4
Vulnerability	64.5	-----
Detection	31.0	8.7
Survivability	21.2	10.7

“Don’t skate to where the puck is, skate to where the puck is going to be”
Wayne Gretzky

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Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Army										Date: March 2019		
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 2: Applied Research					R-1 Program Element (Number/Name) PE 0602143A / Soldier Lethality Technology							
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
Total Program Element	-	0.000	0.000	115.274	-	115.274	126.345	136.958	140.057	141.390	0.000	660.024
AN1: Narrowband SATCOM Technology	-	0.000	0.000	4.000	-	4.000	1.000	0.000	0.000	0.000	0.000	5.000
AY6: Soldier Squad Small Arms Armaments Technology	-	0.000	0.000	18.345	-	18.345	18.316	17.577	14.988	15.145	0.000	84.371
AY8: Small Arms Fire Control Technology*	-	0.000	0.000	0.000	-	0.000	0.000	4.228	4.122	4.168	0.000	12.518
AZ2: Body Armor & Integrated Headborne Technology	-	0.000	0.000	8.427	-	8.427	8.081	8.753	8.928	9.027	0.000	43.216
AZ5: Soldier Protection Technology - Vulnerability	-	0.000	0.000	8.104	-	8.104	12.260	13.671	15.162	15.330	0.000	64.527
AZ9: Soldier Protection Advanced Tech - Detectability	-	0.000	0.000	4.500	-	4.500	5.294	7.181	6.883	6.964	0.000	30.822
BB4: Dismounted Soldier Survivability Materials	-	0.000	0.000	4.946	-	4.946	3.946	5.187	5.539	5.615	0.000	25.233
BB5: Physical Augmentation: Tech for Human Interactions	-	0.000	0.000	1.500	-	1.500	1.500	1.500	1.500	1.517	0.000	7.517
BB7: Exoskeleton: Technology for Man-Machine Interface	-	0.000	0.000	1.600	-	1.600	1.600	1.632	0.000	0.000	0.000	4.832
BB9: Human Performance Tech for Mobility & Lethality	-	0.000	0.000	2.500	-	2.500	1.500	1.000	0.000	0.000	0.000	5.000
BC2: Next Gen Mobility & Lethality Tech for Warfighters	-	0.000	0.000	5.678	-	5.678	5.221	5.827	2.596	2.625	0.000	21.947
BC3: Soldier Decision Making & Comms Performance Tech	-	0.000	0.000	10.759	-	10.759	9.875	9.992	6.112	6.181	0.000	42.919
BC6: Human Perf - Tech for Warfighter Enhancement	-	0.000	0.000	2.676	-	2.676	2.826	3.395	1.419	1.377	0.000	11.693
BC7: Training Technology (Other than STE)*	-	0.000	0.000	0.000	-	0.000	9.174	11.881	13.306	13.465	0.000	47.826

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Army										Date: March 2019		
Appropriation/Budget Activity 2040 / 2					R-1 Program Element (Number/Name) PE 0602143A / Soldier Lethality Technology				Project (Number/Name) AZ5 / Soldier Protection Technology - Vulnerability			
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
AZ5: Soldier Protection Technology - Vulnerability	-	0.000	0.000	8.104	-	8.104	12.260	13.671	15.162	15.330	0.000	64.527

Note

In Fiscal Year (FY) 2020 this Project was realigned from:
Program Element (PE) 0602105A Materials Technology
* Project H84 Materials
PE 0602618A Ballistics Technology
* Project H80 Survivability and Lethality Technology

A. Mission Description and Budget Item Justification

This Project investigates and develops materials, methods, and models that enable design and integration of emerging material technologies into lightweight, flexible and modular Soldier equipment to protect against the range of existing and emerging threats for head, torso, and extremity protection. Specific research thrusts include the development of materials and mechanisms to enhance ballistic protection; computational models and associated experiments to provide a fundamental understanding of material properties and failure mechanisms, as well as correlation to ballistic/blast/blunt impact performance of Soldier personal protective equipment (PPE) and improved fibers, composite and ceramic materials. Specific technologies include experimental helmets that reduce impact and blast loading to the head, Soldier torso protection systems to increase protection from ballistic and blunt impacts, and novel fibers and fabrics that provide additional survivability mechanisms.

Work in this Project supports key Army needs and is fully coordinated with several PEs to include PE 0602143A (Soldier Lethality Technology) and 0603118A (Soldier Lethality Advanced Technology); and leverages the technical research of several PEs to include PE 0601102A (Defense Research Sciences) / Project AA7 (Mechanics and Ballistics) and 0602144A (Ground Technology) / Project BL1 (Materials and Manufacturing Research Technology).

The cited work is consistent with the Under Secretary of Defense for Research and Engineering priority focus areas and the Army Modernization Strategy.

FY 2020 realignments are due to financial restructuring in support of Army Modernization Priorities.

Work in this Project is performed by the United States Army Futures Command (AFC).

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2018	FY 2019	FY 2020
Title: Soldier Protection Technologies	-	-	4.131
Description: This effort develops integrated lightweight, flexible and modular protection equipment that is tailored to support the 'Soldier as a system' approach for defeat of emerging threats. Research areas encompass high fidelity ballistic impact injury models for hard and soft tissues, novel ceramic architectures to include graded and hierarchically structured ceramics, and novel			

PE 0602143A: *Soldier Lethality Technology*
Army

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For More Information

- Visit the website for the Office of the Under Secretary of Defense (Comptroller) at
 - <http://www.defense.gov/cj>
 - Download the Department of Defense's FY 2020 Budget Request





FOR ADDITIONAL INFORMATION

This overview provides the highlights of the Army's Budget submitted to the Congress as part of the FY 2020 President's Budget.

All Army budget materials are available to the public on the Assistant Secretary of the Army (Financial Management and Comptroller) website.

<https://www.asafm.army.mil/offices/bu/content.aspx?what=BudgetMaterials>

Army Strong!

<http://www.army.mil>

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