

**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, 2019
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>Trading Symbol</u>	<u>Name of each exchange on which registered</u>
Common Stock \$.001 par value	VRSK	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 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, 2019, 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 \$22,756,706,943 based on the closing price reported on the NASDAQ Global Select Market on such date.

As of February 14, 2020, there were 163,075,947 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 2020 Annual Meeting of Stockholders, which will be filed with the Securities and Exchange Commission not later than 120 days after December 31, 2019.

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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, commercial banking and finance, 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 2019, 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 nine of the top ten global energy producers 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, as indicated below. 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 prepaid and represented over 81% of our revenues in 2019. For the year ended December 31, 2019, we had revenues of \$2,607.1 million and net income of \$449.9 million. For the five-year period ended December 31, 2019, our consolidated revenues grew at a compound annual growth rate, or CAGR, of 10.3% and our net income declined at 3.0%. The decrease in our net income was primarily attributable to the recognition of our litigation reserve of \$125.0 million, higher acquisition related costs (earn-outs) and a higher effective tax rate for the year ended December 31, 2019.

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 Solutions Inc., 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 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 their respective segments. 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 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. In 2019, we acquired Genscape, Inc., or Genscape, and Flexible Architecture and Simplified Technology, LLC, or FAST, to enhance our solutions within the Energy and Specialized Markets segment and Insurance segment, respectively.

Those acquisitions have added scale, geographic reach, highly skilled workforces, and a wide array of new capabilities to support our customers. They have helped 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 also to 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 30 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. They must also make sure their policies remain competitive by promptly changing coverages in response to changes in statutes or case law. To meet their insurers’ 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 15,000 legislative bills, 11,000 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, 282 national endorsements, and 612 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 4.4 billion detailed individual records of insurance transactions, such as insurance premiums collected or losses incurred. We maintain a database of more than 22.5 billion statistical records, including approximately 9.5 billion commercial lines records and approximately 13.0 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 individual properties and communities so that insurers can use our information to evaluate and price personal and commercial property insurance, as well as commercial liability insurance. Our property-specific rating and underwriting information allows our customers to understand, quantify, underwrite, mitigate, and avoid potential loss for commercial properties. Our database contains loss costs and other relevant information on more than 3.8 million commercial risks in the U.S. and also holds information on more than 6.9 million individual businesses within those risks. We have a staff of approximately 540 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 more than 292,000 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 gauge the degree and cost of risk quickly and precisely.

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 of the ability of 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 third-party sources, information on hazards related to geographic locations representing every postal address in the U.S. Insurers use this information not only for policy quoting but also for 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 people 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, and repair cost estimation, 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 1.4 billion claims and is the world's largest database of P&C claims information used for claims and investigations. Insurers and other participants submit more than 253,000 new claims 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 manually sketch floor, roof and wall framing plans based upon their own measurements, and automatically calculates material and labor quantities for all desired construction or repairs to the structure.

We also offer our customers access to wholesale and retail price lists, which include structural repair and restoration pricing for 468 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% 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.

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 and, mining, and power and renewables sectors. We deliver analysis and advice on assets, companies, governments, and markets based on proprietary near real time data as well as historic information. This enables us to offer a comprehensive and integrated analysis of relevant commodities to our customers. 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 differentiate our solutions in the market by continuously gathering and managing 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.

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 various other 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 monitor risks in Earth's natural environment. 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, data streams, and software solutions. We are dedicated to the advancement of the atmospheric and remote sensing science disciplines and directly addressing problems regarding weather, climate, and air quality as well as oceanography and the 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 the 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. Complementing this, we leverage our partnerships with processors and credit bureaus not only to 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 Verisk Financial 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 10.3% 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 domestic InsurTech startup companies and 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. Further, our claims database serves thousands of customers, representing approximately 90% of the P&C insurance industry by premium volume, 26 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 the Energy and Specialized Markets segment include nine of the top ten global energy producers around the world. Our customer base includes international and national energy companies as well as chemicals, metals, and mining, power utilities, and renewables companies; financial institutions; and governments, among others. Within these organizations, we work with a range of diverse teams. These include strategists and policy makers, business developers, market analysts, commodity traders, corporate finance, risk teams, and investors. Alongside large corporate and government clients, we also work with many small and medium-size enterprises, offering services tailored to each customer's needs.

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., and emerging providers in the InsurTech space. 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. Finally, our underwriting products compete with Lexis Nexis and Core Logic in the marketplace. 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® 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), CRU Group (metals), and Bloomberg New Energy Finance (power and 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 relation to those companies.

Within the Financial Services segment, our unique datasets and wallet solutions mean 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, Lexis Nexis, American Infosource, 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 2015, we have acquired 32 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, comprises our largest customers. Tier Two, or "Strategic" Accounts, represents 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 and 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 partnership innovation opportunities.

Sales people participate in both sales and customer service activities. They provide direct support, interacting frequently with assigned customers to ensure 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 collect data, or license or purchase from third parties, 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 18% 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. 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. Business continuity planning is in place for all of our critical business processes to provide for the prompt and effective continuation of critical services in the event of a business disruption. Our business continuity program adheres to ISO 22301:2012, which is an international standard for business continuity. All business impact analysis and business continuity plans are reviewed and updated, at a minimum, annually or when significant business changes occur.

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: security policies and governance committees, 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 procedures relating to removable media such as laptops. Laptops are encrypted, and media leaving our premises and sent to third-party storage facilities are also encrypted. Our commitment to security has earned ISO 27001:2013 Certification for our core data centers, which is an international standard for best practices associated with our Information Security Management System.

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, 2019, we employed 9,060 full-time and 240 part-time employees. None of our employees located in the U.S. 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 40 Associates of the Casualty Actuarial Society as well as 137 Chartered Property Casualty Underwriters, 16 Associate Insurance Data Managers, 14 Certified Insurance Data Managers, 1 Fellow Insurance Data Manager, 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 nonpublic 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 nonpublic 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. Further, 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. 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), 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 have been, and in the future may continue to be, stockholders of our company. If our customers' percentage of ownership of our common stock decreases, or they cease to be stockholders of our company, 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, 2019, approximately 49% 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 acquisitions or 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 and future 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 uncertainty 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. formally exited the E.U. on January 31,

2020, uncertainty remains as to the process and future relationship between the U.K. and the E.U. The Brexit process 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 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, 2019, our ten largest shareholders owned 41.6% of our common stock, including 4.7% 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 7,064,380 shares of common stock were outstanding as of February 14, 2020. 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, 2019, 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 28 states in the U.S., and offices outside the U.S. to support our international operations in Argentina, Australia, Bahrain, Brazil, Bulgaria, Canada, China, Denmark, Germany, India, Indonesia, Ireland, Israel, Italy, Japan, Kazakhstan, Malaysia, Mexico, Nepal, Netherlands, New Zealand, Nigeria, Poland, 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 the matters described below. With respect to 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. In the case of the *360Value Litigation*, this is primarily because the matter is generally in early stages and discovery has not yet commenced. 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 alleged that our Roof InSight (now known as Geomni Roof), Property InSight product (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 (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 sought 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 entered a Joint Stipulated Order of Partial Dismissal with Prejudice dismissing all claims or assertions pertaining to the 880 and 732 patents and certain asserted claims of the 436, 840, 152, 770, 454, 376 and 737 patents (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 closed in 2018 and our 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 Act. Thereafter, Eagle View dropped the 737 patent and further reduced the number of asserted claims from the five remaining Patents in Suit to 6 asserted claims. On September 25, 2019, following a trial, the jury determined that we had willfully infringed the 6 asserted claims, and assessed damages in the amount of \$125.0 million, for which we have recorded a reserve. The impact associated with the reserve was recorded in our consolidated financial statements included in this annual report on Form 10-K. After trial, Eagle View moved for a temporary restraining order ("TRO") and a permanent injunction preventing our sales of the Geomni Roof, Geomni Property and Aerial Sketch products in combination with Xactimate. The Court granted the motion for a TRO on September 26, 2019 and on October 18, 2019, issued an Order permanently enjoining defendants' sales of the Geomni Roof, Geomni Property and Aerial Sketch products in combination with Xactimate. We plan to appeal these results. Eagle View has petitioned the Court to award up to treble damages, together with fees and expenses. The parties' post-trial motions were fully submitted on December 10, 2019 and the parties are awaiting a decision on these motions. We have established a \$125.0 million reserve in connection with this litigation, however, at this time it is not reasonably possible to determine the ultimate resolution of 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. Defendants filed their motions to dismiss the Second Amended Complaint on March 8, 2019. On July 2, 2019, the Court granted those motions, dismissing various claims with leave to amend, and dismissing other claims with prejudice. Plaintiffs filed their Third Amended Complaint on August 1, 2019. As in the Second Amended Complaint plaintiffs claim in the Third Amended Complaint that defendants violated federal antitrust law as well as California consumer protection law and common law. Defendants filed their motions to dismiss the Third Amended Complaint on September 19, 2019. The motions were fully submitted on October 31, 2019 and oral argument, originally scheduled for November 27, 2019, has been postponed to February 13, 2020. 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

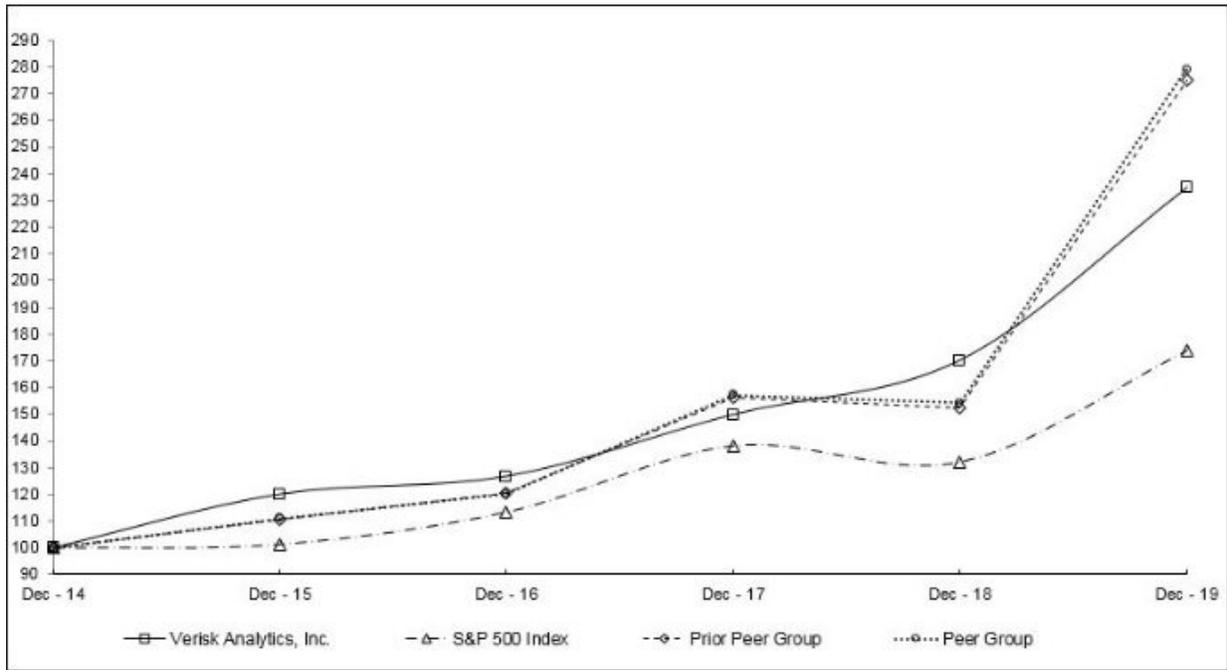
Verisk trades under the ticker symbol “VRSK” on the NASDAQ Global Select Market. As of February 14, 2020, there were approximately 50 stockholders of record. We believe the number of beneficial owners is substantially greater than the number of record holders, because a large portion of common stock is held in “street name” by brokers.

On February 13, 2019, April 29, 2019, July 24, 2019, and October 23, 2019, our Board approved a cash dividend of \$0.25 per share of common stock issued and outstanding to the holders of record as of March 15, 2019, June 14, 2019, September 13, 2019, and December 13, 2019, respectively. The cash dividends of \$40.9 million, \$41.0 million, and \$40.8 million, and \$40.8 million were paid on March 29, 2019, June 28, 2019, September 30, 2019, and December 31, 2019, respectively. We have a publicly announced share repurchase plan and repurchased a total of 60,053,306 shares since our IPO through December 31, 2019. As of December 31, 2019, we had 380,841,474 shares of treasury stock.

Performance Graph

The graph below compares the cumulative total stockholder return of our common stock with the cumulative total return of the S&P 500 index, an aggregate index of our proxy peers used in last year’s statement and an aggregate index of our proxy peers used in this year’s statements. In this transition year, the table and the graph below include both the prior and the new indices of peer companies. The peer issuers used for this graph are Alliance Data Systems Corporation, CoStar Group Inc., 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. The prior peer issuers used for this graph are the same as above excluding CoStar Group, Inc. The graph assumes that the value of investment in our Common stock and in each index was \$100 at December 31, 2014 and that all cash dividends were reinvested.

COMPARISON OF CUMULATIVE TOTAL RETURN
Assumes \$100 Invested on December 31, 2014
Assumes Dividend Reinvested
Fiscal Year Ended December 31, 2019



Recent Sales of Unregistered Securities

There were no unregistered sales of equity securities by the Company during 2019.

Issuer Purchases of Equity Securities

Our board of directors has authorized a share repurchase program, or Repurchase Program, since May 2010, of up to \$3.8 billion, inclusive of the \$500.0 million authorization approved by the board on February 12, 2020. As of December 31, 2019, \$127.6 million remains available for share repurchases. In December 2018, March 2019, June 2019, and September 2019, we entered into four Accelerated Share Repurchase, or ASR, agreements to repurchase shares of its common stock for an aggregate purchase price of \$250.0 million. These ASRs were settled in March 2019, June 2019, September 2019, and November 2019. In December 2019, we entered into an additional ASR agreement to repurchase shares of its common stock for an aggregate purchase price of \$50.0 million. This ASR will be settled in February 2020. 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 \$3,172.4 million. Our share repurchases for the quarter ended December 31, 2019 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, 2019 through October 31, 2019	252,940	\$ 158.14 ⁽¹⁾	252,940	\$ 177.6
November 1, 2019 through November 30, 2019	409,021 ⁽¹⁾	\$ 140.62 ⁽¹⁾	409,021	\$ 131.6
December 1, 2019 through December 31, 2019	27,411	\$ 145.94	27,411	\$ 127.6
	<u>689,372</u>	145.07 ⁽¹⁾	<u>689,372</u>	

⁽¹⁾ In September 2019, we entered into an ASR agreement to repurchase shares of our common stock for an aggregate purchase price of \$50.0 million with HSBC Bank USA, N.A. The ASR agreement is accounted for as a treasury stock transaction and a forward stock purchase agreement indexed to our common stock. Upon the payment of the aggregate purchase price of \$50.0 million on October 1, 2019, we received 252,940 shares of our common stock at a price of \$158.14 per share. Upon final settlement in November 2019, we received an additional 81,862 shares as determined by the daily volume weighted average share price of our common stock during the term of the ASR agreement, bringing the total shares received under this ASR agreement to 334,802 and a final average price paid of \$149.34 per share. In addition to the ASR agreement, we also repurchased 327,159 shares of our common stock at an average price of \$140.62 in November 2019.

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, 2019, 2018, and 2017 and the consolidated balance sheet data as of December 31, 2019 and 2018 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, 2016 and 2015 and the consolidated balance sheet data as of December 31, 2017, 2016, and 2015 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, 2019 are not necessarily indicative of results that may be expected in any other future period.

Between January 1, 2015 and December 31, 2019, we acquired 32 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. The following table sets forth our statement of operations for the years ended December 31:

	2019	2018	2017	2016	2015
(in millions, except for share and per share data)					
Revenues:					
Insurance	\$ 1,855.5	\$ 1,705.9	\$ 1,550.5	\$ 1,419.1	\$ 1,330.6
Energy and Specialized Markets	573.6	513.3	444.7	442.8	308.8
Financial Services	178.0	175.9	150.0	133.3	121.3
Revenues	<u>2,607.1</u>	<u>2,395.1</u>	<u>2,145.2</u>	<u>1,995.2</u>	<u>1,760.7</u>
Operating expenses:					
Cost of revenues (exclusive of items shown separately below)	976.8	886.2	783.8	714.4	612.0
Selling, general and administrative	603.5	378.7	322.8	301.6	278.3
Depreciation and amortization of fixed assets	185.7	165.3	135.6	119.1	96.6
Amortization of intangible assets	138.0	130.8	101.8	92.5	70.4
Other operating expenses	6.2	—	—	—	—
Total operating expenses	<u>1,910.2</u>	<u>1,561.0</u>	<u>1,344.0</u>	<u>1,227.6</u>	<u>1,057.3</u>
Operating income	<u>696.9</u>	<u>834.1</u>	<u>801.2</u>	<u>767.6</u>	<u>703.4</u>
Other income (expense):					
Investment (loss) income and others, net	(1.7)	15.3	9.2	6.1	16.9
Gain on derivative instruments	—	—	—	—	85.2
Interest expense	(126.8)	(129.7)	(119.4)	(120.0)	(121.4)
Total other expense, net	<u>(128.5)</u>	<u>(114.4)</u>	<u>(110.2)</u>	<u>(113.9)</u>	<u>(19.3)</u>
Income before income taxes from continuing operations	568.4	719.7	691.0	653.7	684.1
Provision for income taxes	(118.5)	(121.0)	(135.9)	(202.2)	(196.6)
Income from continuing operations	449.9	598.7	555.1	451.5	487.5
Income from discontinued operations, net of tax ⁽¹⁾	—	—	—	139.7	20.1
Net income	<u>\$ 449.9</u>	<u>\$ 598.7</u>	<u>\$ 555.1</u>	<u>\$ 591.2</u>	<u>\$ 507.6</u>
Basic net income per share					
Income from continuing operations	\$ 2.75	\$ 3.63	\$ 3.36	\$ 2.68	\$ 2.95
Income from discontinued operations	—	—	—	0.83	0.12
Basic net income per share	<u>\$ 2.75</u>	<u>\$ 3.63</u>	<u>\$ 3.36</u>	<u>\$ 3.51</u>	<u>\$ 3.07</u>
Diluted net income per share					
Income from continuing operations	\$ 2.70	\$ 3.56	\$ 3.29	\$ 2.64	\$ 2.89
Income from discontinued operations	—	—	—	0.81	0.12
Diluted net income per share	<u>\$ 2.70</u>	<u>\$ 3.56</u>	<u>\$ 3.29</u>	<u>\$ 3.45</u>	<u>\$ 3.01</u>
Cash dividends declared per share ⁽²⁾	<u>\$ 1.00</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>
Weighted average shares outstanding:					
Basic	<u>163,535,438</u>	<u>164,808,110</u>	<u>165,168,224</u>	<u>168,248,304</u>	<u>165,090,380</u>
Diluted	<u>166,560,115</u>	<u>168,297,836</u>	<u>168,688,868</u>	<u>171,171,572</u>	<u>168,451,343</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:

	2019	2018	2017	2016	2015
	(in millions)				
Other data:					
EBITDA ⁽³⁾ :					
Insurance	\$ 827.1	\$ 932.2	\$ 855.8	\$ 779.2	\$ 762.5
Energy and Specialized Markets	137.4	154.4	133.6	151.2	162.3
Financial Services	54.4	58.9	58.4	320.9	129.4
EBITDA	<u>\$ 1,018.9</u>	<u>\$ 1,145.5</u>	<u>\$ 1,047.8</u>	<u>\$ 1,251.3</u>	<u>\$ 1,054.2</u>
The following is a reconciliation of net income to EBITDA:					
Net income	\$ 449.9	\$ 598.7	\$ 555.1	\$ 591.2	\$ 507.6
Depreciation and amortization of fixed and intangible assets from continuing operations	323.7	296.1	237.4	211.6	167.0
Interest expense from continuing operations	126.8	129.7	119.4	120.0	121.4
Provision for income taxes from continuing operations	118.5	121.0	135.9	202.2	196.6
Depreciation, amortization, interest and provision for income taxes from discontinued operations	—	—	—	126.3	61.6
EBITDA	<u>\$ 1,018.9</u>	<u>\$ 1,145.5</u>	<u>\$ 1,047.8</u>	<u>\$ 1,251.3</u>	<u>\$ 1,054.2</u>

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

	2019	2018	2017	2016	2015
	(in millions)				
Balance Sheet Data ⁽⁴⁾:					
Cash and cash equivalents	\$ 184.6	\$ 139.5	\$ 142.3	\$ 135.1	\$ 138.3
Total assets	\$ 7,055.2	\$ 5,900.3	\$ 6,020.3	\$ 4,631.2	\$ 5,593.7
Total debt ⁽⁵⁾	\$ 3,151.0	\$ 2,723.3	\$ 3,008.8	\$ 2,387.0	\$ 3,145.7
Stockholders' equity	\$ 2,260.8	\$ 2,070.6	\$ 1,925.4	\$ 1,332.4	\$ 1,372.0

- (1) On June 1, 2016, we sold our healthcare business. 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. As necessary, the amounts have been retroactively adjusted in all periods presented to give recognition to the discontinued operations.
- (2) Cash dividends declared per share is calculated by the aggregate cash dividends declared in a fiscal year divided by the shares issued and outstanding. See Note 16. of our consolidated financial statements included in this annual report on Form 10-K.
- (3) 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. 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 involved in the use of EBITDA 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.
- (4) Refer to Note 8. of our consolidated financial statements included in this annual report on Form 10-K for the impacts of the adoption of Topic 842, *Leases*.
- (5) Includes finance 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.”

This discussion includes a comparison of our results of operations, liquidity and capital resources, financing and financing capacity and cash flow for the years ended December 31, 2019 and 2018. A discussion of changes in our results of operations and cash flows for the years ended December 31, 2018 and 2017 can be found in “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” within the annual report on Form 10-K for the year ended December 31, 2018 filed on February 19, 2019.

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, commercial banking and finance, 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% of our revenues for the years ended December 31, 2019 and 2018. 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% of our revenues for the years ended December 31, 2019 and 2018. 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, 2019 and 2018.

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 measure of our ability to balance the size of revenue growth with cost management and investing for future growth. EBITDA growth allows for greater transparency regarding our operating performance and facilitate period-to-period comparison.

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% of the revenues in our Insurance segment for the years ended December 31, 2019 and 2018 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% of the revenues in our Energy and Specialized Markets segment for the years ended December 31, 2019 and 2018 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 72% and 73% of the revenues in our Financial Services segment for the years ended December 31, 2019 and 2018, 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, 2019 and 2018, approximately 19% and 20% of our consolidated revenues were derived from providing transactional and advisory/consulting solutions, respectively.

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 52% and 58% of our total operating expenses for the years ended December 31, 2019 and 2018, 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, 4.7% in 2017 and, 5.5% in 2018. 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, metals and mining sectors, and activity in financial markets can influence our revenues. These include geopolitical risks such as the U.S.-China trade dispute and heightened tension in the Middle East, among others, which influenced commodity flows and prices in 2019. Commodity markets in energy were also oversupplied challenging the revenues for some of our major energy customers. Brent oil averaged \$64 dollar per barrel in 2019, down from

\$71 dollar per barrel in 2018; U.S. and globally traded gas prices are also in a downcycle. Investment in the natural resources sector fell sharply mid-decade but has stabilised at a lower level in recent years. Many companies in the natural resources sector continue to demonstrate tight capital discipline which may affect our business. The energy transition presents both a threat and an opportunity for the sector and our revenues. Increasing global economic growth will lead to higher energy demand and, in turn, potentially our services. Fossil fuels will meet much of global demand for some decades, but zero carbon energy (renewables and emerging technologies such as electric vehicles and energy storage) will grow in importance. The infrastructure needed for the electrification of economies will drive demand for base metals, some bulk commodities and battery raw materials. Climate change and decarbonisation are rising up the agenda, and policy on environmental and social governance is intensifying. Attracting the capital needed to meet future energy demand is one of the industry's challenges and data, analysis and insight will help our customers achieve this.

Trends in the banking and retail sectors can influence revenues in our Financial Services segment in many ways. Fraud and similar financial crimes in particular impact our customers in ways ranging from regulatory risk and credit loss for financial institutions, to counterfeit loss and inventory shrinkage for merchants. This can strengthen demand for our credit risk and fraud solutions ranging from enhanced brand protection solutions for retailers, through to enhanced artificial-intelligence led models to identify cross bank and cross-border fraudulent transactions. Following regulatory intervention, some markets are seeing increased standardization of offered products across issuers which could stifle competition and innovation for consumers. Additionally, traditional retail banks and consumer lenders face increasing competition from financial technology companies and on-line lending new entrants, and finally the market is reacting to increased data privacy laws such as General Data Protection Regulation, or GDPR, by demanding broader use of tokenization-based solutions and managing data use rights more closely. Our data model has relied on tokenization, and we address these emerging issues by leveraging our extensive wallet-based market and product data and expertise, and also support an active and ongoing dialogue with regulators worldwide to fully understand the impact and adverse consequences of any intended legislation.

Description of Acquisitions

We acquired twenty-three businesses since January 1, 2017. These acquisitions affect the comparability of our consolidated results of operations between periods. See a description of our 2019 acquisitions below and Note 10. to our consolidated financial statements included in this annual report on Form 10-K for further discussions.

2019 Acquisitions

On December 23, 2019, we acquired 100 percent of the stock of Flexible Architecture and Simplified Technology, LLC., or FAST, a software company for the life insurance and annuity industry. FAST offers a flexible policy administration system that helps insurers accelerate underwriting and claims to enhance the customer experience and support profitable growth. FAST has become part of the claims category within our Insurance segment, and expanded and enhanced the suite of solutions we are developing across the enterprise for life insurers looking to transform the customer experience throughout the life of the policy, from quote to claims.

On December 19, 2019, we acquired selected assets of Commerce Signals, Inc., or Commerce Signals, a software company that offers a data sharing platform for retail, restaurant and entertainment marketers. Commerce Signals has become part of our Financial Services segment, and enhanced the existing solutions we currently offer.

On November 5, 2019, we acquired 100 percent of the stock of Genscape, Inc., or Genscape, a global provider of real-time data and intelligence for commodity and energy markets. Genscape has become part of the Energy and Specialized Markets segment, and enhanced our business' existing sector intelligence in energy data and analytics.

On October 10, 2019, we acquired 100 percent of the stock of BuildFax, Inc., or BuildFax. BuildFax uses building permit, contractor, and inspection data to provide information about the condition of properties to insurance and financial institutions. The data from BuildFax enhances property analytics under the underwriting & rating category within our Insurance segment while helping underwriters gain insight into changes in the property insured.

On August 28, 2019, we acquired substantially all of the assets of Property Pres Wizard, LLC, or PPW. PPW is a web and mobile application that manages work order details and property status in the field services industry throughout the supply chain. PPW has become part of the claims category within our Insurance segment and added a service order and project management application to our PropTech suite of solutions.

On July 31, 2019, we acquired 100 percent of the stock of Keystone Aerial Surveys, Inc., or Keystone, to expand our remote imagery business. Keystone sources imagery by providing customers geospatial solutions and has become part of the claims category within our Insurance segment. Keystone was a component within the aerial imagery sourcing group, which was qualified as assets held for sale on December 2, 2019. On February 1, 2020, the sale of the aerial imagery sourcing group was

closed. See *Description of Businesses Held for Sale and Disposition* below and Note 10. of our consolidated financial statements included in this annual report on Form 10-K for further discussion.

On March 29, 2019, we entered into an agreement with an enterprise application software provider to acquire their Content as a Service (“CaaS”) business, which included the Environmental Health and Safety Regulatory Content and Environmental Health and Safety Regulatory Documentation teams and data assets. The CaaS business has become part of our Energy and Specialized Markets segment. This transaction strengthened our environmental health and safety services business and extended its global customer footprint and European operations.

Description of Businesses Held for Sale and Disposition

During the fourth quarter of 2019, our compliance background screening business and the aerial imagery sourcing group within the remote imagery business qualified as assets held for sale, respectively. These assets held for sale were part of the claims category within our Insurance segment as of December 31, 2019. Our board of directors approved the actions to make these assets held for sale available for immediate sale at their current fair value in the fourth quarter of 2019. On February 1, 2020, the sale of the aerial imagery sourcing group was completed. We contributed the assets and stock related to the business held for sale and cash of \$60.0 million in exchange for a non-controlling 35.0% ownership interest in Vexcel Group, Inc. On February 14, 2020, the sale of the compliance background screening business was also completed. See Note 11. to our consolidated financial statements included in this annual report on Form 10-K.

On July 15, 2019, we sold our retail analytics solution business for \$2.0 million excluding contingent and indemnity escrows of \$0.4 million. The sale resulted in a loss of \$6.2 million for the year ended December 31, 2019. See Note 11. to our consolidated financial statements included in this annual report on Form 10-K.

Year Ended December 31, 2019 Compared to Year Ended December 31, 2018

Consolidated Results of Continuing Operations

Revenues

Revenues were \$2,607.1 million for the year ended December 31, 2019 compared to \$2,395.1 million for the year ended December 31, 2018, an increase of \$212.0 million or 8.9%. Our recent acquisitions (Business Insight, Validus, Rulebook, Keystone, PPW, BuildFax and FAST within the Insurance segment; the CaaS business and Genscape within the Energy and Specialized Markets segment; and Commerce Signals within the Financial Services segment), and businesses held for sale (compliance background screening and the aerial imagery sourcing businesses within the claims category of the Insurance segment), partially offset by the disposition (retail analytics solution business within the Financial Services segment), contributed net revenues of \$64.7 million. The remaining increases in our consolidated revenues of \$147.3 million or 6.2% related to the following: revenues within our Insurance segment increased \$115.6 million or 6.8%; revenues within our Energy and Specialized Markets segment increased \$27.5 million or 5.3%; and revenues within our Financial Services segment increased \$4.2 million or 2.4%. Refer to the Results of Operations by Segment within this section for more information regarding our revenues.

	2019	2018	Percentage change	Percentage change excluding recent acquisitions, businesses held for sale and disposition
	(in millions)			
Insurance	\$ 1,855.5	\$ 1,705.9	8.8%	6.8%
Energy and Specialized Markets	573.6	513.3	11.7%	5.3%
Financial Services	178.0	175.9	1.2%	2.4%
Total revenues	<u>\$ 2,607.1</u>	<u>\$ 2,395.1</u>	8.9%	6.2%

Cost of Revenues

Cost of revenues was \$976.8 million for the year ended December 31, 2019 compared to \$886.2 million for the year ended December 31, 2018, an increase of \$90.6 million or 10.2%. Our recent acquisitions, businesses held for sale and disposition accounted for a net increase of \$32.3 million in cost of revenues, which was primarily related to salaries and employee benefits. The remaining cost of revenues increased \$58.3 million or 6.7% primarily due to increases in salaries and employee benefits of \$40.3 million, information technology expenses of \$10.2 million, data costs of \$4.4 million, and other operating expenses of \$3.4 million.

Selling, General and Administrative Expenses

Selling, general and administrative expenses, or SGA, were \$603.5 million for the year ended December 31, 2019 compared to \$378.7 million for the year ended December 31, 2018, an increase of \$224.8 million or 59.4%. Our litigation reserve related to the *Xactware Solutions, Inc. Patent Litigation* accounted for an increase of \$125.0 million (see Note 21, Commitments and Contingencies, to our consolidated financial statements included in this annual report on Form 10-K). Our acquisition-related costs (earn-outs) accounted for an increase of \$71.1 million (see Note 10, Acquisitions, to our consolidated financial statements included in this annual report on Form 10-K). Our recent acquisitions, businesses held for sale, and disposition, accounted for a net increase of \$12.6 million primarily related to salaries and employee benefits. The remaining SGA increased \$16.1 million or 4.3% primarily due to increases in salaries and employee benefits of \$11.7 million, information technology expenses of \$3.2 million, and professional consulting costs of \$2.7 million; these increases were partially offset by a decrease in other general expenses of \$1.5 million.

The increase in salaries and employee benefits of \$11.7 million included an increase in stock based compensation of \$2.0 million. Our stock based compensation increased as a result of the expensing of the full impact of the equity awards in the period for all employees upon the attainment of age 62 during the year in accordance with ASC 718, *Stock Compensation*, or ASC 718, instead of amortizing the expense over the vesting term.

Other Operating Expenses

Other operating expenses were \$6.2 million for the year ended December 31, 2019 compared to \$0 million for the year ended December 31, 2018, an increase of \$6.2 million, primarily related to a loss associated with the disposition of our retail analytics solution business.

Depreciation and Amortization of Fixed Assets

Depreciation and amortization of fixed assets was \$185.7 million for the year ended December 31, 2019 compared to \$165.3 million for the year ended December 31, 2018, an increase of \$20.4 million or 12.4%. The increase in depreciation and amortization of fixed assets primarily related to depreciation and amortization incurred in connection to our recent acquisitions, hardware and software development costs and aircraft equipment placed into use to support data capacity expansion and revenue growth.

Amortization of Intangible Assets

Amortization of intangible assets was \$138.0 million for the year ended December 31, 2019 compared to \$130.8 million for the year ended December 31, 2018, an increase of \$7.2 million or 5.5%. The increase was primarily due to amortization related to our recent acquisitions of \$11.8 million, partially offset by currency fluctuations impacting amortization denominated in currencies other than U.S. dollars.

Investment (Loss) Income and Others, Net

Investment (loss) income and others, net was a loss of \$1.7 million for the year ended December 31, 2019 compared to a gain of \$15.3 million for the year ended December 31, 2018. The decrease of \$17.0 million was primarily due to a realized gain and interest income of \$20.4 million related to the repayment of the subordinated promissory note receivable in August 2018, prior to its maturity.

Interest Expense

Interest expense was \$126.8 million for the year ended December 31, 2019 compared to \$129.7 million for the year ended December 31, 2018, a decrease of \$2.9 million or 2.2%. The decrease was primarily 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 the acquisitions of G2, LCI and Sequel, which occurred in August 2017 and PowerAdvocate, which occurred in December 2017.

Provision for Income Taxes

The provision for income taxes was \$118.5 million for the year ended December 31, 2019 compared to \$121.0 million for the year ended December 31, 2018, a decrease of \$2.5 million or 2.0%. The effective tax rate was 20.9% for the year ended December 31, 2019 compared to 16.8% for the year ended December 31, 2018. The increase in the effective tax rate in 2019 compared to 2018 was primarily due to the impact of lower tax benefits from equity compensation in the current period versus the prior period as well as nondeductible earn-out expenses in the current period.

Net Income

The net income margin for our consolidated results was 17.3% for the year ended December 31, 2019 compared to 25.0% for the year ended December 31, 2018.

EBITDA Margin

The EBITDA margin for our consolidated results was 39.1% for the year ended December 31, 2019 compared to 47.8% for the year ended December 31, 2018. The decrease in EBITDA margin was primarily related to the litigation reserve, acquisition-related costs (earn-outs), the loss on the sale of our retail analytics solution business, and additional stock-based compensation as a result of accelerated vesting of equity awards granted to employees at age 62 for the year ended December 31, 2019.

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

Revenues were \$1,855.5 million for the year ended December 31, 2019 compared to \$1,705.9 million for the year ended December 31, 2018, an increase of \$149.6 million or 8.8%. Our underwriting & rating revenues increased \$100.1 million or 8.7%. Our claims revenues increased \$49.5 million or 8.8%.

	2019	2018	Percentage change	Percentage change excluding recent acquisitions, businesses held for sale and disposition
	(in millions)			
Underwriting & rating	\$ 1,244.6	\$ 1,144.5	8.7%	7.3%
Claims	610.9	561.4	8.8%	5.8%
Total Insurance	\$ 1,855.5	\$ 1,705.9	8.8%	6.8%

Our recent acquisitions, Business Insight, Validus, Rulebook, Keystone, PPW, BuildFax and FAST, and businesses held for sale, the compliance background screening and aerial imagery sourcing businesses, contributed net revenues of \$34.0 million and the remaining Insurance revenues increased \$115.6 million or 6.8%. Our underwriting & rating revenues increased \$83.5 million or 7.3%, primarily due to an annual 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 within commercial and personal lines. In addition, catastrophe modeling services contributed to the growth. Our claims revenues increased \$32.1 million or 5.8%, primarily due to growth in our claims analytics revenues and repair cost estimating solutions revenues, slightly offset by the impact of the injunction ruling related to the roof measurement solutions in the fourth quarter.

Cost of Revenues

Cost of revenues for our Insurance segment was \$631.5 million for the year ended December 31, 2019 compared to \$568.1 million for the year ended December 31, 2018, an increase of \$63.4 million or 11.2%. Our recent acquisitions and businesses held for sale, represented a net increase of \$16.9 million in cost of revenues, which was primarily related to salaries and employee benefits. The remaining cost of revenues increased \$46.5 million or 8.3% primarily due to increases in salaries and employee benefits of \$31.9 million, information technology expenses of \$8.9 million, data costs of \$3.6 million, and other operating expenses of \$2.1 million.

Selling, General and Administrative Expenses

Selling, general and administrative expenses for our Insurance segment were \$397.7 million for the year ended December 31, 2019 compared to \$218.8 million for the year ended December 31, 2018, an increase of \$178.9 million or 81.7%. Our litigation reserve related to the *Xactware Solutions, Inc. Patent Litigation* accounted for an increase of \$125.0 million. Our acquisition-related costs (earn-outs) accounted for an increase of \$32.1 million. Our recent acquisitions, and businesses held for sale, accounted for an increase of \$8.0 million primarily related to salaries and employee benefits. The remaining SGA increased \$13.8 million or 6.4% primarily due to increases in salaries and employee benefits of \$10.0 million, information technology expenses of \$2.5 million, and professional consulting costs of \$2.3 million; these increases were partially offset by a decrease in other general expenses of \$1.0 million.

The increase in salaries and employee benefits of \$10.0 million included an increase in stock based compensation of \$1.4 million. Our stock based compensation increased as a result of the expensing of the full impact of the equity awards in the period for all employees upon the attainment of age 62 during the year in accordance with ASC 718, instead of amortizing the expense over the vesting term.

Investment (Loss) Income and Others, Net

Investment (loss) income and others, net was a gain of \$0.8 million for the year ended December 31, 2019 compared to a gain of \$13.2 million for the year ended December 31, 2018. The decrease of \$12.4 million was primarily due to a realized gain and interest income of \$17.2 million related to the repayment of the subordinated promissory note receivable in August 2018, prior to its maturity.

EBITDA Margin

EBITDA for our Insurance segment was \$827.1 million for the year ended December 31, 2019 compared to \$932.2 million for the year ended December 31, 2018. The EBITDA margin for our Insurance segment was 44.6% for the year ended December 31, 2019 compared to 54.6% for the year ended December 31, 2018. The decrease in EBITDA margin was primarily related to the litigation reserve, acquisition-related costs (earn-outs), and additional stock-based compensation as a result of accelerated vesting of equity awards granted to employees at age 62 for the year ended December 31, 2019.

Energy and Specialized Markets

Revenues

Revenues for our Energy and Specialized Markets segment were \$573.6 million for the year ended December 31, 2019 compared to \$513.3 million for the year ended December 31, 2018, an increase of \$60.3 million or 11.7%. Our recent acquisitions, the Caas business and Genscape, within this segment contributed revenues of \$32.8 million. The remaining increase in Energy and Specialized Markets revenue of \$27.5 million or 5.3% primarily was due to an increase in new customers for our market and cost intelligence solutions, growth in the continuing end-market improvements in the energy sector, specifically in core research, and an increase in our environmental health and safety services revenue.

Cost of Revenues

Cost of revenues for our Energy and Specialized Markets segment was \$248.1 million for the year ended December 31, 2019 compared to \$218.2 million for the year ended December 31, 2018, an increase of \$29.9 million or 13.7%. Our recent acquisitions accounted for an increase of \$19.9 million in cost of revenues, which was primarily related to salaries and employee benefits. The remaining cost of revenues increased \$10.0 million or 4.5% primarily due to increases in salaries and employee benefits costs of \$7.4 million, data costs of \$0.8 million, information technology expenses of \$0.7 million, and other operating costs of \$1.1 million.

Selling, General and Administrative Expenses

Selling, general and administrative expenses for our Energy and Specialized Markets segment were \$186.1 million for the year ended December 31, 2019 compared to \$141.1 million for the year ended December 31, 2018, an increase of \$45.0 million or 32.0%. Our acquisition-related costs (earn-out) accounted for an increase of \$39.5 million. Our recent acquisitions accounted for an additional increase of \$4.5 million, primarily related to salaries and employee benefits. The remaining SGA increased \$1.0 million or 0.8% primarily due to an increase in salaries and employee benefits costs of \$0.8 million, professional consulting costs of \$0.5 million, and information technology expenses of \$0.5 million; these increases were partially offset by a decrease in other general expenses of \$0.8 million.

Investment (Loss) Income and Others, Net

Investment (loss) income and others, net was a loss of \$2.0 million for the year ended December 31, 2019 compared to a gain of \$0.4 million for the year ended December 31, 2018.

EBITDA Margin

EBITDA for our Energy and Specialized Markets segment was \$137.4 million for the year ended December 31, 2019 compared to \$154.4 million for the year ended December 31, 2018. The EBITDA margin for our Energy and Specialized Markets segment was 24.0% for the year ended December 31, 2019 compared to 30.1% for the year ended December 31, 2018. The decrease in EBITDA margin was primarily related to acquisition-related costs (earn-out) and additional stock-based compensation as a result of accelerated vesting of equity awards granted to employees at age 62 for the year ended December 31, 2019.

Financial Services

Revenues

Revenues for our Financial Services segment were \$178.0 million for the year ended December 31, 2019 compared to \$175.9 million for the year ended December 31, 2018, an increase of \$2.1 million or 1.2%. The increase within this segment of \$4.2 million or 2.4% was primarily due to increases in spend informed analytics revenues and fraud and credit risk management, partially offset by weakness in enterprise data management solutions. The disposition of the retail analytics solution business negatively impacted growth by \$2.1 million.

Cost of Revenues

Cost of revenues for our Financial Services segment was \$97.2 million for the year ended December 31, 2019 compared to \$99.9 million for the year ended December 31, 2018, a decrease of \$2.7 million or 2.7%. The cost of revenues decreased \$1.4 million due to the disposition of our retail analytics solution business for the year ended December 31, 2019 and \$3.1 million due to our acquisition-related costs (earn-outs) for the year ended December 31, 2018. These decreases were partially offset by a cost of revenues increase of \$1.8 million or 2.0%, primarily due to increases in salaries and employee benefits costs of \$1.0 million, information technology expenses of \$0.6 million and other operating costs of \$0.2 million.

Selling, General and Administrative Expenses

Selling, general and administrative expenses for our Financial Services segment were \$19.7 million for the year ended December 31, 2019 compared to \$18.8 million for the year ended December 31, 2018, an increase of \$0.9 million or 4.3%. Our acquisition-related costs (earn-out) accounted for a decrease of \$0.4 million. The remaining SGA increase of \$1.3 million, or 7.3%, is primarily due to increases in salaries and employee benefits costs of \$0.9 million, information technology expenses of \$0.2 million, and other general expenses of \$0.3 million. These increases were partially offset by a decrease in professional consulting fees of \$0.1 million.

Other Operating Expenses

Other operating expenses were \$6.2 million for the year ended December 31, 2019 compared to \$0 million for the year ended December 31, 2018, an increase of \$6.2 million or 100.0%, which was primarily related to a loss associated with the disposition of our retail analytics solution business.

Investment (Loss) Income and Others, Net

Investment (loss) income and others, net was a loss of \$0.5 million for the year ended December 31, 2019 compared to a gain of \$1.7 million for the year ended December 31, 2018.

EBITDA Margin

EBITDA for our Financial Services segment was \$54.4 million for the year ended December 31, 2019 compared to \$58.9 million for the year ended December 31, 2018. The EBITDA margin for our Financial Services segment was 30.6% for the year ended December 31, 2019 compared to 33.5% for the year ended December 31, 2018. The decrease in EBITDA margin was primarily related to the loss generated from the sale of our retail analytics solution business and additional stock-based compensation expenses as a result of accelerated vesting of equity awards granted to employees at age 62 for the year ended December 31, 2019.

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, 2019. 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,	
	2019				2019
	(in millions, except for per share data)				
Statement of operations data:					
Revenues	\$ 625.0	\$ 652.6	\$ 652.7	\$ 676.8	\$ 2,607.1
Operating income	\$ 202.4	\$ 218.3	\$ 69.6 ⁽¹⁾	\$ 206.6	\$ 696.9
Net income	\$ 134.4	\$ 150.4	\$ 32.9	\$ 132.2	\$ 449.9
Basic net income per share	\$ 0.82	\$ 0.92	\$ 0.20	\$ 0.81	\$ 2.75
Diluted net income per share	\$ 0.81	\$ 0.90	\$ 0.20	\$ 0.80	\$ 2.70
	For the Quarters Ended				Full Year
	March 31,	June 30,	September 30,	December 31,	
	2018				2018
	(in millions, except for per share data)				
Statement of operations data:					
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

⁽¹⁾ Included a loss of \$6.2 million from the sale of our retail analytics solution business to conform with the presentation of our consolidated financial statements in this Form 10-K for the year ended December 31, 2019.

Liquidity and Capital Resources

As of December 31, 2019 and 2018, we had cash and cash equivalents and available-for-sale securities of \$188.2 million and \$142.8 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, 2019 and 2018, were 8.3% and 9.6%, 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 historically used a portion of our cash for repurchases of our common stock from our stockholders. For the years ended December 31, 2019, 2018 and 2017, we repurchased \$300.0 million, \$438.6 million and \$276.3 million, respectively, of our common stock. For the year ended December 31, 2019, we also paid dividends of \$163.5 million.

Financing and Financing Capacity

We had total debt, excluding finance lease obligations, unamortized discounts and premium, and debt issuance costs of \$3,145.0 million and \$2,715.0 million at December 31, 2019 and 2018, respectively. The debt at December 31, 2019 primarily consists of senior notes issued in 2019, 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, 2019, we had senior notes with an aggregate principal amount of \$2,650.0 million outstanding, and we were in compliance with our financial debt covenants.

We have a credit facility with Bank of America N.A., HSBC Bank USA, N.A., JP Morgan Chase Bank, N.A., Wells Fargo Bank, National Association, Citibank, N.A., Credit Suisse AG, Cayman Islands Branch, Morgan Stanley Bank, N.A., TD Bank, N.A., and the Northern Trust Company. On August 15, 2019, we entered into the fourth amendment, or the Amendment, to the Credit Facility, which reduced the borrowing capacity from \$1,500.0 million to \$1,000.0 million, extended the maturity date to August 15, 2024, and amended the pricing grid. Interest on borrowings under the Amendment is payable at an interest rate of LIBOR plus 1.0% to 1.625%, depending upon the public debt rating. A commitment fee on any unused balance is payable periodically and may range from 8.0 to 20.0 basis points based upon the public debt rating. The Amendment also contains certain financial and other covenants that, among other things, impose certain restrictions on indebtedness, liens, investments, and capital expenditures. These covenants 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, we have a consolidated funded debt leverage ratio of less than 3.5 to 1.0. At our election, the maximum consolidated funded debt leverage ratio could be permitted to increase one time each to 4.0 to 1.0 and 4.25 to 1.0. The Credit Facility may be used for general corporate purposes, including working capital needs and capital expenditures, acquisitions, dividends and the share repurchase program. As of December 31, 2019, we were in compliance with all financial and other debt covenants under the Credit Facility. During the year ended December 31, 2019, we had borrowings of \$880.0 million and repayments of \$800.0 million under the Credit Facility. As of December 31, 2019 and 2018, we had outstanding borrowings under the Credit Facility of \$495.0 million and \$415.0 million, respectively. Subsequent to December 31, 2019, we had borrowings of \$40.0 million under the Credit Facility. In addition, we subsequently repaid a total of \$130.0 million of the \$495.0 million outstanding borrowings at December 31, 2019 under the Credit Facility.

Cash Flow

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

	<u>2019</u>	<u>2018</u>	<u>2017</u>
	(in millions)		
Net cash provided by operating activities	\$ 956.3	\$ 934.4	\$ 743.5
Net cash used in investing activities	\$ (927.9)	\$ (265.4)	\$ (1,105.5)
Net cash provided by (used in) financing activities	\$ 10.9	\$ (669.8)	\$ 362.5

Operating Activities

Net cash provided by operating activities increased to \$956.3 million for the year ended December 31, 2019 compared to \$934.4 million for the year ended December 31, 2018. The increase was primarily related to an increase in cash receipts from customers driven by an increase in revenues and operating profit partially offset by an increase of income tax payments.

Investing Activities

Net cash used in investing activities of \$927.9 million for the year ended December 31, 2019 was primarily related to acquisitions of \$703.7 million including escrow funding and capital expenditures of \$216.8 million.

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.

Financing Activities

Net cash provided by financing activities of \$10.9 million for the year ended December 31, 2019 was driven by proceeds from issuance of long-term debt, inclusive of original issue premium and net of original discount, of \$619.7 million, net debt proceeds on our Credit Facility of \$80.0 million, and proceeds from stock options exercised of \$52.4 million, partially offset by repurchases of common stock of \$300.0 million, the repayment of our 4.875% senior notes of \$250.0 million on January 15, 2019, and dividend payments of \$163.5 million.

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.

Contractual Obligations

The following table summarizes our contractual obligations at December 31, 2019 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)					
Contractual obligations					
Long-term debt, current portion of long-term debt and interest	\$ 4,133.4	\$ 615.7	\$ 993.2	\$ 160.0	\$ 2,364.5
Operating leases (1)	304.7	48.7	74.8	52.4	128.8
Pension and postretirement plans (2)	16.3	2.0	4.0	3.4	6.9
Finance lease obligations (3)	8.1	5.2	2.8	0.1	—
Other long-term liabilities (4)	0.6	0.1	0.1	—	0.4
Total (5)	\$ 4,463.1	\$ 671.7	\$ 1,074.9	\$ 215.9	\$ 2,500.6

- (1) Future operating lease payments of \$2.5 million related to businesses classified as held for sale have been excluded. See Note 11. Businesses held for sale and disposition and Note 22. Subsequent events, to our consolidated financial statements included in this annual report on Form 10-K.
- (2) Our funding policy is to contribute at least equal to the minimum legal funding requirement.
- (3) Future finance lease payments of \$26.5 million related to businesses classified as held for sale have been excluded. See Note 11. Businesses held for sale and disposition and Note 22. Subsequent events, to our consolidated financial statements included in this annual report on Form 10-K.
- (4) 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.

- (5) Unrecognized tax benefits of approximately \$11.5 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 \$4.6 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, 2019, we had goodwill of \$3,864.3 million, which represents 54.8% of our total assets. During 2019, we performed an impairment test as of June 30, 2019 and confirmed that no impairment charge was necessary. None of our reporting units are at risk of impairment as the fair value of each reporting unit exceeds its carrying value. There are many assumptions and estimates used that directly impact the results of impairment testing, including an estimate of future expected revenues, EBITDA, EBITDA margins and cash flows, useful lives and discount rates, and an estimate of value using multiples derived from the stock prices of publicly traded guideline companies applied to such expected cash flows and market approaches 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, 2019. For the year ended December 31, 2019, 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.

We estimate unrecognized tax positions of \$1.1 million that may be recognized by December 31, 2020, due to expiration of statutes of limitations and resolution of audits with taxing authorities, net of additional uncertain tax positions.

As of December 31, 2019, we have gross federal, state, and foreign income tax net operating loss carryforwards of \$229.1 million, which will expire at various dates from 2020 through 2039. Such net operating loss carryforwards expire as follows:

Years Ending	(In millions)
2020 - 2027	\$ 24.9
2028 - 2032	14.6
2033 - 2039	189.6
Total	<u>\$ 229.1</u>

The net deferred income tax liability of \$346.2 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, 2019, we had borrowings outstanding under our credit facility of \$495.0 million, which bear interest at variable rates based on LIBOR plus 1.0% 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, 2019, a one percent change in interest rate would result in a change in annual pre-tax interest expense of approximately \$5.0 million based on our current borrowing levels.

We have started to consider the implications of the transition of LIBOR to alternative reference rate measures that will likely become effective post December 2021. We believe that there is still some uncertainty over what these rates will be but one possibility for U.S. dollar LIBOR would be the Secured Overnight Financing Rate ("SOFR"). As this decision has not been finalized at the time of amending our Credit Facility agreement, there is no definitive alternative rate proposed in the current contract. We are, however, reviewing the potential impact on the application of this rate on our interest expense once it becomes applicable. As our only current contract extending beyond 2021, that is subject to the LIBOR rate is the Credit Facility, the impact will be dependent on what the outstanding borrowing amount is on the Credit Facility and the relevant interest rate that will be contractually applicable. Should we amend our Credit Facility to reflect SOFR, based on recent borrowings and applicable SOFR, we do not anticipate to have a material impact on the business.

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, 2019. 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 103 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 2019 (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 less than 1.4% of total assets (excluding goodwill and intangible assets which were integrated into the Company's systems and control environment) and less than 1.7% of revenues as of and for the year ended December 31, 2019. Based upon the foregoing assessments, our Chief Executive Officer and Chief Financial Officer have concluded that, as of December 31, 2019, our disclosure controls and procedures were effective at the reasonable assurance level.

Management's Report on Internal Control over Financial Reporting

The information required by this Item is set forth on page 46 of this annual report on Form 10-K.

Attestation Report of the Registered Public Accounting Firm

The information required by this Item is set forth on pages 47 through 48 of this annual report on Form 10-K.

Changes in Internal Control over Financial Reporting

We are in the process of integrating our recent acquisitions in 2019 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 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

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, 2019.

Management excluded from its assessment the internal control over financial reporting for our acquisitions in 2019 (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 1.4% of total assets (excluding goodwill and intangible assets which were integrated into the Company's systems and control environment) and 1.7% of revenues collectively included within our consolidated financial statements as of and for the year ended December 31, 2019. 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, 2019, 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, 2019, 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, 2019, 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, 2019, of the Company and our report dated February 18, 2020, expressed an unqualified opinion on those consolidated financial statements and included an explanatory paragraph regarding the Company’s adoption of a new accounting standard.

As described in Management’s Report on Internal Controls over Financial Reporting, management excluded from its assessment the internal control over financial reporting at Content as a Service (“Caas”), which was acquired on March 29, 2019, Keystone Aerial Surveys, Inc., which was acquired on July 31, 2019, Property Pres Wizard, LLC., which was acquired on August 28, 2019, BuildFax, Inc., which was acquired on October 10, 2019, Genscape, Inc., which was acquired on November 5, 2019, Commerce Signals, Inc., which was acquired on December 19, 2019, and Flexible Architecture and Simplified Technology, LLC, which was acquired on December 23, 2019 (collectively the “2019 acquired businesses”). The consolidated financial statements of the 2019 acquired businesses constitute less than 1.4% of total assets (excluding goodwill and intangible assets which were integrated into the Company’s systems and control environment) and less than 1.7% of revenues collectively of the consolidated financial statement amounts as of and for the year ended December 31, 2019. Accordingly, our audit did not include the internal control over financial reporting at the 2019 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.

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 18, 2020

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, 2019 (the "Proxy Statement").

Our board of directors has adopted a Code of Business Conduct and Ethics applicable to all officers, directors and employees, which is available on our website (investor.verisk.com) under "Corporate Governance". We intend to satisfy the disclosure requirement under Item 5.05 of Form 8-K regarding any amendment to, or waiver from, a provision of our Code of Business Conduct and Ethics by posting such information on the website address and location specified above.

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, 2019 and 2018 and for the Years Ended December 31, 2019, 2018 and 2017.

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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, 2019 and 2018, the related consolidated statements of operations, comprehensive income (loss), stockholders' equity, and cash flows, for each of the three years in the period ended December 31, 2019, 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, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, 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, 2019, 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 18, 2020, expressed an unqualified opinion on the Company's internal control over financial reporting.

Change in Accounting Principle

As discussed in Note 8 to the financial statements, effective January 1, 2019, the Company adopted FASB Accounting Standards Codification ("ASC") Topic 842, *Leases*, using the modified retrospective approach.

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.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Goodwill - Energy and Specialized Markets Reportable Segment - Refer to Notes 2 and 12 to the financial statements

Critical Audit Matter Description

The Company's evaluation of goodwill for impairment involves the comparison of the fair value of each reporting unit to its carrying value. The Company determines the fair value of its reporting units using the discounted cash flow model and the market approach. The determination of fair value using the discounted cash flow model requires management to make significant estimates and assumptions related to forecasts of future revenues, EBITDA margins, and the discount rate. The determination of fair value using the market approach requires management to make significant estimates and assumptions related to the selection of revenue and EBITDA multiples. Changes in these assumptions could have a significant impact on either the fair value, the amount of any goodwill impairment charge, or both. The goodwill balance was \$3,864 million as of

December 31, 2019 of which \$2,255 million was attributable to a reporting unit within the Energy & Specialized Markets reportable segment.

Given the significant judgments made by management to estimate the fair value of the reporting unit within the Energy and Specialized Markets reportable segment including management's judgments in selecting significant assumptions to forecast future revenues, EBITDA margins, and the discount rate, as well as the selection of revenue and EBITDA multiples, performing audit procedures to evaluate the reasonableness of management's estimates and assumptions for the reporting unit within the Energy and Specialized Markets reportable segment required a high degree of auditor judgment and an increased extent of effort, including the need to involve our fair value specialists.

How the Critical Audit Matter was addressed in the Audit

Our audit procedures related to forecasts of future revenue and EBITDA margin, selection of the discount rate used within the income approach and selection of the Revenue and EBITDA multiples used in the market approach for a reporting unit within the Energy & Specialized Markets reportable segment included the following, among others:

- We tested the effectiveness of controls over management's goodwill impairment evaluation, including those over the determination of the fair value of the reporting unit within the Energy and Specialized Markets reportable segment such as controls related to management's selection of the discount rate, forecasts of future revenue and Revenue and EBITDA multiples.
- We evaluated management's ability to accurately forecast future revenues and EBITDA margins by comparing actual results to management's historical forecasts.
- We evaluated the reasonableness of management's revenue and EBITDA margin forecasts by comparing the forecasts to:
 - Historical revenues and EBITDA margins.
 - Internal communications to management and the Board of Directors.
 - Forecasted information included in Company press releases, as well as in analyst and industry reports for the Company and certain peer companies.
- With the assistance of our fair value specialists, we evaluated the reasonableness of the (1) valuation methodologies (2) Revenue and EBITDA multiples and (3) the discount rate by:
 - Testing the source information underlying the determination of the discount rate, the selection of the Revenue and EBITDA multiples and the mathematical accuracy of the calculations.
 - Developing a range of independent estimates and comparing those to the discount rate selected by management.

/s/ Deloitte & Touche LLP
Parsippany, New Jersey
February 18, 2020

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

VERISK ANALYTICS, INC.
CONSOLIDATED BALANCE SHEETS
As of December 31, 2019 and 2018

	2019	2018
(in millions, except par value and number of shares)		
ASSETS:		
Current assets:		
Cash and cash equivalents	\$ 184.6	\$ 139.5
Accounts receivable, net	441.6	356.4
Prepaid expenses	60.9	63.9
Income taxes receivable	25.9	34.0
Other current assets	17.8	50.7
Current assets held for sale	14.1	—
Total current assets	744.9	644.5
Noncurrent assets:		
Fixed assets, net	548.1	555.9
Operating lease right-of-use assets, net	218.6	—
Intangible assets, net	1,398.9	1,227.8
Goodwill	3,864.3	3,361.5
Deferred income tax assets	9.8	11.1
Other noncurrent assets	159.8	99.5
Noncurrent assets held for sale	110.8	—
Total assets	\$ 7,055.2	\$ 5,900.3
LIABILITIES AND STOCKHOLDERS' EQUITY:		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 375.0	\$ 250.9
Acquisition-related liabilities	111.2	12.6
Short-term debt and current portion of long-term debt	499.4	672.8
Deferred revenues	440.1	383.1
Operating lease liabilities	40.6	—
Income taxes payable	6.8	5.2
Current liabilities held for sale	18.7	—
Total current liabilities	1,491.8	1,324.6
Noncurrent liabilities:		
Long-term debt	2,651.6	2,050.5
Deferred income tax liabilities	356.0	350.6
Operating lease liabilities	208.1	—
Acquisition-related liabilities	0.2	28.3
Other noncurrent liabilities	48.6	75.7
Noncurrent liabilities held for sale	38.1	—
Total liabilities	4,794.4	3,829.7
Commitments and contingencies		
Stockholders' equity:		
Common stock, \$.001 par value; 2,000,000,000 shares authorized; 544,003,038 shares issued; 163,161,564 and 163,970,410 shares outstanding, respectively	0.1	0.1
Additional paid-in capital	2,369.1	2,283.0
Treasury stock, at cost, 380,841,474 and 380,032,628 shares, respectively	(3,849.9)	(3,563.2)
Retained earnings	4,228.4	3,942.6
Accumulated other comprehensive loss	(486.9)	(591.9)

Total stockholders' equity	2,260.8	2,070.6
Total liabilities and stockholders' equity	\$ 7,055.2	\$ 5,900.3

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, 2019, 2018 and 2017

	2019	2018	2017
	(in millions, except per share amounts and number of shares)		
Revenues	\$ 2,607.1	\$ 2,395.1	\$ 2,145.2
Operating expenses:			
Cost of revenues (exclusive of items shown separately below)	976.8	886.2	783.8
Selling, general and administrative	603.5	378.7	322.8
Depreciation and amortization of fixed assets	185.7	165.3	135.6
Amortization of intangible assets	138.0	130.8	101.8
Other operating expenses	6.2	—	—
Total operating expenses	1,910.2	1,561.0	1,344.0
Operating income	696.9	834.1	801.2
Other income (expense):			
Investment (loss) income and others, net	(1.7)	15.3	9.2
Interest expense	(126.8)	(129.7)	(119.4)
Total other expense, net	(128.5)	(114.4)	(110.2)
Income before income taxes	568.4	719.7	691.0
Provision for income taxes	(118.5)	(121.0)	(135.9)
Net income	\$ 449.9	\$ 598.7	\$ 555.1
Basic net income per share	\$ 2.75	\$ 3.63	\$ 3.36
Diluted net income per share	\$ 2.70	\$ 3.56	\$ 3.29
Weighted average shares outstanding:			
Basic	163,535,438	164,808,110	165,168,224
Diluted	166,560,115	168,297,836	168,688,868

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

VERISK ANALYTICS, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
For The Years Ended December 31, 2019, 2018 and 2017

	<u>2019</u>	<u>2018</u>	<u>2017</u>
		(in millions)	
Net income	\$ 449.9	\$ 598.7	\$ 555.1
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustment	88.4	(154.1)	227.0
Unrealized holding gain on available-for-sale securities	—	—	0.4
Pension and postretirement adjustment	16.6	(24.8)	11.1
Total other comprehensive income (loss)	<u>105.0</u>	<u>(178.9)</u>	<u>238.5</u>
Comprehensive income	<u>\$ 554.9</u>	<u>\$ 419.8</u>	<u>\$ 793.6</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, 2019, 2018 and 2017

	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 as of January 1, 2017	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 transferred from treasury stock)	—	—	28.7	9.2	—	—	37.9
Restricted stock lapsed (143,557 shares transferred from treasury stock)	—	—	(1.1)	1.1	—	—	—
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 (50,957 shares transferred from treasury stock)	—	—	2.0	0.4	—	—	2.4
Balance as of 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 transferred from treasury stock)	—	—	66.8	24.0	—	—	90.8
Restricted stock lapsed (176,610 shares transferred from treasury stock)	—	—	(1.5)	1.5	—	—	—
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 (44,602 shares transferred from treasury stock)	—	—	2.8	0.4	—	—	3.2
Balance as of December 31, 2018	544,003,038	0.1	2,283.0	(3,563.2)	3,942.6	(591.9)	2,070.6
Net income	—	—	—	—	449.9	—	449.9
Common stock dividend ⁽¹⁾	—	—	—	—	(164.1)	—	(164.1)
Other comprehensive income	—	—	—	—	—	105.0	105.0
Treasury stock acquired (2,178,151 shares)	—	—	—	(300.0)	—	—	(300.0)
Stock options exercised (1,131,970 shares transferred from treasury stock)	—	—	46.9	11.0	—	—	57.9
Restricted stock lapsed (192,109 shares transferred from treasury stock)	—	—	(1.8)	1.8	—	—	—
Stock-based compensation	—	—	42.7	—	—	—	42.7
Net share settlement from restricted stock awards (40,578 shares withheld for tax settlement)	—	—	(5.5)	—	—	—	(5.5)
Other stock issuances (45,226 shares transferred from treasury stock)	—	—	3.8	0.5	—	—	4.3
Balance as of December 31, 2019	544,003,038	\$ 0.1	\$ 2,369.1	\$ (3,849.9)	\$ 4,228.4	\$ (486.9)	\$ 2,260.8

⁽¹⁾ Refer to Note 16. Stockholders' Equity for discussion related to quarterly cash dividends declared per share

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, 2019, 2018 and 2017

	2019	2018	2017
	(In millions)		
Cash flows from operating activities:			
Net income	\$ 449.9	\$ 598.7	\$ 555.1
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization of fixed assets	185.7	165.3	135.6
Amortization of intangible assets	138.0	130.8	101.8
Amortization of debt issuance costs and original issue discount, net of original issue premium	3.9	4.2	4.2
Provision for doubtful accounts	7.2	5.6	2.0
Realized gain on subordinated promissory note	—	(12.3)	—
Other operating expenses	6.2	—	—
Stock-based compensation expense	42.7	38.5	31.8
Realized (gain) loss on available-for-sale securities, net	(0.9)	0.1	—
Deferred income taxes	(29.3)	18.3	(73.6)
Loss on disposal of fixed assets, net	0.3	0.3	0.1
Changes in assets and liabilities, net of effects from acquisitions:			
Accounts receivable	(70.3)	(17.4)	(45.5)
Prepaid expenses and other assets	(19.7)	(28.2)	(30.6)
Operating lease right-of-use assets, net	51.3	—	—
Income taxes	15.0	(2.9)	22.7
Acquisition-related liabilities	70.4	9.7	—
Accounts payable and accrued liabilities	150.9	58.1	28.5
Deferred revenues	11.4	0.8	29.2
Operating lease liabilities	(49.5)	—	—
Other liabilities	(6.9)	(35.2)	(17.8)
Net cash provided by operating activities	956.3	934.4	743.5
Cash flows from investing activities:			
Acquisitions, net of cash acquired of \$10.4 million, \$3.1 million and \$29.9 million, respectively	(699.2)	(138.2)	(873.3)
Escrow funding associated with acquisitions	(4.5)	(14.9)	(41.6)
Proceeds from subordinated promissory note	—	121.4	—
Capital expenditures	(216.8)	(231.0)	(183.5)
Other investing activities, net	(7.4)	(2.7)	(7.1)
Net cash used in investing activities	(927.9)	(265.4)	(1,105.5)

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

VERISK ANALYTICS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS (Continued)
For The Years Ended December 31, 2019, 2018 and 2017

	2019	2018	2017
	(in millions)		
Cash flows from financing activities:			
Proceeds (repayment) of short-term debt, net	80.0	(300.0)	160.0
Repayments of current portion of long-term debt	(250.0)	—	—
Proceeds from issuance of long-term debt, inclusive of original issue premium and net of original issue discount	619.7	—	—
Proceeds from issuance of short-term debt with original maturities greater than three months	—	—	455.0
Payment of debt issuance costs	(6.3)	—	(0.5)
Repurchases of common stock	(300.0)	(438.6)	(276.3)
Net share settlement of taxes from restricted stock awards	(5.5)	(3.7)	(2.9)
Proceeds from stock options exercised	52.4	87.3	35.0
Dividends paid	(163.5)	—	—
Other financing activities, net	(15.9)	(14.8)	(7.8)
Net cash provided by (used in) financing activities	10.9	(669.8)	362.5
Effect of exchange rate changes	6.1	(2.0)	6.7
Net increase (decrease) in cash and cash equivalents, including cash classified within current assets held for sale	45.4	(2.8)	7.2
Less: Decrease in cash classified within current assets held for sale	(0.3)	—	—
Increase (decrease) in cash and cash equivalents	45.1	(2.8)	7.2
Cash and cash equivalents, beginning of period	139.5	142.3	135.1
Cash and cash equivalents, end of period	\$ 184.6	\$ 139.5	\$ 142.3
Supplemental disclosures:			
Income taxes paid	\$ 139.8	\$ 103.2	\$ 186.3
Interest paid	\$ 119.9	\$ 125.2	\$ 113.9
Noncash investing and financing activities:			
Deferred tax liability established on date of acquisitions	\$ 43.4	\$ 5.6	\$ 74.4
Right-of-use assets obtained in exchange for new operating lease liabilities	\$ 247.6	\$ —	\$ —
Finance lease additions	\$ 20.2	\$ 21.3	\$ 10.9
Operating lease additions, net of terminations	\$ 13.7	\$ —	\$ —
Tenant improvement	\$ 1.7	\$ 0.3	\$ —
Fixed assets included in accounts payable and accrued liabilities	\$ 1.6	\$ 0.3	\$ 2.9
Dividend payable included in other liabilities	\$ 0.6	\$ —	\$ —

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. 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, 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 and liabilities, 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. 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.) Certain reclassifications, including reflecting acquisition-related liabilities as a separate line item in 2019, have been made within the consolidated balance sheets, consolidated statements of cash flows and in the notes to conform to the respective 2019 presentation.

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 recurring and non-recurring long-term 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 sale of services where revenue is recognized when control of the promised services is transferred to 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 non-refundable. 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 as well as 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 while the online portal contains the latest 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 a 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/or collected in advance of services being provided are recorded as “Deferred revenues” and “Other noncurrent liabilities” in the accompanying consolidated balance sheets and are recognized as the services are performed, control is transferred to customers, and the applicable revenue recognition criteria is met.

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

Accounts receivable 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, 2019. 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* ("ASC 350-40"). The Company also capitalizes software development costs upon the establishment of technological feasibility for a product in accordance with ASC 985-20, *Software to be Sold, Leased, or Marketed* ("ASC 985-20"). Software development costs are amortized on a straight-line basis.

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) *Leases*

The Company has operating and finance leases for corporate offices, data centers, and certain equipment that are accounted for under ASC 842. The leases have remaining lease terms ranging from one year to fourteen years, some of which include the options to extend the leases for up to twenty years, and some of which include the options to terminate the leases within one year. Extension and termination options are considered in the calculation of the right-of-use (“ROU”) assets and lease liabilities when the Company determines it is reasonably certain that it will exercise those options.

The Company determines if an arrangement is a lease at inception. The Company considers any contract where there is an identified asset and that it has the right to control the use of such asset in determining whether the contract contains a lease. A ROU asset represents the Company’s right to use an underlying asset for the lease term and the lease liabilities represent its obligation to make lease payments arising from the lease. Operating lease ROU assets

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

and lease liabilities are recognized at commencement date based on the present value of lease payments over the lease term. As 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 incremental borrowing rate was calculated by using the Company's credit rating on its publicly-traded U.S. unsecured bonds and estimating an appropriate credit rating for similar secured debt instruments. The Company's calculated credit rating on secured debt instruments determined the yield curve used. The Company calculated an implied spread and applied the spreads to the risk-free interest rates based on the yield of the U.S. Treasury zero coupon securities with a maturity equal to the remaining lease term in determining the borrowing rates for all operating leases. The operating lease ROU assets include any lease payments made prior to the rent commencement date and exclude lease incentives. Lease expense for lease payments are recognized on a straight-line basis over the lease term. Operating lease transactions are included in "Operating lease right-of-use assets, net", and "Operating lease liabilities", current and noncurrent, within the accompanying consolidated balance sheets. Finance leases are included in property and equipment under "Fixed assets, net", "Short-term debt and current portion of long-term debt", and "Long-term debt" within the accompanying consolidated balance sheets.

(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.

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

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.

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 \$65.6 million, \$47.6 million and \$37.4 million for the years ended December 31, 2019, 2018 and 2017, 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 \$10.7 million, \$9.0 million and \$6.9 million for the years ended December 31, 2019, 2018 and 2017, 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.

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

(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 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, 2019 and 2018, 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, 2019, which resulted in no impairment of goodwill in 2019. 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*

Accounting Standard	Description	Effective Date	Effect on Consolidated Financial Statements or Other Significant Matters
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VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

<p><i>Revenue from Contracts with Customers</i> ("Topic 606")</p> <p>In May 2014, Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2014-09, "Revenue from Contracts with Customers (Topic 606)"</p>	<p>Refer to Note 6. Revenue</p>	<p>Fiscal years beginning after December 15, 2017 with early adoption permitted. The Company adopted on January 1, 2018.</p>	<p>Refer to Note 6. Revenue</p>
<p><i>Financial Instruments—Overall</i> (Subtopic 825-10)</p> <p>In January 2016, FASB issued ASU No. 2016-01, "Recognition and Measurement of Financial Assets and Financial Liabilities" ("ASU 2016-01")</p>	<p>The amendments in this update require all equity investments to be measured at fair value with changes in the fair value recognized through net income (other than those accounted for under equity method of accounting or those that result in consolidation of the investee). The amendments allow equity investments that do not have readily determinable fair values to be remeasured at fair value either upon occurrence of an observable price change or upon identification of an impairment.</p>	<p>Fiscal years beginning after December 15, 2017. The Company adopted on January 1, 2018.</p>	<p>The impact of adoption associated with ASU No. 2016-01 was immaterial to the Company's consolidated financial statements.</p>
<p><i>Income Statement—Reporting Comprehensive Income</i> (Topic 220)</p> <p>In February 2018, the FASB issued ASU 2018-02, Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income ("ASU 2018-02").</p>	<p>The guidance in ASU 2018-02 allows an entity to elect to reclassify the stranded tax effects related to the Tax Cuts and Jobs Act of 2017 (the "Act") from accumulated other comprehensive income into retained earnings.</p>	<p>Fiscal years beginning after December 15, 2018 with early adoption permitted. The Company adopted on January 1, 2019.</p>	<p>The Company elected not to reclassify any amounts recognized in other comprehensive income into retained earnings.</p>
<p><i>Leases</i> ("Topic 842")</p> <p>In July 2018, FASB issued ASU No. 2018-10, "Codification Improvements to Topic 842, Lease"</p>	<p>Refer to Note 8. Leases</p>	<p>Fiscal years beginning after December 15, 2018 with early adoption permitted. The Company adopted on January 1, 2019.</p>	<p>Refer to Note 8. Leases</p>
<p><i>Financial Instruments—Credit Losses</i> (Topic 326), <i>Derivatives and Hedging</i> (Topic 815), and <i>Financial Instruments</i> (Topic 825)</p> <p>In April 2019, FASB issued ASU No. ASU No. 2019-04, "Codification Improvements to Topic 326, Financial Instruments—Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments"</p>	<p>Topics addressed by the updates include recoveries in estimating expected credit losses, accrued interest accounting policy elections and practical expedients, transfers between loan classifications and debt security categories, contractual term extensions and renewal options, vintage disclosures for revolving line-of credit arrangements, reinsurance recoverables, expected prepayments in determining the discount rate used to estimate credit losses, and interest rate projections for variable-rate instruments. In May 2019, the FASB issued ASU No. 2019-05, <i>Financial Instruments—Credit Losses</i> (Topic 326): <i>Targeted Transition Relief</i> ("ASU No. 2019-05"). ASU No. 2019-05 amends the transition guidance in the new credit losses standard, ASC 326, <i>Financial Instruments—Credit Losses</i>. In November 2019, the FASB issued 1) ASU No. 2019-10, <i>Financial Instruments - Credit Losses</i> (Topic 326, <i>Derivative and Hedging</i> (Topic 815) and <i>Leases</i> (Topic 842): <i>Effective Dates</i> ("ASU No. 2019-10"), which clarified various effective dates for these topics; and 2) ASU No. 2019-11, <i>Codification Improvements to Topic 326, Financial Instruments - Credit Losses</i> ("ASU No. 2019-11"), which addressed stakeholders' specific issues about certain aspects of the amendments in Update 2016-13.</p>	<p>Fiscal years beginning after December 15, 2019 with early adoption permitted.</p>	<p>The Company has decided not to early adopt the amendments. The adoption of this guidance is not expected to have a material impact on the Company's consolidated financial statements.</p>

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

<p><i>Income Tax (Topic 740)</i></p> <p>In December 2019, FASB issued ASU No. 2019-12, "Simplifying the Accounting for Income Taxes" ("ASU No. 2019-12")</p>	<p>The amendments in this guidance reflect the FASB's effort to reduce the complexity of accounting standards while maintaining or enhancing the helpfulness of information provided to financial statement users. Changes include treatment of Hybrid tax regimes, tax basis step-up in goodwill obtained in a transaction that is not a business combination, separate financial statements of legal entities not subject to tax, intraperiod tax allocation, ownership changes in investments, interim-period accounting for enacted changes in tax law, year-to-date loss limitation in interim-period tax accounting, income statement presentation of tax benefits of tax-deductible dividends, and impairment of investment in qualified affordable housing projects accounted for under the equity method.</p>	<p>Fiscal years beginning after December 15, 2020 with early adoption permitted.</p>	<p>The Company has decided not to early adopt the amendments. The Company is currently evaluating ASU No. 2019-12 and has not yet determined the impact of these amendments may have on its consolidated financial statements.</p>
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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:

	2019	2018
Billed receivables	\$ 372.7	\$ 299.7
Unbilled receivables	80.6	62.4
Total receivables	453.3	362.1
Less allowance for doubtful accounts	(11.7)	(5.7)
Accounts receivable, net	\$ 441.6	\$ 356.4

5. Concentration of Credit Risk:

Financial instruments that potentially expose the Company to credit risk consist primarily of cash and cash equivalents as well as accounts receivable, net 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 as of December 31, 2019 and 2018. As of December 31, 2019 and 2018, the Company had cash balances on deposit with ten and eight banks that exceeded the balance insured by the FDIC limit by approximately \$36.4 million and \$16.8 million, respectively. As of December 31, 2019 and 2018, the Company also had cash on deposit with foreign banks of approximately \$145.7 million and \$121.1 million, respectively.

The Company considers the concentration of credit risk associated with its 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 33% of revenues for 2019 and 34% for 2018 as well as for 2017, respectively, with no individual customer accounting for more than approximately 3% of revenues for the years ended December 31, 2019, 2018, and 2017. No individual customer comprised more than approximately 3% of accounts receivable as of December 31, 2019 and 2018.

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

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

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 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.

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 ⁽³⁾	\$ 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	\$ 248.6	\$ 2.3	\$ 250.9
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

Disaggregated revenues by type of service and by country are provided below for the years ended December 31, 2019, 2018 and 2017. No individual country outside of the U.S. accounted for more than 10.0% of the Company's consolidated revenues for the years ended December 31, 2019, 2018 or 2017.

	2019	2018	2017
Insurance:			
Underwriting & rating	\$ 1,244.6	\$ 1,144.5	\$ 1,046.9
Claims	610.9	561.4	503.7
Total Insurance	1,855.5	1,705.9	1,550.6
Energy and Specialized Markets	573.6	513.3	444.6
Financial Services	178.0	175.9	150.0
Total revenues	\$ 2,607.1	\$ 2,395.1	\$ 2,145.2

	2019	2018	2017
Revenues:			
United States ("U.S.")	\$ 2,005.6	\$ 1,849.4	\$ 1,679.4
United Kingdom ("U.K.")	177.3	148.2	111.3
Other countries	424.2	397.5	354.5
Total revenues	\$ 2,607.1	\$ 2,395.1	\$ 2,145.2

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

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, 2019 and 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, 2019 and 2018, the Company had contract liabilities that primarily related to unsatisfied performance obligations to provide customers with the right to use and update the online content over the remaining contract term of \$443.2 million and \$385.1 million, respectively. The \$58.1 million increase in contract liabilities from December 31, 2018 to December 31, 2019 was primarily due to billings of \$357.8 million that were paid in advance, partially offset by \$299.7 million of revenue recognized for the year ended December 31, 2019. Contract liabilities, which are current and noncurrent, are included in "Deferred revenues" and "Other liabilities" in the consolidated balance sheets, respectively, as of December 31, 2019 and 2018.

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 were \$443.2 million and \$385.1 million as of December 31, 2019 and 2018, respectively. 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 as of December 31, 2019 and 2018.

The Company recognizes an asset for incremental costs of obtaining a contract with a customer if it expects the benefits of those costs to be longer than one year. As of December 31, 2019 and 2018, the Company had deferred commissions of \$63.7 million and \$49.5 million, respectively, which have been included in "Prepaid expenses" and "Other assets" in the accompanying consolidated balance sheets.

7. 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 established 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.

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 fair value of cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities, and short-term debt approximate their carrying amounts because of the short-term nature of these instruments. The investments in registered investment companies, which are Level 1 assets measured at fair value on a recurring basis using quoted prices in active markets multiplied by the number of shares owned, were \$3.6 million and \$3.3 million as of December 31, 2019 and 2018, respectively. The investments in registered investment companies have been included in "Other current assets" in the consolidated balance sheets as of December 31, 2019 and 2018.

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

The Company elected not to carry its long-term debt at fair value. The carrying value of the long-term debt represents the amortized cost, inclusive of unamortized premium, and net of 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, 2019 and 2018 respectively:

	Fair Value Hierarchy	2019		2018	
		Carrying Value	Estimated Fair Value	Carrying Value	Estimated Fair Value
Financial instrument not carried at fair value:					
Long-term debt excluding finance lease liabilities and syndicated revolving credit facility debt issuance costs	Level 2	\$ 2,650.4	\$ 2,902.2	\$ 2,033.9	\$ 2,347.4

As of December 31, 2019 and 2018, the Company had securities of \$14.0 million and \$11.5 million, which were accounted for as cost-based investments under ASC 323-10-25, *The Equity Method of Accounting for Investments in Common Stock* ("ASC 323-10-25"). The Company does not have the ability to exercise significant influence over the investees' operating and financial policies. As of December 31, 2019 and 2018, the Company also had an investment in a limited partnership of \$13.1 million and \$5.9 million, respectively, accounted for in accordance with ASC 323-10-25 as an equity method investment. These investments were included in "Other assets" in the accompanying consolidated balance sheet.

8. Leases:

In February 2016, the FASB established ASC 842, which focused on increasing transparency and comparability related to leases among organizations by requiring the recognition of ROU assets and lease liabilities on the balance sheet. The core principle of ASC 842 is that a lessee should recognize the assets and liabilities that arise from leases. This concept requires a lessee to recognize on the balance sheet a ROU asset representing the lessee's right to use the underlying asset over the duration of the lease term and a liability to make lease payments. Most prominent among the changes in the standard is the recognition of ROU assets and lease liabilities by lessees for those leases classified as operating leases. Under the standard, disclosures are required to meet the objective of enabling users of financial statements to assess the amount, timing, and uncertainty of cash flows arising from leases. The Company is also required to recognize and measure leases existing at, or entered into after the adoption date using a modified retrospective approach, with certain practical expedients available.

The Company adopted ASC 842 on January 1, 2019 using the modified retrospective approach and elected the transition relief package of practical expedients by applying 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. The Company did not separate lease components from non-lease components for leased corporate offices and data centers. The election applies to all operating leases where fixed rent payments incorporate common area maintenance. For leases where the election does not apply, the common area maintenance is billed by the landlord separately. Additionally, the Company did not capitalize any short-term leases, generally defined as a lease term of less than one year, in accordance with ASC 842.

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

The following table presents the cumulative effect of the changes made to the accompanying consolidated balance sheets as of January 1, 2019 as a result of the adoption of ASC 842:

	December 31, 2018	Adjustments due to ASC 842	January 1, 2019
Prepaid expenses	\$ 63.9	\$ (0.2)	\$ 63.7
Operating lease right-of-use assets, net	\$ —	\$ 247.8	\$ 247.8
Accounts payable and accrued liabilities	\$ 250.9	\$ (2.0)	\$ 248.9
Current operating lease liabilities	\$ —	\$ 39.5	\$ 39.5
Noncurrent operating lease liabilities	\$ —	\$ 236.4	\$ 236.4
Other liabilities	\$ 75.7	\$ (26.3)	\$ 49.4

The following table presents the lease cost, cash paid for amounts included in the measurement of lease liabilities, ROU assets obtained, weighted-average remaining lease terms, and weighted-average discount rates for finance and operating leases for the year ended December 31, 2019.

	2019
Lease cost:	
Operating lease cost ⁽¹⁾	\$ 48.4
Finance lease cost	
Depreciation of finance lease assets ⁽²⁾	13.2
Interest on finance lease liabilities ⁽³⁾	1.8
Total lease cost	\$ 63.4
Other information:	
Cash paid for amounts included in the measurement of lease liabilities	
Operating cash outflows from operating leases	\$ (48.4)
Operating cash outflows from finance leases	\$ (1.8)
Financing cash outflows from finance leases	\$ (15.1)
Weighted-average remaining lease term - operating leases	9.4 years
Weighted-average remaining lease term - finance leases	2.6 years
Weighted-average discount rate - operating leases	4.0%
Weighted-average discount rate - finance leases	4.4%

⁽¹⁾ Included in "Cost of revenues" and "Selling, general and, administrative" expenses in the accompanying consolidated statements of operations

⁽²⁾ Included in "Depreciation and amortization of fixed assets" in the accompanying consolidated statements of operations

⁽³⁾ Included in "Interest expense" in the accompanying consolidated statements of operations

The ROU assets and lease liabilities for finance leases were \$9.9 million and \$7.7 million, respectively, as of December 31, 2019. The ROU assets for finance leases were included in "Fixed assets, net" in the accompanying consolidated balance sheets. The lease liabilities for finance leases were included in the "Short-term debt and current portion of long-term debt" and "Long-term debt" in the accompanying consolidated balance sheets (see Note 15. Debt).

Maturities of lease liabilities for the years through 2025 and thereafter are as follows:

Years Ending	Operating Leases	Finance Leases
2020	\$ 48.7	\$ 5.2
2021	39.2	2.5
2022	35.6	0.3
2023	31.0	0.1
2024	21.4	—
2025 and thereafter	128.8	—
Total lease payments	304.7	8.1
Less: Amount representing interest	(56.0)	(0.4)
Present value of total lease payments	\$ 248.7	\$ 7.7

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

The following table summarizes the minimum rentals under long-term noncancelable leases for all leased premises, computer equipment and automobiles under ASC 840, *Leases*, as of December 31, 2018:

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>

Rent expense on operating leases approximated \$44.9 million, and \$39.0 million for the years ended December 31, 2018 and 2017, respectively.

9. Fixed Assets

The following is a summary of fixed assets:

	Useful Life	Cost	Accumulated Depreciation and Amortization	Net
December 31, 2019				
Furniture and office equipment	3-10 years	\$ 268.9	\$ (210.1)	\$ 58.8
Leasehold improvements	Lease term	103.9	(41.7)	62.2
Purchased software	3 years	89.8	(77.7)	12.1
Software development costs	3-7 years	773.7	(373.7)	400.0
Leased equipment	3-4 years	38.5	(28.6)	9.9
Aircraft equipment	2-10 years	5.2	(0.1)	5.1
Total fixed assets		<u>\$ 1,280.0</u>	<u>\$ (731.9)</u>	<u>\$ 548.1</u>
December 31, 2018				
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>

Depreciation and amortization of fixed assets for the years ended December 31, 2019, 2018 and 2017 were \$185.7 million, \$165.3 million and \$135.6 million, of which \$100.2 million, \$85.4 million and \$58.0 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 \$12.8 million, \$9.7 million and \$9.5 million for the years ended December 31, 2019, 2018 and 2017, respectively. The Company had unamortized software development costs that had been capitalized in accordance with ASC 350-40 of \$353.3 million and \$295.3 million as of December 31, 2019 and 2018, respectively. The Company had unamortized software development costs that had been capitalized in accordance with ASC 985-20 of \$46.7 million and \$42.7 million as of December 31, 2019 and 2018, respectively. Leased assets include amounts held under capital leases for automobiles, computer software, computer equipment and aircraft equipment.

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

10. Acquisitions

2019 Acquisitions

On December 23, 2019, the Company acquired 100 percent of the stock of Flexible Architecture and Simplified Technology, LLC ("FAST"), a software company for the life insurance and annuity industry, for a net cash purchase price of \$192.4 million, of which \$1.9 million represents indemnity escrows. FAST offers a flexible policy administration system that helps insurers accelerate underwriting and claims to enhance the customer experience and support profitable growth. FAST has become part of the underwriting & rating category within the Company's Insurance segment, and expanded and enhanced the suite of solutions the Company is developing across the enterprise for life insurers looking to transform the customer experience throughout the life of the policy, from quote to claims. The preliminary purchase price allocation of the acquisition is presented in the table below.

On December 19, 2019, the Company acquired selected assets of Commerce Signals, Inc. ("Commerce Signals"), a software company that offers a data sharing platform for retail, restaurant and entertainment marketers, for a net cash purchase price of \$3.8 million, which consists of a holdback of \$1.1 million as security for the indemnification obligations of the seller. Commerce Signals has become part of the Company's Financial Services segment, and enhanced the existing solutions the Company currently offer. The preliminary purchase price allocation of the acquisition is presented as part of "Others" in the table below.

On November 5, 2019, the Company acquired 100 percent of the stock of Genscape, Inc. ("Genscape"), a global provider of real-time data and intelligence for commodity and energy markets, for a net cash purchase price of \$353.2 million. Genscape has become part of the Energy and Specialized Markets segment, and enhanced the Company's existing sector intelligence in energy data and analytics. The preliminary purchase price allocation of the acquisition is presented in the table below.

On October 10, 2019, the Company acquired 100 percent of the stock of BuildFax, Inc. ("BuildFax") for a net cash purchase price of \$40.4 million, which consists a holdback of \$1.0 million. BuildFax uses building permit, contractor, and inspection data to provide information about the condition of properties to insurance and financial institutions. The data from BuildFax enhances property analytics under the underwriting & rating category within the Company's Insurance segment while helping underwriters gain insight into changes in the property insured. The preliminary purchase price allocation of the acquisition is presented in the table below.

On August 28, 2019, the Company acquired substantially all of the assets of Property Pres Wizard, LLC. ("PPW"), for a net cash purchase price of \$15.0 million, of which \$1.5 million represents indemnity escrows. PPW is a web and mobile application that manages work order details and property status in the field services industry throughout the supply chain. PPW has become part of the claims category within the Company's Insurance segment, and added a service order and project management application to the Company's PropTech suite of solutions. The preliminary purchase price allocation of the acquisition is presented as part of "Others" in the table below.

On July 31, 2019, the Company acquired 100 percent of the stock of Keystone Aerial Surveys, Inc. ("Keystone"), for a net cash purchase price of \$29.8 million, of which \$3.0 million represents indemnity escrows, to expand its remote imagery business. Keystone sourced imagery by providing customers geospatial solutions and had become part of the claims category within the Company's Insurance segment. Keystone was a component within the aerial imagery sourcing group, which was qualified as assets held for sale on December 2, 2019. On February 1, 2020, the sale of the aerial imagery sourcing group was closed. See Note 10. Businesses Held for Sale and Disposition for further discussion. The final purchase price allocation of the acquisition is presented as part of "Others" in the table below.

On March 29, 2019, the Company entered into an agreement with an enterprise application software provider to acquire their Content as a Service ("CaaS") business, which included the Environmental Health and Safety Regulatory Content and Environmental Health and Safety Regulatory Documentation teams and data assets, for a net cash purchase price of \$69.1 million. The CaaS business has become part of the Company's Energy and Specialized Markets segment. This transaction strengthened the Company's environmental health and safety services business and extended its global customer footprint and European operations. The preliminary purchase price allocation of the acquisition is presented in the table below.

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

The preliminary purchase price allocation of the 2019 acquisitions resulted in the following:

	FAST	Genscape	BuildFax	CaaS	Others	Total
Cash and cash equivalents	\$ 3.0	\$ 0.2	\$ 0.4	\$ 3.7	\$ 3.1	\$ 10.4
Accounts receivable	7.8	13.4	1.8	—	3.9	26.9
Other current assets	0.4	7.4	0.2	3.1	0.9	12.0
Fixed assets	2.6	22.3	0.9	—	6.4	32.2
Operating lease right-of-use assets, net	1.4	7.4	0.4	—	0.6	9.8
Intangible assets	69.0	152.9	21.9	34.4	13.8	292.0
Goodwill	116.9	245.6	19.7	42.9	28.4	453.5
Other assets	—	—	—	—	5.2	5.2
Total assets acquired	201.1	449.2	45.3	84.1	62.3	842.0
Current liabilities	1.1	18.9	0.8	1.3	1.4	23.5
Deferred revenues	2.2	30.2	1.9	10.0	0.1	44.4
Operating lease liabilities	1.4	7.4	0.4	—	0.4	9.6
Deferred income tax, net	1.0	39.3	0.5	—	2.9	43.7
Other liabilities	—	—	0.9	—	5.8	6.7
Total liabilities assumed	5.7	95.8	4.5	11.3	10.6	127.9
Net assets acquired	195.4	353.4	40.8	72.8	51.7	714.1
Cash acquired	(3.0)	(0.2)	(0.4)	(3.7)	(3.1)	(10.4)
Net cash purchase price	<u>\$ 192.4</u>	<u>\$ 353.2</u>	<u>\$ 40.4</u>	<u>\$ 69.1</u>	<u>\$ 48.6</u>	<u>\$ 703.7</u>

The preliminary amounts assigned to intangible assets by type for the 2019 acquisitions are summarized in the table below:

	Weighted Average Useful Life	Total
Technology	6 years	\$ 81.9
Marketing	4 years	3.9
Customer	12 years	185.5
Database	10 years	20.7
Total intangible assets		<u>\$ 292.0</u>

The preliminary allocations of the purchase price for the 2019 acquisitions with less than a year ownership are subject to revisions as additional information is obtained about the facts and circumstances that existed as of each acquisition date. The revisions may have a significant impact on the accompanying consolidated financial statements. The allocations of the purchase price will be finalized once all information is obtained and assessed, 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 goodwill associated with the Company's acquisitions include the acquired assembled work force, the value associated with the opportunity to leverage the work force to continue to develop the technology and content assets, as well as the ability to grow the Company through adding additional customer relationships or new solutions in the future. Goodwill of \$307.1 million associated with the 2019 acquisitions is not deductible for tax purposes. 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. For the year ended December 31, 2019, the Company incurred transaction costs of \$3.0 million which were 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 2019 acquisitions were not significant, both individually and in the aggregate, to the Company's consolidated financial statements for the years ended December 31, 2019, 2018 and 2017, and therefore, supplemental information disclosure on an unaudited pro forma basis is not presented.

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

2018 Acquisitions

On December 14, 2018, the Company acquired Rulebook for a net cash purchase price of \$86.5 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 final 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 final 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 \$18.0 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 commercial property and homeowners insurance market. The final 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 final purchase price allocation of the acquisition is presented as part of "Others" in the table below.

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

	Rulebook	Validus	Others	Total
Cash and cash equivalents	\$ —	\$ 0.9	\$ 2.2	\$ 3.1
Accounts receivable	2.0	1.5	1.0	4.5
Current assets	0.1	6.3	0.2	6.6
Fixed assets	1.5	0.4	0.2	2.1
Intangible assets	25.1	20.9	8.4	54.4
Goodwill	58.9	24.8	15.8	99.5
Other assets	8.6	—	—	8.6
Total assets acquired	96.2	54.8	27.8	178.8
Current liabilities	0.6	3.9	1.0	5.5
Deferred revenues	0.4	0.1	1.1	1.6
Deferred income taxes, net	0.1	3.6	1.5	5.2
Other liabilities	8.6	0.2	—	8.8
Total liabilities assumed	9.7	7.8	3.6	21.1
Net assets acquired	86.5	47.0	24.2	157.7
Less: Cash acquired	—	(0.9)	(2.2)	(3.1)
Net cash purchase price	\$ 86.5	\$ 46.1	\$ 22.0	\$ 154.6

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

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

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

For the year ended December 31, 2019, the Company finalized the purchase accounting for the 2018 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 \$99.5 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.

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 and 2017 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 the net assets 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.

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

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 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.

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 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.

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

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

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	9 years	\$ 96.3
Marketing	5 years	22.0
Customer	13 years	202.3
Database	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 year ended December 31, 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 year ended December 31, 2017, and therefore, supplemental information disclosure on an unaudited pro forma basis is not presented.

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

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 years ended December 31, 2019 and 2018, the Company released \$25.2 million and \$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. At December 31, 2019 and 2018, the current portion of the escrows amounted to \$0.5 million and \$31.2 million, and the noncurrent portion of the escrows amounted to \$10.5 million and \$8.7 million, respectively. The current and noncurrent portions of the escrows have been included in "Other current assets" and "Other noncurrent assets" in the accompanying consolidated balance sheets, respectively.

The acquisitions of Validus, PowerAdvocate, Rebmark, Healix and ENI include acquisition related contingencies, for which the sellers of these acquisitions could receive additional payments by achieving the specific predetermined revenue, EBITDA, and EBITDA margin earn-out targets for exceptional performance. The Company believes that the liabilities recorded as of December 31, 2019 reflect the best estimate of acquisition contingent payments. The associated current acquisition-related liabilities were \$111.2 million and \$12.6 million as of December 31, 2019 and December 31, 2018, respectively. The associated noncurrent acquisition-related liabilities were \$0.2 million and \$28.3 million as of December 31, 2019 and December 31, 2018, respectively.

11. Businesses Held for Sale and Disposition:

On July 15, 2019, the Company sold its retail analytics solution business for \$2.0 million excluding contingent and indemnity escrows of \$0.4 million. The sale resulted in a loss of \$6.2 million that was included within "Other operating expenses" in the accompanying consolidated statements of operations for the year ended December 31, 2019.

In the fourth quarter of 2019, the Company's compliance background screening business and the aerial imagery sourcing group within the remote imagery business qualified as assets held for sale, respectively. These assets held for sale were part of the claims category within the Company's Insurance segment as of December 31, 2019. The Company's board of directors approved the actions to make these assets held for sale available for immediate sale at their current fair value in the fourth quarter of 2019. Management had an active program in place to locate buyers and believed that the sales were probable.

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

The following table summarizes the held for sale assets and the held for sale liabilities for the compliance background screening business and the aerial imagery sourcing operation as of December 31:

	Amount
Cash and cash equivalents	\$ 0.3
Accounts receivable, net of allowance for doubtful accounts of \$0.1	8.6
Prepaid expenses	4.9
Other current assets	0.3
Total current assets held for sale	\$ 14.1
Fixed assets, net	\$ 85.3
Operating lease right-of-use assets, net	2.0
Intangible assets, net	9.0
Goodwill	7.9
Other assets	6.6
Total noncurrent assets held for sale	\$ 110.8
Accounts payable and accrued liabilities	\$ 7.8
Short-term debt and current portion of long-term debt	10.0
Deferred revenues	0.2
Operating lease liabilities	0.7
Income taxes receivable	—
Total current liabilities held for sale	\$ 18.7
Long-term debt	\$ 15.0
Deferred income taxes, net	18.5
Other liabilities	4.6
Total noncurrent liabilities held for sale	\$ 38.1

12. Goodwill and Intangible Assets:

The Company completed the required annual impairment test as of June 30, 2019, 2018 and 2017, which resulted in no impairment of goodwill. Based on the results of the impairment assessment as of June 30, 2019, 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.

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

The following is a summary of the change in goodwill from December 31, 2017 through December 31, 2019, both in total and as allocated to the Company's operating segments:

	<u>Insurance</u>	<u>Energy and specialized markets</u>	<u>Financial services</u>	<u>Total</u>
Goodwill at December 31, 2017	\$ 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	833.8	2,054.7	473.0	3,361.5
Acquisitions	161.0	288.5	4.0	453.5
Businesses held for sale and disposition	(7.9)	—	(0.7)	(8.6)
Purchase accounting reclassifications	(1.4)	—	(0.1)	(1.5)
Foreign currency translation adjustment	13.3	46.3	(0.2)	59.4
Goodwill at December 31, 2019	<u>\$ 998.8</u>	<u>\$ 2,389.5</u>	<u>\$ 476.0</u>	<u>\$ 3,864.3</u>

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

	<u>Weighted Average Useful Life</u>	<u>Cost</u>	<u>Accumulated Amortization</u>	<u>Net</u>
December 31, 2019				
Technology-based	7 years	\$ 519.2	\$ (291.9)	\$ 227.3
Marketing-related	16 years	265.3	(94.3)	171.0
Contract-based	6 years	5.0	(5.0)	—
Customer-related	13 years	901.2	(278.0)	623.2
Database-based	19 years	484.6	(107.2)	377.4
Total intangible assets		<u>\$ 2,175.3</u>	<u>\$ (776.4)</u>	<u>\$ 1,398.9</u>
December 31, 2018				
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		<u>\$ 1,868.3</u>	<u>\$ (640.5)</u>	<u>\$ 1,227.8</u>

Amortization expense related to intangible assets for the years ended December 31, 2019, 2018 and 2017, was \$138.0 million, \$130.8 million, and \$101.8 million, respectively. Estimated amortization expense in future periods through 2025 and thereafter for intangible assets subject to amortization is as follows:

<u>Years Ending</u>	<u>Amount</u>
2020	\$ 165.5
2021	154.1
2022	142.3
2023	130.1
2024	125.6
2025 and thereafter	681.3
Total	<u>\$ 1,398.9</u>

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

13. Income Taxes:

Domestic and foreign income before income taxes was as follows:

	2019	2018	2017
U.S.	\$ 553.9	\$ 700.2	\$ 669.9
Foreign	14.5	19.5	21.1
Total income before income taxes	<u>\$ 568.4</u>	<u>\$ 719.7</u>	<u>\$ 691.0</u>

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

	2019	2018	2017
Current:			
Federal	\$ 109.9	\$ 69.0	\$ 176.6
State and local	21.4	22.1	23.4
Foreign	14.6	11.1	9.5
Total current provision for income taxes	<u>145.9</u>	<u>102.2</u>	<u>209.5</u>
Deferred:			
Federal	(14.3)	27.6	(66.3)
State and local	(0.2)	2.8	5.7
Foreign	(12.9)	(11.6)	(13.0)
Total deferred provision for income taxes	<u>(27.4)</u>	<u>18.8</u>	<u>(73.6)</u>
Provision for income taxes	<u>\$ 118.5</u>	<u>\$ 121.0</u>	<u>\$ 135.9</u>

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

	2019	2018	2017
Federal statutory rate	21.0 %	21.0 %	35.0 %
State and local taxes, net of federal tax benefit	2.8 %	2.8 %	2.6 %
Foreign tax differentials	(0.8)%	(0.8)%	(1.8)%
Federal Tax Reform - deferred rate change	— %	0.1 %	(12.9)%
Foreign Derived Intangible Income (FDII)	(1.2)%	(0.9)%	— %
Stock-based compensation	(3.0)%	(5.5)%	(2.5)%
Earn-outs	2.0 %	0.1 %	— %
Other	0.1 %	— %	(0.7)%
Effective tax rate	<u>20.9 %</u>	<u>16.8 %</u>	<u>19.7 %</u>

The increase in the effective tax rate in 2019 compared to 2018 was primarily due to the impact of lower tax benefits from equity compensation in the current period versus the prior period as well as nondeductible earn-out expenses in the current period.

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

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

	2019	2018
Deferred tax assets:		
Employee wages, pension, and other benefits	\$ 13.0	\$ 20.9
ASC 842/Deferred rent	7.3	4.6
Net operating loss carryover	28.8	30.2
Litigation accrual	31.2	—
Capital and other unrealized losses	1.7	2.4
Interest expense	33.4	21.2
Other	16.4	11.5
Total	131.8	90.8
Less valuation allowance	(46.5)	(34.5)
Deferred tax assets	85.3	56.3
Deferred tax liabilities:		
Fixed assets and intangible assets	(411.0)	(376.1)
Commissions	(14.3)	(11.8)
Other	(6.2)	(7.9)
Deferred tax liabilities	(431.5)	(395.8)
Deferred tax liabilities, net	\$ (346.2)	\$ (339.5)

The net deferred tax liabilities of \$346.2 million consist 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 Ending	Amount
2020 - 2027	\$ 24.9
2028 - 2032	14.6
2033 - 2039	189.6
Total	\$ 229.1

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, 2019, 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

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

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:

	2019	2018	2017
Unrecognized tax benefit as of January 1	\$ 17.4	\$ 16.3	\$ 16.8
Gross increase in tax positions in prior period	0.6	2.0	1.7
Gross decrease in tax positions in prior period	(3.3)	(0.1)	(1.2)
Settlements	(2.4)	(0.3)	—
Lapse of statute of limitations	(0.8)	(0.5)	(1.0)
Unrecognized tax benefit as of December 31	<u>\$ 11.5</u>	<u>\$ 17.4</u>	<u>\$ 16.3</u>

Of the total unrecognized tax benefits as of December 31, 2019, 2018, and 2017, \$8.6 million, \$14.4 million, and \$13.2 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, 2019, 2018, and 2017 was \$4.6 million, \$5.7 million, and \$4.5 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, state, or foreign tax exposures within the coming year. In addition, the Company believes that it is reasonably possible that approximately \$1.1 million of its currently remaining unrecognized tax positions, each of which is individually insignificant, may be recognized by the end of 2020 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., various state, and foreign jurisdictions. The Company joined by its domestic subsidiaries, files a consolidated income tax return for Federal income tax purposes. With a few exceptions, none of which are material to the Company's consolidated financial statements as of December 31, 2019, 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 2015. In New Jersey, the Company is being audited for the years ended December 31, 2013 through 2018 with a statute extension until October 31, 2020. In Massachusetts, the Company is being audited for the years ended December 31, 2014 through 2015 with a statute extension until June 30, 2020. The Company is also under audit in New York for the years ended December 31, 2015 through 2017 with a statute extension until October 2, 2020. 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.

14. Composition of Certain Financial Statement Caption:

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

	2019	2018
Accounts payable and accrued liabilities:		
Accrued salaries, benefits and other related costs	\$ 147.4	\$ 131.1
Legal accrual ⁽¹⁾	128.4	2.5
Escrow liabilities	0.2	25.4
Accrued interest	19.0	17.2
Trade accounts payable and other accrued expenses	80.0	74.7
Total accounts payable and accrued liabilities	<u>\$ 375.0</u>	<u>\$ 250.9</u>

⁽¹⁾ Included a litigation reserve for *Xactware Solutions, Inc. Patent Litigation* of \$125.0 million.

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

15. Debt:

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

	Issuance Date	Maturity Date	2019	2018
Short-term debt and current portion of long-term debt:				
Syndicated revolving credit facility	Various	Various	\$ 495.0	\$ 415.0
Senior notes:				
4.875% senior notes	12/08/2011	01/15/2019	—	250.0
Finance lease liabilities ⁽¹⁾	Various	Various	4.4	7.8
Short-term debt and current portion of long-term debt			499.4	672.8
Long-term debt:				
Senior notes:				
4.125% senior notes ⁽²⁾ , inclusive of unamortized premium, and net of unamortized discount and debt issuance costs of \$13.9	03/06/2019	03/15/2029	613.9	—
4.000% senior notes, less unamortized discount and debt issuance costs of \$(6.7) and \$(7.9), respectively	05/15/2015	06/15/2025	893.3	892.1
5.500% senior notes, less unamortized discount and debt issuance costs of \$(4.5) and \$(4.7), respectively	05/15/2015	06/15/2045	345.5	345.3
4.125% senior notes, less unamortized discount and debt issuance costs of \$(1.6) and \$(2.3), respectively	09/12/2012	09/12/2022	348.4	347.7
5.800% senior notes, less unamortized discount and debt issuance costs of \$(0.7) and \$(1.2), respectively	04/06/2011	05/01/2021	449.3	448.8
Finance lease liabilities	Various	Various	3.3	19.5
Syndicated revolving credit facility debt issuance costs			(2.1)	(2.9)
Long-term debt			2,651.6	2,050.5
Total debt			\$ 3,151.0	\$ 2,723.3

⁽¹⁾ Refer to Note 8. Leases

⁽²⁾ The Company offered an additional issuance of these notes on September 6, 2019.

Accrued interest associated with the Company's outstanding debt obligations was \$19.0 million and \$17.2 million as of December 31, 2019 and 2018, respectively, and included in "Accounts payable and accrued liabilities" within the accompanying consolidated balance sheets. Interest expense associated with the Company's finance lease and outstanding debt obligations, including amortization of debt issuance costs and original discounts, was \$125.7 million, \$128.2 million and \$119.4 million for the years ended December 31, 2019, 2018 and 2017, respectively.

Senior Notes

On January 15, 2019, the Company utilized borrowings from its the Credit Facility and cash from operations to repay the 4.875% senior notes in full in an amount of \$250.0 million.

On March 6, 2019, the Company completed an issuance of \$400.0 million aggregate principal amount of 4.125% senior notes due 2029 (the "2029 notes"), which were issued at a discount of \$2.1 million and the Company incurred debt issuance costs of \$3.7 million. On September 6, 2019, the Company completed an additional issuance of \$200.0 million aggregate principal amount of the 2029 notes that were issued at a premium of \$21.8 million and the Company incurred debt issuance costs of \$1.9 million. The 2029 notes mature on March 15, 2029 and accrue interest at a fixed rate of 4.125% per annum. Interest is payable semiannually on the 2029 notes on March 15th and September 15th of each year, beginning on March 15, 2020. The original issue discount, original issue premium 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 the accompanying consolidated statements of operations over the life of the 2029 notes. The net proceeds from the issuance of the 2029 notes were utilized to support the acquisition of Genscape (See Note 10. Acquisitions), partially repay the Credit Facility and for general corporate purposes. The indenture governing the 2029 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, 2019 and

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

December 31, 2018, the Company had senior notes with an aggregate principal amount of \$2,650.0 million and \$2,300.0 million outstanding, respectively, and was in compliance with their financial and other debt covenants.

Syndicated Revolving Credit Facility

On August 15, 2019, the Company entered into the Fourth Amendment (the "Amendment") to the Credit Facility with Bank of America N.A., HSBC Bank USA, N.A., JP Morgan Chase Bank, N.A., Wells Fargo Bank, National Association, Citibank, N.A., Credit Suisse AG, Cayman Islands Branch, Morgan Stanley Bank, N.A., TD Bank, N.A., and the Northern Trust Company, which reduced the borrowing capacity from \$1,500.0 million to \$1,000.0 million, extended the maturity date to August 15, 2024, and amended the pricing grid. The Amendment is considered as a modification of existing debt under U.S. GAAP. Interest on borrowings under the Amendment is payable at an interest rate of LIBOR plus 1.0% to 1.625%, depending upon the public debt rating. A commitment fee on any unused balance is payable periodically and may range from 8.0 to 20.0 basis points based upon the public debt rating. The Amendment also contains certain financial and other covenants that, among other things, impose certain restrictions on indebtedness, liens, investments, and capital expenditures. These covenants 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 funded debt leverage ratio of less than 3.5 to 1.0. At the election of the Company, the maximum consolidated funded debt leverage ratio could be permitted to increase one time each to 4.0 to 1.0 and 4.25 to 1.0. The Credit Facility may be used for general corporate purposes, including working capital needs and capital expenditures, acquisitions, dividends and the share repurchase program (the "Repurchase Program"). As of December 31, 2019, the Company was in compliance with all financial and other debt covenants under the Credit Facility. As of December 31, 2019 and 2018, the available capacity under the Credit Facility was \$500.2 million and \$1,078.9 million, net of the letters of credit of \$4.8 million and \$6.1 million, respectively. In connection with the Amendment, the Company incurred additional debt issuance costs of \$0.7 million, which will be amortized to "Interest expense" within the accompanying consolidated statements of operations over the remaining life of the Credit Facility. In addition, due to the reduction in the available capacity as part of the Amendment, previously capitalized debt issuance costs of \$0.8 million were written off and recorded to "Interest expense" in the consolidated statements of operations for the year ended December 31, 2019. Subsequent to December 31, 2019, the Company had borrowings of \$40.0 million and repayments of \$130.0 million under the Credit Facility.

Debt Maturities

The following table reflects the Company's debt maturities:

Years Ending	Amount
2020	\$ 499.9
2021	452.5
2022	350.3
2023	—
2024	—
2025 and thereafter	1,850.0
Total	\$ 3,152.7

16. Stockholders' Equity:

The Company has 2,000,000,000 shares of authorized common stock as of December 31, 2019 and 2018. 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 eleven 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, 2019.

At December 31, 2019, 2018 and 2017, the adjusted closing price of Verisk common stock was \$149.34, \$108.28, and \$95.33 per share, respectively.

On February 13, 2019, April 29, 2019, July 24, 2019, and October 23, 2019, the Company's Board approved a cash dividend of \$0.25 per share of common stock issued and outstanding to the holders of record as of March 15, 2019, June 14,

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2019, September 13, 2019, and December 13, 2019 respectively. The cash dividend of \$40.9 million, \$41.0 million, and \$40.8 million, and \$40.8 million was paid on March 29, 2019, June 28, 2019, September 30, 2019, and December 31, 2019 and recorded as a reduction to retained earnings, respectively.

Share Repurchase Program

Since May 2010, the Company has authorized repurchases of up to \$3,800.0 million of its common stock through its Repurchase Program, inclusive of the \$500.0 million authorization approved by the board on February 12, 2020. 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 \$3,172.4 million. As of December 31, 2019, the Company had \$127.6 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"), the Verisk 2009 Equity Incentive Plan (the "2009 Incentive Plan"), the Company's sharesave plan ("UK Sharesave Plan"), and the employee stock purchase plan ("ESPP") 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 December 2018, March 2019, June 2019, and September 2019 the Company entered into Accelerated Share Repurchase ("ASR") agreements to repurchase shares of its common stock for an aggregate purchase price of \$75.0 million, \$50.0 million, \$75.0 million, and \$50.0 million, respectively, with Morgan Stanley & Co. LLC and HSBC Bank USA, N.A. The ASR agreements are each accounted for as a treasury stock transaction and a forward stock purchase agreement indexed to the Company's common stock. The forward stock purchase agreements are each 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 respective effective date. Upon payments of the aggregate purchase price on January 2, 2019, April 1, 2019, July 1, 2019, and October 1, 2019, the Company received an aggregate delivery of 550,257, 300,752, 409,668, and 252,940 shares of its common stock at a price of \$109.04, \$133.00, \$146.46, and \$158.14 respectively. Upon the final settlement of the ASR agreements in March 2019, June 2019, September 2019, and November 2019, the Company received additional shares of 86,333, 60,721, 81,048, and 81,862 respectively, as determined by the volume weighted average share price of Verisk's common stock during the term of the ASR agreements. The aggregate purchase price was recorded as a reduction to stockholders' equity in the Company's consolidated statements of changes in stockholders' equity for the year ended December 31, 2019. These repurchases of 1,823,581 shares for the year ended December 31, 2019 resulted in a reduction of outstanding shares used to calculate the weighted average common shares outstanding for basic and diluted earnings per share ("EPS").

During the years ended December 31, 2019 and 2018, the Company repurchased 2,178,151 and 3,882,467 shares of common stock as part of the Repurchase Program, inclusive of the ASRs, at a weighted average price of \$137.73 and \$112.97 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, 2019, the Company's treasury stock consisted of 380,841,474 shares of common stock. During the years ended December 31, 2019, 2018 and 2017, the Company transferred 1,369,305, 2,973,947 and 1,319,518 shares of common stock, under the 2013 Incentive Plan, and 2009 Incentive Plan, from the treasury shares at a weighted average price of \$9.72, \$8.71 and \$8.13 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:

	<u>2019</u>	<u>2018</u>	<u>2017</u>
(In millions, except for share and per share data)			
Numerator used in basic and diluted EPS:			
Net income	\$ 449.9	\$ 598.7	\$ 555.1
Denominator:			
Weighted average number of common shares used in basic EPS	163,535,438	164,808,110	165,168,224
Effect of dilutive shares:			
Potential common stock issuable from stock options and stock awards	3,024,677	3,489,726	3,520,644
Weighted average number of common shares and dilutive potential common shares used in diluted EPS	166,560,115	168,297,836	168,688,868

The potential shares of common stock that were excluded from diluted EPS were 674,983, 496,446 and 1,967,409 at December 31, 2019, 2018 and 2017, 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:

	<u>2019</u>	<u>2018</u>
Foreign currency translation adjustment	\$ (400.1)	\$ (488.5)
Pension and postretirement adjustment, net of tax	(86.8)	(103.4)
Accumulated other comprehensive losses	\$ (486.9)	\$ (591.9)

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

The before tax and after tax amounts of other comprehensive income (loss) for the years ended December 31, 2019, 2018 and 2017 are summarized below:

	Before Tax	Tax Benefit (Expense)	After Tax
December 31, 2019			
Foreign currency translation adjustment	\$ 88.4	\$ —	\$ 88.4
Pension and postretirement adjustment before reclassifications	26.7	(6.4)	20.3
Amortization of net actuarial loss and prior service benefit reclassified from accumulated other comprehensive losses (1)	(4.9)	1.2	(3.7)
Pension and postretirement adjustment	21.8	(5.2)	16.6
Total other comprehensive income	\$ 110.2	\$ (5.2)	\$ 105.0
December 31, 2018			
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 (1)	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)
December 31, 2017			
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 (1)	(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

(1) These accumulated other comprehensive loss components, before tax, are included under “Cost of revenues” and “Selling, general and administrative” in the accompanying consolidated statements of operations. These components are also included in the computation of net periodic (benefit) 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 \$19.0 thousand for 2019, \$18.5 thousand for 2018 and \$18.0 thousand for 2017. Certain eligible participants (age 50 and older) may contribute an additional \$6.0 thousand on a pre-tax basis for 2019, 2018 and 2017. 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 under

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

the KSOP for the years ended December 31, 2019, 2018 and 2017, were \$31.0 million, \$22.0 million, \$15.6 million, respectively; which, at the option of the Company, were funded in cash or in common stock issued from treasury shares.

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, 2019, 2018 and 2017, 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. 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. As of December 31, 2019, there were 4,391,470 shares of common stock reserved and available for future issuance.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

A summary of the status of the stock options, restricted stock and PSUs awarded under the 2013 Incentive Plan as of December 31, 2019, 2018 and 2017 and changes during the years is presented below.

	Stock Option			Restricted Stock		PSU	
	Number of Options	Weighted Average Exercise Price	Aggregate Intrinsic Value	Number of Shares	Weighted Average Grant Date Fair Value Per Share	Number of Shares	Weighted Average Grant Date Fair Value Per Share
			(in millions)				
Outstanding at January 1, 2017	8,770,917	\$ 46.67	\$ 302.6	537,667	\$ 73.34	—	\$ —
Granted	1,440,270	\$ 81.33		296,850	\$ 82.02	—	\$ —
Exercised or lapsed	(1,125,004)	\$ 33.66	\$ 57.2	(197,403)	\$ 70.72	—	\$ —
Canceled, expired or forfeited	(179,074)	\$ 76.70		(32,650)	\$ 77.13	—	\$ —
Outstanding at December 31, 2017	8,907,109	\$ 53.31	\$ 380.2	604,464	\$ 78.28	—	\$ —
Granted	958,332	\$ 104.23		207,041	\$ 104.34	46,705	\$ 140.70
Exercised or lapsed	(2,752,735)	\$ 33.00	\$ 213.0	(225,205)	\$ 76.88	—	\$ —
Canceled, expired or forfeited	(292,660)	\$ 79.16		(52,965)	\$ 82.64	(4,655)	\$ 140.70
Outstanding at December 31, 2018	6,820,046	\$ 67.27	\$ 284.9	533,335	\$ 88.55	42,050	\$ 140.70
Granted	920,398	\$ 135.64		167,231	\$ 135.82	51,792	\$ 173.59
Dividend reinvestment	—	\$ —		—	\$ —	550	Not applicable
Exercised or lapsed	(1,131,970)	\$ 51.20	\$ 101.0	(242,815)	\$ 84.60	—	\$ —
Canceled, expired or forfeited	(175,660)	\$ 92.27		(29,022)	\$ 109.72	(432)	\$ 134.24
Outstanding at December 31, 2019	6,432,814	\$ 79.51	\$ 449.2	428,729	\$ 107.96	93,960	\$ 158.50
Exercisable at December 31, 2019	4,175,855	\$ 65.05	\$ 352.0				
Exercisable at December 31, 2018	4,360,117	\$ 55.94	\$ 231.5				
Nonvested at December 31, 2019	2,256,959			428,729		93,960	
Expected to vest at December 31, 2019	1,947,840			366,529		150,400	(1)

(1) Includes estimated performance achievement

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:

	2019	2018	2017
Expected volatility	18.76%	18.51%	18.72%
Risk-free interest rate	2.25%	2.53%	1.82%
Expected term in years	4.4	4.4	4.5
Dividend yield	0.80%	—%	—%
Weighted average grant date fair value per stock option	\$ 24.13	\$ 21.48	\$ 15.71

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

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

	Number of Options	Weighted Average Grant- Date Fair Value Per Share
Nonvested balance at January 1, 2017	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
Granted	920,398	\$ 24.13
Vested	(947,708)	\$ 17.29
Cancelled or expired	(175,660)	\$ 17.77
Nonvested balance at December 31, 2019	2,256,959	\$ 20.17

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. Excess tax benefits of \$23.2 million, \$48.9 million and \$19.0 million from exercised stock options were recorded as income tax benefit in the accompanying consolidated statements of operations for the years ended December 31, 2019, 2018 and 2017, respectively. Stock based compensation expense for the years ended December 31, 2019, 2018 and 2017 was \$42.7 million, \$38.5 million and \$31.8 million, respectively. Cash received from stock option exercises for the years ended December 31, 2019, 2018 and 2017 was \$52.4 million, \$87.3 million and \$35.0 million, respectively. As of December 31, 2019, the weighted average remaining contractual terms were 5.76 years and 4.57 years for outstanding and exercisable stock options, respectively. As of December 31, 2018, the weighted average remaining contractual terms were 5.87 years and 4.55 years for outstanding and exercisable stock options, respectively.

For the year ended December 31, 2019 and 2018, certain employees had restricted stock vesting and covered the aggregate statutory minimum tax withholding of \$5.5 million and \$3.7 million through a net settlement of 40,578 shares and 35,637 shares, respectively.

As of December 31, 2019, there was \$92.0 million of total unrecognized compensation cost, exclusive of the impact of vesting upon retirement eligibility, related to nonvested share-based compensation arrangements granted under the 2013 Incentive Plan. That cost is expected to be recognized over a weighted-average period of 2.51 years. The total grant date fair value of options vested during the years ended December 31, 2019, 2018, and 2017 was \$17.4 million, \$16.8 million and \$16.6 million, respectively. The total grant date fair value of restricted stock vested during the years ended December 31, 2019, 2018 and 2017 was \$20.2 million, \$18.6 million and \$17.6 million, respectively. The total grant date fair value of PSUs vested during the years ended December 31, 2019 and 2018 was \$4.2 million and \$1.5 million, respectively.

The Company's UK Sharesave Plan offers qualifying employees in the United Kingdom the opportunity to own shares of the Company's common stock. Employees who elect to participate are granted stock options, of which the exercise price is equal to the adjusted closing price of the Company's common stock on the grant date discounted by 5%, and enter into a savings contract, the proceeds of which are then used to exercise the options upon the three-year maturity of the savings contract. During the years ended December 31, 2019 and 2018, the Company granted 18,713 and 19,247 stock options under the UK Sharesave Plan at a discounted exercise price of \$136.35 and \$101.27, respectively. As of December 31, 2019, there were 462,040 shares of common stock reserved and available for future issuance under the UK Sharesave Plan.

The Company also offers eligible employees the opportunity to participate in an ESPP. Under the ESPP, participating employees may authorize payroll deductions of up to 20.0% of their regular base 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, 2019, 2018 and 2017, the Company issued 30,705, 30,550 and 29,605 shares of common stock at a weighted

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

average discounted price of \$141.17, \$104.71 and \$81.38, respectively. As of December 31, 2019, there were 1,292,768 shares of common stock reserved and available for future issuance under the ESPP.

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 2019 and 2020, respectively. The Company contributed \$0.7 million and \$1.0 million to the SERP in 2019 and 2018, respectively, and expects to contribute \$0.9 million in 2020.

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 2020.

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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	
	2019	2018	2019	2018
Change in benefit obligation:				
Benefit obligation at January 1	\$ 407.8	\$ 452.9	\$ 9.7	\$ 11.8
Interest cost	15.6	15.2	0.3	0.3
Actuarial loss (gain)	48.2	(30.0)	(0.4)	(0.4)
Plan participants' contributions	—	—	2.1	2.0
Benefits paid	(28.0)	(30.3)	(3.6)	(4.1)
Federal subsidy on benefits paid	—	—	0.1	0.1
Benefit obligation at December 31	\$ 443.6	\$ 407.8	\$ 8.2	\$ 9.7
Accumulated benefit obligation at December 31	\$ 443.6	\$ 407.8		
Change in plan assets:				
Fair value of plan assets at January 1	\$ 421.3	\$ 484.7	\$ 9.7	\$ 10.1
Actual return on plan assets, net of expenses	94.9	(34.1)	0.6	0.1
Employer contributions, net	0.7	1.0	1.4	1.5
Plan participants' contributions	—	—	2.1	2.0
Benefits paid	(28.0)	(30.3)	(3.6)	(4.1)
Federal subsidies received	—	—	0.1	0.1
Fair value of plan assets at December 31	\$ 488.9	\$ 421.3	\$ 10.3	\$ 9.7
Funded status at December 31	\$ (45.3)	\$ (13.5)	\$ (2.1)	\$ —
Amounts recognized in the consolidated balance sheets consist of:				
Pension assets, noncurrent ⁽¹⁾	\$ (58.2)	\$ (25.3)	\$ (2.1)	\$ —
Pension, SERP and postretirement benefits, current ⁽²⁾	0.8	1.0	—	—
Pension, SERP and postretirement benefits, noncurrent ⁽³⁾	12.1	10.8	—	—
Total Pension, SERP and Postretirement benefits	\$ (45.3)	\$ (13.5)	\$ (2.1)	\$ —

(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	
	2019	2018	2019	2018
Prior service benefit cost (credit)	\$ 3.2	\$ 3.3	\$ (0.3)	\$ (0.4)
Actuarial losses	137.1	158.1	3.8	4.9
Accumulated other comprehensive losses, pretax	\$ 140.3	\$ 161.4	\$ 3.5	\$ 4.5

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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		
	2019	2018	2017	2019	2018	2017
Interest cost	\$ 15.6	\$ 15.2	\$ 17.1	\$ 0.3	\$ 0.3	\$ 0.4
Expected return on plan assets	(30.3)	(32.9)	(31.1)	(0.2)	(0.2)	(0.3)
Amortization of prior service cost (credit) reclassified from accumulated other comprehensive losses	0.2	0.2	0.2	(0.1)	(0.1)	(0.2)
Amortization of net actuarial loss reclassified from accumulated other comprehensive losses	4.5	3.2	4.5	0.3	0.4	0.4
Net periodic benefit (credit) cost	(10.0)	(14.3)	(9.3)	0.3	0.4	0.3
Amortization of prior service (cost) credit reclassified from accumulated other comprehensive losses	(0.2)	(0.2)	(0.2)	0.1	0.1	0.2
Amortization of actuarial loss reclassified from accumulated other comprehensive losses	(0.1)	(0.1)	(0.1)	—	—	—
Net loss recognized reclassified from accumulated other comprehensive losses	(4.4)	(3.1)	(4.4)	(0.3)	(0.4)	(0.4)
Actuarial (gain) loss	(16.4)	37.0	(10.8)	(0.8)	(0.3)	0.9
Total recognized in other comprehensive (income) loss	(21.1)	33.6	(15.5)	(1.0)	(0.6)	0.7
Total recognized in net periodic benefit (credit) cost and other comprehensive (income) loss	\$ (31.1)	\$ 19.3	\$ (24.8)	\$ (0.7)	\$ (0.2)	\$ 1.0

The estimated amounts in accumulated other comprehensive losses that are expected to be recognized as components of net periodic benefit (credit) cost during 2020 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	4.0	0.3	4.3
Total	\$ 4.2	\$ 0.2	\$ 4.4

The weighted-average assumptions used to determine benefit obligations as of December 31, 2019 and 2018 and net periodic benefit (credit) cost for the years 2019, 2018 and 2017 are provided below:

	Pension Plan and SERP			Postretirement Plan		
	2019	2018	2017	2019	2018	2017
Weighted-average assumptions used to determine benefit obligations:						
Discount rate	3.24%	4.24%		2.50%	3.75%	
Expected return on plan assets	6.75%	7.00%		2.00%	2.00%	
Weighted-average assumptions used to determine net periodic benefit (credit) loss:						
Discount rate	3.82%	3.50%	3.99%	3.75%	3.00%	3.25%
Expected return on plan assets	7.00%	7.00%	7.25%	2.00%	2.00%	3.00%

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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
2020	\$ 30.8	\$ 1.4	\$ (0.2)	\$ 1.2	
2021	\$ 30.4	\$ 1.2	\$ (0.2)	\$ 1.0	
2022	\$ 29.9	\$ 1.1	\$ (0.2)	\$ 0.9	
2023	\$ 29.9	\$ 1.0	\$ (0.1)	\$ 0.9	
2024	\$ 29.6	\$ 0.8	\$ —	\$ 0.8	
2025-2029	\$ 138.8	\$ 2.8	\$ (0.1)	\$ 2.7	

The healthcare cost trend rate for 2020 was 8.25% 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 assets by approximately \$0.8 million and \$0.9 million as of December 31, 2019 and 2018, respectively. The subsidy cost increased the net periodic benefit cost by approximately \$48.5 thousand and \$51.0 thousand in fiscal 2019 and 2018, respectively, and reduced the net periodic benefit cost by approximately \$2.0 thousand in fiscal 2017.

The expected return on the Pension Plan assets as of December 31, 2019 and 2018 was 6.75% and 7.00%, respectively, 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 targeted investment allocation of 60% equity securities and 40% debt securities as of December 31, 2019 and 2018. 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. As of December 31, 2019 and 2018, the domestic equity portion of the total portfolio ranged between 40% and 60%. The international equity portion of the total portfolio ranged between 10% and 20%. The fixed income portion of the total portfolio ranged between 20% and 40%.

The asset allocation at December 31, 2019 and 2018, and target allocation by asset category are as follows:

Asset Category	Target Allocation	Percentage of Plan Assets	
		2019	2018
Equity securities	60.0%	53.7%	49.2%
Debt securities	40.0%	37.9%	41.9%
Other	—%	8.4%	8.9%
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.

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

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, 2019 and 2018 was 100% in debt securities.

There were no transfers among Levels 1, 2 or 3 for the years ended December 31, 2019 and 2018. Refer to Note 7. 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:

	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
December 31, 2019				
Equity				
Managed equity accounts ⁽¹⁾	\$ 196.1	\$ 196.1	\$ —	\$ —
Equity — pooled separate account ⁽²⁾	66.1	—	66.1	—
Equity — partnerships ⁽³⁾	0.1	—	—	0.1
Debt				
Fixed income manager — pooled separate account ⁽²⁾	185.4	—	185.4	—
Fixed income manager — government securities ⁽⁴⁾	10.3	10.3	—	—
Others				
Cash — pooled separate account ⁽²⁾	3.4	—	3.4	—
Global real estate account ⁽⁵⁾	37.8	—	37.8	—
Total	\$ 499.2	\$ 206.4	\$ 292.7	\$ 0.1
December 31, 2018				
Equity				
Managed equity accounts ⁽¹⁾	\$ 159.7	\$ 159.7	\$ —	\$ —
Equity — pooled separate account ⁽²⁾	47.3	—	47.3	—
Equity — partnerships ⁽³⁾	0.1	—	—	0.1
Debt				
Fixed income manager — pooled separate account ⁽²⁾	176.7	—	176.7	—
Fixed income manager — government securities ⁽⁴⁾	9.7	9.7	—	—
Others				
Cash — pooled separate account ⁽²⁾	1.1	—	1.1	—
Global real estate account ⁽⁵⁾	36.4	—	36.4	—
Total	\$ 431.0	\$ 169.4	\$ 261.5	\$ 0.1

(1) 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.

(2) 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.

(3) 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

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

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.

- (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 year ended December 31, 2017.

Each of the Company's 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 the 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, and loss quantification 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

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

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 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 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.

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 income before income taxes for all periods presented in the accompanying consolidated statements of operations:

	2019				2018				2017			
	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	\$ 1,855.5	\$ 573.6	\$ 178.0	\$ 2,607.1	\$ 1,705.9	\$ 513.3	\$ 175.9	\$ 2,395.1	\$ 1,550.6	\$ 444.6	\$ 150.0	\$ 2,145.2
Expenses:												
Cost of revenues (exclusive of items shown separately below)	(631.5)	(248.1)	(97.2)	(976.8)	(568.1)	(218.2)	(99.9)	(886.2)	(510.4)	(193.8)	(79.6)	(783.8)
Selling, general and administrative	(397.7)	(186.1)	(19.7)	(603.5)	(218.8)	(141.1)	(18.8)	(378.7)	(196.1)	(114.4)	(12.3)	(322.8)
Other operating expenses	—	—	(6.2)	(6.2)	—	—	—	—	—	—	—	—
Investment (loss) income and others, net	0.8	(2.0)	(0.5)	(1.7)	13.2	0.4	1.7	15.3	11.7	(2.8)	0.3	9.2
EBITDA	\$ 827.1	\$ 137.4	\$ 54.4	1,018.9	\$ 932.2	\$ 154.4	\$ 58.9	1,145.5	\$ 855.8	\$ 133.6	\$ 58.4	1,047.8
Depreciation and amortization of fixed assets				(185.7)				(165.3)				(135.6)
Amortization of intangible assets				(138.0)				(130.8)				(101.8)
Interest expense				(126.8)				(129.7)				(119.4)
Income before income taxes				\$ 568.4				\$ 719.7				\$ 691.0

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

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

	2019	2018
Long-lived assets:		
U.S.	\$ 3,162.5	\$ 2,335.8
U.K.	2,685.3	2,595.5
Other countries	462.5	324.5
Total long-lived assets	<u>\$ 6,310.3</u>	<u>\$ 5,255.8</u>

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, 2019 and 2018.

In addition, the Company had no revenues from related parties for the years ended December 31, 2019, 2018 and 2017.

21. Commitments and Contingencies:

The Company is a party to legal proceedings with respect to a variety of matters in the ordinary course of business, including the matters 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. In the case of the *360Value Litigation*, this is primarily because the matter is generally in early stages and discovery has not yet commenced. 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 alleged 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 sought 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 entered a Joint Stipulated Order of Partial Dismissal with Prejudice dismissing all claims or assertions pertaining to the 880 and 732 patents, and certain asserted claims of the 436, 840, 152, 770, 454, 376 and 737 patents (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 closed in 2018 and the Company's 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 Act. Thereafter, Eagle View dropped the 737 patent and further reduced the number of asserted claims from the five remaining Patents in Suit to 6 asserted claims. On September 25, 2019, following a trial, the jury determined that the Company had willfully infringed the 6 asserted claims, and assessed damages in the amount of \$125.0 million, for which the Company has recorded a reserve. The impact associated with the reserve was included in the "Selling, general and administrative" in the accompanying consolidated statements of operations for the year ended December 31, 2019. After trial, Eagle View moved for a temporary restraining order ("TRO") and a permanent injunction preventing the Company's sales of the Geomni Roof, Geomni Property and Aerial Sketch products in combination with Xactimate. The Court granted the motion for a TRO on September 26, 2019 and on October 18, 2019, issued an Order permanently enjoining the Company's sales of the Geomni Roof, Geomni Property and Aerial Sketch

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

products in combination with Xactimate. The Company plans to appeal these results. Eagle View has petitioned the Court to award up to treble damages, together with fees and expenses. The parties' post-trial motions were fully submitted on December 10, 2019 and the parties are awaiting a decision on these motions. The Company has established a \$125.0 million reserve in connection with this litigation, however, at this time it is not reasonably possible to determine the ultimate resolution of this matter.

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. Defendants filed their motions to dismiss the Second Amended Complaint on March 8, 2019. On July 2, 2019, the Court granted those motions, dismissing various claims with leave to amend, and dismissing other claims with prejudice. Plaintiffs filed their Third Amended Complaint on August 1, 2019. As in the Second Amended Complaint plaintiffs claim in the Third Amended Complaint that defendants violated federal antitrust law as well as California consumer protection law and common law. Defendants filed their motions to dismiss the Third Amended Complaint on September 19, 2019. The motions were fully submitted on October 31, 2019 and oral argument, originally scheduled for November 27, 2019, has been postponed to February 13, 2020. At this time, it is not reasonably possible to determine the ultimate resolution of, or estimate the liability related to, this matter.

22. Subsequent Events:

In December 2019, the Company entered into an additional ASR agreement with HSBC Bank USA, N.A. to repurchase shares of its common stock for an aggregate purchase price of \$50.0 million. Upon payment of the aggregate purchase price on January 2, 2020, the Company received an initial delivery of 267,845 shares of its common stock at a price of \$149.34 per share, representing approximately \$40.0 million of the aggregate purchase price. Upon the final settlement of the ASR agreement in February 2020, 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 counter-party. See Note 16. Stockholders' Equity for further discussion.

On January 15, 2020, the Company granted 882,749 stock options, 148,658 shares of restricted stock, and 50,736 performance share units to key employees. The 882,749 stock options and 141,725 shares of restricted stock have a graded service vesting period of four years, while 6,933 shares of restricted stock have a four-year cliff vesting period, and 50,736 performance share units have a three-year performance period, subject to the recipients' continued service. See Note 17. Compensation Plans for further discussion.

On February 1, 2020, the sale of the aerial imagery sourcing group was completed. The Company contributed the assets and stock related to the business held for sale and cash of \$60.0 million in exchange for a non-controlling 35.0% ownership interest in Vexcel Group, Inc.

On February 12, 2020, the Company's Board approved a cash dividend of \$0.27 per share of common stock issued and outstanding, payable on March 31, 2020, to holders of record as of March 13, 2020. On February 12, 2020, the Board also approved an additional share repurchase authorization of \$500.0 million.

On February 14, 2020, the sale of the compliance background screening business was also completed for cash proceeds of \$23.5 million.

Schedule II
Valuation and Qualifying Accounts and Reserves
For the Years Ended December 31, 2019, 2018 and 2017
(In millions)

Description	Balance at Beginning of Year	Charged to Costs and Expenses ⁽¹⁾	Deductions— Write-offs ⁽²⁾	Balance at End of Year
Year ended December 31, 2019				
Allowance for doubtful accounts	\$ 5.7	\$ 7.2	\$ (1.2)	\$ 11.7
Valuation allowance for income taxes	\$ 34.5	\$ 16.7	\$ (4.7)	\$ 46.5
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

⁽¹⁾ Primarily additional reserves for bad debts

⁽²⁾ Primarily accounts receivable balances written off, net of recoveries, the expiration of loss carryforwards and businesses held for sale

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 18, 2020.

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 18, 2020.

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/ CHRISTOPHER M. FOSKETT

Christopher M. Foskett

Lead Independent Director

/S/ ANNELL BAY

Annell R. Bay

Director

/S/ FRANK J. COYNE

Frank J. Coyne

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/ LAURA K. IPSEN

Laura K. Ipsen

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

Exhibit Number	Description
2.1	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.
3.1	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.
3.2	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.
4.1	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.
4.2	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.
4.3	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.
4.4	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.
4.5	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.
4.6	Senior Notes Indenture, dated March 6, 2019, among Verisk Analytics, Inc. 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 March 6, 2019.
4.7	First Supplemental Indenture, dated March 6, 2019, 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 March 6, 2019.
4.8	Description of Verisk Analytics, Inc.'s securities registered pursuant to Section 12 of the Securities Exchange Act.*
10.1	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.
10.2	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.
10.3	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.
10.4	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.

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Exhibit Number	Description
10.5	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.
10.6	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.
10.7	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.
10.8	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.
10.9	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.
10.10	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.
10.11	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.
10.12	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.
10.13	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.
10.14	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.
10.15	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.
10.16	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.
10.17	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.
10.18	Fourth Amendment dated August 15, 2019 to the 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 10.18 to the Company's Current Report on Form 8-K, dated August 16, 2019.

Exhibit Number	Description
10.19	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.
21.1	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.
23.1	Consent of Deloitte & Touche LLP.*
31.1	Certification of the Chief Executive Officer of Verisk Analytics, Inc. pursuant to Rule 13a-14 under the Securities Exchange Act of 1934.*
31.2	Certification of the Chief Financial Officer of Verisk Analytics, Inc. pursuant to Rule 13a-14 under the Securities Exchange Act of 1934.*
32.1	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.

DESCRIPTION OF CAPITAL STOCK

The following description of capital stock of Verisk Analytics, Inc. (the “company,” “we,” “us” and “our”) summarizes certain provisions of our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws. The description is intended as a summary, and is qualified in its entirety by reference to our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, copies of which have been filed as exhibits to this Annual Report on Form 10-K.

Our authorized capital stock consists of 2,000,000,000 shares of common stock, par value \$0.001 per share, and 80,000,000 shares of preferred stock, par value \$0.001 per share.

Common Stock

Voting Rights

Holders of our common stock have the sole right and power to vote on all matters on which a vote of stockholders is to be taken, except as provided by statute or resolution of our board of directors in connection with the issuance of preferred stock in accordance with our Amended and Restated Certificate of Incorporation.

The amendment of certain of the provisions in our amended and restated certificate of incorporation requires the affirmative vote of at least two-thirds of the votes cast thereon by the outstanding shares of the common stock. These provisions include certain of the limitations described below under “- Dividend Rights”, “-Liquidation Rights”, “-Beneficial Ownership Limitations” and “Anti-Takeover Effects of Delaware Law - Staggered Boards.”

Dividend Rights

Holders of our common stock are entitled to share equally (on a per share basis) in any dividend declared by our board of directors, subject to any preferential or other rights of any outstanding preferred stock.

Liquidation Rights

Upon liquidation, dissolution or winding up, holders of our common stock are entitled to receive ratably the assets available for distribution to the stockholders after payment of liabilities and payment of preferential and other amounts, if any, payable on any outstanding preferred stock.

Beneficial Ownership Limitations

Our amended and restated certificate of incorporation prohibits any insurance company from beneficially owning more than ten percent of the aggregate outstanding shares of our common stock. If any transfer is purportedly effected which, if effected, would result in a violation of this limitation, the intended transferee will acquire no rights in respect of the shares in excess of this limitation, and the purported transfer of such number of excess shares will be null and void. In this context an insurance company means any insurance company whose primary activity is the writing of insurance or the reinsuring of risks underwritten by insurance companies or any other entity controlling, controlled by or under common ownership, management or control with such insurer or reinsurer.

Preferred Stock

The board of directors has the authority to issue the preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof, including dividend rights, dividend rates, conversion rights, voting rights, terms of redemption, redemption prices, liquidation preferences and the number of shares constituting any series or the designation of such series, without further vote or action by the stockholders.

The issuance of preferred stock may have the effect of delaying, deferring or preventing a change in control of the Company without further action by the stockholders and may adversely affect the voting and other rights of the holders of common stock. At present, we have no plans to issue any of the preferred stock.

Anti-Takeover Effects of Delaware Law

We are subject to the “business combination” provisions of Section 203 of the Delaware General Corporation Law. In general, such provisions prohibit a publicly held Delaware corporation from engaging in various “business combination” transactions with any interested stockholder for a period of three years after the date of the transaction in which the person became an interested stockholder, unless

- the transaction is approved by the board of directors prior to the date the interested stockholder obtained such status;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced; or
- on or subsequent to such date the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders by the affirmative vote of at least 66 2/3% of the outstanding voting stock which is not owned by the interested stockholder.

A “business combination” is defined to include mergers, asset sales and other transactions resulting in financial benefit to a stockholder. In general, an “interested stockholder” is a person who, together with affiliates and associates, owns (or within three years, did own) 15% or more of a corporation’s voting stock.

The statute could prohibit or delay mergers or other takeover or change in control attempts with respect to the Company and, accordingly, may discourage attempts to acquire us even though such a transaction may offer our stockholders the opportunity to sell their stock at a price above the prevailing market price.

Advance Notice of Proposals and Nominations

Our bylaws establish advance notice procedures with regard to stockholders’ proposals relating to the nomination of candidates for election as directors or other business to be brought before meetings of its stockholders. These procedures provide that notice of such stockholders’ proposals must be timely given in writing to our secretary prior to the meeting at which the action is to be taken. Generally, to be timely, notice must be received at our principal executive offices not less than 60 days nor more than 90 days prior to the first anniversary date of the annual meeting for the preceding year. Shareholders utilizing "proxy access" must meet separate deadlines. The notice must contain certain information specified in the bylaws.

Limits on Written Consents

Our amended and restated certificate of incorporation prohibits stockholder action by written consent.

Proxy Access

Our bylaws contain “proxy access” provisions which give an eligible shareholder (or group of up to 20 shareholders aggregating their shares) owning at least 3% of the Company’s issued and outstanding common stock continuously for at least three years the right to nominate and include in the Company’s annual meeting proxy materials director nominees constituting up to the greater of two directors or 20% of the board of directors, provided that the shareholders and nominees satisfy the requirements and such other limitations specified in the bylaws.

Limits on Special Meetings

Our amended and restated certificate of incorporation and bylaws provide that special meetings of the stockholders may be called by our board of directors, the chairman of the board, the Chief Executive Officer, the President or our Secretary.

Staggered Boards

Our board of directors is divided into three classes serving staggered terms. The number of directors is fixed by our board of directors, subject to the terms of our Amended and Restated Certificate of Incorporation.

Our board of directors currently consists of twelve directors, and each director is elected for a three-year term by the holders of a majority of the votes cast by the holders of shares of common stock present in person or represented by proxy at the meeting and entitled to vote on the election of the directors, provided that if the number of nominees exceeds the number of directors to be elected, the directors shall be elected by the vote of a plurality of the votes cast by the holders of shares of

common stock present in person or represented by proxy at the meeting and entitled to vote on the election of the directors. Vacancies on our board of directors will be filled by a majority of the remaining directors.

Listing

Our common stock is listed on the NASDAQ Global Select Market under the symbol “VRSK.”

Transfer Agent and Registrar

The Transfer Agent and Registrar for the common stock is Equiniti Trust Company.

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 Registration Statement Nos. 333-188629, 333-183476, and 333-165912 on Form S-8 of our reports dated February 18, 2020 relating to the financial statements of Verisk Analytics, Inc., and the effectiveness of Verisk Analytics, Inc.'s internal control over financial reporting, appearing in this Annual Report on Form 10-K of Verisk Analytics, Inc. for the year ended December 31, 2019.

/s/ Deloitte & Touche LLP
Parsippany, New Jersey
February 18, 2020

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 18, 2020

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 18, 2020

**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, 2019, 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 18, 2020