2018 was a year of significant change for the Army as it sought to reorient itself toward restoring tactical overmatch against strategic competitors like China and Russia. Given the challenges presented by these strategic competitors, the Army needs to transform its approach to acquisition and started to do so in 2018. At the start of the fiscal year (FY), the Army released a new modernization strategy centralized around six priorities that best aligned with the Army’s emerging Multi-Domain Operations operational concept. Furthermore, the Army reorganized its acquisition structures and processes in pursuit of its new modernization strategy, making some of the biggest changes to the Army’s structure since the 1970s. The Army established cross-functional teams to lead the development of each of its Big Six programs and created a new four-star command, the Army Futures Command, to oversee all elements of Army modernization.

It will take several years for the Army to fully reorient itself and transform its acquisition system. Some initial signs of change are already reflected in the Army’s contracting trends. Using the methodology used in other CSIS reports on federal contracting, this paper, a part of DIIG’s annual Acquisition Trends analysis, examines the trends in what the Army is buying, how the Army is buying, and whom the Army is buying from, using data from the Federal Procurement Data System (FPDS). For this paper, CSIS focused on the following questions:

- Have there been significant changes across the different sectors of the Army’s industrial base to reflect its Big Six modernization priorities?
- Does the resurgence of Other Transaction Authority signify a new R&D paradigm?
- Has the Army’s new modernization approach changed its usage of fixed-price contracts?
- What has the Army’s slow but steady growth in contract spending meant for the composition of its industrial base?

ARMY CONTRACT SPENDING IN A BUDGETARY CONTEXT

Army contract obligations increased from $80.1 billion in FY 2017 to $93.2 billion in FY 2018, a 15 percent increase. Since the trough in FY 2015, Army contract obligations have increased 21 percent over the last three years.
As shown in Figure 1 below, Army contract obligations have outpaced the growth in the Army’s budget, as measured by Total Obligation Authority (TOA), over the last three years. Army TOA increased 13 percent between FY 2015 and FY 2018, compared to the 21 percent growth in Army contract obligations. Although Army contracting has rebounded faster than the Army’s budget, Army contract spending as a share of total Army TOA has yet to recover from sequestration and the defense drawdown. In FY 2018, Army contract obligations accounted for 51 percent of total Army TOA in FY 2018, compared to an annual average of 53 percent this century.

**WHAT IS THE ARMY BUYING?**

While Army contract obligations increased across all three areas (Products, Services, and R&D), Army Services growth outpaced the other two product or service categories. In FY 2018, Army Services contract obligations increased from $44.0 billion to $52.4 billion, a 19 percent increase, a rate above the total 15 percent growth in Army contracting. Army contract obligations for Products and R&D grew at nearly equal rates in FY 2018, 10 percent and 9 percent, respectively, below the overall rate of growth.

Between FY 2015 and FY 2018, Army contract obligations increased from $160.3 billion to $181 billion, a 21 percent increase. Over that same period, Army Products contract obligations increased 25 percent; Army Services are up 20 percent; and Army R&D contract obligations have increased just 12 percent, though analysis later in this paper suggests that a newly emerging R&D paradigm may explain why R&D contracting is lagging the other two areas.

**ARMY CONTRACT OBLIGATIONS BY PLATFORM PORTFOLIO**

The Army contracting data show significant increases in contract spending in FY 2018 in many of the platform portfolios most closely aligned with the Army’s Big Six modernization priorities.

In FY 2018, there was a significant increase in contract obligations in the Air & Missile Defense and Land Vehicles sector, which align with the Army’s fifth-ranked (Air & Missile Defense) and second-ranked (Next Generation Combat Vehicle (NGCV)) modernization priorities, respectively. Army Air & Missile Defense contract obligations increased 68 percent in FY 2018, the largest percentage increase across all platform portfolios, while Land Vehicles contract obligations increased 50 percent. The substantial increase in Army Air & Missile Defense contract spending in FY 2018 marked a turnaround for a sector that had been declining since FY 2016, even as total Army obligations for Air & Missile Defense had increased. Army R&D obligations have lagged behind the other two areas, growing just 12 percent in FY 2018, though analysis later in this paper suggests that a newly emerging R&D paradigm may explain why R&D contracting is lagging the other two areas.

**Figure 1: Army Contract Obligations versus TOA, 2000–2018**

![Figure 1: Army Contract Obligations versus TOA, 2000–2018](https://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2020/FY20_Green_Book.pdf)
contracting had rebounded. The Army’s significant increase in spending in Land Vehicles in FY 2018 marked a much-needed investment in a sector that had been heaviest hit by sequestration and the defense drawdown and had only remained steady between FY 2015 and FY 2018.\(^5\)

Army Electronics and Communications contract obligations, generally aligning with its fourth-ranked modernization priority (Network) increased 14 percent in FY 2018, a rate just below the total growth in Army contracts.

Army Ordnance & Missiles contract obligations, the platform portfolio most aligned with the Army’s top modernization priority (Long-Range Precision Fires), increased 3 percent in FY 2018 after growing 79 percent between FY 2015 and FY 2017.\(^6\) Although the Army’s Ordnance & Missiles contract spending slowed down in FY 2018, the Army still spent $0.66 billion more than it averaged annually from FY 2000 to FY 2017.

Army Aviation contract obligations declined 16 percent in FY 2018. Although the Aviation platform portfolio most closely aligned with the Army’s third-ranked modernization priority (Future Vertical Lift), these trends are not driven by the FVL program, given the source of the decline and FVL acquisition program timelines. The two largest efforts comprising FVL—Future Attack Reconnaissance Aircraft (FARA) and Future Long-Range Assault Aircraft (FLRAA)—are now in the prototyping phase and are not planned to enter production until 2024 and 2028, respectively.\(^7\) Neither existed in their current form in FY 2018. More detailed analysis of the FPDS data show that the declines in Army aviation contract spending were concentrated in the procurement of Products connected to the existing legacy aircraft fleet, with Army Aviation R&D and Services related contract spending increasing.

**ARMY CONTRACT OBLIGATIONS BY SERVICES CATEGORY**

A 32 percent increase in Army Facility-related Services and Construction
(FRS&C) contract obligations, also seen in the facility and construction category in Figure 3 above, helped drive the 19 percent in Army Services contract spending in FY 2018. Army FRS&C contract obligations increased from $17.9 billion in FY 2017 to $23.5 billion in FY 2018, the highest level since FY 2012. Equipment-related Services (ERS) increased 19 percent in FY 2018, a rate equal to the total growth in Army Services, while Information and Communications Technology (ICT) grew slightly below the topline growth, increasing 15 percent. Finally, Medical (MED) and Professional, Administrative, and Management services (PAMS) contract obligations increased in FY 2018 but at rates well below the topline, increasing 3 percent and 7 percent, respectively.

**IS THE ARMY’S R&D PARADIGM HANGING?**

The data show that although the Army’s R&D contracting portfolio continues to make slow but steady progress in recovering from the substantial cuts suffered during sequestration and the defense drawdown, growth has been uneven across the pipeline, and overall Army R&D contract spending remains below historical levels.

Combined contract spending for the two R&D seed-corn categories, Basic Research (6.1) and Applied Research (6.2), increased 11 percent in FY 2018, but that only tells half the story. Basic Research contract obligations increased 31 percent in FY 2018, compared to a 12 percent decline in Applied Research contract obligations.

The Army’s development pipeline for major weapon systems saw increased contract obligations in FY 2018, but significant concerns remain. Promisingly, Army Advanced Component Development & Prototypes (6.4) and System Development & Demonstration (SD&D) (6.5) contract obligations increased 41 percent and 80 percent, respectively, in FY 2018. Although the 80 percent increase in SD&D contract obligations may be relatively small in dollar terms, $0.08 billion to $0.15 billion, this increase is still promising for an account in which the Army de-obligated more money than it obligated just two years ago. However, SD&D levels remain far below even their 2000 levels. Also worrisome is the ongoing decline in the Army’s Advanced Technology Development (6.3) since FY 2009. Army ATD contract obligations declined 33 percent in FY 2018 and have fallen 44 percent since FY 2015. Army
ATD contract obligations fell to $0.71 billion in FY 2018, their lowest level this century and over three times below historical averages.

**ARMY OTA TRENDS**
The Army’s R&D contracting portfolio has shown some signs of recovery, but the Army’s paradigm for its development pipeline for major weapon systems might be undergoing an evolution given that “the Army has been at the forefront of DoD’s Other Transaction Authority (OTA) resurgence.”

The Army was already using OTAs before the recent legislation encouraging greater usage, but it has seen a 348 percent increase in OTA obligations over the last three years. As shown in Figure 6, 96 percent of Army OTA obligations awarded between FY 2014 and FY 2018 went towards R&D activities. Combined Army OTA and R&D contract obligations totaled $7.7 billion in FY 2018, approximately $0.8 billion less than historical averages this century but much higher than the $4.9 billion in R&D contract obligations. Combined Army OTA and R&D contract obligations have also been increasing at a faster rate than the total growth in Army contracting, increasing 28 percent in FY 2018 and 52 percent between FY 2015 and FY 2018.

Analyzing the OTA data by Product or Service Code (PSC) demonstrates, as shown in Table 1, that most Army OTA obligations go toward the development of major weapon systems. Given that DoD’s OTA authority was historically designed to help enable prototyping, it is not surprising that the predominant majority of Army R&D OTA obligations were awarded for Advanced Component Development & Prototypes (6.4) activities, with Advanced Technology Development (6.3) a distant second. These trends are likely to continue in the years to come because the Army plans to heavily leverage OTAs and other rapid acquisition authorities to develop many of its Big Six modernization efforts using competitive prototyping competitions. While Congress has given DoD the authority to award follow-on production contracts using OTAs, it will be several years before the Army is prepared to award those big money follow-on production contracts.

**HOW IS THE ARMY BUYING IT?**

**Figure 7: Army Contract Obligations by Pricing Mechanism, 2000–2018**

![Graph showing Army Contract Obligations by Pricing Mechanism, 2000–2018](image)

Source: FPDS; CSIS analysis.

Figure 7 shows that fixed-price remains the Army’s predominant contract pricing mechanism. Since FY 2014, nearly three-fourths of all Army contract obligations have been awarded using a fixed-price contract structure. In FY 2018, there was a slight up-tick in the Army’s use of Times & Materials contract pricing structures, following several years of decline. Time & Materials contracts accounted for approximately 7 percent of Army contract obligations between FY 2007 and FY 2010 but had been gradually declining in the years since as the contract pricing structure fell out of favor in the Army. Whether this up-tick signals a resurgence in the Army’s use of Time & Materials remains to be seen but is worth watching given the Army’s previous usage levels.

**WHOM IS THE ARMY BUYING FROM?**

Medium-sized vendors remain the biggest beneficiary of the Army’s contracting rebound, outpacing the growth by the Big Five, Large-, and Small-sized vendors. Total Army contract obligations awarded to Medium-sized vendors increased from $21.9 billion in FY 2017 to $27.1 billion in FY 2018, a 24 percent increase. Total Army
contract obligations awarded to Medium-sized vendors has increased 31 percent since FY 2015. Total Army contract obligations awarded to the Big Five, Large-, and Small-sized vendors increased 10 percent, 13 percent, and 13 percent, respectively, in FY 2018, rates all below the overall growth in Army contracting.

Although Medium-sized vendors were the largest beneficiary of the total growth in Army contracting, there were notable differences in vendor size trends across the three areas of Army acquisition (Products, Services, and R&D).

In Army Products, Medium- and Large-sized vendors both grew at rates above the 10 percent growth in Army products, while the Big Five and Small-sized vendors grew at rates below that topline rate. Medium-sized vendors’ Army Products contract obligations increased 14 percent in FY 2018, which resulted in their market share rising from 23 percent to 24 percent. Despite Army products contract obligations awarded to Large-sized vendors increasing by 13 percent in FY 2018, Large vendors’ Army products contract obligations are down 5 percent from FY 2015. Although the Big Five’s market share of Army products slipped from 46.4 percent to 45.5 percent, their market share in FY 2018 remains significantly above their historical average (31 percent).

In Army R&D, the 9 percent topline growth was concentrated among the Big Five. Big Five Army R&D contract obligations increased 67 percent in FY 2018, raising their market share of Army R&D contracts from 9 percent to 13 percent. Despite this enormous increase, the Big Five are still recovering from the 71 percent decline in Big Five Army R&D contract obligations between FY 2015 and FY 2016, which saw their market share fall to just 5 percent. Large-sized vendors’ obligations also increased at a rate above the topline, increasing 14 percent. Medium-sized vendors’ obligations declined 1 percent in FY 2018, but their Army R&D contract obligations are up 11 percent since FY 2015. Small-sized vendors’ Army R&D contract obligations increase just 1 percent in FY 2018, resulting in a market share falling from 32 percent to 30 percent. Despite this, Small-sized vendors are higher than their historical averages (21.4 percent).

In Army Services, contract obligations awarded to Medium-sized vendors increased from $14.6 billion to $18.6 billion, a 30 percent increase. Small-sized vendors continue to retain their increased share of Army Services contract obligations at the expense of Large-sized vendors. The Big Five have continued to fall back to their historical share of Army Services contracting in the years after peaking at 12 percent in FY 2016.

**Figure 8: Army Contract Obligations by Area by Size of Vendor, 2000–2018**

![Figure 8: Army Contract Obligations by Area by Size of Vendor, 2000–2018](image)

Source: FPDS; CSIS analysis.

**TOP ARMY VENDORS**

Table 2 shows the top 10 Army vendors ranked by contract obligations in FY 2018. Unlike in previous years, there were no changes in the vendors comprising the top 5 Army vendors, but there was some shakeup in their positions.

**Table 2: Top 10 Army Vendors, 2018**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company</th>
<th>FY17 Obligations (Millions)</th>
<th>FY18 Obligations (Millions)</th>
<th>FY18 Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lockheed Martin</td>
<td>$7,685</td>
<td>$7,765</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Raytheon</td>
<td>$4,511</td>
<td>$4,591</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>General Dynamics</td>
<td>$4,493</td>
<td>$4,590</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>BAE Systems</td>
<td>$2,730</td>
<td>$2,705</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Boeing</td>
<td>$2,448</td>
<td>$2,431</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>Northrop Grumman</td>
<td>$1,751</td>
<td>$1,751</td>
<td>7</td>
</tr>
<tr>
<td>7</td>
<td>Fluor</td>
<td>$1,536</td>
<td>$1,536</td>
<td>19</td>
</tr>
<tr>
<td>8</td>
<td>Oshkosh Defense</td>
<td>$1,404</td>
<td>$1,404</td>
<td>6</td>
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<tr>
<td>9</td>
<td>DynCorp International</td>
<td>$1,135</td>
<td>$1,165</td>
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<tr>
<td>10</td>
<td>Leidos</td>
<td>$1,075</td>
<td>$1,075</td>
<td>14</td>
</tr>
</tbody>
</table>

**Top 5 Total** | $21,866

**Top 10 Total** | $28,767

**Army FY 2018 Total** | $93,170

Source: FPDS; CSIS analysis.
Lockheed Martin (1), Raytheon (2), and General Dynamics (3) retained their ranking from FY 2017, while BAE Systems (4) and Boeing (5) swapped places. Outside the top Five, Oshkosh Defense fell from sixth to eighth and Northrop Grumman rose one spot, going from seventh to sixth. L3 Communications, SAIC, and General Atomics ranked eighth, ninth, and tenth, respectively, in FY 2017 but fell out of the top 10 in FY 2018. Fluor, DynCorp International, and Leidos moved up into the top 10 in FY 2018 ranking seventh, ninth, and tenth, respectively.

**CONCLUSION**

The FY 2018 Army contracting data provided critical preliminary insights into the acquisition system’s response to the Army’s efforts to transform its acquisition approach. The data show that have already been some notable changes in the Army contracting trends in the first year of the Army’s reform efforts. Significant changes in FY 2018 included the large increases in most of the platform portfolios most closely aligned with the Army’s Big Six priorities, the potential emergence of a new paradigm for the Army’s development pipeline for major weapon systems using OTAs, and notable differences in the award of contracts to different sizes of vendors across the three areas of Army acquisition.

Although the FY 2018 Army contracting trends show a preliminary response to the Army’s acquisition reform efforts, even more significant changes are likely in the years to come. Given the time needed to incorporate new priorities into the budget and for new offices’ efforts to get ramped up, it often takes two-plus years before major reforms are reflected in the contract data.13 Furthermore, the Army’s efforts to transform its acquisition system did not stop with its efforts in FY 2018. For example, in the Army’s FY 2020 budget submission, the service identified $25 billion it could cut from its existing acquisition programs over the Future Years Defense Program (FYDP) that could be reinvested toward its new modernization priorities.14 Therefore, it is likely that FY 2018 signals the beginning of a rapidly evolving Army acquisition system, bringing with it perhaps some of the most radical changes to the modern Army acquisition system since its inception.

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ENDNOTES


2. The Army’s Big Six Modernization Priorities are (1) Long-Range Precision Fires; (2) Next-Generation Combat Vehicle; (3) Future Vertical Lift; (4) Network; (5) Air and Missile Defense; and (6) Soldier Lethality.


6. Ibid.


9. “OTAs are an alternative acquisition approach to the traditional Federal Acquisition Regulation-based (FAR) mechanisms, contracts, grants, and cooperative agreements. DoD and other federal agencies can use OTAs to access innovation outside of traditional acquisition.” Source: McCormick, Defense Acquisition Trends 2019: Topline DoD Trends.


12. The Big Five are the five largest defense contractors as measured by total defense contract obligations: Lockheed Martin, Boeing, Northrop Grumman, Raytheon, and General Dynamics. Large Vendors include all other contractors identified by CSIS as having total annual revenue of at least $3 billion.
