Making (Some) Sense of the DoD Budget

Ron Houle
AGENDA

- How We Got Here
- DoD Overview
- Army Overview
- Thoughts on Future Directions For The Army
- How To find And View Budget Documents
- Questions and Discussion
How We Got Here

• Change in Administration

• Alphabet Soup
  - BCA
  - BBA
  - CR
  - Base
  - OCO

• Evolving Geopolitical Crises And Response(s)
From There To Here

**Chart 2**

**Historical Defense Spending**

*AS A PERCENTAGE OF GDP*

- **Vietnam War, 1959-1975**
- **Wars in Afghanistan and Iraq, 2001-**

FY 2018 DoD Budget Request

Base Budget Request: $574.5 billion
Overseas Contingency Operations (OCO): $64.6 billion
Total: $639.1 billion

• Base budget request is $52 billion above DoD’s share of the FY 2018 Defense budget cap in current law
• Must increase the Defense budget cap in order to adequately protect U.S. national security
• Since enactment of the BCA, the world has become a more dangerous place with rising terrorism and more aggressive potential adversaries
• Under the BCA, the military has become smaller, readiness has eroded, and modernization has been deferred
• This budget begins to balance the Defense program and establishes a foundation for rebuilding the U.S. military into a more capable, lethal and ready joint force
Rebuilding the U.S. Armed Forces

• Get Ready
  – FY 2017 added resources to improve near term readiness

• Get Balanced
  – FY 2018 budget request builds on readiness improvements in the FY 2017 budget and adds resources to balance the force

• Get Bigger and More Lethal
  – The goal in FY 2019 will be to sustain the gains in FY 2017/FY 2018 and, informed by the new defense strategy, build further to achieve a bigger more lethal and ready force
FY 2018 Themes

• Improving warfighter readiness
  – More aircraft in the air, ships at sea, troops in the field, and munitions on hand to rebuild the current force
• Address evolving national security challenges
  – Retain counterterrorism/counter insurgency competencies
  – Preserve competitive advantage versus major adversaries
  – Sustain capability development for new warfighter concepts
• Recapitalize and modernize nuclear enterprise
• Prioritize key investments in cyber and space capabilities
• Focus on innovation to maintain technological advantage
• Sustain the finest fighting force in the world
• Identify reforms to improve efficiencies and achieve cost savings
FY 2018 DoD Base Funding

By Appropriation Title
- RDT&E, $82.7
- Military Personnel, $141.6
- Procurement, $115.0
- O&M, $223.3
- Military Construction and Family Housing, Other, $11.9

By Military Department
- Army, $137.1
- Air Force, $165.5
- Navy, $171.5
- Defense Wide, $100.4

FY 2018 Request: $574.5 billion

Numbers may not add due to rounding.
FY 2018 OCO Funding

By Appropriation Title

- Procurement, $10.2
- O&M, $48.6
- RDT&E, $.6
- Military Construction and Family Housing, Other, $.8
- Military Personnel, $4.3

By Military Department

- Defense Wide, $9.6
- Air Force, $17.5
- Navy, $8.5
- Army, $28.9

FY 2018 Request: $64.6 billion

Numbers may not add due to rounding.
FY 2018 Total Base and OCO Funding

**By Appropriation Title**
- Military Construction and Family Housing, Other: $12.6 billion
- RDT&E, $83.3 billion
- Military Personnel, $146.0 billion
- Procurement, $125.2 billion
- O&M, $271.9 billion

**By Military Department**
- Army: $166.0 billion
- Navy: $180.0 billion
- Air Force: $183.0 billion
- Defense Wide: $110.1 billion

**FY 2018 Request: $639.1 billion**

Numbers may not add due to rounding.
Defense Budget Request
($ in Billions)

DoD = 619

DoD BBA Level = 524

DoD = 606

DoD BCA Level = 522

DoD = 639

Total = +52

2017 Request

2017 Enacted

2018 Request

DoD

DoD OCO

Numbers may not add due to rounding
## Major Investments in the FY 2018 Budget

### Aircraft

<table>
<thead>
<tr>
<th>Aircraft</th>
<th>Quantities</th>
<th>Dollars in Billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-35 Joint Strike Fighter (USAF, USMC, USN)</td>
<td>70</td>
<td>$10.8</td>
</tr>
<tr>
<td>KC-46 Tanker Replacement (Air Force)</td>
<td>15</td>
<td>$3.1</td>
</tr>
<tr>
<td>F/A-18 Aircraft (Navy)</td>
<td>14</td>
<td>$1.3</td>
</tr>
<tr>
<td>AH-64E Attack Helicopter (Army)</td>
<td>61</td>
<td>$1.4</td>
</tr>
<tr>
<td>UH-60 Utility Helicopter (Army)</td>
<td>48</td>
<td>$1.1</td>
</tr>
<tr>
<td>P-8A Aircraft (Navy)</td>
<td>7</td>
<td>$1.6</td>
</tr>
<tr>
<td>MQ-4 Triton Unmanned Aerial Vehicle (Navy)</td>
<td>3</td>
<td>$0.9</td>
</tr>
<tr>
<td>B-21 Long Range Strike Bomber (Air Force)</td>
<td>-</td>
<td>$2.0</td>
</tr>
</tbody>
</table>

### Shipbuilding

<table>
<thead>
<tr>
<th>Ship</th>
<th>Quantities</th>
<th>Dollars in Billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia Class Submarine</td>
<td>2</td>
<td>$5.5</td>
</tr>
<tr>
<td>DDG-51 AEGIS Destroyers</td>
<td>2</td>
<td>$4.0</td>
</tr>
<tr>
<td>Littoral Combat ships (LCS)</td>
<td>1</td>
<td>$1.2</td>
</tr>
<tr>
<td>CVN-78 Class Aircraft Carrier</td>
<td>1</td>
<td>$4.6</td>
</tr>
<tr>
<td>LHA-6 Amphibious Assault Ship</td>
<td>-</td>
<td>$1.7</td>
</tr>
<tr>
<td>Columbia Class Submarine - Advance Procurement</td>
<td>-</td>
<td>$1.8</td>
</tr>
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</table>

### Space

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantities</th>
<th>Dollars in Billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evolved Expendable Launch Vehicle (Air Force)</td>
<td>3</td>
<td>$1.9</td>
</tr>
<tr>
<td>Space Based Infrared System (Air Force)</td>
<td>-</td>
<td>$1.4</td>
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</tbody>
</table>
## Major Investments in the FY 2018 Budget

### (Continued)

<table>
<thead>
<tr>
<th>Preferred Munitions</th>
<th>Quantities/Dollars in Billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hellfire Missile</td>
<td>1,397 $0.1</td>
</tr>
<tr>
<td>Joint Direct Attack Munition (JDAM)</td>
<td>12,822 $0.4</td>
</tr>
<tr>
<td>Guided Multiple Launch Rocket System (GMLRS)</td>
<td>4,458 $0.7</td>
</tr>
<tr>
<td>Advanced Precision Kill Weapon System (APKWS)</td>
<td>- $0.2</td>
</tr>
<tr>
<td>Small Diameter Bomb (SDB)</td>
<td>5,039 $0.4</td>
</tr>
<tr>
<td>Tomahawk Missile</td>
<td>34 $0.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ground Systems</th>
<th>Quantities/Dollars in Billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Light Tactical Vehicle (Multi-service)</td>
<td>2,775 $1.1</td>
</tr>
<tr>
<td>M-1 Tank Modifications (Army)</td>
<td>20 $0.6</td>
</tr>
<tr>
<td>Amphibious Combat Vehicle (Marine Corps)</td>
<td>26 $0.3</td>
</tr>
<tr>
<td>Armored Multi-Purpose Vehicle (Army)</td>
<td>42 $0.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Missile Defense Programs</th>
<th>Quantities/Dollars in Billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEGIS SM-3 Missiles</td>
<td>40 $1.6</td>
</tr>
<tr>
<td>Ground Based Midcourse</td>
<td>- $1.4</td>
</tr>
</tbody>
</table>
Focus on Technology Innovation

• Funds science and technology to further innovation ($13.2 billion)
• Supports DoD, academic, and industry partnerships with initiatives like Army Research Lab Collaborative Research Alliances ($58.7 million), Defense Innovation Unit-Experiment (DIUx) ($54 million), and the pilot program with In-Q-Tel ($60 million)
• Examples of technology initiatives
  – Alternative navigation technologies (e.g., Assured Positioning Navigation, and Timing (Army), Atomic Clocks with Enhanced Stability (ACES) (DARPA))
  – Directed energy weapons (e.g., Self-protect High Energy Laser Demonstrator (Air Force), High Energy Laser Tactical Vehicle Demonstrator (Army))
  – Electromagnetic spectrum technologies (e.g., Electromagnetic Maneuver & Control Capability (Navy))
  – High speed strike weapons (e.g., Hypersonic Flight Demonstrations (Air Force, DARPA), High-Speed Propulsion Technology (DARPA, Air Force, Navy))
  – Establishment of Hypersonics defeat program within the Missile Defense Agency
  – Low-cost unmanned systems (e.g., Low Cost Unmanned Air Systems Swarming Technology (LOCUST) (Navy), Perdix (Strategic Capabilities Office))
  – Investment across DoD to counter illicit Unmanned Aerial Systems (UAS) and other multi-domain unmanned or autonomous threats

DoD seeks to accelerate delivery of new capabilities
Keeping Faith With Service Members and Families

- Maintains support for critical Family Assistance Programs
  - Warfighter & Family Services
    - Non-medical counseling support services
    - Financial Readiness
    - Joint Family Support Assistance through Military One Source
    - Family Advocacy Program
  - Military Spouse Education & Career Assistance
  - Morale, Recreation, & Welfare, such as fitness centers, libraries, recreations centers, and single service member programs
  - Tuition Assistance for Off-Duty Education Support
  - Child & Youth Programs serving over 1 million children
  - National Guard Youth Challenge
  - DoD Dependent Schools educating over 77 thousand students
  - Commissary Operations at 238 stores

Invests more than $8 billion into supporting our families
ARMY OVERVIEW

Ron Houle | Making (Some) Sense of the DoD Budget
The two-year Bipartisan Budget Acts of 2013 (BBA13) and 2015 (BBA15) provided limited predictability but did not eliminate future BCA budget spending caps which, barring new legislation, return in FY18.

The funding received through the FY17 RAA provided the Army additional base funding to support critical warfighter readiness requirements.

BBA15 repeats the oscillating funding of BBA13 extending the time necessary to restore balance between readiness, end strength and modernization.

OCO funding is an essential funding source for incremental wartime costs, but its continued use as a supplement for base funding requirements is now standard practice.
Globally Committed:
Why the Army must be ready today and prepared for tomorrow

DESTROY ISIS
The US Army contributes troops to train, advise and assist Iraqi Security to destroy ISIS

DETER RUSSIA
The US Army is working with allies to deter Russian aggression and assure European nations

SUPPORT TO AFGHANISTAN SECURITY FORCES
The US Army remains committed to training Afghan forces, and supporting counterterrorism operations against the remaining opposition forces

ENGAGE ASIA / NORTH KOREA
The US Army contributes to Asia Pacific regional security and stability to deter North Korean aggression and assure Pacific partners

The instability throughout the world has a direct impact on the number and size of US Army’s missions and operations and its ability to keep pace with the global security environment.
FY 2018 Budget Highlights

The Army’s FY 2018 Budget Request provides critical capabilities to conduct operations, sustain readiness, and make progress toward a more modern, capable, and lethal Army

- Supports Globally Committed Warfighter
- Restores/Builds Warfighter Readiness
- Builds Decisive Action Capability For Major Combat Operations
- Sustains 1,018K Army
- Retains Counter Terrorism/Counter Insurgency Competencies
- Increases Global Responsiveness
- Supports Regional Engagements
- Supports Our People
- Advances Soldier and technological overmatch
- Increases Investments to address failing Infrastructure
- Improves Accountability Stewardship

U.S. and Polish Soldiers conduct training: Poland
FY 2018 Budget Request

(Base Funding Program)

<table>
<thead>
<tr>
<th>Request ($B)</th>
<th>FY16 Actuals</th>
<th>FY17 Enacted</th>
<th>FY18 Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military Personnel</td>
<td>55.9</td>
<td>55.5</td>
<td>58.0</td>
</tr>
<tr>
<td>Operation and Maintenance ¹</td>
<td>45.4²</td>
<td>46.2⁴</td>
<td>49.4</td>
</tr>
<tr>
<td>Procurement/RDTE</td>
<td>24.3</td>
<td>26.2</td>
<td>26.8</td>
</tr>
<tr>
<td>Military Const/Family Housing/BRAC</td>
<td>1.9</td>
<td>1.5</td>
<td>1.8</td>
</tr>
<tr>
<td>Other Base (CAMD/AWCF/ANC)</td>
<td>0.9</td>
<td>0.9</td>
<td>1.1</td>
</tr>
<tr>
<td>Totals</td>
<td>128.4²</td>
<td>130.3³</td>
<td>137.2</td>
</tr>
</tbody>
</table>

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

1: Includes Environmental Restoration Account (ERA) funding
2: Includes $2.7B Base-to-OCO Transfer
3: Includes $6.1B in OCO for base requirements
4: Amount adjusted for fuel rates and foreign currency fluctuation reductions

- In the FY18 Defense Budget Request, the Army’s topline base funding grew by 5.1% from the total FY17 enacted budget.
- Growth in the FY18 base budget funds the Army’s readiness requirements at the higher end strength, primarily in:
  - Military Personnel 4.6% ▲
  - Operations & Maintenance ~6.7% ▲
Military End Strength

- All components maintain end strength Authorized in 2017 NDAA

- Prioritizes manning requirements in the operating force over the generating force

- Army continues to assess its end strength & force structure requirements to best meet current and future operational commitments

<table>
<thead>
<tr>
<th>Component</th>
<th>FY16 Actuals</th>
<th>FY17 Authorized</th>
<th>FY18 Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular Army</td>
<td>475,400</td>
<td>476,000</td>
<td>476,000</td>
</tr>
<tr>
<td>Army National Guard</td>
<td>341,590</td>
<td>343,000</td>
<td>343,000</td>
</tr>
<tr>
<td>Army Reserve</td>
<td>198,395</td>
<td>199,000</td>
<td>199,000</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>1,015,385</strong></td>
<td><strong>1,018,000</strong></td>
<td><strong>1,018,000</strong></td>
</tr>
</tbody>
</table>
Operation and Maintenance (Regular Army)

- **Trains the Force**
  - Continues to rebuild Readiness
  - Resources 19 Combat Training Center rotations - 15 Regular Army and 4 ARNG
  - Provides for home station training focused on counter insurgency and decisive action
  - Sustains leader development and functional training for the Total Army

- **Operates the Force**
  - Supports the Combatant Commanders’ requirements: providing ready and responsive Soldiers
  - Maintains Cyber Funding for Defensive Cyber Operations (DCO), Infrastructure, Cybersecurity, and continues Cyber force training
  - Maintains power projection and security cooperation

- **Sustains the Force**
  - Prioritizes rapid global response and projection readiness
  - Funds depot maintenance

- **Installation/Enterprise Support**
  - Resources critical Family and Soldier programs and installation security, and IT services
  - Invests in facility restoration and modernization

<table>
<thead>
<tr>
<th>Appropriation Title ($B)</th>
<th>FY16 Actuals</th>
<th>FY17 Enacted</th>
<th>FY18 Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular Army (OMA)</td>
<td>36.1^1</td>
<td>36.2^2</td>
<td>38.9</td>
</tr>
</tbody>
</table>

1: $2.5B OCO-to-Base Transfer
2: $3.6B OCO-to-Base Transfer
The Operation and Maintenance, Army National Guard
- Continues the process of improving readiness
- Increases lethality and Warfighting capability of NG units
- Increases ARNG CTC rotations from two to four
- Sustains commitment to Soldier and Family programs
- Invests in facility sustainment to improve readiness

The Operation and Maintenance, Army Reserve
- Continues the process of improving readiness
- Provides ready critical enablers to Combatant Commanders
- Supports 77 functional and multifunctional support brigades
- Funds base operations for 3 installations and approximately 840 Reserve centers

<table>
<thead>
<tr>
<th>Appropriation Title ($B)</th>
<th>FY16¹ Actuals</th>
<th>FY17² Enacted</th>
<th>FY18 Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army National Guard (OMNG)</td>
<td>6.6</td>
<td>7.0</td>
<td>7.3</td>
</tr>
<tr>
<td>Army Reserve (OMAR)</td>
<td>2.7</td>
<td>2.8</td>
<td>2.9</td>
</tr>
</tbody>
</table>

¹: Includes OCO Readiness Add ARNG: $75M; USAR: $75M
²: Includes OCO-to-Base transfers for ARNG: $60M; USAR:$15M
Operational Testing
Know The Test Standards
Procurement Summary

$17.4 B

Capability Portfolio*

<table>
<thead>
<tr>
<th>Request (SB)</th>
<th>FY16 Actuals</th>
<th>FY17 Enacted</th>
<th>FY18 Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Total</td>
<td>16.4</td>
<td>17.8</td>
<td>17.4</td>
</tr>
<tr>
<td>Aircraft</td>
<td>5.9</td>
<td>4.9</td>
<td>4.2</td>
</tr>
<tr>
<td>Missiles</td>
<td>1.6</td>
<td>2.3</td>
<td>2.5</td>
</tr>
<tr>
<td>WTCV</td>
<td>1.9</td>
<td>2.3</td>
<td>2.4</td>
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<tr>
<td>Ammunition</td>
<td>1.3</td>
<td>1.9</td>
<td>1.9</td>
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<tr>
<td>Other Procurement</td>
<td>5.7</td>
<td>6.4</td>
<td>6.5</td>
</tr>
</tbody>
</table>

Numbers may not sum due to rounding
1: Includes OCO request to comply with BBA15: Missiles $150M and Other Procurement $162M

- Continues Patriot modernization and Patriot Missile Segment Enhancement (MSE) missiles upgrades.
- Increases procurement of preferred munitions Guided Multiple Launch Rocket Systems (GMLRS), Army Tactical Missile Systems (ATACMS), and Hellfire missiles.
- Modernizing M1 Abrams, M2 Bradley and Stryker combat vehicles with mobility and lethality upgrades.
- Continuation of the Paladin Integrated Management (PIM) and procurement of the Joint Light Tactical Vehicle Low Rate Initial Production (LRIP) procurement.
- Continues Apache, Blackhawk and Chinook aircraft remanufacture and limited newbuilds.
### Top Procurement Quantities

<table>
<thead>
<tr>
<th>Program</th>
<th>Quantities</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH-64E Apache Remanufacture</td>
<td>FY17: 52</td>
</tr>
<tr>
<td></td>
<td>FY18: 50</td>
</tr>
<tr>
<td>AH-64E Apache New Build</td>
<td>FY17: 7</td>
</tr>
<tr>
<td></td>
<td>FY18: 13</td>
</tr>
<tr>
<td>UH-60M BlackHawk</td>
<td>FY17: 61</td>
</tr>
<tr>
<td></td>
<td>FY18: 48</td>
</tr>
<tr>
<td>CH-47 Chinook</td>
<td>FY17: 22</td>
</tr>
<tr>
<td></td>
<td>FY18: 6</td>
</tr>
<tr>
<td>M1 Abrams Tank (MOD) ECP 1A/Abrams Upgrade</td>
<td>FY17: 60</td>
</tr>
<tr>
<td></td>
<td>FY18: 20</td>
</tr>
<tr>
<td>Bradley Program (MOD)</td>
<td>FY17: 45</td>
</tr>
<tr>
<td></td>
<td>FY18: 135</td>
</tr>
<tr>
<td>Paladin Integrated Management</td>
<td>FY17: 48</td>
</tr>
<tr>
<td></td>
<td>FY18: 71</td>
</tr>
<tr>
<td>Joint Light Tactical Vehicle</td>
<td>FY17: 1,828</td>
</tr>
<tr>
<td></td>
<td>FY18: 2,110</td>
</tr>
<tr>
<td>Guided MLRS Rocket (GMLRS)</td>
<td>FY17: 2,954</td>
</tr>
<tr>
<td></td>
<td>FY18: 6,000</td>
</tr>
<tr>
<td>MSE Missile</td>
<td>FY17: 145</td>
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<tr>
<td></td>
<td>FY18: 93</td>
</tr>
<tr>
<td>ATACMS</td>
<td>FY17: 200</td>
</tr>
<tr>
<td></td>
<td>FY18: 122</td>
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<tr>
<td>Patriot Mods</td>
<td>FY17: -</td>
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<tr>
<td></td>
<td>FY18: 25</td>
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<tr>
<td>Hellfire Missiles</td>
<td>FY17: 155</td>
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<tr>
<td></td>
<td>FY18: 998</td>
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<tr>
<td>Counterfire Radar</td>
<td>FY17: 36</td>
</tr>
<tr>
<td></td>
<td>FY18: 21</td>
</tr>
<tr>
<td>Joint Battle Command - Platform (JBC-P)</td>
<td>FY17: 10,687</td>
</tr>
<tr>
<td></td>
<td>FY18: 15,920</td>
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<tr>
<td>WIN-T Increment 2</td>
<td>Multiple Config. Items</td>
</tr>
<tr>
<td>DCGS-A Increment 1</td>
<td>FY17: 2,171</td>
</tr>
<tr>
<td></td>
<td>FY18: 3,437</td>
</tr>
<tr>
<td>Handheld Manpack Small Form Fit Radios</td>
<td>FY17: 5,656</td>
</tr>
<tr>
<td></td>
<td>FY18: 3,658</td>
</tr>
</tbody>
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New Paradigms (?)
Modernization Summary (Base)

<table>
<thead>
<tr>
<th>Request ($B)</th>
<th>FY16 Actuals</th>
<th>FY17 Enacted</th>
<th>FY18 Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Total</td>
<td>16.4</td>
<td>17.8 (^1)</td>
<td>17.4</td>
</tr>
<tr>
<td>RDT&amp;E Total</td>
<td>7.9</td>
<td>8.4</td>
<td>9.4</td>
</tr>
<tr>
<td>RDA Total</td>
<td>24.3</td>
<td>26.2</td>
<td>26.8</td>
</tr>
</tbody>
</table>

1: Includes $1,805M in OCO request to comply with BBA15

- Prioritizes systems critical to Soldier and Unit readiness
- Increases the pace of near-term development and reduces risk in operational overmatch in the mid-term
- Protects Science and Technology (S&T) funding to support the Army of 2025 guided by the Army Operating Concept
- Continues to develop and improve existing fleet systems to enhance survivability, mobility, and lethality

Priorities
1. Air & Missile Defense
2. Long-Range Fires
3. Munitions Shortfall
4. Mobility, Lethality, and Protection of BCTs
5. Active Protection Systems
6. Assured PNT
7. EW/ SIGINT
8. Cyber (Offensive & Defensive)
9. Assured Communications
10. Vertical Lift

$26.8 B

Capability Portfolios
RDT&E Summary

- Continued development of Air and Missile defense (to include high energy laser and cybersecurity), Long Range Precision Fires (LRPF), and weapons and munition technologies.

- New start efforts for the Army Multi-Purpose Vehicle (AMPV) and Joint Tactical Ground System to increase mobility and lethality for Brigade Combat Teams.

- Investment in Active Protective Systems (APS) for detect and defeat capability on air platforms and Vehicle Protection Systems (VPS) for modernization of ground combat platforms.

- Development of Assured Positioning, Navigation and Timing (PNT); Electronic Warfare (EW); Cyber; and Assured Communications tools and platforms to address current and future vulnerabilities.

<table>
<thead>
<tr>
<th>Request ($B)</th>
<th>FY16 Actuals</th>
<th>FY17 Enacted</th>
<th>FY18 Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDT&amp;E Total</td>
<td>7.6</td>
<td>8.4</td>
<td>9.4</td>
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<tr>
<td>Basic Research</td>
<td>0.5</td>
<td>0.5</td>
<td>0.4</td>
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<tr>
<td>Applied Research</td>
<td>1.1</td>
<td>1.2</td>
<td>0.9</td>
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<tr>
<td>Advanced Technology Dev.</td>
<td>1.1</td>
<td>1.4</td>
<td>1.1</td>
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<tr>
<td>Demonstration/Validation</td>
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<td>0.6</td>
<td>0.9</td>
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<tr>
<td>Engineering Manufacturing Dev.</td>
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<td>2.3</td>
<td>3.0</td>
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<tr>
<td>Testing &amp; Management Support</td>
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<td>1.2</td>
<td>1.3</td>
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<tr>
<td>Operational System Development</td>
<td>1.2</td>
<td>1.3</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Numbers may not sum due to rounding
Some Future Directions

- Anything Cyber
- Wearables/Telemetry
- Sensors and Imagery
- Robotics
- Autonomous (all domains)
- Situational Awareness
- Portable Power
‘Iron Man suit’

Concept suit from the animated video produced by the Army’s Research, Development and Engineering Command.

Head gear:
Live data feed projected on a see-through display inside the helmet.

Uniform:
Head-to-toe armor would protect the soldier from bullets and shrapnel.

Pack essentials:
The prototype should be able to cure minor wounds with inflatable tourniquets. It would also carry an oxygen supply, cooling system and vital-signs sensors.

The suit would be connected with drones and satellite systems.

Pack weight:
Motors in the exoskeleton would allow a soldier to jump and run carrying 100 pounds or more.

“We are on our fifth prototype. Will we get everything we want? Probably not. That was never the intent,” James Geurts of Special Operations Forces Acquisition, Technology and Logistics.
Rapid Innovation Fund

**Requirement #:** ARMY-FY17-18-PEOSOLD05  
**Title:** “Advanced Materials for Soldier Environmental Protection”  
**Military System or Acquisition Customer:** Program Executive Office Soldier, Project Manager Soldier Protection & Individual Equipment (PM SPIE)  
**Description:** Advanced materials are needed that provide improved protection from various threats and environments. Environmentally protective materials/systems are needed which provide improved comfort and dexterity for mission execution across a wide spectrum of environments. Thermally protective materials are desired with improved durability, strength, and moisture vapor transport. Alternative spatial vector protection technologies are needed with increased deterrence, functional time, and low toxicity. Breakthrough alternative concealment technologies are needed. Advanced and innovative ways to improve weight distribution of load carriage equipment are needed. Technologies and processes which combine multiple capabilities, reduce weight and/or reduce cost are desired. Mature technology solutions are desired that can satisfy this requirement for $1 million or less. Because additional funds may become available, priced options for additional funding are encouraged. Proposals for base amounts greater than $1M will be considered, but will be at a competitive disadvantage to lower dollar figure efforts.  
**Technical POC:** Suzanne Horner, 703-806-5181, suzanne.e.horner.civ@mail.mil

**Requirement #:** ARMY-FY17-14-PEOSOLD01  
**Title:** "Advanced Technologies for Lighter Weight Soldier Protective Equipment”  
**Military System or Acquisition Customer:** Program Executive Office Soldier, Project Manager Soldier Protection & Individual Equipment (PM SPIE)  
**Description:** US Army has a need for advanced material, processing, and integration technology for lighter weight Soldier equipment with equal or improved performance. Novel fiber-based, film, or other advanced materials with improved tenacity, durability and ballistic performance are desired for application in hard armor, soft armor, and helmets. Technology is needed for improved hard armor inserts such as ultra-hard ceramics, advanced alternative materials, or novel integration methods. Advanced manufacturing methods are needed for hard armor and combat helmets to improve ballistic performance and reduce weight. High performance energy absorbing materials are needed for blunt impact protection for head, extremities, etc. Advanced transparent materials with improved scratch resistance and ultrafast transitioning are needed to improve ballistic eyewear. Mature technology solutions are desired that can satisfy this requirement for $1 million or less. Because additional funds may become available, priced options for additional funding are encouraged. Proposals for base amounts greater than $1M will be considered, but will be at a competitive disadvantage to lower dollar figure efforts.  
**Technical POC:** Virginia Halls, 703-806-5176, virginia.a.halls.civ@mail.mil
Operational Testing

Trust Your Product!?
Facilities

- MILCON remains at historically low spending levels (prior to major investments for Grow the Army, Transformation and BRAC 2005)
- Focuses on replacement of poor and failing training, operations and maintenance facilities, cyber capability facility deficits, footprint consolidation, and construction of new facilities for the National Guard and Reserves
  - Regular Army: 26 projects, $920M
  - Army National Guard: 8 projects, $211M
  - Army Reserve: 3 projects, $74M
- Supports U.S. and overseas Army Family Housing operation and maintenance, leases, and construction (6 projects, $183M)
- BRAC request supports environmental remediation actions at sites closed during prior BRAC rounds

<table>
<thead>
<tr>
<th>Appropriation</th>
<th>FY16 Actuals</th>
<th>FY 17 Enacted</th>
<th>FY 18 Request</th>
</tr>
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<tbody>
<tr>
<td>MILCON</td>
<td>1,183</td>
<td>1,003&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>Family Housing</td>
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<td>BRAC</td>
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<td>29</td>
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<tr>
<td>Totals</td>
<td>1,877</td>
<td>1,515</td>
<td>1,792</td>
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</table>
OCO-European Reassurance Initiative

- Continues investment in European assurance and increases investment in deterrence
- Continues Brigade Combat Team rotations to Europe and increases rotations in support of training exercises
- Increases warfighting capacity on the continent through increased prepositioned equipment stocks
- Continues to provide rotational aviation capability to the European Command Area of Responsibility

<table>
<thead>
<tr>
<th>Initiative ($M)</th>
<th>FY16 Actual</th>
<th>FY17 Enacted*</th>
<th>FY18 Request</th>
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<tbody>
<tr>
<td>Increased Presence</td>
<td>$ 320</td>
<td>$ 796</td>
<td>$ 1,313</td>
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<tr>
<td>Build Partner Capacity</td>
<td>$ 38</td>
<td>$ 51</td>
<td>$ 19</td>
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<tr>
<td>Additional Bilateral &amp; Multilateral Exercises &amp; Training</td>
<td>$ 61</td>
<td>$ 69</td>
<td>$ 158</td>
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<tr>
<td>Enhanced Prepositioning</td>
<td>$ -</td>
<td>$ 1,804</td>
<td>$ 1,732</td>
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<tr>
<td>Improved Infrastructure / Setting Conditions</td>
<td>$ 91</td>
<td>$ 82</td>
<td>$ 20</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$ 509</strong></td>
<td><strong>$ 2,802</strong></td>
<td><strong>$ 3,242</strong></td>
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</tbody>
</table>

*Does not account for Undistributed Adjustments such as Fuel Rate changes and Foreign Currency Fluctuations
(Re)defining Requirements?
This overview provides the highlights of the Army’s Budget submitted to the Congress as part of the FY 2018 President’s Budget. All Army budget materials are available to the public on the Assistant Secretary of the Army (Financial Management and Comptroller) website.

Contact Information

Ron Houle
President
Pivot Step Consultants LLC
700 12th Street NW, Suite 700
Washington, DC 20005

914-806-3775
Ron.houle76@gmail.com