ARMY SCORES

1 2 3 4 5
Weakest ⟷ Strongest

Procurement and Spending ■ Through FY 2018 ■ Pending

Main Battle Tank

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
M1A1/2 Abrams Inventory: **775/1,609** Fleet age: **28/7.5** Date: **1980** The Abrams is the main battle tank used by the Army in its armored brigade combat teams (BCTs). The Abrams went through a remanufacture program to extend its life to 2045.	4	4	**Next Generation Combat Vehicles (NGCV)** The NGCV program is intended to replace the Bradley fighting vehicle and the Abrams tank, and is number two among the Army's "Big Six" modernization priorities.		

Infantry Fighting Vehicle

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
M2 Bradley Inventory: **6,547** Fleet age: **13** Date: **1981** The Bradley is a tracked infantry fighting vehicle (IFV) meant to transport infantry and provide covering fire. The Bradley complements the Abrams tank in armored BCTs. Originally intended to be replaced by the Ground Combat Vehicle (now canceled), the Bradley underwent a remanufacture program to extend the life of the platform. The Army plans to keep the Bradley in service until 2045.	4	2	**Next Generation Combat Vehicles (NGCV)** The NGCV program is intended to replace the Bradley fighting vehicle and the Abrams tank, and is number two among the Army's "Big Six" modernization priorities.		

Armored Fighting Vehicle

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
Stryker Inventory: **3,892** Fleet age: **12** Date: **2002** The Stryker is a wheeled armored fighting vehicle that makes up the Stryker BCTs. The program was considered an interim vehicle to serve until the arrival of the Future Combat System (FCS), but that program was cancelled due to technology and cost hurdles. The Stryker is undergoing modifications to receive a double-v hull (DVH) to increase survivability. The Stryker is expected to remain in service for 30 years.	4	3	None		

See Methodology for descriptions of scores. Fleet age—Average age of fleet Date—Year fleet first entered service

ARMY SCORES

1 2 3 4 5
Weakest ⟷ Strongest

Procurement and Spending ■ Through FY 2018 ■ Pending

Armored Personnel Carrier

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
M113 Armored Personnel Carrier Inventory: **3,000** Fleet age: **19** Date: **1960** The M113 is a tracked APC that plays a supporting role for armored BCTs and infantry BCTs. The APC was also to be replaced by the GCV. Plans are to use the platform until 2045.	3	1	**Armored Multi-Purpose Vehicle (AMPV)** Timeline: **2018–2035** The AMPV will be adapted from an existing vehicle design which allowed the program to bypass the technology development phase. Initial operation capability is not expected until 2022. **PROCUREMENT** 42 2,894 **SPENDING** *($ millions)* $739 $13,036	2	5

Light Wheeled Vehicle

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
HMMWV Inventory: **150,000** Fleet age: **10.5** Date: **1985** The HMMWV is a light wheeled vehicle used to transport troops under some level of protection. The expected life span of the HMMWV is 15 years. Some HMMWVs will be replaced by the Joint Light Tactical Vehicle (JLTV).	2	1	**Joint Light Tactical Vehicle (JLTV)** Timeline: **2015–2036** Currently in development, the JLTV is a vehicle program meant to replace some of the HMMWVs and improve reliability and survivability of vehicles. So far the program has experienced a one-year delay due to changes in vehicle requirements. This is a joint program with USMC. IOC is anticipated at the end of 2019 for the Army. **PROCUREMENT** 4,800 44,299 **SPENDING** *($ millions)* $3,001 $25,028	1	4

See Methodology for descriptions of scores. Fleet age—Average age of fleet Date—Year fleet first entered service

ARMY SCORES

1 2 3 4 5
Weakest ⟷ Strongest

Procurement and Spending ■ Through FY 2018 ■ Pending

Attack Helicopter

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
AH-64 D Apache Inventory: **400** Fleet age: **13** Date: **1984** The Apache is an attack helicopter that makes up the Army Combat Aviation Brigades. The expected life cycle is about 20 years.	1	2	**AH-64E Reman** Timeline: **2010–2024** The AH-64E Reman is a program to remanufacture old Apache helicopters into the more advanced AH-64E version. The AH-64E will have more modern and interoperable systems and be able to carry modern munitions. **PROCUREMENT** 341 / 298 **SPENDING** *($ millions)* $8,500 / $6,048	2	4
AH-64E Inventory: **203** Fleet age: **4** Date: **2013** The AH-64E variant of the Apache is a remanufactured version with substantial upgrades in powerplant, avionics, communications, and weapons capabilities. The expected life cycle is about 20 years.	5		**AH-64E New Build** Timeline: **2013–2028** The AH-64E New Build pays for the production of new Apaches. The program is meant to modernize and sustain the current Apache inventory. The AH-64E will have more modern and interoperable systems and be able to carry modern munitions. FY 2019 defense appropriation support increased procurement quantities to address national guard shortfalls. **PROCUREMENT** 58 **SPENDING** *($ millions)* $1,528	2	4

Medium Lift

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
UH-60A Black Hawk Inventory: **802** Fleet age: **25** Date: **1979** The Black Hawk UH-60A is a medium-lift utility helicopter. The expected life span is about 25 years. This variant of the Black Hawk is now being replaced by the newer UH-60M variant.	1	3	**UH-60M Black Hawk** Timeline: **2005–2030** The UH-60Ms, currently in production, are intended to modernize and replace current Black Hawk inventories. The newer M variant will improve the Black Hawk's range and lift by upgrading the rotor blades, engine, and computers. **PROCUREMENT** 926 / 444 **SPENDING** *($ millions)* $18,149 / $9,290	5	4
UH-60M Black Hawk Inventory: **621** Fleet age: **9** Date: **2006** The Black Hawk UH-60M is a medium-lift utility helicopter that is a follow-on to the UH-60A. As the UH-60A is retired, the M variant will be the main medium-lift rotorcraft used by the Army. Expected to remain in service until 2030.	4				

See Methodology for descriptions of scores. Fleet age—Average age of fleet Date—Year fleet first entered service

ARMY SCORES

1 2 3 4 5
Weakest ⟷ Strongest

Procurement and Spending ■ Through FY 2018 ■ Pending

Heavy Lift

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
CH-47D Chinook Inventory: **60** Fleet age: **28** Date: **1962** The Chinook is a heavy-lift helicopter. It has an expected life cycle of 20 years. The CH-47Ds were originally upgraded from earlier variants of the CH-47s.	1	5	**CH-47F** Timeline: **2003–TBD** Currently in production, the CH-47F program is intended to keep the fleet of heavy-lift rotorcraft healthy as older variants of the CH-47 are retired. The program includes both remanufactured and new builds of CH-47s. The F variant has engine and airframe upgrades to lower the maintenance requirements. Total procurement numbers include the MH-47G configuration for U.S. Special Operations Command (67 total). FY2018 funding exceeded stated acquisition objectives, citing "emergency requirements." **PROCUREMENT** 548 **SPENDING** *($ millions)* $15,077	5	4
CH-47F Chinook Inventory: **390** Fleet age: **4.4** Date: **2001** CH-47F is "a remanufactured version of the CH-47D with a new digital cockpit and modified airframe to reduce vibrations." It also includes a common aviation architecture cockpit and advanced cargo-handling capabilities. The expected life span is 35 years.	5				

Intelligence, Surveillance, and Reconnaissance (ISR)

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
MQ-1C Gray Eagle Inventory: **125** Fleet age: **3** Date: **2009** The Gray Eagle is a medium-altitude long-endurance (MALE) unmanned aerial vehicle (UAV) used to conduct ISR missions. The use of MALE UAVs is a new capability for the Army. The Gray Eagle is currently in production.	5	5	**MQ-1C Gray Eagle** Timeline: **2010–2016** The MQ-1C UAV provides Army reconnaissance, surveillance, and target acquisition capabilities. The army is continuing to procure MQ1Cs to replace combat losses. **PROCUREMENT** 204 **SPENDING** *($ millions)* $5,761 $146	5	4

SOURCE: Heritage Foundation research using data from government documents and websites. See also Dakota L. Wood, ed., *2018 Index of U.S. Military Strength* (Washington, DC: The Heritage Foundation, 2018), http://index.heritage.org/militarystrength/.

See Methodology for descriptions of scores. Fleet age—Average age of fleet Date—Year fleet first entered service

NAVY SCORES

1 2 3 4 5
Weakest ⟷ Strongest

Procurement and Spending ■ Through FY 2018 ■ Pending

Aircraft Carrier

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
***Nimitz*-Class Aircraft Carrier (CVN-68)** Inventory: **10** Fleet age: **27.5** Date: **1975** The expected life of the *Nimitz*-class nuclear aircraft carrier is 50 years. The class will start retiring in the mid-2020s and will be replaced by the *Ford*-class carriers.	3	3	***Ford*-Class Aircraft Carrier (CVN-78)** Timeline: **2008–2018** Currently in production, the *Ford*-class will replace the current Nimitz-class aircraft carriers. The *Ford*-class will increase aircraft sorties by 25 percent, require a crew of several hundred fewer sailors, and be able to handle more advanced weapon systems. Program cost increases reflect an increased acquisition objective from 3 to 4 ships. **PROCUREMENT** 3 1 **SPENDING** *($ millions)* $32,707 $25,932	1	2
***Ford*-Class Aircraft Carrier (CVN-21)** Inventory: **1** Fleet age: **1** Date: **2017** The expected life of the *Ford*-class nuclear aircraft carrier is 50 years.	5				

See Methodology for descriptions of scores. Fleet age—Average age of fleet Date—Year fleet first entered service

NAVY SCORES

1 2 3 4 5
Weakest ⟷ Strongest

Procurement and Spending ■ Through FY 2018 ■ Pending

Large Surface Combatant

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
***Ticonderoga*-Class Cruiser (CG-47)** Inventory: **22** Fleet age: **28** Date: **1983** The *Ticonderoga*-class guided missile cruiser has a life expectancy of 40 years. There are plans to lay up half of the cruiser fleet to modernize it and extend its life into the 2030s. There are no replacements currently planned.	2	4	***Zumwalt*-Class Destroyer (DDG-1000)** Timeline: **2007–2009** The DDG-1000 was designed to be a new-generation destroyer capable of handling more advanced weapon systems with modern gun systems and a hull design aimed to reduce radar detectability. The DDG-1000 program was intended to produce a total of 32 ships, but this number has been reduced to 3. The first DDG-1000 was commissioned in October 2016. **PROCUREMENT** 3 **SPENDING** *($ millions)* $22,292 $1,200	1	1
***Zumwalt*-Class Destroyer** Inventory: **1** Fleet age: **2** Date: **2016** Although the ship has passed sea trials, it continues to experience problems with its combat systems. The second ship of the Zumwalt class is expected to commission in January 2019.	5				
***Arleigh Burke*-Class Destroyer (DDG-51)** Inventory: **66** Fleet age: **16.3** Date: **1991** The *Arleigh Burke*-class guided missile destroyer is the only operating class of large surface combatant currently in production. The Navy plans to extend the service life of the entire class to 45 years from its original life expectancy of 35 years.	3		***Arleigh Burke*-Class Destroyer (DDG-51)** Timeline: **1985–2024** The DDG-51 was restarted in FY 2013 to make up for the reduction in DDG-1000 acquisitions. Future DDG-51s will be upgraded to a Flight III design, which will include the Advanced Missile Defense Radar (AMDR), a more capable missile defense radar. Cost growth reflects a procurement increase to 95 ships. **PROCUREMENT** 80 15 **SPENDING** *($ millions)* $90,566 $31,182	4	4

See Methodology for descriptions of scores. Fleet age—Average age of fleet Date—Year fleet first entered service

NAVY SCORES

1 2 3 4 5
Weakest ⟷ Strongest

Procurement and Spending ■ Through FY 2018 ■ Pending

Small Surface Combatant

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
Littoral Combat Ship (LCS) Inventory: **12** Fleet age: **3.6** Date: **2008** The Littoral Combat Ship includes two classes: the *Independence*-class and the *Freedom*-class, both of which are in the early phases of production. The ship is expected to have a service life of 25 years. The LCS is designed to meet multiple missions and make up the entirety of the small surface combatant requirement. LCS 14 was commissioned in May 2018.	5	2	**Littoral Combat Ship (LCS)** Timeline: **2009–2025** The LCS is intended to fulfill the mine countermeasure, antisubmarine warfare, and surface warfare roles for the Navy. It will be the only small surface combatant in the fleet once the Navy's MCM ships retire. Procurement of 3 additional LCSs in FY2019 will exceed the planned procurement of 32. A new program called the FFG(x) will fill out the remaining 20-ship small surface combatant requirement. **PROCUREMENT** 32 **SPENDING** *($ millions)* $21,953	2	1
***Avenger*-Class Mine Counter Measure (MCM-1)** Inventory: **11** Fleet age: **26.1** Date: **1987** Designed for mine sweeping and hunting/killing, 11 of the 14 *Avenger*-class ships built are still active. The class has a 30-year life span. The remaining MCMs are expected to be decommissioned throughout the 2020s. There is no replacement in production for this class of ship, but the Navy plans to fill its mine countermeasure role with the LCS.	1				

SSGN Cruise Missile Submarine

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
***Ohio*-Class (SSGN-726)** Inventory: **4** Fleet age: **33.1** Date: **1981** Rather than retiring the four oldest *Ohio*-class ballistic missile submarines early, the Navy converted them to SSGN-726 guided missile submarines, equipping them with conventional Tomahawk cruise missiles rather than Trident ballistic missiles tipped with nuclear warheads. The SSGNs provide the Navy with a large stealthy strike capability. The conversion began in 2002 and was completed in 2007. Since the conversion, they are expected to be retired in the late 2020s. The Navy has no planned replacement for the SSGNs once they retire.	2	4	None		

See Methodology for descriptions of scores. Fleet age—Average age of fleet Date—Year fleet first entered service

NAVY SCORES

1 2 3 4 5
Weakest ⟷ Strongest

Procurement and Spending ■ Through FY 2018 ■ Pending

Attack Submarines

PLATFORM	Age Score	Capability Score
***Seawolf*-Class (SSN-21)** Inventory: **3** Fleet age: **18.1** Date: **1997** Larger and equipped with more torpedo tubes than the U.S. Navy's other current nuclear-powered attack submarines, the class was cancelled after three submarines were purchased due to budget constraints in the 1990s. The *Seawolf*-class submarines are expected to be retired by 2030. Meant to replace the *Los Angeles*-class, the *Seawolf* has been replaced by the *Virginia*-class attack submarine.	3	
***Los Angeles*-Class (SSN-688)** Inventory: **31** Fleet age: **27.2** Date: **1976** The *Los Angeles*-class comprises the largest portion of the Navy's attack submarine fleet. The class has a 33 year service life. Of the 62 built, 28 have been decommissioned and three have been inactivated awaiting decommissioning. The last *Los Angeles*-class submarine is expected to retire in the late 2020s. The *Virginia*-class is replacing this submarine class.	1	4
***Virginia*-Class (SSN-774)** Inventory: **15** Fleet age: **6.8** Date: **2004** The *Virginia*-class is the U.S. Navy's next-generation attack submarine. The life expectancy of the *Virginia*-class is 33 years. The *Virginia*-class is in production and will replace the *Los Angeles*-class and *Seawolf*-class attack submarines as they are decommissioned.	4	

MODERNIZATION PROGRAM	Size Score	Health Score
***Virginia*-Class (SSN-774)** Timeline: **1998–2021** In 2017, the Navy increased the official acquistion objective from 30 to 48. **PROCUREMENT** 28 20 **SPENDING** *($ millions)* $84,133 $80,073	5	4

See Methodology for descriptions of scores. Fleet age—Average age of fleet Date—Year fleet first entered service

NAVY SCORES

1 2 3 4 5
Weakest ⟷ Strongest

Procurement and Spending ■ Through FY 2018 ■ Pending

SSBN Ballistic Missile Submarine

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
***Ohio*-Class (SSBN)** Inventory: **14** Fleet age: **27.6** Date: **1984** The SSBN *Ohio*-class is one of the three legs of the U.S. military's nuclear triad. The *Ohio*-class's expected service life is 42 years. The *Ohio*-class fleet will begin retiring in 2027 at an estimated rate of one submarine per year until 2039. The Navy plans to replace the *Ohio*-class with the SSBN(X) or next-generation "Ohio replacement program."	2	4	***Columbia*-Class (SSBN-826)** Inventory: **n/a** Fleet age: **26.7** Date: **1984** In January 2017, the SSBN *Columbia*-class was designated a major defense acquisition program. This also marks the entry of the program into the engineering and manufacturing development phase. The ships will begin construction in FY 2021, and are expected to remain in service until 2080. **PROCUREMENT** 12 **SPENDING** *($ millions)* $9,534 $117,340	5	5

Amphibious Warfare Ship

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
***Wasp*-Class Amphibious Assault Ship (LHD-1)** Inventory: **8** Fleet age: **21.3** Date: **1989** The *Wasp*-class is the Navy's current amphibious landing helicopter deck, meant to replace the *Tarawa*-class LHA. This ship has a 40-year life span. This class is no longer in production and will be replaced by the new *America*-class.	3	3	***America*-class (LHA-6)** Timeline: **2007–2017** The *America*-class is in production with all three LHA-6s already procured. There has been significant cost growth in this program resulting in a Nunn–McCurdy cost breach. The program is also experiencing a 19-month delay because of design problems. One problem was caused by the level of heat from the F-35B STOVL's exhaust. The LHA-7 will follow designs from the LHA-6; FY2017 funded the procurement of the third and final *America*-Class LHA. **PROCUREMENT** 3 **SPENDING** *($ millions)* $10,748 $509	1	1
***America*-Class Amphibious Assault Ship (LHA-6)** Inventory: **1** Fleet age: **3.8** Date: **2014** The *America*-class, the Navy's new class of large-deck amphibious assault ships, is meant to replace the retiring *Wasp*-class LHDs. The lead ship was delivered in April 2014. The *America*-class is designed to accommodate the Marine Corps's F-35Bs.	5				

See Methodology for descriptions of scores. Fleet age—Average age of fleet Date—Year fleet first entered service

NAVY SCORES

1 2 3 4 5
Weakest ⟷ Strongest

Procurement and Spending ■ Through FY 2018 ■ Pending

Amphibious Warfare Ship

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
San Antonio-Class Amphibious Transport Dock (LPD-17) Inventory: **11** Fleet age: **7.1** Date: **2006** The *San Antonio*-class is the replacement for the *Austin*-class LPD and makes up most of the LPD inventory. The LPDs have well decks that allow the USMC to transfer the vehicles and supplies carried by the ship to the shore via landing craft. The LPD can also carry 4 CH-46s or 2 MV-22s. The class has a 40-year life expectancy.	5	3	**_San Antonio_-Class Amphibious Transport Dock (LPD-17)** Timeline: **1996–2016** The LPD-17s are replacements for the *San Antonio*-class LPDs. All 13 LPD-17s have been procured. **PROCUREMENT** 13 **SPENDING** *($ millions)* $22,464 $195	5	4
Whidbey Island-Class Dock Landing Ship (LSD-41) Inventory: **8** Fleet age: **29.5** Date: **1985** The *Whidbey Island*-class is a dock landing ship that transports Marine Corps units, equipment, and supplies for amphibious operations through use of its large stowage and well decks. The *Whidbey Island*-class and *Harpers Ferry*-class ships are to be replaced by LPD–117 Flight II program, which began procurement in FY2018.	3				
Harpers Ferry-Class Dock Landing Ships (LSD-49) Inventory: **4** Fleet age: **22.2** Date: **1995** A follow-on to the *Whidbey Island*-class, the *Harpers Ferry*-class LSDs have a larger well deck with more space for vehicle stowage and landing craft. Like the *Whidbey Island*-class, these ships should remain in service until 2038. The *Whidbey Island*-class and *Harpers Ferry*-class ships are planned to be replaced by the LPD–17 Flight II, which began procurement in FY2018.	3		**LPD-17 Flight II** Timeline: **2018–TBD** Previously known as LX(R), the LPD–17 Flight II program will procure 13 ships to replace the Navy's LSD-type ships. The Navy originally planned to procure the first Flight II ships in 2020, however accelerated procurement funding enabled procurement of the first LPD-17 Flight II in 2018. A procurement timeline remains in development. **PROCUREMENT** 1 12 **SPENDING** *($ millions)* $1,800	5	5

See Methodology for descriptions of scores. Fleet age—Average age of fleet Date—Year fleet first entered service

NAVY SCORES

1 2 3 4 5
Weakest ⟷ Strongest

Procurement and Spending ■ Through FY 2018 ■ Pending

Airborne Early Warning

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
E-2C Hawkeye Inventory: **50** Fleet age: **32** Date: **1964** The E-2C Hawkeye is a battle management and airborne early warning aircraft. While still operational, the E-2C is nearing the end of its service life and is being replaced by the E-2D Advanced Hawkeye. The E-2C fleet received a series of upgrades to mechanical and computer systems around the year 2000.	1	4	**E-2D Advanced Hawkeye** Timeline: **2009–2024** Meant to replace the E-2C, the E-2D Hawkeye is in production. The original plan was to purchase five per year until 2023. **PROCUREMENT** 51 / 24 **SPENDING** *($ millions)* $14,805 / $6,652	5	4
E-2D Advanced Hawkeye Inventory: **30** Fleet age: **3** Date: **2013** A more advanced version of the E-2C, the E-2D provides improved battle management capabilities.	5				

Electronic Attack Aircraft

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
EA-18G Growler Inventory: **131** Fleet age: **4** Date: **2010** The EA-18G electronic warfare aircraft replaced the legacy EA-6B Prowlers. The platform is still in production and is relatively new.	5	5	**EA-18G Growler** Timeline: **2006–2016** The EA-18G Growler has been in production for several years, with few current acquisition problems. The program total of 160 is an increase from previous years, which estimated the Navy would purchase 88. All 160 have been procured. **PROCUREMENT** 160 **SPENDING** *($ millions)* $15,031 / $377	5	4

See Methodology for descriptions of scores. Fleet age—Average age of fleet Date—Year fleet first entered service

NAVY SCORES

1 2 3 4 5
Weakest ⟷ Strongest

Procurement and Spending ■ Through FY 2018 ■ Pending

Fighter/Attack Aircraft

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
F/A-18 A-D Hornet Inventory: **139** Fleet age: **25.5** Date: **1983** The F/A-18 is the Navy's older carrier-based fighter and strike attack aircraft. The Navy has been trying to extend the life of the later variants (C-D) from 6,000 flight hours to potentially 10,000. In 2019, the Navy plans to transfer its remaining F/A–18 A–Ds to the Marine Corps to help maintain its fleet through 2030.	1	3	**F-35C Joint Strike Fighter** Timeline: **2009–2033** The F-35C is the Navy's variant of the Joint Strike Fighter. The Joint Strike Fighter faced many issues during its developmental stages, including engine problems, software development delays, cost overruns incurring a Nunn–McCurdy breach, and structural problems. The F-35C variant was always scheduled to be the last one to reach IOC, which repeatedly has been and is currently planned for 2019. **PROCUREMENT** 75 185 **SPENDING** *($ millions)* $133,099 $273,122	1	1
F/A-18 E/F Super Hornet Inventory: **561** Fleet age: **15** Date: **2001** The F/A-18 E/F Super Hornet is a newer, more capable version of the Hornet. The Navy is aiming to have a combination of Super Hornets and F-35Cs make up their carrier-based strike capability. The F/A-18E-F has an expected service life of 20 years.	2				

NOTES: The total program dollar value reflects the full F–35 joint program, including engine procurement. The Navy is also procuring 67 F-35Cs for the Marine Corps. Age of fleet is calculated from date of commissioning to January 2016.
SOURCE: Heritage Foundation research using data from government documents and websites. See also Dakota L. Wood, ed., *2018 Index of U.S. Military Strength* (Washington, DC: The Heritage Foundation, 2018), http://index.heritage.org/militarystrength/.

See Methodology for descriptions of scores. Fleet age—Average age of fleet Date—Year fleet first entered service

AIR FORCE SCORES

1 2 3 4 5
Weakest ⟷ Strongest

Procurement and Spending ■ Through FY 2018 ■ Pending

Strategic Bomber

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
B-52 Inventory: **58** Fleet age: **56** Date: **1955** The B-52, the oldest of the bombers, can provide global strike capabilities with conventional or nuclear payloads, although it largely has made up the core of the strategic bomber force. The aircraft entered service in 1955 and was in production until 1962.	1		The B-21 is intended to replace the Air Force bomber fleet. Initial conventional capability is enhanced for the mid-2020s. The program completed primary design review in early 2017.		
B-1 Inventory: **61** Fleet age: **30** Date: **1986** The B-1, originally designed to carry nuclear weapons, was reconfigured for conventional weapons in the early 1990s. The program entered service in 1986 and completed production in 1988. The B-1B will remain in service until 2040.	3	1			
B-2 Inventory: **20** Fleet age: **23** Date: **1997** The B-2 bomber provides the USAF with global strike capabilities. It can carry both nuclear and conventional payloads. Initially deployed in 1997, the aircraft communication modules are being upgraded. It is expected to remain in service until 2058.	4				

See Methodology for descriptions of scores. Fleet age—Average age of fleet Date—Year fleet first entered service

AIR FORCE SCORES

1 2 3 4 5
Weakest ⟷ Strongest

Procurement and Spending ■ Through FY 2018 ■ Pending

Ground Attack/Multi-Role Aircraft

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
A-10 Thunderbolt II Inventory: **141** Fleet age: **36** Date: **1977** The A-10 is the only USAF platform designed primarily for close air support, which it provides usng a variety of conventional munitions. The USAF has proposed retiring the aircraft earlier than the planned 2028 date for budget reasons.	2	1	**F-35A** Timeline: **2007–2038** The F-35A is the Air Force variant of the Joint Strike Fighter program, a multirole fixed-wing aircraft. It is currently in early stages of production. The program has faced many issues including a Nunn–McCurdy cost breach during development, grounding due to engine problems, and software development problems. The F-35A achieved IOC on August 2, 2016. **PROCUREMENT** 234 1,529 **SPENDING** *($ millions)* $132,461 $273,670	5	1
F-16 Inventory: **570** Fleet age: **27** Date: **1978** The F-16 is a multirole aircraft that was built between 1976 and 1999. It has received various upgrade blocks over that time. The aircraft was expected to last about 30 years.	2	1			
F-35A Inventory: **122** Fleet age: **2.6** Date: **2016** See Ground Attack Modernization Program entry. The USAF has received a small portion of a projected 1,763 total aircraft for the program.	5				

Fighter Aircraft

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
F-15 Inventory: **317** Fleet age: **30** Date: **1979** The F-15 is a legacy fighter that performs air superiority missions. It is no longer in production. The newer F-15E Strike Eagle variant is to operate until 2025 to supplement the F-22.	1	2	None		
F-22 Inventory: **166** Fleet age: **10** Date: **2005** The F-22 is the preeminent air superiority fighter aircraft. The stealth aircraft completed production in 2009 after a dramatic cut of its overall order from 750 to 187. It is currently being modified.	5				

See Methodology for descriptions of scores. Fleet age—Average age of fleet Date—Year fleet first entered service

AIR FORCE SCORES

1 2 3 4 5
Weakest ⟷ Strongest

Procurement and Spending ■ Through FY 2018 ■ Pending

Tanker

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
KC-10 Inventory: **59** Fleet age: **33** Date: **1981** An aerial refueling tanker supporting the USAF's Mobility and Lift mission, the KC-10 was deployed in 1981. The aircraft was purchased to increase the number of tankers available, which the Air Force posited did not meet current requirements. The aircraft is no longer in production, but is planned to remain in inventory until 2040.	3	1	**KC-46** Timeline: **2015–2027** The KC-46 is meant to replace the KC-135. The program entered low rate initial production in August 2016 after having been delayed by a year due to "design changes and late parts." The first delivery is anticipated in October 2018. **PROCUREMENT** 55 / 124 **SPENDING** *($ millions)* $15,712 / $28,106	1	3
KC-135 Inventory: **156** Fleet age: **57** Date: **1956** The KC-135 supports the mobility and lift mission by providing the joint force aerial refueling capability. The KC-135 makes up the bulk of the aerial refueling capability. The aircraft was initially deployed in 1956, completing production in 1965. The aircraft has undergone several modifications, mainly engine upgrades to improve reliability. It is expected to be in service until 2040, but excessive usage has created many reliability issues due to problems from wear and tear, such as corrosion and fuel bladder leaks.	1				

Heavy Lift

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
C-5M Inventory: **35** Fleet age: **30** Date: **1970** The C-5 is the USAF's largest mobility and lift aircraft, enabling it to transport a greater amount of cargo (270,000 pounds) compared with other transport aircraft. Originally deployed in 1970, the aircraft has undergone three modification cycles. The latest started in 2009 to upgrade the platform to a C-5M. Funding is now completed for the modernization program.	2	5	None		

See Methodology for descriptions of scores. Fleet age—Average age of fleet Date—Year fleet first entered service

AIR FORCE SCORES

1 2 3 4 5
Weakest ⟷ Strongest

Procurement and Spending ■ Through FY 2018 ■ Pending

Heavy Lift

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
C-17 Inventory: **162** Fleet age: **14** Date: **1993** The C-17 is a large fixed-wing transport aircraft in support of USAF's mobility and lift mission. The aircraft can lift 170,900 pounds and land on short runways. The aircraft entered service in 1995. The program was expanded from 120 aircraft to 223 aircraft. The procurement program for the C-17 was recently completed. The aircraft was originally planned to last 30 years, but more frequent usage may shorten that life span.	3	5	None		

Medium Lift

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
C-130J Inventory: **87** Fleet age: **8.8** Date: **1956** The C-130J aircraft supports the USAF's tactical mobility and lift capability. Unlike the other transport aircraft, the C-130s can land on rough dirt strips. It can carry about 42,000 pounds and is expected to last 25 years. The air force active component completed transition to the C-130J in October 2017.	5	5	**C-130J** Timeline: **1994–2023** The program provides the Air Force with an upgraded medium-lift capability. The C-130J can lift over 40,000 pounds of cargo. The frame supports various other types of aircraft, such as the USMC tanker KC-130J. There are few issues with the current acquisition of C-130Js. **PROCUREMENT** 168 2 **SPENDING** *($ millions)* $14,124 $110	4	4

See Methodology for descriptions of scores. Fleet age—Average age of fleet Date—Year fleet first entered service

AIR FORCE SCORES

1 2 3 4 5
Weakest ⟷ Strongest

Procurement and Spending ■ Through FY 2018 ■ Pending

Intelligence, Surveillance, and Reconnaissance (ISR)

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
RQ-4 Global Hawk Inventory: **29** Fleet age: **6.6** Date: **2011** The RQ-4 is an unmanned aerial vehicle (UAV) that supports the USAF's ISR mission. Unlike the MQ-1 or MQ-9, the RQ-4 is a high-altitude, long-endurance (HALE) UAV, which in addition to higher altitude has a longer range than medium-altitude, long-endurance (MALE) UAVs.	4	4	None		
MQ-9 A/B Inventory: **200** Fleet age: **4.4** Date: **2007** The MQ-9 Reaper replaced the MQ-1 Predator to fulfill the USAF's ISR mission. The UAV is in production. The expected life span of the MQ-9 is 20 years.	4		**MQ-9** Timeline: **2002–2017** The MQ-9 is in production. It has experienced delays due to manufacturing and testing problems. The Air Force continues to increase planned acquistion objectives for the MQ-9. **PROCUREMENT** 363 / 73 **SPENDING** *($ millions)* $8,947 / $4,215	5	3
RC-135 Rivet Joint Inventory: **22** Fleet age: **54** Date: **1964** The RC-135 is a manned ISR aircraft. It was originally fielded in 1964. The Air Force plans to keep the system in service through 2018.	1		None		
U-2 Inventory: **27** Fleet age: **34** Date: **1956** Initially deployed in 1956, this manned ISR aircraft can operate at high altitudes and long ranges. The U-2 has undergone a series of modification programs since 1967 to extend the life of the aircraft.	3				

See Methodology for descriptions of scores. Fleet age—Average age of fleet Date—Year fleet first entered service

AIR FORCE SCORES

1 2 3 4 5
Weakest ⟷ Strongest

Procurement and Spending ■ Through FY 2018 ■ Pending

Command and Control

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
E-3 AWACS Inventory: **31** Fleet age: **39** Date: **1978** The E-3 is an airborne warning and control system (AWACS) that provides USAF with command and control and battle management capabilities. The aircraft entered service in 1978. No longer in production, the current inventory is undergoing modifications to upgrade computing systems. The fleet is currently intended to remain in service until 2025.	1	2	None		
E-8 JSTARS Inventory: **16** Fleet age: **17** Date: **1997** The E-8 is a newer command and control aircraft that provides battle management and C4ISR capabilities, mainly by providing ground surveillance to various air and ground commanders in theater. The aircraft first entered service in 1997 and is not currently in production. The Air Force plans to retire the JSTARs in the early 2030s.	2				

SOURCE: Heritage Foundation research using data from government documents and websites. See also Dakota L. Wood, ed., *2018 Index of U.S. Military Strength* (Washington, DC: The Heritage Foundation, 2018), http://index.heritage.org/militarystrength/.

See Methodology for descriptions of scores. Fleet age—Average age of fleet Date—Year fleet first entered service

MARINE CORPS SCORES

1 2 3 4 5
Weakest ⟷ Strongest

Procurement and Spending ■ Through FY 2018 ■ Pending

Main Battle Tank

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
M1A1 Abrams Inventory: **447** Fleet age: **28** Date: **1989** The M1A1 Abrams Main Battle Tank provides the Marine Corps with heavy-armor direct fire capabilities. It is expected to remain in service beyond 2028.	2	1	None		

Light Wheeled Vehicle

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
HMMWV Inventory: **17,000** Fleet age: **10** Date: **1985** The HMMWV is a light wheeled vehicle used to transport troops with some measure of protection against light arms, blast, and fragmentation. The expected life span of the HMMWV is 15 years. Some HMMWVs will be replaced by the Joint Light Tactical Vehicle (JLTV).	2	1	**Joint Light Tactical Vehicle (JLTV)** Timeline: **2015–2023** Currently in development, the JLTV is a vehicle program meant to replace some of the HMMWVs and improve reliability, survivability, and strategic and operational transportability. So far the program has experienced a one-year delay due to changes in vehicle requirements. This is a joint program with Army. The Marine Corps has increased its acquistion objective by 1,850 vehicles, bringing the total planned procurement to 9,091 and extending the timeline procurement through 2023. **PROCUREMENT** 850 8,511 **SPENDING** *($ millions)* $3,001 $25,028	2	5

NOTE: JLTV spending figures reflect the full joint program spending.

See Methodology for descriptions of scores. Fleet age—Average age of fleet Date—Year fleet first entered service

MARINE CORPS SCORES

1 2 3 4 5
Weakest ⟷ Strongest

Procurement and Spending ■ Through FY 2018 ■ Pending

Amphibious Assault Vehicle

PLATFORM	Age Score	Capability Score
AAV Inventory: **~1,200** Fleet age: **40** Date: **1972** The Amphibious Assault Vehicle transports troops and cargo from ship to shore. The AAV is undergoing a survivability upgrade to extend its life through 2035. The Marine Corps has procured 48 upgraded vehicles to-date. It will upgrade 392 in total.	1	1
LAV-25 Inventory: **~900** Fleet age: **26** Date: **1983** The LAV is a wheeled light armor vehicle with modest amphibious capability used for armored reconnaissance and highly mobile fire support. It has undergone several service life extensions (most recently in 2012) and will be in service until 2035.	2	1

MODERNIZATION PROGRAM	Size Score	Health Score
Amphibious Combat Vehicle (ACV) 1.1 Timeline: **2014–2021** The Amphibious Combat Vehicle is now a major defense acquisition program. The ACV is intended to replace the aging AAV. ACV 1.1 will procure 204 vehicles. Delivery of the first 30 vehicles are anticipated for 2019. **PROCUREMENT** 26 178 **SPENDING** *($ millions)* $619 $1,271	3	5

Attack Helicopters

PLATFORM	Age Score	Capability Score
AH-1W Cobra Inventory: **77** Fleet age: **26** Date: **1986** The Super Cobra is an attack helicopter that provides the Marines with close air support and armed reconnaissance. The Super Cobra will remain in service until 2021, when it will be replaced with the AH-1Z.	1	2
AH-1Z Viper Inventory: **76** Fleet age: **4** Date: **2010** The AH-1Z Viper is the follow on to the AH-1W Cobra attack helicopter. The Viper will have greater speed, payload, and range, as well as a more advanced cockpit. It is expected that the AH-1Z will fully replace the AH-1W Cobra in 2021. The expected operational life span of the Viper is 30 years.	5	

MODERNIZATION PROGRAM	Size Score	Health Score
AH-1Z Timeline: **2004–2020** The new AH-1Z Viper program is part of a larger modification program to the H-1 platform. The new H-1 rotorcraft will have upgraded avionics, rotor blades, transmissions, landing gear, and structural modifications to enhance speed, maneuverability, and payload. The AH-1Z started out as a remanufacture program, but that was later changed to a New Build program because of concerns over existing airframes. While costs have increased, the program has not met the APB breach threshold. **PROCUREMENT** 148 41 **SPENDING** *($ millions)* $11,554 $731	5	3

See Methodology for descriptions of scores. Fleet age—Average age of fleet Date—Year fleet first entered service

MARINE CORPS SCORES

1 2 3 4 5
Weakest ⟷ Strongest

Procurement and Spending ■ Through FY 2018 ■ Pending

Airborne Electronic Attack Aircraft/ Ground Attack Aircraft

PLATFORM	Age Score	Capability Score
EA-6B Inventory: **6** Fleet age: **29** Date: **1971** The Prowler provides the USMC with an electronic warfare capability. The last squadron will be retired in October 2018.	1	1
AV-8B Inventory: **130** Fleet age: **21** Date: **1985** The Harrier is a vertical/short takeoff and landing aircraft designed to fly from LHA/LHDs. It provides strike and reconnaissance capabilities. The aircraft will be retired around 2024.	5	
F-35B Inventory: **50** Fleet age: **3** Date: **2015** The F-35B is the Marine Corps's short takeoff and vertical landing variant meant to replace the AV-8B Harrier. Despite some development problems, the F-35B achieved IOC in July 2015.	5	
F/A-18 A-D Inventory: **251** Fleet age: **26** Date: **1978** Many aircraft in the F/A-18 fleet have logged about 8,000 hours compared with the originally intended 6,000. The fleet life has been extended until 2030. This is necessary to bridge the gap to when the F-35Bs and F-35Cs are available.	3	

MODERNIZATION PROGRAM	Size Score	Health Score
F-35B/C Timeline: **2008–2033** The Corps is purchasing 353 F-35Bs and 67 F-35Cs. The F-35B is the USMC version of the Joint Strike Fighter program. It is meant to replace the AV-8B Harrier, completing transition by 2030. The Joint Strike Fighter has had many development issues, including a Nunn–McCurdy cost breach and major development issues. The F-35B in particular has had software development problems and engine problems that led to grounding. The Marine Corps announced IOC of its second F-35B squadron in June 2016. The F-35C is not anticipated to achieve IOC until 2019. **PROCUREMENT** 131 289 **SPENDING** *($ millions)* $127,534 $278,597	3	1

See Methodology for descriptions of scores. Fleet age—Average age of fleet Date—Year fleet first entered service

MARINE CORPS SCORES

1 2 3 4 5
Weakest ⟷ Strongest

Procurement and Spending ■ Through FY 2018 ■ Pending

Medium Lift

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
MV-22 Inventory: **277** Fleet age: **6** Date: **2007** The Osprey is a vertical takeoff and landing tilt-rotor platform designed to support expeditionary assault, cargo lift, and raid operations. The program is still in production. The life expectancy of the MV-22 is 23 years.	4	5	**MV-22B** Timeline: **1997–2031** The Osprey is in production, and the platform is meeting performance requirements. The modernization program is not facing any serious issues. Procurement figures include 48 Navy MV-22s and 50 of the carrier variant CV-22s. **PROCUREMENT** 403 / 59 **SPENDING** *($ millions)* $47,898 / $8,341	4	5

Heavy Lift

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
CH-53E Super Stallion Inventory: **139** Fleet age: **29** Date: **1981** The CH-53E is a heavy-lift rotorcraft. The aircraft will be replaced by the CH-53K, which will have a greater lift capacity. The program life of the CH-53E is 41 years.	2	1	**CH-53K** Timeline: **2017–2028** The program is in development. It is meant to replace the CH-53E and provide increased range, survivability, and payload. The program still has not fully developed the critical technology necessary. The program has experienced delays and cost growth. **PROCUREMENT** 6 / 194 **SPENDING** *($ millions)* $6,969 / $24,196	5	3

Tanker

PLATFORM	Age Score	Capability Score	MODERNIZATION PROGRAM	Size Score	Health Score
KC-130J Inventory: **45** Fleet age: **10** Date: **2004** The KC-130J is both a tanker and transport aircraft. It can transport troops, provide imagery reconnaissance, and perform tactical aerial refueling. This platform is currently in production. The airframe is expected to last 38 years.	4	5	**KC-130J** Timeline: **1997–2028** The KC-130J is both a tanker and transport aircraft. The procurement program for the KC-130J is not facing acquisition problems. **PROCUREMENT** 63 / 41 **SPENDING** *($ millions)* $4,992 / $4,904	4	4

NOTES: The total program dollar value reflects the full F–35 joint program, including engine procurement. As part of the F–35 program, the Navy is purchasing 67 F-35Cs for the U.S. Marine Corps, which are included here. The MV-22B program also includes some costs from the U.S. Air Force procurement. The AH–1Z costs include costs of UH–1 procurement.
SOURCE: Heritage Foundation research using data from government documents and websites. See also Dakota L. Wood, ed., *2018 Index of U.S. Military Strength* (Washington, DC: The Heritage Foundation, 2018), http://index.heritage.org/militarystrength/.

See Methodology for descriptions of scores. Fleet age—Average age of fleet Date—Year fleet first entered service