

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

**FORM 10-K**

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

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from \_\_\_\_\_ to \_\_\_\_\_  
Commission file number 001-34480

**VERISK ANALYTICS, INC.**

*(Exact name of registrant as specified in its charter)*

**Delaware**

*(State or other jurisdiction of incorporation or organization)*

**545 Washington Boulevard Jersey City, NJ**

*(Address of principal executive offices)*

**26-2994223**

*(I.R.S. Employer Identification No.)*

**07310-1686**

*(Zip Code)*

**(201) 469-3000**

*(Registrant's telephone number, including area code)*

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

<u>Title of each class</u>	<u>Name of each exchange on which registered</u>
Common Stock \$.001 par value	NASDAQ Global Select Market

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

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

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  No

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  No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).  Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) 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.

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 the 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	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

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

As of June 30, 2018, the last business day of the registrant's most recently completed second fiscal quarter, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was \$16,796,964,310 based on the closing price reported on the NASDAQ Global Select Market on such date.

As of February 15, 2019, there were 163,509,530 shares outstanding of the registrant's Common Stock, par value \$.001.

**DOCUMENTS INCORPORATED BY REFERENCE**

Certain information required by Part III of this annual report on Form 10-K is incorporated by reference to our definitive Proxy Statement for our 2019 Annual Meeting of Stockholders, which will be filed with the Securities and Exchange Commission not later than 120 days after December 31, 2018.

## INDEX

	<u>Page</u>
<b>PART I</b>	
Item 1. <a href="#">Business</a>	<a href="#">4</a>
Item 1A. <a href="#">Risk Factors</a>	<a href="#">15</a>
Item 1B. <a href="#">Unresolved Staff Comments</a>	<a href="#">23</a>
Item 2. <a href="#">Properties</a>	<a href="#">23</a>
Item 3. <a href="#">Legal Proceedings</a>	<a href="#">23</a>
Item 4. <a href="#">Mine Safety Disclosures</a>	<a href="#">24</a>
<b>PART II</b>	
Item 5. <a href="#">Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</a>	<a href="#">25</a>
Item 6. <a href="#">Selected Financial Data</a>	<a href="#">26</a>
Item 7. <a href="#">Management’s Discussion and Analysis of Financial Condition and Results of Operations</a>	<a href="#">29</a>
Item 7A. <a href="#">Quantitative and Qualitative Disclosures About Market Risk</a>	<a href="#">48</a>
Item 8. <a href="#">Consolidated Financial Statements and Supplementary Data</a>	<a href="#">48</a>
<a href="#">Consolidated Balance Sheets</a>	<a href="#">57</a>
<a href="#">Consolidated Statements of Operations</a>	<a href="#">58</a>
<a href="#">Consolidated Statements of Comprehensive Income</a>	<a href="#">59</a>
<a href="#">Consolidated Statements of Changes in Stockholders' Equity</a>	<a href="#">60</a>
<a href="#">Consolidated Statements of Cash Flows</a>	<a href="#">61</a>
<a href="#">Notes to Consolidated Financial Statements</a>	<a href="#">63</a>
Item 9. <a href="#">Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</a>	<a href="#">48</a>
Item 9A. <a href="#">Controls and Procedures</a>	<a href="#">48</a>
Item 9B. <a href="#">Other Information</a>	<a href="#">49</a>
<b>PART III</b>	
Item 10. <a href="#">Directors, Executive Officers and Corporate Governance</a>	<a href="#">50</a>
Item 11. <a href="#">Executive Compensation</a>	<a href="#">50</a>
Item 12. <a href="#">Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</a>	<a href="#">50</a>
Item 13. <a href="#">Certain Relationships and Related Transactions and Director Independence</a>	<a href="#">50</a>
Item 14. <a href="#">Principal Accounting Fees and Services</a>	<a href="#">50</a>
<b>PART IV</b>	
Item 15. <a href="#">Exhibits and Financial Statement Schedule</a>	<a href="#">51</a>
Item 16. <a href="#">Form 10-K Summary</a>	<a href="#">51</a>
<a href="#">SIGNATURES</a>	<a href="#">105</a>
<a href="#">EXHIBIT INDEX</a>	<a href="#">106</a>
Exhibit 23.1	
Exhibit 31.1	
Exhibit 31.2	
Exhibit 32.1	

*Unless the context otherwise indicates or requires, as used in this annual report on Form 10-K, references to “we,” “us,” “our” or the “Company” refer to Verisk Analytics, Inc. and its subsidiaries.*

*In this annual report on Form 10-K, all dollar amounts are expressed in millions, unless indicated otherwise.*

#### **SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS**

Verisk Analytics, Inc., or Verisk, has made statements under the captions “Business,” “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and in other sections of this annual report on Form 10-K that are forward-looking statements. In some cases, you can identify these statements by forward-looking words such as “may,” “might,” “will,” “should,” “expects,” “plans,” “anticipates,” “believes,” “estimates,” “predicts,” “potential,” or “continue,” the negative of these terms and other comparable terminology. These forward-looking statements, which are subject to risks, uncertainties and assumptions about us, may include projections of our future financial performance, our anticipated growth strategies and anticipated trends in our business. These statements are only predictions based on our current expectations and projections about future events. There are important factors that could cause our actual results, level of activity, performance or achievements to differ materially from the results, level of activity, performance or achievements expressed or implied by the forward-looking statements, including those factors discussed under the caption entitled “Risk Factors.” You should specifically consider the numerous risks outlined under “Risk Factors.”

Although we believe the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, level of activity, performance or achievements. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of any of these forward-looking statements. We are under no duty to update any of these forward-looking statements after the date of this annual report on Form 10-K to conform our prior statements to actual results or revised expectations.

## PART I

### Item 1. Business

#### Our Company

Verisk is a leading data analytics provider serving customers in insurance, energy and specialized markets, and financial services. Using advanced technologies to collect and analyze billions of records, we draw on unique data assets and deep domain expertise to provide innovations that may be integrated into customer workflows. We offer predictive analytics and decision support solutions to customers in rating, underwriting, claims, catastrophe and weather risk, natural resources intelligence, economic forecasting, and many other fields. In the United States, or U.S., and around the world, we help customers protect people, property, and financial assets.

Our customers use our solutions to make better decisions about risk and opportunities with greater efficiency and discipline. We refer to these products and services as solutions due to the integration among our services and the flexibility that enables our customers to purchase components or a comprehensive package. These solutions take various forms, including data, expert insight, statistical models and tailored analytics all designed to allow our customers to make more logical decisions. We believe our solutions for analyzing risk have a positive impact on our customers' revenues and help them better manage their costs. In 2018, our customers included all of the top 100 property and casualty, or P&C, insurance providers in the U.S. for the lines of P&C services we offer, and all of the top 30 credit card issuers in North America, the United Kingdom and Australia, as well as 9 of the top 10 global energy providers around the world. We also work with a wide range of companies, governments and institutions across the energy, and metals and mining value chains. We believe that our commitment to our customers and the embedded nature of our solutions serve to strengthen and extend our relationships.

We believe that Verisk is uniquely positioned because of the set of distinctives or competitive advantages we cultivate and continue to expand. Our existing businesses, in addition to new product innovations, integrate the following four singular qualities into the foundation of our strategy.

#### Our Distinctives

- **Unique Data Assets** - Data is at the core of what we do. We use our proprietary data assets to develop predictive analytics and transformative models for our customers.
- **Deep Domain Expertise** - We have specialized and in-depth knowledge in a number of defined vertical markets, including insurance, energy, financial services, and risk management. We understand that different verticals require different approaches, and our deep domain expertise adds value to our analytics in the markets we serve.
- **Steady Stream of First-to-Market Innovations** - We move quickly to be the first to market with new solutions. Typically, the marketplace assumes that those who are first to market are superior to the competition and better positioned to succeed.
- **Deep Integration into Customer Workflows** - By embedding our solutions into customer workflows, we help our customers better manage risk and optimize their bottom line. We achieve this goal by remaining closely connected to our customers at all times and serving their distinct needs.

We offer our solutions and services primarily through annual subscriptions or long-term agreements, which are typically pre-paid and represented over 80% of our revenues in 2018. For the year ended December 31, 2018, we had revenues of \$2,395.1 million and net income of \$598.7 million. For the five year period ended December 31, 2018, our revenues and net income grew at a compound annual growth rate, or CAGR, of 13.7% and 10.6%, respectively.

#### Our History

We trace our history to 1971, when Insurance Services Office, Inc., or ISO, started operations as a not-for-profit advisory and rating organization providing services to the U.S. P&C insurance industry. ISO was formed as an association of insurance companies to gather statistical data and other information from insurers and report to regulators, as required by law. ISO's original functions also included developing programs to help insurers define and manage insurance products and providing information to help insurers determine their own independent premium rates. Insurers used and continue to use our offerings primarily in their product development, underwriting and rating functions.

On May 23, 2008, in contemplation of our initial public offering, or IPO, ISO formed Verisk Analytics, Inc., or Verisk, a Delaware corporation, to be the holding company for our business. Verisk was initially formed as a wholly-owned subsidiary

of ISO. On October 6, 2009, in connection with our IPO, the Company effected a reorganization whereby ISO became a wholly-owned subsidiary of Verisk. Verisk common stock began trading on the NASDAQ Global Select Market on October 7, 2009, under the ticker symbol “VRSK.”

Over the past two decades, we have transformed our business beyond its original functions by deepening and broadening our data assets, developing a set of integrated risk management solutions and services and addressing new markets. Our expansion into analytics began when we acquired the American Insurance Services Group, or AISG, and certain operations and assets of the National Insurance Crime Bureau in 1997 and 1998, respectively. Those organizations brought to the company large databases of insurance claims, as well as expertise in detecting and preventing claims fraud. To further expand our business, in 2002, we acquired AIR Worldwide, or AIR, the technological leader in catastrophe modeling. In 2006, to bolster our position in the insurance claims field we acquired Xactware, a leading supplier of estimation software for professionals involved in building repair and reconstruction. In 2012, we acquired Argus Information & Advisory Services, LLC, or Argus, to expand our global presence providing information, competitive benchmarking, analytics, and customized services to financial institutions in the payments space. In 2015, we acquired Wood Mackenzie Limited, or Wood Mackenzie, to advance our strategy to expand internationally and position us in the global energy market. In 2017, we acquired a group of similar but unrelated companies for aerial image capture purposes, or Aerial Imagery acquisitions, in our insurance vertical. Additionally, in 2017, we acquired G2 Web Services, LLC, or G2; Sequel Business Solutions Ltd., or Sequel; Lundquist Consulting, Inc., or LCI; and PowerAdvocate, Inc., or PowerAdvocate, to further strengthen our position in the Insurance, Energy and Specialized Markets and Financial Services segments. The Aerial Imagery acquisitions provide multi-spectral aerial photographic services with expertise in offering digital photogrammetric and remote sensing data for mapping and surveying applications. G2 provides merchant risk intelligence solutions for acquirers, commercial banks, and other payment system providers. Sequel is a leading insurance and reinsurance software specialist based in London. LCI offers risk insight, prediction, and management solutions for banks and creditors. PowerAdvocate is a leading data analytics provider with a one-of-a-kind spend and cost data that are curated from millions of transactions across thousands of services, materials, and equipment categories in the energy industry. In 2018, we acquired Rulebook Limited, or Rulebook, to further our international insurance presence in the overseas market.

Those acquisitions have added scale, geographic reach, highly skilled workforces, and a wide array of new capabilities to support our customers. They have helped to make us a leading provider of information and decision analytics for customers involved in the business of risk in the U.S. and selectively around the world.

## Segments

We organize our business in three segments: Insurance, Energy and Specialized Markets and Financial Services. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Part II of this annual report for additional information regarding our segments. See Note 19. of our consolidated financial statements included in this annual report on Form 10-K for further information.

### Insurance Segment

Our Insurance segment primarily serves our P&C insurance customers and focuses on the prediction of loss, the selection and pricing of risk, and compliance with their reporting requirements in each U.S. state in which they operate. We also develop predictive models to forecast scenarios and produce both standard and customized analytics that help our customers better manage their businesses, including detecting fraud before and after a loss event, and quantifying losses. Our customers include most of the P&C insurance providers in the U.S. In recent years, we have expanded our offerings to also serve certain non-U.S. markets.

#### *Underwriting & rating*

We are the recognized leader in the U.S. for industry-standard insurance programs that help P&C insurers define coverages and issue policies. We provide policy language, prospective loss costs, policy writing rules, and a variety of other solutions for 29 lines of insurance. Our policy language, prospective loss cost information and policy writing rules can serve as integrated turnkey insurance programs for our customers. Insurance companies need to ensure that their policy language, rules, and rates comply with all applicable legal and regulatory requirements. Insurers must also make sure their policies remain competitive by promptly changing coverages in response to changes in statutes or case law. To meet their needs, we process approximately 2,400 regulatory filings and interface with state regulators in all 50 states plus the District of Columbia, Guam, Puerto Rico, and the Virgin Islands each year to ensure smooth implementation of our rules and forms. When insurers choose to develop their own alternative programs, our industry-standard insurance programs also help regulators ensure that such insurers’ policies meet basic coverage requirements.

Standardized coverage language, which has been tested in litigation and tailored to reflect judicial interpretation, helps ensure consistent treatment of claimants. As a result, our industry-standard language also simplifies claim settlements and can reduce the occurrence of costly litigation, because our language causes the meaning of coverage terminology to become established and known. Our policy language includes standard coverage language, endorsements and policy writing support language that assist our customers in understanding the risks they assume and the coverages they offer. With these policy programs, insurers also benefit from economies of scale. We have more than 120 specialized lawyers and insurance experts reviewing changes in each state's insurance rules and regulations, including an average of approximately 13,000 legislative bills, 9,000 regulatory actions and 2,000 court decisions per year, to make any required changes to our policy language and rating information.

To cover the wide variety of risks in the marketplace, we offer a broad range of policy programs. For example, in the homeowners line of insurance, we maintain policy language and rules for 6 basic coverages, 283 national endorsements, and 611 state-specific endorsements.

The P&C insurance industry is heavily regulated in the U.S. P&C insurers are required to collect statistical data about their premiums and losses and to report that data to regulators in every state in which they operate. Our statistical agent services have enabled P&C insurers to meet those regulatory requirements for more than 45 years. We aggregate the data, and as a licensed or appointed "statistical agent" in all 50 states, Puerto Rico, and the District of Columbia, we report those statistics to insurance regulators. We are able to capture significant economies of scale given the level of penetration of this service within the U.S. P&C insurance industry.

To provide our customers and the regulators the information they require, we maintain one of the largest private databases in the world. Over the past four decades, we have developed core expertise in acquiring, processing, managing, and operating large and comprehensive databases that are the foundation of our insurance offerings. We use our proprietary technology to assemble, organize and update vast amounts of detailed information submitted by our customers. We supplement this data with publicly available information.

Each year, P&C insurers send us approximately 3.7 billion detailed individual records of insurance transactions, such as insurance premiums collected or losses incurred. We maintain a database of more than 21.4 billion statistical records, including approximately 9.1 billion commercial lines records and approximately 12.3 billion personal lines records. We collect unit transaction detail of each premium and loss record, which enhances the validity, reliability and accuracy of our data sets and our actuarial analyses. Our proprietary quality process includes more than 2,900 separate checks to ensure that the data meets our high standards of quality.

We provide actuarial services to help our customers analyze and price their risks. Using our large database of premium and loss data, our actuaries are able to perform sophisticated analyses using our predictive models and analytic methods to help our P&C insurance customers with pricing, loss reserving, and marketing. We distribute a number of actuarial solutions and offer flexible services to meet our customers' needs. In addition, our actuarial consultants provide customized services for our customers that include assisting them with the development of independent insurance programs, analysis of their own underwriting experience, development of classification systems and rating plans, and a wide variety of other business decisions. We also supply information to various customers in other markets including reinsurance and government agencies.

We project customers' future losses and loss expenses using a broad set of data. Those projections tend to be more reliable than if our customers used their own data exclusively. We make a number of actuarial adjustments before the data is used to estimate future costs. Our customers can use our estimates of future costs in making independent decisions about the prices charged for their policies. For most P&C insurers, in most lines of business, we believe that our estimates of future costs are an essential input to rating decisions. Our actuarial products and services are also used to create the analytics underlying our industry-standard insurance programs described above.

We gather information on properties, businesses, and communities so that insurers can evaluate, price, and efficiently process commercial insurance applications, including property, auto, general liability, business owner's policy, and workers compensation. Our property-specific rating and underwriting data and analytics allow our customers to understand, quantify, mitigate, and avoid potential losses, while matching price to exposure. Our ProMetrix<sup>®</sup> platform contains information on 6 million commercial buildings, 27.5 million businesses, loss costs and virtually all communities in the U.S. We have a staff of approximately 550 field representatives strategically located around the U.S. who observe and report on conditions at commercial and residential properties, evaluate community fire-protection capabilities and assess the effectiveness of municipal building-code enforcement. Each year, our field staff visits approximately 290,000 commercial properties to collect information on new buildings and verify building attributes.

We are a leading provider of solutions for the personal underwriting markets, including homeowners and auto lines. We build and maintain widely used, industry-standard tools that assist insurers in underwriting and rating, that is, measuring and selecting risks and pricing coverage appropriately to ensure fairness to the consumer and a reasonable return for the insurer. Our solutions apply advanced predictive analytics to our deep reservoir of data and information to quickly and precisely gauge the degree and cost of risk.

Our solutions span a wide range of P&C insurance, encompassing personal and commercial lines of coverage that protect private residences, private and commercial vehicles, and businesses.

We also provide proprietary analytic measures for individual communities to mitigate losses from important perils. Nearly every property insurer in the U.S. uses our evaluations of community firefighting capabilities to help determine premiums for fire insurance throughout the country. We provide field-verified and validated data on the fire protection services for approximately 40,000 fire response jurisdictions. We also offer services to evaluate the effectiveness of community enforcement of building codes and the efforts of communities to mitigate damage from flooding. Further, we provide information on the insurance rating territories, premium taxes, crime risk, and hazards of windstorm, earthquake, wildfire, and other perils. To supplement our data on specific commercial properties and individual communities, we have assembled, from a variety of internal and select third-party sources, information on hazards related to geographic locations representing every postal address in the U.S. Insurers use this information for policy quoting and analyzing risk concentration in geographical areas. We also make our data and analytics available to commercial real estate lenders to allow them to better understand risks associated with properties they lend against.

We are a leader in and pioneered the field of probabilistic catastrophe modeling used by insurers, reinsurers, financial institutions, and government to manage their risk from extreme events. Our models, which form the basis of our solutions, enable companies to identify, quantify and plan for the financial consequences of catastrophes. We have developed models for hurricanes, earthquakes, winter storms, tornadoes, hailstorms, and floods in more than 110 countries, as well as pandemics worldwide. We have developed a probabilistic terrorism model capable of quantifying the risk in the U.S. from this evolving threat, which supports pricing and underwriting decisions down to the level of an individual policy, as well as models for estimating losses to crop insurance programs in the U.S., Canada and China. Our newest models offer risk management solutions for the cyber and casualty lines of business.

We have begun to expand our footprint of data and solutions to include both U.S. and international markets.

### ***Claims***

Our claims insurance solutions provide our customers analytics in the areas of fraud detection, repair cost estimation, and aerial imagery business, including emerging areas of interest within these categories.

We are a leading provider of fraud-detection tools for the P&C insurance industry. Our anti-fraud solutions improve our customers' profitability by both predicting the likelihood that fraud is occurring and detecting suspicious activity after it has occurred. When a claim is submitted, our system searches our database and returns information about other claims filed by the same individuals or businesses (either as claimants or insurers), that helps our customers determine if fraud has occurred. The system searches for matches in identifying informational fields, such as name, address, Social Security number, vehicle identification number, driver's license number, tax identification number, or other parties to the loss. Our system also includes advanced name and address searching to perform intelligent searches and improve the overall quality of the matches. Information from match reports speeds payment of meritorious claims while providing a defense against fraud and can lead to denial of a claim, negotiation of a reduced award, or further investigation by the insurer or law enforcement.

We have a comprehensive system used by claims adjusters and investigation professionals to process claims and fight fraud. Claims databases are one of the key tools in the fight against insurance fraud. The benefits of a single all-claims database include improved efficiency in reporting data and searching for information, enhanced capabilities for detecting suspicious claims and superior information for investigating fraudulent claims, suspicious individuals, and possible fraud rings. Our database contains information for more than 1.3 billion claims and is the world's largest database of P&C claims information used for claims and investigations. Insurers and other participants submit new claims more than 240,000 a day on average across all categories of the U.S. P&C insurance industry.

We also provide data, analytics, and networking products for professionals involved in estimating all phases of building repair and reconstruction. We provide solutions for every phase of a building's life, including:

- quantifying the ultimate cost of repair or reconstruction of damaged or destroyed buildings,
- aiding in the settlement of insurance claims, and

- tracking the process of repair or reconstruction and facilitating communication among insurers, adjusters, contractors, and policyholders.

To help our customers estimate repair costs, we provide a solution that assists contractors and insurance adjusters in estimating repairs using a patented plan-sketching program. The program allows our customers to sketch floor plans, roof plans and wall-framing plans and automatically calculates material and labor quantities for the construction of walls, floors, footings, and roofs.

We also offer our customers access to wholesale and retail price lists, which include structural repair and restoration pricing for 467 separate economic areas in North America. We revise this information monthly and, in the aftermath of a major disaster, we can update the price lists as often as weekly to reflect rapid price changes. Our structural repair and cleaning database contains approximately 21,000 unit-cost line items. For each line item such as smoke cleaning, water extraction and hazardous cleanup, we report time and material pricing, including labor, labor productivity rates (for new construction and restoration), labor burden and overhead, material costs, and equipment costs. We improve our reported pricing data by several methods including direct market surveys and an analysis of the actual claims experiences of our customers. We estimate that more than 80.0% of insurance repair contractors and service providers in the U.S. and Canada with computerized estimating systems use our building and repair pricing data. Use of such a large percentage of the industry's claims data leads to accurate reporting of pricing information, which we believe is unmatched in the industry.

In addition, we provide an efficient multitier, multispectral terrestrial imagery and data acquisition, processing, analytics, and distribution system. Using the latest remote sensing and machine learning technologies, we gather, store, process, and deliver geographic and spatially referenced information that supports uses in many markets, including insurance, commercial property, energy, banking, architecture, engineering, emergency response, and urban planning. Mapping professionals and firms leverage our data to accurately understand growth and change, determine damage, discover hazards, assess risk, and perform valuations.

We continually pursue new solutions that help our customers keep abreast of changing markets and technology. For example, we provide tools and platforms to help insurers, their customers, and providers of products and services to leverage the growing Internet of Things. This technology connects devices, vehicles, and homes to the Internet and generates valuable data to underwrite, rate, and manage risk while enriching customer relationships. By ingesting, storing, and normalizing this data, Verisk makes it accessible for users to extract business insights at a significantly lower cost and logistical burden than they could achieve on their own.

### **Energy and Specialized Markets Segment**

We are a leading provider of data analytics across the natural resources value chain including the global energy, chemicals, metals, mining, power and renewables sectors. We provide research and consulting services focusing on exploration strategies and screening, asset development and acquisition, commodity markets, and corporate analysis. We offer consultancy in the areas of business environment, business improvement, business strategies, commercial advisory, and transaction support. We deliver analysis and advice on assets, companies, governments, and markets. We provide comprehensive and integrated coverage and analysis of relevant commodities across the interconnected global energy sectors. We continuously gather and manage proprietary information, insight, and analysis on thousands of oil and gas fields, mines, refineries and other assets, as well as detailed assessments of the market fundamentals across each value chain. Our experts analyze the data and work directly with customers to address their business challenges. Our growing customer base includes international and national energy companies, as well as chemicals, metals, mining, power utilities and renewables companies, financial institutions, and governments. We work with a range of diverse teams, from strategy and policy makers, business developers, and market analysts to corporate finance, risk teams and investors.

We provide market and cost intelligence to energy companies to optimize financial results. We combine information, innovative technology, and expert services to produce market intelligence. We aim to help asset-intensive clients achieve operational and financial excellence, increase profitability, and optimize business performance. In addition, our client service team of technical and professionals plays an integral role at a number of energy companies. We have engineers and supply chain professionals who consult on capital projects. Our team members include experts from the energy industry with hands-on operational experience.

We help businesses and governments better anticipate and manage climate and weather-related risks. We prepare certain agencies and companies to anticipate, manage, react to, and profit from climate and weather-related risk. We serve our customers by providing state-of-the-art research, development and analysis delivered in reports, databases, and software solutions. We are dedicated to the advancement of scientific understanding of the atmospheric, climate and weather, ocean, and planetary sciences. Through research conducted by our in-house scientific staff, and often in collaboration with world-renowned scientists at academic and other research institutions, we have developed analytical tools to help measure and observe environmental properties and translate those measurements into actionable information.

We also offer a comprehensive suite of data and information services that enable improved compliance with global Environmental Health and Safety, or EH&S, requirements related to the safe manufacturing, distribution, transportation, usage, and disposal of chemicals and products. From the supply chain or solutions life cycle, we deliver a program specific to the EH&S compliance information and management needs of our customers. Our full solutions life cycle and cross-supply chain approach provides a single, integrated solution for managing customers' EH&S capabilities, which results in improved processes and reduced cost, risk, and liability.

### **Financial Services Segment**

We maintain the largest bank account consortia to provide competitive benchmarking, decisioning algorithms, business intelligence, and customized analytic services to financial institutions, payment networks and processors, alternative lenders, regulators and merchants - enabling better strategy, marketing, and risk decisions. Our teams are located across U.S., U.K., Canada, Australia, New Zealand, the United Arab Emirates, Mexico and India, delivering unique products and services to an expanding customer base that values the comprehensiveness of our data and solutions, as well as our full wallet spend view of a consumer. Complimenting this, we leverage our partnerships with processors and credit bureaus, to not only augment the richness of our data, but also to provide expanded solutions across the broad span of consumer banking and retail products. Meanwhile, we offer services and a suite of solutions to satisfy growing customer needs for better forecasting and expense tools, and regulatory-focused solutions. In addition, we provide solutions in the media effectiveness space given the unique nature and strength of our partnerships and through our developing Marketview brand.

Our professionals have substantive industry knowledge about providing solutions to the financial services sector. We are known for our unique ability to blend the highly technical, data-centered aspects of our projects with expert communication and business knowledge. Our solutions enhance our customers' ability to manage their businesses' profitably and position them better to handle present day challenges (competitive, regulatory, and economic). Specifically, we use comprehensive transaction, risk, behavioral, and bureau-sourced account data to assist customers in making better business decisions through analysis and analytical solutions. We maintain a comprehensive and granular direct observation financial services industry database for credit card, debit card, and deposit transactions, as well as merchant and collections transactions.

### **Our Growth Strategy**

Over the past five years, we have grown our revenues at a CAGR of 13.7% through the successful execution of our business plan. Those results reflect strong organic revenue growth, new product development, and acquisitions. We have made, and continue to make, investments in people, data sets, analytic solutions, technology, and complementary businesses. The key components of our strategy include the following:

***Increase Solution Penetration with Customers.*** We expect to expand the application of our solutions in customers' internal processes. Building on our deep knowledge of, and embedded position in, various industries, we expect to sell more solutions to existing customers tailored to individual market segments. By increasing the breadth and relevance of our offerings, we believe that we can strengthen our relationships with customers and increase our value to their decision making in critical ways. We have opportunities to expand solution penetration to our insurance, energy and financial services customers.

***Develop New, Proprietary Data Sets and Predictive Analytics.*** We work with our customers to understand their evolving needs. We plan to create new solutions by enriching our mix of proprietary data sets, analytic solutions and effective decision support across the markets we serve. We constantly seek to add new data sets that can further leverage our analytic methods, technology platforms and intellectual capital.

***Leverage Our Intellectual Capital to Expand into Adjacent Markets and New Customer Sectors.*** Our organization is built on more than four decades of intellectual property in risk management. We believe we can continue to expand the use of our intellectual capital profitably and apply our analytic methods in new markets where significant opportunities for long-term growth exist. We also continue to pursue growth through targeted international expansion.

We have already demonstrated the effectiveness of this strategy with our expansion into non insurance financial services.

***Pursue Strategic Acquisitions that Complement Our Leadership Positions.*** We will continue to expand our data and analytics capabilities across industries. While we expect this will occur primarily through organic growth, we have acquired and will continue to acquire assets and businesses that strengthen our value proposition to customers. We have developed an internal capability to source, evaluate, and integrate acquisitions that have created value for shareholders.

## **Our Customers**

The customers in our Insurance segment for the lines of P&C services we offer include the top 100 P&C insurance providers in the U.S., as well as insurers in international markets. A substantial majority of P&C insurance providers in the U.S. use our statistical agent services to report to regulators, and the majority of insurers and reinsurers in the U.S. use our actuarial services and industry-standard insurance programs. In addition, certain agencies of the federal government as well as county and state governmental agencies and organizations use our solutions to help satisfy government needs for risk assessment and emergency response information. Furthermore, our claims database serves thousands of customers, representing approximately 90% of the P&C insurance industry by premium volume, 25 state workers' compensation insurance funds, more than 500 self-insurers, approximately 400 third-party administrators, several state fraud bureaus, and many law-enforcement agencies involved in the investigation and prosecution of insurance fraud. We estimate that more than 80% of insurance repair contractors and service providers in the U.S. and Canada with computerized estimating systems use our building and repair cost estimation pricing data.

Our customers within Energy and Specialized Markets segment include 9 of the top 10 global energy providers around the world. We also work with a wide range of companies, governments and institutions across the energy, and metals and mining value chains.

Within the Financial Services segment, our customers include financial institutions, payment networks and processors, alternative lenders, regulators, merchants, and all of the top 30 credit card issuers in North America, the United Kingdom, and Australia.

## **Our Competitors**

We believe that no single competitor currently offers the same scope of services and market coverage we provide. The breadth of markets we serve exposes us to a broad range of competitors as described below. Businesses that we acquire may introduce us to additional competitors.

Our Insurance segment operates primarily in the U.S. P&C insurance industry, where we enjoy a leading market presence. We have a number of competitors in specific lines or services. We encounter competition from a number of sources, including insurers that develop internal technology and actuarial methods for proprietary insurance programs. Competitors also include other statistical agents, such as the National Independent Statistical Service, the Independent Statistical Service, Inc., and other advisory organizations, that provide underwriting rules, prospective loss costs, and coverage language, including the American Association of Insurance Services, Inc. and Mutual Services Organization. However, we believe that none of our competitors have the breadth or depth of data we have. Competitors for our property-specific rating and underwriting information are primarily limited to a number of regional providers of commercial property inspections and surveys, including Overland Solutions, Inc. and Regional Reporting, Inc. We also compete with a variety of organizations that offer consulting services, primarily specialty technology and consulting firms. In addition, a customer may use its own internal resources rather than engage an outside firm for these services. Our competitors also include information technology product and services vendors; management and strategy consulting firms; and smaller specialized information technology and analytical services firms, including Pinnacle Consulting and EMB, a unit of Willis Towers Watson. In the P&C insurance claims market and catastrophe modeling market, certain products are offered by a number of companies, including Risk Management Solutions (catastrophe modeling), CoreLogic (property replacement value), LexisNexis<sup>®</sup> Risk Solutions (loss histories and motor vehicle records for personal lines underwriting), Solera Holdings, Inc. (personal automobile underwriting), and Symbility. We believe that our P&C insurance industry expertise, and our ability to offer multiple applications, services and integrated solutions to individual customers are competitive strengths.

In the Energy and Specialized Markets segment, certain products are offered by a number of companies, including IHS Markit (natural resources), Rystad Energy (upstream), RS Energy (upstream), Global Data PLC (upstream), PIRA Energy Group (oil and gas markets), and CRU Group (metals) and Bloomberg New Energy Finance (Power & Renewables). We

believe that our global integrated value chain knowledge and insight, bottom-up proprietary data, and long-term trusted relationships enhance our competitive position in relationship to those companies.

Within the Financial Services segment, our unique datasets and wallet solutions means that we have no direct competitors, and we work closely to create partnerships for mutual clients with organizations such as the card networks and credit bureaus to deepen ongoing relationships and create new value solutions. Our key competitors for our major brands are EverCompliant, WebShield, Trustwave, LegitScript, Lexus Nexis, American Inforsource, and Phin Solutions.

### **Development of New Solutions**

We take a market-focused team approach to developing our solutions. Our operating units are responsible for developing, reviewing, and enhancing our various products and services. Our data management and production team designs and manages our processes and systems for market data procurement, proprietary data production, and quality control. Our Joint Development Environment, or JDE, and Enterprise Data Management, or EDM, teams support our efforts to create new information and products from available data and explore new methods of collecting data. EDM is focused on understanding and documenting business unit and corporate data assets and data issues, sharing and combining data assets across the enterprise, creating an enterprise data strategy, facilitating research and product development, and promoting cross-enterprise communication. Our Verisk Innovative Analytics, or VIA, team is a corporate center of excellence for analytical methods in applying modeling techniques to predict risk outcomes.

Our software development teams build the technology used in many of our solutions. As part of our product development process, we continually solicit feedback from our customers on the value of our products and services and the market's needs. We have established an extensive system of customer advisory panels that meet regularly throughout the year to help us respond effectively to the needs of our markets. In addition, we use frequent sales calls, executive visits, user group meetings, and other industry forums to gather information to align our product development efforts with the needs of the market. We also use a variety of market research techniques to enhance our understanding of our customers and the markets in which they operate.

We add to our offerings through an active acquisition program. Since 2014, we have acquired 26 businesses, which have allowed us to enter new markets, offer new solutions and enhance the value of existing services with additional proprietary sources of data.

When we find it advantageous, we augment our proprietary data sources and systems by forming alliances with other leading information providers and technology companies and integrating their product offerings into our offerings. This approach gives our customers the opportunity to obtain the information they need from a single source and more easily integrate the information into their workflows.

### **Sales, Marketing, and Customer Support**

We sell our solutions and services primarily through direct interaction with our customers. We employ a three-tier sales structure that includes salespeople, technical consultants, and sales support. Within the company, several areas have sales teams that specialize in specific products and services. Those specialized sales teams sell specific, highly technical solution sets to targeted markets in coordination with account management.

To provide account management to our largest customers in the insurance, energy and financial markets, we divide our customers into three groups. Tier One or "Global/National" Accounts, comprise of our largest customers. Tier Two, or "Strategic" Accounts, represent both large and middle market customer groups. Tier Three is composed of small and specialized companies that may represent one line of business, may be regionally focused, or are recent new entrants into the marketplace. In Tier One and Tier Two segments, we have sales teams organized by the following specialties: Personal or Commercial Lines Underwriting & Pricing, Claims, Catastrophe Risk, and Energy. In the Tier Three segment, we assign a sales generalist with overall account management responsibility. Our tiered approach has proven to be a successful sales model and approach to building customer relationships. Our senior executives regularly engage with the senior management of our customers to ensure customer satisfaction and strategic alignment and to support mutual innovation partnership opportunities.

Sales people participate in both sales and customer-service activities. They provide direct support, interacting frequently with assigned customers to assure a satisfactory experience using our services. Salespeople primarily seek out new sales opportunities and work with the various sales teams to coordinate sales activities and ensure our solutions fit the customer's needs. We believe our salespeople's product knowledge, skills to develop relationships of trust, and local presence differentiate us from our competition. Technical consultants are subject matter experts and work with salespeople on specific opportunities for their assigned products and segments. Both salespeople and technical consultants have responsibility for

identifying new sales opportunities. A team approach and a common customer relationship management system allow for effective coordination among the groups.

## **Sources of Our Data**

The data we use to perform our analytics and power our solutions is sourced through seven different kinds of data arrangements. First, we gather data from our customers within agreements that also permit our customers to use the solutions created from their data. Those agreements remain in effect unless the data contributor chooses to opt out. It is very rare that contributors elect not to continue providing us data. Second, we have agreements with data contributors in which we specify the particular uses of their data and provide their required levels of privacy, protection of data, and where necessary, de-identification of data. The agreements represent no cost to us, generally feature a specified period of time for the data contributions, and require renewal. Third, we “mine” data found inside the transactions supported by our solutions; as an example, we use the claims settlement data generated inside our repair cost estimating solution to improve the cost factors used in our models. Again, those arrangements represent no cost to us, and we obtain the consent of our customers to make use of their data in this way. Fourth, we source data generally at no cost from public sources, including federal, state, and local governments. Fifth, we gather data about the physical characteristics of commercial properties through the direct observation of our field staff members, who also perform property surveys at the request of, and facilitated by, property insurers. Sixth, we independently collect data on geographic and spatially referenced information relating to residential and commercial structures by using the latest remote sensing and machine learning technologies. Lastly, we purchase data from data aggregators under contracts that reflect prevailing market pricing for the data elements purchased, including county tax assessor records, descriptions of hazards such as flood plains and professional licenses. We are the owners of the derivative solutions we create using the data we collect.

## **Information Technology**

### *Technology*

Our information technology systems and the more recent adoption of cloud computing are fundamental to our success. They are used for the storage, processing, access, and delivery of the data that forms the foundation of our business and the development and delivery of the solutions we provide to our customers. Much of the technology we use and provide to our customers is developed, maintained, and supported by approximately 20% of our employee population. We generally own, or have secured ongoing rights to use for the purposes of our business, all the customer-facing applications that are material to our operations. We support and implement a mix of technologies and focus on implementing the most efficient technology for any given business requirement or task.

### *Data Centers*

We have two primary data centers in Somerset, New Jersey and Lehi, Utah, creating redundancy and back up capabilities. In addition, we have data centers located in other states dedicated to certain business units.

### *Disaster Recovery*

We are committed to a framework for business continuity management and carry out annual reviews of the state of preparedness of each business unit. All of our critical databases, systems and contracted customer services are also regularly recovered. We also have documented disaster recovery plans in place for each of our major data centers and each of our solutions. The data center in Somerset, New Jersey is the recovery site for the Lehi, Utah data center and vice versa.

### *Security*

We have adopted a wide range of measures to ensure the security of our IT infrastructure and data. Security measures generally cover the following key areas: physical security, logical security of the perimeter, network security such as firewalls, logical access to the operating systems, deployment of virus detection software, and appropriate policies and procedures relating to removable media such as laptops. All laptops are encrypted, and media leaving our premises and sent to third-party storage facilities are also encrypted. Our commitment to security has earned CyberTrust Security Certification (an industry leader in information security certification) since 2002.

## **Intellectual Property**

We own a significant number of intellectual property rights, including copyrights, trademarks, trade secrets, and patents. Specifically, our policy language, insurance manuals, software, and databases are protected by both registered and common law copyrights and the licensing of those materials to our customers for their use represents a large portion of our revenue. We also own in excess of 500 trademarks in the U.S. and foreign countries, including the names of our products and

services and our logos and tag lines, many of which are registered. We believe many of our trademarks, trade names, service marks, and logos to be of material importance to our business, as they assist our customers in identifying our products and services and the quality that stands behind them. We consider our intellectual property to be proprietary, and we rely on a combination of statutory (for example, copyright, trademark, trade secret, and patent) and contractual safeguards in a comprehensive intellectual property enforcement program to protect it wherever it is used.

We also own several patents and have several pending patent applications in the U.S. that complement our products. The patents and patent applications include claims, that pertain to technology, including a patent for our Liability Navigator™ product. We believe the protection of our proprietary technology is important to our success and we will continue to seek to protect those intellectual property assets for which we have expended substantial research and development capital and that are material to our business.

To maintain control of our intellectual property, we enter into contractual agreements with our customers, granting each customer permission to use our products and services, including our software and databases. This helps maintain the integrity of our proprietary intellectual property and to protect the embedded information and technology contained in our solutions. As a general practice, employees, contractors and other parties with access to our proprietary information sign agreements that prohibit the unauthorized use or disclosure of our proprietary rights, information and technology.

## **Employees**

As of December 31, 2018, we employed 7,951 full-time and 233 part-time employees. None of our employees are represented by unions. We consider our relationship with our employees to be good and have not experienced interruptions of operations due to labor disagreements.

Our employees include more than 200 actuarial professionals, including 35 Fellows and 39 Associates of the Casualty Actuarial Society as well as 130 Chartered Property Casualty Underwriters, 14 Certified and 17 Associate Insurance Data Managers, and more than 1,000 professionals with advanced degrees, including PhDs in mathematics and statistical modeling who review both the data and the models.

## **Regulation**

Because our business involves the distribution of certain personal, public, and non-public data to businesses and governmental entities that make eligibility, service, and marketing decisions based on such data, certain of our solutions and services are subject to regulation under federal, state, and local laws in the U.S., and to a lesser extent, in foreign countries. Examples of such regulation include the Fair Credit Reporting Act, which regulates the use of consumer credit report information; the Gramm-Leach-Bliley Act, which regulates the use of non public personal financial information held by financial institutions and applies indirectly to companies that provide services to financial institutions; the Drivers Privacy Protection Act, which prohibits the public disclosure, use or resale by any state's department of motor vehicles of personal information about an individual that was obtained by the department in connection with a motor vehicle record, except for a "permissible purpose", and various other federal, state, and local laws and regulations.

Those laws generally restrict the use and disclosure of personal information and provide consumers certain rights to know the manner in which their personal information is being used, to challenge the accuracy of such information and/or to prevent the use and disclosure of such information. In certain instances, the laws also impose requirements for safeguarding personal information through the issuance of data security standards or guidelines. Certain state laws impose similar privacy obligations as well as obligations to provide notification of security breaches in certain circumstances.

We are also licensed as a rating, rate service, advisory, or statistical organization under state insurance codes in all 50 states, Puerto Rico, Guam, the U.S. Virgin Islands, and the District of Columbia. As such an advisory organization, we provide statistical, actuarial, policy language development, and related products and services to P&C insurers, including advisory prospective loss costs, other prospective cost information, manual rules, and policy language. We also serve as an officially designated statistical agent of state insurance regulators to collect policy writing and loss statistics of individual insurers and compile that information into reports used by the regulators.

Many of our products, services and operations as well as insurers' use of our services are subject to state rather than federal regulation by virtue of the McCarran-Ferguson Act. As a result, many of our operations and products are subject to review and/or approval by state regulators. Furthermore, our operations involving licensed advisory organization activities are subject to periodic examinations conducted by state regulators, and our operations and products are subject to state antitrust and trade practice statutes within or outside state insurance codes, which are typically enforced by state attorneys general and/or insurance regulators.

**Available Information**

We maintain an Investor Relations website on the Internet at [investor.verisk.com](http://investor.verisk.com). We make available free of charge on or through this website, our annual, quarterly, and current reports and any amendments to those reports as soon as reasonably practicable following the time they are electronically filed with or furnished to the U.S. Securities and Exchange Commission, or SEC. For access to the filings, click the "SEC Filings" link on the "Financial Information" tab on our Investor Relations homepage. The contents of our website are not incorporated into this filing. Verisk trades on the NASDAQ Global Market in the Nasdaq Global Select Market segment under the ticker symbol "VRSK." Our stock was first publicly traded on October 7, 2009.

The public may read any materials filed by Verisk with the SEC on the SEC's Internet site ([www.sec.gov](http://www.sec.gov)), which contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC.

**Item 1A. Risk Factors**

*You should carefully consider the following risks and all of the other information set forth in this annual report on Form 10-K before deciding to invest in any of our securities. If any of the following risks actually occurs, our business, financial condition or results of operations would likely suffer. In such case, the trading price of our securities, including our common stock, could decline due to any of these risks, and you may lose all or part of your investment.*

***We could lose our access to data from external sources, which could prevent us from providing our solutions.***

We depend upon data from external sources, including data received from customers and various government, and public record services, for information used in our databases. In general, we do not own the information in these databases, and the participating organizations could discontinue contributing information to the databases. Our data sources could withdraw or increase the price for their data for a variety of reasons, and we could also become subject to legislative, judicial, or contractual restrictions on the use of such data, in particular if such data is not collected by the third parties in a way that allows us to legally use and/or process the data. In addition, some of our customers are significant stockholders of our company. Specifically, a portion of common stock is owned by insurers who are also our customers. If our customers' percentage of ownership of our common stock decreases in the future, there can be no assurance that our customers will continue to provide data to the same extent or on the same terms. If a substantial number of data sources, or certain key sources, were to withdraw or be unable to provide their data, or if we were to lose access to data due to government regulation or if the collection of data became uneconomical, our ability to provide solutions to our customers could be impacted, which could materially adversely affect our business, reputation, financial condition, operating results, and cash flows.

Agreements with our data suppliers are short-term agreements. Some suppliers are also competitors, which may make us vulnerable to unpredictable price increases and may cause some suppliers not to renew certain agreements. Our competitors could also enter into exclusive contracts with our data sources. If our competitors enter into such exclusive contracts, we may be precluded from receiving certain data from these suppliers or restricted in our use of such data, which would give our competitors an advantage. Such a termination or exclusive contracts could have a material adverse effect on our business, financial position, and operating results if we were unable to arrange for substitute data sources.

***Fraudulent or unpermitted data access and other cyber-security or privacy breaches may negatively impact our business and harm our reputation.***

Security breaches in our facilities, computer networks, and databases may cause harm to our business and reputation and result in a loss of customers. Many of our solutions involve the storage and transmission of proprietary information and sensitive or confidential data. As with other global companies, our systems are regularly subject to cyber-attacks, cyber-threats, physical break-ins, computer viruses, attacks by hackers and similar disruptive problems. As cyber-threats continue to evolve, we are required to expend significant additional resources to continue to modify and enhance our protective measures and to investigate and remediate any information security vulnerabilities and incidents. Despite efforts to ensure the integrity of our systems and implement controls, processes, policies and other protective measures, we may not be able to anticipate or detect all security breaches, nor may we be able to implement guaranteed preventive measures against such security breaches. Cyber-threats are rapidly evolving and we may not be able to anticipate, prevent or detect all such attacks and could be held liable for any security breach or loss. Although we may incur significant costs in protecting against or remediating cyberattacks or other cyber-incidents, no cyber-attack or other cyber-incident has, to our knowledge, had a material adverse effect on our business, financial condition or results of operations to date.

Third-party contractors, including cloud-based service providers, also may experience security breaches involving the storage and transmission of proprietary information. If users gain improper access to our databases, they may be able to steal, publish, delete or modify confidential third-party information that is stored or transmitted on our networks. Our business relies on the secure processing, transmission, storage and retrieval of confidential, proprietary and other information in our computer and data management systems and networks, and in the computer and data management systems and networks of third parties. In addition, to access our network, products and services, our customers and other third parties may use personal mobile devices or computing devices that are outside of our network environment and are subject to their own cybersecurity risks.

In addition, customers', employees' or other's misuse of and/or gaining unpermitted access to or failure to properly secure our information or services could cause harm to our business and reputation and result in loss of customers. Any such misappropriation and/or misuse of or failure to properly secure our information could result in us, among other things, being in breach of certain data protection and related legislation.

A security or privacy breach may affect us in the following ways:

- deterring customers from using our solutions;
- deterring data suppliers from supplying data to us;
- harming our reputation;
- exposing us to liability;
- increasing operating expenses to correct problems caused by the breach;
- affecting our ability to meet customers' expectations; and/or
- causing inquiry from governmental authorities.

Incidents in which consumer data has been fraudulently or improperly acquired or viewed, or any other security or privacy breaches, may occur and could go undetected. The number of potentially affected consumers identified by any future incidents is obviously unknown. Any such incident could materially adversely affect our business, reputation, financial condition, operating results and cash flows. In addition, media or other reports of perceived security vulnerabilities to our systems or those of our third-party suppliers, even if no breach has been attempted or occurred, could also adversely impact our reputation and materially impact our business.

***We derive a substantial portion of our revenues from U.S. P&C primary insurers. If there is a downturn in the U.S. insurance industry or that industry does not continue to accept our solutions, our revenues will decline.***

Revenues derived from solutions we provide to U.S. P&C primary insurers account for a substantial portion of our total revenues. During the year ended December 31, 2018, approximately 47% of our revenue was derived from solutions provided to U.S. P&C primary insurers. Also, invoices for certain of our solutions are linked in part to premiums in the U.S. P&C insurance market, which may rise or fall in any given year due to loss experience and capital capacity and other factors in the insurance industry that are beyond our control. In addition, our revenues will decline if the insurance industry does not continue to accept our solutions.

Factors that might affect the acceptance of these solutions by P&C primary insurers include the following:

- changes in the business analytics industry,
- changes in technology,
- our inability to obtain or use state fee schedule or claims data in our insurance solutions,
- saturation of market demand,
- loss of key customers,
- industry consolidation, and
- failure to execute our customer-focused selling approach.

A downturn in the insurance industry, pricing pressure or lower acceptance of our solutions by the insurance industry could result in a decline in revenues from that industry and have a material adverse effect on our financial condition, results of operations and cash flows.

***Acquisitions could result in operating difficulties, dilution and other harmful consequences, and we may not be successful in achieving growth through acquisitions.***

Our long-term business strategy includes growth through acquisitions. Future acquisitions may not be completed on acceptable terms and acquired assets, data or businesses may not be successfully integrated into our operations, and we may ultimately divest unsuccessful investments. Any acquisitions or investments will be accompanied by the risks commonly encountered in the acquisitions of businesses. Such risks include, among other things:

- failing to implement or remediate controls, procedures and policies appropriate for a larger public company at acquired companies that prior to the acquisition lacked such controls, procedures and policies,

- paying more than fair market value for an acquired company or assets,
- failing to integrate the operations and personnel of the acquired businesses in an efficient, timely manner,
- assuming potential liabilities of an acquired company,
- managing the potential disruption to our ongoing business,
- distracting management focus from our core businesses,
- failing to retain management at the acquired company,
- difficulty in acquiring suitable businesses, including challenges in predicting the value an acquisition will ultimately contribute to our business,
- possibility of overpaying for acquisitions, particularly those with significant intangible assets that derive value using novel tools and/or are involved in niche markets,
- impairing relationships with employees, customers, and strategic partners,
- incurring expenses associated with the amortization of intangible assets particularly for intellectual property and other intangible assets,
- incurring expenses associated with an impairment of all or a portion of goodwill and other intangible assets due to changes in market conditions, weak economies in certain competitive markets, or the failure of certain acquisitions to realize expected benefits, and
- diluting the share value and voting power of existing stockholders.

The anticipated benefits of many of our acquisitions may not materialize. Future acquisitions or dispositions could result in the incurrence of debt, contingent liabilities or amortization expenses, or write-offs of goodwill and other intangible assets, any of which could harm our financial condition.

We typically fund our acquisitions through our debt facilities. Although we have capacity under committed facilities, those may not be sufficient. Therefore, future acquisitions may require us to obtain additional financing through debt or equity, which may not be available on favorable terms or at all and could result in dilution.

In addition, to the extent we cannot identify or consummate, on terms acceptable to us, acquisitions that are complementary or otherwise attractive to our business, we may experience difficulty in achieving future growth.

***There may be consolidation in our end customer market, which could reduce the use of our services.***

Mergers or consolidations among our customers could reduce the number of our customers and potential customers. This could adversely affect our revenues even if these events do not reduce the aggregate number of customers or the activities of the consolidated entities. If our customers merge with or are acquired by other entities that are not our customers, or that use fewer of our services, they may discontinue or reduce their use of our services. The adverse effects of consolidation will be greater in sectors that we are particularly dependent upon, for example, in the P&C insurance sector. Any of these developments could materially adversely affect our business, financial condition, operating results, and cash flows.

***If we are unable to develop successful new solutions or if we experience defects, failures and delays associated with the introduction of new solutions, our business could suffer serious harm.***

Our growth and success depends upon our ability to develop and sell new solutions. If we are unable to develop new solutions, or if we are not successful in introducing and/or obtaining regulatory approval or acceptance for new solutions, or products we develop face sufficient pricing pressure to make them unattractive to pursue, we may not be able to grow our business, or growth may occur more slowly than we anticipate. In addition, significant undetected errors or delays in new solutions may affect market acceptance of our solutions and could harm our business, financial condition or results of operations. In the past, we have experienced delays while developing and introducing new solutions, primarily due to difficulties in developing models, acquiring data and adapting to particular operating environments. Errors or defects in our solutions that are significant, or are perceived to be significant, could result in rejection of our solutions, damage to our reputation, loss of revenues, diversion of development resources, an increase in product liability claims, and increases in service and support costs and warranty claims.

***We will continue to rely upon proprietary technology rights, and if we are unable to protect them, our business could be harmed.***

Our success depends, in part, upon our intellectual property rights. To date, we have relied primarily on a combination of copyright, patent, trade secret, and trademark laws and nondisclosure and other contractual restrictions on copying and distribution to protect our proprietary technology. This protection of our proprietary technology is limited, and our proprietary technology could be used by others without our consent. In addition, patents may not be issued with respect to our pending or future patent applications, and our patents may not be upheld as valid or may not prevent the development of competitive products. Businesses we acquire also often involve intellectual property portfolios, which increase the challenges we face in protecting our strategic advantage. Any disclosure, loss, invalidity of, or failure to protect our intellectual property could negatively impact our competitive position, and ultimately, our business. Our protection of our intellectual property rights in the U.S. or abroad may not be adequate and others, including our competitors, may use our proprietary technology without our consent. Furthermore, litigation may be necessary to enforce our intellectual property rights, to protect our trade secrets, or to determine the validity and scope of the proprietary rights of others. Such litigation could result in substantial costs and diversion of resources and could harm our business, financial condition, results of operations, and cash flows.

***We could face claims for intellectual property infringement, which if successful could restrict us from using and providing our technologies and solutions to our customers.***

There has been substantial litigation and other proceedings, particularly in the U.S., regarding patent and other intellectual property rights in the information technology industry. There is a risk that we are infringing, or may in the future infringe, the intellectual property rights of third parties. We have, from time-to-time, been subject to litigation alleging intellectual property infringement. We monitor third-party patents and patent applications that may be relevant to our technologies and solutions and we carry out freedom to operate analysis where we deem appropriate. However, such monitoring and analysis has not been, and is unlikely in the future to be, comprehensive, and it may not be possible to detect all potentially relevant patents and patent applications. Since the patent application process can take several years to complete, there may be currently pending applications, unknown to us, that may later result in issued patents that cover our products and technologies. As a result, we may infringe existing and future third-party patents of which we are not aware. As we expand our operations there is a higher risk that such activity could infringe the intellectual property rights of third parties.

Third-party intellectual property infringement claims and any resultant litigation against us or our technology partners or providers, could subject us to liability for damages, restrict us from using and providing our technologies and solutions or operating our business generally, or require changes to be made to our technologies and solutions. Even if we prevail, litigation is time consuming and expensive to defend and would result in the diversion of management's time and attention.

If a successful claim of infringement is brought against us and we fail to develop non-infringing technologies and solutions or to obtain licenses on a timely and cost effective basis, this could materially adversely affect our business, reputation, financial condition, operating results, and cash flows.

***Regulatory developments could negatively impact our business.***

Because personal, public and non-public information is stored in some of our databases, we are vulnerable to government regulation and adverse publicity concerning the use of our data. We provide many types of data and services that already are subject to regulation under the Fair Credit Reporting Act, Gramm-Leach-Bliley Act, Driver's Privacy Protection Act, the European Union's General Data Protection Regulation, the Dodd Frank Wall Street Reform and Consumer Protection Act and to a lesser extent, various other federal, state, and local laws and regulations. These laws and regulations are designed to protect the privacy of the public and to prevent the misuse of personal information in the marketplace. However, many consumer advocates, privacy advocates, and government regulators believe that the existing laws and regulations do not adequately protect privacy. They have become increasingly concerned with the use of personal information, particularly social security numbers, department of motor vehicle data and dates of birth. As a result, they are lobbying for further restrictions on the dissemination or commercial use of personal information to the public and private sectors. Similar initiatives are under way in other countries in which we do business or from which we source data. The Company has implemented various measures to comply with the data privacy and protection principles of the European Union's General Data Protection Regulation, however, there can be no assurances that such methods will be deemed fully compliant. If the Company is unable to comply with the data privacy and protection principles adopted pursuant to the General Data Protection Regulation, it will impede our ability to conduct business between the U.S. and the E.U. which could have a material adverse effect on our business, financial position, results of operations or cash flows.

The following legal and regulatory developments also could have a material adverse effect on our business, financial position, results of operations or cash flows:

- amendment, enactment, or interpretation of laws and regulations which restrict the access and use of personal information and reduce the supply of data available to customers;
- changes in cultural and consumer attitudes to favor further restrictions on information collection and sharing, which may lead to regulations that prevent full utilization of our solutions;
- failure of our solutions to comply with current laws and regulations; and
- failure of our solutions to adapt to changes in the regulatory environment in an efficient, cost-effective manner.

***We typically face a long selling cycle to secure new contracts that require significant resource commitments, which result in a long lead time before we receive revenues from new relationships.***

We typically face a long selling cycle to secure a new contract and there is generally a long preparation period in order to commence providing the services. We typically incur significant business development expenses during the selling cycle and we may not succeed in winning a new customer's business, in which case we receive no revenues and may receive no reimbursement for such expenses. Even if we succeed in developing a relationship with a potential new customer, we may not be successful in obtaining contractual commitments after the selling cycle or in maintaining contractual commitments after the implementation cycle, which may have a material adverse effect on our business, results of operations and financial condition.

***We may lose key business assets, through the loss of data center capacity or the interruption of telecommunications links, the internet, or power sources, which could significantly impede our ability to do business.***

Our operations depend on our ability, as well as that of third-party service providers to whom we have outsourced several critical functions, to protect data centers, whether in cloud or dedicated environments, and related technology against damage from hardware failure, fire, flood, power loss, telecommunications failure, impacts of terrorism, breaches in security (such as the actions of computer hackers), natural disasters, or other disasters. Certain of our facilities are located in areas that could be impacted by coastal flooding, earthquakes or other disasters. The online services we provide are dependent on links to telecommunications providers. In addition, we generate a significant amount of our revenues through telesales centers and websites that we utilize in the acquisition of new customers, fulfillment of solutions and services and responding to customer inquiries. We may not have sufficient redundant operations to cover a loss or failure in all of these areas in a timely manner. Certain of our customer contracts provide that our online servers may not be unavailable for specified periods of time. Any damage to our or our third-party service provider's data centers, failure of our telecommunications links or inability to access these telesales centers or websites could cause interruptions in operations that materially adversely affect our ability to meet customers' requirements, resulting in decreased revenue, operating income and earnings per share.

***We are subject to competition in many of the markets in which we operate and we may not be able to compete effectively.***

Some markets in which we operate or which we believe may provide growth opportunities for us are highly competitive, and are expected to remain highly competitive. We compete on the basis of quality, customer service, product and service selection, and pricing. Our competitive position in various market segments depends upon the relative strength of competitors in the segment and the resources devoted to competing in that segment. Due to their size, certain competitors may be able to allocate greater resources to a particular market segment than we can. As a result, these competitors may be in a better position to anticipate and respond to changing customer preferences, emerging technologies and market trends. In addition, new competitors and alliances may emerge to take market share away, and as we enter into new lines of business, due to acquisition or otherwise, we face competition from new players with different competitive dynamics. We may be unable to maintain our competitive position in our market segments, especially against larger competitors. We may also invest further to upgrade our systems in order to compete. If we fail to successfully compete, our business, financial position and results of operations may be adversely affected.

***To the extent the availability of free or relatively inexpensive information increases, the demand for some of our solutions may decrease.***

Public sources of free or relatively inexpensive information have become increasingly available recently, particularly through the Internet, and this trend is expected to continue. Governmental agencies in particular have increased the amount of information to which they provide free public access. Public sources of free or relatively inexpensive information may reduce the demand for our solutions. To the extent that customers choose not to obtain solutions from us and instead rely on information obtained at little or no cost from these public sources, our business and results of operations may be adversely affected.

***Our financial position may be impacted by audit examinations or changes in tax laws or tax rulings.***

Our existing corporate structure and tax positions have been implemented in a manner in which we believe is compliant with current prevailing tax laws. However, changes in existing tax laws or rulings, including Federal, State and International, could have a significant impact on our effective tax rate, cash tax positions and deferred tax assets and liabilities. Audit examinations with an adverse outcome could have a negative effect in the jurisdictions in which we operate. Furthermore, the Organization for Economic Co-operation and Development (OECD) released its Base Erosion and Profit Shifting (BEPS) action plans which may also lead to future tax reform that could affect our results. In addition, our tax positions are impacted by fluctuations in our earnings and financial results in the various countries in which we do business.

***Our senior leadership team is critical to our continued success and the loss of such personnel could harm our business.***

Our future success substantially depends on the continued service and performance of the members of our senior leadership team. These personnel possess business and technical capabilities that are difficult to replace.

However, as a general practice we do not enter into employee contracts with the members of our senior management operating team, except for certain limited situations. If we lose key members of our senior management operating team, we may not be able to effectively manage our current operations or meet ongoing and future business challenges, and this may have a material adverse effect on our business, results of operations and financial condition.

***We may fail to attract and retain enough qualified employees to support our operations, which could have an adverse effect on our ability to expand our business and service our customers.***

Our business relies on large numbers of skilled employees and our success depends on our ability to attract, train and retain a sufficient number of qualified employees. If our attrition rate increases, our operating efficiency and productivity may decrease. We compete for employees not only with other companies in our industry, but also with companies in other industries, such as software services, engineering services and financial services companies, and there is a limited pool of employees who have the skills and training needed to do our work.

If our business continues to grow, the number of people we will need to hire will increase. We will also need to increase our hiring if we are not able to maintain our attrition rate through our current recruiting and retention policies. Increased competition for employees could have an adverse effect on our ability to expand our business and service our customers, as well as cause us to incur greater personnel expenses and training costs.

***We are subject to antitrust, consumer protection and other litigation, and may in the future become further subject to such litigation; an adverse outcome in such litigation could have a material adverse effect on our financial condition, revenues and profitability.***

We participate in businesses (particularly insurance-related businesses and services) that are subject to substantial litigation, including antitrust and consumer protection litigation. In addition, our insurance specialists are in the business of providing advice on standard contract terms, which if challenged could expose us to substantial reputational harm and possible liability. We are subject to the provisions of a 1995 settlement agreement in an antitrust lawsuit brought by various state Attorneys General and private plaintiffs, which imposes certain constraints with respect to insurer involvement in our governance and business. We currently are defending against putative class action lawsuits in which it is alleged that certain of our subsidiaries unlawfully have conspired with insurers with respect to their payment of insurance claims. See “Item 3. Legal Proceedings.” Our failure to successfully defend or settle any litigation could result in liability that, to the extent not covered by our insurance, could have a material adverse effect on our financial condition, revenues and profitability. Given the nature of our business, we may be subject to litigation in the future. Even if the direct financial impact of such litigation is not material, settlements or judgments arising out of such litigation could include further restrictions on our ability to conduct business, including potentially the elimination of entire lines of business, which could increase our cost of doing business and limit our prospects for future growth.

***General economic, political and market forces and dislocations beyond our control could reduce demand for our solutions and harm our business.***

The demand for our solutions may be impacted by domestic and international factors that are beyond our control, including macroeconomic, political and market conditions, the availability of short-term and long-term funding and capital, the level and volatility of interest rates, currency exchange rates, and inflation. Any one or more of these factors may contribute to reduced activity and prices in the securities markets generally and could result in a reduction in demand for our solutions, which could have an adverse effect on our results of operations and financial condition. A significant additional decline in the

value of assets for which risk is transferred in market transactions could have an adverse impact on the demand for our solutions.

***We may incur substantial additional indebtedness in connection with future acquisitions.***

In order to finance acquisitions, which are an important part of our long term growth strategy, we may incur substantial additional indebtedness and such increased leverage could adversely affect our business. In particular, the increased leverage could increase our vulnerability to sustained, adverse macroeconomic weakness, limit our ability to obtain further financing and limit our ability to pursue other operational and strategic opportunities. The increased leverage, potential lack of access to financing and increased expenses could have a material adverse effect on our financial condition, results of operations and cash flows.

***General economic uncertainties, including downward trends in the energy industry, could reduce demand by Wood Mackenzie's customers for its products and services.***

Demand for Wood Mackenzie's products and services may be negatively influenced by general economic uncertainties, particularly any downward trends in the energy industry. Many factors could negatively affect the revenues, profits and discretionary spending of Wood Mackenzie's customers. Such factors include commodity prices (in particular, oil and coal), the state of the local economy, interest rates, currency exchange rates, political uncertainty or restrictions and regulations, the availability of industry resources, and other matters. A downturn or perceived downturn in the economy, particularly the energy industry, could add pricing pressure, delay subscription renewals or lead to more challenging or protracted fee negotiations or generally lower acceptance of our solutions by Wood Mackenzie's customers, which could cause a decline in our revenues and have a material adverse effect on our financial condition, results of operations and cash flows.

***Our operations are subject to additional risks inherent in international operations.***

Wood Mackenzie is based in the United Kingdom, or U.K., and conducts its principal operations outside the U.S. As a result, the percentage of our revenues generated outside of the U.S. has increased materially. Conducting extensive international operations subjects us to risks that are inherent in international operations, including challenges posed by different pricing environments and different forms of competition; lack of familiarity and burdens of complying with foreign laws, legal standards, regulatory requirements, tariffs and other barriers; unexpected changes in regulatory requirements, taxes, trade laws, tariffs, export quotas, custom duties, or other trade restrictions; differing technology standards; difficulties in collecting accounts receivable; difficulties in managing and staffing international operations; varying expectations as to employee standards; potentially adverse tax consequences, including possible restrictions on the repatriation of earnings; and reduced or varied protection for intellectual property rights in some countries. Moreover, international operations could be interrupted and negatively affected by economic changes, geopolitical regional conflicts, terrorist activity, political unrest, civil strife, acts of war, and other economic or political uncertainties. All of these risks could result in increased costs or decreased revenues, either of which could have a material adverse effect on our financial condition, results of operations and cash flows.

***We are subject to the increased risk of exchange rate fluctuations.***

The revenues and costs of Wood Mackenzie are primarily denominated in pound sterling. As a result of our acquisition of Wood Mackenzie and other recent acquisitions outside of the U.S., we face greater exposure to movements in currency exchange rates, which may cause our revenue and operating results to differ materially from expectations. Our operating results could be negatively affected depending on the amount of revenue and expense denominated in foreign currencies. As exchange rates vary, revenue, cost of revenue, operating expenses, and other operating results, when remeasured in U.S. dollars, may differ materially from expectations. Although we may apply certain strategies to mitigate foreign currency risk, these strategies may not eliminate our exposure to foreign exchange rate fluctuations and would involve costs and risks of their own, such as ongoing management time and expertise, external costs to implement the strategies and potential accounting implications.

***Economic and political instability and potential unfavorable changes in laws and regulations resulting from the U.K.'s exit from the E.U. could adversely affect our financial condition, results of operations and cash flows.***

The results of the referendum on June 23, 2016 in the U.K., to exit the E.U., which is commonly referred to as "Brexit," and to potentially significantly change the U.K.'s relationship with the E.U. and the laws and regulations impacting business conducted between the U.K. and E.U. countries could disrupt the overall stability of the E.U. given the diverse economic and political circumstances of individual E.U. countries and negatively impact our European operations. An immediate consequence of the Brexit vote was an adverse impact to global markets, including currency markets which experienced a sharp drop in the value of the British pound. Longer term, the ongoing negotiations regarding the future terms of the U.K.'s relationship with the E.U. could result in the U.K. losing access to certain aspects of the single E.U. market and the global trade deals negotiated by the E.U. on behalf of its members. While the U.K. is currently expected to leave the E.U. on

March 29, 2019, uncertainty remains as to the exact timing and process. The Brexit vote and the perceptions as to the impact of the withdrawal of the U.K. may adversely affect business activity, political stability and economic conditions in the U.K., the E.U. and elsewhere, the impact of which could have an adverse effect on our financial condition, results of operations and cash flows.

***If there are substantial sales of our common stock, our stock price could decline.***

The market price of our common stock could decline as a result of sales of a large number of shares of our common stock in the market, or the perception that these sales could occur. These sales, or the possibility that these sales may occur, also might make it more difficult for us to sell equity securities in the future at a time and at a price that we deem attractive. As of December 31, 2018, our ten largest shareholders owned 41.2% of our common stock, including 3.9% of our common stock owned by our Employee Stock Ownership Plan or ESOP. Such stockholders are able to sell their common stock in the public market from time to time without registration, and subject to limitations on the timing, amount and method of those sales imposed by securities laws. If any of these stockholders were to sell a large number of their common stock, the market price of our common stock could decline significantly. In addition, the perception in the public markets that sales by them might occur could also adversely affect the market price of our common stock.

Pursuant to our equity incentive plans, options to purchase approximately 6,730,288 shares of common stock were outstanding as of February 15, 2019. We filed a registration statement under the Securities Act, which covers the shares available for issuance under our equity incentive plans (including for such outstanding options) as well as shares held for resale by our existing stockholders that were previously issued under our equity incentive plans. Such further issuance and resale of our common stock could cause the price of our common stock to decline.

Also, in the future, we may issue our securities in connection with investments and acquisitions. The amount of our common stock issued in connection with an investment or acquisition could constitute a material portion of our then outstanding common stock.

***Our capital structure, level of indebtedness and the terms of anti-takeover provisions under Delaware law and in our amended and restated certificate of incorporation and bylaws could diminish the value of our common stock and could make a merger, tender offer or proxy contest difficult or could impede an attempt to replace or remove our directors.***

We are a Delaware corporation and the anti-takeover provisions of the Delaware General Corporation Law may discourage, delay or prevent a change in control by prohibiting us from engaging in a business combination with an interested stockholder for a period of three years after the person becomes an interested stockholder, even if a change of control would be beneficial to our existing stockholders. In addition, our certificate of incorporation and bylaws may discourage, delay or prevent a change in our management or control over us that stockholders may consider favorable or make it more difficult for stockholders to replace directors even if stockholders consider it beneficial to do so. Our certificate of incorporation and bylaws:

- authorize the issuance of “blank check” preferred stock that could be issued by our board of directors to increase the number of outstanding shares to thwart a takeover attempt,
- prohibit cumulative voting in the election of directors, which would otherwise allow holders of less than a majority of the stock to elect some directors,
- require that vacancies on the board of directors, including newly-created directorships, be filled only by a majority vote of directors then in office,
- limit who may call special meetings of stockholders,
- prohibit stockholder action by written consent, requiring all stockholder actions to be taken at a meeting of the stockholders, and
- establish advance notice requirements for nominating candidates for election to the board of directors or for proposing matters that can be acted upon by stockholders at stockholder meetings.

In addition, Section 203 of the Delaware General Corporation Law may inhibit potential acquisition bids for us. As a public company, we are subject to Section 203, which regulates corporate acquisitions and limits the ability of a holder of 15.0% or more of our stock from acquiring the rest of our stock. Under Delaware law, a corporation may opt out of the anti-takeover provisions, but we do not intend to do so.

These provisions may prevent a stockholder from receiving the benefit from any premium over the market price of our common stock offered by a bidder in a potential takeover. Even in the absence of an attempt to effect a change in management or a takeover attempt, these provisions may adversely affect the prevailing market price of our common stock if they are viewed as discouraging takeover attempts in the future.

**Item 1B. Unresolved Staff Comments**

Not Applicable.

**Item 2. Properties**

Our headquarters are in Jersey City, New Jersey. As of December 31, 2018, our principal offices consisted of the following properties:

Location	Square Feet	Lease Expiration Date
Jersey City, New Jersey	352,765	December 31, 2033
Lehi, Utah	200,000	January 31, 2024
Boston, Massachusetts	69,806	November 30, 2020
White Plains, New York	63,461	September 29, 2021
Houston, Texas	56,584	April 30, 2023

We also lease offices in 24 states in the U.S., and offices outside the U.S. to support our international operations in Argentina, Australia, Bahrain, Brazil, Canada, China, Denmark, Germany, India, Indonesia, Ireland, Israel, Japan, Kazakhstan, Malaysia, Mexico, Nepal, New Zealand, Nigeria, Russia, Singapore, South Africa, South Korea, Spain, Thailand, the United Arab Emirates, and the U.K.

We believe that our properties are in good operating condition and adequately serve our current business operations. We also anticipate that suitable additional or alternative space, including those under lease options, will be available at commercially reasonable terms for future expansion.

**Item 3. Legal Proceedings**

We are party to legal proceedings with respect to a variety of matters in the ordinary course of business, including those matters described below. With respect to the ongoing matters, we are unable, at the present time, to determine the ultimate resolution of or provide a reasonable estimate of the range of possible loss attributable to these matters or the impact they may have on our results of operations, financial position or cash flows. This is primarily because the matters are generally in early stages and discovery has either not commenced or been completed. Although we believe we have strong defenses and intend to vigorously defend these matters, we could in the future incur judgments or enter into settlements of claims that could have a material adverse effect on our results of operations, financial position or cash flows.

*Xactware Solutions, Inc. Patent Litigation*

On October 8, 2015, we were served with a summons and complaint in an action titled Eagle View Technologies, Inc. and Pictometry International Group, Inc. v. Xactware Solutions, Inc. and Verisk Analytics, Inc. filed in the United States District Court for the District of New Jersey. The complaint alleges that our Roof InSight, or now known as Geomni Roof, Property InSight product, or now known as Geomni Property and Aerial Sketch product in combination with our Xactimate product infringe seven patents owned by Eagle View and Pictometry namely, Patent Nos. 8,078,436, or the 436 patent, 8,170,840, or the 840 patent, 8,209,152, or the 152 patent, 8,542,880, or the 880 patent, 8,818,770, or the 770 patent, 8,823,732, or the 732 patent, and 8,825,454, or the 454 patent. On November 30, 2015, plaintiffs filed a First Amended Complaint adding Patent Nos. 9,129,376, or the 376 patent and 9,135,737, or the 737 patent to the lawsuit. The First Amended Complaint seeks an entry of judgment by the Court that defendants have and continue to directly infringe and/or indirectly infringe, including by way of inducement the Patents-in-Suit, permanent injunctive relief, damages, costs and attorney's fees. On May 19, 2017, the District Court so ordered a Joint Stipulated Order of Partial Dismissal with Prejudice dismissing all claims or assertions pertaining to Pictometry Patents Nos. 880 and 732 and certain asserted claims of the Eagle View Patents Nos. 436, 840, 152, 770, 454, 376 and 737, or collectively the "Patents in Suit". Eagle View further reduced the number of asserted claims pertaining to the Patents in Suit to 18 asserted claims. Thereafter, Eagle View dropped the 152 patent and further reduced the number of asserted claims from the six remaining Patents in Suit to 11 asserted claims. Fact discovery and expert discovery are now closed and defendants' summary judgment motions were fully submitted on October 26, 2018. On December 6, 2018, the Court denied Eagle View's motion for summary judgment that a key prior art reference be excluded. On December 20, 2018, the Court denied our motion for summary judgment of equitable estoppel. On January 29, 2019, the Court denied our motion for summary judgment of unpatentability pursuant to Section 101 of the Patent Statute. At this time, it is not reasonably possible to determine the ultimate resolution of, or estimate the liability related to, this matter.

*360Value Litigation*

On December 10, 2018, we were served with a First Amended Complaint filed in the United States District Court for the Northern District of California titled *Sheahan, et al. v. State Farm General Insurance Co., Inc., et al.* The action is brought by California homeowners, on their own behalf and on behalf of an unspecified putative class of State Farm policyholders whose homes were damaged or lost during the Northern California wildfires of 2017, against State Farm as well as us, ISO, and Xactware Solutions, Inc. Plaintiffs served a Second Amended Complaint on January 6, 2019. Like the First Amended Complaint, it alleges that defendants through the use of our 360Value product conspired to under-insure plaintiffs' homes by issuing undervalued policies and underestimating the costs of rebuilding those homes. Plaintiffs claim that defendants violated federal antitrust law as well as California consumer protection law and common law. At this time, it is not reasonably possible to determine the ultimate resolution of, or estimate the liability related to, this matter.

**Item 4. Mine Safety Disclosures**

Not Applicable.

**PART II**

**Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities**

**Market Information**

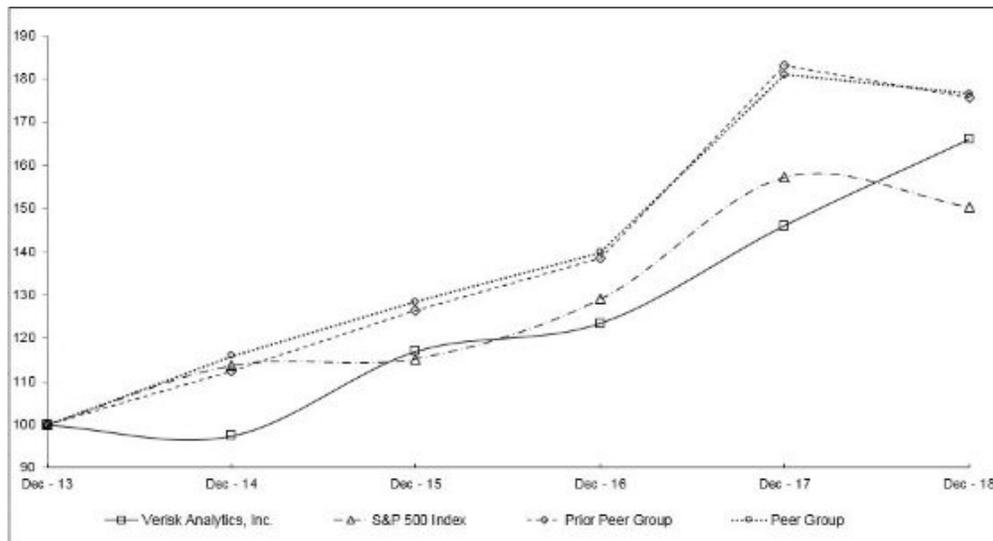
Verisk trades under the ticker symbol “VRSK” on the NASDAQ Global Select Market. As of February 15, 2019, there were approximately 47 stockholders of record. We believe the number of beneficial owners is substantially greater than the number of record holders, because a large portion of common stock is held in “street name” by brokers.

We have not paid or declared any cash dividends on our common stock during the two most recent fiscal years. We have a publicly announced share repurchase plan and repurchased a total of 57,875,155 shares since our IPO through December 31, 2018. As of December 31, 2018, we had 380,032,628 shares of treasury stock.

**Performance Graph**

The graph below compares the cumulative total stockholder return on \$100 invested in our common stock, with the cumulative total return (assuming reinvestment of dividends) on \$100 invested in the S&P 500 Index and an aggregate of peer issuers in the information services industry used in last year’s statement, and a new group of aggregate of peer issuers in the information services industry. We have aligned our peer issuers for this performance graph with those used in our proxy statement. In this transition year, the table and the graph below include both the prior and the new indices of peer companies. The prior peer issuers used for this graph are Equifax Inc., Factset Research Systems Inc., IHS Markit, MSCI Inc., Moody’s Corporation, S&P Global, and Nielsen Holdings plc. The new peer issuers used for this graph are Alliance Data Systems Corporation, Equifax Inc., Factset Research Systems Inc., Fidelity National Information Services, Inc., Fiserv, Inc., Gartner, Inc., IHS Markit, Moody’s Corporation, MSCI Inc., Nielsen Holdings plc, S&P Global, and TransUnion.

**COMPARISON OF CUMULATIVE TOTAL RETURN**  
**Assumes \$100 Invested on December 31, 2013**  
**Assumes Dividend Reinvested**  
**Fiscal Year Ended December 31, 2018**



**Recent Sales of Unregistered Securities**

There were no unregistered sales of equity securities by the Company during 2018.

**Issuer Purchases of Equity Securities**

Our board of directors has authorized a share repurchase program, or Repurchase Program, since May 2010, of up to \$3.3 billion . As of December 31, 2018 , \$427.6 million remains available for share repurchases. In June and September 2018, we entered into two Accelerated Share Repurchase, or ASR, agreements to repurchase shares of its common stock for an aggregate purchase price of \$100.0 million. These ASRs were settled in September and December 2018. In December 2018, we entered into an additional ASR agreement to repurchase shares of its common stock for an aggregate purchase price of \$75.0 million . This ASR will be settled in March 2019. Under the Repurchase Program, we may repurchase stock in the market or as otherwise determined by us. These authorizations have no expiration dates and may be suspended or terminated at any time. Since the introduction of share repurchase as a feature of our capital management strategies in 2010, we have repurchased shares with an aggregated value of \$2,872.4 million . Our share repurchases for the quarter ended December 31, 2018 are set forth below:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs
				(in millions)
October 1, 2018 through October 31, 2018	331,812	\$ 120.55	331,812	\$ 544.0
November 1, 2018 through November 30, 2018	605,500	\$ 121.93	605,500	\$ 470.2
December 1, 2018 through December 31, 2018	371,032	\$ 114.76	371,032	\$ 427.6
	1,308,344		1,308,344	

**Item 6. Selected Financial Data**

The following selected historical financial data should be read in conjunction with, and are qualified by reference to, Item 7. “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the consolidated financial statements and notes thereto included elsewhere in this annual report on Form 10-K. The consolidated statement of operations data for the years ended December 31, 2018 , 2017 , and 2016 and the consolidated balance sheet data as of December 31, 2018 and 2017 are derived from the audited consolidated financial statements included elsewhere in this annual report on Form 10-K. The consolidated statement of operations data for the years ended December 31, 2015 and 2014 and the consolidated balance sheet data as of December 31, 2016 , 2015 , and 2014 are derived from consolidated financial statements that are not included in this annual report on Form 10-K. Results for the year ended December 31, 2018 are not necessarily indicative of results that may be expected in any other future period.

Between January 1, 2014 and December 31, 2018 , we acquired 26 businesses (most notably Wood Mackenzie on May 19, 2015), which may affect the comparability of our consolidated financial statements. Our consolidated financial statements have been retroactively adjusted in all periods presented to give recognition to the discontinued operations of our healthcare business and mortgage services business. The following table sets forth our statement of operations for the years ended December 31:

	2018	2017	2016	2015	2014
(in millions, except for share and per share data)					
<b>Revenues:</b>					
Insurance	\$ 1,705.9	\$ 1,550.5	\$ 1,419.1	\$ 1,330.6	\$ 1,245.0
Energy and Specialized Markets	513.3	444.7	442.8	308.8	84.9
Financial Services	175.9	150.0	133.3	121.3	101.2
Revenues	<u>2,395.1</u>	<u>2,145.2</u>	<u>1,995.2</u>	<u>1,760.7</u>	<u>1,431.1</u>
<b>Operating expenses:</b>					
Cost of revenues (exclusive of items shown separately below)	886.2	783.8	714.4	612.0	516.0
Selling, general and administrative	378.7	322.8	301.6	278.3	187.3
Depreciation and amortization of fixed assets	165.3	135.6	119.1	96.6	65.4
Amortization of intangible assets	130.8	101.8	92.5	70.4	30.1
Total operating expenses	<u>1,561.0</u>	<u>1,344.0</u>	<u>1,227.6</u>	<u>1,057.3</u>	<u>798.8</u>
Operating income	<u>834.1</u>	<u>801.2</u>	<u>767.6</u>	<u>703.4</u>	<u>632.3</u>
<b>Other income (expense):</b>					
Investment income and others, net	15.3	9.2	6.1	16.9	0.2
Gain on derivative instruments	—	—	—	85.2	—
Interest expense	(129.7)	(119.4)	(120.0)	(121.4)	(70.0)
Total other expense, net	<u>(114.4)</u>	<u>(110.2)</u>	<u>(113.9)</u>	<u>(19.3)</u>	<u>(69.8)</u>
Income before income taxes from continuing operations	719.7	691.0	653.7	684.1	562.5
Provision for income taxes	(121.0)	(135.9)	(202.2)	(196.6)	(208.5)
Income from continuing operations	598.7	555.1	451.5	487.5	354.0
Income from discontinued operations, net of tax (1)	—	—	139.7	20.1	46.0
Net income	<u>\$ 598.7</u>	<u>\$ 555.1</u>	<u>\$ 591.2</u>	<u>\$ 507.6</u>	<u>\$ 400.0</u>
<b>Basic net income per share</b>					
Income from continuing operations	\$ 3.63	\$ 3.36	\$ 2.68	\$ 2.95	\$ 2.14
Income from discontinued operations	—	—	0.83	0.12	0.27
Basic net income per share	<u>\$ 3.63</u>	<u>\$ 3.36</u>	<u>\$ 3.51</u>	<u>\$ 3.07</u>	<u>\$ 2.41</u>
<b>Diluted net income per share</b>					
Income from continuing operations	\$ 3.56	\$ 3.29	\$ 2.64	\$ 2.89	\$ 2.10
Income from discontinued operations	—	—	0.81	0.12	0.27
Diluted net income per share	<u>\$ 3.56</u>	<u>\$ 3.29</u>	<u>\$ 3.45</u>	<u>\$ 3.01</u>	<u>\$ 2.37</u>
<b>Weighted average shares outstanding:</b>					
Basic	164,808,110	165,168,224	168,248,304	165,090,380	165,823,803
Diluted	<u>168,297,836</u>	<u>168,688,868</u>	<u>171,171,572</u>	<u>168,451,343</u>	<u>169,132,423</u>

The financial operating data below sets forth the information we believe is useful for investors in evaluating our overall financial performance for the years ended December 31:

	2018	2017	2016	2015	2014
	(in millions)				
<b>Other data:</b>					
EBITDA (2):					
Insurance	\$ 932.2	\$ 855.8	\$ 779.2	\$ 762.5	\$ 672.3
Energy and Specialized Markets	154.4	133.6	151.2	162.3	17.9
Financial Services	58.9	58.4	320.9	129.4	168.4
EBITDA	<u>\$ 1,145.5</u>	<u>\$ 1,047.8</u>	<u>\$ 1,251.3</u>	<u>\$ 1,054.2</u>	<u>\$ 858.6</u>
The following is a reconciliation of net income to EBITDA:					
Net income	\$ 598.7	\$ 555.1	\$ 591.2	\$ 507.6	\$ 400.0
Depreciation and amortization of fixed and intangible assets from continuing operations	296.1	237.4	211.6	167.0	95.5
Interest expense from continuing operations	129.7	119.4	120.0	121.4	70.0
Provision for income taxes from continuing operations	121.0	135.9	202.2	196.6	208.5
Depreciation, amortization, interest and provision for income taxes from discontinued operations	—	—	126.3	61.6	84.6
EBITDA	<u>\$ 1,145.5</u>	<u>\$ 1,047.8</u>	<u>\$ 1,251.3</u>	<u>\$ 1,054.2</u>	<u>\$ 858.6</u>

The following table sets forth our consolidated balance sheet data as of the years ended December 31:

	2018	2017	2016	2015	2014
	(in millions)				
<b>Balance Sheet Data:</b>					
Cash and cash equivalents	\$ 139.5	\$ 142.3	\$ 135.1	\$ 138.3	\$ 39.3
Total assets	\$ 5,900.3	\$ 6,020.3	\$ 4,631.2	\$ 5,593.7	\$ 2,335.1
Total debt (3)	\$ 2,723.3	\$ 3,008.8	\$ 2,387.0	\$ 3,145.7	\$ 1,426.7
Stockholders' equity	\$ 2,070.6	\$ 1,925.4	\$ 1,332.4	\$ 1,372.0	\$ 211.0

- (1) On June 1, 2016 and March 11, 2014, we sold our healthcare business and mortgage services business, respectively. Results of operations for the healthcare and mortgage services businesses are reported as discontinued operations for the year ended December 31, 2016 and for all prior periods presented. As necessary, the amounts have been retroactively adjusted in all periods presented to give recognition to the discontinued operations. See Note 11 of our consolidated financial statements included in this annual report on Form 10-K.
- (2) EBITDA is the financial measure that management uses to evaluate the performance of our segments. "EBITDA" is defined as net income before interest expense, provision for income taxes, and depreciation and amortization of fixed and intangible assets. Because EBITDA is calculated from net income, this presentation includes EBITDA from discontinued operations of our healthcare business and mortgage services business. In addition, references to EBITDA margin, which is computed as EBITDA divided by revenues from continuing and discontinued operations. See Note 19 of our consolidated financial statements included in this annual report on Form 10-K.

Although EBITDA is a non-GAAP financial measure, EBITDA is frequently used by securities analysts, lenders and others in their evaluation of companies, EBITDA has limitations as an analytical tool, and should not be considered in isolation, or as a substitute for an analysis of our operating income, net income or cash flow from operating activities

reported under GAAP. Management uses EBITDA in conjunction with traditional GAAP operating performance measures as part of its overall assessment of company performance. Some of these limitations are:

- EBITDA does not reflect our cash expenditures, or future requirements for capital expenditures or contractual commitments.
- EBITDA does not reflect changes in, or cash requirements for, our working capital needs.
- Although depreciation and amortization are non-cash charges, the assets being depreciated and amortized often will have to be replaced in the future and EBITDA does not reflect any cash requirements for such replacements.
- Other companies in our industry may calculate EBITDA differently than we do, limiting its usefulness as a comparative measure.

(3) Includes capital lease obligations and unamortized discount and debt issuance costs.

## **Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations**

*The following discussion should be read in conjunction with our historical financial statements and the related notes included elsewhere in this annual report on Form 10-K, as well as the discussion under “Selected Consolidated Financial Data.” This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results may differ materially from those discussed in or implied by any of the forward-looking statements as a result of various factors, including but not limited to those listed under “Risk Factors” and “Special Note Regarding Forward-Looking Statements.”*

Verisk is a leading data analytics provider serving customers in insurance, energy and specialized markets, and financial services. Using advanced technologies to collect and analyze billions of records, we draw on unique data assets and deep domain expertise to provide innovations that may be integrated into customer workflows. We offer predictive analytics and decision support solutions to customers in rating, underwriting, claims, catastrophe and weather risk, natural resources intelligence, economic forecasting, and many other fields. In the United States, or U.S., and around the world, we help customers protect people, property, and financial assets. Refer to Item 1. Business for further discussion.

Our customers use our solutions to make better decisions about risk and opportunities with greater efficiency and discipline. We refer to these products and services as “solutions” due to the integration among our products and the flexibility that enables our customers to purchase components or the comprehensive package of products. These solutions take various forms, including data, statistical models or tailored analytics, all designed to allow our customers to make more logical decisions. We believe our solutions for analyzing risk positively impact our customers’ revenues and help them better manage their costs.

We previously reported results based on two operating segments, Decision Analytics and Risk Assessment. During the first quarter of 2018, the chief operating decision maker, or CODM, changed how he makes operating decisions, assesses the performance of the business, and allocates resources in a manner that caused the Company's operating segments to change. Consequently, effective as of the first quarter of 2018, our operating segments are based on three vertical markets we serve: Insurance, Energy and Specialized Markets, and Financial Services. These three operating segments are also our reportable segments, which have been retroactively recast to reflect the new segments in all periods presented.

Our Insurance segment provides underwriting and ratings, and claims insurance data for the U.S. P&C insurance industry. This segment's revenues represented approximately 71% and 72% of our revenues for the years ended December 31, 2018 and 2017, respectively. Our Energy and Specialized Markets segment provides research and consulting data analytics for the global energy, chemicals, and metals and mining industries. Our Energy and Specialized Markets segment's revenues represented approximately 22% and 21% of our revenues for the years ended December 31, 2018 and 2017, respectively. Our Financial Services segment provides competitive benchmarking, decisioning algorithms, business intelligence, and customized analytic services to financial institutions, payment networks and processors, alternative lenders, regulators and merchants. Our Financial Services segment's revenues represented approximately 7% of our revenues for the years ended December 31, 2018 and 2017.

## Executive Summary

### *Key Performance Metrics*

We believe our business's ability to grow recurring revenue and generate positive cash flow is the key indicator of the successful execution of our business strategy. We use year-over-year revenue and EBITDA growth as metrics to measure our performance. EBITDA and EBITDA margin are non-GAAP financial measures (see Note 2 within Item 6. Selected Financial Data section of Management's Discussion and Analysis of Financial Condition and Results of Operations). The respective GAAP financial measures are net income and net income margin.

*Revenue growth.* We use year-over-year revenue growth as a key performance metric. We assess revenue growth based on our ability to generate increased revenue through increased sales to existing customers, sales to new customers, sales of new or expanded solutions to existing and new customers, and strategic acquisitions of new businesses.

*EBITDA growth.* We use EBITDA growth as a proxy for the cash generated by the business. EBITDA growth serves as a measure of our ability to balance the size of revenue growth with cost management and investing for future growth.

*EBITDA margin.* We use EBITDA margin as a metric to assess segment performance and scalability of our business. We assess EBITDA margin based on our ability to increase revenues while controlling expense growth.

### *Revenues*

We earn revenues through agreements for hosted subscriptions, advisory/consulting services, and for transactional solutions, recurring and non-recurring. Subscriptions for our solutions are generally paid in advance of rendering services either quarterly or in full upon commencement of the subscription period, which is usually for one year and automatically renewed each year. As a result, the timing of our cash flows generally precedes our recognition of revenues and income and our cash flow from operations tends to be higher in the first quarter as we receive subscription payments. Examples of these arrangements include subscriptions that allow our customers to access our standardized coverage language, our claims fraud database or our actuarial services throughout the subscription period. In general, we experience minimal revenue seasonality within the business.

Approximately 82% and 81% of the revenues in our Insurance segment for the years ended December 31, 2018 and 2017 were derived from hosted subscriptions through agreements (generally one to five years) for our solutions. Our customers in this segment include most of the P&C insurance providers in the U.S. Approximately 78% and 82% of the revenues in our Energy and Specialized Markets segment for the years ended December 31, 2018 and 2017, respectively, were derived from hosted subscriptions with long-term agreements for our solutions. Our customers in this segment include most of the top 10 global energy providers around the world. Approximately 73% and 72% of the revenues in our Financial Services segment for the years ended December 31, 2018 and 2017, respectively, were derived from subscriptions with long-term agreements for our solutions, respectively. Our customers in this segment include financial institutions, payment networks and processors, alternative lenders, regulators, merchants, and all of the top 30 credit card issuers in North America, the United Kingdom, and Australia.

We also provide advisory/consulting services, which help our customers get more value out of our analytics and their subscriptions. In addition, certain of our solutions are paid for by our customers on a transactional basis, recurring and non-recurring. For example, we have solutions that allow our customers to access property-specific rating and underwriting information to price a policy on a commercial building, or compare a P&C insurance or a workers' compensation claim with information in our databases, or use our repair cost estimation solutions on a case-by-case basis. For the years ended December 31, 2018 and 2017, approximately 20% and 19%, respectively, of our revenues were derived from providing transactional and advisory/consulting solutions.

### *Principal Operating Costs and Expenses*

Personnel expenses are a major component of both our cost of revenues and selling, general and administrative expenses. Personnel expenses, which represented approximately 58% and 59% of our total operating expenses for the years ended December 31, 2018 and 2017, respectively, include salaries, benefits, incentive compensation, equity compensation costs, sales commissions, employment taxes, recruiting costs, and outsourced temporary agency costs.

We assign personnel expenses between two categories, cost of revenues and selling, general and administrative costs, based on the actual costs associated with each employee. We categorize employees who maintain our solutions as cost of revenues, and all other personnel, including executive managers, sales people, marketing, business development, finance, legal, human resources, and administrative services, as selling, general and administrative expenses. A significant portion of our other

operating costs, such as facilities and communications, are either captured within cost of revenues or selling, general and administrative expense based on the nature of the work being performed.

While we expect to grow our headcount over time to take advantage of our market opportunities, we believe that the economies of scale in our operating model will allow us to grow our personnel expenses at a lower rate than revenues. Historically, our EBITDA margin has improved because we have been able to increase revenues without a proportionate corresponding increase in expenses. However, part of our corporate strategy is to invest in new solutions and new businesses, which may offset margin expansion.

*Cost of Revenues.* Our cost of revenues consists primarily of personnel expenses. Cost of revenues also includes the expenses associated with the acquisition and verification of data, the maintenance of our existing solutions and the development and enhancement of our next-generation solutions. Our cost of revenues excludes depreciation and amortization.

*Selling, General and Administrative Expense.* Our selling, general and administrative expense also consists primarily of personnel costs. A portion of the other operating costs such as facilities, insurance and communications are allocated to selling, general and administrative costs based on the nature of the work being performed by the employee. Our selling, general and administrative expenses excludes depreciation and amortization.

### ***Trends Affecting Our Business***

We serve customers in three primary vertical markets: P&C insurance, energy and specialized markets, and financial services. The industry trends in each of those markets can affect our business.

A significant change in P&C insurers' profitability could affect the demand for our solutions. For insurers, the keys to profitability include increasing investment income, premium growth and disciplined underwriting of risks. Investment income remains under pressure as a result of low interest rates. Growth in P&C insurers' direct written premiums is cyclical, with total industry premium growth receding from a peak of 14.8% in 2002 to a trough of negative 3.1% in 2009 and subsequently recovering to 4.4% in 2012, 4.3% in 2013, 4.4% in 2014, 3.7% in 2015, 3.7% in 2016 and 4.7% in 2017. In recent years, we have signed multi-year contracts with certain customers, and pricing is fixed at the beginning of each multi-year period; pricing for other customers is still linked to prior years' premiums.

Based on the most recent results available, direct premium growth and net premium growth accelerated in 2018. However, insurers were also challenged by heightened catastrophic losses in 2018 associated with major hurricanes, such as Florence and Michael, and several devastating wildfires in the state of California, coupled with additional losses reported from the three major hurricanes in 2017 - Harvey, Irma, and Maria. These events illustrate the need for broader coverages, such as flood to meet the changing needs of communities. We continue to provide the necessary resources to meet insurer needs.

Trends in catastrophe and non-catastrophe weather losses can have an effect on our customers' profitability, and therefore on their appetite for buying analytics to help them manage their risks. Any increase or decrease in frequency or severity of weather events over time could lead to an increased or decreased demand for our catastrophe modeling, catastrophe loss information, and repair cost solutions. Likewise, any structural changes in the reinsurance and related brokerage industry from the recent influx of alternative capital or newer technologies could affect demand for our products. We also have a portion of our revenue related to the number of claims processed due to losses, which can be impacted by seasonal storm activity. The need by our customers to fight insurance fraud - both in claims and at policy inception - could lead to increased demand for our underwriting and claims solutions.

Trends in the energy, chemicals, and metals and mining sectors and activity in financial markets can influence our revenues. During 2018, the Brent oil price reached a peak of over approximately 80 dollar per barrel before falling under approximately 60 dollar per barrel by year end reflecting an oversupply in the market. The Organization of the Petroleum Exporting Countries, or OPEC, announced a significant cut in production beginning January 1, 2019 to help balance the market. In the upstream sector there are five global trends. First, capital investments have recovered from the cyclical low, the start of spend on a new global phase of significant liquefied natural gas projects adding momentum in 2019. Second, the industry's ongoing progress in reducing costs have been boosted by digitalization initiatives as well as over-capacity in the service sector in many regions, leading to improved economics and more projects reaching a final investment decision. Third, tight oil production in the U.S. lower 48 is still on a strong growth trajectory and remains a focus of global merger and acquisition activity as the industry consolidates. Fourth, resource capture continues to be focused on lower risk opportunities with competitive bidding in 2019 to develop discovered fields in Qatar (gas) and Brazil (oil). Fifth, many countries are reviewing their existing fiscal policies to ensure that they are competitive and attract investment. In the wider energy sector the energy transition is gaining momentum, most evidently in the rapid penetration of renewables into power and the emergence of electric vehicles – the latter set to present a competitive challenge to the internal combustion engine in the coming decades and

with implications for oil demand in the long term. Petrochemicals is a key growth segment for oil demand, but the disposal of plastics is increasingly in the public eye as a social and environmental concern. New legislation limiting sulphur content in marine fuels comes into effect in 2020 with profound implications for refiners and major fuel consumers, such as airlines. As environmental concerns and the move to decarbonization gather pace, we will continue to evolve our offerings to meet the needs of our customers in a dynamic market and remain increasingly well positioned to serve our customers' information and analytical needs.

Market trends continue to influence our Financial Services segment in important ways. As we look forward towards 2019, increasing fraud and delinquency loss rates worldwide are strengthening demand for robust risk solutions which we are addressing via a range of new fraud solutions, which we have initially launched in Mexico. Additionally, higher levels of regulatory scrutiny as well as greater regulatory alignment worldwide is increasing demand for compliance and reporting tools, which we are tackling via our range of compliance products developed both within our Financial Services segment. In order to better serve our customers, add to our data asset, and expand our expertise, we made a number of acquisitions in the past year, including Marketview, which provides analytical solutions for banks, acquirers, merchants and government in New Zealand. These new businesses offer new solutions for existing and new clients of our core business, and enable us to develop product and cost synergies going forward, and join our existing businesses that we acquired earlier and have integrated during 2018.

### ***Description of Acquisitions***

We acquired twenty-two businesses since January 1, 2016. These acquisitions affect the comparability of our consolidated results of operations between periods. See Note 10 to our consolidated financial statements included in this annual report on Form 10-K for further discussions on the below acquisitions.

#### *2018 Acquisitions*

On December 14, 2018, we acquired Rulebook, whose proprietary pricing engine can be used for internal pricing and underwriting as well as external distribution for the insurance market through its platform. Rulebook furthers our goal of providing solutions to the global insurance market, including a comprehensive chain of solutions to specialty insurers for mitigating risk and optimizing total cost of operations. Rulebook is part of the underwriting and ratings category within the Insurance segment.

On June 20, 2018, we acquired 100 percent of the stock of Validus-IVC Limited, or Validus, a provider of claims management solutions and developer of the subrogation portal in the UK, verify™. Validus has become part of the claims category within our Insurance segment. The integration of Validus' verify™ platform with our global claims analytic services allows insurers to take advantage of enhanced analytic and technology tools to help improve and automate the claims settlement process.

On February 21, 2018, we acquired 100 percent of the stock of Business Insight Limited, Business Insight, a provider of predictive analytics for insurers in the U.K. and Ireland. Business Insight has become part of the underwriting and ratings category within the Insurance segment. Business Insight offers a comprehensive set of peril models to support underwriting and rating for the commercial property and homeowners insurance market.

On January 5, 2018, we acquired 100 percent of the stock of Marketview Limited, or Marketview. Marketview is a provider of consumer spending analysis and insights across the retail, hospitality, property, and government sectors in New Zealand. Marketview has become part of the Financial Services segment. The acquisition helps expand our solutions related to consumer spending analytics across the Australasia and Oceania regions by combining its domain expertise and proprietary data assets with those of Marketview.

#### *2017 Acquisitions*

On December 29, 2017, we acquired 100 percent of the stock of PowerAdvocate, a provider of market, cost intelligence, and supply chain solutions serving the energy sector. Within our Energy and Specialized Markets segment, PowerAdvocate expands our offerings to the energy sector by adding proprietary spend data and cost models and providing insight into customers' cost savings opportunities.

On December 22, 2017, we acquired the net assets of Service Software, LLC., or Service Software, a provider of business management software for the construction industry. Within our Insurance segment, Service Software expands our offerings to the insurance sector by integrating with the existing loss quantification solutions, which makes it possible for restoration professionals to save time by sharing job information, reducing duplicate data entry, and increasing productivity.

On November 9, 2017, we acquired 100 percent of the stock of Rebmark Legal Solutions Ltd., or Rebmark, a provider of injury claims solutions, within the Insurance segment. Rebmark's solutions aid claimant and defendant lawyers, barristers, and claims handlers with the preparation of schedules of loss, which is useful in complex, high-value injury claims where calculations can be time-consuming and there is greater potential for error.

On August 31, 2017, we acquired 100 percent of the stock of LCI, a provider of risk insight, prediction, and management solutions for banks and creditors. LCI has become part of the Financial Services segment. This acquisition brings together our proprietary data assets and LCI's proprietary time-series data, including consumer and commercial bankruptcies, consumer behavior, and legal and technical terms associated with debtor settlements.

On August 23, 2017, we acquired 100 percent of the stock of Sequel, a provider of commercial and specialty insurance and reinsurance software based in the U.K. Sequel has become part of the Insurance segment. The acquisition of Sequel further enhances our comprehensive offerings to the global complex commercial and specialty insurance industry, enabling integrated global data analytics through a specialized end-to-end workflow solution.

On August 3, 2017, we acquired 100 percent of the stock of G2, a provider of merchant risk intelligence solutions for acquirers, commercial banks, and other payment system providers. G2 has become part of the Financial Services segment. The acquisition of G2 positions us to further enhance our offerings to clients and partners, by providing solutions that help fight fraud, transaction laundering, and reputational risk within the global payments and e-commerce ecosystem.

During the three months ended June 30, 2017, we acquired the net assets of the Aerial Imagery acquisitions, a group of similar but unrelated companies, which give us broad geographic coverage of the U.S. for aerial image capture purposes. The Aerial Imagery acquisitions provide multi-spectral aerial photographic services with expertise in offering digital photogrammetric and remote sensing data for mapping and surveying applications. Within our Insurance segment, the Aerial Imagery acquisitions enable us to enhance and maintain its database of images with the required frequency, resolution, and coverage across the U.S. to support our objective as the leading provider of loss quantification data, analytics, and decision-support solutions to the insurance industry, and the photogrammetry, surveying, mapping, and other related markets.

On May 19, 2017, we acquired 100 percent of the stock of MAKE Consulting A/S, or MAKE, a research and advisory business specializing in wind power. MAKE has become part of the Energy and Specialized Markets segment. MAKE enhances our offering to existing customers and forms a market analysis and advisory consortium on renewables and the transformation of the global electricity industry. With detailed coverage of power market fundamentals, solar, wind, energy storage, and grid edge technologies, the Energy and Specialized Markets segment is positioned to bring customers market analysis and insight on the evolution of the energy landscape and provide a comprehensive platform for the future.

On March 31, 2017, we acquired 100 percent of the stock of Fintellix Solutions Private Limited, or Fintellix, a Bangalore-based data solutions company specializing in the development of data management platforms and regulatory reporting solutions for financial institutions. Fintellix has become part of the Financial Services segment. The acquisition of Fintellix positions us to expand the data hosting and regulatory platforms and better address the increasingly complex needs of its customers.

On February 24, 2017, we acquired 100 percent of the stock of Emergent Network Intelligence Limited, or ENI, a developer in insurance claims efficiency and fraud detection solutions based in the U.K.. With the acquisition of ENI within the Insurance segment, our customers in the U.K. can take advantage of technologically advanced tools that allow them to improve motor vehicle claims workflow and reduce their costs and exposure to fraud.

On February 16, 2017, we acquired 100 percent of the stock of Healix International Holdings Limited, or Healix, a software analytics provider in automated medical risk assessment for the travel insurance industry. Healix is within our Insurance segment. The acquisition further expands our offerings for the global insurance industry, providing solutions that are embedded with customer workflows and can help underwrite medical coverage for travelers with greater speed, accuracy, and efficiency.

On January 21, 2017, we acquired 100 percent of the stock of Arium Limited, or Arium. Arium specializes in liability risk modeling and decision support. Arium has become part of the insurance vertical within the Insurance segment, and enables us to provide its customers with additional modeling solutions and analytics for the casualty market.

#### *2016 Acquisitions*

On November 23, 2016, we acquired the net assets of IntelliStance, LLC, or MarketStance, a provider of market intelligence data and analytics to the property/casualty insurance market. MarketStance has become part of our Insurance segment. MarketStance has built a proprietary analytics model to provide actionable insights on customer's profitability that enhances our existing offerings.

On November 11, 2016, we acquired 100 percent of the stock of The GeoInformation Group Limited, or GeoInformation, a provider of geographic data solutions. GeoInformation offers mapping services and geospatial data and analytic solutions to companies and public sector organizations. GeoInformation's resources complement the risk management and predictive analytics capabilities internationally within the Insurance segment.

On October 20, 2016, we acquired 100 percent of the stock of Analyze Re, Inc., or Analyze Re, a software analytics provider for the reinsurance and insurance industries. Analyze Re has become part of our Insurance segment and enables us to provide our customers with additional real-time pricing, exposure management, and enterprise portfolio roll-up capabilities.

On August 19, 2016, we acquired the net assets of data and subscriptions business of Quest Offshore Resources, Inc, or Quest Offshore, which supplies market intelligence to the offshore oil and gas sector. The data and subscriptions business has become part of the Energy and Specialized Markets segment and complements its existing upstream analysis expertise.

On July 26, 2016, we acquired 100 percent of the stock of Greentech Media, Inc., or Greentech Media, an information services provider for the electricity and renewables sector. Greentech Media has become part of the Energy and Specialized Markets segment and enables us to provide our customers with market intelligence across several categories, including solar generation, energy storage, and smart grids that react to changes in supply and demand.

On April 14, 2016, we acquired 100 percent of the stock of Risk Intelligence Ireland Limited, or RII, a provider of fraud detection, compliance, risk control, and process automation services to the Irish insurance industry. RII enhances the ability of our Insurance segment to serve the international insurance market.

**Description of Discontinued Operations**

On June 1, 2016, we sold our healthcare business, Verisk Health. The purchase price consisted of a cash consideration of \$714.6 million, net of closing adjustments of \$5.4 million, and proceeds from a promissory note associated with the sale of \$100.0 million, that was received in August 2018. Results of operations for the healthcare business are reported as discontinued operations for the year ended December 31, 2016 and for all prior periods presented. See Note 11 to our consolidated financial statements included in this annual report on Form 10-K.

**Year Ended December 31, 2018 Compared to Year Ended December 31, 2017**

**Consolidated Results of Continuing Operations**

*Revenues*

Revenues were \$2,395.1 million for the year ended December 31, 2018 compared to \$2,145.2 million for the year ended December 31, 2017, an increase of \$249.9 million or 11.6%. In 2017 and 2018, we acquired the following companies, Rebmark, Service Software, PowerAdvocate, Marketview, Business Insight, Validus, and Rulebook, collectively referred to as our recent acquisitions, which we define as acquisitions not owned for a significant portion of both the current period and/or prior period and would therefore impact the comparability of the financial results. Excluding revenues of \$110.9 million from our recent acquisitions, our revenue growth was \$139.0 million or 6.5%. Revenues within our Insurance segment, excluding our recent acquisitions of Rebmark, Service Software, Business Insight, Validus, and Rulebook, increased by \$111.3 million or 7.2%. Revenues in our Energy and Specialized Market segment, excluding our recent acquisition of PowerAdvocate, increased by \$30.6 million or 6.9%. Revenues in our Financial Services segment, excluding our recent acquisition of Marketview, decreased by \$2.9 million or 2.0%. Refer to the Results of Continuing Operations by Segment within this section for further information regarding our revenues.

	2018	2017	Percentage change	Percentage change excluding recent acquisitions
	(in millions)			
Insurance	\$ 1,705.9	\$ 1,550.6	10.0%	7.2 %
Energy and Specialized Markets	513.3	444.6	15.4%	6.9 %
Financial Services	175.9	150.0	17.3%	(2.0)%
Total revenues	<u>\$ 2,395.1</u>	<u>\$ 2,145.2</u>	11.6%	6.5 %

*Cost of Revenues*

Cost of revenues was \$886.2 million for the year ended December 31, 2018 compared to \$783.8 million for the year ended December 31, 2017, an increase of \$102.4 million or 13.1%. Our recent acquisitions accounted for an increase of \$55.0 million in cost of revenues, primarily related to salaries and employee benefits. Excluding the impact of our recent acquisitions, our cost of revenues increased \$47.4 million or 6.1%. The increase was primarily due to increases in salaries and employee benefits cost of \$30.8 million, data costs and data processing fees of \$5.0 million, rent and facilities expenses of \$4.8 million, information technology expense of \$4.2 million, and other operating costs of \$2.6 million.

*Selling, General and Administrative Expenses*

Selling, general and administrative expenses, or SGA, were \$378.7 million for the year ended December 31, 2018 compared to \$322.8 million for the year ended December 31, 2017, an increase of \$55.9 million or 17.3%. Our recent acquisitions accounted for an increase of \$30.6 million in SGA, primarily related to salaries and employee benefits. Excluding the impact of our recent acquisitions, SGA increased \$25.3 million or 8.1%. The increase was primarily due to increases in salaries and employee benefits (which include annual salaries increase, medical costs, and long term equity compensation plan costs) of \$17.8 million, information technology expense of \$3.8 million, professional consulting fees of \$2.4 million, and other general and administrative of \$1.3 million.

*Depreciation and Amortization of Fixed Assets*

Depreciation and amortization of fixed assets was \$165.3 million for the year ended December 31, 2018 compared to \$135.6 million for the year ended December 31, 2017, an increase of \$29.7 million or 21.9%. The increase in depreciation and amortization of fixed assets includes depreciation and amortization related to our recent acquisitions of \$9.4 million. The remaining increase primarily relates to depreciation and amortization of hardware and software development costs and aircraft equipment placed into production to support data capacity expansion and revenue growth.

*Amortization of Intangible Assets*

Amortization of intangible assets was \$130.8 million for the year ended December 31, 2018 compared to \$101.8 million for the year ended December 31, 2017, an increase of \$29.0 million or 28.5%. The increase in amortization of intangible assets was primarily due to amortization related to our recent acquisitions of \$26.0 million and currency fluctuations impacting amortization denominated in currencies other than U.S. dollars.

*Investment Income and Others, Net*

Investment income and others, net was a gain of \$15.3 million for the year ended December 31, 2018 compared to a gain of \$9.2 million for the year ended December 31, 2017. The increase of \$6.1 million was primarily due to a realized gain of \$12.3 million on the repayment of subordinated promissory note receivable in August 2018, prior to its maturity. This gain was partially offset by a reduction in interest income on the note due to the payoff that occurred in August 2018.

*Interest Expense*

Interest expense was \$129.7 million for the year ended December 31, 2018 compared to \$119.4 million for the year ended December 31, 2017, an increase of \$10.3 million or 8.6%. The increase was due to our higher average outstanding borrowings for the year ended December 31, 2018 related to the credit facility. These higher average outstanding borrowings in 2018 were primarily associated with the funding of our share repurchase program and the acquisition of PowerAdvocate, which occurred in December of 2017.

*Provision for Income Taxes*

The provision for income taxes was \$121.0 million for the year ended December 31, 2018 compared to \$135.9 million for the year ended December 31, 2017, a decrease of \$14.9 million or 11.0%. The effective tax rate was 16.8% for the year ended December 31, 2018 compared to 19.7% for the year ended December 31, 2017. The decrease in the effective tax rate in 2018 compared to 2017 was primarily due to the impact of tax reform lowering the U.S. tax rate from 35.0% to 21.0%, as well as the impact of greater tax benefits from equity compensation.

*Net Income*

The net income margin for our consolidated results was 25.0% for the year ended December 31, 2018 compared to 25.9% for the year ended December 31, 2017.

*EBITDA*

The EBITDA margin for our consolidated results was 47.8% for the year ended December 31, 2018 compared to 48.8% for the year ended December 31, 2017. The EBITDA margin for the year ended December 31, 2018 was negatively impacted by the recent acquisitions with slightly lower margins.

**Results of Continuing Operations by Segment****Insurance***Revenues*

Revenues for our Insurance segment were \$1,705.9 million for the year ended December 31, 2018 compared to \$1,550.6 million for the year ended December 31, 2017, an increase of \$155.3 million or 10.0%. Excluding revenues of \$44.0 million from our recent acquisitions of Rebrmark, Service Software, Business Insight, Validus, and Rulebook, Insurance revenues increased \$111.3 million or 7.2%.

	2018	2017	Percentage change	Percentage change excluding recent acquisitions
(in millions)				
Underwriting & rating	\$ 1,144.5	\$ 1,046.9	9.3%	6.6%
Claims	561.4	503.7	11.5%	8.5%
<b>Total Insurance</b>	<b>\$ 1,705.9</b>	<b>\$ 1,550.6</b>	<b>10.0%</b>	<b>7.2%</b>

Our underwriting & rating revenue increased \$97.6 million or 9.3%; excluding revenues from recent acquisitions of \$29.0 million, our underwriting & rating revenue increased \$68.6 million or 6.6%, primarily resulted from an increase in prices derived from continued enhancements to the content of the solutions within our industry-standard insurance programs as well as selling expanded solutions to existing customers. In addition, property-specific underwriting solutions and catastrophe modeling services contributed to the growth.

Our claims revenue increased \$57.7 million or 11.5%; excluding revenues from recent acquisitions of \$15.0 million, our claims revenue increased \$42.7 million or 8.5%, primarily due to growth in our repair cost estimating solutions, claims analytics and aerial imagery solutions revenue. The repair costs estimating and aerial imagery-based solutions contributed approximately \$16.0 million in revenues related to severe storms for the year ended December 31, 2017, which did not reoccur in 2018.

*Cost of Revenues*

Cost of revenues for our Insurance segment was \$568.1 million for the year ended December 31, 2018 compared to \$510.4 million for the year ended December 31, 2017, an increase of \$57.7 million or 11.3%. Our recent acquisitions within the Insurance segment represented an increase of \$22.0 million in cost of revenues, which was primarily related to salaries and employee benefits. Excluding the impact of our recent acquisitions, our cost of revenues increased \$35.7 million or 7.0%. The increase was primarily due to increases in salaries and employee benefits of \$21.3 million, rent and facilities expenses of \$4.2 million, data costs and data processing fees of \$3.6 million, information technology expense of \$3.4 million, and other operating costs of \$3.2 million.

*Selling, General and Administrative Expenses*

Selling, general and administrative expenses for our Insurance segment were \$218.8 million for the year ended December 31, 2018 compared to \$196.1 million for the year ended December 31, 2017, an increase of \$22.7 million or 11.6%. Our recent acquisitions within the Insurance segment, accounted for an increase of \$10.4 million in SGA, was primarily related to salaries and employee benefits. Excluding costs associated with our recent acquisitions, SGA increased \$12.3 million or 6.5%. The increase was primarily due to increases in salaries and employee benefits (which include annual salaries increase, medical costs, and long term equity compensation plan costs) of \$8.4 million, information technology expense of \$3.0 million, and professional consulting fees of \$1.0 million. These increases were offset by a decrease in other general expenses of \$0.1 million.

## *EBITDA*

EBITDA for our Insurance segment was \$932.2 million for the year ended December 31, 2018 compared to \$855.8 million for the year ended December 31, 2017. The EBITDA margin for our Insurance segment was 54.6% for the year ended December 31, 2018 compared to 55.2% for the year ended December 31, 2017. The EBITDA margin for the year ended December 31, 2018 was negatively impacted by the recent acquisitions with slightly lower margins.

## **Energy and Specialized Markets**

### *Revenues*

Revenues for our Energy and Specialized Markets segment were \$513.3 million for the year ended December 31, 2018 compared to \$444.6 million for the year ended December 31, 2017, an increase of \$68.7 million or 15.4%. Excluding revenues of \$38.1 million from our recent acquisition of PowerAdvocate, revenues for our Energy and Specialized Markets increased \$30.6 million or 6.9% for the year ended December 31, 2018. The increase within this segment primarily resulted from continuing end-market improvements in the energy sector and growth in our environmental health and safety service revenue.

### *Cost of Revenues*

Cost of revenues for our Energy and Specialized Markets segment was \$218.2 million for the year ended December 31, 2018 compared to \$193.8 million for the year ended December 31, 2017, an increase of \$24.4 million or 12.6%. Our recent acquisition within this segment represented an increase of \$13.9 million in cost of revenues, which was primarily related to salaries and employee benefits. Excluding the impact of our recent acquisition, our cost of revenues increased \$10.5 million or 5.4%. The increase was primarily due to increases in salaries and employee benefit costs of \$7.1 million, rent and facilities expense of \$0.5 million, information technology expense of \$0.5 million, and other operating costs of \$2.5 million. These increases were offset by a decrease in data costs and data processing fees of \$0.1 million.

### *Selling, General and Administrative Expenses*

Selling, general and administrative expenses for our Energy and Specialized Markets segment were \$141.1 million for the year ended December 31, 2018 compared to \$114.4 million for the year ended December 31, 2017, an increase of \$26.7 million or 23.3%. Our recent acquisition within this segment accounted for an increase of \$16.2 million in SGA expenses, which was primarily related to salaries and employee benefits. Excluding costs associated with our recent acquisition, SGA increased \$10.5 million or 9.1%. The increase was primarily due to increases in salaries and employee benefit costs of \$8.0 million, information technology expenses of \$0.8 million, professional consulting costs of \$0.2 million and other general expense of \$1.5 million.

## *EBITDA*

EBITDA for our Energy and Specialized Markets segment was \$154.4 million for the year ended December 31, 2018 compared to \$133.6 million for the year ended December 31, 2017. The EBITDA margin for our Energy and Specialized Markets segment was 30.1% for the year ended December 31, 2018 compared to 30.0% for the year ended December 31, 2017.

## **Financial Services**

### *Revenues*

Revenues for our Financial Services segment were \$175.9 million for the year ended December 31, 2018 compared to \$150.0 million for the year ended December 31, 2017, an increase of \$25.9 million or 17.3%. Excluding revenues of \$28.8 million from our recent acquisition of Marketview, revenues for our Financial Services decreased \$2.9 million or 2.0% for the year ended December 31, 2018. The decrease within this segment resulted from nonrecurring project revenues that occurred during the year ended December 31, 2017 and did not reoccur in 2018, which offset the growth in portfolio management solutions and spend informed analytics revenues.

### Cost of Revenues

Cost of revenues for our Financial Services segment was \$99.9 million for the year ended December 31, 2018 compared to \$79.6 million for the year ended December 31, 2017, an increase of \$20.3 million or 25.5%. Our recent acquisition within this segment represented an increase of \$19.1 million in cost of revenues, which was primarily related to salaries and employee benefits. Excluding the impact of our recent acquisition, our cost of revenues increased \$1.2 million or 1.6%. The increase was primarily due to increases in salaries and employee benefit costs of \$2.4 million, data costs and data processing fees of \$1.5 million, information technology expense of \$0.3 million, and rent and facilities expense of \$0.1 million. These increases were offset by a decrease in other operating costs of \$3.1 million.

### Selling, General and Administrative Expenses

Selling, general and administrative expenses for our Financial Services segment were \$18.8 million for the year ended December 31, 2018 compared to \$12.3 million for the year ended December 31, 2017, an increase of \$6.5 million or 52.7%. Our recent acquisition within this segment accounted for an increase of \$4.0 million in SGA expenses, which was primarily related to salaries and employee benefits. Excluding costs associated with our recent acquisition, SGA increased \$2.5 million or 24.7%. The increase was primarily due to increases in salaries and employee benefit costs of \$1.4 million, and professional consulting costs of \$1.2 million. The increases were offset by a decrease in other general expense of \$0.1 million.

### EBITDA

EBITDA for our Financial Services segment was \$58.9 million for the year ended December 31, 2018 compared to \$58.4 million for the year ended December 31, 2017. The EBITDA margin for our Financial Services segment was 33.5% for the year ended December 31, 2018 compared to 39.0% for the year ended December 31, 2017. The decrease in EBITDA margin was primarily due to an acquisition contingent payment of \$3.5 million related to the Fintellix acquisition that negatively impacted our margin for the year ended December 31, 2018.

### Year Ended December 31, 2017 Compared to Year Ended December 31, 2016

#### Consolidated Results of Continuing Operations

##### Revenues

Revenues were \$2,145.2 million for the year ended December 31, 2017 compared to \$1,995.2 million for the year ended December 31, 2016, an increase of \$150.0 million or 7.5%. Excluding revenues of \$61.3 million from RII, Greentech Media, Quest Offshore, Analyze Re, GeoInformation, MarketStance, Arium, Healix, ENI, Fintellix, MAKE, Aerial Imagery acquisitions, G2, Sequel, LCI, Rebmark, and Service Software, collectively referred to as our recent acquisitions, which we define as acquisitions not owned for a significant portion of both the current period and/or prior period and would therefore impact the comparability of the financial results, our revenue growth was \$88.7 million or 4.5%. Revenues within our Insurance segment, excluding our recent acquisitions of RII, Analyze Re, GeoInformation, MarketStance, Arium, Healix, ENI, Aerial Imagery, Sequel, Rebmark, and Service Software, increased by \$102.3 million or 7.2%. Revenues in our Energy and Specialized Markets segment, excluding our recent acquisitions of Greentech Media, Quest Offshore, and MAKE, decreased by \$9.5 million or 2.2%. Revenues in our Financial Services segment, excluding our recent acquisitions of Fintellix, G2, and LCI, decreased by \$4.1 million or 3.0%. Refer to the Results of Continuing Operations by Segment within this section for further information regarding our revenues.

	2017	2016	Percentage change	Percentage change excluding recent acquisitions
	(in millions)			
Insurance	\$ 1,550.6	\$ 1,419.1	9.3%	7.2%
Energy and Specialized Markets	444.6	442.8	0.4%	(2.2)%
Financial Services	150.0	133.3	12.5%	(3.0)%
Total revenues	\$ 2,145.2	\$ 1,995.2	7.5%	4.5%

##### Cost of Revenues

Cost of revenues was \$783.8 million for the year ended December 31, 2017 compared to \$714.4 million for the year ended December 31, 2016, an increase of \$69.4 million or 9.7%. Our recent acquisitions accounted for an increase of \$45.3

million in cost of revenues, primarily related to salaries and employee benefits. Excluding the impact of our recent acquisitions, our cost of revenues increased \$24.1 million or 3.4%. The increase was primarily due to increases in salaries and employee benefits cost of \$30.7 million, data costs and data processing fees of \$6.1 million, information technology expense of \$1.7 million and other operating costs of \$0.1 million. These increases were offset by a decrease in a nonrecurring ESOP charge of \$14.5 million, which occurred in 2016. The ESOP charge was related to the stretch-out of our ESOP loan, which was paid off in 2015.

#### *Selling, General and Administrative Expenses*

Selling, general and administrative expenses, or SGA, were \$322.8 million for the year ended December 31, 2017 compared to \$301.6 million for the year ended December 31, 2016, an increase of \$21.2 million or 7.0%. Our recent acquisitions accounted for an increase of \$13.7 million in SGA, primarily related to salaries and employee benefits, and transaction costs. Excluding the impact of our recent acquisitions, SGA increased \$7.5 million or 2.5%. The increase was primarily due to increases in salaries and employee benefits of \$8.8 million, professional consulting fees of \$4.0 million and other general and administrative of \$0.2 million. These increases were offset by a decrease in information technology expense of \$1.2 million and a 2016 ESOP charge of \$4.3 million.

#### *Depreciation and Amortization of Fixed Assets*

Depreciation and amortization of fixed assets was \$135.6 million for the year ended December 31, 2017 compared to \$119.1 million for the year ended December 31, 2016, an increase of \$16.5 million or 13.8%. The increase in depreciation and amortization of fixed assets includes depreciation and amortization related to our recent acquisitions of \$3.8 million. The remaining increase primarily relates to depreciation and amortization of hardware and software development costs placed into production to support data capacity expansion and revenue growth.

#### *Amortization of Intangible Assets*

Amortization of intangible assets was \$101.8 million for the year ended December 31, 2017 compared to \$92.5 million for the year ended December 31, 2016, an increase of \$9.3 million or 10.1%. The increase in amortization of intangible assets was primarily related to our recent acquisitions of \$13.5 million offset by currency fluctuations impacting amortization denominated in currencies other than U.S. dollars.

#### *Investment Income and Others, Net*

Investment income and others, net was a gain of \$9.2 million for the year ended December 31, 2017 compared to \$6.1 million for the year ended December 31, 2016, an increase of \$3.1 million. The increase was primarily related to an increase in interest income of \$5.1 million generated from the subordinated promissory note associated with the divestiture of our healthcare business. This increase was offset by a gain on sale of equity investments of \$1.5 million in 2016.

#### *Interest Expense*

Interest expense was \$119.4 million for the year ended December 31, 2017 compared to \$120.0 million for the year ended December 31, 2016, a decrease of \$0.6 million or 0.5%, as a result of the Second Amendment to the Credit Facility in May 2016, which reduced the borrowing capacity from \$1,750.0 million to \$1,500.0 million.

#### *Provision for Income Taxes*

The provision for income taxes was \$135.9 million for the year ended December 31, 2017 compared to \$202.2 million for the year ended December 31, 2016, a decrease of \$66.3 million or 32.8%. The effective tax rate was 19.7% for the year ended December 31, 2017 compared to 30.9% for the year ended December 31, 2016. The decrease in the effective tax rate in 2017 compared to 2016 was primarily due to lowered federal income tax rates as a result of U.S. Tax Reform and the adoption of ASU No. 2016-09, partially offset by legislation enacted in the U.K.

#### *Net Income*

The net income margin for our consolidated results, including discontinued operations, was 25.9% for the year ended December 31, 2017 compared to 28.1% for the year ended December 31, 2016. Our net income margin for the year ended December 31, 2017 was positively impacted by the 2017 tax reform legislation of 4.2%. Our net income margin for the year ended December 31, 2016 was positively impacted by the discontinued operations, including the gain on sale of our healthcare business of 5.5% and lowered by an ESOP charge of 0.6%.

## EBITDA

The EBITDA margin for our consolidated results, including discontinued operations, was 48.8% for the year ended December 31, 2017 compared to 59.4% for the year ended December 31, 2016. Our EBITDA margin for the year ended December 31, 2016 was positively impacted by the discontinued operations, including the gain on sale of our healthcare business, of 10.0%, which was partially offset by the impact from an ESOP charge of 0.9%.

### Results of Continuing Operations by Segment

#### Insurance

##### Revenues

Revenues for our Insurance segment were \$1,550.6 million for the year ended December 31, 2017 compared to \$1,419.1 million for the year ended December 31, 2016, an increase of \$131.5 million or 9.3% . Excluding revenues of \$29.2 million from our recent acquisitions of RII, GeoInformation, MarketStance, Analyze Re, Arium, Healix, ENI, Aerial Imagery acquisitions, Sequel, Rebmark, and Service Software, Insurance revenues increased \$102.3 million or 7.2% .

	2017	2016	Percentage change	Percentage change excluding recent acquisitions
	(in millions)			
Underwriting & rating	\$ 1,046.9	\$ 970.5	7.9%	5.6%
Claims	503.7	448.6	12.3%	10.6%
Total Insurance	\$ 1,550.6	\$ 1,419.1	9.3%	7.2%

Our underwriting & rating revenue increased \$76.4 million or 7.9% ; excluding revenues from recent acquisitions of \$21.6 million, our underwriting & rating revenue increased \$54.8 million or 5.6% , primarily resulted from an increase in prices derived from continued enhancements to the content of the solutions within our industry-standard insurance programs as well as selling expanded solutions to existing customers. In addition, catastrophe modeling services contributed to the growth.

Our claims revenue increased \$55.1 million or 12.3% ; excluding revenues from recent acquisitions of \$7.6 million, our claims revenue increased \$47.5 million or 10.6% , primarily due to growth in our repair cost estimating solutions, claims analytics and aerial imagery solutions revenue. The severe storm-related repair costs estimating and aerial imagery-based solutions contributed approximately \$16.0 million for the year ended December 31, 2017 , which did not exist in 2016 .

##### Cost of Revenues

Cost of revenues for our Insurance segment was \$510.4 million for the year ended December 31, 2017 compared to \$469.6 million for the year ended December 31, 2016, an increase of \$40.8 million or 8.7%. Our recent acquisitions within the Insurance segment represented an increase of \$24.6 million in cost of revenues, which was primarily related to salaries and employee benefits. Excluding the impact of our recent acquisitions, our cost of revenues increased \$16.2 million or 3.5%. The increase was primarily due to increases in salaries and employee benefits of \$22.7 million, data costs and data processing fees of \$6.3 million, and information technology expense of \$1.9 million. These increases were offset by decreases in an ESOP charge of \$14.5 million that occurred in 2016 and other operating costs of \$0.2 million.

##### Selling, General and Administrative Expenses

Selling, general and administrative expenses for our Insurance segment were \$196.1 million for the year ended December 31, 2017 compared to \$178.1 million for the year ended December 31, 2016, an increase of \$18.0 million or 10.1%. Our recent acquisitions within the Insurance segment, accounted for an increase of \$7.4 million in SGA, was primarily related to salaries and employee benefits, and transaction costs. Excluding costs associated with our recent acquisitions, SGA increased \$10.6 million or 6.0%. The increase was primarily due to increases in salaries and employee benefits of \$10.6 million, professional consulting fees of \$3.6 million, and information technology expense of \$0.7 million. These increases were offset by a decrease in an ESOP charge of \$4.3 million that occurred in 2016.

## *EBITDA*

EBITDA for our Insurance segment was \$855.8 million for the year ended December 31, 2017 compared to \$779.2 million for the year ended December 31, 2016. The EBITDA margin was 55.2% for the year ended December 31, 2017 and 54.9% for the year ended December 31, 2016. The margin for the year ended December 31, 2016 was negatively impacted by an ESOP charge of 1.3%.

### **Energy and Specialized Markets**

#### *Revenues*

Revenues for our Energy and Specialized Markets were \$444.6 million for the year ended December 31, 2017 compared to \$442.8 million for the year ended December 31, 2016, an increase of \$1.8 million or 0.4%. Excluding revenues of \$11.3 million from our recent acquisitions of Greentech Media, Quest Offshore, and MAKE, our Energy and Specialized Markets revenue decreased \$9.5 million or 2.2% due to the continuing end-market and currency tailwinds affecting the energy business and declines in our environmental health and safety services.

#### *Cost of Revenues*

Cost of revenues for our Energy and Specialized Markets segment was \$193.8 million for the year ended December 31, 2017 compared to \$177.1 million for the year ended December 31, 2016, an increase of \$16.7 million or 9.4%. Our recent acquisitions within this segment represented an increase of \$7.2 million in cost of revenues, which was primarily related to salaries and employee benefits. Excluding the impact of our recent acquisitions, our cost of revenues increased \$9.5 million or 5.4%. The increase was primarily due to increases in salaries and employee benefit costs of \$9.1 million, information technology expense of \$0.2 million, and other operating costs of \$0.2 million.

#### *Selling, General and Administrative Expenses*

Selling, general and administrative expenses for our Energy and Specialized Markets segment were \$114.4 million for the year ended December 31, 2017 compared to \$113.4 million for the year ended December 31, 2016, an increase of \$1.0 million or 0.9%. Our recent acquisitions within this segment accounted for an increase of \$2.6 million in SGA expenses, which was primarily related to salaries and employee benefits and transaction costs. Excluding costs associated with our recent acquisitions, SGA decreased \$1.6 million or 1.4%. The decrease was primarily due to decreases in information technology expenses of \$1.7 million and professional consulting costs of \$0.6 million. These decreases were offset by increases in salaries and employee benefit costs of \$0.4 million and other general expense of \$0.3 million.

## *EBITDA*

EBITDA for our Energy and Specialized Markets segment was \$133.6 million for the year ended December 31, 2017 compared to \$151.2 million for the year ended December 31, 2016. The EBITDA margin was 30.0% for the year ended December 31, 2017 compared to 34.2% for the year ended December 31, 2016. The decrease in margin for the year ended December 31, 2017 was primarily due to the impact of movements in the U.S. dollar relative to British pounds.

### **Financial Services**

#### *Revenues*

Revenues for our Financial Services were \$150.0 million for the year ended December 31, 2017 compared to \$133.3 million for the year ended December 31, 2016, an increase of \$16.7 million or 12.5%. Excluding revenues of \$20.8 million from our recent acquisitions of Fintellix, G2, and LCI, our financial services revenue decreased \$4.1 million or 3.0%. The decrease was primarily due to several contract completions in 2016 partially offset by growth in media effectiveness solutions.

#### *Cost of Revenues*

Cost of revenues for our Financial Services segment was \$79.6 million for the year ended December 31, 2017 compared to \$67.7 million for the year ended December 31, 2016, an increase of \$11.9 million or 17.7%. Our recent acquisitions within this segment represented an increase of \$13.5 million in cost of revenues, which was primarily related to salaries and employee benefits. Excluding the impact of our recent acquisitions, our cost of revenues decreased \$1.6 million or 2.2%. The decrease was primarily due to decreases in salaries and employee benefit costs of \$1.1 million, information technology expense of \$0.4 million, and data costs and data processing fees of \$0.2 million. These decreases were offset by an increase in other operating costs of \$0.1 million.

*Selling, General and Administrative Expenses*

Selling, general and administrative expenses for our Financial Services segment were \$12.3 million for the year ended December 31, 2017 compared to \$10.1 million for the year ended December 31, 2016, an increase of \$2.2 million or 21.8%. Our recent acquisitions within this segment accounted for an increase of \$3.7 million in SGA expenses, which was primarily related to salaries and employee benefits and transaction costs. Excluding costs associated with our recent acquisitions, SGA decreased \$1.5 million or 14.8%. The decrease was primarily due to decreases in salaries and employee benefit costs of \$2.2 million and information technology expenses of \$0.2 million, and other general expense of \$0.1 million. These decreases were offset by an increase in professional consulting costs of \$1.0 million.

*EBITDA*

EBITDA for our Financial Services segment was \$58.4 million for the year ended December 31, 2017 compared to \$320.9 million for the year ended December 31, 2016. The EBITDA margin was 39.0% for the year ended December 31, 2017 and for the year ended December 31, 2016, including our discontinued operations, the EBITDA margin was 240.7%. Our EBITDA margin for the year ended December 31, 2016 was primarily impacted by discontinued operations, including the gain on sale of our healthcare business, of 199.5%.

## Quarterly Results of Operations

The following table sets forth our quarterly unaudited consolidated statement of operations data for each of the eight quarters in the period ended December 31, 2018. In management's opinion, the quarterly data has been prepared on the same basis as the audited consolidated financial statements included in this annual report on Form 10-K, and reflects all necessary adjustments for a fair presentation of this data. The results of historical periods are not necessarily indicative of the results of operations for a full year or any future period.

	For the Quarters Ended				Full Year
	March 31,	June 30,	September 30,	December 31,	
	2018				2018
	(in millions, except for per share data)				
<b>Statement of operations data:</b>					
Revenues	\$ 581.2	\$ 601.3	\$ 598.7	\$ 613.9	\$ 2,395.1
Operating income	\$ 194.5	\$ 212.3	\$ 211.1	\$ 216.2	\$ 834.1
Net income	\$ 133.0	\$ 153.5	\$ 166.0	\$ 146.2	\$ 598.7
Basic net income per share	\$ 0.81	\$ 0.93	\$ 1.01	\$ 0.89	\$ 3.63
Diluted net income per share	\$ 0.79	\$ 0.91	\$ 0.99	\$ 0.87	\$ 3.56
	For the Quarters Ended				Full Year
	March 31,	June 30,	September 30,	December 31,	
	2017				2017
	(in millions, except for per share data)				
<b>Statement of operations data:</b>					
Revenues	\$ 502.6	\$ 523.2	\$ 549.1	\$ 570.3	\$ 2,145.2
Operating income	\$ 187.7	\$ 195.0	\$ 208.4	\$ 210.1	\$ 801.2
Net income	\$ 108.8	\$ 121.0	\$ 120.7	\$ 204.6	\$ 555.1
Basic net income per share	\$ 0.65	\$ 0.73	\$ 0.73	\$ 1.24	\$ 3.36
Diluted net income per share	\$ 0.64	\$ 0.72	\$ 0.72	\$ 1.22	\$ 3.29

## Liquidity and Capital Resources

As of December 31, 2018 and 2017, we had cash and cash equivalents and available-for-sale securities of \$142.8 million and \$146.1 million, respectively. Subscriptions for our solutions are billed and generally paid in advance of rendering services either quarterly or in full upon commencement of the subscription period, which is usually for one year. Subscriptions are automatically renewed at the beginning of each calendar year. We have historically generated significant cash flows from operations. As a result of this factor, as well as the availability of funds under our syndicated revolving credit facility, we believe we will have sufficient cash to meet our working capital and capital expenditure needs, and to fuel our future growth plans.

We have historically managed the business with a working capital deficit due to the fact that, as described above, we offer our solutions and services primarily through annual subscriptions or long-term contracts, which are generally prepaid quarterly or annually in advance of the services being rendered. When cash is received for prepayment of invoices, we record an asset (cash and cash equivalents) on our balance sheet with the offset recorded as a current liability (deferred revenues). This current liability is deferred revenue that does not require a direct cash outflow since our customers have prepaid and are obligated to purchase the services. In most businesses, growth in revenue typically leads to an increase in the accounts receivable balance causing a use of cash as a company grows. Unlike these businesses, our cash position is favorably affected by revenue growth, which results in a source of cash due to our customers prepaying for most of our services.

Our consolidated capital expenditures as a percentage of consolidated revenues for the years ended December 31, 2018 and 2017, were 9.6% and 8.6%, respectively. Expenditures related to developing and enhancing our solutions are predominately related to internal-use software and are capitalized in accordance with ASC 350-40, "Accounting for Costs of Computer Software Developed or Obtained for Internal Use." We also capitalize amounts in accordance with ASC 985-20, "Software to be Sold, Leased or Otherwise Marketed."

We have also historically used a portion of our cash for repurchases of our common stock from our stockholders. For the years ended December 31, 2018, 2017 and 2016, we repurchased \$438.6 million, \$276.3 million and \$326.8 million, respectively, of our common stock.

### ***Financing and Financing Capacity***

We had total debt, excluding capital lease obligations, unamortized discounts and debt issuance costs of \$2,715.0 million and \$3,015.0 million at December 31, 2018 and 2017, respectively. The debt at December 31, 2018 primarily consists of senior notes issued in 2015, 2012 and 2011 and borrowings outstanding under our committed senior unsecured Syndicated Revolving Credit Facility, or the Credit Facility, described below. Interest on the senior notes is payable semi-annually each year. The unamortized discount and debt issuance costs were recorded as "Long-term debt" in the accompanying consolidated balance sheets, and will be amortized to "Interest expense" in the accompanying consolidated statements of operations within this Form 10-K over the life of the respective senior note. The indenture governing the senior notes restricts our ability to, among other things, create certain liens, enter into sale/leaseback transactions and consolidate with, sell, lease, convey, or otherwise transfer all or substantially all of our assets, or merge with or into, any other person or entity. As of December 31, 2018, we had senior notes with an aggregate principal amount of \$2,300.0 million outstanding, and we were in compliance with our financial debt covenants. In January 2019, we repaid a total of \$250.0 million of the \$2,300.0 million outstanding borrowings at December 31, 2018 under the senior notes.

We have a credit facility with a borrowing capacity of \$1,500.0 million with Bank of America N.A., JP Morgan Chase, N.A., Sun Trust Bank, Wells Fargo Bank, N.A., Citizens Bank, N.A., Morgan Stanley, N.A., HSBC Bank USA, N.A., Royal Bank of Canada, BNP Paribas, TD Bank, N.A., and The Northern Trust Company. On May 18, 2017, we entered into the third amendment to the Credit Facility, which, among other things, extended the maturity date one year to May 15, 2022. The Credit Facility may be used for general corporate purposes, including working capital needs and capital expenditures, acquisitions and the share repurchase program, or the Repurchase Program. The Credit Facility contains certain financial and other covenants that, among other things, impose certain restrictions on indebtedness, liens, investments, and capital expenditures. These covenants also place restrictions on mergers, asset sales, sale/leaseback transactions, payments between us and our subsidiaries, and certain transactions with affiliates. The financial covenants require that, at the end of any fiscal quarter, we have a consolidated interest coverage ratio of at least 3.0 to 1.0 and that we maintain, during any period of four fiscal quarters, a consolidated funded debt leverage ratio of 3.5 to 1.0. We were in compliance with all financial covenants under the Credit Facility as of December 31, 2018. Interest on borrowings under the Credit Facility is payable at an interest rate of LIBOR plus 1.125% to 1.625%, depending upon the consolidated funded debt leverage ratio. During the year ended December 31, 2018, we had borrowings of \$325.0 million and repayments of \$625.0 million under the Credit Facility. As of December 31, 2018 and 2017, we had outstanding borrowings under the Credit Facility of \$415.0 million and \$715.0 million, respectively. Subsequent to December 31, 2018, we had borrowings of \$275.0 million under the Credit Facility, which were primarily utilized to pay down the \$250.0 million of senior notes due on January 15, 2019. In addition, we subsequently repaid a total of \$175.0 million of the \$415.0 million outstanding borrowings at December 31, 2018 under the Credit Facility.

### ***Cash Flow***

The following table summarizes our cash flow data for the years ended December 31:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
	(in millions)		
Net cash provided by operating activities	\$ 934.4	\$ 743.5	\$ 577.5
Net cash (used in) provided by investing activities	\$ (265.4)	\$ (1,105.5)	\$ 493.2
Net cash (used in) provided by financing activities	\$ (669.8)	\$ 362.5	\$ (1,064.2)

#### ***Operating Activities***

Net cash provided by operating activities increased to \$934.4 million for the year ended December 31, 2018 compared to \$743.5 million for the year ended December 31, 2017. The increase of \$190.9 million in net cash provided by operating activities was primarily due to an increase in cash receipts from customers driven by an increase in revenues and operating profit, as well as a reduction in tax payments primarily due to the impact of tax reform lowering the U.S. tax rate from 35.0% to 21.0% and the impact of greater tax benefits from equity compensation in the current year versus the prior year.

Net cash provided by operating activities increased to \$743.5 million for the year ended December 31, 2017 compared to \$577.5 million for the year ended December 31, 2016. The increase of \$166.0 million in net cash provided by operating

activities was primarily due to an increase in cash receipts from customers driven by an increase in revenues and operating profit. Our net cash provided by operating activities for the year ended December 31, 2016 also included a \$99.9 million tax payment related to the gain on the sale of our healthcare business and a one-time cash funding of our ESOP plan of \$18.8 million. These operating cash expenditures in 2016 did not occur in 2017.

#### *Investing Activities*

Net cash used in investing activities of \$ 265.4 million for the year ended December 31, 2018 was primarily related to capital expenditures of \$231.0 million and acquisitions of \$153.1 million including escrow funding, partially offset by proceeds from the repayment of the subordinated promissory note receivable of \$121.4 million.

Net cash used in investing activities of \$1,105.5 million for the year ended December 31, 2017 was primarily related to acquisitions, including escrow funding, of \$914.9 million and capital expenditures of \$183.5 million.

Net cash provided by investing activities of \$493.2 million for the year ended December 31, 2016 was primarily related to proceeds from the sale our healthcare business of \$714.6 million, partially offset by capital expenditures of \$156.5 million and acquisitions including escrow payments of \$74.1 million.

#### *Financing Activities*

Net cash used in financing activities of \$669.8 million for the year ended December 31, 2018 was primarily related to share repurchases of \$438.6 million, net debt repayments of \$300.0 million of borrowings under our Credit Facility, partially offset by proceeds from stock option exercises and other option-related items of \$83.6 million.

Net cash provided by financing activities of \$362.5 million for the year ended December 31, 2017 was primarily related to \$615.0 million of borrowings, net under our Credit Facilities and proceeds from stock option exercises, net of net share settlement of taxes from restricted stock, of \$32.1 million, partially offset by share repurchases of \$276.3 million.

Net cash used in financing activities of \$1,064.2 million for the year ended December 31, 2016 was primarily related to a \$770.0 million repayments of borrowings under our Credit Facilities and share repurchases of \$326.8 million, partially offset by proceeds from stock option exercises and other option-related items of \$38.0 million.

#### *Contractual Obligations*

The following table summarizes our contractual obligations at December 31, 2018 and the future periods in which such obligations are expected to be settled in cash:

	Payments Due by Period				
	Total	Less than 1 year	2-3 years	4-5 years	More than 5 years
(in millions)					
<b>Contractual obligations</b>					
Long-term debt, current portion of long-term debt and interest	\$ 3,572.6	\$ 762.2	\$ 624.2	\$ 470.6	\$ 1,715.6
Operating leases	339.8	46.0	83.5	62.7	147.6
Pension and postretirement plans (1)	29.7	2.6	4.3	3.9	18.9
Capital lease obligations	29.2	8.3	18.1	2.8	—
Other long-term liabilities (2)	0.9	0.3	0.1	0.1	0.4
<b>Total (3)</b>	<b>\$ 3,972.2</b>	<b>\$ 819.4</b>	<b>\$ 730.2</b>	<b>\$ 540.1</b>	<b>\$ 1,882.5</b>

- (1) Our funding policy is to contribute at least equal to the minimum legal funding requirement.
- (2) Other long-term liabilities consist of our employee-related deferred compensation plan. We also have a deferred compensation plan for our Board of Directors; however, based on past performance and the uncertainty of the dollar amounts to be paid, if any, we have excluded such amounts from the above table.
- (3) Unrecognized tax benefits of approximately \$17.4 million have been recorded as liabilities in accordance with ASC 740, which have been omitted from the table above, and we are uncertain as to if or when such amounts may be settled, with the exception of those amounts subject to a statute of limitation. Related to the unrecognized tax benefits, we also have recorded a liability for potential penalties and interest of \$5.7 million.

### ***Off-Balance Sheet Arrangements***

We have no off-balance sheet arrangements.

### **Critical Accounting Policies and Estimates**

Our management's discussion and analysis of financial condition and results of operations are based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements require management to make estimates and judgments that affect reported amounts of assets and liabilities and related disclosures of contingent assets and liabilities at the dates of the financial statements and revenue and expenses during the reporting periods. These estimates are based on historical experience and on other assumptions that are believed to be reasonable under the circumstances. On an ongoing basis, management evaluates its estimates, including those related to revenue recognition, goodwill and intangible assets, pension and other post retirement benefits, stock based compensation, and income taxes. Actual results may differ from these assumptions or conditions.

#### ***Revenue Recognition***

We recognize revenue based on the transfer of promised goods or services to customers for the amount that reflects the consideration to which we expect to be entitled in exchange for those goods or services. Revenue is recognized in a five-step model: 1) identify the contract with a customer; 2) identify the performance obligations in the contract; 3) determine the transaction price; 4) allocate the transaction price to the performance obligations in the contract; and 5) recognize revenue when or as the company satisfies a performance obligation. Revenues for hosted subscription services are recognized ratably over the subscription term. Revenues from certain discrete project based advisory/consulting services are recognized over time by measuring the progress toward complete satisfaction of the performance obligation, based on the input method of consulting hours worked; this aligns with the results achieved and value transferred to the customer. Revenues from transactional solutions are recognized as the solutions are delivered or services performed at point in time.

We invoice our customers in annual, quarterly, or monthly installments. Amounts billed and collected in advance are recorded as deferred revenues on the balance sheet and are recognized as the services are performed and revenue recognition criteria are met.

#### ***Stock-Based Compensation***

Stock-based compensation cost, including stock options, restricted stock, and performance share units, or PSUs, is measured at the grant date, based on the fair value of the awards granted, and is recognized as expense over the requisite service period. The fair value of stock options is measured using a Black-Scholes option-pricing model, which requires the use of several estimates, including expected term, expected risk-free interest rate, expected volatility, and expected dividend yield. The fair value of the restricted stock is determined using the closing price of the Company's common stock on the grant date. The fair value of PSUs is determined on the grant date using the Monte Carlo Simulation model.

Option grants and restricted stock awards are generally expensed ratably over the four-year vesting period. PSUs are generally expensed ratably over the three-year vesting period. We follow the substantive vesting period approach for awards granted after January 1, 2005, which requires that stock-based compensation expense be recognized over the period from the date of grant to the date when the award is no longer contingent on the employee providing additional service.

We estimate expected forfeitures of equity awards at the date of grant and recognize compensation expense only for those awards expected to vest. The forfeiture assumption is ultimately adjusted to the actual forfeiture rate.

#### ***Goodwill and Intangibles***

Goodwill represents the excess of acquisition costs over the fair value of tangible net assets and identifiable intangible assets of the businesses acquired. Goodwill and intangible assets deemed to have indefinite lives are not amortized. Intangible assets determined to have definite lives are amortized over their useful lives. Goodwill and intangible assets with indefinite lives are subject to impairment testing annually as of June 30, or whenever events or changes in circumstances indicate that the carrying amount may not be fully recoverable, using the guidance and criteria described in the accounting standard for *Goodwill and Other Intangible Assets*. This testing compares carrying values to fair values and, when appropriate, the carrying value of these assets is reduced to fair value.

As of December 31, 2018, we had goodwill of \$3,361.5 million, which represents 57.0% of our total assets. During 2018, we performed an impairment test as of June 30, 2018 and confirmed that no impairment charge was necessary. There are many assumptions and estimates used that directly impact the results of impairment testing, including an estimate of future expected revenues, earnings and cash flows, useful lives and discount rates applied to such expected cash flows in order to

estimate fair value. We have the ability to influence the outcome and ultimate results based on the assumptions and estimates we choose for determining the fair value of our reporting units. To mitigate undue influence, we set criteria and benchmarks that are reviewed and approved by various levels of management and reviewed by other independent parties. The determination of whether or not goodwill or indefinite-lived acquired intangible assets have become impaired involves a significant level of judgment in the assumptions and estimates underlying the approach used to determine the value of our reporting units. Changes in our strategy or market conditions could significantly impact these judgments and require an impairment to be recorded to intangible assets and goodwill. There have been no goodwill impairment indicators subsequent to the impairment test performed as of June 30, 2018. For the year ended December 31, 2018, there were no impairment indicators related to our intangible assets.

We allocate the fair value of the purchase consideration to the tangible assets acquired, liabilities assumed and intangible assets acquired based on their estimated fair values. The excess of the fair value of the purchase consideration over the fair values of these identifiable assets and liabilities is recorded as goodwill. Such valuations require management to make significant estimates and assumptions, especially with respect to intangible assets. The estimates used in valuing the intangible assets are determined with the assistance of third party specialists, a discounted cash flow analysis and estimates made by management. Management's estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable and, as a result, actual results may differ from estimates. During the measurement period, which is not to exceed one year from the acquisition date, we may record adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill. Upon the conclusion of the measurement period, any subsequent adjustments are recorded to earnings.

### ***Income Taxes***

In projecting future taxable income, we develop assumptions including the amount of future state, federal and foreign pretax operating income, the reversal of temporary differences, and the implementation of feasible and prudent tax planning strategies. These assumptions require significant judgment about the forecasts of future taxable income and are consistent with the plans and estimates we use to manage the underlying businesses. The calculation of our tax liabilities also involves dealing with uncertainties in the application and evolution of complex tax laws and regulations in other jurisdictions.

We account for uncertain tax positions in accordance with *Accounting for Uncertainty in Income Taxes — an interpretation of ASC 740*, which addresses the determination of whether tax benefits claimed or expected to be claimed on a tax return should be recorded in the financial statements. Under this interpretation, we may recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained upon examination by the taxing authorities, based on the technical merits of the position.

We recognize and adjust our liabilities when our judgment changes as a result of the evaluation of new information not previously available. Due to the complexity of some of these uncertainties, the ultimate resolution may result in a payment that is materially different from our current estimate of the tax liabilities. These differences will be reflected as increases or decreases to income tax expense in the period in which they are determined.

On December 22, 2017 the Tax Cuts and Job Act ("Tax Act") was enacted. The Tax Act included a number of changes to U.S. tax laws, most notably a reduction in the U.S. corporate tax rate from 35.0% to 21.0%. As a result of the corporate tax rate reduction, the Company recognized a tax benefit in 2017 of \$89.1 million due to the re-measurement of its deferred tax assets and liabilities. In accordance with Staff Accounting Bulletin (SAB) No. 118, the Company completed the analysis of the impacts of the 2017 Tax Act in the fourth quarter of 2018, resulting in an incremental charge of \$1.0 million as income tax expense to reflect the final remeasurement of deferred tax assets and liabilities of \$88.1 million.

We estimate unrecognized tax positions of \$0.9 million that may be recognized by December 31, 2019, due to expiration of statutes of limitations and resolution of audits with taxing authorities, net of additional uncertain tax positions.

As of December 31, 2018, we have gross federal, state, and foreign income tax net operating loss carryforwards of \$186.5 million, which will expire at various dates from 2019 through 2038. Such net operating loss carryforwards expire as follows:

Years	(In millions)
2019-2026	\$ 15.9
2027-2031	7.1
2032-2038	163.5
Total	<u>\$ 186.5</u>

The net deferred income tax liability of \$339.5 million consists primarily of timing differences involving depreciation and amortization.

## **Recent Accounting Pronouncements**

For a discussion of recent accounting pronouncements, refer to Note 2(s) to the audited consolidated financial statements included elsewhere in this annual report on Form 10-K.

## **Item 7A. Quantitative and Qualitative Disclosures about Market Risk**

### ***Interest Rate Risk***

We are exposed to market risk from fluctuations in interest rates. At December 31, 2018, we had borrowings outstanding under our credit facility of \$415.0 million, which bear interest at variable rates based on LIBOR plus 1.125% to 1.625% depending on certain ratios defined in the credit agreement. A change in interest rates on variable rate debt impacts our pre-tax income and cash flows, but does not impact the fair value of the instruments. Based on our overall interest rate exposure at December 31, 2018, a one percent change in interest rate would result in a change in annual pre-tax interest expense of approximately \$4.2 million based on our current borrowing levels.

### ***Foreign Currency Risk***

Our foreign-based businesses and results of operations are exposed to movements in the U.S. dollar to British pounds and other foreign currency exchange rates. A portion of our revenue is denominated in British pounds and other foreign currencies. If the U.S. dollar strengthens against British pounds and other foreign currencies, our revenues reported in U.S. dollars would decline. With regard to operating expense, our primary exposure to foreign currency exchange risk relates to operating expense incurred in British pounds and other foreign currencies. If British pounds and other foreign currencies strengthen, costs reported in U.S. dollars will increase. Movements in the U.S. dollar to British pounds and other foreign currency exchange rates did not have a material effect on our revenue for the year ended December 31, 2018. A hypothetical ten percent change in average exchange rates versus the U.S. dollar would not have resulted in a material change to our earnings.

## **Item 8. Consolidated Financial Statements and Supplementary Data**

The information required by this Item is set forth on pages 52 through 104 of this annual report on Form 10-K.

## **Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure**

None.

## **Item 9A. Controls and Procedures**

### **Evaluation of Disclosure Controls and Procedures**

We are required to maintain disclosure controls and procedures (as that term is defined in Rules 13a-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) that are designed to ensure that information required to be disclosed in our reports under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the Securities and Exchange Commission's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosures. Any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives at the reasonable assurance level.

Our management, with the participation of the Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the Company's disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) as of the end of the period covered by this annual report on Form 10-K for the Company and our subsidiaries other than our recent acquisitions in 2018 (See Note 10 of our consolidated financial statements included in this annual report on Form 10-K). Management excluded from its assessment the internal control over financial reporting of these acquisitions and collectively represents approximately 0.4% of total assets (excluding goodwill and intangible assets which were integrated into the Company's systems and control environment) and 0.5% of revenues as of and for the year ended December 31, 2018. Based upon the foregoing assessments, our Chief Executive Officer and Chief Financial Officer have concluded that, as of December 31, 2018, our disclosure controls and procedures were effective at the reasonable assurance level.

**Management's Report on Internal Control over Financial Reporting**

Management's Report on Internal Control over Financial Reporting as of December 31, 2018 is set forth in Item 8. Consolidated Financial Statement and Supplementary Data.

**Attestation Report of the Registered Public Accounting Firm**

The Report of Independent Registered Public Accounting Firm on Internal Control over Financial Reporting as of December 31, 2018 is set forth in Item 8. Consolidated Financial Statement and Supplementary Data.

**Changes in Internal Control over Financial Reporting**

We are in the process of integrating our recent acquisitions in 2018 into our overall internal control over financial reporting process. Other than this ongoing integration, there have been no changes in our internal control over financial reporting identified in connection with the evaluation of such internal control that occurred during the fourth quarter of 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

**Item 9B. Other Information**

None.

**PART III**

**Item 10. Directors, Executive Officers and Corporate Governance**

The information required to be furnished by this Item 10. is incorporated herein by reference to our Notice of Annual Meeting of Stockholders and Proxy Statement to be filed within 120 days of December 31, 2018 (the “Proxy Statement”).

**Item 11. Executive Compensation**

The information required to be furnished by this Item 11. is incorporated herein by reference to our Proxy Statement.

**Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters**

The information required to be furnished by this Item 12. is incorporated herein by reference to our Proxy Statement.

**Item 13. Certain Relationships and Related Transactions and Director Independence**

The information required to be furnished by this Item 13. is incorporated herein by reference to our Proxy Statement.

**Item 14. Principal Accounting Fees and Services**

The information required to be furnished by this Item 14. is incorporated herein by reference to our Proxy Statement.

**PART IV**

**Item 15. Exhibits and Financial Statement Schedule**

(a) The following documents are filed as part of this report.

- (1) Financial Statements. See Index to Financial Statements and Schedules in Part II, Item 8. on this Form 10-K.
- (2) Financial Statement Schedule. See Schedule II. Valuation and Qualifying Accounts and Reserves.
- (3) Exhibits. See Index to Exhibits in this annual report on Form 10-K.

**Item 16. Form 10-K Summary**

None.

**Item 8. Consolidated Financial Statements and Supplementary Data**

**Index to Consolidated Financial Statements and Schedule**

**Verisk Analytics, Inc. Consolidated Financial Statements as of December 31, 2018 and 2017 and for the Years Ended December 31, 2018, 2017 and 2016.**

<a href="#">Management's Report on Internal Control over Financial Reporting</a>	<a href="#">53</a>
<a href="#">Report of Independent Registered Public Accounting Firm on Internal Control over Financial Reporting</a>	<a href="#">54</a>
<a href="#">Report of Independent Registered Public Accounting Firm</a>	<a href="#">56</a>
<a href="#">Consolidated Balance Sheets</a>	<a href="#">57</a>
<a href="#">Consolidated Statements of Operations</a>	<a href="#">58</a>
<a href="#">Consolidated Statements of Comprehensive Income</a>	<a href="#">59</a>
<a href="#">Consolidated Statements of Changes in Stockholders' Equity</a>	<a href="#">60</a>
<a href="#">Consolidated Statements of Cash Flows</a>	<a href="#">61</a>
<a href="#">Notes to Consolidated Financial Statements</a>	<a href="#">63</a>
Financial Statements Schedule	
<a href="#">Schedule II. Valuation and Qualifying Accounts and Reserves</a>	<a href="#">104</a>

## MANAGEMENT'S 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. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the financial statements for external purposes in accordance with U.S. generally accepted accounting principles. Because of its inherent limitations, a system of internal control over financial reporting can provide only reasonable assurance and may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that internal control may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework set forth in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013.

Based on this assessment, management concluded that our internal control over financial reporting was effective at December 31, 2018 .

Management excluded from its assessment the internal control over financial reporting for our acquisitions in 2018 (See Note 10. of our consolidated financial statements included in this annual report on Form 10-K). The excluded financial statements of these acquisitions constitute approximately 0.4% of total assets (excluding goodwill and intangible assets which were integrated into the Company's systems and control environment) and 0.5% of revenues collectively included within our consolidated financial statements as of and for the year ended December 31, 2018 . Due to the timing of the acquisitions, management did not assess the effectiveness of internal control over financial reporting for these acquisitions.

Deloitte & Touche LLP, the independent registered public accounting firm that audited the consolidated financial statements included in this annual report on Form 10-K has also audited the effectiveness of our internal control over financial reporting as of December 31, 2018 , as stated in their report which is included herein.

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Verisk Analytics, Inc.

### Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Verisk Analytics, Inc. 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 February 19, 2019, expressed an unqualified opinion on those financial statements.

As described in Management's Report on Internal Controls over Financial Reporting, management excluded from its assessment the internal control over financial reporting at Marketview Limited, which was acquired on January 5, 2018, Business Insight Limited, which was acquired on February 21, 2018, Validus-IVC Limited, which was acquired on June 20, 2018, and Rulebook, which was acquired on December 14, 2018 (collectively the "2018 acquired businesses"). The financial statements of the 2018 acquired businesses constitute 0.4% of total assets (excluding goodwill and intangible assets which were integrated into the Company's systems and control environment) and 0.5% of revenues collectively of the consolidated financial statement amounts as of and for the year ended December 31, 2018. Accordingly, our audit did not include the internal control over financial reporting at the 2018 acquired businesses.

### 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 Report on Internal Controls 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.

[Table of Contents](#)

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  
Parsippany, New Jersey  
February 19, 2019

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Stockholders and the Board of Directors of Verisk Analytics, Inc.

**Opinion on the Financial Statements**

We have audited the accompanying consolidated balance sheets of Verisk Analytics, Inc. and subsidiaries (the "Company") as of December 31, 2018 and 2017, the related consolidated statements of operations, comprehensive income, changes in stockholders' equity, and cash flows, for each of the three years in the period ended December 31, 2018, and the related notes and the schedule listed in the Index at Item 15 (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 three 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 February 19, 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  
Parsippany, New Jersey  
February 19, 2019

We have served as the Company's auditor since 2001.

**VERISK ANALYTICS, INC**  
**CONSOLIDATED BALANCE SHEETS**  
**As of December 31, 2018 and 2017**

	2018	2017
	(in millions, except for share and per share data)	
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 139.5	\$ 142.3
Accounts receivable, net	356.4	345.5
Prepaid expenses	63.9	38.1
Income taxes receivable	34.0	28.8
Other current assets	50.7	42.9
Total current assets	644.5	597.6
Noncurrent assets:		
Fixed assets, net	555.9	478.3
Intangible assets, net	1,227.8	1,345.3
Goodwill	3,361.5	3,368.7
Deferred income tax assets	11.1	15.9
Other assets	99.5	214.5
Total assets	\$ 5,900.3	\$ 6,020.3
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 263.5	\$ 225.4
Short-term debt and current portion of long-term debt	672.8	724.4
Deferred revenues	383.1	384.7
Income taxes payable	5.2	3.1
Total current liabilities	1,324.6	1,337.6
Noncurrent liabilities:		
Long-term debt	2,050.5	2,284.4
Deferred income tax liabilities	350.6	337.8
Other liabilities	104.0	135.1
Total liabilities	3,829.7	4,094.9
Commitments and contingencies		
Stockholders' equity:		
Verisk common stock, \$.001 par value; 2,000,000,000 shares authorized; 544,003,038 shares issued and 163,970,410 and 164,878,930 shares outstanding, respectively	0.1	0.1
Additional paid-in capital	2,283.0	2,180.1
Treasury stock, at cost, 380,032,628 and 379,124,108 shares, respectively	(3,563.2)	(3,150.5)
Retained earnings	3,942.6	3,308.0
Accumulated other comprehensive losses	(591.9)	(412.3)
Total stockholders' equity	2,070.6	1,925.4
Total liabilities and stockholders' equity	\$ 5,900.3	\$ 6,020.3

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

**VERISK ANALYTICS, INC.**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
**For The Years Ended December 31, 2018 , 2017 and 2016**

	2018	2017	2016
	(in millions, except for share and per share data)		
Revenues	\$ 2,395.1	\$ 2,145.2	\$ 1,995.2
Operating expenses:			
Cost of revenues (exclusive of items shown separately below)	886.2	783.8	714.4
Selling, general and administrative	378.7	322.8	301.6
Depreciation and amortization of fixed assets	165.3	135.6	119.1
Amortization of intangible assets	130.8	101.8	92.5
Total operating expenses	1,561.0	1,344.0	1,227.6
Operating income	834.1	801.2	767.6
Other income (expense):			
Investment income and others, net	15.3	9.2	6.1
Interest expense	(129.7)	(119.4)	(120.0)
Total other expense, net	(114.4)	(110.2)	(113.9)
Income before income taxes	719.7	691.0	653.7
Provision for income taxes	(121.0)	(135.9)	(202.2)
Income from continuing operations	598.7	555.1	451.5
Discontinued operations:			
Income from discontinued operations (Note 11)	—	—	253.0
Provision for income taxes from discontinued operations	—	—	(113.3)
Income from discontinued operations	—	—	139.7
Net income	\$ 598.7	\$ 555.1	\$ 591.2
Basic net income per share:			
Income from continuing operations	\$ 3.63	\$ 3.36	\$ 2.68
Income from discontinued operations	—	—	0.83
Basic net income per share	\$ 3.63	\$ 3.36	\$ 3.51
Diluted net income per share:			
Income from continuing operations	\$ 3.56	\$ 3.29	\$ 2.64
Income from discontinued operations	—	—	0.81
Diluted net income per share	\$ 3.56	\$ 3.29	\$ 3.45
Weighted average shares outstanding:			
Basic	164,808,110	165,168,224	168,248,304
Diluted	168,297,836	168,688,868	171,171,572

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

**VERISK ANALYTICS, INC.**  
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**  
**For The Years Ended December 31, 2018 , 2017 and 2016**

	<u>2018</u>	<u>2017</u>	<u>2016</u>
	(in millions)		
Net income	\$ 598.7	\$ 555.1	\$ 591.2
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustment	(154.1)	227.0	(395.6)
Unrealized holding gain on available-for-sale securities	—	0.4	0.3
Pension and postretirement adjustment	(24.8)	11.1	(13.5)
Total other comprehensive (loss) income	(178.9)	238.5	(408.8)
Comprehensive income	<u>\$ 419.8</u>	<u>\$ 793.6</u>	<u>\$ 182.4</u>

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

**VERISK ANALYTICS, INC.**  
**CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY**  
**For The Years Ended December 31, 2018 , 2017 and 2016**

	Common Stock Issued	Par Value	Additional Paid-in Capital	Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Losses	Total Stockholders' Equity
(in millions, except for share data)							
Balance, January 1, 2016	544,003,038	\$ 0.1	\$ 2,023.4	\$ (2,571.2)	\$ 2,161.7	\$ (242.0)	\$ 1,372.0
Net income	—	—	—	—	591.2	—	591.2
Other comprehensive loss	—	—	—	—	—	(408.8)	(408.8)
Treasury stock acquired (4,325,548 shares)	—	—	—	(333.3)	—	—	(333.3)
KSOP shares earned (181,198 shares reissued from treasury stock)	—	—	13.2	1.3	—	—	14.5
Stock options exercised, including tax benefit of \$22.1 (1,409,803 shares reissued from treasury stock)	—	—	56.2	10.2	—	—	66.4
Restricted stock lapsed, including tax benefit of \$1.2 (169,365 shares reissued from treasury stock)	—	—	—	1.2	—	—	1.2
Employee stock purchase plan (29,867 shares reissued from treasury stock)	—	—	2.1	0.2	—	—	2.3
Stock based compensation	—	—	29.9	—	—	—	29.9
Net share settlement from restricted stock awards (38,250 shares withheld for tax settlement)	—	—	(3.1)	—	—	—	(3.1)
Other stock issuances (26,106 shares reissued from treasury stock)	—	—	(0.1)	0.2	—	—	0.1
Balance, December 31, 2016	544,003,038	0.1	2,121.6	(2,891.4)	2,752.9	(650.8)	1,332.4
Net income	—	—	—	—	555.1	—	555.1
Other comprehensive income	—	—	—	—	—	238.5	238.5
Treasury stock acquired (3,356,360 shares)	—	—	—	(269.8)	—	—	(269.8)
Stock options exercised (1,125,004 shares reissued from treasury stock)	—	—	28.7	9.2	—	—	37.9
Restricted stock lapsed (143,557 shares reissued from treasury stock)	—	—	(1.1)	1.1	—	—	—
Employee stock purchase plan (29,605 shares reissued from treasury stock)	—	—	2.2	0.2	—	—	2.4
Stock based compensation	—	—	31.8	—	—	—	31.8
Net share settlement from restricted stock awards (36,067 shares withheld for tax settlement)	—	—	(2.9)	—	—	—	(2.9)
Other stock issuances (21,352 shares reissued from treasury stock)	—	—	(0.2)	0.2	—	—	—
Balance, December 31, 2017	544,003,038	0.1	2,180.1	(3,150.5)	3,308.0	(412.3)	1,925.4
Adjustments to opening retained earnings related to Topic 606 and ASU 2016-01	—	—	—	—	35.9	(0.7)	35.2
Net income	—	—	—	—	598.7	—	598.7
Other comprehensive loss	—	—	—	—	—	(178.9)	(178.9)
Treasury stock acquired (3,882,467 shares)	—	—	—	(438.6)	—	—	(438.6)
Stock options exercised (2,752,735 shares reissued from treasury stock)	—	—	66.8	24.0	—	—	90.8
Restricted stock lapsed (176,610 shares reissued from treasury stock)	—	—	(1.5)	1.5	—	—	—
Employee stock purchase plan (30,550 shares reissued from treasury stock)	—	—	2.9	0.3	—	—	3.2
Stock based compensation	—	—	38.5	—	—	—	38.5
Net share settlement from restricted stock awards (35,637 shares withheld for tax settlement)	—	—	(3.7)	—	—	—	(3.7)
Other stock issuances (14,052 shares reissued from treasury stock)	—	—	(0.1)	0.1	—	—	—
Balance, December 31, 2018	544,003,038	\$ 0.1	\$ 2,283.0	\$ (3,563.2)	\$ 3,942.6	\$ (591.9)	\$ 2,070.6

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

**VERISK ANALYTICS, INC.**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
**For The Years Ended December 31, 2018 , 2017 and 2016**

	2018	2017	2016
	(in millions)		
<b>Cash flows from operating activities:</b>			
Net income	\$ 598.7	\$ 555.1	\$ 591.2
<b>Adjustments to reconcile net income to net cash provided by operating activities:</b>			
Depreciation and amortization of fixed assets	165.3	135.6	126.2
Amortization of intangible assets	130.8	101.8	98.4
Amortization of debt issuance costs and original issue discount	4.2	4.2	5.0
Provision for doubtful accounts	5.6	2.0	2.4
KSOP stock based compensation expense	—	—	14.5
Realized gain on settlement of subordinated promissory note	(12.3)	—	—
Stock based compensation	38.5	31.8	30.0
Gain on sale of subsidiary	—	—	(265.9)
Realized loss on securities, net	0.1	—	0.5
Gain on sale of non-controlling equity investments in non-public companies	—	—	(1.5)
Deferred income taxes	18.3	(73.6)	14.8
Loss on disposal of fixed assets	0.3	0.1	1.0
<b>Changes in assets and liabilities, net of effects from acquisitions:</b>			
Accounts receivable	(17.4)	(45.5)	(5.7)
Prepaid expenses and other assets	(28.2)	(30.6)	(26.5)
Income taxes	(2.9)	22.7	8.7
Accounts payable and accrued liabilities	67.8	28.5	(2.6)
Deferred revenues	0.8	29.2	(8.2)
Other liabilities	(35.2)	(17.8)	(4.8)
Net cash provided by operating activities	934.4	743.5	577.5
<b>Cash flows from investing activities:</b>			
Acquisitions, net of cash acquired of \$3.3 million, \$29.9 million and \$2.1 million, respectively	(138.2)	(873.3)	(67.7)
Escrow funding associated with acquisitions	(14.9)	(41.6)	(6.4)
Proceeds from sale of subsidiary	—	—	714.6
Proceeds from subordinated promissory note	121.4	—	—
Capital expenditures	(231.0)	(183.5)	(156.5)
Purchases of available-for-sale securities	(0.1)	(0.3)	(0.3)
Proceeds from sales and maturities of available-for-sale securities	0.5	0.4	0.5
Other investing activities, net	(3.1)	(7.2)	9.0
Net cash (used in) provided by investing activities	(265.4)	(1,105.5)	493.2



**VERISK ANALYTICS, INC.**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS (Continued)**  
**For The Years Ended December 31, 2018 , 2017 and 2016**

	2018	2017	2016
	(in millions)		
<b>Cash flows from financing activities:</b>			
Proceeds from issuance of short-term debt with original maturities greater than three months	—	455.0	—
(Repayments) proceeds from short-term debt, net	(300.0)	160.0	(770.0)
Payment of debt issuance costs	—	(0.5)	(0.5)
Repurchases of common stock	(438.6)	(276.3)	(326.8)
Net share settlement of taxes from restricted stock awards	(3.7)	(2.9)	(3.1)
Proceeds from stock options exercised	87.3	35.0	41.1
Other financing activities, net	(14.8)	(7.8)	(4.9)
Net cash (used in) provided by financing activities	(669.8)	362.5	(1,064.2)
Effect of exchange rate changes	(2.0)	6.7	(9.7)
(Decrease) increase in cash and cash equivalents	(2.8)	7.2	(3.2)
Cash and cash equivalents, beginning of period	142.3	135.1	138.3
Cash and cash equivalents, end of period	\$ 139.5	\$ 142.3	\$ 135.1
<b>Supplemental disclosures:</b>			
Income taxes paid	\$ 103.2	\$ 186.3	\$ 289.2
Interest paid	\$ 125.2	\$ 113.9	\$ 116.6
<b>Noncash investing and financing activities:</b>			
Repurchases of common stock included in accounts payable and accrued liabilities	\$ —	\$ —	\$ 6.5
Promissory note received for sale of discontinued operations	\$ —	\$ —	\$ 82.9
Equity interest received for sale of discontinued operations	\$ —	\$ —	\$ 8.4
Deferred tax liability established on the date of acquisitions	\$ 5.6	\$ 74.4	\$ 4.7
Tenant improvement allowance	\$ 0.3	\$ —	\$ 0.1
Capital lease obligations	\$ 21.3	\$ 10.9	\$ 11.7
Capital expenditures included in accounts payable and accrued liabilities	\$ 0.3	\$ 2.9	\$ 1.9

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

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**(Amounts in millions, except for share and per share data, unless otherwise stated)**

**1. Organization:**

Verisk Analytics, Inc. and its consolidated subsidiaries (“Verisk” or the “Company”) is a data analytics provider serving customers in insurance, energy and specialized markets, and financial services. Using various technologies to collect and analyze billions of records, Verisk draws on numerous data assets and domain expertise to provide first-to-market innovations that are integrated into customer workflows. Verisk offers predictive analytics and decision support solutions to customers in rating, underwriting, claims, catastrophe and weather risk, global risk analytics, natural resources intelligence, economic forecasting, and many other fields. Around the world, Verisk helps customers protect people, property, and financial assets.

Verisk was established to serve as the parent holding company of Insurance Services Office, Inc. (“ISO”) upon completion of the initial public offering (“IPO”), which occurred on October 9, 2009. ISO was formed in 1971 as an advisory and rating organization for the property and casualty (“P&C”) insurance industry to provide statistical and actuarial services, to develop insurance programs and to assist insurance companies in meeting state regulatory requirements. For over the past decade, the Company broadened its data assets, entered new markets, placed a greater emphasis on analytics, and pursued strategic acquisitions. Verisk trades under the ticker symbol “VRSK” on the NASDAQ Global Select Market.

**2. Basis of Presentation and Summary of Significant Accounting Policies:**

The accompanying consolidated financial statements have been prepared on the basis of accounting principles generally accepted in the United States of America (“U.S. GAAP”). The preparation of financial statements in conformity with these accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Significant estimates include acquisition purchase price allocations, the fair value of goodwill, the realization of deferred tax assets, acquisition related liabilities, fair value of stock based compensation for equity awards granted, and assets and liabilities for pension and postretirement benefits. Actual results may ultimately differ from those estimates. Certain reclassifications have been made within the consolidated financial statements and in the notes to conform to the respective 2018 presentation.

As of January 1, 2018, the Company adopted Accounting Standards Update (“ASU”) 2014-09, *Revenue from Contracts with Customers* (“Topic 606”) and ASU No. 2016-01, *Recognition and Measurement of Financial Assets and Financial Liabilities* (“ASU No. 2016-01”) under the modified retrospective method. An aggregate adjustment of \$35.2 million was made to the opening retained earnings in relation to the adoption of these standards (See Notes 6, 7 and 16). In addition, effective the first quarter of 2018, the operating segments of the Company are Insurance, Energy and Specialized Markets, and Financial Services. Previously, its operating segments were Decision Analytics and Risk Assessment. (See Note 19).

The Company sold its healthcare business on June 1, 2016. The results of operations for the Company's healthcare business are reported as discontinued operations for the year ended December 31, 2016 (See Note 11).

Significant accounting policies include the following:

(a) *Intercompany Accounts and Transactions*

The consolidated financial statements include the accounts of Verisk. All intercompany accounts and transactions have been eliminated.

(b) *Revenue Recognition*

The following describes the Company's primary types of revenues and the applicable revenue recognition policies. The Company recognizes revenues through agreements (generally one to five years) for hosted subscriptions, advisory/consulting services, and for transactional solutions. Each of our reportable segments, Insurance, Energy and Specialized Markets, and Financial Services has a portion of its revenue from more than one of these revenue types. The Company's revenues are primarily derived from the sales of services and revenue is recognized when control of the promised services is transferred to the customers, in an amount that reflects the consideration that the Company expects to be entitled to in exchange for those services. Fees for services provided by the Company are nonrefundable. Revenue is recognized net of applicable sales tax withholdings.

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

### *Hosted Subscriptions*

The Company offers two forms of hosted subscriptions. The first and most prevalent form of hosted subscription is where customers access content only through the online portal (the "Hosted Subscription"). The Company grants a license to the customer to enter the online portal. The license is a contractual mechanism that allows the customer to access the online portal for a defined period of time. As the license alone does not provide utility to the customer, the customer has no contractual right to take possession of the online portal at any time, and the customer cannot engage another party to host the online portal and related content, it is not considered a functional license under Topic 606. The Company's promise to the customer is to provide continuous access to the online portal and to update the content throughout the subscription period. Hosted Subscription is a single performance obligation that represents a series of distinct services (daily access to the online portal and related content) that are substantially the same and that have the same pattern of transfer to the customer. The Company recognizes revenue for Hosted Subscriptions ratably over the subscription period on a straight-line basis as services are performed and continuous access to information in the online portal is provided over the entire term of the agreements.

The second form of hosted subscription is where customers have access to the Company's online portals combined with software content that is delivered via disk drive/download to the customer ("Hosted Subscription with Disk Drive/Download") and is offered only on a limited basis. For this form of hosted subscription, the Company also grants the customer a license to enter the online portal and access the software content as needed and acts as the same contractual mechanism as described for Hosted Subscriptions. The Hosted Subscription with Disk Drive/Download works in such a manner that the customer gains significant benefit, functionality and overall utility only when the online portal and the software content are used together. The disk drive/download contains the models and the online portal contains the most up to date data and research which is updated throughout the subscription period. The models within the disk drive/download depend on the data and research contained within the online portal. The data and research within the online portal is only useful when the customer can utilize it within the models (e.g., queries, projections, etc.) so that they may use the most current information and alerts to forecast potential future losses. The software content is only sold together with the online portal to provide a highly interdependent and interrelated promise and therefore represents a single performance obligation. As the customer has no contractual right to take possession of the online portal at any time, and the customer cannot engage another party to host the online portal and related software content, it is not considered a functional license under Topic 606. The Company's promise to the customer is to deliver the disk drive/download, to provide continuous access to the online portal, and to update the software content throughout the subscription period. The Company recognizes revenue for Hosted Subscriptions with Disk Drive/Download ratably over the subscription period on a straight-line basis as services are performed and continuous access to information is provided over the entire term of the agreements.

Subscriptions are generally paid in advance of rendering services either quarterly or annually upon commencement of the subscription period, which is usually for one year and in most instances automatically renewed each year.

### *Advisory/Consulting Services*

The Company provides certain discrete project based advisory/consulting services, which are recognized over time by measuring the progress toward complete satisfaction of the performance obligation, based on the input method of consulting hours worked; this aligns with the results achieved and value transferred to the customer. The hours consumed are most reflective of the measure of progress towards satisfying the performance obligation, as the resources hours worked directly tie to the progress of the services to be provided. In general, they are billed over the course of the project.

### *Transactional Solutions*

Certain solutions are also paid for by customers on a transactional basis. The Company recognizes these revenues as the solutions are delivered or services performed at point in time. In general, the customers are billed monthly at the end of each month.

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

(c) *Deferred Revenues*

The Company invoices its customers in annual, quarterly, monthly, or milestone installments. Amounts billed and collected in advance of earnings are recorded as “Deferred revenues” in the accompanying consolidated balance sheets and are recognized as the services are performed and the applicable revenue recognition criteria are met.

(d) *Accounts Receivables and Allowance for Doubtful Accounts*

Accounts receivables are generally recorded at the invoiced amount. The allowance for doubtful accounts is estimated based on an analysis of the aging of the accounts receivable, historical write-offs, customer payment patterns, individual customer credit worthiness, current economic trends, and/or establishment of specific reserves for customers in adverse financial condition. The Company assesses the adequacy of the allowance for doubtful accounts on a quarterly basis.

(e) *Deferred Commissions*

The Company recognizes an asset for the incremental costs of obtaining a contract with a customer if it expects the benefit of those costs to be longer than one year. The Company has determined that certain sales incentive programs meet the requirements to be capitalized. The incremental costs of obtaining a contract with a customer, which primarily consist of sales commissions, are deferred and amortized over a useful life of five years that is consistent with the transfer to the customer the services to which the asset relates. The Company classifies deferred commissions as current or noncurrent based on the timing of expense recognition. The current and noncurrent portions of deferred commissions are included in prepaid expenses and other assets, respectively, in the consolidated balance sheets as of December 31, 2018. Amortization expense related to deferred commissions is computed on a straight-line basis over its estimated useful lives and included in "Selling, general and administrative" within the accompanying consolidated statements of operations.

(f) *Fixed Assets and Finite-lived Intangible Assets*

Fixed assets and finite-lived intangibles are stated at cost less accumulated depreciation and amortization, which are computed on a straight-line basis over their estimated useful lives. Leasehold improvements are amortized over the shorter of the useful life of the asset or the lease term.

The Company’s internal software development costs primarily relate to internal-use software. Such costs are capitalized in the application development stage in accordance with ASC 350-40, *Internal-use Software*. The Company also capitalizes software development costs upon the establishment of technological feasibility for a product in accordance with Accounting Standards Codification ("ASC") 985-20, *Software to be Sold, Leased, or Marketed* (“ASC 985-20”). Software development costs are amortized on a straight-line basis over a three -year period, which management believes represents the useful life of these capitalized costs.

In accordance with ASC 360, *Property, Plant & Equipment*, whenever events or changes in circumstances indicate that the carrying amount of long-lived assets and finite-lived intangible assets may not be recoverable, the Company reviews its long-lived assets and finite-lived intangible assets for impairment by first comparing the carrying value of the assets to the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the assets. If the carrying value exceeds the sum of the assets’ undiscounted cash flows, the Company estimates and recognizes an impairment loss by taking the difference between the carrying value and fair value of the assets.

(g) *Capital and Operating Leases*

The Company leases various property, plant and equipment. Leased property is accounted for under ASC 840, *Leases* (“ASC 840”). Accordingly, leased property that meets certain criteria is capitalized and the present value of the related lease payments is recorded as a liability. Amortization of assets accounted for as capital leases is computed utilizing the straight-line method over the shorter of the remaining lease term or the estimated useful life (principally three to four years for computer equipment and automobiles).

All other leases are accounted for as operating leases. Rent expense for operating leases, which may have rent escalation provisions or rent holidays, is recorded on a straight-line basis over the non-cancelable lease period in accordance with ASC 840. The initial lease term generally includes the build-out period, where no rent payments are typically due under the terms of the lease. The difference between rent expensed and rent paid is recorded as deferred

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

rent. Construction allowances received from landlords are recorded as a deferred rent credit and amortized to rent expense over the term of the lease.

(h) *Fair Value of Financial and Non-financial Instruments*

The Company follows the provisions of ASC 820-10, *Fair Value Measurements* (“ASC 820-10”), which defines fair value, establishes a framework for measuring fair value under U.S. GAAP and expands fair value measurement disclosures. The Company follows the provisions of ASC 820-10 for its financial assets and liabilities recognized or disclosed at fair value on a recurring basis. The Company follows the provisions of ASC 820-10 for its non-financial assets and liabilities recognized or disclosed at fair value.

(i) *Foreign Currency*

The Company has determined local currencies are the functional currencies of the foreign operations. The assets and liabilities of foreign subsidiaries are translated at the period-end rate of exchange and statement of operations items are translated at the average rates prevailing during the year. The resulting translation adjustment is recorded as a component of “Accumulated other comprehensive losses” in the accompanying consolidated statements of changes in stockholders’ equity.

(j) *Stock Based Compensation*

The Company follows ASC 718, *Stock Compensation* (“ASC 718”). Under ASC 718, stock based compensation cost is measured at the grant date, based on the fair value of the awards granted, and is recognized as expense over the requisite service period.

The nonqualified stock options have an exercise price equal to the closing price of the Company’s common stock on the grant date, with a ten - year contractual term. The expected term for the stock options granted for a majority of the awards granted was estimated based on studies of historical experience and projected exercise behavior. However, for certain awards granted, for which no historical exercise pattern exists, the expected term was estimated using the simplified method. The risk-free interest rate is based on the yield of U.S. Treasury zero coupon securities with a maturity equal to the expected term of the equity award. The volatility factor is calculated using the Company’s historical daily closing prices over the most recent period that is commensurate with the expected term of the stock option awards. The expected dividend yield was based on the Company’s expected annual dividend rate on the date of grant.

The fair value of the restricted stock is determined using the closing price of the Company’s common stock on the grant date. The restricted stock is not assignable or transferable until it becomes vested. Restricted stock generally has a service vesting period of four years and the Company recognizes the expense ratably over this service vesting period.

Performance share units (“PSU”) vest at the end of a three -year performance period, subject to the recipient’s continued service. Each PSU represents the right to receive one share of Verisk common stock and the ultimate realization is based on the Company’s achievement of certain market performance criteria. The Company determined the grant date fair value of PSUs with the assistance of a third-party valuation specialist and based on estimates provided by the Company. The valuation of the PSUs employed the Monte Carlo simulation model, which includes certain key assumptions that were applied to the Company and its peer group. Those key assumptions included valuation date stock price, expected volatility, correlation coefficients, risk-free rate of return, and expected dividend yield. The valuation date stock price is based on the dividend-adjusted closing price on the grant date. Expected volatility is calculated using historical daily closing prices over a period that is commensurate with the length of the performance period. The correlation coefficients are based on the price data used to calculate the historical volatilities. The risk-free rate of return is based on the yield of U.S. Treasury zero coupon securities with a maturity equal to the length of the performance period. The expected dividend yield was based on the Company and its peer group’s expected dividend rate over the performance period.

The Company estimates expected forfeitures of equity awards at the date of grant and recognizes compensation expense only for those awards expected to vest. The forfeiture assumption is ultimately adjusted to the actual forfeiture rate. Estimated forfeiture is ultimately adjusted to actual forfeiture. Changes in the forfeiture assumptions may impact the total amount of expense ultimately recognized, as well as the timing of expense recognized over the requisite service period.

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

Excess tax benefit from exercised stock options, lapsing of restricted stock and PSUs is recorded as an income tax benefit in the accompanying consolidated statements of operations. This tax benefit is calculated as the excess of the intrinsic value of options exercised and of the market value of restricted stock lapsed over the compensation recognized for financial reporting purposes.

(k) *Research and Development Costs*

Research and development costs, which are primarily related to personnel and related overhead costs incurred in developing new services for customers, are expensed as incurred. Such costs were \$47.6 million, \$37.4 million and \$27.4 million for the years ended December 31, 2018, 2017 and 2016, respectively, and were included in the accompanying consolidated statements of operations.

(l) *Advertising Costs*

Advertising costs, which are primarily associated with promoting the Company's brand, names and solutions provided, are expensed as incurred. Such costs were \$9.0 million, \$6.9 million and \$6.5 million for the years ended December 31, 2018, 2017 and 2016, respectively.

(m) *Income Taxes*

The Company accounts for income taxes under the asset and liability method under ASC 740, *Income Taxes* ("ASC 740"), which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial statements and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date.

Deferred tax assets are recorded to the extent these assets are more likely than not to be realized. In making such determination, the Company considers all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax planning strategies and recent financial operations. Valuation allowances are recognized to reduce deferred tax assets if it is determined to be more likely than not that all or some of the potential deferred tax assets will not be realized.

The Company follows ASC 740-10, *Income Taxes* ("ASC 740-10"), which clarifies the accounting for uncertainty in income taxes recognized in the financial statements. ASC 740-10 provides that a tax benefit from an uncertain tax position may be recognized based on the technical merits when it is more likely than not that the position will be sustained upon examination, including resolutions of any related appeals or litigation processes. Income tax positions must meet a more likely than not recognition threshold in accordance with ASC 740-10. This standard also provides guidance on measurement, derecognition, classification, interest and penalties, accounting in interim periods, disclosure, and transition.

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 included within "Other liabilities" on the accompanying consolidated balance sheets.

(n) *Earnings Per Share*

Basic and diluted earnings per share ("EPS") are determined in accordance with ASC 260, *Earnings per Share*, which specifies the computation, presentation and disclosure requirements for EPS. Basic EPS excludes all dilutive common stock equivalents. It is based upon the weighted average number of common shares outstanding during the period. Diluted EPS, as calculated using the treasury stock method, reflects the potential dilution that would occur if the Company's dilutive outstanding stock options and stock awards were issued.

(o) *Pension and Postretirement Benefits*

The Company accounts for its pension and postretirement benefits under ASC 715, *Compensation — Retirement Benefits* ("ASC 715"). ASC 715 requires the recognition of the funded status of a benefit plan in the balance sheet, the recognition in other comprehensive income (loss) of gains or losses and prior service costs arising during the period, but which are not included as components of periodic benefit cost or credit, and the measurement of

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

defined benefit plan assets and obligations as of the balance sheet date. The Company utilizes a valuation date of December 31.

(p) *Product Warranty Obligations*

The Company provides warranty coverage for certain of its solutions. The Company recognizes a product warranty obligation when claims are probable and can be reasonably estimated. As of December 31, 2018 and 2017, product warranty obligations were not material.

In the ordinary course of business, the Company enters into numerous agreements that contain standard indemnities whereby the Company indemnifies another party for breaches of confidentiality, infringement of intellectual property or gross negligence. Such indemnifications are primarily granted under licensing of computer software. Most agreements contain provisions to limit the maximum potential amount of future payments that the Company could be required to make under these indemnifications; however, the Company is not able to develop an estimate of the maximum potential amount of future payments to be made under these indemnifications as the triggering events are not subject to predictability.

(q) *Loss Contingencies*

The Company accrues for costs relating to litigation, claims and other contingent matters when such liabilities become probable and reasonably estimable. Such estimates are based on management's judgment. Actual amounts paid may differ from amounts estimated, and such differences will be charged to operations in the period in which the final determination of the liability is made.

(r) *Goodwill*

Goodwill represents the excess of acquisition costs over the fair value of tangible net assets and identifiable intangible assets of the businesses acquired. Goodwill and intangible assets deemed to have indefinite lives are not amortized. Intangible assets determined to have finite lives are amortized over their useful lives. Goodwill and intangible assets with indefinite lives are subject to impairment testing annually as of June 30 or whenever events or changes in circumstances indicate that the carrying amount may not be fully recoverable. The Company completed the required annual impairment test as of June 30, 2018, which resulted in no impairment of goodwill in 2018. This test compares the carrying value of each reporting unit to its fair value. If the fair value of the reporting unit exceeds the carrying value of the net assets, including goodwill assigned to that reporting unit, goodwill is not impaired. If the carrying value of the reporting unit's net assets, including goodwill, exceeds the fair value of the reporting unit, then the Company will determine the implied fair value of the reporting unit's goodwill. If the carrying value of a reporting unit's goodwill exceeds its implied fair value, then an impairment loss is recorded for the difference between the carrying amount and the implied fair value of the goodwill.

(s) *Recent Accounting Pronouncements*

In February 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2016-02, *Leases* ("ASU No. 2016-02"). This guidance amends the existing accounting considerations and treatments for leases through the creation of Topic 842, *Leases*, to increase transparency and comparability among organizations by requiring the recognition of right-of-use ("ROU") assets and lease liabilities on the balance sheet. Lessees and lessors are required to disclose qualitative and quantitative information about leasing arrangements to enable a user of the financial statements to assess the amount, timing and uncertainty of cash flows arising from such leases.

In July 2018, FASB issued ASU No. 2018-10, *Codification Improvements to Topic 842, Leases*, ("ASU No. 2018-10") to further clarify, correct and consolidate various areas previously discussed in ASU 2016-02. FASB also issued ASU No. 2018-11, *Leases: Targeted Improvements* ("ASU 2018-11") to provide entities another option for transition and lessors with a practical expedient. The transition option allows entities to not apply ASU No. 2016-02 in comparative periods in the financial statements in the year of adoption. The practical expedient offers lessors an option to not separate non-lease components from the associated lease components when certain criteria are met.

The amendments in ASU No. 2016-02, ASU No. 2018-10 and ASU No. 2018-11 are effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years, and allow for modified retrospective adoption with early adoption permitted. The Company adopted the amendments on January 1, 2019 using the modified retrospective approach and elected the transition relief package of practical expedients by applying

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

previous accounting conclusions under ASC 840 to all leases that existed prior to the transition date. As a result, the Company did not reassess 1) whether existing or expired contracts contain leases, 2) lease classification for any existing or expired leases, and 3) whether lease origination costs qualified as initial direct costs. The Company did not elect the practical expedient to use hindsight in determining a lease term and impairment of the ROU assets at the adoption date. Additionally, the Company did not separate lease components from non-lease components for the specified asset classes .

The Company established a corporate implementation team, which engages with cross-functional representatives from all its businesses. The Company utilized a bottom-up approach to analyze the impact of the standard on its lease contract portfolio by reviewing current accounting policies and practices to identify potential differences that would result from applying the requirements of the new standard to lease arrangements. In addition, the Company identified and implemented the appropriate changes to its business processes, systems and controls to support recognition and disclosure under the new standard.

The Company determines if an arrangement is a lease at inception. A ROU asset represents the Company's right to use an underlying asset for the lease term and lease liabilities represent its obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are to be recognized at commencement date based on the present value of lease payments over the lease term. As most of the Company's operating leases do not provide an implicit rate, the Company uses an incremental borrowing rate based on the information available on the adoption date in determining the present value of lease payments. The implicit rate is to be applied when readily determinable. The operating lease ROU assets will also include any lease payments made and exclude lease incentives. Lease terms may include options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option. Lease expense for lease payments will be recognized on a straight-line basis over the lease term. Finance leases are to be included in property and equipment, other current liabilities, and other long-term liabilities within the consolidated balance sheets. The Company expects the adoption of ASC 842 to incrementally increase our assets and liabilities, respectively, by the ROU assets in the range of \$232.0 million to \$256.0 million and by the lease liabilities in the range of \$257.0 million to \$281.0 million . The impact to retained earnings is expected to be immaterial.

In August 2016, the FASB issued ASU No. 2016-15, *Classification of Certain Cash Receipts and Cash Payments* ("ASU No. 2016-15"). The amendments in this update provide guidance on various specific cash flow issues to reduce diversity in the practice of how certain transactions are classified in the statement of cash flows. The Company adopted ASU No. 2016-15 on January 1, 2018 and there was no impact to the consolidated statements of cash flows for the years ended December 31, 2017 and 2016 .

In January 2017, the FASB issued ASU No. 2017-01, *Clarifying the Definition of a Business* ("ASU No. 2017-01"). Under the amendments in this update, an acquisition would have to include an input and a substantive process that together significantly contribute to the ability to create outputs to be considered a business. In acquisitions where outputs are not present, FASB has developed more stringent criteria for sets without outputs. The Company adopted ASU No. 2017-01 on January 1, 2018. There was no material impact associated with the adoption of the standard.

In January 2017, the FASB issued ASU No. 2017-04, *Simplifying the Test for Goodwill Impairment* ("ASU No. 2017-04"). The guidance eliminates Step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. A goodwill impairment will now be the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. The same one-step impairment test will be applied to goodwill at all reporting units, even those with zero or negative carrying amounts. Entities will be required to disclose the amount of goodwill at reporting units with zero or negative carrying amounts. ASU 2017-04 is effective for its annual or any interim goodwill impairment tests in fiscal years beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The adoption of ASU No. 2017-04 is not expected to have a material impact on the Company's consolidated financial statements.

In March 2017, the FASB issued ASU No. 2017-07, *Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost* ("ASU No. 2017-07"). Employers are required to present the service cost component of net periodic benefit cost in the same income statement line items as other employee compensation costs arising from services rendered during the period. Only the service cost component will be eligible for capitalization in assets. The other components of the net periodic benefit cost should be separately presented from the line items that include the service cost and outside of any subtotal of operating income, if one is presented. The Company adopted

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

ASU No. 2017-07 on January 1, 2018. The adoption of ASU No. 2017-07 did not have a material impact on the Company's consolidated financial statements.

In May 2017, the FASB issued ASU No. 2017-09, *Scope of Modification Accounting* ("ASU 2017-09"), that clarifies when changes to the terms or conditions of a share-based payment award must be accounted for as modifications. Under the guidance within this update, a company will not apply modification accounting to a sharebased payment award if all of the following are the same immediately before and after the change:

- The award's fair value (or calculated value or intrinsic value, if those measurement methods are used)
- The award's vesting conditions
- The award's classification as an equity or liability instrument.

The Company adopted ASU No. 2017-09 on January 1, 2018. There was no material impact associated with the adoption of the standard.

In June 2018, FASB issued ASU No. 2018-07, *Improvements to Nonemployee Share-Based Payment Accounting* ("ASU No. 2018-07") intended to reduce cost and complexity and to improve financial reporting for share-based payments issued to nonemployees. This ASU expands the scope of Topic 718, *Compensation - Stock Compensation* ("Topic 718"), to include share-based payment transactions for acquiring goods and services from nonemployees. An entity should apply the requirements of Topic 718 to nonemployee awards except for specific guidance on inputs to an option pricing model and the attribution of cost. The Company adopted ASU No. 2018-07 on January 1, 2019. The adoption of the standard did not have a material impact on the Company's consolidated financial statements. The Company will evaluate the impact of ASU No. 2018-07 for future awards to nonemployees subsequent to the effective date.

In August 2018, FASB issued ASU No. 2018-13, *Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement* ("ASU No. 2018-13"), which eliminates, adds and modifies certain fair value measurement disclosure requirements of Accounting Standards Codification 820, *Fair Value Measurement* ("ASC 820"). The amendments in this ASU are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Early adoption is permitted. The Company has decided not to early adopt the amendments. The adoption of ASU No. 2018-13 is not expected to have a material impact on the Company's consolidated financial statements.

In August 2018, FASB issued ASU No. 2018-14, *Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plan* ("ASU 2018-14"), which removes, adds and clarifies certain disclosure requirements for employers who sponsor defined benefit pension and other postretirement plans. The amendments in this ASU are effective for fiscal years ending after December 15, 2020. Early adoption is permitted. The Company is evaluating the impact of ASU 2018-14, but it does not expect to have a material impact on the Company's consolidated financial statements.

In August 2018, FASB issued ASU No. 2018-15, *Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract* ("ASU No. 2018-15"). Under the amendments of this guidance, customers will apply the same criteria for capitalizing implementation costs as they would for an arrangement that has a software license. The guidance also prescribes the balance sheet, income statement, and cash flow classification of the capitalized implementation costs and related amortization expense, and requires additional quantitative and qualitative disclosures. The amendments in this ASU are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Early adoption is permitted. The Company will evaluate the impact of ASU No. 2018-15 for future implementation costs incurred subsequent to the effective date.

In October 2018, FASB issued ASU No. 2018-17, *Targeted Improvements to Related Party Guidance for Variable Interest Entities* ("ASU 2018-17"). There are two main provisions within this amendment. The Company considered the first provision, "Private Company Accounting Alternative", is not applicable. With respect to the second provision, "Decision-Making Fees", the standard amends how a decision maker or service provider determines whether its fee is a variable interest in a variable interest entity ("VIE") when a related party under common control also has an interest in the VIE. An entity should consider that indirect interests held by related parties on a proportionate basis for determining whether fees paid to decision makers and service providers are variable interests, which aligns the analysis with the primary beneficiary determination. The amendments in this ASU are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Early adoption is

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

permitted. The adoption of ASU No. 2018-17 is not expected to have a material impact on the Company's consolidated financial statements.

In November 2018, FASB issued ASU No. 2018-18, *Collaborative Arrangements* ("ASU No. 2018-18"). ASU No. 2018-18 clarifies certain transactions between collaborative partners should be accounted for as revenue under Topic 606 when the collaborative partner is a customer; provides guidance specifying that a distinct good or service is a unit of account for evaluating whether a transaction is with a customer; and precludes a company from presenting transactions with a collaborative partner that are not in the scope of Topic 606 together with revenue from contracts with customers. The amendments in this ASU are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Early adoption is permitted. The Company is currently evaluating ASU No. 2018-18 and has not yet determined the impact of these amendments may have on its consolidated financial statements.

### 3. Cash and Cash Equivalents:

Cash and cash equivalents consist of cash in banks, commercial paper, money-market funds, and other liquid instruments with original maturities of 90 days or less at the time of purchase.

### 4. Accounts Receivable:

Accounts receivable, net consisted of the following at December 31:

	2018	2017
Billed receivables	\$ 299.7	\$ 291.4
Unbilled receivables	62.4	58.7
Total receivables	362.1	350.1
Less allowance for doubtful accounts	(5.7)	(4.6)
Accounts receivable, net	\$ 356.4	\$ 345.5

### 5. Concentration of Credit Risk:

Financial instruments that potentially expose the Company to credit risk consist primarily of cash and cash equivalents, and accounts receivable, which are generally not collateralized. The Company maintains its cash and cash equivalents in higher credit quality financial institutions in order to limit the amount of credit exposure. The total domestic cash balances are insured by the Federal Deposit Insurance Corporation ("FDIC") to a maximum amount of \$250.0 thousand per bank at December 31, 2018 and 2017. At December 31, 2018 and 2017, the Company had cash balances on deposit that exceeded the balance insured by the FDIC limit by approximately \$16.8 million and \$40.6 million with eight and seven banks, respectively. At December 31, 2018 and 2017, the Company also had cash on deposit with foreign banks of approximately \$121.1 million and \$99.8 million, respectively.

The Company considers the concentration of credit risk associated with its trade accounts receivable to be commercially reasonable and believes that such concentration does not result in the significant risk of near-term severe adverse impacts. The Company's top fifty customers represent approximately 34% of revenues for 2018, 34% for 2017 and 30% for 2016 with no individual customer accounting for more than approximately 2% of revenues during the year ended December 31, 2018, 2% for 2017 and 2% for 2016. No individual customer comprised more than approximately 3% and 2% of accounts receivable at December 31, 2018 and 2017, respectively.

### 6. Revenues:

In May 2014, the FASB issued Topic 606, which replaces numerous requirements under Topic 605, *Revenue Recognition* ("Topic 605"), in U.S. GAAP, including industry-specific requirements, and provides companies with a single revenue recognition model for recognizing revenue from contracts with customers. The core principle of the new standard is that a company should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. Revenue is recognized in a five-step model: 1) identify the contract with a customer; 2) identify the performance obligations in the contract; 3) determine the transaction price; 4) allocate the transaction price to the performance obligations in the contract; and 5) recognize revenue when or as the company satisfies a performance obligation. Effective January 1, 2018, the Company adopted the requirements of Topic 606 using the modified retrospective method in which case the cumulative effect of applying the standard would be recognized at the date of initial application. The results of operations for reporting periods beginning

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

after January 1, 2018 are presented under Topic 606, while prior period amounts are not adjusted and continue to be reported in accordance with the historic accounting under Topic 605. The accounting policies related to Topic 605 were presented in the Form 10-K for the year ended December 31, 2017, for which the Company recognized revenue when the following four criteria were met: persuasive evidence of an arrangement existed, delivery had occurred or services had been rendered, fees and/or price was fixed or determinable, and collectability was reasonably assured.

The following table shows cumulative effect of the changes made to the January 1, 2018 consolidated balance sheet for the adoption of Topic 606 related to contracts that were entered into prior to and remained in progress subsequent to the adoption:

	December 31, 2017	Adjustments due to ASU 2014-09	January 1, 2018
Accounts receivable	\$ 345.5	\$ 3.0 <sup>(1)</sup>	\$ 348.5
Prepaid expenses	\$ 38.1	\$ 14.9 <sup>(2)</sup>	\$ 53.0
Other assets	\$ 214.5	\$ 27.0 <sup>(2)</sup>	\$ 241.5
Deferred revenues	\$ 384.7	\$ (1.5)	\$ 383.2
Deferred income tax liabilities	\$ 337.8	\$ 11.2	\$ 349.0
Retained earnings	\$ 3,308.0	\$ 35.2	\$ 3,343.2

(1) Relates to unbilled receivables

(2) Relates to current and non-current deferred commissions, respectively

In accordance with Topic 606, the disclosure of the impact of adoption on the accompanying consolidated statement of operations and the accompanying consolidated balance sheet for and as of the year ended December 31, 2018 are as follows:

	For the year ended December 31, 2018 under Topic 605	Adjustments due to ASU 2014-09	For the year ended December 31, 2018 under Topic 606
Revenues	\$ 2,394.4	\$ 0.7	\$ 2,395.1
Selling, general and administrative <sup>(3)</sup>	\$ 384.0	\$ (5.3)	\$ 378.7
Provision for income taxes	\$ (119.5)	\$ (1.5)	\$ (121.0)
Net income	\$ 594.2	\$ 4.5	\$ 598.7

(3) Includes deferred commission amortization under Topic 606

	As of December 31, 2018 under Topic 605	Adjustments due to ASU 2014-09	As of December 31, 2018 under Topic 606
Accounts receivable	\$ 351.7	\$ 4.7	\$ 356.4
Prepaid expenses	\$ 47.0	\$ 16.9	\$ 63.9
Other assets	\$ 66.9	\$ 32.6	\$ 99.5
Accounts payable and accrued liabilities	\$ 261.2	\$ 2.3	\$ 263.5
Deferred revenues	\$ 383.6	\$ (0.5)	\$ 383.1
Deferred income tax liabilities	\$ 337.9	\$ 12.7	\$ 350.6
Retained earnings	\$ 3,902.9	\$ 39.7	\$ 3,942.6

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

Disaggregated revenues by type of service and by country are provided below for the years ended December 31, 2018, 2017 and 2016. No individual country outside of the U.S. accounted for 10.0% or more of the Company's consolidated revenues for the years ended December 31, 2018, 2017 or 2016.

	2018	2017	2016
<b>Insurance:</b>			
Underwriting & rating	\$ 1,144.5	\$ 1,046.9	\$ 970.5
Claims	561.4	503.7	448.6
Total Insurance	1,705.9	1,550.6	1,419.1
Energy and Specialized Markets	513.3	444.6	442.8
Financial Services	175.9	150.0	133.3
Total revenues	\$ 2,395.1	\$ 2,145.2	\$ 1,995.2

	2018	2017	2016
<b>Revenues:</b>			
U.S.	\$ 1,849.4	\$ 1,679.4	\$ 1,543.9
U.K.	148.2	111.3	105.0
Other countries	397.5	354.5	346.3
Total revenues	\$ 2,395.1	\$ 2,145.2	\$ 1,995.2

The Company's remaining performance obligations represent future revenues not yet recorded for services that have not yet been performed. The Company's most significant remaining performance obligations relate to providing customers with the right to use and update the online content over the remaining contract term. Revenues expected to be recognized in the future related to performance obligations, included within our deferred revenue and other liabilities, that are unsatisfied at December 31, 2018 are \$385.1 million. Our disclosure of the timing for satisfying the performance obligation is based on the requirements of contracts with customers. However, from time to time, these contracts may be subject to modifications, impacting the timing of satisfying the performance obligations. These performance obligations, which are expected to be satisfied within one year, comprised approximately 99% of the balance at December 31, 2018.

#### 7. Contract Assets and Contract Liabilities

Contract assets are defined as an entity's right to consideration in exchange for goods or services that the entity has transferred to a customer when that right is conditioned on something other than the passage of time. As of December 31, 2018 and January 1, 2018, the Company had no contract assets. Contract liabilities are defined as an entity's obligation to transfer goods or services to a customer for which the entity has received consideration (an amount of consideration is due) from the customer. As of December 31, 2018 and January 1, 2018, the Company had contract liabilities of \$385.1 million and \$386.7 million, respectively. The \$1.6 million decrease in contract liabilities from January 1, 2018 to December 31, 2018 was primarily due to billings of \$833.6 million that were paid in advance, partially offset by \$835.2 million of revenue recognized in the year ended December 31, 2018. Contract liabilities are included in "Deferred revenues" and "Other liabilities" in the accompanying consolidated balance sheet as of December 31, 2018.

#### 8. Fair Value Measurements:

Certain assets and liabilities of the Company are reported at fair value in the accompanying consolidated balance sheets. Such assets and liabilities include amounts for both financial and non-financial instruments. To increase consistency and comparability of assets and liabilities recorded at fair value, ASC 820-10 establishes a three-level fair value hierarchy to prioritize the inputs to valuation techniques used to measure fair value. ASC 820-10 requires disclosures detailing the extent to which companies' measure assets and liabilities at fair value, the methods and assumptions used to measure fair value and the effect of fair value measurements on earnings. In accordance with ASC 820-10, the Company applied the following fair value hierarchy:

Level 1 — Assets or liabilities for which the identical item is traded on an active exchange, such as publicly-traded instruments.

Level 2 — Assets and liabilities valued based on observable market data for similar instruments.

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

Level 3 — Assets or liabilities for which significant valuation assumptions are not readily observable in the market; instruments valued based on the best available data, some of which is internally-developed, and considers risk premiums that a market participant would require.

The following table provides information for such assets and liabilities as of December 31, 2018 and 2017. The fair values of cash and cash equivalents, accounts receivable, securities accounted for under ASC 323-10-25, accounts payable and accrued liabilities, and short-term debt approximate their carrying amounts because of the short-term nature of these instruments.

The following table summarizes fair value measurements by level for registered investment companies that were measured at fair value on a recurring basis:

	<b>Quoted Prices in Active Markets for Identical Assets (Level 1)</b>
<b>December 31, 2018</b>	
Registered investment companies <sup>(1)</sup>	\$ 3.3
<b>December 31, 2017</b>	
Registered investment companies <sup>(1)</sup>	\$ 3.8

<sup>(1)</sup> Registered investment companies are classified as available-for-sale securities, which were included in "Other current assets" in the accompanying consolidated balance sheets. These assets are valued using quoted prices in active markets multiplied by the number of shares owned.

The Company had elected to carry its subordinated promissory note receivable and long-term debt at carrying value. The subordinated promissory note had a face value of \$100.0 million, an interest rate of 9.0% that was paid-in kind and an eight year maturity with a prepayment option without penalty. As of December 31, 2017, the carrying value of the subordinated promissory note receivable was included in "Other assets" in the accompanying consolidated balance sheets. On August 27, 2018, the debtor chose to exercise their prepayment option to settle the subordinated promissory note receivable in full. As a result of the settlement of the note receivable, the Company recorded a gain of \$12.3 million during the year ended December 31, 2018, which was included in "Investment income and others, net" in the accompanying consolidated statements of operations. The carrying value of the long-term debt represents amortized cost less unamortized discount and debt issuance costs. The Company assesses the fair value of these financial instruments based on an estimate of interest rates available to the Company for financial instruments with similar features, the Company's current credit rating and spreads applicable to the Company. The following table summarizes the carrying value and estimated fair value of these financial instruments as of December 31, 2018 and 2017 respectively:

		2018		2017	
		Fair Value Hierarchy	Carrying Value	Estimated Fair Value	Carrying Value
<b>Financial instrument not carried at fair value:</b>					
Subordinated promissory note receivable	Level 2	\$ —	\$ —	\$ 95.3	\$ 83.3
Long-term debt excluding capitalized leases	Level 2	\$ 2,031.0	\$ 2,347.4	\$ 2,280.6	\$ 2,439.8

The Company received a 10.0% non-participating interest in VCVH Holdings LLC ("VCVH") in 2016 with the sale of the Company's healthcare business. As of December 31, 2018 and 2017, the balance of this investment was \$8.4 million and accounted for as a cost-based investment under ASC 323-10-25, *The Equity Method of Accounting for Investments in Common Stock* ("ASC 323-10-25"), because the interest is currently non-participating, and the Company does not have the ability to exercise significant influence over the investees' operating and financial policies. As of December 31, 2018, the Company also had an investment in a limited partnership of \$5.9 million accounted for in accordance with ASC 323-10-25 as an equity method investment.

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

**9. Fixed Assets**

The following is a summary of fixed assets:

	Useful Life	Cost	Accumulated Depreciation and Amortization	Net
<b>December 31, 2018</b>				
Furniture and office equipment	3-10 years	\$ 260.1	\$ (198.8)	\$ 61.3
Leasehold improvements	Lease term	111.9	(46.6)	65.3
Purchased software	3 years	122.6	(104.4)	18.2
Software development costs	3-7 years	654.6	(316.6)	338.0
Leased equipment	3-4 years	36.2	(31.7)	4.5
Aircraft equipment	2-10 years	81.1	(12.5)	68.6
Total fixed assets		<u>\$ 1,266.5</u>	<u>\$ (710.6)</u>	<u>\$ 555.9</u>
<b>December 31, 2017</b>				
Furniture and office equipment	3-10 years	\$ 276.2	\$ (183.5)	\$ 92.7
Leasehold improvements	Lease term	83.1	(40.7)	42.4
Purchased software	3 years	123.0	(97.6)	25.4
Software development costs	3-7 years	525.3	(230.9)	294.4
Leased equipment	3-4 years	35.0	(29.7)	5.3
Aircraft equipment	2-10 years	20.4	(2.3)	18.1
Total fixed assets		<u>\$ 1,063.0</u>	<u>\$ (584.7)</u>	<u>\$ 478.3</u>

Depreciation and amortization of fixed assets for the years ended December 31, 2018, 2017 and 2016 were \$165.3 million, \$135.6 million and \$119.1 million, of which \$85.4 million, \$58.0 million and \$43.6 million related to amortization of internal-use software development costs, respectively. Amortization expense related to development of software for sale in accordance with ASC 985-20 was \$9.7 million, \$9.5 million and \$9.2 million for the years ended December 31, 2018, 2017 and 2016, respectively. The Company had unamortized software development costs that had been capitalized in accordance with ASC 985-20 of \$19.9 million, \$19.4 million and \$25.6 million as of December 31, 2018, 2017 and 2016, respectively. Leased assets include amounts held under capital leases for automobiles, computer software, computer equipment and aircraft equipment.

**10. Acquisitions**
*2018 Acquisitions*

On December 14, 2018, the Company acquired Rulebook for a net cash purchase price of \$86.1 million, of which \$8.6 million represents contingent escrows. Rulebook's proprietary pricing engine can be used for internal pricing and underwriting as well as external distribution for the insurance market through its platform. Rulebook furthers the Company's goal of providing solutions to the global insurance market, including a comprehensive chain of solutions to specialty insurers for mitigating risk and optimizing total cost of operations. Rulebook is part of the underwriting and ratings category within the Insurance segment. The preliminary purchase price allocation of the acquisition is presented in the table below.

On June 20, 2018, the Company acquired 100 percent of the stock of Validus-IVC Limited ("Validus"), a provider of claims management solutions and developer of the subrogation portal in the UK, verify™, for a net cash purchase price of \$46.1 million, of which \$5.9 million represents contingent escrows. Validus has become part of the claims category within the Company's Insurance segment. The integration of Validus' verify™ platform with the Company's global claims analytic services allows insurers to take advantage of enhanced analytic and technology tools to help improve and automate the claims settlement process. The preliminary purchase price allocation of the acquisition is presented in the table below.

On February 21, 2018, the Company acquired 100 percent of the stock of Business Insight Limited ("Business Insight"), a provider of predictive analytics for insurers in the U.K. and Ireland, for a net cash purchase price of \$17.1 million, including a holdback of \$0.9 million. Business Insight has become part of the underwriting and ratings category within the Insurance segment. Business Insight offers a comprehensive set of peril models to support underwriting and rating for the

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

commercial property and homeowners insurance market. The preliminary purchase price allocation of the acquisition is presented as part of "Others" in the table below.

On January 5, 2018, the Company acquired 100 percent of the stock of Marketview Limited ("Marketview") for a net cash purchase price of \$4.0 million, of which \$0.4 million represents indemnity escrows. Marketview is a provider of consumer spending analysis and insights across the retail, hospitality, property, and government sectors in New Zealand. Marketview has become part of the Financial Services segment. The acquisition helps expand the Company's solutions related to consumer spending analytics across the Australasia and Oceania regions by combining its domain expertise and proprietary data assets with those of Marketview. The preliminary purchase price allocation of the acquisition is presented as part of "Others" in the table below.

The preliminary purchase price allocations of the 2018 acquisitions resulted in the following:

	Rulebook	Validus	Others	Total
Cash and cash equivalents	\$ 0.2	\$ 0.9	\$ 2.2	\$ 3.3
Accounts receivable	2.3	1.5	1.1	4.9
Current assets	—	6.2	0.3	6.5
Fixed assets	—	0.4	0.2	0.6
Intangible assets	25.1	20.9	8.4	54.4
Goodwill	60.2	24.7	16.3	101.2
Other assets	8.6	—	0.4	9.0
Total assets acquired	96.4	54.6	28.9	179.9
Current liabilities	0.7	4.2	1.0	5.9
Deferred revenues	—	0.1	1.4	1.5
Deferred income taxes, net	0.8	3.2	1.6	5.6
Other liabilities	8.6	0.1	1.3	10.0
Total liabilities assumed	10.1	7.6	5.3	23.0
Net assets acquired	86.3	47.0	23.6	156.9
Less: Cash acquired	(0.2)	(0.9)	(2.2)	(3.3)
Net cash purchase price	\$ 86.1	\$ 46.1	\$ 21.4	\$ 153.6

The preliminary amounts assigned to intangible assets by type for the 2018 acquisitions are summarized in the table below:

	Weighted Average Useful Life	Total
Technology-based	6 years	\$ 30.3
Marketing-related	9 years	4.0
Customer-related	10 years	20.1
Total intangible assets		\$ 54.4

The preliminary allocations of the purchase price for the 2018 acquisitions are subject to revisions as additional information is obtained and assessed about the facts and circumstances that existed as of each acquisition date. The revisions may have a significant impact on the condensed consolidated financial statements. The allocations of the purchase price will be finalized once all information is obtained, but not to exceed one year from the acquisition date. The primary areas of the purchase price allocation that are not yet finalized relate to operating leases, income and non-income taxes, deferred revenues, the valuation of intangible assets acquired, and residual goodwill. The preliminary amounts assigned to intangible assets by type for these acquisitions were based upon the Company's valuation model and historical experiences with entities with similar business characteristics.

The goodwill of \$100.7 million associated with the purchases of Rulebook, Validus, Business Insight and Marketview is not deductible for tax purposes. For the year ended December 31, 2018, the Company incurred transaction costs related to acquisitions of \$1.5 million, which are included within "Selling, general and administrative" expenses in the accompanying consolidated statements of operations. Refer to Note 12. Goodwill and Intangible Assets for further discussion.

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

The 2018 acquisitions were immaterial, both individually and in the aggregate, to the Company's consolidated financial statements for the years ended December 31, 2018, 2017 and 2016 and therefore, supplemental information disclosure on an unaudited pro forma basis is not presented.

*2017 Acquisitions*

On December 29, 2017, the Company acquired 100 percent of the stock of PowerAdvocate, Inc. ("PowerAdvocate"), a provider of market, cost intelligence, and supply chain solutions serving the energy sector, for a net cash purchase price of \$200.4 million, of which \$10.0 million represents indemnity escrows. Within the Energy and Specialized Markets segment, PowerAdvocate expands the Company's offerings to the energy sector by adding proprietary spend data and cost models and providing insight into customers' cost savings opportunities. The final purchase price allocation of the acquisition is presented in the table below.

On December 22, 2017, the Company acquired 100 percent of the asset of Service Software, LLC. ("Service Software"), a provider of business management software for the construction industry, for a net cash purchase price of \$6.8 million, of which \$0.5 million represents indemnity escrows. Within the Insurance segment, Service Software expands the Company's offerings to the insurance sector by integrating with the existing loss quantification solutions, which makes it possible for restoration professionals to save time by sharing job information, reducing duplicate data entry, and increasing productivity. The final purchase price allocation of the acquisition is presented as part of "Others" in the table below.

On November 9, 2017, the Company acquired 100 percent of the stock of Rebmark Legal Solutions Limited. ("Rebmark"), a provider of injury claims solutions, for a net cash purchase price of \$2.5 million, of which \$0.2 million represents indemnity escrows. Rebmark has become part of the insurance vertical within the Insurance segment. Rebmark's solutions aid claimant and defendant lawyers, barristers, and claims handlers with the preparation of schedules of loss, which is useful in complex, high-value injury claims where calculations can be time-consuming and there is greater potential for error. The final purchase price allocation of the acquisition is presented as part of "Others" in the table below.

On August 31, 2017, the Company acquired 100 percent of the stock of Lundquist Consulting, Inc. ("LCI"), a provider of risk insight, prediction, and management solutions for banks and creditors, for a net cash purchase price of \$150.6 million, of which \$12.8 million represents indemnity escrows. LCI has become part of the Financial Services segment. This acquisition brings together the Company's proprietary data assets and LCI's proprietary time-series data, including consumer and commercial bankruptcies, consumer behavior, and legal and technical terms associated with debtor settlements. The final purchase price allocation of the acquisition is presented in the table below.

On August 23, 2017, the Company acquired 100 percent of the stock of Sequel Business Solutions Limited. ("Sequel"), a provider of commercial and specialty insurance and reinsurance software based in the U.K., for a net cash purchase price of \$320.3 million. Sequel has become part of the Insurance segment. The acquisition of Sequel further enhances the Company's comprehensive offerings to the global complex commercial and specialty insurance industry, enabling integrated global data analytics through a specialized end-to-end workflow solution. The final purchase price allocation of the acquisition is presented in the table below.

On August 3, 2017, the Company acquired 100 percent of the stock of G2 Web Services, LLC ("G2"), a provider of merchant risk intelligence solutions for acquirers, commercial banks, and other payment system providers, for a net cash purchase price of \$112.0 million, of which \$5.6 million represents indemnity escrows. G2 has become part of the Financial Services segment. The acquisition of G2 positions the Company to further enhance its offerings to clients and partners, by providing solutions that help fight fraud, transaction laundering, and reputational risk within the global payments and e-commerce ecosystem. The final purchase price allocation of the acquisition is presented in the table below.

During the three months ended June 30, 2017, the Company acquired the net assets of Blue Skies Consulting, LLC, ControlCam, LLC, Krawietz Aerial Photography, LLC, Richard Crouse & Associates, Inc., Rocky Mountain Aerial Surveys, Inc., Skyview Aerial Photo, Inc., and Valley Air Photos, LLC (collectively referred to as "Aerial Imagery acquisitions"), a group of similar but unrelated companies, which gives the Company broad geographic coverage of the United States for aerial image capture purposes. The Aerial Imagery acquisitions provide multi-spectral aerial photographic services with expertise in offering digital photogrammetric and remote sensing data for mapping and surveying applications. The purchase consideration consists of an aggregate net cash purchase price of \$28.1 million and a holdback of \$3.1 million. Within the Company's Insurance segment, the Aerial Imagery acquisitions enable the Company to enhance and maintain its database of images with the required frequency, resolution, and coverage across the United States ("U.S.") to support the Company's objective as the leading provider of loss quantification data, analytics, and decision-support solutions to the insurance industry, and the photogrammetry, surveying, mapping and other related markets. The final purchase price allocation of the acquisition is presented as part of "Others" in the table below.

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

On May 19, 2017, the Company acquired 100 percent of the stock of MAKE Consulting A/S ("MAKE"), a research and advisory business specializing in wind power, for a net cash purchase price of \$16.9 million, of which \$2.7 million represents indemnity escrows. MAKE has become part of the Energy and Specialized Markets segment. MAKE enhances the Company's offering to existing customers and forms a market analysis and advisory consortium on renewables and the transformation of the global electricity industry. With detailed coverage of power market fundamentals, solar, wind, energy storage, and grid edge technologies, the Energy and Specialized Markets segment is positioned to bring customers market analysis and insight on the evolution of the energy landscape and provide a comprehensive platform for the future. The final purchase price allocation of the acquisition is presented in the table below.

On March 31, 2017, the Company acquired 100 percent of the stock of Fintellix Solutions Private Limited ("Fintellix"), a Bangalore-based data solutions company specializing in the development of data management platforms and regulatory reporting solutions for financial institutions, for a net cash purchase price of \$16.9 million, of which \$1.8 million represents indemnity escrows. Fintellix has become part of the Financial Services segment. The acquisition of Fintellix positions the Company to expand the data hosting and regulatory platforms and better address the increasingly complex needs of its customers. The final purchase price allocation of the acquisition is presented in the table below.

On February 24, 2017, the Company acquired 100 percent of the stock of Emergent Network Intelligence Limited ("ENI"), a developer in insurance claims efficiency and fraud detection solutions based in the United Kingdom ("U.K."), for a net cash purchase price of \$6.1 million, of which \$0.5 million represents indemnity escrows. With the acquisition of ENI within the Insurance segment, the Company's customers in the U.K. can take advantage of technologically advanced tools that allow them to improve motor vehicle claims workflow and reduce their costs and exposure to fraud. The final purchase price allocation of the acquisition is presented as part of "Others" in the table below.

On February 16, 2017, the Company acquired 100 percent of the stock of Healix International Holdings Limited ("Healix"), a software analytics provider in automated medical risk assessment for the travel insurance industry, for a net cash purchase price of \$52.4 million, of which \$7.5 million represents indemnity escrows. Healix is within the Company's Insurance segment. The acquisition further expands the Company's offerings for the global insurance industry, providing solutions that are embedded with customer workflows and can help underwrite medical coverage for travelers with greater speed, accuracy, and efficiency. The final purchase price allocation of the acquisition is presented in the table below.

On January 21, 2017, the Company acquired 100 percent of the stock of Arium Limited ("Arium") for a net cash purchase price of \$1.9 million. Arium specializes in liability risk modeling and decision support. Arium has become part of the Insurance segment, and enables the Company to provide its customers with additional modeling solutions and analytics for the casualty market. The final purchase price allocation of the acquisition is presented as part of "Others" in the table below.

The final purchase price allocations, inclusive of closing adjustments, of the 2017 acquisitions resulted in the following:

	Power Advocate	LCI	Sequel	G2	MAKE	Fintellix	Healix	Others	Total
Cash and cash equivalents	\$ 7.7	\$ 1.1	\$ 16.0	\$ 0.9	\$ 1.5	\$ 1.1	\$ 0.9	\$ 0.7	\$ 29.9
Accounts receivable	8.3	2.9	7.5	2.5	0.9	2.1	0.9	2.0	27.1
Current assets	1.2	0.1	1.4	3.2	2.7	0.3	—	0.7	9.6
Fixed assets	0.3	5.1	7.6	6.4	0.1	0.1	—	11.4	31.0
Intangible assets	109.6	59.0	102.4	45.3	6.9	6.6	24.1	9.6	363.5
Goodwill	150.1	99.5	233.9	72.0	12.9	12.0	32.2	27.3	639.9
Other assets	10.0	—	—	2.8	—	2.0	—	0.2	15.0
Total assets acquired	287.2	167.7	368.8	133.1	25.0	24.2	58.1	51.9	1,116.0
Current liabilities	6.4	1.1	9.9	3.4	3.5	1.9	1.1	1.5	28.8
Deferred revenues	14.7	0.3	4.0	0.4	1.5	0.8	0.1	0.6	22.4
Deferred income taxes, net	18.6	14.6	18.6	13.6	1.6	1.7	3.6	0.6	72.9
Other liabilities	39.9	—	—	2.8	—	1.8	—	0.2	44.7
Total liabilities assumed	79.6	16.0	32.5	20.2	6.6	6.2	4.8	2.9	168.8
Net assets acquired	207.6	151.7	336.3	112.9	18.4	18.0	53.3	49.0	947.2
Cash acquired	(7.7)	(1.1)	(16.0)	(0.9)	(1.5)	(1.1)	(0.9)	(0.7)	(29.9)
Net cash purchase price	\$ 199.9	\$ 150.6	\$ 320.3	\$ 112.0	\$ 16.9	\$ 16.9	\$ 52.4	\$ 48.3	\$ 917.3

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

The final amounts assigned to intangible assets by type for the 2017 acquisitions are summarized in the table below:

	Weighted Average Useful Life	Total
Technology-based	9 years	\$ 96.3
Marketing-related	5 years	22.0
Customer-related	13 years	202.3
Database-related	14 years	42.9
Total intangible assets		\$ 363.5

For the year ended December 31, 2018, the Company finalized the purchase accounting for the 2017 acquisitions during the measurement periods in accordance with ASC 805, *Business Combinations*. The impact of finalization of the purchase accounting associated with these acquisitions was not material to the accompanying consolidated statements of operations for the years ended December 31, 2018 and 2017.

The goodwill of \$628.2 million associated with the stock purchases of PowerAdvocate, Rebmark, LCI, Sequel, G2, MAKE, Fintellix, ENI, Healix and Arium is not deductible for tax purposes, with the exception of \$20.2 million of goodwill attributable to G2. The goodwill of \$18.3 million associated with the purchases of Service Software and Aerial Imagery acquisitions is deductible for tax purposes. For the year ended December 31, 2017, the Company incurred transaction costs related to these acquisitions of \$6.8 million, which are included within "Selling, general and administrative" expenses in the accompanying consolidated statements of operations. Refer to Note 12. Goodwill and Intangible Assets for further discussion.

The 2017 acquisitions were immaterial, both individually and in the aggregate, to the Company's consolidated financial statements for the years ended December 31, 2017 and 2016 and therefore, supplemental information disclosure on an unaudited pro forma basis is not presented.

#### *2016 Acquisitions*

On November 23, 2016, the Company acquired the net assets of IntelliStance, LLC ("MarketStance"), a provider of market intelligence data and analytics to the property/casualty insurance market, for a net cash purchase price of \$8.6 million, of which \$0.7 million represents indemnity escrows. MarketStance is within the Company's Insurance segment. MarketStance has built a proprietary analytics model to provide actionable insights on customer's profitability and that enhances the Company's offerings. The final purchase price allocation of the acquisition is combined in the table below.

On November 11, 2016, the Company acquired 100 percent of the stock of The GeoInformation Group Limited ("GeoInformation"), a provider of geographic data solutions, for a net cash purchase price of \$6.3 million, of which \$0.3 million represents indemnity escrows. GeoInformation offers mapping services and geospatial data and analytic solutions to companies and public sector organizations. GeoInformation's resources complement the Company's risk management and predictive analytics capabilities internationally within the Insurance segment. The final purchase price allocation of the acquisition is combined in the table below.

On October 20, 2016, the Company acquired 100 percent of the stock of Analyze Re, Inc. ("Analyze Re"), a software analytics provider for the reinsurance and insurance industries, for a net cash purchase price of \$9.5 million, of which \$1.0 million represents indemnity escrows. Analyze Re has become part of the Company's Insurance segment and enables the Company to provide its customers with additional real-time pricing, exposure management, and enterprise portfolio roll-up capabilities. The final purchase price allocation of the acquisition is combined in the table below.

On August 19, 2016, the Company acquired the data and subscriptions business of Quest Offshore Resources, Inc. ("Quest Offshore"), which supplies market intelligence to the offshore oil and gas sector, for a net cash purchase price of \$7.2 million, including a holdback of \$0.8 million. The data and subscriptions business has become part of Wood Mackenzie Limited ("Wood Mackenzie") within the Energy and Specialized Markets segment and complements its existing upstream analysis expertise. The final purchase price allocation of the acquisition is combined in the table below.

On July 26, 2016, the Company acquired 100 percent of the stock of Greentech Media, Inc. ("Greentech Media"), an information services provider for the electricity and renewables sector, for a net cash purchase price of \$36.1 million, of which \$4.4 million represents indemnity escrows. Greentech Media has become part of Wood Mackenzie within the Energy and Specialized Markets segment and enables Wood Mackenzie to provide its customers with market intelligence across several categories, including solar generation, energy storage, and smart grids that react to changes in supply and demand. The final purchase price allocation of the acquisition is combined in the table below.

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

On April 14, 2016, the Company acquired 100 percent of the stock of Risk Intelligence Ireland Limited ("RII"), a provider of fraud detection, compliance, risk control, and process automation services to the Irish insurance industry, for a net cash purchase price of \$6.2 million. RII enhances the ability of the Company's Insurance segment to serve the international insurance market. The final purchase price allocation of the acquisition is combined in the table below.

The combined final purchase price allocations, inclusive of closing adjustments, of the 2016 acquisitions resulted in the following:

	<b>Total</b>
Cash and cash equivalents	\$ 2.1
Accounts receivable	2.3
Current assets	0.3
Fixed assets	0.2
Intangible assets	30.5
Goodwill	55.4
Other assets	5.7
Total assets acquired	96.5
Current liabilities	2.2
Deferred revenues	7.7
Deferred income taxes, net	3.1
Other liabilities	7.5
Total liabilities assumed	20.5
Net assets acquired	76.0
Less: Cash acquired	(2.1)
Net cash purchase price	\$ 73.9

For the year ended December 31, 2017, the Company finalized the purchase accounting for the 2016 acquisitions during the measurement periods in accordance with ASC 805, *Business Combinations*. The impact of finalization of the purchase accounting associated with these acquisitions was not material to the accompanying consolidated statements of operations for the years ended December 31, 2017 and 2016.

The goodwill of \$42.9 million associated with the stock purchases of GeoInformation, Analyze Re, Greentech Media and RII is not deductible for tax purposes. The goodwill of \$12.5 million associated with MarketStance and Quest Offshore acquisitions is deductible for tax purposes. For the year ended December 31, 2016, the Company incurred transaction costs related to these acquisitions of \$1.6 million, which are included within "Selling, general and administrative" expenses in the accompanying consolidated statements of operations. Refer to Note 12. Goodwill and Intangible Assets for further discussion.

The 2016 acquisitions were immaterial, both individually and in the aggregate, to the Company's consolidated financial statements for the year ended December 31, 2016 and therefore, supplemental information disclosure on an unaudited pro forma basis is not presented.

#### *Acquisition Escrows and Related Liabilities*

Pursuant to the related acquisition agreements, the Company has funded various escrow accounts to satisfy pre-acquisition indemnity and tax claims arising subsequent to the acquisition dates, as well as a portion of the contingent payments. During the year ended December 31, 2018, the Company released \$23.8 million of indemnity escrows related to various acquisitions. During the year ended December 31, 2017, the Company released \$3.8 million of indemnity escrows, of which \$3.2 million related to a 2015 acquisition of The PCI Group. During the year ended December 31, 2016, the Company released \$38.0 million of indemnity escrows, of which \$37.0 million related to a 2015 acquisition of Wood Mackenzie, Limited ("Wood Mackenzie"). At December 31, 2018 and 2017, the current portion of the escrows amounted to \$31.2 million and \$22.9 million, and the noncurrent portion of the escrows amounted to \$8.7 and \$26.3 million, respectively. The current and noncurrent portions of the escrows have been included in "Other current assets" and "Other assets" in the accompanying consolidated balance sheets, respectively.

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

The acquisitions of Validus and PowerAdvocate include acquisition related contingencies, for which the sellers of Validus and PowerAdvocate could receive additional payments by achieving the specific predetermined revenue and EBITDA earn-out targets for exceptional performance. The Company believes that the liabilities recorded as of December 31, 2018 reflect the best estimate of acquisition contingent payments. The acquisition-related liabilities of these acquisitions of \$12.7 million and \$28.3 million have been included in "Accounts payable and accrued liabilities" and "Other liabilities" in the accompanying consolidated balance sheets as of December 31, 2018, respectively. The acquisition-related liabilities of \$35.5 million have been included in "Other liabilities" in the accompanying consolidated balance sheets as of December 31, 2017.

**11. Discontinued Operations:**

*2016 Discontinued Operation*

On June 1, 2016, the Company sold 100 percent of the stock of its healthcare business, Verisk Health ("Verisk Health"). The purchase price consisted of \$714.6 million of cash consideration after a working capital adjustment of \$5.4 million; a subordinated promissory note with a face value of \$100.0 million, an interest rate of 9.0% that was paid-in kind and an eight year maturity with a prepayment option without penalty; and other contingent consideration (collectively, the "Sale"). Results of operations for the healthcare business are reported as a discontinued operation for the year ended December 31, 2016.

On August 27, 2018, the debtor of the subordinated promissory note receivable chose to exercise their prepayment option to settle in full. As a result of the settlement of the note receivable, the Company recorded a gain of \$12.3 million during the year ended December 31, 2018, which was included in "Investment income and others, net" in the accompanying consolidated statements of operations. Refer to Note 8. Fair Value Measurements for further discussion.

The Company also received a 10.0% non-participating interest in VCVH, the exercise value of which will be contingent on the parent of VCVH realizing a specified rate of return on its investment. The value of this investment has been included in "Other assets" in the accompanying consolidated balance sheets.

The healthcare business met the criteria for being reported as discontinued operations and have been segregated from continuing operations. The following table summarizes the results from discontinued operations for the year ended December 31, 2016:

	<b>2016</b>
Revenues from discontinued operations	\$ 112.3
Operating expenses:	
Cost of revenues (exclusive of items shown separately below)	75.9
Selling, general and administrative	36.5
Depreciation and amortization of fixed assets	7.1
Amortization of intangibles assets	5.9
Total operating expenses	125.4
Operating income	(13.1)
Other income (expense):	
Gain on sale	265.9
Investment income and others, net	0.2
Total other income	266.1
Income from discontinued operations before income taxes	253.0
Provision for income taxes (including tax on the gain of \$111.8 million for 2016)	(113.3)
Income from discontinued operations, net of tax	\$ 139.7

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

Net cash provided by operating activities and net cash used in investing activities from the healthcare business for the year ended December 31, 2016 :

		<b>2016</b>
Net cash provided by operating activities	\$	21.4
Net cash used in investing activities	\$	(10.6)

**12. Goodwill and Intangible Assets:**

The Company completed the required annual impairment test as of June 30, 2018 , 2017 and 2016 , which resulted in no impairment of goodwill. Based on the results of the impairment assessment as of June 30, 2018 , the Company determined that the fair value of its reporting units exceeded their respective carrying value. There were no goodwill impairment indicators after the date of the last annual impairment test.

The following is a summary of the change in goodwill from December 31, 2016 through December 31, 2018 , both in total and as allocated to the Company's operating segments:

	Insurance	Energy and specialized markets	Financial services	Total
Goodwill at December 31, 2016 <sup>(1)</sup>	\$ 448.2	\$ 1,842.8	\$ 287.1	\$ 2,578.1
Acquisitions	288.8	175.5	182.2	646.5
Purchase accounting reclassifications	(2.2)	(2.2)	—	(4.4)
Foreign currency translation adjustment	14.6	133.5	0.4	148.5
Goodwill at December 31, 2017 <sup>(1)</sup>	749.4	2,149.6	469.7	3,368.7
Acquisitions	97.9	—	3.3	101.2
Purchase accounting reclassifications	5.1	(12.5)	1.4	(6.0)
Foreign currency translation adjustment	(18.6)	(82.4)	(1.4)	(102.4)
Goodwill at December 31, 2018 <sup>(1)</sup>	\$ 833.8	\$ 2,054.7	\$ 473.0	\$ 3,361.5

<sup>(1)</sup> These balances are net of accumulated impairment charges of \$3.2 million that occurred prior to December 31, 2016 .

The Company's intangible assets and related accumulated amortization consisted of the following:

	Weighted Average Useful Life	Cost	Accumulated Amortization	Net
<b>December 31, 2018</b>				
Technology-based	8 years	\$ 438.8	\$ (255.5)	\$ 183.3
Marketing-related	16 years	255.8	(77.2)	178.6
Contract-based	6 years	5.0	(5.0)	—
Customer-related	14 years	718.2	(223.9)	494.3
Database-based	19 years	450.5	(78.9)	371.6
Total intangible assets		\$ 1,868.3	\$ (640.5)	\$ 1,227.8
<b>December 31, 2017</b>				
Technology-based	8 years	\$ 421.0	\$ (222.9)	\$ 198.1
Marketing-related	17 years	263.9	(62.9)	201.0
Contract-based	6 years	5.0	(5.0)	—
Customer-related	14 years	704.2	(174.0)	530.2
Database-based	19 years	474.7	(58.7)	416.0
Total intangible assets		\$ 1,868.8	\$ (523.5)	\$ 1,345.3

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

Amortization expense related to intangible assets for the years ended December 31, 2018, 2017 and 2016, was \$130.8 million, \$101.8 million, and \$92.5 million, respectively. Estimated amortization expense in future periods through 2023 and thereafter for intangible assets subject to amortization is as follows:

Year	Amount
2019	\$ 131.5
2020	129.3
2021	119.0
2022	107.6
2023	95.3
2024 and thereafter	645.1
Total	<u>\$ 1,227.8</u>

**13. Income Taxes:**

Domestic and foreign income from continuing operations before income taxes was as follows:

	2018	2017	2016
U.S.	\$ 700.2	\$ 669.9	\$ 626.6
Foreign	19.5	21.1	27.1
Total income from continuing operations	<u>\$ 719.7</u>	<u>\$ 691.0</u>	<u>\$ 653.7</u>

The components of the provision for income taxes from continuing operations for the years ended December 31 were as follows:

	2018	2017	2016
<b>Current:</b>			
Federal	\$ 69.0	\$ 176.6	\$ 171.7
State and local	22.1	23.4	24.0
Foreign	11.1	9.5	3.6
Total current provision for income taxes	<u>102.2</u>	<u>209.5</u>	<u>199.3</u>
<b>Deferred:</b>			
Federal	27.6	(66.3)	29.4
State and local	2.8	5.7	4.9
Foreign	(11.6)	(13.0)	(31.4)
Total deferred provision for income taxes	<u>18.8</u>	<u>(73.6)</u>	<u>2.9</u>
Provision for income taxes	<u>\$ 121.0</u>	<u>\$ 135.9</u>	<u>\$ 202.2</u>

On December 22, 2017 the Tax Cuts and Job Act ("Tax Act") was enacted. The Tax Act included a number of changes to U.S. tax laws, most notably a reduction in the U.S. corporate tax rate from 35.0% to 21.0%. As a result of the corporate tax rate reduction, the Company recognized a tax benefit in 2017 of \$89.1 million due to the re-measurement of its deferred tax assets and liabilities. In accordance with Staff Accounting Bulletin ("SAB") No. 118, the Company completed the analysis of the impacts of the 2017 Tax Act in the fourth quarter of 2018, resulting in an incremental charge of \$1.0 million as income tax expense to reflect the final remeasurement of deferred tax assets and liabilities of \$88.1 million.

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

The reconciliation between the Company's effective tax rate on income from continuing operations and the statutory tax rate is as follows for the years ended December 31:

	2018	2017	2016
Federal statutory rate	21.0 %	35.0 %	35.0 %
State and local taxes, net of federal tax benefit	2.8 %	2.6 %	2.7 %
Foreign tax differentials	(0.7)%	(2.1)%	(4.7)%
Federal Tax Reform-deferred rate change	0.1 %	(12.9)%	— %
U.K. legislative change	— %	— %	(1.0)%
Stock-based compensation	(5.5)%	(2.5)%	— %
Other	(0.9)%	(0.4)%	(1.1)%
Effective tax rate for continuing operations	<u>16.8 %</u>	<u>19.7 %</u>	<u>30.9 %</u>

The decrease in the effective tax rate in 2018 compared to 2017 was primarily due to the impact of tax reform lowering the U.S. tax rate from 35.0% to 21.0% , as well as the impact of greater tax benefits from equity compensation in accordance with ASU No. 2016-09.

The tax effects of significant items comprising the Company's deferred tax assets as of December 31 are as follows:

	2018	2017
Deferred income tax asset:		
Employee wages, pension and other benefits	\$ 20.9	\$ 15.5
Deferred rent	4.6	3.8
Net operating loss carryover	30.2	36.4
Capital and other unrealized losses	2.4	2.1
Interest expense	21.2	9.1
Other	11.5	8.2
Total	<u>90.8</u>	<u>75.1</u>
Less valuation allowance	<u>(34.5)</u>	<u>(17.6)</u>
Deferred income tax asset	<u>56.3</u>	<u>57.5</u>
Deferred income tax liability:		
Fixed assets and intangible assets	(376.1)	(366.2)
Commissions	(11.8)	—
Other	(7.9)	(13.2)
Deferred income tax liability	<u>(395.8)</u>	<u>(379.4)</u>
Deferred income tax liability, net	<u>\$ (339.5)</u>	<u>\$ (321.9)</u>

The net deferred income liability of \$339.5 million consists primarily of timing differences involving depreciation and amortization.

The ultimate realization of the deferred tax assets depends on the Company's ability to generate sufficient taxable income in the future. The Company has provided a valuation allowance against the deferred tax assets associated with the interest expense deduction limitation in the U.K. The Company has also provided for a valuation allowance against the deferred tax assets associated with the net operating losses of certain subsidiaries. The Company's net operating loss carryforwards expire as follows:

Years	Amount
2019-2026	\$ 15.9
2027-2031	7.1
2032-2038	163.5
Total	<u>\$ 186.5</u>

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

A valuation allowance has been established based on the Company's evaluation of the likelihood of utilizing these benefits before they expire. The Company has determined that the generation of future taxable income from certain subsidiaries to fully realize the deferred tax assets is uncertain. Other than these items, the Company has determined, based on the Company's historical operating performance, that taxable income of the Company will more likely than not be sufficient to fully realize the deferred tax assets.

As of December 31, 2018, the Company has not made a provision for U.S. or additional foreign withholdings taxes for any additional outside basis difference inherent in its foreign subsidiaries, as these amounts continue to be indefinitely reinvested in foreign operations. Determining the amount of unrecognized deferred tax liability related to any additional outside basis difference in these entities is not practicable. The Company does not rely on these unremitted earnings as a source of funds for its domestic business as it expects to have sufficient cash flow in the U.S. to fund its U.S. operational and strategic needs.

The Company follows ASC No. 740-10, which prescribes a comprehensive model for the financial statement recognition, measurement, presentation and disclosure of uncertain tax positions taken or expected to be taken in income tax returns. For each tax position, the Company must determine whether it is more likely than not that the position will be sustained upon examination based on the technical merits of the position, including resolution of any related appeals or litigation. A tax position that meets the more likely than not recognition threshold is then measured to determine the amount of benefit to recognize within the financial statements. No benefits may be recognized for tax positions that do not meet the more likely than not threshold. A reconciliation of the beginning and ending amount of unrecognized tax benefit is as follows:

	2018	2017	2016
Unrecognized tax benefit as of January 1	\$ 16.3	\$ 16.8	\$ 14.5
Gross increase in tax positions in prior period	2.0	1.7	2.5
Gross decrease in tax positions in prior period	(0.1)	(1.2)	(0.4)
Gross increase in tax positions in current period	—	—	6.4
Settlements	(0.3)	—	(5.3)
Lapse of statute of limitations	(0.5)	(1.0)	(0.9)
Unrecognized tax benefit as of December 31	<u>\$ 17.4</u>	<u>\$ 16.3</u>	<u>\$ 16.8</u>

Of the total unrecognized tax benefits as of December 31, 2018, 2017 and 2016, \$14.4 million, \$13.2 million and \$13.8 million, respectively, represent the amounts that, if recognized, would have a favorable effect on the Company's effective tax rate in any future periods.

The total gross amount of accrued interest and penalties for the years ended December 31, 2018, 2017 and 2016 was \$5.7 million, \$4.5 million and \$3.4 million, respectively. The Company's practice is to recognize interest and penalties associated with income taxes as a component of "Provision for income taxes" in the accompanying consolidated statements of operations.

The Company does not expect a significant increase in unrecognized benefits related to federal, foreign, or state tax exposures within the coming year. In addition, the Company believes that it is reasonably possible that approximately \$0.9 million of its currently remaining unrecognized tax positions, each of which is individually insignificant, may be recognized by the end of 2019 as a result of a combination of audit settlements and lapses of statute of limitations, net of additional uncertain tax positions.

The Company is subject to tax in the U.S. and in various state and foreign jurisdictions. The Company joined by its domestic subsidiaries, files a consolidated income tax return for the Federal income tax purposes. With few exceptions, none of which are material to the Company's consolidated financial statements as of December 31, 2018, the Company is no longer subject to U.S. federal, state, and local or non-US income tax examinations by tax authorities for tax years before 2014. In New Jersey, the Company is being audited for the years ended December 31, 2011 through 2016 with a statute extension until June 30, 2019. In Massachusetts, the Company is being audited for the years ended December 31, 2014 through 2015 with a statute extension until December 31, 2019. The Company is also under audit in New York for the years ended December 31, 2015 through 2017. The Company does not expect that the results of these examinations will have a material effect on its financial position, results of operations or cash flow.

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

**14. Composition of Certain Financial Statement Caption:**

The following table presents the components of “Accounts payable and accrued liabilities” as of December 31:

	2018	2017
Accounts payable and accrued liabilities:		
Accrued salaries, benefits and other related costs	\$ 131.1	\$ 115.3
Escrow liabilities	25.4	22.9
Accrued interest	17.2	18.3
Acquisition related liabilities	12.6	—
Trade accounts payable and other accrued expenses	77.2	68.9
Total accounts payable and accrued liabilities	<u>\$ 263.5</u>	<u>\$ 225.4</u>

**15. Debt:**

The following table presents short-term and long-term debt by issuance as of December 31:

	Issuance Date	Maturity Date	2018	2017
Short-term debt and current portion of long-term debt:				
Syndicated revolving credit facility	Various	Various	\$ 415.0	\$ 715.0
Senior notes:				
4.875% senior notes	12/8/2011	1/15/2019	250.0	—
Capital lease obligations	Various	Various	7.8	9.4
Short-term debt and current portion of long-term debt			<u>672.8</u>	<u>724.4</u>
Long-term debt:				
Senior notes:				
4.000% senior notes, less unamortized discount and debt issuance costs of \$7.9 million and \$9.1 million, respectively	5/15/2015	6/15/2025	892.1	890.9
5.500% senior notes, less unamortized discount and debt issuance costs of \$4.7 million and \$4.9 million, respectively	5/15/2015	6/15/2045	345.3	345.1
4.125% senior notes, less unamortized discount and debt issuance costs of \$2.3 million and \$2.9 million, respectively	9/12/2012	9/12/2022	347.7	347.1
4.875% senior notes, less unamortized discount and debt issuance costs of \$0.7 million in 2017	12/8/2011	1/15/2019	—	249.3
5.80% senior notes, less unamortized discount and debt issuance costs of \$1.2 million and \$1.8 million, respectively	4/6/2011	5/1/2021	448.8	448.2
Capital lease obligations	Various	Various	19.5	7.6
Syndicated revolving credit facility debt issuance costs			(2.9)	(3.8)
Long-term debt			<u>2,050.5</u>	<u>2,284.4</u>
Total debt			<u>\$ 2,723.3</u>	<u>\$ 3,008.8</u>

Accrued interest associated with the Company’s outstanding debt obligations was \$17.2 million and \$18.3 million as of December 31, 2018 and 2017, respectively, and included in “Accounts payable and accrued liabilities” within the accompanying consolidated balance sheets. Interest expense associated with the Company’s capital lease and outstanding debt obligations, including amortization of debt issuance costs and original discounts, was \$128.2 million, \$119.4 million and \$120.0 million for the years ended December 31, 2018, 2017 and 2016, respectively.

*Senior Notes*

As of December 31, 2018 and 2017, the Company had senior notes with an aggregate principal amount of \$2,300.0 million outstanding. Interest on senior notes is payable semiannually. The discount and debt issuance costs were recorded in "Long-term debt" in the accompanying consolidated balance sheets and these costs will be amortized to "Interest expense" in

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

the accompanying consolidated statements of operations over the life of the respective senior note. The indenture governing senior notes restricts the Company's ability to, among other things, create certain liens, enter into sale/leaseback transactions and consolidate with, sell, lease, convey or otherwise transfer all or substantially all of the Company's assets, or merge with or into, any other person or entity. As of December 31, 2018 and 2017, the Company was in compliance with all financial and other debt covenants governing the senior notes. On January 15, 2019, the Company utilized borrowings from a committed senior unsecured Syndicated Revolving Credit Facility (the "Credit Facility") and cash from operations to repay the 4.875% senior notes in full in an amount of \$250.0 million.

*Syndicated Revolving Credit Facility*

The Company has the Credit Facility with a borrowing capacity of \$1,500.0 million with Bank of America N.A., JP Morgan Chase, N.A., Sun Trust Bank, Wells Fargo Bank N.A., Citizens Bank, N.A., Morgan Stanley, N.A., HSBC Bank USA, N.A., Royal Bank of Canada, BNP Paribas, TD Bank, N.A., and The Northern Trust Company, which expires on May 15, 2022. The Credit Facility may be used for general corporate purposes, including working capital needs and capital expenditures, acquisitions and the share repurchase program (the "Repurchase Program"). The debt issuance costs were recorded in "Long-term debt" in the accompanying consolidated balance sheets and these costs will be amortized to "Interest expense" in the accompanying consolidated statements of operations over the life of the Credit Facility. The Credit Facility contains certain financial and other covenants that, among other things, impose certain restrictions on indebtedness, liens, investments, and capital expenditures. These covenants also place restrictions on mergers, asset sales, sale/leaseback transactions, and certain transactions with affiliates. The financial covenants require that, at the end of any fiscal quarter, the Company has a consolidated interest coverage ratio of at least 3.0 to 1.0 and that it maintains, during any period of four fiscal quarters, a consolidated funded debt leverage ratio of less than 3.5 to 1.0. The Company was in compliance with all financial and other covenants under the Credit Facility as of December 31, 2018. Interest on borrowings under the Credit Facility is payable at an interest rate of LIBOR plus 1.125% to 1.625%, depending upon the consolidated funded debt leverage ratio. A commitment fee on any unused balance is payable periodically and may range from 12.50 to 25.00 basis points based upon the consolidated funded debt leverage ratio. As of December 31, 2018 and 2017, the Company had outstanding borrowings under the Credit Facility of \$415.0 million and \$715.0 million, respectively. The available capacity of the Credit Facility was \$1,078.9 million, net of the letters of credit of \$6.1 million, at December 31, 2018.

*Debt Maturities*

The following table reflects the Company's debt maturities:

Year	Amount
2019	\$ 672.8
2020	8.9
2021	458.0
2022	352.6
2023	—
2024 and thereafter	1,250.0
Total	\$ 2,742.3

**16. Stockholders' Equity:**

The Company has 2,000,000,000 shares of authorized common stock as of December 31, 2018 and 2017. The common shares have rights to any dividend declared by the board of directors, subject to any preferential or other rights of any outstanding preferred stock, and voting rights to elect all twelve members of the board of directors.

The Company has 80,000,000 shares of authorized preferred stock, par value \$0.001 per share. The preferred shares have preferential rights over the common shares with respect to dividends and net distribution upon liquidation. The Company did not issue any preferred shares as of December 31, 2018.

At December 31, 2018, 2017 and 2016, the fair value of Verisk common stock was \$109.04, \$96.00, and \$81.17 per share, respectively.

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

On February 13, 2019, the Company's Board of Directors declared a cash dividend of \$0.25 per share of common stock issued and outstanding, payable on March 29, 2019, to the holders of record as of March 15, 2019. The dividend is recorded, subsequent to December 31, 2018, as a reduction to retained earnings and will be adjusted for actual payments. The establishment of future record and payment dates is subject to the final determination of the Company's Board of Directors.

*Share Repurchase Program*

Since May 2010, the Company has authorized repurchases of up to \$3,300.0 million of its common stock through its Repurchase Program, including an additional authorization of \$500.0 million approved on May 16, 2018. Since the introduction of share repurchase as a feature of the Company's capital management strategies in 2010, the Company has repurchased shares with an aggregate value of \$2,872.4 million. As of December 31, 2018, the Company had \$427.6 million available to repurchase shares. The Company has no obligation to repurchase stock under this program and intends to use this authorization as a means of offsetting dilution from the issuance of shares under the Verisk 2013 Equity Incentive Plan (the "2013 Incentive Plan") and the Verisk 2009 Equity Incentive Plan (the "2009 Incentive Plan"), while providing flexibility to repurchase additional shares if warranted. This authorization has no expiration date and may be increased, reduced, suspended, or terminated at any time. Shares that are repurchased under the Repurchase Program will be recorded as treasury stock and will be available for future issuance.

In June 2018, the Company entered into an Accelerated Share Repurchase ("ASR") agreement with Morgan Stanley, N.A. In September 2018, the Company entered into another ASR with Bank of America, N.A. The Company repurchased shares of its common stock for an aggregate purchase price of \$100.0 million through these two ASRs. The ASR agreements were accounted for as initial treasury stock transactions and forward stock purchase agreements indexed to the Company's own common stock. The forward stock purchase agreements were classified as an equity instrument under ASC 815-40, *Contracts in Entity's Own Equity* ("ASC 815-40") and were deemed to have a fair value of zero at the effective dates. Upon payments of the aggregate purchase price in July and October 2018, the Company received an aggregate initial delivery of 703,421 shares of its common stock. The aggregate purchase price was recorded as a reduction to stockholders' equity in the Company's accompanying consolidated statements of changes in stockholders' equity for the year ended December 31, 2018. Upon the final settlements of the ASR agreements in September and December 2018, the Company received an aggregate additional 152,220 shares of the Company's common stock. These 855,641 shares, which were repurchased at an average price of \$116.87 per share, resulted in a reduction of outstanding shares used to calculate the weighted average common shares outstanding for basic and diluted earnings per share ("EPS").

In December 2018, the Company entered into an additional ASR agreement to repurchase shares of its common stock for an aggregate purchase price of \$75.0 million. Upon payment of the aggregate purchase price on January 2, 2019, the Company received an initial delivery of 550,257 shares of its common stock at a price of \$109.04 per share, representing approximately \$60.0 million of the aggregate purchase price. Upon the final settlement of the ASR agreement in March 2019, the Company may be entitled to receive additional shares of its common stock or, under certain limited circumstances, be required to deliver shares to the counterparty.

During the years ended December 31, 2018 and 2017, the Company repurchased 3,882,467 and 3,356,360 shares of common stock as part of the Repurchase Program, inclusive of the ASRs, at a weighted average price of \$112.97 and \$80.39 per share, respectively. The Company utilized cash from operations and borrowings from its Credit Facility to fund these repurchases.

*Treasury Stock*

As of December 31, 2018, the Company's treasury stock consisted of 380,032,628 shares of common stock. During the years ended December 31, 2018, 2017 and 2016, the Company reissued 2,973,947, 1,319,518 and 1,816,339 shares of common stock, under the 2013 Incentive Plan, and 2009 Incentive Plan, from the treasury shares at a weighted average price of \$8.71, \$8.13 and \$7.23 per share, respectively.

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

*Earnings Per Share*

The following is a reconciliation of the numerators and denominators of the basic and diluted EPS computations for the years ended December 31:

	2018	2017	2016
(In millions, except for share and per share data)			
<b>Numerator used in basic and diluted EPS:</b>			
Income from continuing operations	\$ 598.7	\$ 555.1	\$ 451.5
Income from discontinued operations	—	—	139.7
Net income	<u>\$ 598.7</u>	<u>\$ 555.1</u>	<u>\$ 591.2</u>
<b>Denominator:</b>			
Weighted average number of common shares used in basic EPS	164,808,110	165,168,224	168,248,304
<b>Effect of dilutive shares:</b>			
Potential common stock issuable from stock options and stock awards	3,489,726	3,520,644	2,923,268
Weighted average number of common shares and dilutive potential common shares used in diluted EPS	<u>168,297,836</u>	<u>168,688,868</u>	<u>171,171,572</u>

The potential shares of common stock that were excluded from diluted EPS were 496,446 , 1,967,409 and 1,724,338 at December 31, 2018 , 2017 and 2016 , respectively, because the effect of including those potential shares was anti-dilutive.

*Accumulated Other Comprehensive Losses*

The following is a summary of accumulated other comprehensive losses as of December 31:

	2018	2017
Foreign currency translation adjustment	\$ (488.5)	\$ (334.4)
Unrealized gains on available-for-sale securities, net of tax	— <sup>(1)</sup>	0.7
Pension and postretirement adjustment, net of tax	(103.4)	(78.6)
Accumulated other comprehensive losses	<u>\$ (591.9)</u>	<u>\$ (412.3)</u>

<sup>(1)</sup> Includes an adjustment of \$0.7 million to opening retained earnings related to adoption of ASU 2016-01 at January 1, 2018 .

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

The before tax and after tax amounts of other comprehensive loss for the years ended December 31, 2018 , 2017 and 2016 are summarized below:

	Before Tax	Tax Benefit (Expense)	After Tax
<b>December 31, 2018</b>			
Foreign currency translation adjustment	\$ (154.1)	\$ —	\$ (154.1)
Pension and postretirement adjustment before reclassifications	(36.7)	9.1	(27.6)
Amortization of net actuarial loss and prior service benefit reclassified from accumulated other comprehensive losses <sup>(1)</sup>	3.7	(0.9)	2.8
Pension and postretirement adjustment	(33.0)	8.2	(24.8)
Total other comprehensive loss	\$ (187.1)	\$ 8.2	\$ (178.9)
<b>December 31, 2017</b>			
Foreign currency translation adjustment	\$ 227.0	\$ —	\$ 227.0
Unrealized holding gain on available-for-sale securities before reclassifications	0.5	(0.1)	0.4
Unrealized holding gain on available-for-sale securities	0.5	(0.1)	0.4
Pension and postretirement adjustment before reclassifications	19.7	(4.9)	14.8
Amortization of net actuarial loss and prior service benefit reclassified from accumulated other comprehensive losses <sup>(1)</sup>	(4.9)	1.2	(3.7)
Pension and postretirement adjustment	14.8	(3.7)	11.1
Total other comprehensive income	\$ 242.3	\$ (3.8)	\$ 238.5
<b>December 31, 2016</b>			
Foreign currency translation adjustment	\$ (395.6)	\$ —	\$ (395.6)
Unrealized holding gain on available-for-sale securities before reclassifications	0.5	(0.2)	0.3
Unrealized holding gain on available-for-sale securities	0.5	(0.2)	0.3
Pension and postretirement adjustment before reclassifications	(18.1)	6.8	(11.3)
Amortization of net actuarial loss and prior service benefit reclassified from accumulated other comprehensive losses <sup>(1)</sup>	(3.6)	1.4	(2.2)
Pension and postretirement adjustment	(21.7)	8.2	(13.5)
Total other comprehensive loss	\$ (416.8)	\$ 8.0	\$ (408.8)

<sup>(1)</sup>This accumulated other comprehensive losses component, before tax, was included under “Cost of revenues” and “Selling, general and administrative” in the accompanying consolidated statements of operations. This component was also included in the computation of net periodic benefit (credit) cost (see Note 18. Pension and Postretirement Benefits for additional details).

**17. Compensation Plans:**

*KSOP*

The Company has established the KSOP for the benefit of eligible employees in the U.S. and Puerto Rico. The KSOP includes both an employee savings component and an employee stock ownership component. The purpose of the combined plan is to enable the Company’s employees to participate in a tax-deferred savings arrangement under Internal Revenue Service Code Sections 401(a) and 401(k) (the “Code”), and to provide employee equity participation in the Company through the employee stock ownership plan (“ESOP”) accounts.

Under the KSOP, eligible employees may make pre-tax and after-tax cash contributions as a percentage of their compensation, subject to certain limitations under the applicable provisions of the Code. The maximum pre-tax contribution that can be made to the 401(k) account as determined under the provisions of Code Section 401(g) is \$18.5 thousand for 2018 , and \$18.0 thousand for 2017 and 2016 . Certain eligible participants (age 50 and older) may contribute an additional \$6.0

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

thousand on a pre-tax basis for 2018 , 2017 and 2016 . After-tax contributions are limited to 10.0% of a participant’s compensation. The matching contributions prior to April 1, 2018 were primarily equal to 75.0% of the first 6.0% of the participant’s contribution. Effective April 1, 2018, the Company amended the KSOP to increase the matching contributions to 87.5% of the first 6.0% of the participant’s contribution. Effective January 1, 2019, the Company increased the matching contributions to 100.0% of the first 6.0% of the participant’s contribution. The 401(k) matching contributions for the years ended December 31, 2018 , 2017 and 2016 , including the discontinued operations, were \$22.0 million , \$15.6 million , \$14.5 million , respectively; which, at the option of the Company, were funded in cash or in common stock issued from treasury shares. The Company also contributed a total of \$18.8 million of cash to the KSOP for the year ended December 31, 2016 .

In 2005, the Company established the ISO Profit Sharing Plan (the “Profit Sharing Plan”), a defined contribution plan, to replace the qualified pension plan for all eligible employees hired on or after March 1, 2005. The Profit Sharing Plan is a component of the KSOP. Eligible employees participated in the Profit Sharing Plan if they completed 1,000 hours of service each plan year and were employed on December 31 of that year. The Company can make a discretionary contribution to the Profit Sharing Plan based on the annual performance of the Company. Participants vest once they have completed four years and 1,000 hours of service. For the years ended December 31, 2018 , 2017 and 2016 , there were no profit sharing contributions.

*Equity Compensation Plans*

All of the Company’s outstanding stock options, restricted stock and PSUs are covered under the 2013 Incentive Plan or 2009 Incentive Plan. Awards under the 2013 Incentive Plan may include one or more of the following types: (i) stock options (both nonqualified and incentive stock options), (ii) stock appreciation rights, (iii) restricted stock, (iv) restricted stock units, (v) performance awards, (vi) other share-based awards, and (vii) cash. Employees, directors and consultants are eligible for awards under the 2013 Incentive Plan. The Company issued common stock under these plans from the Company’s treasury shares. The number of shares of common stock available for issuance under the 2013 Incentive Plan is 15,700,000 and such amount shall be reduced on a 1 -for-1 basis for every share issued that is subject to an option or stock appreciation right and on a 2.5 -for-1 basis for every share issued that is subject to an award other than an option or stock appreciation right. Shares that were subject to an award under the 2013 Incentive Plan that become forfeited, expired or otherwise terminated shall again be available for issuance under the 2013 Incentive Plan on a 1 -for-1 basis if the shares were subject to options or stock appreciation rights, and on a 2.5 -for-1 basis if the shares were subject to awards other than options or stock appreciation rights. As of December 31, 2018 , there were 5,602,624 shares of common stock reserved and available for future issuance. Cash received from stock option exercises including the discontinued operations for the years ended December 31, 2018 , 2017 and 2016 was \$87.3 million , \$35.0 million and \$41.1 million , respectively.

The Company has granted equity awards to key employees and directors. The ultimate realization of the PSUs may range from 0% to 200% of the recipient’s target levels established on the grant date. A summary of the equity awards granted for the year ended December 31, 2018 is presented below.

Grant Date	Service Vesting Period	Stock Options	Restricted Stock	Common Stock	Performance Share Units
January 1 to December 31, 2018	Four-year graded vesting	901,885	193,303	—	—
April 1 to December 31, 2018	Three-year cliff vesting	19,247	—	—	46,705
July 1, 2018	One-year graded vesting	17,402	11,880	—	—
July 1 to December 31, 2018	Various	19,798	1,858	1,094	—
		958,332	207,041	1,094	46,705

The fair value of the stock options granted was estimated on the date of grant using a Black-Scholes option valuation model that uses the weighted-average assumptions noted in the following table during the years ended December 31:

	2018	2017	2016
Expected volatility	18.51%	18.72%	20.26%
Risk-free interest rate	2.53%	1.82%	1.14%
Expected term in years	4.4	4.5	4.5
Dividend yield	—%	—%	—%
Weighted average grant date fair value per stock option	\$ 21.48	\$ 15.71	\$ 15.33

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

A summary of options outstanding under the 2013 Incentive Plan and the 2009 Incentive Plan and changes, including the discontinued operations, during the three years then ended are presented below:

	Number of Options	Weighted Average Exercise Price Per Share	Aggregate Intrinsic Value
(In millions, except for share and per share data)			
Outstanding at January 1, 2016	9,117,733	\$ 40.17	\$ 334.7
Granted	1,364,916	\$ 80.23	
Exercised	(1,409,803)	\$ 31.47	\$ 69.3
Cancelled or expired	(301,929)	\$ 73.01	
Outstanding at December 31, 2016	8,770,917	\$ 46.67	\$ 302.6
Granted	1,440,270	\$ 81.33	
Exercised	(1,125,004)	\$ 33.66	\$ 57.2
Cancelled or expired	(179,074)	\$ 76.70	
Outstanding at December 31, 2017	8,907,109	\$ 53.31	\$ 380.2
Granted	958,332	\$ 104.23	
Exercised	(2,752,735)	\$ 33.00	\$ 213.0
Cancelled or expired	(292,660)	\$ 79.16	
Outstanding at December 31, 2018	6,820,046	\$ 67.27	\$ 284.9
Options exercisable at December 31, 2018	4,360,117	\$ 55.94	\$ 231.5
Options exercisable at December 31, 2017	5,995,339	\$ 41.50	\$ 326.8

A summary of the status of the Company's nonvested options and changes, including the discontinued operations, are presented below:

	Number of Options	Weighted Average Grant-Date Fair Value Per Share
Nonvested balance at January 1, 2016	2,576,504	\$ 12.95
Granted	1,364,916	\$ 15.33
Vested	(1,016,923)	\$ 12.78
Cancelled or expired	(301,929)	\$ 14.18
Nonvested balance at December 31, 2016	2,622,568	\$ 14.12
Granted	1,440,270	\$ 15.71
Vested	(971,994)	\$ 14.19
Cancelled or expired	(179,074)	\$ 14.53
Nonvested balance at December 31, 2017	2,911,770	\$ 14.86
Granted	958,332	\$ 21.48
Vested	(1,117,513)	\$ 14.79
Cancelled or expired	(292,660)	\$ 15.33
Nonvested balance at December 31, 2018	2,459,929	\$ 17.41

Intrinsic value for stock options is calculated based on the exercise price of the underlying awards and the quoted price of Verisk's common stock as of the reporting date. The Company adopted ASU No. 2016-09 prospectively on January 1, 2017 and excess tax benefits from exercised stock options were recorded as income tax benefit in the accompanying consolidated statements of operations. This tax benefit is calculated as the excess of the intrinsic value of options exercised and restricted stock lapsed in excess of compensation recognized for financial reporting purposes. For the years ended December 31, 2018 and 2017, the Company recorded excess tax benefit from exercised stock options of \$48.9 million and \$19.0 million, respectively, as income tax benefit in the accompanying consolidated statements of operations. Prior to the adoption of ASU

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

No. 2016-09, for the year ended December 31, 2016, the Company recorded excess tax benefit from exercised stock options of \$23.3 million in "Additional paid-in capital" in the accompanying consolidated balance sheets and realized \$31.4 million of tax benefit within the Company's tax payments. Stock based compensation expense, including the discontinued operations, for the years ended December 31, 2018, 2017 and 2016 was \$38.5 million, \$31.8 million and \$30.0 million, respectively.

A summary of the status of the restricted stock awarded under 2013 Incentive Plan and the 2009 Incentive Plan and changes, including the discontinued operations, are presented below:

	Number of Shares	Weighted Average Grant Date Fair Value Per Share
Outstanding at January 1, 2016	533,768	\$ 66.25
Granted	292,941	\$ 80.27
Vested	(230,683)	\$ 64.44
Forfeited	(58,359)	\$ 72.86
Outstanding at December 31, 2016	537,667	\$ 73.34
Granted	296,850	\$ 82.02
Vested	(197,403)	\$ 70.72
Forfeited	(32,650)	\$ 77.13
Outstanding at December 31, 2017	604,464	\$ 78.28
Granted	207,041	\$ 104.37
Vested	(225,205)	\$ 76.88
Forfeited	(52,965)	\$ 82.64
Outstanding at December 31, 2018	533,335	\$ 88.55

For the year ended December 31, 2018 and 2017, certain employees had restricted stock vesting and covered the aggregate statutory minimum tax withholding of \$3.7 million and \$2.9 million through a net settlement of 35,637 shares and 36,067 shares, respectively.

On April 1, 2018, the Company granted 46,705 PSUs at a weighted average grant date fair value of \$140.70 per unit to certain executive officers. A summary of the status of the PSUs awarded under 2013 Incentive Plan and changes are presented below:

	Number of Units	Weighted Average Grant Date Fair Value Per Unit
Outstanding at January 1, 2018	—	\$ —
Granted	46,705	\$ 140.70
Forfeited	(4,655)	\$ 140.70
Outstanding at December 31, 2018	42,050	\$ 140.70

As of December 31, 2018, there was \$71.3 million of total unrecognized compensation cost related to nonvested share-based compensation arrangements granted under the 2013 Incentive Plan and the 2009 Incentive Plan. That cost is expected to be recognized over a weighted-average period of 2.46 years. As of December 31, 2018, there were 2,459,929, 533,290, and 42,050 nonvested stock options, restricted stock, and PSUs, respectively, of which 2,050,021, 448,352 and 42,050 are expected to vest. The total grant date fair value of options vested, including the discontinued operations, during the years ended December 31, 2018, 2017 and 2016 was \$16.8 million, \$16.6 million and \$14.2 million, respectively. The total grant date fair value of restricted stock vested, including the discontinued operations, during the years ended December 31, 2018, 2017 and 2016 was \$18.6 million, \$17.6 million and \$14.4 million, respectively. The total grant date fair value of PSUs vested during the year ended December 31, 2018 was \$1.5 million.

The Company also offers eligible employees the opportunity to participate in an employee stock purchase plan ("ESPP"). Under the ESPP, participating employees may authorize payroll deductions of up to 20.0% of their regular base

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

salary and up to 50.0% of their short-term incentive compensation, both of which in total may not exceed \$25.0 thousand in any calendar year, to purchase shares of the Company's common stock at a 5.0% discount of its fair market value at the time of purchase. In accordance with ASC 718, the ESPP is noncompensatory as the purchase discount is 5.0% or less from the fair market value, substantially all employees that meet limited employment qualifications may participate, and it incorporates no option features. During the years ended December 31, 2018, 2017 and 2016, the Company issued 30,550, 29,605 and 29,867 shares of common stock at a weighted average discounted price of \$104.71, \$81.38 and \$76.75, respectively.

**18. Pension and Postretirement Benefits:**

The Company has a frozen qualified defined benefit pension plan for certain of its employees through membership in the Pension Plan for Insurance Organizations (the "Pension Plan"), a multiple-employer trust. Prior to the freeze, the Company applied a cash balance formula to determine future benefits. Under the cash balance formula, each participant has an account, which was credited annually based on salary rates determined by years of service, as well as the interest earned on the previous year-end cash balance. The Company also has a non-qualified frozen supplemental cash balance plan ("SERP") for certain employees. The SERP is funded from the general assets of the Company.

The Pension Plan's funding policy is to contribute annually at an amount between the minimum funding requirements set forth in the Employee Retirement Income Security Act of 1974 and the maximum amount that can be deducted for federal income tax purposes. The minimum contribution requirement was and is expected to be \$0 in 2018 and 2019, respectively. The Company contributed \$1.0 million and \$0.9 million to the SERP in 2018 and 2017, respectively, and expects to contribute \$1.1 million in 2019.

The Company also provides certain healthcare and life insurance benefits for both active and retired employees. The Postretirement Health and Life Insurance Plan (the "Postretirement Plan"), which has been frozen, is contributory, requiring participants to pay a stated percentage of the premium for coverage. The Company does not expect to contribute to the Postretirement Plan in 2019.

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

The following table sets forth the changes in the benefit obligations and the plan assets, the (funded) unfunded status of the Pension Plan, SERP and Postretirement Plan, and the amounts recognized in the Company's consolidated balance sheets at December 31:

	Pension Plan and SERP		Postretirement Plan	
	2018	2017	2018	2017
<b>Change in benefit obligation:</b>				
Benefit obligation at January 1	\$ 452.9	\$ 438.4	\$ 11.8	\$ 12.8
Interest cost	15.2	17.1	0.3	0.4
Actuarial (gain) loss	(30.0)	25.4	(0.4)	0.7
Plan participants' contributions	—	—	2.0	1.6
Benefits paid	(30.3)	(28.0)	(4.1)	(4.2)
Federal subsidy on benefits paid	—	—	0.1	0.5
Benefit obligation at December 31	\$ 407.8	\$ 452.9	\$ 9.7	\$ 11.8
Accumulated benefit obligation at December 31	\$ 407.8	\$ 452.9		
<b>Change in plan assets:</b>				
Fair value of plan assets at January 1	\$ 484.7	\$ 444.5	\$ 10.1	\$ 11.1
Actual return on plan assets, net of expenses	(34.1)	67.3	0.1	0.1
Employer contributions, net	1.0	0.9	1.5	1.0
Plan participants' contributions	—	—	2.0	1.6
Benefits paid	(30.3)	(28.0)	(4.1)	(4.2)
Federal subsidies received	—	—	0.1	0.5
Fair value of plan assets at December 31	\$ 421.3	\$ 484.7	\$ 9.7	\$ 10.1
(Funded) unfunded status at December 31	\$ (13.5)	\$ (31.8)	\$ —	\$ 1.7
<b>Amounts recognized in the consolidated balance sheets consist of:</b>				
Pension assets, noncurrent <sup>(1)</sup>	\$ (25.3)	\$ (45.1)	\$ —	\$ —
Pension, SERP and postretirement benefits, current <sup>(2)</sup>	1.0	0.8	—	—
Pension, SERP and postretirement benefits, noncurrent <sup>(3)</sup>	10.8	12.5	—	1.7
Total Pension, SERP and Postretirement benefits	\$ (13.5)	\$ (31.8)	\$ —	\$ 1.7

(1) Included in "Other assets" in the accompanying consolidated balance sheets

(2) Included in "Accounts payable and accrued liabilities" in the accompanying consolidated balance sheets

(3) Included in "Other liabilities" in the accompanying consolidated balance sheets

The pre-tax components included within accumulated other comprehensive losses as of December 31 are summarized below:

	Pension Plan and SERP		Postretirement Plan	
	2018	2017	2018	2017
Prior service benefit cost (credit)	\$ 3.3	\$ 3.5	\$ (0.4)	\$ (0.5)
Actuarial losses	158.1	124.3	4.9	5.6
Accumulated other comprehensive losses, pretax	\$ 161.4	\$ 127.8	\$ 4.5	\$ 5.1

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

The pre-tax components of net periodic benefit (credit) cost and the amounts recognized in other comprehensive loss are summarized below for the years ended December 31:

	Pension Plan and SERP			Postretirement Plan		
	2018	2017	2016	2018	2017	2016
Interest cost	\$ 15.2	\$ 17.1	\$ 19.3	\$ 0.3	\$ 0.4	\$ 0.4
Expected return on plan assets	(32.9)	(31.1)	(31.7)	(0.2)	(0.3)	(0.5)
Amortization of prior service cost (credit) reclassified from accumulated other comprehensive losses	0.2	0.2	0.1	(0.1)	(0.2)	(0.1)
Amortization of net actuarial loss reclassified from accumulated other comprehensive losses	3.2	4.5	3.2	0.4	0.4	0.4
Net periodic benefit (credit) cost	(14.3)	(9.3)	(9.1)	0.4	0.3	0.2
Amortization of prior service benefit (credit) cost reclassified from accumulated other comprehensive losses	(0.2)	(0.2)	(0.1)	0.1	0.2	0.1
Amortization of actuarial gain reclassified from accumulated other comprehensive losses	(0.1)	(0.1)	—	—	—	—
Net gain recognized reclassified from accumulated other comprehensive losses	(3.1)	(4.4)	(3.2)	(0.4)	(0.4)	(0.4)
Actuarial loss (gain)	37.0	(10.8)	26.4	(0.3)	0.9	(1.1)
Total recognized in other comprehensive loss	33.6	(15.5)	23.1	(0.6)	0.7	(1.4)
Total recognized in net periodic benefit cost (credit) and other comprehensive loss	\$ 19.3	\$ (24.8)	\$ 14.0	\$ (0.2)	\$ 1.0	\$ (1.2)

The estimated amounts in accumulated other comprehensive losses that are expected to be recognized as components of net periodic benefit (credit) cost during 2019 are summarized below:

	Pension Plan and SERP	Postretirement Plan	Total
Amortization of prior service benefit cost (credit)	\$ 0.2	\$ (0.1)	\$ 0.1
Amortization of net actuarial loss	5.3	0.4	5.7
Total	\$ 5.5	\$ 0.3	\$ 5.8

The weighted-average assumptions used to determine benefit obligations as of December 31, 2018 and 2017 and net periodic benefit (credit) cost for the years 2018, 2017 and 2016 are provided below:

	Pension Plan and SERP			Postretirement Plan		
	2018	2017	2016	2018	2017	2016
Weighted-average assumptions used to determine benefit obligations:						
Discount rate	4.24%	3.50%		3.75%	3.00%	
Expected return on plan assets	7.00%	7.00%		2.00%	2.00%	
Weighted-average assumptions used to determine net periodic benefit (credit) loss:						
Discount rate	3.50%	3.99%	4.73%	3.00%	3.25%	3.25%
Expected return on plan assets	7.00%	7.25%	7.50%	2.00%	3.00%	4.00%

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

The following table presents the estimated future benefit payments for the respective plans. The future benefit payments for the Postretirement Plan are net of the federal Medicare subsidy.

	Pension Plan and SERP		Postretirement Plan		
	Gross Benefit Amount	Gross Benefit Amount	Gross Benefit Amount	Medicare Subsidy Payments	Net Benefit Amount
2019	\$ 30.7	\$ 1.7	\$ (0.2)	\$	1.5
2020	\$ 30.6	\$ 1.5	\$ (0.2)	\$	1.3
2021	\$ 30.1	\$ 1.4	\$ (0.2)	\$	1.2
2022	\$ 29.5	\$ 1.2	\$ (0.2)	\$	1.0
2023	\$ 29.5	\$ 1.1	\$ —	\$	1.1
2024-2028	\$ 138.1	\$ 3.6	\$ (0.1)	\$	3.5

The healthcare cost trend rate for 2018 was 8.50% gradually decreasing to 4.50% in 2035. Assumed healthcare cost trend rates have a significant effect on the amounts reported for the healthcare plan. However, a 1.00% change in assumed healthcare cost trend rates would have an immaterial effect to our postretirement benefit obligation.

The subsidy benefit from the Medicare Prescription Drug, Improvement and Modernization Act of 2003 reduced the Company's accumulated postretirement benefit obligation by approximately \$0.9 million and \$1.6 million as of December 31, 2018 and 2017, respectively. The subsidy cost increased the net periodic benefit cost by approximately \$51.0 thousand in fiscal 2018 and reduced the net periodic benefit cost by approximately \$2.0 thousand and \$54.0 thousand in fiscal 2017 and 2016, respectively.

The expected return on the Pension Plan assets as of December 31, 2018 and 2017 was 7.00%, which was determined by taking into consideration the Company's analysis of its actual historical investment returns to a broader long-term forecast after adjusting for the target investment allocation and reflecting the current economic environment. The Company's investment guidelines target investment allocation of 60% equity securities and 40% debt securities. The Pension Plan assets consist primarily of investments in various fixed income and equity funds. Investment guidelines are established with each investment manager. These guidelines provide the parameters within which the investment managers agree to operate, including criteria that determine eligible and ineligible securities, diversification requirements and credit quality standards, where applicable. Investment managers are prohibited from entering into any speculative hedging transactions. The investment objective is to achieve a maximum total return with strong emphasis on preservation of capital in real terms. The domestic equity portion of the total portfolio should range between 40% and 60%. The international equity portion of the total portfolio should range between 10% and 20%. The fixed income portion of the total portfolio should range between 20% and 40%. The asset allocation at December 31, 2018 and 2017, and target allocation for 2019 by asset category are as follows:

Asset Category	Target Allocation	Percentage of Plan Assets	
		2018	2017
Equity securities	60.0%	49.2%	54.0%
Debt securities	40.0%	41.9%	37.9%
Other	—%	8.9%	8.1%
Total	100.0%	100.0%	100.0%

The Company has used the target investment allocation to derive the expected return as the Company believes this allocation will be retained on an ongoing basis that will be commensurate with the projected cash flows of the plan. The expected return for each investment category within the target investment allocation is developed using average historical rates of return for each targeted investment category, considering the projected cash flow of the Pension Plan. The difference between this expected return and the actual return on plan assets is generally deferred and recognized over subsequent periods through future net periodic benefit costs. The Company believes that the use of the average historical rates of returns is consistent with the timing and amounts of expected contributions to the plans and benefit payments to plan participants. These considerations provide the basis for reasonable assumptions with respect to the expected long-term rate of return on plan assets.

The Company also maintains a voluntary employees beneficiary association plan (the "VEBA Plan") under Section 501(c)(9) of the Internal Revenue Code to fund the Postretirement Plan. The asset allocation for the VEBA Plan at December 31, 2018 and target allocation for 2019 are 100% in debt securities.

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

There were no transfers among Levels 1, 2 or 3 for the years ended December 31, 2018 and 2017. Refer to Note 8. Fair Value Measurements for further discussion with respect to fair value hierarchy. The following table summarizes the fair value measurements by level of the Pension Plan and Postretirement Plan assets:

	<b>Total</b>	<b>Quoted Prices in Active Markets for Identical Assets (Level 1)</b>	<b>Significant Other Observable Inputs (Level 2)</b>	<b>Significant Unobservable Inputs (Level 3)</b>
<b>December 31, 2018</b>				
Equity				
Managed equity accounts <sup>(1)</sup>	\$ 159.7	\$ 159.7	\$ —	\$ —
Equity — pooled separate account <sup>(2)</sup>	47.3	—	47.3	—
Equity — partnerships <sup>(3)</sup>	0.1	—	—	0.1
Debt				
Fixed income manager — pooled separate account <sup>(2)</sup>	176.7	—	176.7	—
Fixed income manager — government securities <sup>(4)</sup>	9.7	9.7	—	—
Others				
Cash — pooled separate account <sup>(2)</sup>	1.1	—	1.1	—
Global real estate account <sup>(5)</sup>	36.4	—	36.4	—
Total	<u>\$ 431.0</u>	<u>\$ 169.4</u>	<u>\$ 261.5</u>	<u>\$ 0.1</u>
<b>December 31, 2017</b>				
Equity				
Managed equity accounts <sup>(1)</sup>	\$ 201.4	\$ 201.4	\$ —	\$ —
Equity — pooled separate account <sup>(2)</sup>	60.3	—	60.3	—
Equity — partnerships <sup>(3)</sup>	0.2	—	—	0.2
Debt				
Fixed income manager — pooled separate account <sup>(2)</sup>	183.6	—	183.6	—
Fixed income manager — government securities <sup>(4)</sup>	10.1	10.1	—	—
Others				
Cash — pooled separate account <sup>(2)</sup>	0.5	—	0.5	—
Global real estate account <sup>(5)</sup>	38.7	—	38.7	—
Total	<u>\$ 494.8</u>	<u>\$ 211.5</u>	<u>\$ 283.1</u>	<u>\$ 0.2</u>

<sup>(1)</sup> Valued at the closing price of shares for domestic stocks within the managed equity accounts, and valued at the net asset value (“NAV”) of shares for mutual funds at either the closing price reported in the active market or based on yields currently available on comparable securities of issuers with similar credit ratings for corporate bonds held by the Pension Plan in these managed accounts.

<sup>(2)</sup> The pooled separate accounts invest in domestic and foreign stocks, bonds and mutual funds. The fair values of these stocks, bonds and mutual funds are publicly quoted and are used in determining the NAV of the pooled separate account, which is not publicly quoted.

<sup>(3)</sup> Investments for which readily determinable prices do not exist are valued by the General Partner using either the market or income approach. In establishing the estimated fair value of investments, including those without readily determinable values, the General Partner assumes a reasonable period of time for liquidation of the investment, and takes into consideration the financial condition and operating results of the underlying portfolio company, nature of investment, restrictions on marketability, holding period, market conditions, foreign currency exposures, and other factors the General Partner deems appropriate.

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

- (4) The fund invested in the U.S. government, its agencies or instrumentalities or securities that are rated AAA by S&P, AAA by Fitch, or Aaa by Moody's, including but not limited to mortgage securities such as agency and non-agency collateralized mortgage obligations, and other obligations that are secured by mortgages or mortgage backed securities, and valued at the closing price reported in the active market.
- (5) The funds invested in common stocks and other equity securities issued by domestic and foreign real estate companies, including real estate investment trusts ("REIT") and similar REIT-like entities. The fair values of these stocks, bonds and mutual funds are publicly quoted and are used in determining the NAV of the funds, which is not publicly quoted.

## 19. Segment Reporting

ASC 280-10, *Disclosures About Segments of an Enterprise and Related Information* ("ASC 280-10"), establishes standards for reporting information about operating segments. ASC 280-10 requires that a public business enterprise reports financial and descriptive information about its reportable operating segments. Operating segments are components of an enterprise for which separate financial information is available that is evaluated regularly by the chief operating decision maker ("CODM") in deciding how to allocate resources and in assessing performance. The Company's President and CEO is identified as the CODM as defined by ASC 280-10.

The Company previously reported results based on its two operating segments, Decision Analytics and Risk Assessment. During the first quarter of 2018, the CODM changed how he makes operating decisions, assesses the performance of the business, and allocates resources in a manner that caused its operating segments to change. Consequently, effective as of the first quarter of 2018, the operating segments of the Company are based on three vertical markets it serves: Insurance, Energy and Specialized Markets, and Financial Services. These three operating segments are also the Company's reportable segments, which have been recast to reflect the new segments for the years ended December 31, 2017 and 2016.

Each of our reportable segments, Insurance, Energy and Specialized Markets, and Financial Services has a portion of its revenue from more than one of the three revenue types described within our revenue recognition policy within Note 2. Basis of Presentation and Summary of Significant Accounting Policies. Below is the overview of the solutions offered within each reportable segment.

**Insurance:** The Company is the leading provider of statistical, actuarial and underwriting data for the U.S. P&C insurance industry. The Company's databases include cleansed and standardized records describing premiums and losses in insurance transactions, casualty and property risk attributes for commercial buildings and their occupants and fire suppression capabilities of municipalities. The Company uses this data to create policy language and proprietary risk classifications that are industry standards and to generate prospective loss cost estimates used to price insurance policies, which are accessed via a hosted platform. The Company also develops solutions that its customers use to analyze key processes in managing risk. The Company's combination of algorithms and analytic methods incorporates its proprietary data to generate solutions. In most cases, the Company's customers integrate the solutions into their models, formulas or underwriting criteria in order to predict potential loss events, ranging from hurricanes to earthquakes. The Company develops catastrophe and extreme event models and offers solutions covering natural and man-made risks, including acts of terrorism. The Company further develops solutions that allow customers to quantify costs after loss events occur. The Company's multitier, multispectral terrestrial imagery and data acquisition, processing, analytics, and distribution system using the remote sensing and machine learning technologies help gather, store, process, and deliver geographic and spatially referenced information that supports uses in many markets. Additionally, the Company offers fraud-detection solutions including review of data on claim histories, analysis of claims to find emerging patterns of fraud, and identification of suspicious claims in the insurance sector. The Company's underwriting & rating, insurance anti-fraud claims, catastrophe modeling, loss quantification and aerial imagery solutions are included in this segment.

**Energy and Specialized Markets:** The Company is a leading provider of data analytics via hosted platform for the global energy, chemicals, and metals and mining industries. Its research and consulting solutions focus on exploration strategies and screening, asset development and acquisition, commodity markets, and corporate analysis in the areas of business environment, business improvement, business strategies, commercial advisory, and transaction support. The Company gathers and manages proprietary information, insight, and analysis on oil and gas fields, mines, refineries and other assets across the interconnected global energy sectors to advise customers in making asset investment and portfolio allocation decisions. The Company also helps businesses and governments better anticipate and manage climate and weather-related risks. The Company's analytical tools measure and observe environmental properties and translate those measurements into actionable information based on customer needs. In addition, the Company provides market and cost intelligence to energy companies to optimize financial results. The Company further offers a suite of data and information services that enable improved compliance with global Environmental Health and Safety requirements related to the safe

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

manufacturing, distribution, transportation, usage, and disposal of chemicals and products. The Company's energy business, environmental health and safety services and, weather risk solutions are included in this segment.

**Financial Services:** The Company maintains a bank account consortia to provide competitive benchmarking, decisioning algorithms, business intelligence, and customized analytic services that help financial institutions, payment networks and processors, alternative lenders, regulators and merchants make better strategy, marketing, and risk decisions. Customers apply the Company's solutions in the areas of tailored data management and media effectiveness that include business intelligence platforms, profile views, mobile data solutions, enterprise database services, and fraud risk scoring algorithms for marketing, fraud, and risk mitigation. In addition, the Company's bankruptcy management solutions assist creditors, debt servicing businesses and credit services to enhance regulatory compliance by eliminating stay violation and portfolio valuation risk. The Company's financial services and retail analytics solutions are included in this segment.

The three aforementioned operating segments represent the segments for which discrete financial information is available and upon which operating results are regularly evaluated by the CODM in order to assess performance and allocate resources. The Company uses EBITDA as the profitability measure for making decisions regarding ongoing operations. EBITDA is net income before interest expense, provision for income taxes, depreciation and amortization of fixed and intangible assets. EBITDA is the measure of operating results used to assess corporate performance and optimal utilization of debt and acquisitions. Operating expenses consist of direct and indirect costs principally related to personnel, facilities, software license fees, consulting, travel, and third-party information services. Indirect costs are generally allocated to the segments using fixed rates established by management based upon estimated expense contribution levels and other assumptions that management considers reasonable. The Company does not allocate interest expense and provision for income taxes, since these items are not considered in evaluating the segment's overall operating performance. In addition, the CODM does not evaluate the financial performance of each segment based on assets. See Note 6. Revenues for information on disaggregated revenues by type of service and by country.

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

The following table provides the Company's revenue and EBITDA by reportable segment for the years ended December 31, as well as a reconciliation of EBITDA to operating income for all periods presented in the accompanying consolidated statements of operations:

	2018				2017				2016			
	Insurance	Energy and Specialized Markets	Financial Services	Total	Insurance	Energy and Specialized Markets	Financial Services	Total	Insurance	Energy and Specialized Markets	Financial Services	Total
Revenues	\$ 1,705.9	\$ 513.3	\$ 175.9	\$ 2,395.1	\$ 1,550.6	\$ 444.6	\$ 150.0	\$ 2,145.2	\$ 1,419.1	\$ 442.8	\$ 133.3	\$ 1,995.2
Expenses:												
Cost of revenues (exclusive of items shown separately below)	(568.1)	(218.2)	(99.9)	(886.2)	(510.4)	(193.8)	(79.6)	(783.8)	(469.6)	(177.1)	(67.7)	(714.4)
Selling, general and administrative	(218.8)	(141.1)	(18.8)	(378.7)	(196.1)	(114.4)	(12.3)	(322.8)	(178.1)	(113.4)	(10.1)	(301.6)
Investment income and others, net	13.2	0.4	1.7	15.3	11.7	(2.8)	0.3	9.2	7.8	(1.1)	(0.6)	6.1
EBITDA from discontinued operations	—	—	—	—	—	—	—	—	—	—	266.0	266.0
EBITDA	932.2	154.4	58.9	1,145.5	855.8	133.6	58.4	1,047.8	779.2	151.2	320.9	1,251.3
Depreciation and amortization of fixed assets	(107.0)	(42.7)	(15.6)	(165.3)	(91.2)	(36.4)	(8.0)	(135.6)	(86.4)	(25.9)	(6.8)	(119.1)
Amortization of intangible assets	(22.8)	(84.6)	(23.4)	(130.8)	(13.7)	(70.3)	(17.8)	(101.8)	(6.1)	(72.8)	(13.6)	(92.5)
Investment income and others, net	(13.2)	(0.4)	(1.7)	(15.3)	(11.7)	2.8	(0.3)	(9.2)	(7.8)	1.1	0.6	(6.1)
EBITDA from discontinued operations	—	—	—	—	—	—	—	—	—	—	(266.0)	(266.0)
Operating income	\$ 789.2	\$ 26.7	\$ 18.2	834.1	\$ 739.2	\$ 29.7	\$ 32.3	801.2	\$ 678.9	\$ 53.6	\$ 35.1	767.6
Investment income and others, net				15.3				9.2				6.1
Interest expense				(129.7)				(119.4)				(120.0)
Income from continuing operations before income taxes				\$ 719.7				\$ 691.0				\$ 653.7

Long-lived assets by country are provided below as of December 31:

	2018	2017
Long-lived assets:		
U.S.	\$ 2,335.8	\$ 2,438.6
U.K.	2,595.5	2,656.6
Other countries	324.5	327.5
Total long-lived assets	\$ 5,255.8	\$ 5,422.7

**20. Related Parties:**

The Company considers its stockholders that own more than 5% of the outstanding stock within the class to be related parties as defined within ASC 850, *Related Party Disclosures*. The Company had no material transactions with related parties owning more than 5% of the entire class of stock as of December 31, 2018 and 2017, except for transactions with the KSOP as disclosed in Note 17. Compensation Plans in the accompanying consolidated financial statements.

In addition, the Company had no revenues from related parties for the years ended December 31, 2018, 2017 and 2016.

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

**21. Commitments and Contingencies:**

The Company's operations are conducted on leased premises. Approximate minimum rentals under long-term noncancelable leases for all leased premises, computer equipment and automobiles are as follows:

Years Ending	Operating Leases	Capital Leases
2019	\$ 46.0	\$ 8.3
2020	46.3	9.5
2021	37.2	8.6
2022	33.8	2.8
2023	28.9	—
2024 and thereafter	147.6	—
Net minimum lease payments	<u>\$ 339.8</u>	<u>29.2</u>
Less amount representing interest		1.9
Present value of net minimum lease capital payments		<u>\$ 27.3</u>

Most of the leases require payment of property taxes and utilities and, in certain cases, contain renewal options. Operating leases consist of office space. Capital leases consist of computer equipment, office equipment, leased automobiles, and aircraft sensors. Rent expense on operating leases approximated \$44.9 million, \$39.0 million and \$39.5 million in 2018, 2017 and 2016, respectively.

In addition, the Company is a party to legal proceedings with respect to a variety of matters in the ordinary course of business, including the matter described below. With respect to ongoing matters, the Company is unable, at the present time, to determine the ultimate resolution of or provide a reasonable estimate of the range of possible loss attributable to these matters or the impact they may have on the Company's results of operations, financial position or cash flows. This is primarily because the matters are generally in early stages and discovery has either not commenced or been completed. Although the Company believes it has strong defenses and intends to vigorously defend these matters, the Company could in the future incur judgments or enter into settlements of claims that could have a material adverse effect on its results of operations, financial position or cash flows.

*Xactware Solutions, Inc. Patent Litigation*

On October 8, 2015, the Company was served with a summons and complaint in an action titled Eagle View Technologies, Inc. and Pictometry International Group, Inc. v. Xactware Solutions, Inc. and Verisk Analytics, Inc. filed in the United States District Court for the District of New Jersey. The complaint alleges that the Company's Roof InSight (now known as Geomni Roof), Property InSight product (now known as Geomni Property) and Aerial Sketch product in combination with the Company's Xactimate product infringe seven patents owned by Eagle View and Pictometry namely, Patent Nos. 8,078,436 (the "436 patent"), 8,170,840 (the "840 patent"), 8,209,152 (the "152 patent"), 8,542,880 (the "880 patent"), 8,818,770 (the "770 patent"), 8,823,732 (the "732 patent"), and 8,825,454 (the "454 patent"). On November 30, 2015, plaintiffs filed a First Amended Complaint adding Patent Nos. 9,129,376 (the "376 patent") and 9,135,737 (the "737 patent") to the lawsuit. The First Amended Complaint seeks an entry of judgment by the Court that defendants have and continue to directly infringe and/or indirectly infringe, including by way of inducement the Patents-in-Suit, permanent injunctive relief, damages, costs and attorney's fees. On May 19, 2017, the District Court so ordered a Joint Stipulated Order of Partial Dismissal with Prejudice dismissing all claims or assertions pertaining to Pictometry Patents Nos. 880 and 732 and certain asserted claims of the Eagle View Patents Nos. 436, 840, 152, 770, 454, 376 and 737 (collectively the "Patents in Suit"). Eagle View further reduced the number of asserted claims pertaining to the Patents in Suit to 18 asserted claims. Thereafter, Eagle View dropped the 152 patent and further reduced the number of asserted claims from the six remaining Patents in Suit to 11 asserted claims. Fact discovery and expert discovery are now closed and defendants' summary judgment motions were fully submitted on October 26, 2018. On December 6, 2018, the Court denied Eagle View's motion for summary judgment that a key prior art reference be excluded. On December 20, 2018, the Court denied the Company's motion for summary judgment of equitable estoppel. On January 29, 2019, the Court denied the Company's motion for summary judgment of unpatentability pursuant to Section 101 of the Patent Statute. At this time, it is not reasonably possible to determine the ultimate resolution of, or estimate the liability related to, this matter.

**VERISK ANALYTICS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

*360Value Litigation*

On December 10, 2018, the Company was served with a First Amended Complaint filed in the United States District Court for the Northern District of California titled *Sheahan, et al. v. State Farm General Insurance Co., Inc., et al.* The action is brought by California homeowners, on their own behalf and on behalf of an unspecified putative class of State Farm policyholders whose homes were damaged or lost during the Northern California wildfires of 2017, against State Farm as well as the Company, ISO, and Xactware Solutions, Inc. Plaintiffs served a Second Amended Complaint on January 6, 2019. Like the First Amended Complaint, it alleges that defendants through the use of the Company's 360Value product conspired to under-insure plaintiffs' homes by issuing undervalued policies and underestimating the costs of rebuilding those homes. Plaintiffs claim that defendants violated federal antitrust law as well as California consumer protection law and common law. At this time, it is not reasonably possible to determine the ultimate resolution of, or estimate the liability related to, this matter.

\*\*\*\*\*

**Schedule II**  
**Valuation and Qualifying Accounts and Reserves**  
**For the Years Ended December 31, 2018 , 2017 and 2016**  
**(In millions)**

Description	Balance at Beginning of Year <sup>(1)</sup>	Charged to Costs and Expenses <sup>(2)</sup>	Deductions— Write-offs <sup>(3)</sup>	Balance at End of Year
Year ended December 31, 2018				
Allowance for doubtful accounts	\$ 4.6	\$ 5.6	\$ (4.5)	\$ 5.7
Valuation allowance for income taxes	\$ 17.6	\$ 21.2	\$ (4.3)	\$ 34.5
Year ended December 31, 2017				
Allowance for doubtful accounts	\$ 3.4	\$ 2.0	\$ (0.8)	\$ 4.6
Valuation allowance for income taxes	\$ 8.1	\$ 10.0	\$ (0.5)	\$ 17.6
Year Ended December 31, 2016				
Allowance for doubtful accounts	\$ 2.6	\$ 2.2	\$ (1.4)	\$ 3.4
Valuation allowance for income taxes	\$ 0.9	\$ 7.2	\$ —	\$ 8.1

(1) Excludes discontinued operations

(2) Primarily additional reserves for bad debts

(3) Primarily accounts receivable balances written off, net of recoveries, and the expiration of loss carryforwards

**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, on February 19, 2019 .

VERISK ANALYTICS, INC.  
(Registrant)

/S/ Scott G. Stephenson

**Scott G. Stephenson**

*President and Chief Executive Officer*

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 indicated on February 19, 2019 .

**Signature**

**Capacity**

/S/ SCOTT G. STEPHENSON

**Scott G. Stephenson**

President and Chief Executive Officer (principal executive officer and director)

/S/ LEE M. SHAVEL

**Lee M. Shavel**

Executive Vice President and Chief Financial Officer  
(principal financial officer)

/S/ DAVID J. GROVER

**David J. Grover**

Vice President and Controller  
(principal accounting officer)

/S/ FRANK J. COYNE

**Frank J. Coyne**

Lead Independent Director

/S/ ANNELL BAY

**Annell R. Bay**

Director

/S/ CHRISTOPHER M. FOSKETT

**Christopher M. Foskett**

Director

/S/ BRUCE E. HANSEN

**Bruce E. Hansen**

Director

/S/ KATHLEEN HOGENSON

**Kathleen A. Hogenson**

Director

/S/ CONSTANTINE P. IORDANOU

**Constantine P. Iordanou**

Director

/S/ JOHN F. LEHMAN, JR.

**John F. Lehman, Jr.**

Director

/S/ SAMUEL G. LISS

**Samuel G. Liss**

Director

/S/ ANDREW G. MILLS

**Andrew G. Mills**

Director

/S/ THERESE M. VAUGHAN

**Therese M. Vaughan**

Director

/S/ DAVID B. WRIGHT

**David B. Wright**

Director

**EXHIBIT INDEX**

<b>Exhibit Number</b>	<b>Description</b>
<a href="#">2.1</a>	Deed, dated as of March 10, 2015, among Verisk Analytics, Inc. and the sellers named therein, incorporated herein by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K, dated March 11, 2015.
<a href="#">3.1</a>	Amended and Restated Certificate of Incorporation, incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K, dated May 29, 2015.
<a href="#">3.2</a>	Amended and Restated By-Laws, incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K, dated February 15, 2019.
<a href="#">4.1</a>	Form of Common Stock Certificate, incorporated herein by reference to Exhibit 4.1 to Amendment No. 6 to the Company's Registration Statement on Form S-1, dated September 21, 2009.
<a href="#">4.2</a>	Senior Notes Indenture, dated as of April 6, 2011, among Verisk Analytics, Inc., the guarantors named therein and Wells Fargo Bank, National Association, as Trustee, incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K, dated April 6, 2011.
<a href="#">4.3</a>	First Supplemental Indenture, dated as of April 6, 2011, among Verisk Analytics, Inc., the guarantors named therein and Wells Fargo Bank, National Association, as Trustee, incorporated herein by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K, dated April 6, 2011.
<a href="#">4.4</a>	Second Supplemental Indenture, dated as of December 8, 2011, among Verisk Analytics, Inc., the guarantors named therein and Wells Fargo Bank, National Association, as Trustee, incorporated herein by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K, dated December 8, 2011.
<a href="#">4.5</a>	Third Supplemental Indenture, dated as of September 12, 2012, among Verisk Analytics, Inc., the guarantors named therein and Wells Fargo Bank, National Association, as Trustee, incorporated herein by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K, dated September 12, 2012.
<a href="#">4.6</a>	Fifth Supplemental Indenture, dated as of May 15, 2015, between Verisk Analytics, Inc. and Wells Fargo Bank, National Association, as Trustee, incorporated herein by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K, dated May 15, 2015.
<a href="#">10.1</a>	401(k) Savings Plan and Employee Stock Ownership Plan, incorporated herein by reference to Exhibit 10.1 to the Company's Registration Statement on Form S-1, dated August 12, 2008.
<a href="#">10.2</a>	Verisk Analytics, Inc. 2009 Equity Incentive Plan, incorporated herein by reference to Exhibit 10.2 to Amendment No. 6 to the Company's Registration Statement on Form S-1, dated September 21, 2009.
<a href="#">10.3</a>	Form of Letter Agreement, incorporated herein by reference to Exhibit 10.3 to Amendment No. 1 to the Company's Registration Statement on Form S-1, dated October 7, 2008.
<a href="#">10.4</a>	Form of Master License Agreement and Participation Supplement, incorporated herein by reference to Exhibit 10.4 to Amendment No. 1 to the Company's Registration Statement on Form S-1, dated October 7, 2008.

[Table of Contents](#)

<b>Exhibit Number</b>	<b>Description</b>
<a href="#">10.5</a>	Schedule of Master License Agreements Substantially Identical in All Material Respects to the Form of Master License Agreement and Participation Supplement, incorporated herein by reference to Exhibit 10.5 to Amendment No. 2 to the Company's Registration Statement on Form S-1, dated November 20, 2008.
<a href="#">10.6</a>	Form of Change of Control Severance Agreement, incorporated herein by reference to Exhibit 10.8 to Amendment No. 6 to the Company's Registration Statement on Form S-1, dated September 21, 2009.
<a href="#">10.7</a>	Insurance Services Office, Inc. 1996 Incentive Plan and Form of Stock Option Agreement thereunder, incorporated herein by reference to Exhibit 10.9 to Amendment No. 7 to the Company's Registration Statement on Form S-1, dated September 29, 2009.
<a href="#">10.8</a>	Form of Stock Option Award Agreement under the Verisk Analytics, Inc. 2009 Equity Incentive Plan, incorporated herein by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q, dated November 16, 2009.
<a href="#">10.9</a>	Insurance Services Office, Inc. Supplemental Cash Balance Plan dated January 1, 2009 as amended by the Amendment to the Insurance Services Office, Inc. Supplemental Cash Balance Plan dated February 10, 2012 incorporated by reference to Exhibit 10.12 to the Company's annual report on Form 10-K dated February 25, 2014.
<a href="#">10.10</a>	Insurance Services Office, Inc. Supplemental Executive Retirement Savings Plan dated January 1, 2009 incorporated by reference to Exhibit 10.13 to the Company's annual report on Form 10-K dated February 25, 2014.
<a href="#">10.11</a>	Verisk Analytics, Inc. 2013 Equity Incentive Plan, incorporated herein by reference to Appendix A to the Company's Proxy Statement on Schedule 14A, dated April 1, 2013.
<a href="#">10.12</a>	Form of Stock Option Award Agreement under Verisk Analytics, Inc. 2013 Equity Incentive Plan, incorporated herein by reference to Exhibit 99.2 to Company's Registration Statement on Form S-8 dated May 15, 2013.
<a href="#">10.13</a>	Form of Restricted Stock Award Agreement under Verisk Analytics, Inc. 2013 Equity Incentive Plan, incorporated herein by reference to Exhibit 99.3 to Company's Registration Statement on Form S-8 dated May 15, 2013.
<a href="#">10.14</a>	Second Amended and Restated Credit Agreement dated April 22, 2015 among Verisk Analytics, Inc., as borrower, and the lenders and agents party thereto, incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated April 24, 2015.
<a href="#">10.15</a>	First Amendment to Second Amended and Restated Credit Agreement dated July 24, 2015 among Verisk Analytics, Inc., as borrower, and the lenders and agents party thereto, incorporated herein by reference to Exhibit 10.2 to the Company's quarterly report on Form 10-Q dated July 28, 2015.
<a href="#">10.16</a>	Second Amendment to the Second Amended and Restated Credit Agreement dated May 26, 2016 among Verisk Analytics, Inc., as borrower, and the lenders and agents party thereto, incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated May 26, 2016.
<a href="#">10.17</a>	Third Amendment to the Second Amended Restated Credit Agreement dated May 18, 2017 among Verisk Analytics, Inc., as borrower, and the lenders and agents party thereto, incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated May 19, 2017.
<a href="#">10.18</a>	Agreement of Purchase and Sale dated April 25, 2016 among Verisk Analytics, Inc., Argus Information and Advisory Services, LLC, Verisk Health, Inc., MediConnect Global, Inc., VCVH Holding Corp., VCVH Holdings LLC, VCVH Intermediate Holding Corp. and VCVH Holding II Corp., incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated April 28, 2016.

<b>Exhibit Number</b>	<b>Description</b>
<a href="#">21.1</a>	Subsidiaries of the Registrant, incorporated herein by reference to Exhibit 21.1 to the Company's annual report on Form 10-K dated February 20, 2018.
<a href="#">23.1</a>	Consent of Deloitte & Touche LLP.*
<a href="#">31.1</a>	Certification of the Chief Executive Officer of Verisk Analytics, Inc. pursuant to Rule 13a-14 under the Securities Exchange Act of 1934.*
<a href="#">31.2</a>	Certification of the Chief Financial Officer of Verisk Analytics, Inc. pursuant to Rule 13a-14 under the Securities Exchange Act of 1934.*
<a href="#">32.1</a>	Certification of the Chief Executive Officer and Chief Financial Officer of Verisk Analytics, Inc. pursuant to 18 U.S.C. Section 1350 as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.*
101.INS	XBRL Instance Document.*
101.SCH	XBRL Taxonomy Extension Schema.*
101.CAL	XBRL Taxonomy Extension Calculation Linkbase.*
101.DEF	XBRL Taxonomy Definition Linkbase.*
101.LAB	XBRL Taxonomy Extension Label Linkbase.*
101.PRE	XBRL Taxonomy Extension Presentation Linkbase.*

---

\* Filed herewith.

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in Registration Statement Nos. 333-216966, 333-194874 and 333-173135 on Form S-3 and Nos. 333-188629, 333-183476, and 333-165912 on Form S-8 of our reports dated February 19, 2019, relating to the consolidated financial statements and financial statement schedule of Verisk Analytics, Inc. and subsidiaries (the "Company"), and the effectiveness of the Company's internal control over financial reporting, appearing in this Annual Report on Form 10-K of the Company for the year ended December 31, 2018.

/s/ Deloitte & Touche LLP  
Parsippany, New Jersey  
February 19, 2019

## CERTIFICATION

I, Scott G. Stephenson, certify that:

1. I have reviewed this annual report on Form 10-K of Verisk Analytics, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Scott G. Stephenson

---

Scott G. Stephenson

President

and Chief Executive Officer

Date: February 19, 2019

## CERTIFICATION

I, Lee M. Shavel, certify that:

1. I have reviewed this annual report on Form 10-K of Verisk Analytics, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Lee M. Shavel

---

Lee M. Shavel  
Executive Vice President  
and Chief Financial Officer

Date: February 19, 2019

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

The certification set forth below is being submitted in connection with the annual report on Form 10-K of Verisk Analytics, Inc. (the "Company") for the year ending December 31, 2018, as filed with the Securities and Exchange Commission (the "Report"), for the purpose of complying with Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 (the "Exchange Act") and Section 1350 of Chapter 63 of Title 18 of the United States Code.

Scott G. Stephenson, the Chief Executive Officer of the Company, and Lee M. Shavel, the Chief Financial Officer of the Company, each hereby certifies that, to the best of his knowledge:

1. the Report fully complies with the requirements of Section 13(a) or 15(d) of the Exchange Act; and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Scott G. Stephenson

---

Scott G. Stephenson  
President and Chief Executive Officer

/s/ Lee M. Shavel

---

Lee M. Shavel  
Executive Vice President  
and Chief Financial Officer

Date: February 19, 2019