KEYW HOLDING CORP

Form 10-K March 12, 2019 UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 10-K

(Mark One)

 \circ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended December 31, 2018

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF $\frac{0}{1934}$

For the transition period from

to

Commission file number 001-34891

THE KEYW HOLDING CORPORATION

(Exact name of registrant as specified in its charter)

Maryland 27-1594952 (State or other jurisdiction of (I.R.S. Employer incorporation or organization) Identification No.)

7740 Milestone Parkway, Suite 400, Hanover, Maryland 21076

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (443) 733-1600

Securities registered pursuant to Section 12(b) of the Act:

Title of each class Name of each exchange on which registered

Common Stock, \$0.001 par value per share NASDAQ Global Select Market

Securities registered pursuant to Section 12(g) of the Act: None

(Title of Each Class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes o No ý

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes o No ý

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes \circ No o Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes \circ No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements

incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ý

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer o Accelerated filer x

Non-accelerated filer o Smaller reporting company o

Emerging growth company o

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes o No ý

The aggregate market value of the registrant's Common Stock held by non-affiliates of the registrant as of June 30, 2018, was approximately \$421.2 million.

There were 49,971,676 shares of our Common Stock (\$0.001 par value), outstanding as of March 5, 2019.

DOCUMENTS INCORPORATED BY REFERENCE

Part III incorporates by reference information from certain portions of the registrant's definitive proxy statement for the 2019 annual meeting of shareholders to be filed with the Securities and Exchange Commission within 120 days after the close of the fiscal year.

A list of the Exhibits and Financial Statement Schedules in this Report on Form 10-K begins on page 47.

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PART I

INTRODUCTORY STATEMENT

The information contained in this Annual Report pertains to the registrant, The KeyW Holding Corporation (KeyW). References in this annual report to (KeyW), (the Company), (Holdco), (we), (our) and (us) refer to the KeyW Holding Corporation and, unless the context otherwise requires, its subsidiaries. Holdco is a holding company and conducts its operations through The KeyW Corporation (Opco) and its wholly owned subsidiaries.

FORWARD-LOOKING STATEMENTS

The matters discussed in this Annual Report may constitute forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. These statements involve known and unknown risks, uncertainties, and other factors that may cause our actual results, activity levels, performance or achievements to be materially different from any future results, activity levels, performance or achievements expressed or implied by such forward-looking statements. In some cases, you can identify these statements by forward-looking words such as "could", "expect", "estimate", "may", "potential", "will", and "would", or similar words. You should read statements that contain these words carefully because they discuss our future expectations, contain projections of our future results of operations or of our financial position, or state other forward-looking information. There may be events in the future that we are not able to predict or control accurately, and numerous factors may cause events, our results of operations, financial performance, achievements, or industry performance, to differ materially from those reflected in the forward-looking statements. The factors listed in the section captioned "Risk Factors," contained in this Annual Report, as well as any cautionary language in this Annual Report, provide examples of such risks, uncertainties, and events. You should not place undue reliance on these forward-looking statements, which apply only as of the date of this Annual Report. Subsequent events and developments may cause our views to change. While we may elect to update the forward-looking statements at some point in the future, we specifically disclaim any obligation to do so.

Item 1. BUSINESS GENERAL OVERVIEW

KeyW is an innovative national security solutions provider to the Intelligence, Cyber, and Counterterrorism communities. KeyW's advanced technologies in cyber; intelligence, surveillance and reconnaissance; and analytics span the full spectrum of customer missions and enhanced capabilities. The Company's highly skilled workforce solves complex customer challenges such as preventing cyber threats, transforming data to actionable intelligence, and building and deploying sensor packages into any domain.

Our core capabilities include: advanced cyber operations and training; geospatial intelligence; cloud and data analytics; engineering; and intelligence analysis and operations. Other KeyW offerings include a suite of advanced Intelligence, Surveillance, and Reconnaissance (ISR) technology solutions, proprietary products-including electro-optical, hyperspectral, and synthetic aperture radar sensors-and other products that we manufacture and integrate with hardware and software to meet unique and evolving intelligence mission requirements.

KeyW's solutions focus on Intelligence Community (IC) customers, including the Federal Bureau of Investigation (FBI), Department of Homeland Security (DHS), National Security Agency (NSA), the National Geospatial Intelligence Agency (NGA), the Army Geospatial Center (AGC) and other agencies within the IC and Department of Defense (DoD). In addition, we provide products and services to U.S. federal, state, and local law enforcement agencies, foreign governments and other entities in the Cyber and Counterterrorism markets. We believe the combination of our advanced solutions, understanding of our customers' missions, longstanding and successful customer relationships, operational capabilities and highly skilled, cleared workforce will help expand our footprint in our core markets.

As of December 31, 2018, KeyW had 1,790 employees. For the year ended December 31, 2018, we derived 95% of our revenue from continuing operations from U.S. Government customers, including 76% of revenues derived from

the IC and special military customers, acting as both prime contractor and subcontractor.

For 2018, 2017 and 2016, our revenue from continuing operations was \$507 million, \$442 million, and \$288 million, respectively, based on accounting principles generally accepted in the United States of America (GAAP). Our 2018 revenue from continuing operations was derived from over 350 contracts (a combination of prime contracts and subcontracts), the 10 largest of which accounted for approximately 43% of our 2018 revenue from continuing operations, with no individual contract accounting for greater than 11% of our 2018 revenue from continuing operations. For the year ended December 31, 2018, we derived approximately 3% of our revenue from continuing operations from international customers.

KeyW's core capabilities address the missions of the IC, including the following:

Advanced Cyber Operations and Training: An integrated approach to solve offensive and defensive cyber operations challenges.

Offensive cyberspace operations that deliver capabilities through research and development, operations support, and intelligence analysis

Defensive cyberspace operations and training focused on capabilities development, secure mobile communication and software and hardware security engineering

Cyber mission training and exercises providing real-world training sessions to prepare for a wide range of cyber security challenges

Geospatial Intelligence: Advanced solutions for collecting, processing and disseminating geospatial intelligence.

Geospatial systems and analytics design and development to meet unique mission requirements

Software-reconfigurable radar sensors that are readily adaptable to diverse missions and a wide range of delivery platforms

Ultra high-resolution imaging systems

Custom-built sensors tailored to meet the strictest technical and operational requirements

Cloud & Data Analytics: The most current approaches driven by advanced research and development.

Data discovery, transformation and analysis with a proven, adaptable approach

Data management and security solutions developed by data scientists who understand the complexities of handling and sharing sensitive data

Cloud infrastructure and engineering using Software as a Service (SaaS) and Infrastructure as a Service (IaaS) models to provide universal accessibility and improved manageability

Product Engineering: Solutions for some of the world's most unique and challenging missions.

Custom packaging and microelectronics with low-to medium-rate production for virtually any mission

Digital forensics providing unique digital evidence capture and triage devices designed for speed and simplicity

Intelligence Analysis and Operations: Solutions and support for classified missions, systems and facilities designed to collect, analyze, process and use products of various intelligence sources.

Signals Intelligence

Open Source Intelligence

Counterterrorism

Cyber Threat Analysis

Counterintelligence

Human Terrain

All-source Analysis

System Engineering Analysis

Document and Media Exploitation

Imagery Intelligence

Software Development and Engineering: Solutions that design, develop, document, test, integrate, and implement custom software modules and capabilities focused on Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance and intelligence-related applications. We have achieved a Capability Maturity Model Integration Level III rating certifying that we have implemented best practices associated with integrated product and process development and supplier sourcing in the following areas:

Real-time sensor control and fusion

Data integration and correlation

Communications management

Cross-domain solutions

Knowledge management

Automated navigation systems and decision support systems

Systems Engineering: Our technology development capabilities involve teams of research engineers seeking innovative approaches to complex and enduring national security problems. We lead customer-funded research and development efforts at government research laboratories in the following fields:

Electronics and acoustics

Electronic warfare

Radar

Optics

Chemistry

Plasma physics, among other areas

Information Technology Architecture: Solutions that develop and run mission-critical information technology systems and architectures. Our data fusion, cloud computing, and visual analytics expertise come together to provide unprecedented new capabilities for intelligence analysts.

Our Market Opportunity

KeyW solutions and products focus on serving IC customers including FBI, DHS, NSA, NGA, AGC, and other agencies within the IC and DoD. In addition, we provide products and services to U.S. federal, state and local law enforcement agencies, and foreign allies.

We believe that KeyW's capabilities and offerings are well-aligned with national security priorities, and we have structured our strategic business development efforts to target these opportunities. The current Government Fiscal Year (GFY) 2019 budget requests approximately \$15 billion in cybersecurity funding, and we believe that the total addressable DoD information technology, or IT, budget is approximately \$15 billion for GFY 2019. Additionally, approximately \$8.5 billion of the GFY 2019 budget request is earmarked for the DoD's cyberspace operations, an increase of approximately \$0.3 billion over GFY 2018. The increase is largely associated with anticipated growth in the DoD's Cyber Mission Forces and other defensive and offensive cyberspace activities. The new budget request also calls for investing another \$13.7 billion in science and technology for further innovation and new and advanced capabilities, including capabilities in cyberspace, space, and artificial intelligence - many of KeyW's technology initiative areas.

Intelligence

The IC consists of 17 agencies and organizations, including the Office of the Director of National Intelligence (ODNI), within the Executive Branch that work both independently and collaboratively to gather and analyze the intelligence necessary to conduct foreign relations and national security activities. The rapid pace of technological

innovation and evolution of the security threat environment physical and digital requires highly specialized service providers who can ensure the IC and DoD maintain their technology leadership position to serve the security interests of the United States. To maintain superiority over adversaries, there

is strong demand from the IC and DoD for cutting-edge technologies in areas such as signal processing and cyber and intelligence analysis and operations.

The IC represents an approximately \$81.1 billion addressable market in GFY 2019. The intelligence budget is divided between the National Intelligence Program (NIP), managed by the ODNI, and the Military Intelligence Program, managed by the Secretary of Defense. The NIP, which supports agencies such as the National Reconnaissance Office, the NSA, and the Central Intelligence Agency, represents an approximately \$59.9 billion annual budget in GFY 2019 and has grown at a compounded annual rate of approximately 2% since 2009, despite significant government budgetary pressures. The positive budgetary trends are driven by the need to produce actionable intelligence to combat the evolving asymmetric and widely distributed threat landscape. Growth is expected to continue, driven by the extreme demands on legacy, non-standardized infrastructure and emergence of new technologies to collect, transport and store, analyze, and operate an increasing amount of data.

Funding areas of the NIP focus on maintaining technological advancement and superiority in the following areas: Sustaining key investments to strengthen intelligence collection and critical operational capabilities supporting counterterrorism, counterintelligence, and counterproliferation;

Protecting the IC's core mission areas and maintaining global coverage to remain vigilant against emerging threats; Promoting increased intelligence sharing and advancing IC integration through continued investment in enterprise-wide capabilities and use of cloud technology to facilitate greater efficiency and improve the safeguarding of information across the intelligence information environment; and

Identifying resources for strategic priorities, including advanced technology to improve strategic warning, evolved collection and exploitation capabilities, and increased resiliency.

Cybersecurity

Cybersecurity is receiving increased attention and budget funding at a time when there are widespread and effective threats that demonstrate the vulnerability of U.S. public and private data and communications networks. Recent headlines highlighting high-profile cases of unauthorized access, digital espionage, identity theft, malicious code, and other cyber-crimes in both public and private sectors have reinforced the need for a more robust cybersecurity infrastructure. An increase in hacking attacks on key national security infrastructure systems, such as the DoD computer system, has heightened the need for improved threat protection. Additionally, the expansion of anti-terrorism efforts to cyberspace highlights the need for improved global cyber coordination and security measures.

Our Competitive Strengths

We believe the following competitive strengths will allow us to take advantage of the trends in our industry:

Ability to develop, field, and operate end-to-end intelligence solutions. Through a combination of acquisitions and organic technology development, KeyW has assembled a collection of capabilities that when combined, are capable of supporting our customers' end-to-end intelligence mission in the space, airborne, ground and cyber domains. We intend to leverage these customer proven capabilities to extend our market penetration to other organizations and agencies, foreign and domestic, and to drive organic growth.

ISR sensor development and, rapid deployment and sustainment of collection platforms. Our highly customized, integrated collection solutions are lower cost than traditional ISR platforms and are complemented by ongoing sustainment and logistics support of the collection platforms. We rapidly deploy solutions tailored to meet the most urgent requirements for ISR imagery in support of tactical missions and rapid mapping of large areas in some of the world's most challenging locations, thus placing us at the center of the need for actionable intelligence.

Focus on core cyber superiority, geospatial intelligence and intelligence strengths. We focus on delivering cyber superiority, geospatial intelligence and intelligence support to the IC. We deliver a full range of cyber engineering services and solutions, geospatial intelligence services and solutions and cyber intelligence products. Mastering cyberspace and thereby attaining cyber superiority is a core mission of the IC. We believe that our focus gives our customers faster and more innovative solutions than those offered by our competitors.

Agile intelligence, cybersecurity and cyber age operations expertise. We have significant experience in building signal and information processing solutions and cybersecurity, cyber superiority, and geospatial intelligence solutions, using agile methodologies for the IC to support mission-critical activities and responses to complex national security problems. Our team has established a strong reputation for responding rapidly to customer requirements and for partnering with our customers to identify and define these requirements. The constant and evolving threat environment has put enormous pressure on the IC to respond quickly. We believe that we have a culture of innovation and agility that allows us to respond more quickly and with greater impact than other organizations.

Skilled employees with high-level security clearances. As of December 31, 2018, we had 1,790 employees. Approximately 86% of our employees have U.S. Government security clearances, with approximately 75% holding top secret or higher clearance. This concentration of highly skilled and cleared personnel allows us to respond quickly to customer requirements and gives us ongoing insight into our customers' toughest national security problems. The requirement for these clearances and the time and process required to attain them are significant barriers to entering our markets.

Our Strategy

Our objective is to continue growing our business by providing affordable, advanced engineering and technology solutions for complex challenges such as preventing cyber threats, transforming data into intelligence and combating global terrorism, selling our proven capabilities and innovations to government intelligence, defense, and other federal, state, and local government customers. Key elements of our strategy to accomplish our continued growth objective include:

Leveraging IC experience in certain agencies to address new growth markets in the intelligence, cyber, and counterterrorism communities. KeyW now serves the majority of the agencies in the IC. A key growth strategy is to leverage the unique capabilities we have developed in our core customers to expand into the agencies where KeyW does not have a significant presence. We believe the capabilities we have developed for current customers will be attractive to other members of the IC, enabling a significant growth opportunity for KeyW. To expand our IC presence, we have invested in building a best-in-class business development team with a proven capability of penetrating new customer agencies and winning large new prime contracts.

Building and leveraging our research and development efforts. We intend to continue utilizing company and customer-funded research and development to develop technologies, products, and solutions that have significant potential for near-term as well as long-term value in the markets we serve. We will continue to use intellectual property that we create internally or license from other companies in the areas of network traffic intelligence, cybersecurity, cyber intelligence and geospatial intelligence to build products and solutions to further penetrate the intelligence and defense market.

Competition

We sell our services and products primarily to the intelligence, cyber, space, and counter terrorism communities. The level of security clearances required for this work limits the range of competitors for customers in these communities. In addition, the number of competitors is limited even further by the level of technical expertise required to deliver products and services to our government customers. We compete either as prime contractor or as a subcontractor, depending on the requirements and scope of the project.

Our competitors include both large companies that offer a broad range of services and capabilities and smaller boutique organizations that are highly focused on particular capabilities, solutions, and customers. Our larger competitors include divisions of large defense contractors such as Lockheed Martin Corporation, The Boeing Company and Northrop Grumman Corporation. We also face competition from a number of large, well-established government contractors such as Leidos Inc., Booz Allen Hamilton Corporation, CACI International Inc., and others.

The smaller competitors are generally privately held corporations with strong capabilities in delivering specific elements of a solution for a narrow range of customers. See "Risk Factors" for a description of the various risks we may face from our competitors.

Manufacturing

Our manufacturing capabilities support modest volume product manufacturing consistent with our customers' needs for products that evolve rapidly and on a regular basis. We use a combination of in-house resources and contract manufacturing support provided by third parties. We believe that this approach to our manufacturing needs allows us to carefully manage capital investment while maintaining our ability to meet surges in the volume of customer requirements.

Research and Development

Innovation is an important part of our business model. We look for opportunities to create long-term growth, on a sole-source basis, by leveraging our in-depth knowledge of our customers' missions and needs, and our ability to use Internal Research and Development (IR&D). Our product and solutions business has evolved through a combination of customer development and IR&D. We frequently develop a core capability or technology and then customize this capability or technology to meet specific customer requirements.

Our Research and Development (R&D) consists of IR&D that is an allowable expense under U.S. Government contracts and R&D that is performed at our expense. Spending on R&D activities may vary, depending on the opportunities that we see and customer requirements. R&D costs totaled \$1.8 million, \$3.7 million and \$4.6 million for years ended December 31, 2018, 2017 and 2016, respectively. As a percent of revenue R&D was 0.4%, 0.8% and 1.6% for the years ended December 31, 2018, 2017 and 2016, respectively.

Intellectual Property

We own eight patents and have one pending patent application. We have 11 federally registered trademarks, two pending federal trademark registration applications, and six registered copyrights. As we develop intellectual property, we determine, with the support of outside patent counsel, the best manner to protect it, whether through patent, through copyright, or as a trade secret. When we acquire companies that have developed intellectual property and have patents pending, we determine, with the support of outside patent counsel, whether we need to continue pursuing the pending patent applications. With regard to several of our products, we have developed intellectual property that we are protecting as trade secrets. We have made this determination based on the costs and risks involved, as well as the pace at which changes are being made to the products. As we build our solutions and products, we also make use of third-party intellectual property for which we purchase licenses, as necessary. We integrate technology, including hardware and software, based on designs and architectures that we develop with our customers.

Regulatory Matters

We must comply with laws and regulations relating to the formation, administration, and performance of U.S. Government contracts. The Federal Acquisition Regulation (FAR), which mandates uniform policies and procedures for U.S. Government acquisitions and purchased services, governs the majority of our contracts. Individual agencies also have acquisition regulations that provide implementing language for the FAR or that supplement the FAR. Other federal regulations require certification and disclosure of cost or pricing data in connection with contract negotiations for certain types of contracts; define allowable and unallowable costs; govern reimbursement rights under cost-based contracts; and restrict the use, dissemination, and exportation of products and information classified for national security purposes.

A substantial portion of the Company's revenue and costs are generated from contracts with the U.S. Government that are subject to audit by the U.S. Defense Contract Audit Agency (DCAA). U.S. Agencies, including the DCAA, the Defense Contract Management Agency, and other various agencies, routinely audit contract cost and allocated indirect cost for compliance with federal procurement regulations, Cost Accounting Standards, and in accordance with contract specific terms and conditions. The DCAA has audited the incurred cost submissions of the Company through December 31, 2015. The results of such audits are not expected to have a material effect on the Company's financial position, and as of December 31, 2018 the Company believes it has adequately reserved for potential adjustments from audits or review of contract costs.

Our federal government business is also subject to laws, regulations, and executive orders restricting the use and dissemination of classified information and, under U.S. export control laws, the export of certain products and technical data.

Additionally, federal government contracts, by their terms, generally can be terminated at any time by the federal government, without cause, for the convenience of the federal government. If a federal government contract is so terminated, we would be entitled to receive compensation for the services provided and costs incurred through the time of termination, plus settlement expenses and a negotiated amount of profit. Federal government contractors who fail to comply with applicable U.S. Government procurement-related statutes and regulations may be subject to potential contract termination, suspension and debarment from contracting with the U.S. Government, or other

remedies. See "Risk Factors" for a description of the various risks we may face regarding laws and regulations relating to U.S. Government contracts.

U.S. Federal Government Contracts

We derive substantially all our revenue from U.S. Government customers. In fiscal years 2018, 2017, and 2016, we generated approximately 95%, 94% and 94%, respectively, of our total revenue from contracts where the end customer was the U.S. Government, which has a highly structured and regulated competitive procurement process. Our intelligence and defense customers

typically exercise independent contracting authority and do not use General Services Administration (GSA) or other government-wide acquisition contracts to obtain our services or products.

Subcontracts accounted for approximately 28% of our revenue in 2018, and prime contracts accounted for 72%. In 2017 subcontracts accounted for approximately 36% of our revenue and prime contracts accounted for approximately 64% of our revenue. Our prime contracts have been awarded as both sole-source and competitive awards; our subcontracts have been awarded competitively from prime contractors.

Sole-source award contracts

Under a sole-source award contract, the purchase of goods or services is made from a single source without competitive bidding. It is awarded usually, but not always, by a federal government agency after soliciting and negotiating with only one firm. These contracts can be negotiated much more quickly than a typical competitive contract, providing there is adequate demonstration of both need and the likelihood that any attempt to obtain bids would only result in one person or company able to meet the need. Urgency is often the rationale for sole-source contracts. Sole-source contracts may be awarded based on a variety of different compensation models, including firm-fixed price (FFP), time-and-materials (T&M), cost-plus-fixed-fee, or level-of-effort contracts based on negotiations, risk, and cost uncertainty.

Single award contracts

Under single award contracts with defined statements of work, a federal government agency solicits, qualifies, and then requests proposals from interested contractors. The agency then evaluates the bids and typically awards the contract to a single contractor for a specified service or product.

Multiple award contracts

Under indefinite delivery/indefinite quantity (ID/IQ) contracts, a federal government agency can form preferred provider relationships with one or more contractors. This category includes agency-specific ID/IQ contracts; blanket purchase agreements; government-wide acquisition contracts (GWACs); and GSA schedule contracts. These umbrella contracts, often referred to as vehicles, outline the basic terms and conditions under which federal government agencies may order services. ID/IQ contracts are typically managed by one sponsoring agency, and they may be either for the use of a specific agency or available for use by any other agency of the federal government. ID/IQ contracts available for use by any agency of the federal government are commonly referred to as GWACs.

Contractors within the industry compete to be pre-selected to perform work under an ID/IQ contract. An ordering agency then issues delivery orders, commonly known as task orders, for services to be performed under the contract. If the ID/IQ contract has a single prime contractor, only that contractor may be awarded delivery orders. If the contract has multiple prime contractors, the award of each delivery order typically will be competitively determined among the pre-selected contractors.

GSA schedules are listings of services and products, along with their respective prices, offered by federal government contractors. The schedules are negotiated and maintained by the GSA for use by any federal agency or other authorized entity, including state and local governments. When an agency selects services or products under a GSA schedule contract, the competitive process is limited to qualified GSA schedule contractors.

Contract types

We generate revenue under various types of contracts, which include T&M, fixed-price-level-of-effort, FFP, and cost reimbursable contracts. For the years ended December 31, 2018, 2017 and 2016, we derived revenue from such contracts on an actual basis as follows:

		Year ended December		
		31, 2018		
Contract Type	Contract Type	(in	s(percenta	age)
	Contract Type	millions	s)percent	agc)
	Time & Materials and Fixed-Price-Level-of-Effort	\$175.0	34.5	%
	Firm-Fixed-Price	125.9	24.9	%
	Cost Reimbursement	205.9	40.6	%

	Year ended December 31, 2017		
Contract Type	(in million		ntage)
Time & Materials and Fixed-Price-Level-of-Effort	\$167.8	38.0	%
Firm-Fixed-Price	102.1	23.1	%
Cost Reimbursement	171.7	38.9	%
	Year ended December		
	31, 2016		
Contract Type	(in million	ions)(percentage)	
Time & Materials and Fixed-Price-Level-of-Effort			%
Firm-Fixed-Price	80.7	28.0	%
Cost Reimbursement	92.5	32.1	%

Time-and-materials contracts. Under a T&M contract, we are paid a fixed hourly rate for each direct labor hour expended and we are reimbursed for allowable material costs and out-of-pocket expenses. To the extent our actual direct labor and associated costs vary in relation to the fixed hourly billing rates among various labor categories provided in the contract, we will generate profit or we could incur a loss.

Fixed-price-level-of-effort contracts. Fixed-price-level-of-effort contracts are substantially like T&M contracts except that they require a specified level of effort over a stated period of time.

Firm-fixed-price contracts. FFP contracts provide for a fixed price for specified products, systems and/or services. If actual costs vary from planned costs on an FFP contract, we generate more or less than the planned amount of profit and may even incur a loss.

Cost reimbursable contracts. Cost reimbursable contracts provide for reimbursement of our direct contract costs and allowable and allocable indirect costs, plus a fee.

Backlog

We define backlog to include both funded and unfunded orders for products and services under existing signed contracts, assuming the exercise of all options relating to those contracts, less the amount of revenue we have previously recognized under those contracts. We define funded backlog as the portion of backlog for which funding currently is appropriated and obligated to us under a contract or other authorization for payment signed by an authorized purchasing authority. Unfunded backlog includes all contract options exercised and unexercised that have been priced but not funded.

As of December 31, 2018, our total backlog was \$1,092 million, of which \$227 million was funded and \$865 million was unfunded. As of December 31, 2017, our total backlog was \$1,189 million, of which \$138 million was funded and \$1,051 million was unfunded.

Total backlog may fluctuate from period to period depending on our success rate in winning contracts and the timing of contract awards, renewals, modifications and cancellations. We expect to recognize a substantial portion of our funded backlog as revenue within the next 12 months. However, the U.S. Government may terminate any contract at any time.

Customers

We derive substantially all of our revenue from continuing operations from contracts with U.S. Government agencies involved with national security missions. For the year ended December 31, 2018, our revenue from continuing operations was derived 30% from contracts with the NSA; 20% from contracts with the U.S. Army; 23% from contracts with other elements of the DoD excluding the NSA and the U.S. Army (none of which individually were greater than 10% of our 2018 revenue from continuing operations); 14% from contracts with the FBI; 9% from work for other major intelligence agencies and other intelligence, defense, homeland security and other U.S. Government agencies and law enforcement organizations and 5% from commercial and international customers.

Long-term relationships between intelligence customers and contractors develop because of the high level of security clearances required to work on projects and unique technical requirements of intelligence customers. For example, members of our team have been working closely with the NSA for over 30 years, during which time they have completed numerous projects with the NSA.

Corporate Information

We are a holding company and conduct our operations through The KeyW Corporation and its subsidiaries. We were incorporated in Maryland in December 2009. The KeyW Corporation was incorporated in Maryland in May 2008 and became our wholly-owned subsidiary in December 2009 as part of a corporate restructuring.

The address of our principal executive office is 7740 Milestone Parkway, Suite 400, Hanover, Maryland 21076 and our general telephone number is (443) 773-1600. Our web site address is www.keywcorp.com. We make available free of charge on or through our Internet website, our Annual Report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. The information on, or accessed through, our web site is not part of this or any other report we file with or furnish to the SEC.

Item 1A. RISK FACTORS

You should carefully consider the following risks and all other information contained in this annual report, including our financial statements and the related notes, before investing in our common stock. If any of the following risks materialize, our business, financial condition and results of operations could be materially harmed. In that case, the trading price of our common stock could decline, and you may lose some or all of your investment.

Investing in our common stock involves a high degree of risk. Before investing in our common stock, you should carefully consider the following risks as well as all other information contained in this Annual Report. Risks Relating to Our Business

We currently rely on sales to the U.S. Government for substantially all of our revenue. If our relationships with U.S. Government agencies were harmed, our business, future revenue and growth prospects would be adversely affected. We derive substantially all of our revenue from our U.S. Government customers. For the fiscal years ended December 31, 2018, 2017, and 2016, we generated 95%, 94% and 94%, respectively, of our total revenue from contracts with the U.S. Government, either as a prime contractor or a subcontractor. We expect that U.S. Government contracts will continue to be the primary source of our revenue for the foreseeable future. Our reputation and relationship with the U.S. Government, and in particular with the agencies of the U.S. IC and the DoD, are key factors in maintaining and growing our revenue. For example, in 2018, on a GAAP basis, we derived 30% of our revenue from contracts with the NSA; 20% from contracts with the U.S. Army; 23% from contracts with other elements of the DoD excluding the NSA and the U.S. Army; 14% from contracts with the FBI; 9% from work for other major intelligence agencies and other intelligence, defense, homeland security and other U.S. Government agencies and law enforcement organizations and 5% from commercial and international customers.

Our business, prospects, financial condition and/or operating results would be materially harmed if:

we were to lose, or there were to occur a significant reduction in, U.S. Government funding of one or more programs for which we are the prime contractor or in which we participate;

we were suspended or debarred from contracting with the U.S. Government; or

our reputation, relationships, or the reputations or relationships of our senior managers with the U.S. Government agencies with which we currently do business or seek to do business is impaired.

A decline in U.S. Government spending and mission priorities may adversely affect our future revenue and limit our growth prospects.

Continued U.S. Government expenditures on intelligence, defense and other programs for which we provide support are critically important for our business. While spending authorizations for intelligence and defense-related programs by the government have increased in recent years due to greater homeland security and foreign military commitments, and to a general outsourcing trend, these spending levels may not be sustainable and could significantly decline. Future levels of expenditures, authorizations, and appropriations for programs we support may decrease or shift to programs in areas where we do not currently provide services, or contract opportunities may be in-sourced to be performed by U.S. Government employees. Changes in spending authorizations, appropriations, and budgetary priorities could also occur due to a shift in the number, and intensity, of potential and ongoing conflicts or threats, the rapid growth of the federal budget deficit, increasing political pressure to reduce overall levels of government spending, shifts in spending priorities from intelligence and defense-related programs as a result of competing demands for federal funds, or other factors. Our business prospects, financial condition or operating results could be materially harmed among other causes by the following:

budgetary constraints affecting U.S. Government spending generally, or specific departments or agencies in particular, and changes in available funding, such as federal government sequestration (automatic spending cuts); changes in U.S. Government programs or requirements; and

a prolonged U.S. Government shutdown and other potential delays in the appropriations process.

These or other factors could cause U.S. Government agencies and departments to reduce their purchases under contracts, exercise their right to terminate contracts, or not exercise options to renew contracts, any of which could cause us to lose revenue. A significant decline in overall U.S. Government spending, or a shift in expenditures away from agencies or programs that we support, could cause a material decline in our revenue.

We depend on U.S. Government contract awards that are only partially funded and which depend upon annual budget appropriations. A delay in the completion of the U.S. Government's budget process or the impact of sequestration (automatic spending cuts) could delay procurement of the services and solutions we provide and have an adverse effect on our future revenue.

Budget decisions made by the U.S. Government are outside of our control and could have significant consequences for our business. Funding for U.S. Government contract awards is subject to Congressional appropriations. Although multi-year awards may be planned or authorized in connection with major procurements, Congress generally appropriates funds on a fiscal year basis even though a program may be expected to continue for several years. Consequently, awards often initially receive only partial funding, and additional funds are committed only as Congress makes further appropriations. In some circumstances, we may elect to continue working on a contract that is awaiting additional incremental funding, because we expect the funding to be forthcoming soon, but this may place us at risk of not being paid if additional funding is not subsequently added to the contract. The termination of funding for any of our U.S. Government prime contracts or subcontracts could result in a loss of anticipated future revenue attributable to that program and a reduction in our cash flows and could have an adverse impact on our operating results.

In years when the U.S. Government does not complete its budget process before the end of its fiscal year on September 30, government operations are typically funded pursuant to a "continuing resolution" that authorizes agencies of the U.S. Government to continue to operate, but does not authorize new spending initiatives. When the U.S. Government operates under a continuing resolution, delays can occur in the procurement of the services and solutions that we provide. When supplemental budgets are required to operate the U.S. Government and passage of legislation needed to approve any supplemental budget is delayed, the overall funding environment for our business could be adversely affected.

If Congress does not agree on a budget or continuing resolution, it may result in a partial shutdown of the U.S. Government or sequestration causing reductions of purchases under, or the termination or suspension of our contracts with the U.S. Government; automatic cuts to the U.S. defense or intelligence budget; or delays in program starts or the award of contracts or task orders under contracts, any of which could impact some or all of our contracts, programs

and contract awards. Under such circumstances, we could be required to furlough affected employees for an indefinite time, terminate or suspend subcontracts, or incur contract wind-down costs. It is uncertain if we would be compensated or reimbursed for any loss of revenue during such periods. If we were not compensated or reimbursed, it could result in significant adverse effects on our revenues, operating costs and cash flows.

The U.S. Government has implemented various initiatives to address its budgetary challenges. In 2011, Congress enacted the Budget Control Act (BCA) of 2011 which imposed spending caps and certain reductions in defense spending over a ten-year period through 2021. These spending caps and reductions, referred to as sequestration, went into effect in March 2013. In February 2018, the Bipartisan Budget Act of 2018 (BBA 2018) was signed into law. This law established a framework and increased the caps on

defense and non-defense discretionary spending for the government's FY 2018 and FY2019. However, unless a new agreement is enacted, the BCA will again prevail beginning in FY 2020 resulting in full sequestration of defense and non-defense spending. The continued uncertainty surrounding the U.S. defense budget could adversely impact our business and future results of operations.

The U.S. Government may modify, curtail or terminate our contracts at any time prior to their completion and, if we do not replace them, we may be unable to sustain our revenue growth and may suffer a decline in revenue. Many of the U.S. Government programs in which we participate as a contractor or subcontractor may extend for several years. These programs are normally funded on an incremental basis. Under our contracts, the U.S. Government generally has the right not to exercise options to extend or expand our contracts and may modify, curtail or terminate the contracts and subcontracts at its convenience.

If the U.S. Government terminates a contract for convenience, we may recover only our reasonably incurred or committed allowable costs, settlement expenses and profit on work completed prior to the termination. We cannot recover anticipated future profits on terminated work. If the U.S. Government terminates a contract for default, we may not recover each of those types of costs, and instead may be liable for excess costs incurred by the U.S. Government in procuring undelivered items and services from another source.

Any decision by the U.S. Government not to exercise contract options or to modify, curtail or terminate our major programs or contracts would adversely affect our revenue, growth and profitability.

Our business could be adversely affected by delays caused by our competitors protesting major contract awards received by us, resulting in the delay of the initiation of work.

The number of bid protests of contract awards by unsuccessful bidders is increasing and the U.S. Government is taking longer to resolve such protests. Bid protests may result in an increase in expenses related to obtaining contract awards or an unfavorable modification or loss of an award. In the event a bid protest is unsuccessful, the resulting delay in the startup and funding of the work under these contracts may cause our actual results to differ materially and adversely from those anticipated.

We may not realize as revenue the full amounts reflected in our backlog, which could adversely affect our future revenue and growth prospects.

As of December 31, 2018, our total backlog was \$1,092 million, which included \$865 million in unfunded backlog. As of December 31, 2017, our total backlog was \$1,189 million, which included \$1,051 million in unfunded backlog. The U.S. Government's ability not to exercise contract options or to modify, curtail or terminate our major programs or contracts makes the calculation of backlog subject to numerous uncertainties. Due to the uncertain nature of our contracts with the U.S. Government, we may never realize revenue from some of the engagements that are included in our backlog. Our unfunded backlog, in particular, contains management's estimate of amounts expected to be realized on unfunded work that we may never realize as revenue. As a result, the maximum contract value specified under a U.S. Government contract or task order awarded to us is not necessarily indicative of the revenue that we will realize under that contract. If we fail to realize revenue amounts included in our backlog, our future revenue and growth prospects may be adversely affected and our revenue may be reduced below the levels anticipated. For additional information on our backlog, see "Business — U.S. Federal Government Contracts — Backlog."

If we fail to comply with complex procurement laws and regulations, we could lose business and be liable for various penalties or sanctions.

We must comply with laws and regulations relating to the formation, administration and performance of federal government contracts. These laws and regulations affect how we conduct business with our federal government customers. In complying with these laws and regulations, we may incur significant costs, and the U.S. Government may impose additional fines and penalties, including contractual damages, in the event of our non-compliance. Among the more significant laws and regulations affecting our business are the following:

the FAR, which comprehensively regulates the formation, administration and performance of federal government contracts;

the Truth in Negotiations Act, which requires certification and disclosure of all cost and pricing data in connection with cost-type contracts;

the Cost Accounting Standards and Cost Principles, which impose accounting requirements that govern our right to reimbursement under certain cost-based federal government contracts;

laws and regulations that require us to divest work if an organizational conflict of interest (OCI) related to such work cannot be mitigated to the government's satisfaction; and

laws, regulations and executive orders restricting the use and dissemination of classified information and, under U.S. export control laws, the export of certain products and technical data.

Our contracting agency customers periodically review our performance under and compliance with the terms of our federal government contracts. If we fail to comply with these laws and regulations or if a government review or investigation uncovers improper or illegal activities, we may be subject to civil or criminal penalties or administrative sanctions, including:

termination of contracts;

forfeiture of profits;

cost associated with triggering of price reduction clauses;

suspension of payments;

fines; and

suspension or debarment from doing business with the U.S. Government.

Additionally, the False Claims Act provides for potentially substantial civil and criminal penalties where, for example, a contractor presents a false or fraudulent claim to the U.S. Government for payment or approval. Actions under the False Claims Act may be brought by the U.S. Government or by other persons on behalf of the U.S. Government (who may then share a portion of any recovery).

Because substantially all of our revenue is dependent on our selection, performance and payment under our U.S. Government contracts, the loss of one or more large contracts or any suspension or debarment from doing business with U.S. Government agencies would result in a loss of anticipated future revenue from U.S. Government contracts and a reduction in cash flows and would have a material adverse effect on our operating results. U.S. Government contracts contain other provisions that may be unfavorable to contractors.

Beyond the right to terminate a contract for convenience or decline to exercise an option to renew, U.S. Government contracts contain provisions and are subject to laws and regulations that give the U.S. Government rights and remedies not typically found in commercial contracts. These provisions, laws and regulations permit the U.S. Government to do (among other things) the following:

reduce or modify contracts or subcontracts;

cancel multi-year contracts and related orders if funds for contract performance for any subsequent year become unavailable;

claim certain rights (including, under certain circumstances, certain intellectual property rights) in products and systems produced by us; and

suspend or debar us from doing business with the U.S. Government.

If the U.S. Government exercises its rights under any of these provisions, our ability to operate or our competitive advantage could be hindered, and our revenue and net income could decline and our operating results could be materially adversely affected.

The FAR and many of our U.S. Government contracts contain OCI clauses that may limit our ability to compete for or perform certain other contracts or other types of services for particular customers. OCI arises when we engage in activities that may make us unable to render impartial assistance or advice to the U.S. Government, impair our objectivity in performing contract work or provide us with an unfair competitive advantage. A conflict of interest issue that precludes our competition for or performance on a significant program or contract could harm our prospects.

Further, U.S. Government contracts and certain laws and regulations, including without limitation, the International Traffic in Arms Regulations (ITAR) and laws and contract restrictions relating to classified information, defense articles, defense services, and technical data, contain provisions that may restrict our ability to provide certain of our products and services to third parties. These restrictions may prevent us from leveraging our products, services, intellectual property, know-how or other revenue-

generating aspects of our business or our acquisitions to the fullest extent in the commercial sector and/or foreign markets and customers.

The U.S. Government may revise its procurement or other practices in a manner adverse to us.

The U.S. Government may revise its procurement practices or adopt new contracting rules and regulations, such as cost accounting standards. It could also adopt new contracting methods relating to GSA contracts, or other GWACs, or adopt new standards for contract awards intended to achieve certain socio-economic or other policy objectives. In addition, the U.S. Government may face restrictions from new legislation or regulations, as well as pressure from U.S. Government employees and their unions, on the nature and amount of services the U.S. Government may obtain from private contractors. These changes could impair our ability to obtain new contracts or to continue to retain contracts under which we currently perform when and if those contracts are put up for renewed competitive bidding. Any new contracting methods could be costly or administratively difficult for us to implement, and, as a result, could harm our operating results.

Audits or investigations by U.S. Government agencies could result in unfavorable outcomes that could subject us to a variety of penalties and sanctions, and could harm our reputation and relationships with our customers and negatively impact cash flows.

U.S. Government agencies, including the DCAA and others, routinely audit and review contractors' performance on contracts, cost structure, pricing practices and compliance with applicable laws, regulations and standards. They also review the adequacy of, and a contractor's compliance with, its internal control systems and policies, including the contractor's accounting, billing, cost, purchasing, property, estimating, compensation, management information system and other systems. Any costs found to be improperly allocated to a specific contract will not be reimbursed, while such costs already reimbursed must be refunded. Adverse findings in a DCAA audit could materially affect our competitive position and result in a substantial adjustment to our revenue and net income.

If a U.S. Government audit or investigation uncovers improper or illegal activities, we may be subject to civil and criminal penalties and administrative sanctions, including termination of contracts, forfeiture of net income, suspension of payments, fines and suspension or debarment from doing business with U.S. Government agencies. In addition, we could suffer serious harm to our reputation and competitive position, and incur significant costs, if allegations of impropriety were made against us, whether true or not. If our reputation or relationship with U.S. Government agencies were impaired, or if the U.S. Government otherwise ceased doing business with us or significantly decreased the amount of business it does with us, our revenue and net income would decline and our operating results could be materially adversely affected.

A significant portion of our revenue and net income is derived from a few key programs. The loss of any one or more of these programs could cause a material decline in our operating results.

For the year ended December 31, 2018, and the year ended December 31, 2017, our 10 largest programs accounted for a total of \$220 million and \$190 million, respectively, or 43% and 43% of our total revenue, respectively. There is no assurance that we will be able to continue work on our largest programs in the future. The revenue stream from one or more of these programs could end for a number of reasons, including the completion of the customer's requirements, the completion or early termination of our current program, the consolidation of our work into another program under which we are not a contractor, or the loss of a competitive bid for the follow-on work related to our current program. If any of these events were to occur, we could experience an unexpected, significant reduction in revenue and net income.

We derive significant revenue from contracts awarded through a competitive bidding process involving substantial costs and risks. Due to this competitive pressure, we may be unable to sustain our revenue growth and profitability. We expect a significant portion of the business that we will seek in the foreseeable future will be awarded through competitive bidding, including in many cases competitive rebidding for further work under our contracts that expire.

The competitive bidding process involves substantial costs and a number of risks, including the significant cost and managerial time to prepare bids and proposals for contracts that may not be awarded to us and our failure to accurately estimate the resources and costs that will be required to fulfill any contract we win. Following a contract award, we may encounter significant expense, delay or contract modifications as a result of our competitors protesting or challenging contracts awarded to us in competitive bidding. In addition, multi-award contracts require that we make sustained post-award efforts to obtain task orders under the contract. We may not be able to obtain task orders or recognize revenue under these multi-award contracts. Our failure to compete effectively in this procurement environment would adversely affect our revenue and/or profitability.

If our subcontractors fail to perform their contractual obligations, our performance as a prime contractor and our ability to obtain future business could be materially and adversely impacted and our actual results could differ materially and adversely from those anticipated.

Our performance of government contracts may involve the issuance of subcontracts to other companies upon which we rely to perform all or a portion of the work we are obligated to deliver to our customers. A failure by one or more of our subcontractors to satisfactorily deliver on a timely basis the agreed-upon supplies, perform the agreed-upon services, or appropriately manage their vendors may materially and adversely impact our ability to perform our obligations as a prime contractor.

A subcontractor's performance deficiency could result in the government terminating our contract for default. A default termination could expose us to liability for excess costs of reprocurement by the government and have a material adverse effect on our ability to compete for future contracts and task orders. Depending upon the level of problem experienced, such problems with subcontractors could cause our actual results to differ materially and adversely from those anticipated.

An accident or incident involving our employees or third parties, particularly with respect to our international operations, could harm our reputation, affect our ability to compete for business, and if not adequately insured or indemnified, could adversely affect our results of operations and financial condition.

We are exposed to liabilities that arise from some of the services we provide. Such liabilities may relate to an accident or incident involving our employees or third parties, particularly where we are deployed on-site at active military installations in locations experiencing political or civil unrest, or they may relate to an accident or incident involving aircraft or other equipment we have serviced or used in the course of our business. Any of these types of accidents or incidents could involve significant potential claims of injured employees and other third parties and claims relating to loss or of damage to government or third-party property.

We maintain insurance policies that mitigate risk and potential liabilities related to our operations. Our insurance coverage may not be adequate to cover those claims or liabilities, and we may be forced to bear substantial costs from an accident or incident. Substantial claims in excess of our related insurance coverage could adversely affect our operating performance and may result in additional expenses and possible loss of revenue.

Furthermore, any accident or incident for which we are liable, even if fully insured, may result in negative publicity which could adversely affect our reputation among our customers, including our U.S. Government customers, and the public, which could result in the loss of existing and future contracts or make it more difficult to compete effectively for future contracts. This could adversely affect our operating performance and may result in additional expenses and possible loss of revenue.

In May 2018, the General Data Protection Regulation 2016 (GDPR) came into force in the European Union, which is supplemented by the Data Protection Act 2018 (DPA) in the U.K. The GDPR imposes more stringent data protection obligations on companies that control or process personal data. Because KeyW employs persons on US Government contracts in the European Union, it is required to comply with the measures imposed by the GDPR regarding the protection and handling of personal data. Administrative fines imposed against companies that have breached the data protection regulations can be fines of up to 20 million euros or 4% of worldwide turnover. We have been preparing for this legislation and have implemented a number of risk-mitigating strategies; however, it is not possible to eliminate all risk associated with the new legislation. Possible risks include violations of the DPA and/or GDPR arising from human error or external threats to our IT systems or process omissions.

We face intense competition from many competitors that, among other things, have greater resources than we do. We operate in highly competitive markets and generally encounter intense competition to win contracts and task orders. We compete with many other firms, ranging from small, specialized firms to mid-tier technology firms and large, diversified firms, many of which have substantially greater financial, management and marketing resources than we do. Significant competitors include divisions of large defense contractors such as Lockheed Martin Corporation, The Boeing Company and Northrop Grumman Corporation. We also face competition from a number of large, well-established U.S. Government contractors such as Leidos Inc., Booz Allen Hamilton Corporation, CACI International Inc., and others. Our competitors may be able to provide our customers with different or greater

capabilities or benefits than we can in areas such as technical qualifications, past contract performance, geographic presence, price and the availability of qualified professional personnel. Our failure to compete effectively because of any of these or other factors could cause our revenue and operating profits to decline. In addition, our competitors also have established or may establish relationships among themselves or with third parties to increase their ability to address our customers' needs. There is also a significant industry trend towards consolidation, which may result in the emergence of companies which are better able to compete against us. Accordingly, it is possible that new competitors or alliances among competitors may emerge that would compete with us more effectively than they do currently. Our earnings and profitability may vary based on the mix of our contracts and may be adversely affected by our failure to accurately estimate and manage costs, time and resources.

We generate revenue under various types of contracts, which include T&M, fixed-price-level-of-effort, FFP, cost reimbursable contracts, and commercial software license and related service contracts. Refer to Item 1, "Business" of this Annual Report for breakout of our revenue by contract type.

Our earnings and profitability may vary materially depending on changes in the proportionate amount of revenue derived from each type of contract, the nature of services or products provided, as well as the achievement of performance objectives and the stage of performance at which the right to receive fees, particularly under incentive and award fee contracts, is finally determined. Cost reimbursement and T&M contracts generally have lower profitability than FFP contracts. Our operating results in any period may be affected, positively or negatively, by variable purchasing patterns by our customers of our more profitable technology products.

To varying degrees, there is a risk that we could underestimate the costs and resources necessary to fulfill each of our contract types. While FFP contracts allow us to benefit from cost savings, these contracts also increase our exposure to the risk of cost overruns. When making proposals on these types of contracts, we rely heavily on our estimates of costs and timing for completing the associated projects, as well as on assumptions regarding technical issues. In each case, our failure to accurately estimate costs or the resources and technology needed to perform our contracts or to effectively manage and control our costs during the performance of our work could result, and in some instances has resulted, in reduced profits or in losses. More generally, any increased or unexpected costs or unanticipated delays in connection with the performance of our contracts, including costs and delays caused by contractual disputes or other factors outside of our control, could make our contracts less profitable or unprofitable.

We use estimates in recognizing revenues, and if we make changes to estimates used in recognizing revenues, our profitability may be adversely affected.

Revenues from certain contracts is recognized using the percentage-of-completion method or on the basis of partial performance towards completion. These methodologies require estimates of total costs at completion, fees earned on the contract, or both. This estimation process, particularly due to the technical nature of the services performed and the long-term nature of certain contracts, is complex and involves significant judgment. Adjustments to original estimates are often required as work progresses, experience is gained and additional information becomes known, even though the scope of the work required under the contract may not change. Any adjustment as a result of a change in estimate is recognized as events become known. Changes in the underlying assumptions, circumstances or estimates could result in adjustments that may adversely affect our future financial results.

We have contracts with the U.S. Government that are classified, which may limit investor insight into portions of our business.

We derive a portion of our revenues from programs with the U.S. Government that are subject to security restrictions (classified programs), which preclude the dissemination of information that is classified for national security purposes. We are limited in our ability to provide information about these classified programs, their risks or any disputes or claims relating to such programs. As a result, investors have less insight into our classified programs than our other businesses and therefore less ability to fully evaluate the risks related to our classified business.

We have made and may continue to make acquisitions and divestitures that involve numerous risks and uncertainties.

Historically, part of our growth strategy has relied on acquisitions. We expect to selectively pursue acquisitions and upon completion to integrate those businesses into our existing operations. We intend to seek acquisition opportunities both to expand into new markets and to enhance our position in our existing markets. However, our ability to make acquisitions will depend on a number of steps, including our ability to:

•dentify or compete effectively for suitable acquisition candidates; •negotiate appropriate acquisition terms;

•

accurately estimate the financial effect of acquisitions and investments on our business, and realize anticipated synergies and/or improved operating performance;

obtain debt or equity financing that we may need to complete proposed acquisitions;

complete the proposed acquisitions; and

integrate the acquired business into our existing operations.

In addition, acquisitions involve numerous risks, including difficulties in the assimilation of the operations accounting systems, technologies, services and products of the acquired company, the potential loss of key employees of the acquired company and

the diversion of our management's attention from other business concerns. This is the case particularly in the fiscal quarters immediately following the completion of an acquisition to the extent the operations of the acquired business are integrated into the acquiring businesses' operations during this period. We cannot be sure that we will accurately anticipate all of the changing demands that any future acquisition may impose on our management, our operational and management information systems, and our financial systems.

We may underestimate or fail to discover liabilities relating to a future acquisition during due diligence and we, as the successor owner, might be responsible for any such liabilities. Although we seek to minimize the impact of underestimated or potential undiscovered liabilities by structuring acquisitions to minimize liabilities and obtaining indemnities and warranties from the selling party, these methods may not fully protect us from the impact of undiscovered liabilities. Indemnities or warranties are often limited in scope, amount or duration, and may not fully cover the liabilities for which they were intended. The liabilities that are not covered by the limited indemnities or warranties could have a material adverse effect on our business and financial condition. In addition, acquisitions can raise potential OCI issues that can impact the nature and timing of the acquisition or the acquiring entity's ability to compete for future contracts where the acquired entity may have been involved.

In addition, we have divested, and may in the future divest, businesses that are no longer a part of our ongoing strategic plan. These divestitures similarly require significant investment of time and resources, may disrupt our business, distract management from other responsibilities and may result in losses on disposal or continued financial involvement in the divested business, including through indemnification, guarantee or other financial arrangements, for a period of time following the transaction, which could adversely affect our financial results.

We have a substantial investment in recorded goodwill and other net intangibles as a result of our acquisitions, and changes in future business conditions could cause these investments to become impaired, requiring substantial write-downs that could reduce our net income or increase our net loss.

As of December 31, 2018, goodwill and other net intangibles accounted for \$499 million, or 74% of our recorded total assets on an actual basis. We review our goodwill for impairment annually and when events or changes in circumstances indicate the carrying value may not be recoverable. The annual impairment test is based on several factors requiring judgment. Principally, a decrease in expected cash flows, changes in market conditions or other adverse changes affecting operations may indicate potential impairment of recorded goodwill. If goodwill became impaired, we could record a significant charge to earnings in our financial statements during the period in which impairment of our goodwill is determined, which would significantly reduce or eliminate our net income.

Servicing our debt requires a significant amount of cash, and we may not have sufficient cash flow from our business to pay our substantial debt.

We have substantial indebtedness under our senior secured credit facility entered into in May 2018, which consists of a revolving loan, a first lien term loan and a second lien term loan, and under our convertible senior notes due 2019. Our indebtedness could have important consequences, including:

requiring us to dedicate a substantial portion of our cash flow to service our debt, which will reduce the funds available for working capital, capital expenditures and other general corporate purposes;

dimiting our flexibility in planning for and reacting to changes in our business and in the industry in which we operate; making us more vulnerable to adverse changes in general economic, industry and competitive conditions and adverse changes in government regulation;

limiting our ability to borrow additional amounts for working capital, capital expenditures, debt service requirements, execution of our strategy, or other general corporate purposes; and

placing us at a disadvantage compared to our competitors who have less debt.

Our revolving loan facility matures on May 8, 2023, the first lien term loan facility matures on May 8, 2024 and the second lien term loan facility matures on May 8, 2025. As of December 31, 2018, \$22.6 million aggregate principal amount of the convertible senior notes are outstanding. Unless converted into equity or otherwise repaid or refinanced, the convertible senior notes mature on July 15, 2019.

Our ability to pay interest on or to refinance our indebtedness depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt or obtaining additional equity capital on terms that may

be onerous or highly dilutive. Our ability to refinance our indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations.

Our senior secured credit facility contains financial and operating covenants that limit our operations and could lead to adverse consequences if we fail to comply.

Our senior secured credit facility contains financial and operating covenants that limit our operations and could lead to adverse consequences if we fail to comply. Our credit facility contains financial and operating covenants that, among other things, require us to maintain or satisfy specified financial ratios (including total net leverage ratios), limit our ability to incur indebtedness, pay dividends or engage in certain significant business transactions, and require us to comply with a number of other affirmative and negative operating covenants. Failure to meet these financial and operating covenants could result from, among other things, changes in our results of operations, our incurrence of debt or changes in general economic conditions. These covenants may restrict our ability to engage in transactions that we believe would otherwise be in the best interests of our stockholders, which could harm our business and operations. In addition, our credit facility contains several other material covenants, including a lien against substantially all of our assets (including receivables and a pledge of the equity interests of certain subsidiaries), limitations on additional debt. We may require additional capital to finance our growth. If the terms on which the additional capital is available are unsatisfactory or if the additional capital is not available at all or we are not able to fully access our existing credit facility we may not be able to pursue our growth strategy.

Our growth strategy may require additional capital investment to expand into new markets, complete acquisitions and integrate any completed acquisitions into our existing operations.

To the extent that we do not generate sufficient cash internally to provide the capital we require to fund our growth strategy and future operations, we will require additional debt or equity financing. To the extent not available under our existing senior secured credit facility, we cannot be sure that additional financing will be available or, if available, will be on terms acceptable to us. If new debt is added to our current debt levels, including pursuant to our current senior secured credit facility, the risks related to our ability to service that debt could increase. Further, high volatility in the equity markets may make it difficult for us to access the equity markets for additional capital at attractive prices, if at all. If we are unable to obtain sufficient additional capital in the future, it may limit our ability to implement our business strategy. Global financial and economic conditions involving liquidity and capital adequacy affecting lenders could affect our ability to fully access our existing credit facilities. In addition, even if future debt financing is available, it may result in (1) increased interest expense, (2) increased term loan payments, (3) increased leverage, and (4) decreased income available to fund further acquisitions and expansion. It may also limit our ability to withstand competitive pressures and make us more vulnerable to economic downturns. If future equity financing is available, it may dilute the equity interests of our existing stockholders.

If we are unable to manage our growth, our business could be adversely affected.

Achieving our plans for growth will place significant demands on our management, as well as on our administrative, operational, and financial resources. For us to successfully manage our growth, we must continue to improve our operational, financial and management information systems and expand, motivate and manage our workforce. If we are unable to successfully manage our growth without compromising the quality of our services and products, our business, prospects, financial condition or operating results could be adversely affected.

Our failure to attract, train and retain skilled and qualified employees, including our senior management team, would adversely affect our ability to execute our strategy.

Our business involves the development of tailored solutions for our customers, a process that relies heavily upon the expertise and services of our employees. Our continued success depends on our ability to recruit and retain sufficient numbers of highly qualified individuals who have advanced engineering and information technology skills, specialized knowledge of customer missions and appropriate security clearances, and who work well with our U.S. Government customers. Due to our growth and increased competition for experienced personnel, particularly in highly specialized areas, it has become more difficult for us to meet our needs for these employees in a timely manner and this may affect our growth in the current fiscal year and in future years. Competition for skilled personnel in the

information technology services industry, particularly those with requisite security clearances for the work we perform, is intense, and technology service companies often experience high attrition among their skilled employees. Our overall employee attrition rate for the years ended December 31, 2018 and 2017, on an actual basis, was 21% and 22%, respectively.

Although we intend to continue to devote significant resources to recruit, train and retain qualified employees, we may not be able to attract and retain these employees. Our employees may be solicited and/or hired by competitors (including those employing our former employees), whether or not in violation of existing non-solicitation and non-hire restrictions. Any failure to hire and retain our employees could impair our ability to perform our contractual obligations efficiently and timely meet our customers' needs and win new business, which could adversely affect our future results.

In addition, the relationships and reputation that many members of our senior management team have established and maintain with U.S. Government personnel contribute to our ability to maintain good customer relationships and to identify new business opportunities. The loss of key personnel may impair our ability to obtain new U.S. Government awards or adequately perform under our current U.S. Government contracts. We also rely on the skills and expertise of our senior technical development personnel, the loss of any of whom could prevent us from completing current development projects and restrict new development projects. We currently do not maintain "key person" insurance on any of our executives or key employees.

Our business depends upon obtaining and maintaining required security clearances.

Many of our federal government contracts require our employees to maintain various levels of security clearances, and we are required to maintain certain facility security clearances complying with DoD and IC requirements. Obtaining and maintaining security clearances for employees involves lengthy processes, and it is difficult to identify, recruit and retain employees who already hold security clearances. If our employees are unable to obtain or retain security clearances or if our employees who hold security clearances terminate employment with us and we are unable to find replacements with equivalent security clearances, we may be unable to perform our obligations to customers whose work requires cleared employees, or such customers could terminate their contracts or decide not to renew them upon their expiration. In addition, we expect that many of the contracts on which we will bid will require us to demonstrate our ability to obtain facility security clearances and perform work with employees who hold specified types of security clearances. To the extent we are not able to obtain or retain facility security clearances or engage employees with the required security clearances for a particular contract, we may not be able to bid on or win new contracts, maintain existing contracts or effectively re-bid on expiring contracts.

Employee misconduct, including security breaches, could cause us to lose customers or our ability to contract with the U.S. Government.

Misconduct, fraud or other improper activities by our employees could have a significant adverse impact on our business and reputation, particularly because we are a U.S. Government contractor. Such misconduct could include the failure to comply with U.S. Government procurement regulations, regulations regarding the protection of classified information, legislation regarding the pricing of labor and other costs in U.S. Government contracts, and any other applicable laws or regulations. Employee or former employee misconduct involving data security lapses or breaches of confidentiality resulting in the compromise of our or our customer's sensitive or classified information could result in remediation costs, in regulatory sanctions against us and in serious harm to our reputation. The precautions we take to prevent and detect these activities may not be effective, and we could face unknown risks or losses. Our failure to comply with applicable laws or regulations or misconduct by any of our employees could subject us to fines and penalties, loss of security clearances and suspension or debarment from contracting with the U.S. Government, any of which would adversely affect our business and reputation.

Our quarterly operating results are likely to vary significantly and be unpredictable, which could cause the trading price of our stock to decline.

Our operating results have historically varied from period to period, and may continue to do so as a result of a number of factors, many of which are outside of our control, including:

- the level of demand for our products and services;
- the budgeting cycles and purchasing practices of our customers;
- acquisitions of other businesses;
- the sales cycle for our commercial products;
- failure to accurately estimate or control costs under FFP contracts;

commencement, completion or termination of projects during any particular quarter; and changes in senior U.S. Government officials that affect the timing of technology procurement.

Any one of the factors above or the cumulative effect of some of the factors referred to above may result in significant fluctuations in our quarterly operating results. This variability and unpredictability could result in our failing to meet our revenue or operating results expectations or those of securities analysts or investors for any period. If we fail to meet or exceed such expectations for these or any other reasons, the market price of our shares could fall substantially. We have only a limited ability to protect and enforce our intellectual property rights, which we consider important to our success. Failure to adequately protect or enforce our intellectual property rights could adversely affect our competitive position and cause us to incur significant expense.

We believe that our success depends, in part, upon our ability to protect our proprietary information and other intellectual property. We rely principally on trade secrets to protect much of our intellectual property where we do not believe that patent protection is appropriate or obtainable. However, trade secrets are difficult to protect and to enforce against third parties. Although we believe that we have adopted reasonable practices to ensure that our employees are subject to appropriate confidentiality obligations and to ensure that we obtain appropriate ownership rights in intellectual property developed by our employees (or by the employees of companies that we have acquired), our practices in this regard may be insufficient, which could result in the misappropriation or disclosure of our confidential information or disputes regarding (or the loss of rights to) certain of our intellectual property. For example, confidentiality agreements may not provide adequate protection or may be breached. We generally control and limit access to our product documentation and other proprietary information, but other parties may independently develop our know-how or otherwise obtain access to our technology, which could adversely affect our businesses' prospects and competitive position. We may be unable to detect unauthorized use of our intellectual property or otherwise take appropriate steps to enforce our rights. Failure to obtain or maintain trade secret protection could adversely affect our competitive business position. The protections that we receive for our trade secrets and other intellectual property rights may not be sufficient to prevent our competitors from copying, infringing, or misappropriating our products and services. Similarly, there is no guarantee that when we do apply for intellectual property protection, the applications will result in registrations sufficient to protect our rights. In addition, we cannot be certain that others will not independently develop, design around or otherwise acquire equivalent or superior technology or intellectual property rights.

From time to time, we may seek to enforce our intellectual property rights against third parties. The fact that we have intellectual property rights may not guarantee success in our attempts to enforce these rights against third parties. If we are unable to prevent third parties from infringing or misappropriating our trade secrets or other intellectual property rights, our competitive position could be adversely affected. Our ability and potential success in enforcing our rights is also subject to general litigation risks, as well as uncertainty as to the enforceability of our intellectual property rights. When we seek to enforce our rights, we may be subject to claims that our intellectual property rights are invalid, otherwise unenforceable, or are licensed to the party against whom we are asserting the claim. In addition, our assertions of intellectual property rights may result in the other party seeking to assert various claims against us, including its own alleged intellectual property rights, claims of unfair competition, or others. In the course of conducting our business, we may also inadvertently infringe the intellectual property rights of others, resulting in claims against us or our customers. Our contracts generally indemnify our customers for third-party claims for intellectual property infringement by the services and products we provide. The expense of defending these claims may adversely affect our financial results.

Our acquisitions frequently include the hiring of employees from the acquired entity. These employees may be subject to confidentiality provisions that are not related to the acquisition and may have been exposed to third party confidential information and intellectual property that we do not have the rights to use. During the course of their employment in our business, there is always a risk that employees may inadvertently breach confidentiality obligations or inadvertently infringe third party intellectual property rights based on their prior employment, which could adversely affect our business.

In addition, we conduct R&D under projects with the U.S. Government. In general, our rights to technologies we develop under those projects are subject to the U.S. Government's non-exclusive, non-royalty bearing, world-wide license to use those technologies. Under certain circumstances, the U.S. Government could also claim rights in our

intellectual property that could make it difficult to prevent disclosure to, licensing to, or use by third parties, which could adversely affect our competitive position and business.

We may become involved in intellectual property disputes, which could subject us to significant liability, divert the time and attention of our management and prevent us from selling our products.

We, or our customers, may be a party to litigation in the future to protect our intellectual property or be required to respond to allegations that we infringe on others' intellectual property. If any parties assert that our products infringe upon their proprietary rights, we would be forced to defend ourselves, and possibly our customers, against the alleged infringement, or to negotiate and possibly enter into settlement agreements that could adversely affect our intellectual property rights or the operation of our business. If we are unsuccessful in any intellectual property litigation or enter into any dispute-related settlement, we could be subject to

significant liability and loss of our proprietary rights. Intellectual property litigation, regardless of its success, would likely be time consuming and expensive to resolve and would divert management's time and attention. In addition, we could be forced to do one or more of the following:

stop selling, incorporating or using our products that include the challenged intellectual property; obtain from the owner of any infringed intellectual property right a license to sell or use the relevant technology, which license may not be available on reasonable terms, or at all, or may require us to extend a cross-license to rights under our intellectual property;

pay substantial damages; and/or

re-design those products that use the technology.

If we are forced to take any of these actions, our business could be harmed.

We rely on the availability of third-party licenses.

Certain of our products include software or other intellectual property licensed from third parties. It may be necessary in the future to renew licenses relating to various aspects of these products or to seek new licenses for existing or new products. There can be no assurance that the necessary licenses would be available on equivalent terms to those currently available, on other terms acceptable to us, or at all. The inability to obtain certain licenses or other rights or to obtain such licenses or rights on favorable terms, or the need to engage in litigation regarding these matters, could result in delays in product releases until equivalent technology can be identified, licensed or developed, if at all, and integrated into our products and may have a material adverse effect on our business, operating results, and financial condition. Moreover, the inclusion in our products of software or other intellectual property licensed from third parties on a nonexclusive basis could limit our ability to differentiate our products from those of our competitors.

Many of our contracts contain performance obligations that require innovative design capabilities, are technologically complex, require state-of-the-art manufacturing expertise or are dependent upon factors not wholly within our control. Failure to meet these obligations could adversely affect our profitability and future prospects.

We design, develop and manufacture technologically advanced and innovative products and services applied by our customers in a variety of environments. Problems and delays in development or delivery as a result of issues with respect to design, technology, licensing and patent rights, labor, learning curve assumptions or materials and components could prevent us from achieving contractual requirements.

In addition, our products cannot be tested and proven in all situations and are otherwise subject to unforeseen problems. Examples of unforeseen problems that could negatively affect revenue and profitability include premature failure of products that cannot be accessed for repair or replacement, problems with quality, country of origin, delivery of subcontractor components or services and unplanned degradation of product performance. Among the factors that may affect revenue and profits could be unforeseen costs and expenses not covered by insurance or indemnification from the customer, diversion of management focus in responding to unforeseen problems, loss of follow-on work, and, in the case of certain contracts, repayment to the U.S. Government customer of contract cost and fee payments we previously received.

System failures or security threats, including those resulting from cybersecurity threats, could cause business disruptions, which could have a material adverse effect on our business and damage our reputation.

We rely upon sophisticated technology systems and infrastructure. Under the supervision of our Board of Directors, we take reasonable steps to protect them, including the implementation and use of industry standard security precautions. However, notwithstanding such measures, such systems are potentially vulnerable to breakdown, malicious intrusion, natural disaster, and random attack. A disruption to our systems or infrastructure could damage our reputation and cause us to lose customers and revenue. This could require us to expend significant efforts and resources or incur significant expense to eliminate these problems and address related security concerns.

As a defense contractor, we face various security threats, including cybersecurity threats, to gain unauthorized access to sensitive information; threats to the safety of our directors, officers, and employees; threats to the security of our facilities and infrastructure; and threats from terrorist acts. Although we utilize various procedures and controls to

monitor and mitigate these threats, there can be no assurance that these procedures and controls will be sufficient to prevent security threats from materializing. If any of these events were to materialize, they could lead to losses of sensitive information or capabilities, harm to personnel or infrastructure, or damage to our reputation, and could have a material adverse effect on our financial position, results of operations, or cash flows.

In addition, in order to provide services to our customers, we often depend upon or use customer systems that are supported by the customer or third parties. Any security breach or system failure in such systems could result in an interruption of our customer's operations, significant delays under a contract, and a material adverse effect on our results of operations.

We face a heightened risk of a security breach or disruption because of our possession of classified and other sensitive information. Many government contractors have already been targeted and these types of attacks are likely to occur in the future. Attacks of any kind on our network or other systems could result in the loss of customer or proprietary data, interruptions or delays in our customers' business and damage to our reputation, which could have a material adverse effect on our business operations and reputation. In addition, the failure or disruption of our systems, communications or utilities could result in the interruption or suspension of our operations, which could have a material adverse effect on our business operations and reputation.

If our systems, services or other applications have significant defects or errors, if we are successfully attacked by cyber or other security threats, or if we suffer delivery delays or otherwise fail to meet our customers' expectations, we may:

lose revenue due to adverse customer reaction;

incur additional costs related to monitoring and increasing our cyber security;

incur additional costs related to remediation;

• be sued by customers and other who were harmed:

reduce or negate the value of our proprietary information;

receive negative publicity, which could damage our reputation and adversely affect our ability to attract or retain customers:

be unable to successfully market services that rely on the creation and maintenance of secure IT systems:

damage the confidence of our employees in the management and systems of the company;

suffer claims for substantial damages, particularly as a result of any successful network or systems breach and exfiltration of customer information; or

incur significant costs complying with applicable federal or state laws, including laws governing protection of personal information.

If our new products do not achieve sufficient market acceptance, our financial results and competitive position may suffer.

We spend substantial amounts of time and money to research and develop new products and enhanced versions of our existing products to incorporate additional features, improve functionality or incorporate other enhancements in order to meet our customers' rapidly evolving demands. When we develop a new product or an enhanced version of an existing product, we typically incur expenses and expend resources upfront to market, promote and sell the new

offering. Therefore, when we develop and introduce new or enhanced products, they must achieve market acceptance in order to justify the amount of our investment in developing and bringing them to market.

Our new products or enhancements could fail to attain sufficient market acceptance for many reasons, including: failure to predict market demand accurately in terms of functionality and to supply products that meet demand in a timely fashion;

defects, errors or failures;

negative publicity about their performance or effectiveness;

delays in releasing our new products or enhancements to the market;

introduction or anticipated introduction of competing products by our competitors; and

poor business conditions for our end-customers, causing them to delay purchases.

If our new products or enhancements do not achieve adequate acceptance in the market, our competitive position may be impaired, and our financial results may suffer. The adverse effect on our financial results will be directly related to the significant research, development, marketing, sales and other expenses we will have incurred in connection with the new products or enhancements.

Our current R&D efforts may not produce successful products or features that result in significant revenue in the near future, if at all.

Developing our products and related enhancements is expensive. For the year ended December 31, 2018, our R&D costs totaled \$1.8 million, a 51% decrease over our total R&D costs for the year ended December 31, 2017. Our investments in R&D may not result in significant design improvements, marketable products or features or may result in products that are more expensive than anticipated. Additionally, we may not receive significant revenue from these investments in the near future, if at all, or these investments may not yield expected benefits, either of which could adversely affect our business and operating results. Nevertheless, we believe that we must continue to dedicate a significant amount of resources to our R&D efforts to maintain our competitive position. As a result, our future plans include significant investments in R&D and related product opportunities.

If we do not accurately predict, prepare for, and respond promptly to the rapidly evolving technological and market developments and changing end-customer needs in the cybersecurity market, our competitive position and prospects will be harmed.

The cybersecurity market is expected to continue to evolve rapidly. Many of our end-customers operate in markets characterized by rapidly changing technologies and business needs, incorporating a variety of hardware, software applications, operating systems, and networking protocols. However, some of our new products and enhancements may require us to develop new architectures that involve complex, expensive, and time consuming R&D processes. The technology in our products is especially complex because it needs to effectively identify and respond to new and increasingly sophisticated methods of attack, and quickly respond to and eliminate negative impacts on network performance. As a result, although the market expects rapid introduction of new products or product enhancements to respond to new threats, the development of these products is difficult and the timetable for commercial release and availability is uncertain as there can be long time periods between releases and availability of new products. We may experience unanticipated delays in the availability of new products and fail to meet customer expectations for such availability. If we do not quickly respond to the rapidly changing and rigorous needs of our end-customers by developing, releasing, and making available on a timely basis new products or enhancements that can respond adequately to new security threats, our competitive position and business prospects will be harmed.

Additionally, the process of developing new technology is complex and uncertain, and if we fail to accurately predict end-customers' changing needs and emerging technological trends, our business could be harmed. There can be no assurance that we will successfully identify new product opportunities, develop and bring new products to market in a timely manner, or achieve market acceptance of our products, or that products and technologies developed by others will not render our products or technologies obsolete or noncompetitive.

If functionality similar to that offered by our products is incorporated into existing network infrastructure products, organizations may decide against adding our products to their systems, which would have an adverse effect on our business.

Large, well-established providers of networking equipment offer, and may continue to introduce, network security features that compete with our products, either in stand-alone security products or as additional features in their network infrastructure products. The inclusion of, or the announcement of an intent to include, functionality perceived

to be similar to that offered by our security solutions in networking products that are already generally accepted as necessary components of network architecture may have an adverse effect on our ability to market and sell our products. Furthermore, even if the functionality offered by network infrastructure providers is more limited than our products, a significant number of end-customers may elect to accept such limited functionality in lieu of adding platforms from an additional vendor such as us. Many organizations have invested substantial personnel and financial resources to design and operate their networks and have established deep relationships with other providers of networking products, which may make them reluctant to add new components to their networks, particularly from other vendors such as us. In addition, an organization's existing vendors or new vendors with a broad product offering may be able to offer concessions that we are not able to match because we currently offer only network security products and have fewer resources than many of our competitors. If organizations are reluctant to add additional network infrastructure from new vendors or otherwise decide to work with their existing vendors, our ability to increase our market share and improve our financial condition and operating results will be adversely affected.

If our products do not interoperate with our end-customers' infrastructure, sales of our products could be negatively affected, which would harm our business.

Our products must interoperate with our end-customers' existing infrastructure, which often have different specifications, utilize multiple protocol standards, deploy products from multiple vendors, and contain multiple generations of products that have been added over time. As a result, when problems occur in a network, it may be difficult to identify the sources of these problems. Any delays in identifying the sources of problems or in providing necessary modifications to our software or hardware could have a negative impact on our reputation and our end-customers' satisfaction with our products, and our ability to sell products could be adversely affected. In addition, U.S. Government and other end-customers may require our products to comply with certain security or other certifications and standards. If our products are late in achieving or fail to achieve compliance with these certifications and standards, or our competitors achieve compliance with these certifications and standards, we may be disqualified from selling our products to such end-customers, or at a competitive disadvantage, which would harm our business, operating results, and financial condition.

Risks Relating to Our Common Stock

The price of our common stock may be subject to wide fluctuations.

The market price of our common stock is subject to significant fluctuations. The market price for our common stock has varied between a high of \$10.06 on December 7, 2018 and a low of \$5.33 on January 3, 2018 during the fiscal year ended December 31, 2018.

Among the factors that could affect our common stock price are the risks described in this "Risk Factors" section and other factors, including:

quarterly variations in our operating results compared to market expectations;

changes in expectations as to our future financial performance, including financial estimates or reports by securities analysts;

changes in market valuations of similar companies;

4iquidity and activity in the market for our common stock;

actual or expected sales of our common stock by our stockholders, including any of our significant stockholders;

strategic moves by us or our competitors, such as acquisitions or restructurings;

general market conditions;

future sales of our common stock; and

domestic and international economic, legal and regulatory factors unrelated to our performance.

As a result of the existence of one or more of these factors, the price of our common stock may be subject to wide fluctuations.

Future issuances and sales of our common stock in the public market could lower the market price for our common stock.

In the future, we may sell additional shares of our common stock to raise capital. In addition, a substantial number of shares of our common stock is reserved for issuance upon the exercise of stock options and upon conversion of the Convertible Senior Notes (Notes). We cannot predict the size of future issuances or the effect, if any, that they may have on the market price for our common stock. The issuance and sale of substantial amounts of common stock, or the perception that such issuances and sales may occur, could adversely affect the market price of our common stock and impair our ability to raise capital through the sale of additional equity securities.

The issuance of substantial amounts of our common stock could adversely impact its price. As of December 31, 2018, we had 50.0 million shares of our common stock issued and outstanding and options to purchase 0.7 million shares of our common stock outstanding and exercisable. We also had warrants to purchase 0.2 million shares of our common stock, all of which were outstanding and exercisable. We also had 2.5 million shares of common stock issuable under outstanding restricted stock units and pursuant to Long-Term Incentive Shares and 1.2 million shares of common stock available for grant under our 2013 Stock Incentive Plan as of that date. In addition, we have 1.5 million shares of common stock reserved for issuance upon the conversion of our Notes based on the initial conversion rate. Although the terms of our Notes permit us to settle Note conversions with cash, we may not have sufficient funds to do so and we could be required to issue shares of common stock. If we choose to borrow funds to effect cash settlement of our Notes, the resulting increase in interest expense could cause a decline in our profitability. The

issuance of additional shares, including as a result of the exercise or conversion of our outstanding options, warrants and Notes, and under

our restricted stock units and Long-Term Incentive Shares, could also reduce our per share financial performance. Any of these factors could cause the price of our common stock to decline.

We may allocate the net proceeds from issuances and sales of our common stock in ways that stockholders may not approve.

Subject to applicable laws and rules, our management may have broad discretion in the application of the net proceeds from issuances and sales of our common stock and could spend the proceeds in ways that do not necessarily improve our operating results or enhance the value of our common stock.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our stock price and trading volume could decline.

The trading market for our common stock depends in part on the research and reports that securities or industry analysts publish about us or our business. If we do not maintain adequate research coverage or if one or more of the analysts who covers us downgrades our stock or publishes inaccurate or unfavorable research about our business, our stock price would likely decline. If one or more of these analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our stock could decrease, which could cause our stock price and trading volume to decline.

Provisions in our organizational documents and in Maryland law may inhibit potential acquisition bids that our stockholders may consider favorable, and the market price of our common stock may be lower as a result. Our charter and bylaws contain provisions that may have an anti-takeover effect and inhibit a change in our board of directors and management. These provisions include the following:

Our charter permits our board of directors to issue preferred stock with terms that may discourage a third party from acquiring us. Our charter permits our board of directors to issue up to 5 million shares of preferred stock, having preferences, conversion or other rights, voting powers, restrictions, limitations as to distributions, qualifications or terms or conditions of redemption as determined by our board of directors. Our board of directors could authorize the issuance of preferred stock with terms and conditions that could have the effect of discouraging a takeover or other transaction in which holders of some or a majority of our shares might receive a premium for their shares over the then-prevailing market price; and

Our charter and bylaws contain other possible anti-takeover provisions. Our charter and bylaws contain other provisions that may have the effect of delaying, deferring or preventing a change-of-control or the removal of existing directors and, as a result, could prevent our stockholders from being paid a premium for their common stock over the then-prevailing market price. These provisions include the advance notice requirements for stockholder proposals and director nominations.

In addition, Maryland law provides protection for Maryland corporations against unsolicited takeovers by limiting, among other things, the duties of the directors in unsolicited takeover situations. The duties of directors of Maryland corporations do not require them to:

accept, recommend or respond to any proposal by a person seeking to acquire control of the corporation; authorize the corporation to redeem any rights under, or modify or render inapplicable, any stockholder rights plan; make a determination under the Maryland Business Combination Act or the Maryland Control Share Acquisition Act; or

act or fail to act solely because of the effect that the act or failure to act might have on an acquisition or potential acquisition of control of the corporation or the amount or type of consideration that may be offered or paid to the stockholders in an acquisition.

Maryland law also contains a statutory presumption that an act of a director of a Maryland corporation satisfies the applicable standards of conduct for directors under Maryland law.

Any one or more of these provisions, singularly or together, may have an anti-takeover effect that discourages potential acquisition bids that our stockholders may consider favorable.

Section 404 of the Sarbanes-Oxley Act of 2002 requires us to document and test our internal control over financial reporting and also requires our independent registered public accounting firm to report on the operating effectiveness of these controls. Failures delays or difficulty in satisfying these requirements could adversely affect our future results

of operations and our stock price.

Section 404 of the Sarbanes-Oxley Act of 2002 requires us to document and test the effectiveness of our internal control over financial reporting in accordance with an established internal control framework and to report on our conclusions as to the effectiveness of our internal controls. It also requires our independent registered public accounting firm to test our internal control over financial reporting and report on the effectiveness of such controls. In addition, we are required under the Securities Exchange Act of 1934, as amended, which we refer to as the Exchange Act, to maintain disclosure controls and procedures and internal control over financial reporting.

We may, in the future, be determined to have material weaknesses and significant deficiencies in our internal controls under standards established by the Public Company Accounting Oversight Board or discover areas of our internal controls that need improvement, particularly with respect to businesses that we may acquire. If so, we cannot be certain that any remedial measures we take will ensure that we have adequate internal controls over our financial processes and reporting in the future. Any failure to implement required new or improved controls, or difficulties encountered in their implementation could harm our operating results or cause us to fail to meet our reporting obligations. If we are unable to conclude that we have effective internal control over financial reporting, or if our independent registered public accounting firm is unable to provide us with an unqualified report regarding the effectiveness of our internal control over financial reporting in future periods, investors could lose confidence in the reliability of our financial statements. This could result in a decrease in the value of our common stock. Failure to comply with Section 404 could potentially subject us to sanctions or investigations by the SEC, the NASDAQ Global Select Market or other regulatory authorities.

Operational risks such as material weaknesses and other deficiencies in internal control over financial reporting could result in errors, potentially requiring restatements of our historical financial data, leading investors to lose confidence in our reported results.

There are a number of factors that may impede our efforts to establish and maintain effective internal controls and a sound accounting infrastructure, including our recent history of acquisitions, our rapid pace of growth, and general uncertainty regarding the operating effectiveness and sustainability of controls. Controls and procedures, no matter how well designed and operated, provide only reasonable assurance that material errors in our financial statements will be prevented or detected on a timely basis. Any failure to establish and maintain effective internal controls over financial reporting increases the risk of material error and/or delay in our financial reporting. Depending on the nature of a failure and any required remediation, ineffective controls could have a material adverse effect on our business and potentially result in restatements of our historical financial results. Financial restatements or other issues arising from ineffective controls could also cause investors to lose confidence in our reported financial information, which would have an adverse effect on the trading price of our securities. Delays in meeting our financial reporting obligations could affect our ability to maintain the listing of our securities. Although we seek to reduce these risks through active efforts relating to properly documented processes, adequate systems, risk culture, compliance with regulations, corporate governance and other factors supporting internal controls, such procedures may not be effective in limiting each of the operational risks.

Risks Relating to Our Convertible Notes

We may not have the ability to raise the funds necessary to settle conversions of the notes or to repurchase the notes upon a fundamental change, and our revolving credit facility contains limitations on our ability to pay cash upon conversion or repurchase of the notes.

The terms of our convertible notes require us to repurchase convertible notes upon the occurrence of a fundamental change at a fundamental change repurchase price equal to 100% of the principal amount of the notes to be repurchased, plus accrued and unpaid interest, if any. Upon conversion, unless we elect to deliver solely shares of our common stock to settle such conversion (other than paying cash in lieu of delivering any fractional share), we will be required to make cash payments in respect of the notes being converted. However, we may not have enough available cash or be able to obtain financing at the time we are required to make repurchases of convertible notes surrendered therefor or being converted. In addition, our ability to repurchase convertible notes or to pay cash upon conversion may be limited by law, by regulatory authority or by agreements governing our future indebtedness, including our revolving credit facility. Our failure to repurchase convertible notes at a time when the repurchase is required by the

indenture or to pay any cash payable on future conversions of the notes as required by the indenture would constitute a default under the indenture. A default under the indenture or the fundamental change itself could also lead to a default under agreements governing our future indebtedness, including our revolving credit facility. If the repayment of the related indebtedness were to be accelerated after any applicable notice or grace periods, we may not have sufficient funds to repay the indebtedness and repurchase the convertible notes or make cash payments upon conversions thereof.

Our senior secured credit facility limits our ability to pay any cash amount upon the conversion of the notes. Our senior secured credit facility prohibits us from making any cash payments on the conversion of the notes if a default or an event of default exists under that facility or if, after giving effect to such cash payment (and any additional indebtedness incurred

to make such payments), we would not be in pro forma compliance with our financial covenants. Any new credit facility that we may enter into may have similar restrictions.

The notes are not protected by restrictive covenants.

The indenture governing the convertible notes does not contain any financial or operating covenants or restrictions on the payments of dividends, the incurrence of indebtedness or the issuance or repurchase of securities by us or any of our subsidiaries. The indenture contains no covenants or other provisions to afford protection to holders of the notes in the event of a fundamental change or other corporate transaction involving us except in limited circumstances.

The notes are effectively subordinated to our secured debt and any liabilities of our subsidiaries.

The convertible notes rank:

senior in right of payment to any of our indebtedness that is expressly subordinated in right of payment to the notes; equal in right of payment to any of our liabilities that are not so subordinated;

effectively junior in right of payment to any of our secured indebtedness to the extent of the value of the assets securing such indebtedness; and

structurally junior to all indebtedness and other liabilities (including trade payables) of our subsidiaries. In the event of our bankruptcy, liquidation, reorganization or other winding up, our assets that secure debt ranking senior in right of payment to the convertible notes will be available to pay obligations on the notes only after the secured debt has been repaid in full from these assets. There may not be sufficient assets remaining to pay amounts due on any or all of the notes then outstanding. The indenture governing the notes does not prohibit us from incurring additional senior debt or secured debt, nor does it prohibit any of our subsidiaries from incurring additional liabilities. As of December 31, 2018, our total consolidated indebtedness was \$297.6 million, all of which was secured indebtedness of our subsidiary, The KeyW Corporation, to which the convertible notes are structurally subordinated.

Item 1B. UNRESOLVED STAFF COMMENTS None.

Item 2. PROPERTIES

We lease all of our office facilities used in our business. Our corporate headquarters is located in Hanover, Maryland, where we occupy space under a lease that expires in 2026. We also lease space located in Arizona, Florida, Maryland, Massachusetts, North Carolina, Ohio, Texas and Virginia. We believe our facilities meet our current needs and that additional facilities will be available as needed.

Item 3. LEGAL PROCEEDINGS

We are not a party to any material legal proceedings as of March 12, 2019.

Item 4. MINE SAFETY DISCLOSURES Not applicable.

PART II

Item MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS ANDISSUER PURCHASE OF EQUITY SECURITIES

Market Information

On October 1, 2010, the Company's common stock began trading on the Nasdaq Global Market under the symbol "KEYW". The following table sets forth the range of high and low intra-day sales prices of KeyW's common stock for the periods indicated.

	High	Low
Year Ended December 31, 2018:		
First Quarter	\$8.40	\$5.33
Second Quarter	\$9.84	\$7.38
Third Quarter	\$9.81	\$6.58
Fourth Quarter	\$10.06	\$6.17
Year Ended December 31, 2017:		
First Quarter	\$12.40	\$8.58
Second Quarter	\$10.50	\$8.07
Third Quarter	\$9.43	\$6.18
Fourth Quarter	\$8.04	\$4.94

On March 5, 2019, the last reported sale price for our common stock on the Nasdaq Global Select Market was \$7.41 per share.

Holders

As of March 5, 2019, there were approximately 95 registered holders of record of our common stock. The number of holders of record does not reflect the number of beneficial holders whose shares are held by depositories, brokers or nominees.

Dividends

We have never declared or paid any cash dividends on our common stock. We currently intend to retain all available funds and any future earnings for use in the operation and expansion of our business and do not anticipate paying any cash dividends in the foreseeable future. In addition, our credit facility limits our ability to pay dividends in most circumstances.

Recent Sales of Unregistered Securities

During 2018, pursuant to an employment agreement entered into with one new hire, we granted the right to receive up to an aggregate of 100,000 shares of the Company's common stock as long-term incentive inducements, which shares will be issued during the five year period following the commencement of the respective employment agreement in the amounts set forth below, provided the Company's stock price exceeds the applicable target share prices set forth below for at least 30 consecutive trading days.

Target Price Per Share Long-Term Incentive Shares

\$13.00	12,500
\$16.00	12,500
\$20.00	25,000
\$25.00	25,000
\$30.00	25,000

The securities described above were offered and sold pursuant to Section 4(2) of the Securities Act of 1933, as amended, which provides an exemption for transactions by an issuer not involving any public offering.

Equity Compensation Plan Information

The following table sets forth information as of December 31, 2018, with respect to compensation plans under which equity securities of the Company are authorized for issuance.

Plan Category	Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights (a)	Ex Ou Op	eighted-Average ercise Price of atstanding otions, Warrants d Rights (b)	Available for Future
Equity compensation plans approved by security holders ⁽¹⁾	1,372,966	\$	10.28	1,242,735
Equity compensation plans not approved by security holders ⁽²⁾	1,315,000			_
TOTAL	2,687,966			1,242,735

The 2013 Plan, which took effect on January 1, 2013, replaced the 2009 Plan, and authorizes the issuance of up to 4,180,000 shares.

During 2015, 2016, 2017 and 2018, the Company granted Long-Term Incentive Shares pursuant to employment agreements with certain new employees. The agreements provided for grants of inducement equity awards outside of the 2013 Plan. An aggregate of 1,215,000 shares were granted during 2015, 2016, 2017 and 2018 outside of the 2013 Plan to new hires, in accordance with NASDAQ Listing Rule 5635(c)(4) upon commencement of their employment. The remaining 100,000 shares were granted to two Sotera employees upon the Sotera acquisition in April 2017.

Performance Graph

The following graph illustrates a comparison of the total cumulative stockholder return on our common stock (traded under the symbol "KEYW") from December 31, 2013 through December 31, 2018, to two indices: the Russell 2000 Index and the NASDAQ Composite Index. In addition, the graph illustrates the performance of a peer group consisting of Engility Holdings, Inc. (EGL), ICF International, Inc. (ICFI), Mercury Computer Systems, Inc. (MRCY) and Kratos Defense & Security Solutions, Inc. (KTOS). These peers, while not direct competitors, were selected because they are comparable in such factors as annual revenue, market capitalization and number of employees. We believe that the stock performance of the selected peer group is a relevant comparison for investors. The graph assumes an initial investment of \$100 on December 31, 2013, in KeyW common stock, each of the two indices and the peer group, each assuming dividend reinvestment. The comparisons in the graph are required by the Securities and Exchange Commission and are not intended to forecast or be indicative of possible future performance of our common stock.

Item 6. SELECTED FINANCIAL DATA

The following tables contain selected historical financial data for us for the years ended December 31, 2018, 2017, 2016, 2015 and 2014. The selected consolidated financial data presented should be read together with Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and the related notes included in Item 15 of this Annual Report. On April 4, 2017 we acquired Sotera Holdings Inc., a Delaware corporation and its wholly owned subsidiary Sotera Defense Solutions Inc., a Delaware corporation (Sotera) and the results of Sotera's operations were included from the date of acquisition (refer to Note 2 - Acquisitions to the Consolidated Financial Statements in Item 15 of this Annual Report for more information).

	Year ended December 31,								
	2018	2017	2016	2015	2014				
	(In thousa	(In thousands)							
Cash and cash equivalents	\$36,133	\$17,832	\$41,871	\$21,227	\$39,601				
Working capital ^{(1), (2)}	59,768	46,658	68,569	63,915	82,475				
Total assets ^{(1), (2)}	675,981	683,606	444,392	453,579	463,490				
Long-term obligations ^{(1), (2)}	293,009	290,436	175,591	165,936	130,779				
Total stockholders' equity ⁽¹⁾	\$290,230	\$307,518	\$231,880	\$251,282	\$299,047				

- (1) The Company adopted ASC 606 as of January 1, 2018, using the modified retrospective method (refer to Note 3 Revenue from Contract with Customers to the Consolidated Financial Statements in Item 15 of this Annual Report for more information). Also, the balances for the years ended December 31, 2017, 2016, 2015 and 2014 have been revised to reflect the correction of certain errors related to the accounting of self-constructed assets that management has determined are not material (refer to Note 1 Summary of Significant Accounting Policies to the Consolidated Financial Statements in Item 15 of this Annual Report for more information).
- (2) The Company adopted ASU 2015-17 as of January 1, 2017 on a retrospective basis and reclassified current deferred tax assets and liabilities to non-current deferred assets and liabilities (refer to Note 1 Summary of Significant Accounting Policies to the Consolidated Financial Statements in Item 15 of this Annual Report for more information).

information).											
	Year ended December 31,										
	2018		2017		2016		2015		2014		
	(In thousands, except per share data)										
Revenue	\$506,840)	\$441,586	5	\$288,027	7	\$297,935	5	\$279,250)	
Operating income (loss)	7,916		(7,672)	13,190		15,873		18,494		
Net (loss) income from continuing operations	(22,280)	(13,389)	1,352		(30,282)	6,437		
Net loss on discontinued operations	_		_		(27,593)	(28,712)	(20,125)	
Net loss	\$(22,280)	\$(13,389)	\$(26,241)	\$(58,994	.)	\$(13,688)	
Basic net (loss) earnings per share:											
Continuing operations	\$(0.45)	\$(0.27)	\$0.03		\$(0.78)	\$0.17		
Discontinued operations	_		_		(0.68))	(0.74))	(0.54)	
Basic net loss per share	\$(0.45)	\$(0.27)	\$(0.65)	\$(1.52)	\$(0.37)	
Diluted net (loss) earnings per share:											
Continuing operations	\$(0.45	`	\$(0.27)	\$0.03		\$(0.78	`	\$0.16		
	\$(0.43)	\$(0.27)		`	•			`	
Discontinued operations	— • (0. 45	,	— • · · · · • • • · · ·		(0.67)		(0.74		(0.51)	
Diluted net loss per share	\$(0.45)	\$(0.27)	\$(0.64)	\$(1.52)	\$(0.35)	
Adjusted EBITDA from continuing operations	\$49,634		\$40,154		\$31,182		\$35,885		\$38,376		

Adjusted EBITDA from continuing operations as defined by us is a financial measure that is not calculated in accordance with U.S. GAAP. The Adjusted EBITDA from Continuing Operations Reconciliation tables below provide reconciliations of this non-U.S. GAAP financial measure to net income (loss), the most directly comparable financial measure calculated and presented in accordance with U.S. GAAP. Adjusted EBITDA from continuing operations should not be considered as an alternative to net

income, operating income or any other measure of financial performance calculated and presented in accordance with U.S. GAAP. Our adjusted EBITDA from continuing operations may not be comparable to similarly titled measures of other companies because other companies may not calculate adjusted EBITDA from continuing operations or similarly titled measures in the same manner as we do. We prepare adjusted EBITDA from continuing operations to eliminate the impact of items that we do not consider indicative of our core operating performance. We encourage you to evaluate these adjustments and the reasons we consider them appropriate.

We believe adjusted EBITDA from continuing operations is useful to investors in evaluating our operating performance for the following reasons:

we have various non-recurring transactions and expenses that directly impact our net income. Adjusted EBITDA from continuing operations is intended to approximate the net cash provided by operations by adjusting for non-recurring, non-operational items; and

securities analysts use adjusted EBITDA from continuing operations as a supplemental measure to evaluate the overall operating performance of companies.

Our board of directors and management use adjusted EBITDA from continuing operations:

as a measure of operating performance;

to determine a significant portion of management's incentive compensation;

for planning purposes, including the preparation of our annual operating budget; and

to evaluate the effectiveness of our business strategies.

Although adjusted EBITDA from continuing operations is frequently used by investors and securities analysts in their evaluations of companies, adjusted EBITDA from continuing operations has limitations as an analytical tool, and you should not consider it in isolation or as a substitute for analysis of our results of operations as reported under U.S.

GAAP. Some of these limitations are:

adjusted EBITDA from continuing operations does not reflect our cash expenditures or future requirements for capital expenditures or other contractual commitments;

adjusted EBITDA from continuing operations does not reflect changes in, or cash requirements for, our working capital needs;

- adjusted EBITDA from continuing operations does not reflect interest expense or interest income;
- adjusted EBITDA from continuing operations does not reflect cash requirements for income taxes;
- adjusted EBITDA from continuing operations does not include non-cash expenses related to share based compensation;
- adjusted EBITDA from continuing operations does not include acquisition and integration costs;
- adjusted EBITDA from continuing operations does not include non-cash loss on extinguishment of debt;
- adjusted EBITDA from continuing operations does not include asset impairment charges;
- adjusted EBITDA from continuing operations does not include other adjustments which are non-recurring expense; although depreciation and amortization are non-cash charges, the assets being depreciated or amortized will often have to be replaced in the future, and adjusted EBITDA from continuing operations does not reflect any cash requirements for these replacements; and

other companies in our industry may calculate adjusted EBITDA from continuing operations or similarly titled measures differently than we do, limiting its usefulness as a comparative measure.

	Adjusted EBITDA from Continuing Operations									
	Reconciliation									
	Year ended December 31,									
	2018	2017	2016	2015	2014					
	(In thousan	nds)								
Net (loss) income from continuing operations ⁽¹⁾	\$(22,280)	\$(13,389)	\$1,352	\$(30,282)	\$6,437					
Depreciation ⁽¹⁾	11,768	10,700	6,726	6,050	5,489					
Intangible amortization	12,120	11,416	6,113	7,087	7,737					
Share-based compensation	4,908	4,228	3,472	5,524	6,421					
Interest expense, net	23,407	17,015	10,812	10,299	8,934					
Income tax (benefit) expense ^{(1), (2)}	(4,734)	(10,862)	2,452	35,896	3,254					
Loss on extinguishment of debt	11,676	_	_	_	_					
Acquisition costs and other adjustments (3)	12,769	21,046	255	1,311	104					
Adjusted EBITDA from continuing operations ⁽¹⁾	\$49,634	\$40,154	\$31,182	\$35,885	\$38,376					

2018 and 2017.

(1) The Company adopted ASC 606 as of January 1, 2018, using the modified retrospective method. Also, the balances for the years ended December 31, 2017, 2016, 2015 and 2014 have been revised to reflect the correction of certain errors related to the accounting of self-constructed assets that management has determined are not material. (2) The income tax (benefit) expense for 2017 and 2015 included a valuation allowance adjustment for deferred tax assets and liabilities. The income tax (benefit) expense for 2017 included the effect of change in the federal tax rate. (3) Acquisition costs and other adjustments include: \$4.3 million of asset impairment charges, a \$3.2 million loss on disposal of assets, and \$5.3 million of other nonrecurring acquisition and integration related costs in 2018; \$21.0 million of non-recurring acquisition and integration related to a discontinued joint venture in 2016. The following tables contain selected historical unaudited financial data by quarter for the years ended December 31,

	2018				2017			
	Three	Three	Three	Three	Three	Three	Three	Three
	Months	Months	Months	Months	Months	Months	Months	Months
	Ended	Ended	Ended	Ended	Ended	Ended	Ended	Ended
	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30	Dec. 31
	(In thousa	nds, except	per share da	ta and unau	dited)		_	
Revenue ⁽¹⁾	\$125,742	\$128,140	\$126,690	\$126,268	\$68,256	\$124,058	\$122,394	\$126,878
Operating income (loss) ^{(1),}	667	3,688	3,743	(182)	(1,928)	(10,550)	534	4,272
Net (loss) income from continuing operations ^{(1), (2)}	(3,399	(11,394) (1,986	(5,501)	(4,545)	(18,386)	(6,029)	15,571
(Loss) income from continuing operations per share of common stock-basic ^{(1), (2)}	(0.07	0.23) (0.04	(0.11)	(0.10)	(0.37)	(0.12)	0.31
(Loss) income from continuing operations per share of common stock-diluted ^{(1), (2)}	(0.07	0.23) (0.04	(0.11)	(0.10)	(0.37)	(0.12)	0.31
Adjusted EBITDA from continuing operations ^{(1), (2)}	\$11,553	\$12,332	\$13,710	\$12,039	\$4,061	\$10,379	\$11,476	\$14,238

(1) The Company adopted ASC 606 as of January 1, 2018, using the modified retrospective method. Also, the balances for the three months ended March 31, June 30, and September 30, 2018, and the three months ended March

31, June 30, September 30, and December 31, 2018, respectively have been revised to reflect the correction of certain errors related to the accounting of self-constructed assets that management has determined are not material.

(2) The Company has corrected three months ended June 30, 2017, and three months ended September 30, 2017, to reflect an increase of \$1.1 million and \$1.2 million, respectively, of intangible asset amortization resulting from immaterial errors related to the under allocation of purchase price to intangible assets from the Sotera acquisition.

	Adjusted EBITDA from Continuing Operations Reconciliation									
	2018				2017					
	Three	Three	Three	Three	Three	Three	Three	Three		
	Months	Months	Months	Months	Months	Months	Months	Months		
	Ended	Ended	Ended	Ended	Ended	Ended	Ended	Ended		
	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30	Dec. 31		
	(In thousa	inds and un	audited)							
Net (loss) income from continuing operations ^{(1), (2)}	\$(3,399)	\$(11,394)	\$(1,986)	\$(5,501)	\$(4,545)	\$(18,386)	\$(6,029)	\$15,571		
Depreciation ⁽¹⁾	3,117	2,709	2,953	2,989	1,702	2,724	3,087	3,187		
Intangible amortization ⁽²⁾	3,940	2,738	2,721	2,721	1,650	3,604	3,604	2,558		
Share-based compensation	1,180	1,069	1,252	1,407	958	1,140	956	1,174		
Interest expense, net	4,827	5,907	6,240	6,433	2,609	4,914	4,829	4,663		
Income tax (benefit) expense ^{(1), (3)}	(756)	(2,127)	(686)	(1,165)		3,059	1,980	(15,901)		
Loss on extinguishment of debt		11,429	166	81	_		_			
Acquisition costs and other adjustments (4)	2,644	2,001	3,050	5,074	1,687	13,324	3,049	2,986		
Adjusted EBITDA from continuing operations ^{(1), (2)}	\$11,553	\$12,332	\$13,710	\$12,039	\$4,061	\$10,379	\$11,476	\$14,238		

- (1) The Company adopted ASC 606 as of January 1, 2018, using the modified retrospective method. Also, the balances for the three months ended March 31, June 30, and September 30, 2018, and the three months ended March 31, June 30, September 30, and December 31, 2018, respectively have been revised to reflect the correction of certain errors related to the accounting of self-constructed assets that management has determined are not material.
- (2) The Company has corrected three months ended June 30, 2017, and three months ended September 30, 2017, to reflect an increase of \$1.1 million and \$1.2 million, respectively, of intangible asset amortization resulting from immaterial errors related to the under allocation of purchase price to intangible assets from the Sotera acquisition.
- (3) The income tax (benefit) expense in the fourth quarter of 2017 included a valuation allowance adjustment for deferred tax assets and liabilities, as well as the effect of change in the federal tax rate.
- (4) Acquisition costs and other adjustments include: \$4.3 million of asset impairment charges, a \$3.2 million loss on disposal of assets, and \$5.3 million of other nonrecurring acquisition and integration related costs in 2018; and \$21.0 million of non-recurring acquisition and integration related costs in 2017.

$^{\rm 1}$ Management's discussion and analysis of financial condition and results of operations

Our Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) is provided in addition to the accompanying consolidated financial statements and notes to assist readers in understanding our results of operations, financial condition, and cash flows. MD&A is organized as follows:

Executive Level Overview. Discussion of our business and overall analysis of financial and other highlights affecting our company in order to provide context for the remainder of MD&A and our overall strategy.

Critical Accounting Policies. Accounting estimates that we believe are most important to understanding the assumptions and judgments incorporated in our reported financial results and forecasts.

Results of Operations. An analysis of our financial results comparing 2018 to 2017 and comparing 2017 to 2016. Liquidity and Capital Resources. An analysis of changes in our balance sheets and cash flows, and discussion of our financial condition and sources of and needs for liquidity.

Contractual Obligations and Commitments; Off-Balance-Sheet Arrangements. Overview of contractual obligations, contingent liabilities, commitments, and off-balance-sheet arrangements outstanding as of December 31, 2018. Forward-Looking Statements

Management's Discussion and Analysis of Financial Condition and Results of Operations contains forward-looking statements regarding future events and our future results that are subject to the safe harbors created under the Securities Act of 1933 (the "Securities Act") and the Securities Exchange Act of 1934 (the "Exchange Act"). All statements other than statements of historical facts are statements that could be deemed forward-looking statements. These statements are based on current expectations, estimates, forecasts and projections about the industries in which we operate and the beliefs and assumptions of our management. Words such as "expects," "anticipates," "targets," "goals," "projects," "intends," "plans," "believes," "seeks," "estimates," "continues," "endeavors," "strives," "may," variations of such similar expressions are intended to identify such forward-looking statements. In addition, any statements that refer to projections of our future financial performance, our anticipated growth and trends in our businesses, and other characterizations of future events or circumstances are forward-looking statements. Readers are cautioned that these forward-looking statements are only predictions and are subject to risks, uncertainties, and assumptions that are difficult to predict, including those identified below, as well as under "Part I, Item 1A. Risk Factors," and elsewhere in this Annual Report on Form 10-K.

Therefore, actual results may differ materially and adversely from those expressed in any forward-looking statements. You should not place undue reliance on these forward-looking statements, which apply only as of the date of this Annual Report. Subsequent events and developments may cause our views to change. While we may elect to update the forward-looking statements at some point in the future, we specifically disclaim any obligation to do so. Executive Level Overview

We are an innovative national security solutions provider to the Intelligence, Cyber, and Counterterrorism communities. Our advanced technologies in cyber; intelligence, surveillance and reconnaissance; and analytics span the full spectrum of customer missions and enhanced capabilities. Our highly skilled workforce solves complex customer challenges such as preventing cyber threats, transforming data to actionable intelligence, and building and deploying sensor packages into any domain. Our core capabilities include: advanced cyber operations and training; geospatial intelligence; cloud and data analytics; engineering; and intelligence analysis and operations. Our other offerings include a suite of advanced Intelligence, Surveillance, and Reconnaissance (ISR) technology solutions, proprietary products-including electro-optical, hyperspectral, and synthetic aperture radar sensors-and other products that we manufacture and integrate with hardware and software to meet unique and evolving intelligence mission requirements.

Our solutions focus on Intelligence Community (IC) customers, including the Federal Bureau of Investigation (FBI), Department of Homeland Security (DHS), National Security Agency (NSA), the National Geospatial Intelligence Agency (NGA), the Army Geospatial Center (AGC) and other agencies within the IC and Department of Defense (DoD). In addition, we provide products and services to U.S. federal, state, and local law enforcement agencies, foreign governments and other entities in the Cyber and Counterterrorism markets. We believe the combination of our advanced solutions, understanding of our customers' missions, longstanding and successful customer relationships, operational capabilities, and highly skilled, cleared workforce will help expand our footprint in our core markets.

Critical Accounting Policies

The following are the critical accounting policies that require us to make sensitive estimates and assumptions, or that regard matters where further detail will assist the reader in better understanding our business and the results of our operations. We have additional accounting policies included in our audited financial statements contained in Item 15 of this Form 10-K.

The policies that we have included below include: Revenue Recognition
Goodwill

Income Taxes

Revenue Recognition

Effective January 1, 2018, we adopted the requirements of Accounting Standards Update (ASU) 2014-09 and related amendments, Revenue from Contracts with Customers (ASC 606), which superseded all prior revenue recognition methods and industry-specific guidance.

The majority of our revenues are from long-term contracts with the U.S. Government that can span several years. The Company performs under various types of contracts including cost reimbursement (cost-plus-fixed-fee, cost-plus-award-fee), time-and-materials, fixed-price-level-of-effort, and firm-fixed-price contracts.

Under the guidance of ASC 606, the Company evaluates whether it has an enforceable contract with a customer with rights of the parties and payment terms identified, and collectability is probable. The Company also evaluates if a contract has multiple promises and if each promise should be accounted for as separate performance obligations or as a single performance obligation. Multiple promises in a contract are typically separated if they are distinct, both individually and in the context of the contract. If multiple promises in a contract are highly interrelated or comprise a series of distinct services performed over time, they are combined into a single performance obligation.

Contract modifications are evaluated to determine whether they should be accounted for as part of the original contract or as a separate contract. We consider contract modifications to exist when the modification either creates new or changes the existing enforceable rights and obligations. Contract modifications are accounted for as a separate contract if the modification adds distinct goods or services and increases the contract value by its standalone selling price. Modifications that are not determined to be a separate contract are accounted for either has a prospective adjustment to the original contract if the goods or services in the modification are distinct from those transferred before the modification or as a cumulative adjustment if the goods and services are not distinct and are part of a single performance obligation that is partially satisfied. The Company's services contracts frequently provide customers an option to renew for an additional period of time under the same terms and conditions as the original contract. The renewal options typically do not provide the customer any material rights under the contract, therefore are treated as separate contracts when they include distinct goods or services at standalone selling prices.

Transaction prices for contracts with the U.S. Government are typically determined through a competitive procurement process and are based on estimated or actual costs of providing the goods or services in accordance with applicable regulations. Transaction prices for non-U.S. government customers are based on specific negotiations with each customer. In certain instances, our contracts contain award fees, incentive fees, or other provisions that can either increase or decrease the transaction price. The variable amounts generally are awarded upon achievement of certain performance metrics or program milestones and can be based upon customer discretion. We estimate variable consideration at the most likely amount to which we expect to be entitled. Our estimates of variable consideration and determination of whether to include estimated amounts in the transaction price are based largely on an assessment of the Company's anticipated performance and all information (historical, current and forecasted) that is reasonably available to us and the potential of a significant reversal of revenue. The Company excludes any taxes collected or imposed when determining the transaction price.

A contract's transaction price is allocated to each distinct performance obligation and recognized when, or as, the performance obligation is satisfied. For contracts with multiple performance obligations, we allocate the contract's transaction price to each performance obligation using our best estimate of the standalone selling price of each distinct good or service in the contract. Substantially none of the Company's contracts contain a significant financing component, which would require an adjustment to the transaction price of the contract.

The Company recognizes revenue on a majority of its contracts over time as there is continuous transfer of control to the customer over the contract's period of performance. Continuous transfer of control is typically supported by contract clauses which allow our customers to unilaterally terminate a contract for convenience, pay for costs incurred plus a reasonable profit, and take control of work-in-process. Revenue recognized over time is generally based on the extent of progress towards completion of the related performance obligations. The selection of the method to measure progress towards completion requires judgment and is based on the nature of the products or services provided. In certain instances, typically for firm-fixed-price contracts, we use the cost-to-cost measure of progress for our contracts

because it best depicts the transfer of control to the customer which occurs as we incur costs on our contracts. Under the cost-to-cost measure of progress, the extent of progress towards completion is measured based on the ratio of costs incurred to date to the total estimated costs at completion of the performance obligation. Revenues, including estimated fees or profits, are recorded proportionally as costs are incurred. Costs to fulfill generally include direct labor, materials and subcontractors' costs, other direct costs and an allocation of indirect costs. In other instances, generally for cost reimbursable, time-and-materials, and fixed-price-level-of-effort contracts, revenue is recognized based on a right to invoice practical expedient as the Company is able to invoice the customer in an amount that corresponds directly with the value received by a customer for the Company's performance completed to date. In some instances, typically for the sale of products that have an alternative use, the Company recognizes revenue at a point in time using a rate per unit as units are delivered and the customer obtains legal title of the asset.

Changes in estimates related to contracts accounted for using the cost-to-cost method of accounting are recognized in the period in which such changes are made on a cumulative catch-up basis, which recognizes in the current period the cumulative effect of the changes on current and prior periods based on a performance obligation's percentage of completion. A significant change in

one or more estimates could affect the profitability of one or more of our performance obligations. When estimates of total costs to be incurred on a performance obligation exceed total estimates of revenue to be earned, a provision for the entire loss on the performance obligation is recognized in the period the loss is determined. For the years ended December 31, 2018, 2017 and 2016 there were no material adjustments recorded related to revised contract estimates. Goodwill

Purchase price in excess of the fair value of tangible assets and identifiable intangible assets acquired and liabilities assumed in a business combination is recorded as goodwill. The Company tests for impairment at least annually, during the beginning of the fourth quarter, or more frequently if impairment indicators arise. Impairment of goodwill is tested at the reporting unit level by comparing the reporting unit's carrying amount, including goodwill, to the fair value of the reporting unit.

We may elect to first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. When performing a qualitative assessment, we consider factors including, but not limited to, current macroeconomic conditions, industry and market conditions, cost factors, financial performance and other events relevant to the entity or reporting unit under evaluation to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If, based on our review of qualitative factors, it is more likely than not that the fair value of a reporting unit is less than its carrying value (or if we elected to bypass assessing the qualitative factors), the Company would perform a quantitative impairment test to identify goodwill impairment and measures the amount of goodwill impairment loss to be recognized (if any) by comparing the fair value of our reporting unit with its carrying amount, using a combination of income and market approaches. An impairment charge would be recognized for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. As a result of the adoption of ASU 2017-04, Intangibles - Goodwill and Other, if we determine that the goodwill is impaired, it is no longer required to compare the implied fair value of the reporting unit goodwill associated with the carrying amount of that goodwill, which is commonly referred to as Step 2.

If the quantitative impairment test were to be performed, determining the fair value of a reporting unit is a judgment involving significant estimates and assumptions. These estimates and assumptions include revenue growth rates, operating margins and working capital requirements used to calculate projected future cash flows, risk-adjusted discount rates, selected multiples, control premiums and future economic and market conditions. The Company would base the fair value estimates on assumptions that the management believes to be reasonable, but actual future events may differ from these assumptions.

The Company evaluates goodwill for impairment at the beginning of the fourth quarter. Based on the assessment of qualitative factors performed during the annual impairment evaluation for fiscal 2018, it was determined that it is not more likely than not that the fair value of the reporting unit was less than its carrying value, and as a result, a quantitative step one analysis was not necessary. We did not recognize any goodwill impairments during 2018, 2017 and 2016.

Income Taxes

Income taxes are accounted for under the asset-and-liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carry forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to temporary differences expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enacted date. In evaluating our ability to realize our deferred tax assets, we consider all available positive and negative evidence, including cumulative historic earnings, reversal of deferred tax liabilities, projected taxable income, and tax planning strategies. The assumptions utilized in evaluating both positive and negative evidence require the use of significant judgment concerning our business plans.

For a tax position that meets the more-likely-than-not recognition threshold, the Company initially and subsequently measures the tax liability or benefit as the largest amount that it judges to have a greater than 50% likelihood of being realized upon ultimate settlement with a taxing authority. The liability associated with unrecognized tax benefits may be adjusted periodically due to changing circumstances, such as the progress of tax audits, case law developments and new or emerging legislation. Such adjustments are recognized entirely in the period in which they are identified. The effective tax rate includes the net impact of changes in the liability for unrecognized tax obligations or benefits and subsequent adjustments as considered appropriate by management. The Company's policy is to record interest and penalties as an increase in the liability for uncertain tax obligations or benefits and a corresponding increase to the income tax provision.

Results of Operations									
CONSOLIDATED OVERVIEW	Year ended			Year ende	ed		Year ended		
(In thousands)	Decembe	er 31, 20	018	December	r 31, 20)17	December	: 31, 20	016
Revenue ⁽¹⁾	\$506,840	0.001	%	\$441,586	100.0	%	\$288,027	100.0	%
Cost of revenue, excluding amortization ⁽¹⁾	374,838	74.0	%	332,716	75.3	%	196,908	68.4	%
Operating expenses ⁽¹⁾	107,700	21.2	%	105,126	23.8	%	71,816	24.9	%
Intangible amortization	12,120	2.4	%	11,416	2.6	%	6,113	2.1	%
Interest expense, net	23,407	4.6	%	17,015	3.9	%	10,812	3.8	%
Income tax (benefit) expense, net on continuing operations ⁽¹⁾	(4,734)(0.9)%	(10,862)(2.5)%	2,452	0.9	%
Net loss on discontinued operations	\$—		%	\$ —		%	\$(27,593)(9.6)%

(1) The Company adopted ASC 606 as of January 1, 2018, using the modified retrospective method (refer to Note 3 - Revenue from Contract with Customers to the Consolidated Financial Statements in Item 15 of this Annual Report for more information). Also, the balances for the years ended December 31, 2017 and 2016 have been revised to reflect the correction of certain errors related to the accounting of self-constructed assets that management has determined are not material (refer to Note 1 - Summary of Significant Accounting Policies to the Consolidated Financial Statements in Item 15 of this Annual Report for more information).

Revenue

Revenue increased by \$65.3 million, or 14.8%, in 2018 as compared to 2017. The revenue increase is primarily attributable to contracts associated with the addition of Sotera to our financial results from the closing of the Sotera acquisition on April 4, 2017.

Revenue increased by \$153.6 million, or 53.3%, in 2017 as compared to 2016. The revenue increase is primarily attributable to contracts acquired through the 2017 acquisition of Sotera, growth in our airborne ISR solutions business, and higher advanced geospatial intelligence products and solutions sales, partially offset by the completion of certain solutions contracts and the divestiture of our systems engineering and technical assistance (SETA) business in the first quarter of 2016.

Cost of revenue, excluding amortization

Cost of revenue, excluding amortization, increased by \$42.1 million, or 12.7%, and decreased slightly as a percentage of revenue, in 2018 when compared to 2017. The cost increase was driven largely by the increase in revenue primarily due to the contracts associated with the addition of Sotera to our financial results from the closing of the Sotera acquisition on April 4, 2017.

Cost of revenue, excluding amortization, increased by \$135.8 million, or 69.0%, in 2017 when compared to 2016. The increase in the cost of revenue, excluding amortization, was driven largely by the increase in revenue. The increase in cost of revenue, excluding amortization, as a percentage of total revenue was primarily due to the contracts acquired through the Sotera acquisition, increased costs related to the growth in our airborne ISR solutions business, and the completion of certain higher-margin solutions contracts, as well as lower contract margins on a large follow-on services solutions program.

Operating Expenses

Our operating expenses for 2018 increased by \$2.6 million and decreased slightly as a percentage of revenue compared to 2017. The increase is due primarily to the addition of Sotera to our financial results from the closing of the Sotera acquisition on April 4, 2017, partially offset by lower acquisition, integration and other non-recurring expenses in 2018.

Our operating expenses for 2017 increased by \$33.3 million and decreased slightly as a percentage of revenue compared to 2016. The increase is due primarily to the 2017 acquisition of Sotera, as well as \$21.0 million of acquisition-related and other expenses, and higher stock-based compensation.

Intangible Amortization

Intangible amortization expense increased by \$0.7 million in 2018 when compared to 2017, primarily due to additional amortization related to the 2017 acquisition of Sotera, which was partially offset by certain intangible assets that became fully amortized or impaired during 2018.

Intangible amortization expense increased by \$5.3 million in 2017 when compared to 2016. The increase was primarily a result of additional amortization related to the 2017 acquisition of Sotera. Interest Expense, net

Interest expense increased by \$6.4 million in 2018 when compared to 2017, primarily due to higher interest expense associated with borrowings under our 2018 credit facility compared to the 2017 credit facility.

Interest expense, net, increased by \$6.2 million in 2017 when compared to 2016, primarily to higher interest expense related to borrowings under the 2017 credit facility compared to the credit facility in place in 2016.

Income Tax (Benefit) Expense, net on Continuing Operations

The effective tax rate for continuing operations was 17.5%, 44.8% and 64.5% for 2018, 2017 and 2016, respectively. On December 22, 2017, the President of the United States signed into law the Tax Cuts and Jobs Act tax reform legislation. This legislation made significant changes in U.S. tax law including a reduction in the corporate tax rates, changes to net operating loss carryforwards and carrybacks, limitation of the tax deduction for interest expense, and a repeal of the corporate alternative minimum tax. The legislation reduced the U.S. corporate tax rate from 35% to 21%. As a result of the enacted law, the Company was required to revalue deferred tax assets and liabilities at the enacted rate in the Annual Report on Form 10-K for the year ended December 31, 2017. This revaluation resulted in the Company recording a benefit of \$12.4 million to income tax from continuing operations with a corresponding reduction in the deferred tax liability for the year ended December 31, 2017. The revaluation also resulted in an adjustment to the value of deferred tax assets and liabilities and a corresponding adjustment to the valuation allowance. Additionally, the Company recorded an income tax benefit of \$6.0 million as management has reassessed the ability to offset certain indefinite lived deferred tax liabilities with deferred tax assets, reducing the Company's need for a valuation allowance by the portion of deferred tax assets that are expected to have indefinite lives under the new law.

The Company had recorded provisional estimates for valuation allowance reversal to certain state deferred tax assets based upon existing state tax law conformity to federal tax laws based upon the Staff Accounting Bulletin 118 issued in early 2018. Management completed the analysis for the impact of state law conformity changes during the fourth quarter of 2018. As a result of the 2018 analysis, the adjustment to the December 31, 2017 provisional estimate was a reversal of additional \$0.1 million of the valuation allowance. Management will continue to monitor state legislative actions in states. The Company finalized its assessment during the one-year measurement period as prescribed by the Staff Accounting Bulletin 118.

The Company's effective tax rate for 2018 differs from the statutory rate due to permanent differences for tax non-deductible items and changes to the state effective rate. The Company's effective tax rate for 2017 differs from the statutory rate due to the impact of the tax legislation, partial release of the valuation allowance in the fourth quarter of 2017 and the current year movement of the indefinite lived intangible deferred tax liability. The Company's effective tax rate for 2016 differs from statutory rates due to the Company's inability to offset its indefinite lived intangible deferred tax expense against deferred tax assets in association with the recording of the valuation allowance movement.

Loss on Discontinued Operations

Loss on discontinued operations for 2016 was \$27.6 million, which in addition to losses from operations, was driven by a \$5.5 million pre-tax loss on the disposal of the Hexis Cyber Solutions product line and a \$7.0 million goodwill impairment charge.

Liquidity and Capital Resources

At December 31, 2018, we had approximately \$36.1 million in cash and cash equivalents, which represents an increase of \$18.3 million from December 31, 2017. Our working capital, defined as current assets minus current liabilities, was \$59.8 million, which represents an increase of approximately \$13.1 million from December 31, 2017. The increase in working capital is primarily driven by an increase in cash and cash equivalents and a reduction in accounts payable, partially offset by an increase in the current portion of long-term debt.

Cash from Operations

Net cash flows from operating activities provided approximately \$13.0 million in cash during 2018, an increase of \$6.5 million as compared to 2017. The increase was primarily due to higher cash earnings partially offset by higher outflows associated with the timing of vendor and subcontractor payments. A number of non-cash adjustments contributed to our net loss in 2018, including intangible amortization, depreciation, share based compensation expense, loss on extinguishment of debt, asset impairment charges and amortization of convertible debt discount. Intangible amortization was \$12.1 million in 2018. Share based compensation expense was \$4.9 million in 2018. Depreciation expense for 2018 was \$11.8 million. Loss on extinguishment of debt for 2018 was \$11.7 million. Asset impairment charges for 2018 was \$4.3 million. Our need for additional working capital will be determined by our method and volume of growth. Growing through self-performed labor will require more working capital than growing using subcontractors, but we expect self-performed labor will be a more profitable alternative than using subcontractors.

Net cash flows from operating activities provided approximately \$6.5 million in cash during 2017, a decrease of \$15.7 million as compared to 2016. The decrease was primarily due to timing of our collections of receivables and increased cash expenses related to the acquisition and integration of Sotera. A number of non-cash adjustments contributed to our net loss in 2017, including intangible amortization, depreciation, share based compensation expense, and amortization of convertible debt discount. Intangible amortization was \$11.4 million in 2017. Share based compensation expense was \$4.2 million in 2017. Depreciation expense for 2017 was \$10.7 million.

Cash Flow from Investing

The net cash flows used in investing activities for the years ended December 31, 2018, 2017 and 2016 included capital expenditures of \$4.9 million, \$6.4 million and \$17.5 million, respectively.

On April 4, 2017, we completed the acquisition of Sotera in a \$236.1 million, less \$0.2 million of escrow holdback, net of cash acquired, all-cash transaction. The Sotera acquisition was funded through a combination of cash on hand and through borrowings from the 2017 credit facility, discussed below in Cash Flow from Financing.

Cash Flow from Financing

Net cash flows provided by financing activities decreased \$201.5 million during 2018 when compared to 2017, primarily due to net proceeds of debt related transactions. During May of 2018, the Company closed its new senior secured credit facilities, consisting of a \$215 million First Lien Term Loan facility maturing in May 2024, a \$75 million Second Lien Term Loan facility maturing in May 2025 and a \$50 million senior secured Revolving Credit Facility maturing in May 2023. The drawn-down proceeds from the new credit facilities were used to pay off the Company's former credit facility and to repurchase approximately \$126.9 million of the Company's 2.50% senior convertible notes pursuant to a tender offer completed in May 2018. During 2018 the Company elected to prepay \$15.0 million of the First Lien Term Loan. At December 31, 2018, we had \$275.0 million in borrowings under the 2018 credit facility (\$200.0 million under the First Lien Term Loan, \$75.0 million under the Second Lien Term Loan and zero under the Revolving Credit Facility) and \$22.0 million of senior convertible notes outstanding.

Net cash flows provided by financing activities increased \$209.5 million during 2017 when compared to 2016, primarily due to debt related transactions. During 2017 we received \$84.6 million of net proceeds from our January 2017 offering of common stock. Also on April 4, 2017, we entered into a \$135 million term loan facility (the "2017 Term Loan Facility") and a \$50 million revolving credit facility (the "2017 Revolving Loan Facility"). At December 31, 2017, we had \$131.6 million in borrowings under the 2017 Term Loan Facility and zero outstanding under the 2017 Revolving Credit Facility.

2018 Credit Facility

On May 8, 2018, Opco entered into a \$340 million senior secured credit facility (the 2018 Credit Facility), which consists of a \$215 million First Lien Term Loan facility (the First Lien Term Loan Facility), a \$75 million Second Lien Term Loan facility (the Second Lien Term Loan Facility) and a \$50 million senior secured Revolving Credit Facility (the Revolving Loan Facility). The terms of the 2018 Credit Facility are set forth in the First Lien Credit Agreement and the Second Lien Credit Agreement (collectively the 2018 Credit Agreements). On May 8, 2018, Opco borrowed an aggregate of \$215 million under the First Term Loan Facility and \$75 million under the Second Term Loan Facility (collectively the Term Loan Proceeds). The Company used most of the Term Loan Proceeds to pay off the Company's existing credit facility we entered into in 2017 (the 2017 Credit Facility) and to repurchase \$126.9 million of the outstanding Convertible Senior Notes through a tender offer, which resulted in the Company recording a \$11.4 million loss on extinguishment of debt on the Consolidated Statements of Operations for the year ended

December 31, 2018 (refer to Note 11 - Debt to the Consolidated Financial Statements in Item 15 of this Annual Report for more information).

Interest Rates

Borrowings under the 2018 Credit Facility were and will be incurred in U.S. Dollars. All borrowings under the 2018 Credit Facility may, at our option, be incurred as either eurodollar loans (Eurodollar Loans) or base rate loans (Base Rate Loans).

In regards to the First Lien Term Loan Facility and the Revolving Loan Facility:

Eurodollar Loans will accrue interest, for any interest period, at the Eurodollar Rate (as defined in the First Lien Credit Agreement), plus an applicable margin of 4.5%.

Base Rate Loans will accrue interest, for any interest period, at (a) a base rate per annum equal to the highest of (i) the Federal funds rate plus 0.5%; (ii) the prime commercial lending rate announced by Royal Bank of Canada (RBC) from

time to time as its prime lending rate; and (iii) the Eurodollar Rate for a one month interest period plus 1.0%, plus (b) an applicable margin of 3.5%.

The applicable margin for borrowings may be decreased if our consolidated net leverage ratio decreases.

In regards to the Second Lien Term Loan Facility:

Eurodollar Loans will accrue interest, for any interest period, at the Eurodollar Rate (as defined in the Second Lien Credit Agreements) plus an applicable margin of 8.75%.

Base Rate Loans will accrue interest, for any interest period, at (a) a base rate per annum equal to the highest of (i) the Federal funds rate plus 0.5%; (ii) the prime commercial lending rate announced by RBC from time to time as its prime lending rate; and (iii) the Eurodollar Rate for a one month interest period plus 1.0%, plus (b) an applicable margin of 7.75%.

Maturity Dates

The 2018 Revolving Loan Facility matures on May 8, 2023, the 2018 First Lien Term Loan Facility matures on May 8, 2024, and the 2018 Second Lien Term Loan Facility matures on May 8, 2025.

Payments

Voluntary prepayments of the First Lien Term Loan Facility are permitted at any time, in minimum principal amounts. Voluntary prepayments of the Second Lien Term Loan Facility are subject to a 2.00% premium on all principal amounts prepaid prior to the first anniversary of the Closing Date and a 1.00% premium on all principal amounts prepaid after the first anniversary of the Closing Date and prior to the second anniversary of the Closing Date.

The First Lien Term Loan Facility requires scheduled quarterly payments in an amount equal to \$0.5 million with the remaining balance payable on the maturity date. During 2018 the Company elected to prepay \$15.0 million of the First Lien Term Loan. This elective prepayment was applied against future quarterly payments and as such there are no required quarterly payments until first quarter of 2023.

Beginning with the fiscal year 2020, the Company will be required to remit up to 50% of excess cash flow, based on the total net leverage ratio, from the prior year and respective interim periods therein. Also, amounts outstanding under the 2018 Credit Facility will be subject to mandatory prepayments, subject to customary exceptions, from the net cash proceeds to us from certain events and transactions as set forth in the 2018 Credit Agreements.

Certain Covenants and Events of Default

The 2018 Credit Agreements require that the Company comply with certain covenants, including that the Company maintain a total leverage ratio as defined in the 2018 Credit Agreements. At December 31, 2018, the Company was in compliance with all of its debt covenants under the 2018 Credit Agreements.

Security

The Company's obligations under the 2018 Credit Agreements are secured by a pledge of substantially all of its and each other guarantor's assets, including a pledge of the equity interests in certain of Opco's domestic and first-tier foreign subsidiaries, subject to customary exceptions.

2.5% Convertible Senior Notes

During the third quarter of 2014, the Company issued \$149.5 million aggregate principal amount of convertible senior notes in an underwritten public offering. The Convertible Senior Notes bear interest at a rate of 2.50% per annum on the principal amount, payable semi-annually in arrears on January 15 and July 15 of each year, to holders of record at the close of business on the preceding January 1 and July 1, respectively. The Convertible Senior Notes mature on July 15, 2019, unless earlier repurchased or converted. The Company may not redeem the Convertible Senior Notes prior to their stated maturity date.

On May 16, 2018, the Company repurchased approximately \$126.9 million of its Convertible Senior Notes in cash pursuant to a tender offer, and made a payment of \$1.1 million for accrued and unpaid interest associated with the repurchased Convertible Senior Notes. The tendered Convertible Senior Notes were retired upon repurchase. The Company incurred third party fees of \$0.7 million and wrote off \$5.9 million in debt discount and \$0.9 million in deferred financing costs in connection with the partial redemption of the Convertible Senior Notes, which resulted in the Company recording a \$7.5 million loss on extinguishment of debt on the Consolidated Statements of Operations for the year ended December 31, 2018.

Outlook

We expect cash on hand, operating cash flow, and access to our line of credit will provide sufficient liquidity for fiscal 2019. We expect that our 2019 cash flow from operations will be positive. The manner in which we staff our contracts will impact the degree of working capital investment required to fuel our growth. Included in our net income are several significant non-cash transactions that would be add-backs to net income when calculating our cash flow from operations, including stock compensation expense, amortization of intangibles and depreciation of fixed assets.

Contractual Obligations and Commitments

C	Total	Less than one yea	1-3 years	3-5 years	More than 5 years
	(In thous	ands)			
Facilities/Office space	\$68,535	\$8,624	\$15,688	3\$16,243	3\$27,980
Office equipment	116	111	5		_
Total Operating Leases	68,651	8,735	15,693	16,243	27,980
Convertible Senior Notes	22,608	22,608			_
Term Loan Facility	275,000				275,000
Total Contractual Obligations	\$366,259	9\$31,343	3\$15,693	3 \$ 16,243	3\$302,980
Off Balance Sheet Arrangeme	ents				

We do not have any material off balance sheet arrangements.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

In addition to the risks inherent in our operations, we are exposed to financial, market, political and economic risks. The following discussion provides additional detail regarding our exposure to interest rates and foreign exchange rate risks.

Currency Exchange Rates

We currently do not have any material foreign currency risk, and accordingly estimate that an immediate 10% change in foreign exchange rates would not have a material impact on our results from operations.

Interest Rates

Our exposure to market risk relates to changes in interest rates on the borrowings outstanding under our 2018 Credit Facility. We have the ability to manage these fluctuations in part through interest rate hedging alternatives in the form of interest rate swaps. In September 2018, we entered into interest rate swap agreements to hedge the cash flows of \$185.3 million of variable rate interest payments related to our debt (see Note 6 - Derivative Instruments to our consolidated financial statements included herein). A hypothetical 1% increase in interest rates would have increased our interest expense by approximately \$1.1 million for the twelve months ended December 31, 2018, and likewise decreased our income and cash flows.

Equity Price Risk

We do not currently own nor have we ever owned any marketable equity investments to include marketable equity securities and equity derivative instruments such as warrants and options. Therefore, since we do not currently own investments that are subject to market price volatility, our equity price risk is very low.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

See Item 15(a)(1) "Exhibits, Financial Statements Schedule", "Consolidated Financial Statements" in Part IV of this Form 10-K.

Item CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL 9. DISCLOSURE

None.

Item 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our filings and submissions to the Securities and Exchange Commission (the "SEC") under the Securities Exchange Act of 1934 (the Exchange Act) is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms. Such controls include those designed to ensure that information is accumulated and communicated to management, including our Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), as appropriate, to allow timely decisions regarding required disclosures.

An evaluation was conducted under the supervision and with the participation of management, including the CEO and CFO, on the effectiveness of our disclosure controls and procedures, as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act. Based on the evaluation of our disclosure controls and procedures as of

December 31, 2018, the CEO and CFO concluded that, as of such date, our disclosure controls and procedures were effective.

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of consolidated financial statements for external purposes in accordance with U.S. generally accepted accounting principles.

Under the supervision and with the participation of management, we assessed our internal control over financial reporting as of December 31, 2018, the end of our fiscal year. Management based its assessment on criteria established in the 2013 Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO").

Our management's assessment of the effectiveness of our internal control over financial reporting included testing and evaluating the design and operating effectiveness of our internal controls. Based on this assessment, management has concluded that as of December 31, 2018, our internal control over financial reporting was effective.

Attestation Report of the Independent Registered Public Accounting Firm

The effectiveness of our internal control over financial reporting as of December 31, 2018, has been audited by Deloitte & Touche LLP, our independent registered public accounting firm, who also audited our consolidated financial statements included in this Annual Report on Form 10-K, as stated in their reports, which appear with our accompanying consolidated financial statements.

Remediation of Previously Disclosed Material Weaknesses

As disclosed in our Annual Report on Form 10-K for the year ended December 31, 2017 filed with the SEC on March 16, 2018, management previously identified material weaknesses in our internal control over financial reporting. Based on management's evaluation, these material weaknesses have been remediated as of December 31, 2018. The following actions were taken by management to remediate the previously identified material weaknesses:

Control Environment

The Company implemented changes to the Company's control environment which included the following: Hired five new key accounting team members with the appropriate experience, certifications, education, and training including a new Chief Accounting Officer, Director of Technical Accounting (new position responsible for monitoring and reviewing all unique, complex, and/or significant accounting transactions), and Director of Internal Controls and SOX Compliance (new position responsible for overseeing the design of controls, remediation of prior control deficiencies, and enhancement of control activities);

Evaluated the competence of other accounting personnel, including outsourced service providers, and made necessary adjustments;

Developed and delivered relevant control related trainings to senior-level management, control owners, control preparers, and accounting personnel;

Completed a robust review of all internal controls to strengthen documentation, validate processes, and communicate accountability for performance of internal control related responsibilities;

Established an Internal Controls Council that serves as a monitoring function over the Company's control environment, which includes recommending COSO framework improvements, and is comprised of key control owners across the organization and directly enforces accountability and ownership over internal control responsibilities; and

Implemented a quarterly management sub-representation letter process where key members of management certify to the accuracy of and completeness of financial data, disclosures, and internal controls.

Control Activities

The Company executed specific actions to improve the performance of internal control activities including:

Enhanced process and control documentation including the development of detailed control checklists that identify control owners, critical design and control elements, and responsibilities for effectively performing controls;

Implemented automated workflows to reduce reliance on manual processes in support of timely and effective control activities; and

Created and enforced adherence to a quarterly certification of internal controls by control owners and preparers.

As noted, management has taken significant steps to strengthen the Company's internal controls over financial reporting. The material weaknesses are deemed fully remediated as the revised control processes have been operating effectively for a sufficient period of time and management testing has reached a successful conclusion.

Changes in Internal Control Over Financial Reporting

Other than the remediation efforts identified above to address the material weakness, there were no changes to our internal control over financial reporting (as defined in Rules 13a-15(f) and 15-d-15(f) under the Exchange Act) that occurred during the quarter ended December 31, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on the Effectiveness of Controls

Our management, including the CEO and CFO, does not expect that our disclosure controls or our internal control over financial reporting will prevent or detect all error and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. The design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Further, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, have been detected. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Projections of any evaluation of the effectiveness of controls to future periods are subject to risks. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures.

Item 9B. OTHER INFORMATION

On March 11, 2019, the Company entered into amendments to the Employment Agreements with John Sutton, Philip Luci, and Kirk Herdman to provide that any outstanding equity awards to the executive, including Long-Term Incentive Shares (as defined in the Employment Agreements), shall vest immediately upon a Change of Control (as defined pursuant to the Employment Agreements). The foregoing summary of the amendments to the Employment Agreements does not purport to be complete and is qualified in its entirety by reference to the amendments to the Employment Agreements, copies of which are attached as Exhibits 10.29, 10.30 and 10.31 to this Annual Report on Form 10-K, respectively, and are incorporated herein by reference.

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this Item will be included in and is incorporated herein by reference from our 2019 Proxy Statement.

Item 11. EXECUTIVE COMPENSATION

The information required by this Item will be included in and is incorporated herein by reference from our 2019 Proxy Statement.

Item SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND

12. RELATED STOCKHOLDER MATTERS

The information required by this Item will be included in and is incorporated herein by reference from our 2019 Proxy Statement.

Change in Control

There are no arrangements, known to the Company, including any pledge by any person of securities of the Company, where the operation of which may at a subsequent date result in a change in control of the Company.

Equity Compensation Plan Information

See Item 5 "Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities" in Part II of this Form 10-K.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this Item will be included in and is incorporated herein by reference from our 2019 Proxy Statement.

Item 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this Item will be included in and is incorporated herein by reference from our 2019 Proxy Statement.

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Item 15.	EXHIBITS, FINANCIAL STATEMENT SCHEDULES
(a)(1)	Consolidated Financial Statements

Reports of Independent Registered Public Accounting Firm
Consolidated Balance Sheets
Consolidated Statements of Operations
Consolidated Statements of Changes in Stockholders' Equity
Consolidated Statements of Other Comprehensive Loss
Consolidated Statements of Cash Flows
Notes to Consolidated Financial Statements
F-9

Financial Statement Schedules — All financial statement schedules required by Item 8 and Item 15 of Form 10-K

- (2) have been omitted because the information requested is not required, not applicable, or is shown in the Consolidated Financial Statements or Notes thereto.
- (3) Exhibits See Exhibit Index, which is incorporated in this item by reference.
- (b) Exhibits See Exhibit Index, which is incorporated in this item by reference.
- (c) Financial Statement Schedules Included in Item 15(a)(2) above.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of The KeyW Holding Corporation

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of The KeyW Holding Corporation and subsidiaries (the "Company") as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2018, of the Company and our report dated March 12, 2019, expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ DELOITTE & TOUCHE LLP

Baltimore, Maryland March 12, 2019

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of The KeyW Holding Corporation

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of The KeyW Holding Corporation and subsidiaries (the "Company") as of December 31, 2018 and 2017, the related consolidated statements of operations, changes in stockholders' equity, other comprehensive loss, and cash flows, for each of the two years in the period ended December 31, 2018, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2018, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 12, 2019, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ DELOITTE & TOUCHE LLP

Baltimore, Maryland March 12, 2019

We have served as the Company's auditor since 2017.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Shareholders The KeyW Holding Corporation

We have audited the balance sheets of The KeyW Holding Corporation (a Maryland corporation) and subsidiaries (the "Company") as of December 31, 2016 (not presented herein), and the related consolidated statements of operations, changes in stockholders' equity, and cash flows for the year then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the results of operations and cash flows of The KeyW Holding Corporation and subsidiaries for the year ended December 31, 2016, in conformity with accounting principles generally accepted in the United States of America.

/s/ Grant Thornton LLP

Baltimore, Maryland March 15, 2017 (except for Note 1, as to which the date is March 12, 2019)

THE KEYW HOLDING CORPORATION AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS

(In thousands, except par value per share amounts)

	December 31 2018	, December 31, 2017
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 36,133	\$ 17,832
Accounts receivable, net	27,661	49,880
Unbilled receivables, net	59,357	37,785
Inventories, net	24,111	24,337
Prepaid expenses	2,797	2,266
Income tax receivable	155	210
Assets held for sale	2,296	
Total current assets	152,510	132,310
Property and equipment, net	21,073	36,141
Goodwill	455,197	455,197
Other intangibles, net	43,604	57,045
Other assets	3,597	2,913
TOTAL ASSETS	\$ 675,981	\$ 683,606
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 15,578	\$ 25,609
Accrued expenses	17,236	15,545
Accrued salaries and wages	32,036	29,341
Term loan – current portion, net of discount		6,750
Convertible senior notes – current portion, net of discount	22,040	_
Deferred revenue	1,622	6,090
Other current liabilities	4,230	2,317
Total current liabilities	92,742	85,652
Convertible senior notes – non-current portion, net of discount		138,998
Term loan – non-current portion, net of discount	268,924	120,627
Deferred tax liability, net	13,955	19,367
Other non-current liabilities	10,130	11,444
TOTAL LIABILITIES	385,751	376,088
Commitments and contingencies		_
Stockholders' equity:		
Preferred stock, \$0.001 par value; 5,000 shares authorized, none issued		_
Common stock, \$0.001 par value; 100,000 shares authorized, 49,996 and 49,876 shares issued and outstanding as of December 31, 2018 and 2017, respectively	50	50
Additional paid-in capital	430,209	422,901
Accumulated deficit	•	(115,433)
Accumulated other comprehensive loss	(1,320)	_
Total stockholders' equity	290,230	307,518
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$ 675,981	\$ 683,606
TO THE EMBERTILLO PRODUCTION DYON I	\$ 010,701	¥ 002,000

The accompanying notes to the consolidated financial statements are an integral part of these consolidated financial statements.

THE KEYW HOLDING CORPORATION AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share amounts)

	Year Ended December 31,		31,
	2018	2017	2016
Revenues	\$506,840	\$441,586	\$288,027
Costs of revenue, excluding amortization	374,838	332,716	196,908
Operating expenses	107,700	105,126	71,816
Intangible amortization expense	12,120	11,416	6,113
Asset impairment charges	4,266		
Operating income (loss)	7,916	(7,672)	13,190
Interest expense, net	23,407	17,015	10,812
Loss on extinguishment of debt	11,676		
Other non-operating income, net	(153)	(436)	(1,426)
(Loss) earnings before income taxes from continuing operations	(27,014)	(24,251)	3,804
Income tax (benefit) expense, net on continuing operations	(4,734)	(10,862)	2,452
Net (loss) income from continuing operations	(22,280)	(13,389)	1,352
Loss before income taxes from discontinued operations	_	_	(28,082)
Income tax benefit, net on discontinued operations			(489)
Net loss on discontinued operations			(27,593)
Net loss	\$(22,280)	\$(13,389)	\$(26,241)
Weighted average common shares outstanding			
Basic	49,833	48,921	40,501
Diluted	49,833	48,921	41,012
Basic net (loss) earnings per share:			
Continuing operations	\$(0.45)	\$(0.27)	\$0.03
Discontinued operations	_	_	(0.68)
Basic net loss per share	\$(0.45)	\$(0.27)	\$(0.65)
Diluted net (loss) earnings per share:			
Continuing operations	\$(0.45)	\$(0.27)	\$0.03
Discontinued operations			(0.67)
Diluted net loss per share	\$(0.45)	\$(0.27)	\$(0.64)

The accompanying notes to the consolidated financial statements are an integral part of these consolidated financial statements.

THE KEYW HOLDING CORPORATION AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY (In thousands)

			Additional		Accumulated	Total	
	Commo	n Stock	Paid-In	Accumulated	l Other		ro!
	Shares	Amoun	Capital (APIC)	Deficit	Comprehensiv Loss	Equity	15
Balance, January 1, 2016	39,941	\$ 40	\$327,045	\$(75,803)	\$ —	\$ 251,282	
Net loss		_	_	(26,241)		(26,241)
Warrant exercise, net	821	1	1,919			1,920	
Option exercise, net	82		537	_		537	
Equity issued as part of acquisitions, net	129		1,130	_		1,130	
Shares withheld for tax withholding on vesting of restricted stock	(20	· —	(220)	· —	_	(220)
Share-based compensation	24	_	3,472			3,472	
Balance, December 31, 2016	40,977	41	333,883	(102,044)		231,880	
Net loss		_	_	(13,389)		(13,389)
Warrant exercise, net	14						
Option exercise, net	35		222			222	
Shares withheld for tax withholding on vesting of restricted stock	(2)		(9)		_	(9)
Stock issued in secondary offering, net of expenses	8,500	9	84,577	_	_	84,586	
Share-based compensation	352	_	4,228			4,228	
Balance, December 31, 2017	49,876	50	422,901	(115,433)		307,518	
Cumulative effect of adopting ASC 606				(996)		(996)
Net loss			_	(22,280)	_	(22,280)
Other comprehensive loss, net of tax			_	_	(1,320)	(1,320)
Option exercise, net	76	_	395	_	_	395	
Shares withheld for tax withholding on vesting of restricted stock	(11)		(113)	_	_	(113)
Share-based compensation	55	_	4,908			4,908	
Settlement of capped call transactions			2,118			2,118	
Balance, December 31, 2018	49,996	\$ 50	\$430,209	\$(138,709)	\$ (1,320)	\$ 290,230	

The accompanying notes to the consolidated financial statements are an integral part of these consolidated financial statements.

THE KEYW HOLDING CORPORATION AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF OTHER COMPREHENSIVE LOSS (In thousands)

Year Ended December 31, 2018 2017 2016

Net loss \$(22,280) \$(13,389) \$(26,241)

Unrecognized loss on derivatives instruments, net of taxes (1,320) — —

Comprehensive loss \$(23,600) \$(13,389) \$(26,241)

The accompanying notes to the consolidated financial statements are an integral part of these consolidated financial statements.

THE KEYW HOLDING CORPORATION AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS (In thousands)

	Year Ende	ed Decembe	er 31,	
	2018	2017	2016	
Net loss	\$(22,280)	\$(13,389)	\$(26,241))
Adjustments to reconcile net loss to net cash provided by operating activities:				
Share-based compensation	4,908	4,228	3,472	
Depreciation and amortization expense	23,888	22,110	13,855	
Impairment of goodwill from discontinued operations	_		6,980	
Loss on extinguishment of debt	11,676	_	_	
Non-cash interest expense	4,129	7,252	6,294	
Write-off of deferred financing costs	_	_	340	
Loss (gain) on disposal of assets	3,205	5	(3,447)
Asset impairment charges	4,266	_	3,568	
Deferred taxes	(4,604)	(10,895)	1,962	
Changes in assets and liabilities, net of effects of acquisitions:				
Accounts receivable, net	22,219	(12,867)	6,245	
Unbilled receivables, net	(20,406)	8,865	9,271	
Inventories, net	(430)	(8,527)	(1,296)
Prepaid expenses	(728)	707)
Accounts payable	(10,031)	11,689)
Accrued expenses			6,240	
Other non-current assets and liabilities	(1,461)	(2,328)	447	
Net cash provided by operating activities	13,041	6,500	22,221	
Cash flows from investing activities:				
Acquisitions, net of cash acquired		(235,856)	(2,504)
Purchase of property and equipment	(4,932)	(6,419)	(17,536))
Proceeds from sale of assets	_	_	16,226	
Net cash used in investing activities	(4,932)	(242,275)	(3,814)
Cash flows from financing activities:				
Payment of debt extinguishment costs	(711)			
Settlement of capped call transactions	2,118			
Principal payments of convertible senior notes	(126,892)			
Proceeds from stock issuances, net	_	84,586	_	
Proceeds from issuance of term note	290,000	135,000	_	
Principal payments of term loan	(146,625)	(3,375)	_	
Payment of debt issuance costs			_	
Proceeds from revolver	25,000	10,000	_	
Repayment of revolver	(25,000)	(10,000)	_	
Other	(216)	213	2,237	
Net cash provided by financing activities	10,192	211,736	2,237	
Net increase (decrease) in cash and cash equivalents	18,301	(24,039)		
Cash and cash equivalents at beginning of period	17,832	41,871	21,227	
Cash and cash equivalents at end of period	\$36,133	\$17,832	\$41,871	
Supplemental disclosure of cash flow information:	•	•	•	
Cash paid for interest	\$20,972	\$8,426	\$3,883	
Cash (refunded) paid for taxes		\$6	\$40	
· /1	, ,	•	•	

Equity issued for acquisitions, net

The accompanying notes to the consolidated financial statements are an integral part of these consolidated financial statements.

THE KEYW HOLDING CORPORATION AND SUBSIDIARIES NOTES TO CONSOLIDATED FINANCIAL STATEMENTS 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Corporate Organization

The KeyW Holding Corporation (Holdco or KeyW) was incorporated in Maryland in December 2009. Holdco is a holding company and conducts its operations through The KeyW Corporation (Opco) and its wholly owned subsidiaries. As used herein, the terms "KeyW", the "Company", and "we", "us" and "our" refer to Holdco and, unless the context requires otherwise, its subsidiaries, including Opco.

KeyW is an innovative national security solutions provider to the Intelligence, Cyber, and Counterterrorism communities. KeyW's advanced technologies in cyber; intelligence, surveillance and reconnaissance; and analytics span the full spectrum of customer missions and enhanced capabilities. The Company's highly skilled workforce solves complex customer challenges such as preventing cyber threats, transforming data to actionable intelligence, and building and deploying sensor packages into any domain. The Company's core capabilities include: advanced cyber operations and training; geospatial intelligence; cloud and data analytics; engineering; and intelligence analysis and operations. Other KeyW offerings include a suite of advanced Intelligence, Surveillance, and Reconnaissance (ISR) technology solutions, proprietary products-including electro-optical, hyperspectral, and synthetic aperture radar sensors-and other products that the Company manufactures and integrates with hardware and software to meet unique and evolving intelligence mission requirements.

KeyW's solutions focus on Intelligence Community (IC) customers, including the Federal Bureau of Investigation (FBI), Department of Homeland Security (DHS), National Security Agency (NSA), the National Geospatial Intelligence Agency (NGA), the Army Geospatial Center (AGC) and other agencies within the IC and Department of Defense (DoD). In addition, the Company provides products and services to U.S. federal, state, and local law enforcement agencies, foreign governments and other entities in the Cyber and Counterterrorism markets.

Management believes the combination of the Company's advanced solutions, understanding of its customers' missions, longstanding and successful customer relationships, operational capabilities, and highly skilled, cleared workforce will help expand its footprint in its core markets.

Principles of Consolidation

The consolidated financial statements include the transactions of KeyW, Opco and their wholly owned subsidiaries from the date of their acquisition. All intercompany accounts and transactions have been eliminated. Certain prior period amounts in Consolidated Balance Sheets and Consolidated Statements of Cash Flows have been reclassified to conform with current year presentation.

Prior Period Financial Statement Correction of Immaterial Errors

During the second quarter of 2018, management identified errors related to the accounting for self-constructed assets dating back to 2014. These errors resulted in an overstatement of property and equipment, net and an understatement of accumulated deficit. Specifically, management determined that certain selling, general and administrative and overhead costs should not have been capitalized as part of self-constructed assets and that depreciation expense was not recognized in a timely basis on certain self-constructed assets that were placed into service in prior periods. Additionally, management identified certain self-constructed assets previously presented as property and equipment, net which should have been classified as inventory.

The Company assessed the materiality of these errors on the financial statements for prior periods in accordance with the SEC Staff Accounting Bulletin (SAB) No. 99, Materiality, codified in Accounting Standards Codification (ASC) 250, Presentation of Financial Statements, and concluded that they were not material to any prior annual or interim periods. However, the aggregate amount of the prior period corrections of immaterial errors through December 31, 2017 was an approximately \$3.5 million increase to accumulated deficit and would have been material to the amounts

within the current Consolidated Statements of Operations. Consequently, in accordance with ASC 250 (specifically SAB No. 108, Considering the Effects of Prior Year Misstatements when Quantifying Misstatements in Current Year Financial Statements), the Company have corrected these errors for all prior periods presented by revising the consolidated financial statements and other financial information included herein. The Company also corrected the timing of immaterial previously recorded out-of-period adjustments and reflected them in the revised prior period consolidated financial statements, where applicable.

The effects of the correction of immaterial errors on the Consolidated Balance Sheets were as follows (in thousands):

	December 31, 2017			
	As		As	
	Previously	Adjustment	Revised	
	Reported		Revised	
Inventories, net	\$20,496	\$ 3,841	\$24,337	
Property and equipment, net	43,283	(7,142)	36,141	
TOTAL ASSETS	686,907	(3,301)	683,606	
Deferred tax liability, net	19,174	193	19,367	
TOTAL LIABILITIES	375,895	193	376,088	
Accumulated deficit	(111,939)	(3,494)	(115,433)	
TOTAL STOCKHOLDERS' EQUITY	\$311,012	\$ (3,494)	\$307,518	

	December	31, 2016	
	As Previously Reported	Adjustmen	As Revised
Inventories, net	\$15,178	\$ 633	\$15,811
Property and equipment, net	40,615	(1,694)	38,921
TOTAL ASSETS	445,453	(1,061)	444,392
Deferred tax liability, net	30,409	(5)	30,404
TOTAL LIABILITIES	212,517	(5)	212,512
Accumulated deficit	(100,988)	(1,056)	(102,044)
TOTAL STOCKHOLDERS' EQUITY	\$232,936	\$ (1,056)	\$231,880

The effects of the correction of immaterial errors on the Consolidated Statements of Operations were as follows (in thousands):

	Year ended December 31, 2017		
	As	As	
	Previously Adjustment Reported	Revised	
Cost of revenue, excluding amortization	\$331,629 \$ 1,087	\$332,716	
Operating expenses	103,973 1,153	105,126	
Operating loss	(5,432) (2,240)	(7,672)	
Loss before income taxes from continuing operations	(22,011) (2,240)	(24,251)	
Income tax (benefit) expense, net on continuing operations	(11,060) 198	(10,862)	
Net loss from continuing operations	(10,951) (2,438)	(13,389)	
Net loss	(10,951) (2,438)	(13,389)	
Basic net loss per share from continuing operations	\$(0.22) \$(0.05)	\$(0.27)	
Basic net loss per share	\$(0.22) \$(0.05)	\$(0.27)	
Diluted net loss per share from continuing operations	\$(0.22) \$(0.05)	\$(0.27)	
Diluted net loss per share	\$(0.22) \$(0.05)	\$(0.27)	

	Year ended	l December	3	1, 2016	
	As Previously Reported	Adjustmer	1t	As Revised	
Cost of revenue, excluding amortization	\$196,772	\$ 136		\$196,908	3
Operating expenses	71,434	382		71,816	
Operating income (loss)	13,708	(518)	13,190	
Income (loss) before income taxes from continuing operations	4,322	(518)	3,804	
Income tax expense (benefit), net on continuing operations	2,457	(5)	2,452	
Net income (loss) from continuing operations	1,865	(513)	1,352	
Net loss	(25,728)	(513)	(26,241)
Basic net earnings (loss) per share from continuing operations	\$0.05	\$ (0.02)	\$0.03	
Basic net loss per share	\$(0.64)	\$ (0.01)	\$(0.65)
Diluted net earnings (loss) per share from continuing operations	\$0.05	\$ (0.02)	\$0.03	
Diluted net loss per share	\$(0.63)	\$ (0.01)	\$(0.64)

The effects of the correction of immaterial errors on the Consolidated Statements of Cash Flows were as follows (in thousands):

	Year ended December 31, 2017
	As
	Previously Adjustment As Revised
	Reported
Net loss	\$(10,951) \$(2,438) \$(13,389)
Depreciation and amortization expense	20,363 1,747 22,110
Deferred taxes	(11,093) 198 (10,895)
Inventory, net	(5,318) (3,209) (8,527)
Net cash provided (used) by operating activities	10,202 (3,702) 6,500
Purchase of property and equipment	(10,121) 3,702 (6,419)
Net cash (used) provided in investing activities	\$(245,977) \$ 3,702 \$(242,275)

	Year ended December 31, 2016	
	As Previously Adjustment As Reported As	
Net loss	\$(25,728) \$ (513) \$(26,241)	
Depreciation and amortization expense	13,578 277 13,855	
Deferred taxes	1,967 (5) 1,962	
Inventory, net	(663) (633) (1,296)	
Net cash provided (used) by operating activities	23,095 (874) 22,221	
Purchase of property and equipment	(18,410) 874 (17,536)	
Net cash (used) provided in investing activities	\$(4,688) \$ 874 \$(3,814)	

Revenue Recognition

Effective January 1, 2018, the Company adopted the requirements of Accounting Standards Update (ASU) 2014-09 and related amendments, Revenue from Contracts with Customers (ASC 606), which superseded all prior revenue recognition methods and industry-specific guidance.

The majority of the Company's revenues are from long-term contracts with the U.S. Government that can span several years. The Company performs under various types of contracts including cost reimbursement (cost-plus-fixed-fee, cost-plus-award-fee), time-and-materials, fixed-price-level-of-effort, and firm-fixed-price contracts.

Under the guidance of ASC 606, the Company evaluated whether it has an enforceable contract with a customer with rights of the parties and payment terms identified, and collectability is probable. The Company also evaluated if a contract has multiple promises and if each promise should be accounted for as separate performance obligations or as a single performance obligation. Multiple promises in a contract are typically separated if they are distinct, both individually and in the context of the contract. If multiple promises in a contract are highly interrelated or comprise a series of distinct services performed over time, they are combined into a single performance obligation.

Contract modifications are evaluated to determine whether they should be accounted for as part of the original contract or as a separate contract. Management considers contract modifications to exist when the modification either creates new or changes the existing enforceable rights and obligations. Contract modifications are accounted for as a separate contract if the modification adds distinct goods or services and increases the contract value by its standalone selling price. Modifications that are not determined to be a separate contract are accounted for either as a prospective adjustment to the original contract if the goods or services in the modification are distinct from those transferred before the modification or as a cumulative adjustment if the goods and services are not distinct and are part of a single performance obligation that is partially satisfied. The Company's services contracts frequently provide customers an option to renew for an additional period of time under the same terms and conditions as the original contract. The renewal options typically do not provide the customer any material rights under the contract, therefore are treated as separate contracts when they include distinct goods or services at standalone selling prices.

Transaction prices for contracts with the U.S. Government are typically determined through a competitive procurement process and are based on estimated or actual costs of providing the goods or services in accordance with applicable regulations. Transaction prices for non-U.S. government customers are based on specific negotiations with each customer. In certain instances, the contracts contain award fees, incentive fees, or other provisions that can either increase or decrease the transaction price. The variable amounts generally are awarded upon achievement of certain performance metrics or program milestones and can be based upon customer discretion. The Company estimates variable consideration at the most likely amount to which it expects to be entitled without a significant reversal in revenue recognized. The estimates of variable consideration and determination of whether to include estimated amounts in the transaction price are based largely on an assessment of the Company's anticipated performance and all information (historical, current and forecasted) that is reasonably available to the Company and the potential of a significant reversal of revenue. The Company excludes any taxes collected or imposed when determining the transaction price.

A contract's transaction price is allocated to each distinct performance obligation and recognized when, or as, the performance obligation is satisfied. For contracts with multiple performance obligations, the Company allocates the contract's transaction price to each performance obligation using its best estimate of the standalone selling price of each distinct good or service in the contract. Substantially none of the Company's contracts contain a significant financing component, which would require an adjustment to the transaction price of the contract.

The Company recognizes revenue on a majority of its contracts over time as there is continuous transfer of control to the customer over the contract's period of performance. Continuous transfer of control is typically supported by contract clauses which allow the Company's customers to unilaterally terminate a contract for convenience, pay for costs incurred plus a reasonable profit, and take control of work-in-process. Revenue recognized over time is generally based on the extent of progress towards completion of the related performance obligations. The selection of the method to measure progress towards completion requires judgment and is based on the nature of the products or services provided. In certain instances, typically for firm-fixed-price contracts, the Company uses the cost-to-cost measure of progress for its contracts because it best depicts the transfer of control to the customer which occurs as costs on the contracts are incurred. Under the cost-to-cost measure of progress, the extent of progress towards completion is measured based on the ratio of costs incurred to date to the total estimated costs at completion of the

performance obligation. Revenues, including estimated fees or profits, are recorded proportionally as costs are incurred. Costs to fulfill generally include direct labor, materials and subcontractors' costs, other direct costs and an allocation of indirect costs. In other instances, generally for cost reimbursable, time-and-materials, and fixed-price-level-of-effort contracts, revenue is recognized based on a right to invoice practical expedient as the Company is able to invoice the customer in an amount that corresponds directly with the value received by a customer for the Company's performance completed to date. In some instances, typically for the sale of products that have an alternative use, the Company recognizes revenue at a point in time using a rate per unit as units are delivered and the customer obtains legal title of the asset.

Changes in estimates related to contracts accounted for using the cost-to-cost method of accounting are recognized in the period in which such changes are made on a cumulative catch-up basis, which recognizes in the current period the cumulative effect of the changes on current and prior periods based on a performance obligation's percentage of completion. A significant change in one or more estimates could affect the profitability of one or more of our performance obligations. When estimates of total costs to be incurred on a performance obligation exceed total estimates of revenue to be earned, a provision for the entire loss on the performance obligation is recognized in the period the loss is determined. For the years ended December 31, 2018, 2017 and 2016 there were no material adjustments recorded related to revised contract estimates.

Cost of Revenues

Cost of revenues consists primarily of compensation expenses for program personnel, the fringe benefits associated with this compensation and other direct expenses incurred to complete programs, including cost of materials, depreciation and subcontract efforts.

Inventories

Inventories are valued at the lower of cost or net realizable value. The Company's inventory consists of specialty products that are manufactured on a limited quantity basis for its customers. As of December 31, 2018 and 2017, the inventory reserve balances were \$1.1 million and \$0.9 million, respectively, for certain products where the market has not developed as expected.

Accounts Receivable and Unbilled Receivables

Receivables consist of amounts billed and currently due from customers (accounts receivable) and amounts currently due from customers that are not yet billed (unbilled receivables). Receivables are stated at the amount management expects to collect from outstanding balances. Management provides for probable uncollectible amounts through a charge to earnings and a credit to an allowance for doubtful accounts based on its assessment of the status of individual accounts. Balances that are still outstanding after management has used reasonable collection efforts are written-off through a charge to the allowance and a credit to accounts receivable.

Assets Held for Sale

Assets held for sale represent fixed assets that have met the criteria of "held for sale" accounting, as specified by ASC 360, Property, Plant, and Equipment. As of December 31, 2018, assets held for sale were comprised of certain aircraft and plant, property and equipment that are being marketed for sale. The Company intends to complete the sale of these assets within fiscal year 2019. See Note 19 - Assets Held for Sale, Discontinued Operations and Dispositions. Property and Equipment

All property and equipment are stated at acquisition cost or in the case of self-constructed assets, the cost of labor and a reasonable allocation of overhead costs (no general and administrative costs are included). The cost of maintenance and repairs, which do not significantly improve or extend the life of the respective assets, are charged to operations as incurred.

Provisions for depreciation and amortization are computed on either a straight-line method or accelerated methods acceptable under accounting principles generally accepted in the United States of America (U.S. GAAP) over the estimated useful lives of between three and seven years. Leasehold improvements are amortized over the lesser of the terms of the underlying leases or the estimated useful lives of the assets.

Lease Incentives

As part of entering into certain building leases, the lessors have provided the Company with tenant improvement allowances. Typically, such allowances represent reimbursements to the Company for tenant improvements made to the leased space. These improvements are capitalized as property and equipment, and the allowances are classified as a deferred lease incentive liability. This incentive is considered a reduction of rental expense by the lessee over the term of the lease and is recognized on a straight-line basis over the same term.

Long-Lived Assets (Excluding Goodwill and Intangibles)

The Company follows the provisions of FASB ASC topic 360-10-35, Impairment or Disposal of Long-Lived Assets in accounting for long-lived assets such as property and equipment and intangible assets subject to amortization. The guidance requires that long-lived assets be reviewed for impairment whenever events or circumstances indicate that the carrying amount of an asset may not be fully recoverable. The possibility of impairment exists if the sum of the long-term undiscounted cash flows is less than the carrying amount of the long-lived asset being evaluated. Impairment losses are measured as the difference between the carrying value of long-lived assets and their fair market value based on discounted cash flows of the related assets. Impairment losses are treated as permanent reductions in the carrying amount of the assets. During the year ended December 31, 2018, the Company recognized an impairment charge of \$2.6 million for write-downs associated with certain aircraft and plant, property and equipment classified as held for sale. See Note 19 - Assets Held for Sale, Discontinued Operations and Dispositions. Goodwill

Purchase price in excess of the fair value of tangible assets and identifiable intangible assets acquired and liabilities assumed in a business combination is recorded as goodwill. The Company tests for impairment at least annually, during the beginning of the

fourth quarter, or more frequently if impairment indicators arise. Impairment of goodwill is tested at the reporting unit level by comparing the reporting unit's carrying amount, including goodwill, to the fair value of the reporting unit. The Company may elect to first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. When performing a qualitative assessment, the Company considers factors including, but not limited to, current macroeconomic conditions, industry and market conditions, cost factors, financial performance and other events relevant to the entity or reporting unit under evaluation to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If, based on management review of qualitative factors, it is more likely than not that the fair value of a reporting unit is less than its carrying value (or if the Company elected to bypass assessing the qualitative factors), the Company would perform a quantitative impairment test to identify goodwill impairment and measures the amount of goodwill impairment loss to be recognized (if any) by comparing the fair value of its reporting unit with its carrying amount, using a combination of income and market approaches. An impairment charge would be recognized for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. As a result of the adoption of ASU 2017-04, Intangibles -Goodwill and Other, if management determines that the goodwill is impaired, it is no longer required to compare the implied fair value of the reporting unit goodwill associated with the carrying amount of that goodwill, which is commonly referred to as Step 2.

If the quantitative impairment test were to be performed, determining the fair value of a reporting unit is a judgment involving significant estimates and assumptions. These estimates and assumptions include revenue growth rates, operating margins and working capital requirements used to calculate projected future cash flows, risk-adjusted discount rates, selected multiples, control premiums and future economic and market conditions. The Company would base the fair value estimates on assumptions that the management believes to be reasonable, but actual future events may differ from these assumptions.

The Company evaluates goodwill for impairment at the beginning of the fourth quarter. Based on the assessment of qualitative factors performed during the annual impairment evaluation for fiscal 2018, it was determined that it is not more likely than not that the fair value of the reporting unit was less than its carrying value, and as a result, a quantitative step one analysis was not necessary. The Company did not recognize any goodwill impairments during 2018, 2017 and 2016. See Note 19 - Assets Held for Sale, Discontinued Operations and Dispositions for discussion of goodwill impairments associated with the Company's discontinued operations.

As further described in Note 2 - Acquisitions, during the second quarter of 2017, the Company completed the acquisition of Sotera. The goodwill related to the Sotera acquisition represents all the 2017 additions to goodwill. A summary of the changes to goodwill is as follows (in thousands):

Goodwill as of December 31, 2016 \$290,710

Acquisition 164,487

Goodwill as of December 31, 2017 \$455,197

Goodwill as of December 31, 2018 \$455,197

Intangibles

Acquired intangible assets with finite lives are amortized using the method that best reflects how their economic benefits are utilized, or, if a pattern of economic benefits cannot be reliably determined, on a straight-line basis over their estimated useful lives. Intangible assets with finite lives are amortized over a period ranging from one to sixteen years. Intangible assets are assessed for impairment whenever events or changes in circumstances indicate that the carrying value may not be recoverable. See Note 10 - Intangible Assets for impairment charges recognized during the year ended December 31, 2018.

Concentrations of Credit Risk

The Company maintains cash balances that, at times, during the years ended December 31, 2018 and 2017 exceeded the federally insured limit on a per financial institution basis. The Company has not experienced any losses in such accounts and believes it is not exposed to any significant credit risk related to cash. In addition, the Company has credit risk associated with the receivables that arise in the ordinary course of business. In excess of 90% of the total

revenue is derived from contracts where the end customer is the U.S. Government and any disruption to cash payments from the end customer could put the Company at risk.

Use of Estimates

Management uses estimates and assumptions in preparing these consolidated financial statements in accordance with U.S. GAAP. Those estimates and assumptions affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the reported revenues and expenses. Significant estimates include amortization lives, depreciation lives, proportional

performance revenue, inventory obsolescence reserves, income taxes and stock compensation expense. Actual results could vary from the estimates that were used.

Cash and Cash Equivalents

Management considers all highly liquid investments purchased with original maturities of three months or less, when purchased, to be cash equivalents.

Fair Value of Financial Instruments

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. In determining fair value, management considers the principal or most advantageous market in which the asset or liability would transact, and if necessary, consider assumptions that market participants would use when pricing the asset or liability.

The accounting guidance for fair value measurements establishes a three-level fair value hierarchy that prioritizes the inputs used in measuring fair value as follows: observable inputs such as quoted prices in active markets (Level 1); inputs other than quoted prices in active markets that are observable either directly or indirectly (Level 2); and unobservable inputs in which there is little or no market data, which requires the Company to develop its own assumptions (Level 3). Assets and liabilities are classified in their entirety within the fair value hierarchy based on the lowest level input that is significant to the fair value measurement. See Note 5 - Fair Value Measurements for additional information on the Company's fair value measurements.

Derivative Instruments

Derivative instruments designated as cash flow hedges are recorded on the Consolidated Balance Sheets at fair value as of the reporting date, and the effective portion of the hedge is recorded in other comprehensive (loss) income on the Consolidated Statements of Comprehensive Income and reclassified to earnings in the period that the hedged items affect earnings. Management reviews the effectiveness of the hedges on a quarterly basis.

Research and Development

Internally funded research and development costs are expensed as incurred and are included in cost of operations in the accompanying Consolidated Statements of Operations. In accordance with FASB ASC Topic 730, Research and Development, such costs consist primarily of payroll, materials, subcontractor and an allocation of overhead costs related to product development. Research and development costs totaled \$1.8 million, \$3.7 million and \$4.6 million for years ended December 31, 2018, 2017 and 2016, respectively, and are included as operating expenses in the Consolidated Statement of Operations.

Income Taxes

Income taxes are accounted for under the asset-and-liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carry forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enacted date. In evaluating the Company ability to realize our deferred tax assets, management considers all available positive and negative evidence, including cumulative historic earnings, reversal of deferred tax liabilities, projected taxable income, and tax planning strategies. The assumptions utilized in evaluating both positive and negative evidence require the use of significant judgment concerning the Company's business plans.

For a tax position that meets the more-likely-than-not recognition threshold, the Company initially and subsequently measures the tax liability or benefit as the largest amount that it judges to have a greater than 50% likelihood of being realized upon ultimate settlement with a taxing authority. The liability associated with unrecognized tax benefits is adjusted periodically due to changing circumstances, such as the progress of tax audits, case law developments and new or emerging legislation. Such adjustments are recognized entirely in the period in which they are identified. The effective tax rate includes the net impact of changes in the liability for unrecognized tax obligations or benefits and subsequent adjustments as considered appropriate by management. The Company's policy is to record interest and penalties as an increase in the liability for uncertain tax obligations or benefits and a corresponding increase to the

income tax provision.

(Loss) Earnings per Share

Basic net (loss) earnings per share is calculated by dividing net (loss) income by the weighted average number of common shares outstanding during the period. Diluted (loss) earnings per share is calculated by dividing net (loss) income by the diluted weighted

average common shares, which reflects the potential dilution of stock options, warrants, and contingently issuable shares that could share in our (loss) income if the securities were exercised.

The following table presents the calculation of basic and diluted net loss per share (in thousands except per share amounts):

	December 31	, December 3	l, December 31,
	2018	2017	2016
Net (loss) income from continuing operations	\$ (22,280	\$ (13,389)	\$ 1,352
Net loss on discontinued operations			(27,593)
Net loss	\$ (22,280	\$ (13,389)	\$ (26,241)
Weighted-average shares – basic	49,833	48,921	40,501
Effect of dilutive potential common shares		_	511
Weighted-average shares – diluted	49,833	48,921	41,012
Net (loss) income per share from continuing operations – basic	\$ (0.45	\$ (0.27)	\$ 0.03
Net loss per share from discontinued operations – basic		_	(0.68)
Net loss per share – basic	\$ (0.45	\$ (0.27)) \$ (0.65)
Net (loss) income per share from continuing operations – diluted	\$ (0.45	\$ (0.27)	\$ 0.03
Net loss per share from discontinued operations – diluted			(0.67)
Net loss per share – diluted	\$ (0.45	\$ (0.27)	\$ (0.64)
Anti-dilutive share-based awards, excluded	3,647	2,543	2,499

Employee equity share options, restricted shares and warrants granted by the Company are treated as potential common shares outstanding in computing diluted earnings (loss) per share. Diluted shares outstanding include the dilutive effect of in-the-money options and in-the-money warrants and unvested restricted stock. The dilutive effect of such equity awards is calculated based on the average share price for each fiscal period using the treasury stock method. Under the treasury-stock method, the amount the employee must pay for exercising stock options and the amount of compensation cost for future service that the Company has not yet recognized are collectively assumed to be used to repurchase shares. As the Company incurred a net loss from continuing operations for the years ended December 31, 2018 and 2017, none of the outstanding dilutive share-based awards were included in the diluted share calculation as they would have been anti-dilutive.

The Company uses the if-converted method for calculating any potential dilutive effect of the conversion spread of our Convertible Senior Notes due 2019 (the "Notes") on diluted earnings per share, if applicable. The conversion spread will have a dilutive impact on diluted earnings per share of common stock when the average market price of our common stock for a given period exceeds the Notes' conversion price of \$14.83. For the years ended December 31, 2018, 2017 and 2016 approximately 1.5 million, 10.1 million and 10.1 million shares, respectively, related to the Notes have been excluded from the computation of diluted earnings per share as the effect would be anti-dilutive since the conversion price of the Notes exceeded the average market price of the Company's common shares.

Share Based Compensation

As a result of the adoption of ASU 2016-09, Improvements to Employee Share-Based Payment Accounting, and as further discussed in Note 13 - Share-Based Compensation, the Company applies the fair value method that requires all share-based payments to employees and non-employee directors be expensed over their requisite service period based on their fair value at the grant date, using a prescribed option-pricing model. The expense recognized is based on the straight-line amortization of each individually vesting piece of a grant. The Company has elected to account for forfeitures related to share-based awards when they occur.

The following assumptions were used for share-based awards granted.

Dividend Yield—The Company has never declared or paid dividends on its common stock and has no plans to do so in the foreseeable future.

Risk-Free Interest Rate—Risk-free interest rate is based on U.S. Treasury zero-coupon issues with a remaining term approximating the expected life of the share-based award term assumed at the date of grant.

Expected Volatility—Volatility is a measure of the amount by which a financial variable such as a share price has fluctuated (historical volatility) or is expected to fluctuate (expected volatility) during a period. The Company's expected volatility is based on its historical volatility for a period that approximates the estimated life of the share-based awards.

Expected Term of the Share-based Awards—This is the period of time that the share-based awards granted are expected to remain unexercised. The Company estimates the expected life of the share-based award term based on the expected tenure of employees and historical experience.

Segment Reporting

FASB ASC Section 280, Segment Reporting, establishes standards for the way that public business enterprises report information about operating segments in annual financial statements and requires that these enterprises report selected information about operating segments in interim financial reports. The guidance also establishes standards for related disclosures about products and services, geographic areas and major customers. The Company defines its reportable segments based on the way the chief operating decision maker (CODM), currently its chief executive officer, manages the operations of the Company for allocating resources and assessing performance. The Company had historically operated two segments, Government Solutions and Commercial Cyber Solutions. The Company disposed of the assets and liabilities of its Commercial Cyber Solutions during the second quarter of 2016, (see Note 19 - Assets Held for Sale, Discontinued Operations and Dispositions). Therefore, the Company reclassified the results of the Hexis business, which comprised of the entire Commercial Cyber Solutions reportable segment, as discontinued operations for all periods presented in the consolidated financial statements. As a result of the acquisition of Sotera Holdings Inc., a Delaware corporation and its wholly owned subsidiary Sotera Defense Solutions Inc., a Delaware corporation (Sotera) during the second quarter of 2017, there was no change in operating or reporting segments. The Company conducts business as one operating and reporting segment.

Recent Accounting Pronouncements

In May 2014, the FASB issued ASU 2014-09 and related amendments, Revenue from Contracts with Customers (ASC 606), an accounting pronouncement related to revenue recognition. ASC 606 supersedes the guidance in former ASC Topic 605, Revenue Recognition, and provides a single, comprehensive revenue recognition model for all contracts with customers. This standard contains principles that an entity will apply to determine the measurement of revenue and timing of when it is recognized. The entity will recognize revenue to reflect the transfer of goods or services to customers at an amount that the entity expects to be entitled to in exchange for those goods or services. ASC 606 is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017.

Effective January 1, 2018, the Company adopted ASC 606 using the modified retrospective method. ASC 606 was not applied to contracts that were complete at December 31, 2017, and comparative information for the prior fiscal year has not been retrospectively adjusted. For contracts that were modified before the effective date, the Company elected the practical expedient which enabled the Company to reflect the aggregate effect of all modifications when identifying performance obligations and allocating the transaction price. The adoption of ASC 606 did not have a material impact on the Company's consolidated financial statements. The Company recorded a \$1.0 million increase to accumulated deficit on January 1, 2018, as the accumulative impact of ASC 606 adoption. The primary impact related to certain contracts (or contract components) that were previously recognized on a separate basis which are now combined under ASC 606 into a single performance obligation, as they are not capable of being distinct under the new guidance. The adoption of ASC 606 did not have a significant impact on the Company's revenue recognition policy as revenues on a majority of the Company's contracts continue to be recognized over time.

As a result of applying the modified retrospective method to adopt the new guidance, the following adjustments were made on the Consolidated Balance Sheets as of January 1, 2018:

	Year ended		Adjusted
	December	A divetmente	January 1,
	31, 2017	Adjustments	2018
	(in thousand	ls)	
Assets:			
Unbilled receivables, net	\$37,785	\$ 1,166	\$38,951
Inventories, net	24,337	(292)	24,045
Prepaid expenses	2,266	(403)	1,863
Liabilities:			
Accrued expenses	\$15,545	\$ 49	\$15,594
Deferred revenue	6,090	1,743	7,833
Deferred tax liability, net	19,367	(325)	19,042
Equity:			
Accumulated deficit	\$(115,433)	\$ (996)	\$(116,429)

In August 2017, the FASB issued ASU 2017-12, Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities, which amends the application of hedge accounting and improves financial reporting of hedging relationships to more accurately present the economic effects of risk management activities in the financial statements. The ASU is effective for public companies for annual reporting periods beginning after December 15, 2018, with early adoption permitted. The Company early adopted the provisions of ASU 2017-12 during the quarter ended September 30, 2018, using the modified retrospective method. The adoption did not have an impact on the consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, Leases (ASC 842) which superseded existing lease guidance under ASC 840 and made several changes such as requiring an entity to recognize a right-of-use asset and corresponding lease obligation on the balance sheet. The ASU also requires enhanced disclosures of key information about leasing arrangements. In July 2018, the FASB issued ASU 2018-10, Codification Improvements to Topic 842, Leases, and ASU 2018-11, Leases (Topic 842): Targeted Improvements, to clarify certain guidance in ASU 2016-02 and allows companies to elect an optional transition method to apply the new lease standard through a cumulative-effect adjustment in the period of adoption. The Company adopted the standard on January 1, 2019 using the optional transition method. The Company has made substantial progress in executing the implementation plan including revising various controls and processes to address the lease standard. The Company has elected to adopt certain practical expediencies provided under ASC 842, including the option to not apply lease recognition for short-term leases, reassessment of whether expired or existing contracts contain leases, reassessment of lease classification for expired or existing leases, reassessing initial direct costs and combining lease and non-lease components in revenue arrangements. The Company expects adoption of the standard will result in the recognition of approximately \$28 million and \$38 million of right-of-use assets and lease liabilities, respectively, on the Consolidated Balance Sheets for its operating leases. The Company does not expect ASU 2016-02 to have a material impact on the annual Consolidated Statements of Operations and Consolidated Statements of Cash Flows. ASU 2016-02 also requires expanded disclosure regarding the amounts, timing and uncertainties of cash flows related to a company's lease portfolio. Management is evaluating these disclosure requirements and are incorporating the collection of relevant data into its processes in preparation for disclosure in fiscal year 2019.

In February 2018, the FASB issued ASU 2018-02, Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income, which provides the option to reclassify certain income tax effects related to the Tax Cuts and Jobs Act passed in December of 2017 between accumulated other comprehensive income and retained earnings and

also requires additional disclosures. The amendments in this ASU are effective for all entities for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years, with early adoption permitted. Adoption of this ASU is to be applied either in the period of adoption or retrospectively to each period in which the effect of the change in the tax laws or rates were recognized. Management is currently analyzing the impact of this ASU and, at this time, have not yet determined whether the Company will elect to make this optional reclassification. The adoption of ASU 2018-02 is not expected to have a material effect of the Company's financial statements and related disclosures.

In November 2015, the FASB issued ASU 2015-17, Income Taxes (ASU 2015-17), amending the accounting for income taxes and requiring all deferred tax assets and liabilities to be classified as non-current on the Consolidated Balance Sheets. The ASU is effective for reporting periods beginning after December 15, 2016. The Company adopted ASU 2015-17 as of January 1, 2017 on

a retrospective basis and as of December 31, 2016, reclassified \$1.2 million current deferred tax liability to non-current deferred tax liability on our Consolidated Balance Sheets.

2. ACQUISITIONS

On April 4, 2017, the Company's wholly owned operating company, Opco, completed the merger (the "Merger") of Sandpiper Acquisition Corporation, a wholly owned subsidiary of Opco, with and into Sotera Holdings Inc., a Delaware corporation and its wholly owned subsidiary Sotera Defense Solutions Inc., a Delaware corporation (Sotera), with Sotera surviving the Merger as a wholly-owned subsidiary of Opco. The purchase consideration net of cash acquired, for the acquisition of Sotera was \$236.1 million less \$0.2 million of escrow holdback funds returned to the Company during the fourth quarter of 2017. The acquisition of Sotera was completed as an all-cash transaction.

The fair values of the assets acquired and liabilities assumed at the date of the transaction were as follows (in thousands):

Cash	\$11,583
Receivables	37,521
Prepaid expenses	1,679
Fixed assets	1,499
Intangibles	60,590
Goodwill	164,487
Deferred tax assets	142
Other assets	1,149
Total assets acquired	278,650
Accounts payable	7,007
Accrued expenses	9,818
Accrued salaries and wages	10,784
Deferred revenue	1,505
Long-term obligations	2,097
Total liabilities assumed	31,211
Net assets acquired	\$247,439
Net cash paid	\$235,856
Actual cash paid	\$247,439

The goodwill includes the value of the acquiring of an assembled workforce of cleared personnel to expand our presence with new and existing customers. The value of having that assembled workforce generated the majority of the goodwill from the acquisition of Sotera and drove much of the purchase price in addition to other identified intangibles. The goodwill presented above includes \$103.5 million of tax deductible goodwill.

The Company identified \$60.6 million of other intangible assets, including backlog and customer relationships. The following table summarizes the fair value of intangibles assets acquired at the date of acquisition and the related weighted average amortization period:

Intangible Asset Type Weighted average amortization period Fair Value

	(in years)	(in thousands)
Customer relat	ionships 16	\$ 56,700
Backlog	1	3,890
Total		\$ 60,590

In connection with the integration of Sotera, the Company incurred \$2.0 million and \$13.9 million of integration related expenses for the years ended December 31, 2018 and 2017, respectively. During 2017, the Company also incurred \$4.3 million of acquisition related expenses for Sotera. These acquisition and integration related expenses

have been recorded as part of operating expenses.

Unaudited Pro Forma Financial Information

The table below summarizes the unaudited pro forma consolidated results of operations as if the acquisition of Sotera had occurred on January 1, 2016. The unaudited pro forma financial information was prepared based on historical financial information. The unaudited pro forma results below do not include any adjustments that may have resulted from synergies, eliminations of intercompany transactions or from amortization of intangibles (other than during the period following the closing of the Sotera acquisition). The pro forma financial information is not intended to reflect the actual results of operations that would have occurred if the acquisition had been completed on January 1, 2016, nor is it intended to be an indication of future operating results.

Year Ended
December 31,
2017 2016
(unaudited and in thousands)

Revenues \$503,531 \$551,549 Net (loss) income from continuing operations (19,261) 3,000

The Sotera acquisition was accounted for using the acquisition method of accounting. Results of operations were included in the consolidated financial statements from the date of acquisition.

Other Acquisition Related Activity

During the second quarter of 2016, in conjunction with the Milestone Intelligence Group acquisition earn out, the Company issued 129,530 shares of KeyW common stock with an approximate value of \$1 million.

During the third quarter of 2016, the Company acquired a geospatial intelligence collection business for a purchase price of \$3.9 million.

3. REVENUE FROM CONTRACTS WITH CUSTOMERS

Impact of New Revenue Guidance on Financial Statement Line Items

The following tables compare the reported Consolidated Balance Sheets and Consolidated Statements of Operations as of December 31, 2018 and for the year ended December 31, 2018, respectively, to the pro-forma amounts had ASC 605 been in effect:

December 31, 2018
As As
Reported Adjusted
(ASC 606) (ASC 605)
(in thousands)

Assets:

Unbilled receivables, net	\$59,357	\$59,825
Inventories, net	24,111	24,447
Prepaid expenses	2,797	2,395
Liabilities:		
Accrued expenses	\$17,236	\$16,834
	' /	
Deferred revenue	1,622	3,365
•	1,622	•
Deferred revenue	1,622	3,365

Accumulated deficit \$(138,709) \$(139,415)

	Year ended December		
	31, 2018		
	As	As	
	Reported	Adjusted	
	(ASC	(ASC	
	606)	605)	
	(in thousan	ds, except	
	per share a	mounts)	
Revenues	\$506,840	\$505,566	
Cost of revenue, excluding amortization	374,838	374,502	
Operating income	7,916	6,978	
Loss before income taxes	(27,014)	(27,952)	
Income tax benefit, net	(4,734)	(4,967)	
Net loss	(22,280)	(22,985)	
Loss per share			
Basic	\$(0.45)	\$(0.46)	
Diluted	\$(0.45)	\$(0.46)	

The primary impact related to certain contracts (or contract components) that were previously recognized on a separate basis which are now combined under ASC 606 into a single performance obligation, as they are not capable of being distinct under the new guidance.

Revenue by Category

The Company disaggregates its revenue from contracts with customers by contract-type and customer-type, as management believes that they best depict how the nature, amount, timing and uncertainty of the Company's revenue and cash flows are affected by economic factors. The following table summarizes revenue from contracts with customers by contract-type and customer-type for the year ended December 31, 2018:

editioniers by contract type and editionier type for the	year chaca
	Year ended
Revenue by Customer Type and Contract Type	December
	31, 2018
	(in
	thousands)
Department of Defense	
Cost Reimbursement	\$ 199,566
Time & Materials and Fixed-Price-Level-of-Effort	95,017
Firm-Fixed-Price	93,313
Total Department of Defense	387,896
Non-Department of Defense U.S. Government	
Cost Reimbursement	6,351
Time & Materials and Fixed-Price-Level-of-Effort	76,139
Firm-Fixed-Price	12,870
Total Non-Department of Defense U.S. Government	95,360
Commercial and other	
Cost Reimbursement	_
Time & Materials and Fixed-Price-Level-of-Effort	3,846

Firm-Fixed-Price 19,738 Total Commercial and other 23,584

Total Revenues \$506,840

Remaining Performance Obligations

Remaining performance obligations represent the transaction price of firm orders for which revenue has not yet been recognized, excluding unexercised contract options and potential orders under ordering-type contracts (e.g., indefinite-delivery, indefinite-quantity (IDIO)). As of December 31, 2018, the aggregate amount of transaction price allocated to remaining performance obligations was \$561.6 million, the majority of which the Company expects to recognize over the next 12 months.

4. CONTRACT ASSETS AND LIABILITIES

The components of contract assets and contract liabilities consisted of the following:

Decembe December 31,

Balance Sheet Classification 2018 2017

Assets: (in thousands) Contract assets \$59,357 \$ 37,785 Unbilled receivables, net

Liabilities:

Contract liabilities Deferred revenue \$1,622 \$ 6,090

The timing of revenue recognition, billings, and cash collections result in billed accounts receivable, unbilled receivables, and customer advances and deposits. Contract assets (unbilled receivables) result from timing differences between revenue recognition and billing in accordance with agreed-upon contractual terms, which typically occurs subsequent to revenue being recognized. Contract liabilities (deferred revenue) consist of advance payments and billings in excess of revenue recognized. The contract assets and liabilities are reported in a net position on a contract by contract basis.

The increase in contract assets (unbilled receivables) during the year ended December 31, 2018, was primarily due to billable receivables now being classified as contract assets and to the timing of billings and revenue recognized on certain contracts. The decrease in contract liabilities (deferred revenue) during the year ended December 31, 2018, was primarily due to timing of cash collection and subsequent recognition of revenue on the related programs, respectively. The Company expects to bill its customers for a majority of the December 31, 2018 contract assets during 2019.

During the year ended December 31, 2018, the Company recognized revenue of \$6.5 million related to contract liabilities which existed at January 1, 2018. There were no material impairment losses recognized on contract assets for the year ended December 31, 2018.

5. FAIR VALUE MEASUREMENTS

The fair value hierarchy prioritizes the inputs to valuation techniques used to measure the fair value of financial assets and liabilities on a recurring basis into three broad levels:

Level 1 Inputs are unadjusted quoted prices in active markets for identical assets or liabilities the Company has the ability to access.

Level Inputs are other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

Level Inputs are unobservable for the asset or liability and rely on management's own assumptions about what market participants would use in pricing the asset or liability.

The balance sheet includes various financial instruments consisting of cash and cash equivalents, accounts receivable, and accounts payable. The fair values of these instruments approximate the carrying values due to the short maturity of these instruments.

The Company's financial instruments measured at fair value on a recurring basis consisted of the following:

 $\begin{array}{cc} \text{Balance Sheet Classification} & \begin{array}{cc} \text{December 3December 31,} \\ 2018 & 2017 \\ \text{(in thousands)} \end{array}$

Derivatives Other current liabilities \$ 1,850 \$ —

At December 31, 2018, the Company's derivatives consisted of cash flow interest rate swaps (see Note 6 - Derivative Instruments). The fair value of the cash flow swaps is determined based on observed values (Level 2 inputs) for underlying interest rates on the LIBOR yield curve and the underlying interest rate, respectively.

The fair value of the Convertible Senior Notes (see Note 11 - Debt) is determined using quoted prices or other market information from recent trading activity in the high-yield bond market (Level 2 inputs). At December 31, 2018 and 2017, the Company's Convertible Senior Notes had a carrying amount of \$22.0 million and \$139.0 million, respectively, while the fair value was estimated at \$22.3 million and \$141.8 million, respectively.

6. DERIVATIVE INSTRUMENTS

The Company manages its risk to changes in interest rates using derivative instruments. The objective of these instruments is to reduce variability in forecasted interest payments by effectively converting a portion of variable interest rate payments to fixed interest rate payments. The Company does not hold derivative instruments for trading or speculative purposes.

In September 2018, the Company entered into two interest rate swap agreements with an aggregate notional amount of \$185.3 million to hedge the cash flows associated with its variable rate interest payments. Under the terms of the interest rate swap agreements, the Company will receive monthly variable interest payments based on the one-month LIBOR rate and will pay interest at a fixed rate of 2.82% through the maturity date of September 2022. The swaps are designated as cash flow hedges. The gain (loss) on the swap is reported as a component of other comprehensive income (loss) and is reclassified into earnings when the interest payments on the underlying hedged items impact earnings. A qualitative assessment of hedge effectiveness is performed on a quarterly basis, unless facts and circumstances indicate the hedge may no longer be highly effective.

The effect recognized in the Consolidated Statements of Operations and Consolidated Statements of Comprehensive Income were as follows:

	Classification of (loss) gain recognized		3 December :	31,
		2018	2017	
Cash Flow Hedges:		(in thousan	ds)	
Interest rate swaps	Accumulated other comprehensive (loss) income, net of tax	\$ (1,320)	\$	
Interest rate swaps	Interest expense	\$ (315)	\$	_

For the year ended December 31, 2018, \$0.3 million has been reclassified from accumulated other comprehensive (loss) income to interest expense. The Company does not expect to reclassify any material gains or losses from accumulated other comprehensive income into earnings during the next 12 months. Cash flows associated with the interest rate swaps are classified as operating activities in the Consolidated Statements of Cash Flows.

7. INVENTORIES

Inventories are valued at the lower of cost (as calculated using the weighted-average method) or net realizable value and consist of work in process at various stages of production and finished goods. The inventory is primarily related to the off-the-shelf products such as mobile communications devices, cameras and radars, for which revenue is recognized at a point in time using a rate per unit as units are delivered and the customer obtains legal title of the asset. The cost of the work in process consists of materials put into production, the cost of labor and an allocation of overhead costs.

The Company recognized an impairment charge of \$0.4 million for the year ended December 31, 2018 associated with inventories that are valued at the lower of cost, which is included in "Asset impairment charges" on the Consolidated Statements of Operations for the year ended December 31, 2018.

At December 31, 2018 and 2017, the Company had reserved \$1.1 million and \$0.9 million respectively, for certain inventory items where the market has not developed as expected.

Activity in the Inventory Reserve is as follows (in thousands):

\$607
384
(59)
932
176
_
\$1,108

8. PREPAID EXPENSES

Prepaid expenses at December 31, 2018 and 2017, primarily consist of prepaid insurance, rent and software licenses.

9. PROPERTY AND EQUIPMENT, NET

Property and equipment, net consisted of the following:

	December Becember 31.		
	2018	2017	
	(in thousands)		
Aircraft	\$12,474	\$ 27,567	
Leasehold improvements	21,983	23,506	
Manufacturing Equipment	6,116	7,778	
Software Development Costs	2,111	2,111	
Office Equipment	9,767	15,884	
Total	52,451	76,846	
Less: Accumulated Depreciation	(31,378)	(40,705)
Property and Equipment, net	\$21,073	\$ 36,141	

Depreciation and amortization expense charged to operations was \$11.8 million, \$10.7 million, and \$6.7 million for the years ended December 31, 2018, 2017 and 2016, respectively.

During the year ended December 31, 2018, as part of the Company's annual inventory process and as a result of certain lease modifications, the Company disposed of fixed assets with a net book value of \$3.2 million which were included in "Operating expenses" on the Consolidated Statements of Operations. In addition, fixed assets with a carrying value of \$4.9 million were transferred to "Assets held for sale" on the Consolidated Balance Sheets as of December 31, 2018 and accordingly, are not included in the table above. Depreciation of these assets was stopped as of the date they were deemed to be held for sale (see Note 19 - Assets Held for Sale, Discontinued Operations and Dispositions).

10. INTANGIBLE ASSETS

As of December 31, 2018 and 2017, intangible assets consisted of the following (in thousands): December 31, 2018

	Gross	Accumulated	Net
Intangible Asset Type	Book		Book
	Value	Amortization	Value
Customer Relationships and Contracts	\$56,700	\$ (13,096)	\$43,604
Total	\$56,700	\$ (13,096)	\$43,604
December 31, 2017			
	Gross	Aggumulatad	Net
Intangible Asset Type	Book	Accumulated Amortization	Book
	Value	Amortization	Value
Customer Relationships and Contracts	\$66,513	\$ (11,039)	\$55,474
Software Technology and Other	2,162	(591)	1,571
Total	A 60 6	\$ (11,630)	\$57,045

During the year ended December 31, 2018, the Company recognized an intangible asset impairment charge of \$1.3 million as certain assets associated with the acquisition of GeoVantage were determined not to be recoverable due to a change in the expected future economic benefit of the assets. The impairment charge is included in "Asset impairment charges" on the Consolidated Statements of Operations.

The Company recorded amortization expense related to intangible assets of \$12.1 million, \$11.4 million, and \$6.1 million for the years ended December 31, 2018, 2017, and 2016, respectively. As of December 31, 2018, the remaining weighted-average amortization period for acquired intangible assets is 14 years.

As of December 31, 2018, expected amortization expense relating to purchased intangible assets was as follows (in thousands):

Fiscal Year

Ending	
2019	\$8,600
2020	6,998
2021	5,695
2022	4,634
2023	3,771
Thereafter	13,906
Total	\$43,604

11. DEBT
The Company's debt consisted of the following:

		December	31, 2018	December	31, 2017
	Maturity Date	Amount	Effective Rate	Amount	Effective Rate
		(in		(in	
		thousands)		thousands))
Senior secured term loans:					
\$215 million First Lien Term Loan	May 8, 2024	\$200,000	7.2%	\$ —	<u></u> %
\$75 million Second Lien Term Loan	May 8, 2025	75,000	12.0%	_	— %
\$135 million Term Loan	April 4, 2022 ⁽¹⁾	_	— %	131,625	6.2%
\$50 million Revolver	May 8, 2023	_	<u></u> %		— %
Convertible Senior Notes	July 15, 2019	22,608	7.4%	149,500	6.9%
Total		297,608		281,125	
Unamortized discount/issuance costs		(6,644)		(14,750)	
Total		\$290,964		\$266,375	
Reported as:					
Term loan – current portion, net of discount		\$—		\$6,750	
Convertible senior notes – current portion, net of discount		22,040		_	
Term loan – non-current portion, net of discount		268,924		120,627	
Convertible senior notes – non-current portion, net				138,998	
of discount					
Total		\$290,964		\$266,375	

⁽¹⁾ The Term Loan was paid off in full in connection with the Company's May 2018 refinancing described below under "2018 Credit Facility".

2018 Credit Facility

On May 8, 2018, Opco entered into a \$340 million senior secured credit facility (the 2018 Credit Facility), which consists of a \$215 million First Lien Term Loan facility (the First Lien Term Loan Facility), a \$75 million Second Lien Term Loan facility (the Second Lien Term Loan Facility) and a \$50 million senior secured Revolving Credit Facility (the Revolving Loan Facility). The terms of the 2018 Credit Facility are set forth in the First Lien Credit Agreement and the Second Lien Credit Agreement (collectively the 2018 Credit Agreements). On May 8, 2018, Opco borrowed an aggregate of \$215 million under the First Term Loan Facility and \$75 million under the Second Term Loan Facility (collectively the Term Loan Proceeds). The Company used most of the Term Loan Proceeds to pay off the Company's existing credit facility entered into in 2017 (the 2017 Credit Facility) and to repurchase \$126.9 million of the outstanding Convertible Senior Notes through a tender offer.

Interest Rates

Borrowings under the 2018 Credit Facility were and will be incurred in U.S. Dollars. All borrowings under the 2018 Credit Facility may, at our option, be incurred as either eurodollar loans (Eurodollar Loans) or base rate loans (Base Rate Loans).

In regards to the First Lien Term Loan Facility and the Revolving Loan Facility:

•

Eurodollar Loans will accrue interest, for any interest period, at the Eurodollar Rate (as defined in the First Lien Credit Agreement), plus an applicable margin of 4.5%.

Base Rate Loans will accrue interest, for any interest period, at (a) a base rate per annum equal to the highest of (i) the Federal funds rate plus 0.5%; (ii) the prime commercial lending rate announced by Royal Bank of Canada (RBC) from time to time as its prime lending rate; and (iii) the Eurodollar Rate for a one month interest period plus 1.0%, plus (b) an applicable margin of 3.5%.

The applicable margin for borrowings may be decreased if our consolidated net leverage ratio decreases.

In regards to the Second Lien Term Loan Facility:

Eurodollar Loans will accrue interest, for any interest period, at the Eurodollar Rate (as defined in the Second Lien Credit Agreement) plus an applicable margin of 8.75%.

Base Rate Loans will accrue interest, for any interest period, at (a) a base rate per annum equal to the highest of (i) the Federal funds rate plus 0.5%; (ii) the prime commercial lending rate announced by RBC from time to time as its prime lending rate; and (iii) the Eurodollar Rate for a one month interest period plus 1.0%, plus (b) an applicable margin of 7.75%.

As disclosed in Note 6 - Derivative Instruments, the Company entered into two interest rate swap agreements with an aggregate notional amount of \$185.3 million to hedge the cash flows associated with its variable interest payments.

Payments

Voluntary prepayments of the First Lien Term Loan Facility are permitted at any time, in minimum principal amounts. Voluntary prepayments of the Second Lien Term Loan Facility are subject to a 2.00% premium on all principal amounts prepaid prior to the first anniversary of the Closing Date and a 1.00% premium on all principal amounts prepaid after the first anniversary of the Closing Date and prior to the second anniversary of the Closing Date.

The First Lien Term Loan Facility requires scheduled quarterly payments in an amount equal to \$0.5 million with the remaining balance payable on the maturity date. During 2018 the Company elected to prepay \$15.0 million of the First Lien Term Loan. This elective prepayment was applied against future quarterly payments and as such there are no required quarterly payments until first quarter of 2023.

Beginning with the fiscal year 2020, the Company will be required to remit up to 50% of excess cash flow, based on the total net leverage ratio, from the prior year and respective interim periods therein. Also, amounts outstanding under the 2018 Credit Facility will be subject to mandatory prepayments, subject to customary exceptions, from the net cash proceeds to us from certain events and transactions as set forth in the 2018 Credit Agreements.

Certain Covenants and Events of Default

The 2018 Credit Agreements require that the Company comply with certain covenants, including that the Company maintain a total leverage ratio as defined in the 2018 Credit Agreements. At December 31, 2018, the Company was in compliance with all of its debt covenants under the 2018 Credit Agreements.

The Company's obligations under the 2018 Credit Agreements are secured by a pledge of substantially all of its and each other guarantor's assets, including a pledge of the equity interests in certain of Opco's domestic and first-tier foreign subsidiaries, subject to customary exceptions.

In connection with the contemporaneous issuance of the 2018 Credit Facility and the repayment of the 2017 Credit Facility, a portion of the prepayment and issuance was considered a modification of terms with creditors who participated in both the prepaid debt and the new issuance, and the remainder was considered a debt extinguishment. To the extent the prepayment and issuance was considered a modification of terms, the previously incurred unamortized deferred financing costs, debt discount, and any fees or other amounts paid to creditors will be amortized over the life of the new issuance. To the extent the prepayment and issuance was considered an extinguishment, the previously incurred unamortized deferred financing costs, debt discount, and any fees or other amounts paid to creditors were expensed as a loss on extinguishment of debt. The new debt issuances associated with the existing creditors whose prior loans were prepaid were considered a modification of terms and therefore the new issuance costs associated with such issuances were expensed as a loss on extinguishment of debt. All costs and expenses associated

with new creditors are capitalized and amortized over the life of the new issuance.

The following table summarizes the accounting for the debt issuance costs incurred and the related loss on extinguishment of debt recorded associated with the debt transactions discussed above:

	Loss on Extingu	Capitalized and Amortized ushment Over Life	
	of Debt	Over Life of New Issuances	1000
	(in thou	ısands)	
New debt issuance costs	\$364	\$ 7,118	\$7,482
Previously incurred unamortized debt issuance costs or discount	3,571	348	3,919
Total	\$3,935	\$ 7,466	\$11,401

2017 Credit Facility

On April 4, 2017, Opco entered into the 2017 Credit Facility, which included a \$135 million term loan facility and a \$50 million revolving credit facility. On May 8, 2018, in connection with issuing the 2018 Credit Facility, the Company terminated, satisfied, and discharged all of its obligations under the 2017 Credit Facility. The Company wrote off \$3.6 million of unamortized deferred financing costs and debt discount in connection with the payoff of the 2017 Credit Facility. This expense was included as part of loss on extinguishment of debt on the Consolidated Statements of Operations for the year ended December 31, 2018.

2.5% Convertible Senior Notes

During the third quarter of 2014, the Company issued \$149.5 million aggregate principal amount of convertible senior notes in an underwritten public offering. The Convertible Senior Notes bear interest at a rate of 2.50% per annum on the principal amount, payable semi-annually in arrears on January 15 and July 15 of each year, to holders of record at the close of business on the preceding January 1 and July 1, respectively. The Convertible Senior Notes mature on July 15, 2019, unless earlier repurchased or converted. The Company may not redeem the Convertible Senior Notes prior to their stated maturity date.

On May 16, 2018, the Company repurchased approximately \$126.9 million of its Convertible Senior Notes in cash pursuant to a tender offer, and made a payment of \$1.1 million for accrued and unpaid interest associated with the repurchased Convertible Senior Notes. The tendered Convertible Senior Notes were retired upon repurchase. The Company incurred third party fees of \$0.7 million and wrote off \$5.9 million in debt discount and \$0.9 million in deferred financing costs in connection with the partial redemption of the Convertible Senior Notes, which resulted in the Company recording a \$7.5 million loss on extinguishment of debt on the Consolidated Statements of Operations for the year ended December 31, 2018. As of December 31, 2018, the fair value of the liability component relating to the Convertible Senior Notes was approximately \$22.3 million and represents a Level 2 valuation.

During the twelve months ended December 31, 2018, the Company recognized \$4.9 million of interest expense related to the Convertible Senior Notes, which included \$2.7 million for non-cash interest expense relating to the debt discount and \$0.4 million related to amortization of deferred financing costs. During the twelve months ended December 31, 2017, the Company recognized \$10.3 million of interest expense related to the Convertible Senior Notes, which included \$5.6 million for non-cash interest expense relating to the debt discount and \$0.9 million relating to amortization of deferred financing costs. During the twelve months ended December 31, 2016, the Company recognized \$10.0 million of interest expense related to the Convertible Senior Notes, which included \$5.4 million for non-cash interest expense relating to the debt discount and \$0.9 million relating to amortization of deferred financing costs.

Capped Call

In conjunction with the issuance of the Convertible Senior Notes, the Company enter into capped call transactions with respect to its common shares, (the Capped Call Transactions). In connection with the partial redemption of the Convertible Senior Notes through the May 2018 tender offer, the Company entered into agreements with the counterparties to the Capped Call Transactions to unwind the Capped Call Transactions (the Unwind Agreements). Under the terms of the Unwind Agreements, the Capped Call Transactions automatically terminated, along with all respective rights and obligations of the parties. The cash settlement amount was determined to be \$2.1 million. The Company recorded an increase to additional paid in capital on the Consolidated Balance Sheets for the cash received upon settlement.

Subsidiaries

The KeyW Holding Corporation is a holding company with no independent assets or operations (other than the ownership of its subsidiaries). Holdco contemplates that if it issues any guaranteed debt securities under any registration statement filed by it under the Securities Act of 1933, as amended, all guarantees will be full and unconditional and joint and several, and any subsidiaries of Holdco that are not subsidiary guarantors will be "minor" subsidiaries as such term is defined under the rules and regulations

of the Securities and Exchange Commission. The agreements governing the Company's long-term indebtedness do not contain any material restrictions on the ability of Holdco or any guarantor to obtain funds from its subsidiaries by dividend, loan or otherwise. Accordingly, the Company does not provide separate financial statements of any guarantor subsidiaries.

12. ACCUMULATED OTHER COMPREHENSIVE (LOSS) INCOME

Changes in the components of accumulated other comprehensive (loss) income were as follows:

Unrecognized (loss) gain on derivative instruments (in thousands)

Balance at January 1, 2018 \$—
Other comprehensive loss (2,117)
Taxes 482

Taxes 482 Reclassification from accumulated other comprehensive (loss) income 315

Balance at December 31, 2018 \$ (1,320)

Reclassifications for unrecognized (loss) gain on derivative instruments are associated with outstanding debt and are recorded in "Interest expense, net" on the Consolidated Statements of Income. See Note 6 - Derivative Instruments for more information on the Company's interest rate swap agreements.

13. SHARE-BASED COMPENSATION

At December 31, 2018, KeyW had stock-based compensation awards outstanding under the following plans: The 2008 Stock Incentive Plan (2008 Plan), The 2009 Stock Incentive Plan (2009 Plan) and The 2013 Stock Incentive Plan (2013 Plan).

On August 15, 2012, the shareholders approved the 2013 KeyW Holding Corporation Stock Incentive Plan. The 2013 Plan, which took effect on January 1, 2013, provides for the issuance of additional restricted stock, stock options, and restricted stock units. Pursuant to an amendment approved by the Company's shareholders on May 10, 2018, the number of shares available for issuance under the 2013 Plan was increased to a maximum of 4,180,000 shares.

2013 Stock Incentive Plan

Total equity available to issue 4,180,000 Total equity outstanding or exercised 2,937,265 Total equity remaining 1,242,735

The Company has awarded stock options, restricted stock awards, restricted stock units and the rights to receive Long-Term Incentive Shares to attract and retain highly qualified officers, directors, key employees, and other persons, and to motivate such persons to serve the Company and to expend maximum effort to improve the business results and earnings of the Company, by providing to such persons an opportunity to acquire or increase a direct proprietary interest in the operations and future success of the Company and align employee and shareholder interests.

Stock Options

Historically, the Company issued stock option awards that vested over varying periods, ranging from three to five years, and had a ten-year life. The Company estimated the fair value of stock options using the Black-Scholes option-pricing model. All stock options were issued with an exercise price at market value or higher based upon our publicly traded share price on the date of grant. All option awards terminate within ninety days or sooner after

termination of service with the Company except as provided in certain circumstances with regard to our senior executive employment agreements.

No stock options were granted during 2018, 2017, and 2016.

2016 Stock Option Exchange Program

During 2016, the Company completed the shareholder-approved one-time Stock Option Exchange Program.

Replacement RSUs

During July 2016, the Company completed an offer to exchange certain previously granted employee stock options for new restricted stock units on a three-for-one basis with certain eligible employees, excluding members of the Board of Directors and named executive officers. 390,570 options were exchanged for 130,265 restricted stock units. The restricted stock units granted vested over a one-year period from the date of the exchange. The exchange resulted in a modification charge of approximately \$0.1 million, which was recognized over the one-year vesting period of the restricted stock units. Terms of the restricted stock units are discussed in more detail below.

Replacement Long-Term Incentive Share Rights

During August 2016, the Company completed an exchange of certain previously granted employee stock options for new rights to receive Long-Term Incentive Shares on a three-for-one basis with certain members of the non-executive leadership team, excluding members of the Board of Directors and named executive officers. 178,900 options were exchanged for 59,636 rights to receive Long-Term Incentive Shares. These rights have a weighted-average requisite service period of 2.2 years. There was no modification charge as a result of the exchange. Rights to receive Long-Term Incentive Shares are discussed in more detail below.

A summary of stock option activity is as follows:

	Number of Shares	Option Exercise Price	Weighted- Average Exercise Price
Options Outstanding 01/01/2016	2,332,889		
Options Exercisable 01/01/2016	1,965,633		
Granted			
Exercised	(82,550)	\$5.00 - \$11.99	\$6.50
Cancelled	(1,014,117)	\$5.00 - \$17.71	\$13.62
Options Outstanding 12/31/2016	1,236,222		
Options Exercisable 12/31/2016	1,193,911		
Granted			
Exercised	(34,862)	\$5.00 - \$10.00	\$6.37
Cancelled	(321,550)	\$5.50 - \$17.71	\$13.07
Options Outstanding 12/31/2017	879,810		
Options Exercisable 12/31/2017	879,810		
Granted			
Exercised	(75,836)	\$5.00 - \$9.25	\$5.28
Cancelled	(79,124)	\$5.00 - \$17.11	\$10.63
Options Outstanding 12/31/2018	724,850		
Options Exercisable 12/31/2018	724,850		

As of December 31, 2018, outstanding stock options were as follows:

Exercise Price	Options Vested and Outstanding	Intrinsic Value	Weighted-Average Remaining Life (Years)
\$5.00 - \$5.50	161,500	\$192,435	0.84
\$6.90 - \$7.66	135,700	_	3.06
\$7.96 - \$9.25	113,176		2.18
\$9.50 - \$11.67	90,100		3.31
\$11.99 - \$12.97	83,150		3.43
\$13.00 - \$14.33	60,224		3.83
\$14.88 - \$17.11	81,000	_	5.06
	724,850	\$192,435	

Restricted Stock Awards

During 2018, the Company issued 82,934 shares of restricted common stock under equity incentive plans to our directors. The shares vest 50% on the first anniversary of the grant date and 50% on the second anniversary of the grant date.

During 2017, the Company issued 281,201 shares of restricted common stock under equity incentive plans to existing employees, directors and new hires. The Company issued 93,518 shares of restricted common stock to board members, 100,000 shares of restricted common stock to new employees and 87,683 shares of restricted common stock to existing employees as discretionary awards. Of the shares issued to new hires, 20,000 shares were issued as retention incentive inducements to four Sotera employees in accordance with Section 4(2) of the Securities Act of 1933. The Company entered into employment agreements with the four Sotera employees. The employment agreements provided for grants of inducement equity awards outside of the 2013 Plan, in accordance with NASDAQ Listing Rule 5635(c)(4), upon commencement of their employment. The expense for these shares will be recognized over the vesting life of each individual tranche of shares based upon the fair value of a share of stock at the date of grant. All of the shares of restricted common stock issued in 2017 cliff vest after three years, except for 8,518 shares issued to one board member and the shares issued to the four Sotera employees. The shares granted to our board member vest 50% on the first anniversary of the grant date and the shares granted to the Sotera employees vested on the first anniversary of the grant date.

During 2016, the Company issued a total of 184,791 shares of restricted common stock under equity incentive plans to existing employees, directors and new hires. The Company issued 75,100 shares of restricted common stock to existing employees under the long-term incentive plan and an additional 79,441 shares of restricted common stock to board members. The Company also issued 30,250 shares of restricted common stock to new employees. The expense for these shares will be recognized over the vesting life of each individual tranche of shares based upon the fair value of a share of stock at the date of grant. All of the shares of restricted common stock issued in 2016 cliff vest after three years, except for the shares issued to our board members. The shares granted to board members vested 50% on the first anniversary of the grant date and 50% on the second anniversary of the grant date. All restricted stock awards have no exercise price.

A summary of the outstanding unvested restricted stock awards is as follows:

	Unvested
	Shares
Outstanding unvested 01/01/2016	959,733
Granted	184,791
Vested	(335,353)
Cancelled	(162,793)
Outstanding unvested 12/31/2016	646,378
Granted	281,201
Vested	(244,831)
Cancelled	(47,525)
Outstanding unvested 12/31/2017	635,223
Granted	82,934
Vested	(302,733)
Cancelled	(79,475)
Outstanding unvested 12/31/2018	335,949

Restricted Stock Units (units)

During 2018, the Company issued 430,175 units as part of employee incentive plans and to new hires. The Company issued 239,759 units to existing employees under the long-term incentive plan, 125,000 units to new employees and 65,416 units to existing employees as discretionary awards. All of the units of restricted common stock granted in 2018 cliff vest after three years from the grant date based on continuous service, except for approximately 2,000 shares granted as an adjustment to the 2017 long-term incentive plan grant in December 2017 and to the 2018 long-term incentive plan grant in June 2018, respectively, that will vest at specific dates between 2020 and 2021.

During 2017, the Company issued 337,423 units as part of employee incentive plans and to new hires. The Company issued 142,423 units to existing employees under the long-term incentive plan, 15,000 units to new employees and 180,000 units to existing employees as discretionary awards. The 142,423 units granted as part of the long-term incentive plan and the 15,000 units to new employees cliff vest after three years from the grant date based on continuous service. The 180,000 units granted to existing employees as discretionary awards vest 1/3 on the first anniversary of the grant date, 1/3 on the second anniversary of the grant date and 1/3 on the third anniversary of the grant date.

As discussed above, the Company issued 130,265 units as part of the July 2016 stock option exchange program. The following table summarizes the activities for our unvested restricted stock units:

Unvested
Units
130,265
(2,002)
(5,969)
122,294
337,423
(118,326)
(3,968)
337,423
430,175
(54,174)
(49,250)

Outstanding unvested December 31, 2018 664,174

Performance Stock Units (performance units)

During 2018, the Company issued 229,646 performance-based units to existing employees under the long-term incentive plan. These performance-based units will vest three years from the grant date based on continuous service and the stock will be issued at the end of the three-year period based upon the achievement of performance criteria over a three year period, with the number of shares ultimately awarded, if any, ranging up to 150% of the specified target units. If performance is below the threshold level of performance criteria, no shares will be issued. The expense for these units will be recognized over the requisite service period of three years. The grant-date fair value of these performance-based units is \$2.1 million. For purposes of measuring compensation expense for these performance-based units, the number of shares ultimately expected to vest is estimated at each reporting date based on management's expectations regarding the relevant performance criteria.

During 2017, the Company issued 17,557 performance-based units with market conditions to existing employees under the long-term incentive plan. These market conditions units vest based on the achievement of a 20-day average target stock price of \$10.25 (stock price hurdle). Upon attainment of the stock price hurdle at any time during the first 30 months of the three-year period from the grant date, employees will be awarded restricted stock that will vest three years from the performance unit grant date. If the 20-day average stock price hurdle is achieved within the last six months of the three-year period from the grant date, the employees will then be awarded restricted stock that will vest one year from the last day upon which the 20-day average is achieved. We measured the fair value of the performance units using a Monte Carlo simulation approach with the following assumptions: risk-free interest rate of 1.98%, expected volatility of 60.16% and dividend yield of 0%. The grant-date fair value of these performance units is \$0.1 million. The expense for these rights will be recognized over the requisite service period of 3 years.

The following table summarizes the activities for our unvested performance stock units:

Unvested
Performance
Units
_
17,557
17,557
229,646
(6,250)
240,953

Long-Term Incentive Share Rights (rights)

During 2018, the Company granted rights to 270,000 Long-Term Incentive Shares Rights to 100,000 shares were granted outside of the 2013 Plan to a new hire, in accordance with NASDAQ Listing Rule 5635(c)(4), upon commencement of his employment, in accordance with Section 4(2) of the Securities Act of 1933. The remaining rights to 170,000 shares were granted to existing employees under the 2013 Plan. The granting and vesting of the Long-Term Incentive Shares will be contingent upon the employees continued employment with KeyW, subject to acceleration upon certain events. The Company measured the fair value of the Long-Term Incentive Share grants using a Monte Carlo simulation approach with the following assumptions: risk-free interest rate ranging between 2.49% and 2.74%, expected volatility of approximately 55% and dividend yield of 0%. The grant-date fair value of these Long-Term Incentive Share rights is \$1.0 million. The expense for these grants will be recognized over the requisite service period of each individual tranche, which have weighted average requisite service periods ranging from 2.0 years and 2.9 years.

During 2017, the Company granted the right to receive up to an aggregate of 600,000 Long-Term Incentive Shares. 100,000 of these rights were granted to an existing employee per an amendment to the employee's employment agreement. Another 300,000 of these rights were granted outside of the 2013 Plan to new hires, in accordance with NASDAQ Listing Rule 5635(c)(4), upon commencement of their employment, in accordance with Section 4(2) of the Securities Act of 1933. The remaining 200,000 shares were granted to four Sotera employees in accordance with Section 4(2) of the Securities Act of 1933. The Company entered into employment agreements with the four Sotera employees. The employment agreements provided for grants of inducement equity awards outside of the 2013 Plan, in accordance with NASDAQ Listing Rule 5635(c)(4) upon commencement of their employment. We measured the fair value of the rights to receive Long-Term Incentive Shares using a Monte Carlo simulation approach with the following assumptions: risk-free interest rate ranging between 1.78% and 1.95%, expected volatility ranging between 51.76% and 52.34% and dividend yield of 0%. The grant-date fair value of the Long-Term Incentive Share rights granted in 2017 is \$2.5

million. The expense for these grants will be recognized over the requisite service period of each individual tranche, which have weighted average requisite service periods ranging from 2.5 years and 2.7 years.

During 2016, the Company granted the right to receive up to an aggregate of 1,070,000 Long-Term Incentive Shares. 565,000 of these rights were granted to new hires, 445,364 were granted as part of employee incentive plans and 59,636 were granted as part of the August 2016 stock option exchange program, discussed above. Of the grants to new hires, rights to 505,000 of the Long-Term Incentive Shares were granted as sign-on inducements outside of the 2013 Plan, in accordance with NASDAQ Listing Rule 5635(c)(4) and Section 4(2) of the Securities Act of 1933. The Long-Term Incentive Shares will be subject to a two-year holding period following the issuance date. The granting and vesting of the Long-Term Incentive Shares is contingent upon the employees' continued employment with KeyW, subject to acceleration upon certain events. We measured the fair value of the rights to receive Long-Term Incentive Shares granted in 2016 using a Monte Carlo simulation approach with the following assumptions: risk-free interest rate ranging between 1.01% and 1.80%, expected volatility ranging between 52.96% and 59.5% and dividend yield of 0%. The grant-date fair value of these Long-Term Incentive Share rights is \$5.5 million. The expense for these rights will be recognized over the requisite service period of each individual tranche, which have weighted average requisite service periods range from 2.1 years and 4.9 years.

The following table summarizes the activities for our Long-Term Incentive Share rights:

Long-Term Incentive Share Rights Outstanding January 1, 2016 400,000 Granted 1,070,000 Cancelled (30,000)Outstanding December 31, 2016 1,440,000 Granted 600,000 Cancelled (315,000)Outstanding December 31, 2017 1,725,000 Granted 270,000 Cancelled (190,000)Outstanding December 31, 2018 1,805,000

All of the Long-Term Incentive Share rights issued in 2018, 2017, and 2016 consist of five tranches, and Long-Term Incentive Shares will be awarded at any time prior to the fifth anniversary of the rights' commencement dates if the closing market price of the Company's common stock over any 30 consecutive trading days is at or greater than the applicable target price, set forth in the table below.

Target Price Per Share Long-Term Incentive Shares Rights

\$13.00	225,625
\$16.00	225,625
\$20.00	451,250
\$25.00	451,250
\$30.00	451,250

Total Stock Compensation Expense

The Company recorded total stock compensation expense of \$4.9 million, \$4.2 million and \$3.5 million for the years ended December 31, 2018, 2017, and 2016, respectively. The total unrecognized stock compensation expense at December 31, 2018 is approximately \$10.3 million, which will be recognized over a weighted average period of 1.7

years.

Employee Stock Purchase Plan

Effective January 1, 2011, the Company offered an Employee Stock Purchase Plan ("ESPP") to employees. Under the terms of the ESPP, employees may purchase up to 1,000 shares of common stock per quarter at a 15% discount to the market price on the last trading day of the quarter. The Company has elected to use open market purchases for all shares issued under the ESPP, and expense is recognized as the difference between the open market purchases and the employee contributions. In 2018, 2017 and 2016 the Company recognized expense of \$0.3 million, \$0.2 million and \$0.2 million, respectively, under the plan.

14. WARRANTS

During 2018, no warrant holders exercised any warrants.

During 2017, warrant holders exercised 100,000 warrants and 60,000 warrants expired. Under our warrant agreements, warrants may be exercised in a cashless transaction based on the average price of the Company's common stock for the five days prior to exercise. Under this methodology, the warrants exercised were exchanged for 13,773 shares of the Company's common stock.

During 2016, warrant holders exercised 2,213,935 warrants, with 349,144 exercised for cash and 1,864,791 exercised in a cashless transaction. The warrants exercised for cash were exercised at \$5.50 per share. The total cash received from these exercises was \$1.9 million. The warrants that were exercised in a cashless transaction were exchanged for 471,504 shares of the Company's common stock.

As of December 31, 2018, outstanding warrants were as follows:

Exercise Warrants
Price Outstanding and Vested Weighted-Average
Remaining Life (Years)

\$12.65 158.116 0.86

15. COMMITMENTS AND CONTINGENCIES

A substantial portion of the Company's revenue and costs are generated from contracts with the U.S. Government that are subject to audit by the U.S. Defense Contract Audit Agency (DCAA). U.S. Agencies, including the DCAA, the Defense Contract Management Agency, and other various agencies, routinely audit contract cost and allocated indirect cost for compliance with federal procurement regulations, Cost Accounting Standards, and in accordance with contract specific terms and conditions. The DCAA has audited the incurred cost submissions of the Company through December 31, 2015. The results of such audits are not expected to have a material effect on the Company's financial position, and as of December 31, 2018, the Company believes it has adequately reserved for potential adjustments from audits or review of contract costs.

The Company leases certain office equipment and operating facilities under non-cancellable operating leases that expire at various dates through 2030. Certain leases contain renewal options. Rental payments on certain leases are subject to annual increases based on escalation clauses and increases in the lessor's operating expenses. For the leases that require fixed rental escalations during their lease terms, rent expense is recognized on a straight-line basis resulting in deferred rent. The deferred rent included in other liabilities, both current and non-current, totaled \$9.9 million and \$11.2 million at December 31, 2018 and 2017, respectively, of which \$7.0 million and \$7.9 million related to the lease incentive liability at December 31, 2018 and 2017, respectively. Total net lease expense was \$9.8 million, \$10.9 million and \$7.7 million for the years ended December 31, 2018, 2017 and 2016, respectively. The schedule below shows the future minimum lease payments required under the operating leases as of December 31, 2018.

(in thousands)

 Type
 2019
 2020
 2021
 2022
 2023
 Thereafter
 Total

 Facilities/Office space
 \$8,624
 \$7,845
 \$7,843
 \$8,018
 \$8,225
 \$27,980
 \$68,535

 Office equipment
 111
 5
 —
 —
 —
 —
 116

 Operating Leases
 \$8,735
 \$7,850
 \$7,843
 \$8,018
 \$8,225
 \$27,980
 \$68,651

In the normal course of business, the Company is involved in various legal matters. It is the opinion of management that none of the current legal matters would have a material adverse effect on the Company's financial statements.

16. RETIREMENT PLANS

The Company currently has one qualified defined contribution retirement plan. The KeyW Corporation Employee 401(k) Plan (KeyW Plan), which includes a contributory match 401(k) feature for KeyW employees. As of January 1,

2018, the KeyW Plan calls for an employer matching contribution of up to 8.5% of eligible compensation. Total authorized contributions under the

matching contribution feature of the KeyW Plan were \$11.4 million, \$9.1 million and \$10.0 million, in 2018, 2017 and 2016, respectively.

The Company previously had a qualified defined contribution retirement plan, the Sotera 401(k) Plan (Sotera Plan), which included a contribution match for legacy Sotera employees. The Sotera Plan called for an employer matching contribution of up to 4% of eligible compensation. Subsequent to our acquisition of Sotera, the total authorized contributions under the Sotera Plan in 2017 were \$1.9 million. The Sotera Plan was terminated on December 31, 2017.

17. INCOME TAX PROVISION

Applicable income tax (benefit) expense benefit provision on continuing operations is as follows:

	Year Ended December 31,		
	2018	2017	2016
	(in thousands)		
Current:			
Federal	\$ —	\$ —	\$ —
State		35	1
		35	1
Deferred	(4,734)	(10,897)	2,451
Total provision for income taxes	\$(4,734)	\$(10,862)	\$2,452

Deferred income taxes are provided for temporary differences between the financial reporting basis and the tax basis of the Company's assets and liabilities. At December 31, 2018 and 2017, the net deferred tax liability was \$14.0 million and \$19.4 million respectively.

Deferred tax assets and liabilities, shown as the sum of the appropriate tax effect for each significant type of temporary differences as of December 31, 2018 and 2017, are as follows:

	December 31, 2018		December 31, 2017		
	Asset	Liability	Asset	Liability	,
	(in thousa	ands)			
Net operating loss	\$55,622	\$ —	\$52,006	\$ —	
Accrued compensation	3,314	_	2,979		
Share based compensation	3,169	_	2,811	_	
Tenant improvement allowance	381	_	168		
Inventory reserves	904	_	935		
Other deferred tax assets	2,212	_	2,149		
Tax credits	1,215	_	1,665		
Other deferred tax liabilities	_	(16)		(285)
Convertible debt	_	(86)		(735)
Deferred revenue – current		(626)	_	(1,329)
Prepaid expenses		(119)		(128)
Depreciation	1,655	_	576		
Intangible assets amortization – definite lived	883	_	338		
Intangible assets amortization – indefinite lived		(31,177)		(26,263)
Internally developed software		(254)		(377)
Interest limitation	4,247	_			
Unrecognized gain on derivatives	492	_			
Less: Valuation allowance	(55,771)	_	(53,877)		
Deferred tax assets and liabilities, net of valuation allowance	\$18,323	\$(32,278)	\$9,750	\$(29,117	7)
Net deferred liability		\$(13,955)		\$(19,367	7)

The Company has recorded a deferred tax asset reflecting the benefit of \$167.7 million of federal net operating loss carry-forwards, \$1.5 million of federal tax credits for research and development and alternative minimum tax. In addition, the Company has also recorded \$178.7 million of state net operating loss carry-forwards and \$0.1 million of state tax credits for research and development. In connection with the Sotera acquisition, a portion of the net operating loss carryforward is limited under section 382 of the Internal Revenue Code (IRS). The annual limitation is equal to approximately \$2.3 million. The federal and state net operating losses available for use by the Company during the carryforward period is \$47.7 million. Deferred tax assets including tax credits, net operating losses and charitable contribution carryforward are set to expire between 2019 and 2037 for all tax attributes prior to 2018, however, all federal and a portion of the state net operating losses in 2018 can be carried forward indefinitely with no expiration dates.

As a result of the adoption of ASU 2016-09 in the first quarter of 2017, the Company recorded a cumulative effect adjustment to increase deferred tax assets for the federal and state net operating losses attributable to excess tax benefits from stock-based compensation that had not been previously recognized. The impact was an increase to the deferred tax assets associated with net operating losses of approximately \$0.5 million, which was offset by a corresponding increase to the valuation allowance. All excess tax benefits and deficiencies in the current and future periods will be recognized within the quarterly provision for income taxes during the reporting period in which they occur. This may result in increased volatility in the Company's effective tax rate.

On December 22, 2017, the President of the United States signed into law the Tax Cuts and Jobs Act tax reform legislation. This legislation made significant changes in U.S. tax law including a reduction in the corporate tax rates, changes to net operating loss carryforward and carryback, limitation of the tax deduction for interest expense, and a repeal of the corporate alternative minimum tax. The legislation reduced the U.S. corporate tax rate from 35% to 21%. As a result of the enacted law, the Company was required to revalue deferred tax assets and liability at the enacted rate. This revaluation resulted in the Company recording a benefit of \$12.4 million to income tax through continuing operations and a corresponding reduction in the deferred tax liability. The revaluation also resulted in an adjustment to the value of deferred tax assets and liabilities and a corresponding adjustment to the valuation allowance.

Additionally, the Company recorded an income tax benefit of \$6.0 million as management has reassessed the ability to offset certain indefinite lived deferred tax liabilities with deferred tax assets, reducing the Company's need for a valuation allowance by the portion of deferred tax assets that are considered to have indefinite lives under the new law. The other provisions of the Tax Cuts and Jobs Act did not have a material impact on the fiscal 2017 consolidated financial statements.

For the year ended December 31, 2017, the Company recorded provisional estimates for valuation allowance reversal to certain state deferred tax assets based upon existing state tax law conformity to federal tax laws. State legislative actions and conformity to the Tax Act continue to develop. Management completed the analysis for the impact of state law conformity changes during the fourth quarter of 2018. As a result of the 2018 analysis, the adjustment to the December 31, 2017 provisional estimate was a reversal of additional \$0.1 million of the valuation allowance. The Company has finalized its assessment during the one-year measurement period as prescribed by the Staff Accounting Bulletin 118.

With the Sotera acquisition in the second quarter of 2017, the Company determined at the acquisition that the acquired deferred tax assets should have a full valuation allowance established against them due to the uncertainty of the utilization in future periods. A full valuation allowance was established on KeyW's deferred tax assets during the second quarter of 2015 due to the uncertainty of the utilization in future periods. In evaluating the Company's ability to realize the deferred tax assets it considered all available positive and negative evidence, including cumulative historical earnings, reversal of temporary differences, projected taxable income and tax planning strategies. The Company has a history of pretax losses and as management believes that it is more likely than not a significant portion of the Company's deferred tax assets will not be realized. As described above, with the passage of the Tax Cuts and Jobs Act, the Company believes it can utilize certain deferred tax assets that are no longer considered to have definite lives. The valuation allowance at year end relates primarily to the Company's pre-2018 federal net operating losses, pre-2018 state net operating losses, and deferred tax assets related to states in which the deferred tax assets are not considered to have indefinite lives. The Company's deferred tax assets will be evaluated in subsequent reporting periods by management using the same positive and negative evidence to determine if a change in valuation allowance is required.

A reconciliation of the difference between the statutory federal income tax rate and the effective tax rate for the Company's continuing operations for the years ended December 31, 2018, 2017 and 2016 is as follows:

	Percent of Pre-tax Income
	Year Ended December
	31,
	2018 2017 2016
Tax computed at statutory rate	21.0 % 35.0 % 35.0 %
State income taxes net of federal income tax benefit	7.6 % (5.3)% 11.1 %
Worthless stock deduction	— % 14.4 % — %
Meals and entertainment – non-deductible	(0.8)% (1.4)% 5.2 %
Non-deductible acquisition costs	(0.4)% (0.7)% 3.8 %
ESPP expense	(0.2)% (0.2)% 0.9 %
Repurchase premium	(2.1)% — % — %
Other permanent items	(0.3)% 0.2 % 4.3 %
Provision to return	(1.1)% — $%$ 2.0 $%$
Tax credits	(1.2)% — $%$ $(1.8)%$
Decrease in deferred tax assets before valuation allowance due to federal rate change	— % (47.0)% — %
Decrease in valuation allowance on deferred assets that are considered to have indefinite	0.4 % 24.0 %
lives due to tax reform	0.4 % 24.9 % — %
Other changes in valuation allowance, including due to federal rate change	(5.4)% 24.9 % 4.0 %
Effective tax rate	17.5 % 44.8 % 64.5 %

The Company recognizes the benefit of an income tax position only if it is more likely than not (greater than 50%) that the tax position will be sustained upon tax examination, based solely on the technical merits of the tax position. Otherwise, no benefit can be recognized. Additionally, companies are required to accrue interest and related penalties, if applicable, on all tax exposures for which reserves have been established consistent with jurisdictional tax laws.

The following table represents a reconciliation of the Company's total unrecognized tax benefits balance for the year ended December 31, 2018:

Year Ended December 31. 2018 2017 2016 (in thousands) \$5,301 \$4,629 \$483 Unrecognized tax benefits at beginning of year Increases as a result of tax positions taken in a prior period 2 Increases as a result of tax positions taken in a prior periods rate change 670 Increases as a result of tax positions taken during the current period 718 4,160 Decreases as a result of tax positions taken in a prior period (4,638) — (14 Unrecognized tax benefits at end of year \$1,381 \$5,301 \$4,629

As of the year ended December 31, 2018, the Company has certain income tax positions in federal and state jurisdictions that are not more likely than not to be sustained upon tax examination. The Company recorded an increase to the unrecognized tax benefit during the current year and a decrease to tax positions taken in prior periods. The Company recognizes interest and penalties related to unrecognized tax benefits within the income tax expense line in the accompanying Consolidated Statements of Operations. Accrued interest and penalties are deemed immaterial and are not included in the above table or within the financial statements.

As of December 31, 2018, the following tax years remained subject to examination by the major tax jurisdictions indicated:

Major Jurisdictions Open Years

United States 2012 through 2017
California 2013 through 2017
Maryland 2015 through 2017
Massachusetts 2015 through 2017
Virginia 2015 through 2017

During the year ended December 31, 2015, the IRS initiated an audit of the Company's Federal returns for the years ended December 31, 2013 and 2014. During 2018, the Company recorded an adjustment to its ASC 740-10 FIN 48 positions as a result of anticipated conclusion of the audit. The adjustment increased the net operating loss carryforward and reduced other tax credits. The actual timing of the resolution and/or closure of audits is not certain and management does not believe that its unrecognized tax benefits would materially change in the next twelve months. If any changes occur that are inconsistent with management expectations, the Company would expect to adjust its federal net operating loss carryforward and other tax credits.

18. SEGMENT INFORMATION

Prior to the sale of the Hexis Cyber Solutions product lines during the second quarter of 2016 (see Note 19 - Assets Held for Sale, Discontinued Operations and Dispositions), the Company had two reportable segments consisting of Government Solutions and Commercial Cyber Solutions. Subsequent to the sale of the Hexis Cyber Solutions product lines the Company has only one reportable segment. There was no change in operating or reporting segments as a result of the acquisition of Sotera during 2017.

The Company primarily provides information solutions and services to national and military intelligence agencies. Substantially all of the Company's revenues and tangible long-lived assets are generated by or located in the United States. As such, financial information by geographic location is not presented.

Customers

For the years ended December 31, 2018, 2017 and 2016 the Company earned approximately 95%, 94% and 94%, respectively, of its revenue from prime contracts with the U.S. Government or subcontracts with other contractors engaged in work for the U.S. Government. The percentage of total revenue by customer sector was as follows:

Year Ended December December 2018 31, 2017 31, 2016

Department of Defense 76% 78 % 92 % Non-Department of Defense U.S. Government 19% 16 % 2 % Commercial and other 5 % 6 % 6 %

19. ASSETS HELD FOR SALE, DISCONTINUED OPERATIONS AND DISPOSITIONS

In December 2018, the Company committed to a plan to sell certain aircraft and other related plant, property, and equipment which had an aggregate carrying value of \$4.9 million. The assets are being actively marketed and it is the Company's intention to complete the sales of these assets within calendar year 2019. The Company recognized an impairment charge of \$2.6 million associated with these assets based on the value it expects to receive which is included in "Asset impairment charges" on the Consolidated Statements of Operations for the twelve months ended December 31, 2018. The assets are reflected as "Assets held for sale" on the Consolidated Balance Sheets as of December 31, 2018.

During the first quarter of fiscal year 2016, the Company committed to a plan to sell the Hexis business in its entirety. The Hexis business marketed our HawkEye products and related maintenance and services to the commercial cyber sector and comprised our entire former Commercial Cyber Solutions reportable segment. During the second quarter of 2016, the sale of the Hexis Cyber Solutions product lines resulted in a pre-tax loss of approximately \$5.5 million. This loss reflects the difference between the consideration received for Hexis and the net carrying value of the business less transaction costs.

From inception of the Hexis business through management's decision to sell the business, the Company had been a relatively new participant in the commercial cyber security market. Accordingly, the Hexis business had historically required a significant amount of investment of the Company's resources. The business historically incurred losses and was expected to continue to incur losses until the Company gained sufficient traction within the marketplace. Following completion of the sale of the Hexis business, the Company no longer offers or markets any products or services to the commercial cyber security market and does not intend to make similar investments in the development of commercial cyber security products. After consideration of these factors, management concluded that the decision to sell the Hexis business constituted a strategic shift expected to have a major effect on the Company operations and financial results. Therefore, the results of the Hexis business, which comprised of the entire Commercial Cyber Solutions reportable segment, were reclassified as discontinued operations for all periods presented in the consolidated financial statements. The results of the Commercial Cyber Solutions segment previously included the allocation of certain general corporate costs, which have been reallocated to the remaining continuing operations on a retrospective basis.

The following table summarizes the aggregate carrying amounts of the major classes of Hexis assets and liabilities included in discontinued operations (in thousands):

December 31, 2016

Receivables \$ 3,000

Accounts payable and other accrued expenses \$ 1,185

The following table provides a summary of the operating results of Hexis, which have been reflected as discontinued operations (in thousands):

Year ended December 31, 2016

Revenues	\$2,894
Costs of revenues, excluding amortization	1,881
Operating expenses	16,225
Impairment of goodwill	6,980
Intangible amortization expense	381
Loss on disposal of Hexis	5,509
Loss before income taxes from discontinued operations	\$(28,082)
Income tax benefit, net on discontinued operations	(489)
Loss on discontinued operations	\$(27,593)

The following table presents the operating and investing cash flows of the discontinued Hexis business (in thousands):

Year ended December 31, 2016

)

Non-cash operating items

Depreciation and amortization expense \$ 1,015 Impairment of goodwill 6.980 Loss on disposal of long-lived assets \$ 3,568

Cash flows from investing activities

Acquisitions, net of cash acquired \$ — Purchases of property and equipment (471 Proceeds from Hexis asset divestiture \$ 5,000

Other Dispositions

In March 2016, the Company completed the sale of the SETA business to Quantech Services, Inc. for approximately \$11.2 million in cash. The SETA business was not deemed an individually significant component of the Company. Management decided to sell the SETA business in connection with the ongoing strategic review of the overall business, through which it was determined that the growth potential of both the Company core business and the SETA business could be maximized if the two businesses were separated. The sale of SETA eliminated conflicts at two key government agencies and allowed the Company to focus 100% on technology development opportunities across the Intelligence Community at the time of such sale. However, the sale of SETA did not represent a strategic shift that will have a major effect on the Company operations and financial results and, accordingly, the business historical results and the gain on sale were classified within continuing operations on the Consolidated Statements of Operations. Because the sale of SETA was not deemed a discontinued operation, its assets and liabilities of the business were not reclassified as held for sale on the Consolidated Balance Sheets as of December 31, 2015. In connection with the sale of SETA, the Company recognized a pre-tax gain of approximately \$3.0 million. This gain was reported within non-operating expense, net on the Consolidated Statements of Operations and reflects the difference between the consideration received for SETA and the net carrying value of the business less transaction costs. The net carrying value of the SETA business was deemed to include approximately \$7.2 million of goodwill that, in accordance with ASC 350, was allocated to the business based upon the relative fair values of SETA and the overall Government Solutions reporting unit within which the SETA business has been historically reported.

EXHIBIT INDEX

Exhibit No.	Exhibit Description	
2.1	Agreement and Plan of Merger, dated as of March 8, 2017, by and among The KeyW Corporation, Sandpiper Acquisition Corporation, Sotera Holdings, Inc. and Sotera Equity Partners GP LLC. Amendment to Agreement and Plan of Merger, dated as of April 3, 2017, by and among The KeyW	(22)
2.2		(23)
3.1 3.2	Amended and Restated Articles of Incorporation of the Company, as filed on October 6, 2010.	(2) (9)
3.3 4.1	Specimen of Common Stock Certificate.	(15) (1)
4.2	Indenture, dated July 21, 2014, between the Company and Wilmington Trust, National Association, as trustee. First Supplemental Indenture, dated July 21, 2014, between the Company and Wilmington Trust,	(14)
4.3 4.4	National Association, as trustee.	(14)(14)
10.1*	The KeyW Corporation 2008 Stock Incentive Plan Form of Incentive Stock Ontion Agreement for grants pursuant to The KeyW Corporation 2008 Stock	(1)
10.2*	Incentive Plan Form of Non-Qualified Stock Ontion Agreement for grants pursuant to The KeyW Corporation 2008	(1)
10.3*	Stock Incentive Plan Form of Restricted Stock Agreement for grants pursuant to The KeyW Corporation 2008 Stock	(1)
10.4* 10.5*	Incentive Plan	(1)(1)
10.6*	Form of Incentive Stock Ontion Agreement for grants pursuant to The KeyW Holding Corporation	(11)
10.7*	Corporation 2009 Stock Incentive Plan	(11)
10.8*	Stock Incentive Plan	(11)
10.9* 10.10*	Form of The KeyW Corporation Restricted Stock Agreement for non-plan grants	(1) (1)
10.11* 10.12* 10.13	Annual Incentive Plan	(1) (1)
10.13 10.14* 10.15*	The KeyW Holding Corporation 2010 Employee Stock Purchase Plan	(10)(1)(6)
10.16*	Form of Incentive Stock Ontion Agreement for grants pursuant to The KeyW Holding Corporation	(11)
10.17*	Form of Non-Qualified Stock Ontion Agreement for grants pursuant to The KeyW Holding	(11)
10.18*	Form of Restricted Stock Agreement for grants pursuant to The KeyW Holding Corporation 2013 Stock Incentive Plan	X
10.19*	Form of Restricted Stock Unit Agreement for grants pursuant to The KeyW Holding Corporation 2013 Stock Incentive Plan	X
10.20*	Employment Agreement, dated August 25, 2015, between The KeyW Corporation and William J. Weber.	(16)

10.21* Employment Agreement, dated May 23, 2016, by and between The KeyW Corporation and Michael J. (20)

	First Lien Credit Agreement, dated as of May 8, 2018, by and among The Keyw Corporation, as		
10.22	borrower, the Company, Royal Bank of Canada, as administrative agent and lender, RBC Capital	(24)	
10.22	Markets, Fifth Third Bank, JPMorgan Chase, N.A. and SunTrust Robinson Humprey, Inc., as	(24)	
	joint-bookrunners and joint-lead arrangers, and the other lenders party thereto.		
	Second Lien Credit Agreement, dated as of May 8, 2018, by and among The KeyW Corporation, as		
10.23	borrower, the Company, Royal Bank of Canada, as administrative agent and lender, RBC Capital	(25)	
10.23	Markets, Fifth Third Bank, JPMorgan Chase, N.A. and SunTrust Robinson Humprey, Inc., as	(23)	
	joint-bookrunners and joint-lead arrangers, and the other lenders party thereto.		
10.24*	Employment Agreement, dated May 9, 2017, between The KeyW Corporation and John Sutton.	(29)	
10.25*	Employment Agreement, dated August 24, 2016, between The KeyW Corporation and Philip Luci.	(33)	
10.26*	Employment Agreement, dated April 4, 2017, between The KeyW Corporation and Kirk Herdman.	(34)	
10.27*	First Amendment of Employment Agreement, dated October 10, 2017, between The KeyW	(35)	
10.27	Corporation and Kirk Herdman.	(33)	
10.28	First Amendment of Employment Agreement, dated June 1, 2018, between The KeyW Corporation	(36)	
10.26	and Philip Luci, Jr.	(30)	
10.29	First Amendment of Employment Agreement, dated March 11, 2019, between The KeyW Corporation	X	
	and John Sutton.	Λ	
10.30	Second Amendment of Employment Agreement, dated March 11, 2019, between The KeyW	X	
10.50	Corporation and Philip Luci, Jr.	Λ	
10.31	Second Amendment of Employment Agreement, dated March 11, 2019, between The KeyW	X	
10.51	Corporation and Kirk Herdman.	Λ	
14.1	<u>Code of Ethics</u>	(2)	
21.1	Subsidiaries of the Registrant	X	
23.1	Consent of Deloitte & Touche LLP	X	
23.2	Consent of Grant Thornton LLP	X	
31.1	Certification of the Chief Executive Officer pursuant to R Rule 13a-14(a)/15d-14(a)	X	
31.2	Certification of the Chief Financial Officer pursuant to R Rule 13a-14(a)/15d-14(a)	X	
	Certification of the Chief Executive Officer and the Chief Financial Officer and Principal Accounting		
32.1**	Officer pursuant to Rule 13a-14(b) of the Exchange Act and 18 U.S.C. Section 1350, as adopted	X	
	pursuant to Section 906 of the Sarbanes Oxley Act of 2002		
101.INS	XBRL Instance Document	X	
	XBRL Taxonomy Extension Schema Document	X	
	XBRL Taxonomy Extension Calculation Linkbase Document	X	
	XBRL Taxonomy Extension Label Linkbase Document	X	
	XBRL Taxonomy Extension Presentation Linkbase Document	X	
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document	X	

XFiled herewith

These exhibits are being "furnished" with this periodic report and are not deemed "filed" with the Securities and **Exchange Commission and are not incorporated by reference in any filing of the Company under the Securities Act of 1933 or the Securities Exchange Act of 1934, whether made before or after the date hereof and irrespective of any general incorporation by reference language in any such filing.

(1) Incorporated by reference to the corresponding Exhibit number to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-167608).

(2) Filed as Exhibits 3.1 and 14.1, respectively, to Registrant's Form 10-K filed March 29, 2011, File No. 001-34891.

^{*}Indicates management contract of compensatory agreements

- (3) [Reserved]
- (4) [Reserved]
- (5) [Reserved]
- (6) Filed as Annex B to Registrant's Definitive Proxy Statement on Schedule 14A filed April 6, 2018.
- (7) [Reserved]
- (8) [Reserved]
- (9) Filed as Exhibit 3.1 to Registrant's Current Report on Form 8-K filed July 15, 2014, File No. 001-34891.
- (10) Filed as Exhibit 10.20 to the Registrant's Registration Statement on Form S-1, as amended File No. 333-167608.
- Filed as Exhibits 10.6, 10.7, 10.8, 10.28 and 10.29, respectively, to the Registrant's Annual Report on Form (11)10-K for the year ended December 31, 2012, filed March 12, 2013, File No. 001-34891.
- (12)[Reserved]
- (13)[Reserved]
- Filed as Exhibits 4.1, 4.2 and 4.3, respectively to the Registrant's Current Report on Form 8-K filed July 21, 2014, (14) File No. 201 22401 File No. 001-38491.
- (15) Filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed August 15, 2014, File No. 001-34891.
- (16) Filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K, filed August 31, 2015, File No. 001-34891.
- (17)[Reserved]
- (18)[Reserved]
- (19)[Reserved]
- (20) Filed as Exhibit 10.2 to the Registrant's Current Report on Form 8-K, filed May 27, 2016.
- (21)[Reserved]
- (22) Filed as Exhibit 2.1 to the Registrant's Current Report on Form 8-K, filed April 7, 2017.
- (23) Filed as Exhibit 2.2 to the Registrant's Current Report on Form 8-K, filed April 7, 2017.
- (24) Filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K, filed May 8, 2018.
- (25) Filed as Exhibit 10.2 to the Registrant's Current Report on Form 8-K, filed May 8, 2018.
- (26) [Reserved]
- (27) [Reserved]
- (28) [Reserved]
- (29) Filed as Exhibit 10.3 to the Registrant's Current Report on Form 8-K, filed May 15, 2017.
- (30) [Reserved]
- (31)[Reserved]
- (32)[Reserved]
- (33) Filed as Exhibit 10.34 to the Registrant's Annual Report on Form 10-K, filed March 16, 2018.
- (34) Filed as Exhibit 10.35 to the Registrant's Annual Report on Form 10-K, filed March 16, 2018.
- (35) Filed as Exhibit 10.36 to the Registrant's Annual Report on Form 10-K, filed March 16, 2018.

(36) Filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K, filed June 6, 2018.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

THE KEYW HOLDING CORPORATION

(Registrant)

By:/s/ William J. Weber

William J. Weber

President and Chief Executive Officer;

Principal Executive Officer

March 12, 2019

By:/s/ Michael J. Alber

Michael J. Alber

Executive Vice President and Chief Financial Officer;

Principal Financial and Accounting Officer

March 12, 2019

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

/s/ Deborah A. Bonanni /s/ Arthur L. Money Deborah A. Bonanni, Director Arthur L Money, Director

March 12, 2019 March 12, 2019

/s/ William I. Campbell /s/ Caroline S. Pisano

William I. Campbell, Director Caroline S. Pisano, Director

March 12, 2019 March 12, 2019

/s/ Shephard Hill /s/ Mark Sopp Shephard Hill, Director March 12, 2019 March 12, 2019

/s/ J. Chris Inglis /s/ William J. Weber
J. Chris Inglis, Director William J. Weber, Director

March 12, 2019 March 12, 2019

/s/ Kenneth A. Minihan Kenneth A. Minihan, Director

March 12, 2019