UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

(Mark One)

☑ **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**

Commission File No. 1-38300

CANNAE HOLDINGS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**82-1273460**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*

1701 Village Center Circle, Las Vegas, Nevada	89134
(Address of principal executive offices)	*(zip code)*

(702) 323-7330

(Registrant's telephone number, including area code)

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

Title of Each Class	Trading Symbol	Name of Each Exchange on Which Registered
Cannae Common Stock, $0.0001 par value	CNNE	New York Stock Exchange

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, or a smaller reporting 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	☑	Accelerated filer	☐	Non-accelerated filer	☐	Smaller reporting company	☐	Emerging growth company	☐

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 Exchange Act). Yes ☐ No ☑

The aggregate market value of the shares of Cannae Common Stock held by non-affiliates of the registrant as of June 28, 2019, was $1,941,307,497 based on the closing price of $28.98 as reported by the New York Stock Exchange.

As of January 31, 2020 there were 79,516,833 shares of Cannae common stock outstanding.

The information in Part III hereof for the fiscal year ended December 31, 2019, will be filed within 120 days after the close of the fiscal year that is the subject of this Report.

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PART I

Item 1. *Business*

Introductory Note

The following describes the business of Cannae Holdings, Inc. and its subsidiaries. Except where otherwise noted, all references to "we," "us," "our," "Cannae", "Cannae Holdings", or the "Company," are to Cannae Holdings, Inc. and its subsidiaries, taken together.

Company Background

On November 17, 2017, Fidelity National Financial, Inc. ("FNF") redeemed each outstanding share of its FNF Ventures ("FNFV") Group common stock, par value $0.0001, for one share of common stock, par value $0.0001, of a newly formed entity, Cannae (the "Split-Off"). In conjunction with the Split-Off, FNF contributed to us its portfolio of investments unrelated to its primary insurance and real estate operations which included majority and minority equity investment stakes in a number of entities and certain fixed income investments. On November 20, 2017, Cannae common stock began "regular-way" trading on The New York Stock Exchange under the "CNNE" stock symbol.

Description of Business

We are a holding company engaged in actively managing and operating a group of companies and investments, as well as making additional majority and minority equity portfolio investments in businesses, in order to achieve superior financial performance and maximize the value of these assets. Our primary investments as of December 31, 2019 include our minority ownership interests in The Dun & Bradstreet Corporation ("Dun & Bradstreet" or "D&B"), Ceridian HCM Holding, Inc. ("Ceridian") and Coding Solutions Topco, Inc. ("Coding Solutions", the joint venture that now owns T-System Holdings, Inc.); majority equity ownership stakes in O'Charley's, LLC ("O'Charley's) and 99 Restaurants Holdings, LLC ("99 Restaurants"); and various other equity and debt investments primarily in the real estate, financial services and healthcare technology industries.

The Company conducts its business through our wholly-owned subsidiary Cannae Holdings, LLC ("Cannae LLC"), a Delaware limited liability company. The Company's board of directors ("Board") oversees the management of the Company, Cannae LLC and its businesses, and the performance of Trasimene Capital Management, LLC ("Trasimene" or our "Manager"). As previously disclosed, during the fiscal year ended December 31, 2019, the Company transitioned to an externally managed structure (such externalization of certain management functions, the "Externalization"). In connection with the Externalization, the Company, Cannae LLC, and our Manager entered into a Management Services Agreement (the "Management Services Agreement"). See further discussion under the header *Externalization* in Item 7 of Part II of this Annual Report on Form 10-K (this "Annual Report") for further discussion of our Manager and current year change in management structure.

As of December 31, 2019, we had the following reportable segments:

Dun & Bradstreet. This segment consists of our 24.3% ownership interest in the parent of D&B. On February 8, 2019, Cannae and a consortium of other investors (the "D&B Investors") completed the previously announced acquisition of Dun & Bradstreet's ultimate parent (the "D&B Acquisition").

Dun & Bradstreet is a leading global provider of business decisioning data and analytics. Its mission is to deliver a global network of trust, enabling clients to transform uncertainty into confidence, risk into opportunity and potential into prosperity. Clients embed D&B's trusted, end-to-end solutions into their daily workflows to enhance salesforce productivity, gain visibility into key markets, inform commercial credit decisions and confirm that suppliers are financially viable and compliant with laws and regulations. Dun & Bradstreet's solutions support its clients' mission critical business operations by providing proprietary and curated data and analytics to help drive informed decisions and improved outcomes.

Dun & Bradstreet is differentiated by the scale, depth, diversity and accuracy of its constantly expanding business database that contains comprehensive information on more than 355 million total businesses as of December 31, 2019. Access to longitudinal curated data is critical for global commerce, and with only a small percentage of the world's businesses filing public financial statements, D&B data is a trusted source for reliable information about both public and private businesses. By building such a set of data over time, D&B was able to establish a unique identifier that creates a single thread connecting related corporate entities allowing its clients to form a holistic view of an enterprise. This unique identifier, which D&B refers to as the D-U-N-S Number, is a corporate ''fingerprint'' or ''Social Security Number'' of businesses. Dun & Bradstreet believes that it is the only scale provider to possess both worldwide commercial credit data and comprehensive public records data that are linked together by a unique identifier allowing for an accurate assessment of public and private businesses globally.

We account for our investment in Dun & Bradstreet using the equity method of accounting; therefore, its results of operations do not consolidate into ours.

Ceridian. This segment consists of our 16.4% ownership interest in Ceridian. Ceridian is a global human capital management (“HCM”) software company. Dayforce, Ceridian's flagship cloud HCM platform, provides human resources (“HR”), payroll, benefits, workforce management, and talent management functionality. Dayforce is a single application that provides continuous real-time calculations across all modules to enable, for example, payroll administrators access to data through the entire pay period, and managers access to real-time data to optimize work schedules. Dayforce offers a comprehensive range of functionality, including global HR, payroll, benefits, workforce management, and talent management on web and native iOS and Android platforms. Ceridian's Dayforce mobile app enables employees not only to request and to trade schedules, but also to see the real-time impact of schedule changes on their pay. The Dayforce platform is used by organizations, regardless of industry or size, to optimize management of the entire employee lifecycle, including attracting, engaging, paying, deploying, and developing their people. In addition to Dayforce, Ceridian sells Powerpay, a cloud HR and payroll solution for the Canadian small business market, through both direct sales and established partner channels. Ceridian also continues to support customers using its Bureau solutions, which it generally stopped actively selling to new customers in 2012, following the acquisition of Dayforce. Ceridian invests in maintenance and necessary updates to support its Bureau customers and continues to migrate them to Dayforce.

We account for our investment in Ceridian using the equity method of accounting; therefore, its results of operations do not consolidate into ours.

Restaurant Group. This segment consists of the operations of O'Charley's, 99 Restaurants and American Blue Ribbon Holdings, LLC ("Blue Ribbon"), in which we have 65.4%, 88.5% and 65.4% ownership interests, respectively. O'Charley's and its affiliates are the owners and operators of the O'Charley's restaurant concept. 99 Restaurants and its affiliates are the owners and operators of the Ninety Nine Restaurants restaurant concept. Blue Ribbon and its affiliates are the owners and operators of the Village Inn and Bakers Square food service and restaurant concepts, as well as the Legendary Baking bakery operation.

In January 2020, we began a restructuring of Blue Ribbon in order to effectuate a restructuring of the Village Inn and Bakers Square brands, including by closing certain stores just prior to the filing of voluntary chapter 11 petitions for Blue Ribbon and its subsidiaries. The filing of voluntary chapter 11 petitions does not impact O' Charley's or 99 Restaurants, which are not part of Blue Ribbon. Refer to discussion under the header *Recent Developments* in Item 7 of Part II and under *Blue Ribbon Reorganization* in Note M to the financial statements included in Item 8 of Part II of this Annual Report for further information, which are incorporated by reference into this Part I, Item 1.

Corporate and Other. This aggregation of nonreportable segment consists of our share in the operations of controlled and uncontrolled portfolio companies including our 22.7% interest in Coding Solutions, 49.0% interest in an investment fund (the "Equity Fund"), 24.8% equity interest in Triple Tree Holdings, LLC ("Triple Tree"), majority owned real estate and resort development businesses ("Cannae RE"), 18.8% voting equity interest in preferred stock of QOMPLX, Inc. ("QOMPLX") and other various majority and minority equity and debt investments.

Coding Solutions is a joint venture between Cannae, affiliates of The Carlyle Group and others which has various medical coding technology platforms and back office functions supporting the health care revenue and billing cycles and intends to focus on acquiring and operating synergistic health care services companies in the provider and payer space. See further discussion of our current year contribution of T-System Holdings, Inc. to Coding Solutions in exchange for cash and equity interests in Coding Solutions.

The Equity Fund is an investment fund designed to opportunistically trade in marketable securities.

Triple Tree is an independent, research-driven investment banking firm focused on mergers and acquisitions, financial restructuring, and principal investing services for innovative, high-growth businesses in the healthcare industry.

Cannae RE and its subsidiaries currently operate and invest in golf and real estate properties and develop, manage and operate residential and recreational properties, including a 1,800-acre ranch-style luxury resort and residential community in Oregon and an 18-hole championship golf facility in Idaho.

QOMPLX, formerly Fractal Industries, Inc., is an intelligent decision and analytics platform used by businesses for modeling and planning.

Refer to discussion under Recent Developments in Item 7 of Part II of this Annual Report for further information on recent transactions, changes in our management structure, and other activity of our operating segments.

Strategy

Our strategy for the Company is to continue our activities with respect to the above described business investments to achieve superior financial performance, maximize and ultimately monetize the value of those assets and to continue to pursue similar investments in businesses and to grow and achieve superior financial performance with respect to such newly acquired businesses.

Dun & Bradstreet. We believe that Dun & Bradstreet has an attractive business model that is underpinned by highly recurring, diversified revenues, significant operating leverage, low capital requirements and strong free cash flow. The proprietary and embedded nature of its data and analytics solutions and the integral role that D&B plays in its clients' decision-making processes have translated into high client retention and revenue visibility. For example, 16 of D&B's top 20 clients by revenue for the year ended December 31, 2019, have had an average tenure with D&B of over 20 years. Dun & Bradstreet also benefits from strong operating leverage given its centralized database and solutions, which allows it to generate strong contribution margins and free cash flow.

Subsequent to the D&B Acquisition, D&B quickly began implementing changes to address operational and execution issues at D&B which led to stagnant revenue growth and declining profitability over the last decade. The D&B Investors immediately brought in a new senior leadership team which commenced a comprehensive transformation to improve and revitalize D&B's business for long-term success. The new senior leadership team saw significant opportunity to create value by transforming the organization and improving the platform with new business unit leaders, enhanced technology and data, solution innovation and a client-centric go-to-market strategy.

D&B's transformation strategy, which is well underway, is based on a proven playbook of enhancing stockholder value through organizational re-alignment and re-investment. As of December 31, 2019, these initiatives have resulted in approximately $208.0 million of net annualized run-rate savings, and D&B believes there are incremental opportunities to further rationalize its cost structure. In light of the changes that have been made or identified by the D&B Investors and D&B's seasoned management team, we believe D&B is well-positioned to execute on its near- and long-term strategies of driving stockholder value through consistent revenue growth, managing cost initiatives and innovating and improving the way it adds value and solves the increasingly challenging and complex needs of its clients.

Ceridian. Since 2016, Ceridian's business has transformed from a legacy service-bureau model into a cloud-based provider model. Ceridian's flagship cloud offering, Dayforce, is a cloud solution that meets HCM needs with one employee record and one user experience throughout the application. As evidenced by its more than 60% compound annual growth rate since 2012, we believe that the Dayforce cloud offering, built on a single database, enjoys a competitive advantage in the marketplace and is a market leader as shown by both extensive recognition and industry awards. Nucleus Research named Dayforce as the leader in both HCM technology and workforce management, based on functionality and usability. In addition, Gartner Peer Insights placed Ceridian's Dayforce offering in the leader quadrant in global payroll services, and Ventana Research found Dayforce as the leader in both usability and capability in its Value Index.

Restaurant Group. Our restaurant operations are focused in the family dining and casual dining segments of the restaurant industry. The Restaurant Group's strategy is to achieve long-term profit growth and drive increases in same store sales and guest counts. We have a highly experienced management team that is focused on enhancing the guest experience at our restaurants and building team member engagement. We also utilize a shared service platform that takes advantage of the combined back-office synergies of our restaurant operating companies. Our goal is to maintain a strong balance sheet for our Restaurant Group to provide stability in all operating environments.

We believe the Blue Ribbon Reorganization will facilitate Blue Ribbon's Village Inn and Bakers Square restaurant brands' evolution to a healthy core of restaurants and support an approach to the brands that is most beneficial for all stakeholders.

Acquisitions, Dispositions, Minority Owned Operating Affiliates and Financings. Acquisitions are an important part of our growth strategy and dispositions are an important aspect of our strategy of returning value to shareholders. On an ongoing basis, with assistance from our advisors, we actively evaluate possible transactions, such as acquisitions and dispositions of business units and operating assets and business combination transactions.

In the future, we may seek to sell certain investments or other assets to increase our liquidity. Further, our management has stated that we may make acquisitions in lines of business that are not directly tied to, or synergistic with, our current operating segments. In the past we have obtained majority and minority investments in entities and securities where we see the potential to achieve above market returns. Fundamentally our goal is to acquire quality companies that are well-positioned in their respective industries, run by best-in-class management teams in industries that have attractive organic and acquired growth opportunities. We leverage our operational expertise and track record of growing industry leading companies and our active interaction with management of acquired companies, directly or through our board of directors, to ultimately provide value for our shareholders.

There can be no assurance that any suitable opportunities will arise or that any particular transaction will be completed. We have made a number of acquisitions and dispositions over the past several years to strengthen and expand our service offerings and customer base in our various businesses, to expand into other businesses or where we otherwise saw value, and to monetize investments in assets and businesses.

Through the date of this Annual Report, we have made significant progress both monetizing currently held investments and deploying capital toward new investments. Refer to discussion under Recent Developments in Item 7 of Part II of this Annual Report for further information.

Intellectual Property

Dun & Bradstreet. D&B owns and controls various intellectual property rights, such as trade secrets, confidential information, trademarks, service marks, tradenames, copyrights, patents and applications to the foregoing. These rights, in the aggregate, are of material importance to Dun & Bradstreet's business. D&B believes that the Dun & Bradstreet name and related tradenames, marks and logos are also of material importance to its business. Dun & Bradstreet is licensed to use certain technology and other intellectual property rights owned and controlled by others, and other companies are licensed to use certain technology and other intellectual property rights owned and controlled by it. Dun & Bradstreet's trademarks, service marks, databases, software, copyrights, patents, patent applications and other intellectual property are proprietary and accordingly it relies on a combination of statutory (e.g., copyright, trademark, trade secret, patent, etc.) and contract and liability safeguards for protecting them throughout the world.

Dun & Bradstreet owns patents and patent applications both in the U.S. and in other selected countries. The patents and patent applications include claims which pertain to certain technologies and inventions which D&B has determined are proprietary and warrant patent protection. The protection of its innovative technology and inventions, such as its proprietary methods for data curation and identity resolution, through the filing of patent applications, is part of Dun & Bradstreet's business strategy. Filing of patent applications may or may not provide Dun & Bradstreet with a dominant position in the fields of technology. However, these patents and/or patent applications may provide Dun & Bradstreet with legal defenses should subsequent patents in these fields be issued to third-parties and later asserted against it. Where appropriate, Dun & Bradstreet may also consider asserting or cross-licensing its patents.

Ceridian. Ceridian's success depends, in part, on its ability to protect its proprietary technology and intellectual property. Ceridian relies on a combination of copyrights, trade secrets, and trademarks, as well as confidentiality and nondisclosure agreements and other contractual protections, to establish and to safeguard its intellectual property rights.

Restaurant Group. We regard our Restaurant Group's service marks, including "O'Charley's", "Ninety Nine", "Village Inn", "Legendary Baking", and "Bakers Square", and other service marks and trademarks as important factors in the marketing of our restaurants. We have also obtained trademarks for several of our brand's menu items and for various advertising slogans. We are aware of names and marks similar to our Restaurant Group's service marks and trademarks used by other persons in certain geographic areas where we have restaurants. However, we believe such uses will not adversely affect us. Our policy is to pursue registration of our marks whenever possible and to oppose vigorously any infringement of our marks.

We license the use of our registered trademarks and service marks to franchisees and third parties through franchise arrangements and licenses. The franchise and license arrangements restrict franchisees' and licensees' activities with respect to the use of our trademarks and service marks, and impose quality control standards in connection with goods and services offered in connection with the trademarks and service marks.

Seasonality

Ceridian. Ceridian has in the past and expects in the future to experience seasonal fluctuations in its revenues and new customer contracts with the fourth quarter historically being its strongest quarter for new customer contracts, renewals, and customer go-lives. Although the growth of Ceridian's cloud solutions and the ratable nature of its fees makes this seasonality less apparent in its overall results of operations, we expect Ceridian's revenue to fluctuate quarterly and to be higher in the fourth and first quarters of each year. Fourth quarter revenue is driven by year-end processing fees and Dayforce customer go-lives; and first quarter revenue is driven by revenue earned for printing of year-end tax packages.

Restaurant Group. Average weekly sales per restaurant are typically higher in the first and fourth quarters than in other quarters, and the Restaurant Group typically generates a disproportionate share of its earnings from operations in the first and fourth quarters. Holidays, severe weather and other disruptive conditions may impact sales volumes seasonally in some operating regions. Our revenues in future periods will continue to be subject to these and other factors that are beyond our control and, as a result, are likely to fluctuate.

Inventory

Restaurant Group. In the restaurant group's Legendary Baking business, sales of baked goods are greatest during the holiday season in the fourth quarter. As a result of inventory requirements to meet this demand, inventory is built up over the course of the first nine months of the year.

Competition

Dun & Bradstreet. Dun & Bradstreet primarily competes on the basis of differentiated data sets, analytical capabilities, solutions, client relationships, innovation and price. D&B believes that is competes favorably in each of these categories across its business segments. D&B's competitors vary based on the client size and geographical market that its solutions cover.

For Dun & Bradstreet's finance and risk solutions segment, its competition generally varies by client size. D&B has a leading presence in the enterprise market as clients place a high degree of value on our best-in-class commercial credit database to inform their critical decisions around the extension of credit. D&B’s main competitors in the enterprise and mid-market include Bureau van Dijk (owned by Moody’s Corporation) in Europe and Equifax and Experian in North America. In the small and mid-size company market, commercial credit health becomes increasingly tied to consumer credit health. D&B's competition in this market generally includes Equifax, Experian and other consumer credit providers that offer commercial data. Additionally, there is a fragmented tail of low cost, vertical and regionally focused point solutions in this market that may be attractive to certain clients, but lack the scale and coverage breadth to compete holistically.

For Dun & Bradstreet's sales and marketing solutions segment, its competition has historically been very fragmented with many players offering varying levels of data quantity and quality, and with data being collected in ways that may cross ethical and privacy boundaries. Dun & Bradstreet strives to protect the data and privacy of its clients and to maintain the highest standards in the ethical acquisition, aggregation, curation and delivery of data. D&B's direct competitors vary depending on use cases, such as market segmentation, digital marketing lead generation, lead enrichment, sales effectiveness and data management. In the market for contact data, D&B's competition generally includes Bureau Van Dijk, ZoomInfo and a few consultancies building bespoke solutions. For other sales and marketing solutions such as customer data platform, visitor intelligence, audience targeting and intent data, D&B faces a number of smaller competitors such as Bombora.

Overall, outside North America, D&B's competitive environment varies by region and country, and can be significantly impacted by the legislative actions of local governments, availability of data and local business preferences. In the United Kingdom and Ireland, D&B's direct competition for its finance and risk solutions segment is primarily from Bureau van Dijk, Creditsafe and Experian. Additionally, in D&B's sales and marketing solutions segment, the landscape in these markets is both localized and fragmented, where numerous local players of varying sizes compete for business. In Asia Pacific, D&B faces competition in its finance and risk solutions segment from a mix of local and global providers. D&B competes with Experian in India and a subsidiary of Experian, Sinotrust International Information & Consulting (Beijing) Co., Ltd., in China. In addition, as in the United Kingdom, D&B's sales and marketing solutions landscape throughout Asia is localized and fragmented.

Ceridian. The market for HCM technology solutions is rapidly changing, with legacy service bureau and on-premise software providers facing increased competition from emerging cloud players. Ceridian currently competes with firms that provide both integrated and point solutions for HCM. Legacy payroll service providers, such as Automatic Data Processing, provide HCM solutions primarily through service bureau models. These vendors often have more in-house resources, greater name recognition, and longer operating histories than Dayforce and may seek to expand their cloud offerings through acquisition or organic product development. Ceridian also competes with cloud-enabled client-server HCM providers, such as The Ultimate Software Group, Inc. These companies, whose products were developed over 20 years ago as on-premise solutions, have modified and redeployed their platforms as hybrid software as a service offerings. This has allowed them to transition their business model to offer hosted and cloud solutions, resulting in significantly larger customer bases. More recently, Ceridian faces competition from modern HCM providers, such as Workday, Inc., whose solutions have been specifically built as single application platforms in the cloud. In addition, Ceridian also faces competition from large, long-established enterprise application software vendors, such as Oracle Corporation and SAP SE. These companies are seeking to expand their cloud offerings through both acquisition and internal development efforts. Ceridian also competes with point solutions, such as Kronos Incorporated for workforce management and Cornerstone OnDemand Inc. for talent management.

Restaurant Group. The restaurant industry is highly competitive and is often affected by changes in consumer tastes and discretionary spending patterns; changes in general economic conditions; public safety conditions or concerns; demographic trends; weather conditions; the cost of food products, labor, energy and other operating costs; and governmental regulations. Higher labor costs due to state and local minimum wage increases and shopping pattern shifts to e-commerce and “ready to eat” grocery and convenience stores have had a negative impact on restaurant performance, particularly in the casual and family dining restaurants in which the Company operates.

The restaurant industry is also characterized by high capital investments for new restaurants and relatively high fixed or semi-variable restaurant operating expenses. Because of the high fixed and semi-variable expenses, changes in sales in existing restaurants are generally expected to significantly affect restaurant profitability because many restaurant costs and expenses are not expected to change at the same rate as sales. Restaurant profitability can also be negatively affected by inflationary and regulatory increases in operating costs and other factors. The most significant commodities that may affect our cost of food and beverage are beef, seafood, poultry, and dairy, which accounted for approximately half of our overall cost of food and beverage in the past. Generally, temporary increases in these costs are not passed on to guests; however, in the past, we have adjusted menu prices to compensate for increased costs of a more permanent nature. Our revenues in future periods will continue to be subject to these and other factors that are beyond our control and, as a result, are likely to fluctuate.

Competitive Strengths

Proven management team. Our Board of Directors and executive management team, led by William ("Bill") P. Foley II, has a proven track record of investment identification and management. Bill Foley has led the creation of several multi-billion dollar companies with hundreds of acquisitions across diverse platforms, including, Fidelity National Financial, Inc., Fidelity National Information Services, Inc., Black Knight, Inc., Ceridian, and FGL Holdings, Inc. Our Board of Directors and executive management's breadth of knowledge of capital markets allows us to identify companies and strategic assets with attractive value propositions, to structure investments to maximize their value, and to return the value created to shareholders. We believe the Externalization under the Management Services Agreement will enhance our executive management team's ability to provide these services.

Information Security

We and our unconsolidated affiliates are highly dependent on information technology networks and systems to securely process, transmit and store electronic information. Attacks on information technology systems continue to grow in frequency, complexity and sophistication. Such attacks have become a point of focus for individuals, businesses and governmental entities. These attacks can create system disruptions, shutdowns or unauthorized disclosure of confidential information, including non-public personal information, consumer data and proprietary business information.

We and our unconsolidated affiliates remain focused on making strategic investments in information security to protect the clients and information systems of our operating subsidiaries and unconsolidated affiliates. This includes both capital expenditures and operating expenses on hardware, software, personnel and consulting services. As the primary products and services of our operating subsidiaries and unconsolidated affiliates evolve, we apply a comprehensive approach to the mitigation of identified security risks. We have established risk management policies, including those related to information security and cybersecurity, designed to monitor and mitigate information security related risks.

Employees

As of January 31, 2020, Cannae and our consolidated subsidiaries had 22,482 full-time equivalent employees, which includes 22,281 in our Restaurant Group and 201 in the various businesses comprising our Corporate and other segment.

None of our employees are unionized or represented by any collective agency. We believe that our relations with employees are generally good.

Statement Regarding Forward-Looking Information

The statements contained in this Annual Report or in our other documents or in oral presentations or other statements made by our management that are not purely historical are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act") including statements regarding our expectations, hopes, intentions, or strategies regarding the future. These statements relate to, among other things, future financial and operating results of the Company. In many cases, you can identify forward-looking statements by terminology such as “may,” “will,” “should,” “expect,” “plan,” “anticipate,” “believe,” “estimate,” “predict,” “potential,” or “continue,” or the negative of these terms and other comparable terminology. Actual results could differ materially from those anticipated in these statements as a result of a number of factors, including, but not limited to the following:

- changes in general economic, business, and political conditions, including changes in the financial markets;
- compliance with extensive government regulation of our operating subsidiaries and adverse changes in applicable laws or regulations or in their application by regulators;
- the effects of the Externalization and the Management Services Agreement;
- our ability to successfully execute the Blue Ribbon Reorganization;
- loss of key personnel that could negatively affect our financial results and impair our operating abilities;
- our potential inability to find suitable acquisition candidates, as well as the risks associated with acquisitions in lines of business that will not necessarily be limited to our traditional areas of focus, or difficulties integrating acquisitions;
- other risks detailed in "Risk Factors" below and elsewhere in this document and in our other filings with the SEC.

We are not under any obligation (and expressly disclaim any such obligation) to update or alter our forward-looking statements, whether as a result of new information, future events or otherwise. You should carefully consider the possibility that actual results may differ materially from our forward-looking statements.

Additional Information

The Company's Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to reports filed pursuant to Sections 13(a) and 15(d) of the Exchange Act, are filed with the Securities and Exchange Commission (the "SEC"). The Company is subject to the informational requirements of the Exchange Act and files or furnishes reports, proxy statements and other information with the SEC. The SEC maintains an internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at www.sec.gov.

Our website address is www.cannaeholdings.com. We make available free of charge on or through our website our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and all amendments to those reports filed or furnished pursuant to the Exchange Act as soon as reasonably practicable after such material is electronically filed with or furnished to the SEC. However, the information found on our website is not part of this or any other report.

Item 1A. *Risk Factors*

Risks Relating to the Company's Structure

We may become subject to the Investment Company Act of 1940.

We do not believe that we are subject to regulation under the Investment Company Act of 1940, as amended (the "40 Act"). We were formed for the purpose of effecting the Split-Off and for controlling, operating or holding, as applicable, the FNFV Group's business and investments, including the portfolio companies. We engage primarily in the business of managing and operating our controlled subsidiaries. Our officers and any employees who provide services to us pursuant to the terms of our corporate services agreement with FNF devote their activities to the businesses of these portfolio companies. Our interest in the portfolio companies comprises substantially all of our assets and substantially all of our income, if any, is derived from restaurant revenue from our Restaurant Group, the revenue of T-System, and dividends and other distributions made on our interests in portfolio companies. Based on these factors, we believe that we are not an investment company under the 40 Act, including under Section 3(b)(1) of the 40 Act. If, at any time, we become primarily engaged in the business of investing, reinvesting or trading in securities, we could become subject to regulation under the 40 Act. Following any such change in our business and after giving effect to any applicable grace periods, we may be required to register as an investment company, which could result in significant registration and compliance costs, could require changes to our corporate governance structure and financial reporting, and could restrict our activities going forward. In addition, if we were to become inadvertently subject to the 40 Act, any violation of the 40 Act could subject us to material adverse consequences, including potentially significant regulatory penalties and the possibility that certain of our contracts would be deemed unenforceable.

Risks Relating to the Externalization and Our Manager

The Management Service Agreement was negotiated between related parties and the terms, including fees payable, may not be as favorable to us as if it were negotiated with an unaffiliated third party.

Because our Manager is owned by certain of our directors and executive officers, the Management Services Agreement was developed by related parties, although our independent directors reviewed and approved the Management Services Agreement. The terms of the Management Services Agreement, including fees payable, may not reflect the terms we may have received if it was negotiated with an unrelated third party. In addition, particularly as a result of our relationship with the principal owners of the Manager, who are certain directors and members of our management team, our independent directors may determine that it is in the best interests of our shareholders not to enforce, or to enforce less vigorously, our rights under the Management Services Agreement because of our desire to maintain our ongoing relationship with our Manager.

Our executive officers, directors and Manager may allocate some of their time to other businesses, thereby causing conflicts of interest in their determination as to how much time to devote to our affairs, which may materially adversely affect our results of operations.

While the members of our management team anticipate devoting a substantial amount of their time to the affairs of the Company, our executive officers, directors, Manager and other members of our management team may engage in other business activities. This may result in a conflict of interest in allocating their time between our operations and our management and the operations of other businesses. Their other business endeavors may involve related or unrelated parties. Conflicts of interest that arise over the allocation of time may not always be resolved in our favor and may materially adversely affect our results of operations. See the section entitled "Factors Relating to the Split-Off" included in Item 1A of our Annual Report for further discussion of risks associated with our split-off from, and relationship with, FNF.

Conflicts of interest could arise in connection with certain of our directors' and executive officers' discharge of fiduciary duties to our shareholders.

Certain of our directors and executive officers are members or employees of the Manager. Such persons, by virtue of their positions with us, have fiduciary duties to us and our shareholders. The duties of such persons as directors or executive officers to us and our shareholders may conflict with the interests of such persons in their capacities as members or employees of the Manager.

Our Manager and members of our management team may engage in activities that compete with us or our businesses.

While the members of our management team intend to devote a substantial majority of their time to the affairs of the Company, and while our Manager currently does not manage any other businesses that are in lines of business similar to our businesses, neither our management team nor our Manager is expressly prohibited from investing in or managing other entities, including those that are in the same or similar line of business as our businesses, or required to present any particular investment or business opportunity to the Company. In this regard, the Management Services Agreement and the obligation thereunder to provide management services to us will not create a mutually exclusive relationship between our Manager, on the one hand, and the Company, on the other.

We cannot remove our Manager solely for poor performance, which could limit our ability to improve our performance and could adversely affect the market price of our shares.

Under the terms of the Management Services Agreement, our Manager may not be removed as a result of underperformance. Instead, the Company's board of directors may only remove our Manager in certain limited circumstances or upon a vote by 75% of the Company's board of directors and 75% of our shareholders to terminate the Management Services Agreement. This limitation could adversely affect the market price of our shares.

Our Manager can resign on 180 days' notice, subject to a limited extension, and we may not be able to find a suitable replacement, resulting in a disruption in our operations that could materially adversely affect our financial condition, business and results of operations as well as the market price of our shares.

Our Manager has the right, under the Management Services Agreement, to resign at any time on 180 days' written notice, whether we have found a replacement or not, subject to the Company's right to extend such period by an additional 180 days or until a replacement manager has been in place for 30 days, if no replacement manager has been found by the 150th day following the Manager's notice of resignation. If our Manager resigns, we may not be able to contract with a new manager or hire internal management with similar expertise and ability to provide the same or equivalent services on acceptable terms within 180 days (subject to possible extension), or at all, in which case our operations are likely to experience a disruption; our financial condition, business and results of operations as well as our ability to pay distributions are likely to be adversely affected; and the market price of our shares may decline. In addition, the coordination of our internal management, acquisition activities and supervision of our businesses is likely to suffer if we are unable to identify and reach an agreement with a single institution or group of executives having the expertise possessed by our Manager. Even if we are able to retain comparable management, whether internal or external, the integration of such management and their lack of familiarity with our businesses may result in additional costs and time delays that could materially adversely affect our financial condition, business and results of operations.

We must pay our Manager the management fee regardless of our performance.

Our Manager is entitled to receive a management fee that is based on our cost of invested capital, as defined in the Management Services Agreement, regardless of the performance of our businesses. The calculation of the management fee is unrelated to the Company's results of operations. As a result, the management fee may incentivize our Manager to increase the amount of invested capital.

We cannot determine the amount of the management fee that will be paid over time with any certainty, nor are we able to determine with any certainty the amount of carried interest that will be paid over time, and our payment of such fees and carried interest to the Manager may significantly reduce the amount of cash available for distribution to our shareholders.

Under the Management Services Agreement, the Company will be obligated to pay a management fee to and, subject to certain exceptions, reimburse the costs and out-of-pocket expenses of our Manager incurred on behalf of the Company in connection with the provision of services to the Company. The management fee is calculated by reference to the Company's cost of invested capital, which will be impacted by the acquisition or disposition of, and additional capital contributions and investments in, businesses, which can be significantly influenced by our Manager, as well as the performance of our businesses and other businesses we may acquire in the future. Changes in cost of invested capital and in the resulting management fee could be significant, resulting in a material adverse effect on the Company's results of operations. In addition, if the performance of the Company declines, assuming cost of invested capital remains the same, management fees will increase as a percentage of the Company's net income.

Furthermore, we cannot determine the amount of carried interest with respect to liquidity events involving investments of the Company that will be paid over time with any certainty. Such determination would be dependent on the potential sale proceeds received for any of our businesses and the performance of the Company and its businesses over a multi-year period of time, among other factors that cannot be predicted with certainty at this time. Such factors may have a significant impact on the amount of any carried interest to be paid to the Manager. Likewise, such determination would be dependent on whether certain hurdles were surpassed giving rise to a payment of carried interest. Any amounts paid in respect of the carried interest are unrelated to the management fee earned for performance of services under the Management Services Agreement.

While it is difficult to quantify with any certainty the actual amount of any such payments in the future, such amounts could be substantial. The management fee and carried interest will be payment obligations of the Company and, as a result, will be paid, along with other Company obligations, prior to the payment of distributions to shareholders. As a result the payment of these amounts may significantly reduce the amount of cash flow available for distribution to our shareholders. If we do not have sufficient liquid assets to pay the management fee and carried interest when such payments are due, we may be required to liquidate assets or incur debt in order to make such payments. This circumstance could materially adversely affect our liquidity and ability to make distributions to our shareholders.

Our profit allocation may induce our Manager to make suboptimal decisions regarding our operations.

Our Manager will receive carried interest based on profits in excess of an annualized hurdle rate upon a liquidity event involving a Company investment. In this respect, a calculation and payment of carried interest may be triggered upon the sale of one of our businesses. As a result, our Manager may be incentivized to recommend the sale of one or more of our businesses to our Board of Directors at a time that may not be optimal for our shareholders.

Risks Relating to the Restaurant Group

General macroeconomic factors, including unemployment, energy prices and interest rates, and certain economic and business factors specific to the restaurant and bakery industries that are largely out of our restaurant businesses' control may materially and adversely affect consumer behavior and have a material adverse effect on our business, financial condition and results of operations.

General economic conditions may materially and adversely affect the financial condition and results of operations of our restaurant businesses, which we also refer to as our Restaurant Group companies. Recessionary economic cycles, a protracted economic slowdown, a worsening economy, increased unemployment, increased energy prices, rising interest rates, a downgrade of the United States ("U.S.") government's long-term credit rating, financial market volatility and unpredictability or other national, regional and local regulatory and economic conditions or other industry-wide cost pressures could affect consumer behavior and spending for restaurant dining occasions and result in increased pressure with respect to our Restaurant Group companies' pricing, guest count levels and commodity costs, which could lead to a further decline in our Restaurant Group companies' sales and earnings, beyond those that resulted in the Blue Ribbon Reorganization. Job losses, foreclosures, bankruptcies and falling home prices could cause customers to make fewer discretionary purchases, and any significant decrease in our Restaurant Group companies' guest counts or profit will negatively impact their financial performance. In addition, if gasoline, natural gas, electricity and other energy costs increase, or credit card, home mortgage and other borrowing costs increase with rising interest rates, our Restaurant Group companies' customers may have lower disposable income and reduce the frequency with which they dine at restaurants, may spend less during each visit at our Restaurant Group companies' restaurants or may choose more inexpensive restaurants. These factors could also cause the Restaurant Group companies to, among other things, reduce the number and frequency of new restaurant openings, close additional restaurants, delay the reimaging of the Restaurant Group companies' existing restaurant locations, or impede our ability to successfully execute, and achieve the goals contemplated by, the Blue Ribbon Reorganization.

Furthermore, we cannot predict the effects that actual or threatened armed conflicts, terrorist attacks, efforts to combat terrorism, including military action against any foreign state or local group located in a foreign state, heightened security requirements on local, regional, national or international economies or a failure to protect information systems for critical infrastructure, such as the electrical grid and telecommunications systems, could have on the Restaurant Group companies' operations, the economy or consumer confidence generally. Any of these events could affect consumer spending patterns or result in increased costs for the Restaurant Group companies due to security measures.

The business results of our Restaurant Group companies depend on a number of industry-specific factors as well, many of which are beyond the Restaurant Group companies' control. The full service dining sector of the restaurant industry is affected by seasonal fluctuation of sales volumes, consumer confidence, consumer spending patterns and consumer preferences, including changes in consumer tastes and dietary habits, and the level of consumer acceptance of our restaurant brands. The performance of individual restaurants may also be materially and adversely affected by factors applicable to those restaurants, such as demographic trends, severe weather, traffic patterns and the type, number and location of competing restaurants.

Unfavorable changes in the above factors or in other business and economic conditions affecting our Restaurant Group companies' customers or industry could increase costs, reduce guest counts in some or all restaurants or impose practical limits on pricing, any of which could lower profit margins and have a material adverse effect on our business, financial condition and results of operations.

The Restaurant Group companies face significant competition for customers, real estate and employees and competitive pressure to adapt to changes in conditions driving customer demand. The Restaurant Group companies' inability to compete effectively may affect guest counts, sales and profit margins, which could have a material adverse effect on our business, financial condition and results of operations.

The restaurant industry is intensely competitive with a substantial number of restaurant operators that compete directly and indirectly with the Restaurant Group companies with respect to price, service, ambiance, brand, customer service, dining experience, location, food quality and variety and value perception of menu items and there are other well established competitors with substantially greater financial and other resources than the Restaurant Group companies. Some of our Restaurant Group companies' competitors advertise on national television, which may provide customers with greater awareness and name recognition than our Restaurant Group companies can achieve through their advertising efforts. There is also active competition for management personnel and attractive suitable real estate sites. Consumer tastes and perceptions, nutritional and dietary trends, guest count patterns and the type, number and location of competing restaurants often affect the restaurant business, and our Restaurant Group companies' competitors may react more efficiently and effectively to those conditions. For instance, prevailing health or dietary preferences or perceptions of our Restaurant Group companies' products may cause consumers to avoid certain menu items or products our Restaurant Group companies offer in favor of foods that are perceived as more healthy, and such choices by consumers could have a material adverse effect on our business, financial condition and results of operations. Further, our Restaurant Group companies face growing competition from the supermarket industry, with the improvement of their "convenient meals" in the deli and prepared food sections, from quick service and fast casual restaurants and online food delivery services as a result of food and beverage offerings by those food providers. As our Restaurant Group companies' competitors expand operations in markets where our restaurant businesses operate or expect to operate, we expect competition to intensify. If our Restaurant Group companies are unable to continue to compete effectively, including following the completion of the Blue Ribbon Reorganization, their guest counts, sales and profit margins could decline, which could have a material adverse effect on our business, financial condition and results of operations.

Historically, customer spending patterns for the Restaurant Group companies' restaurants are generally highest in the fourth quarter of the year and lowest in the third quarter of the year. Sales activity during the holidays may affect seasonal sales volumes in some of the markets in which our restaurant businesses operate. The quarterly results of our Restaurant Group companies have been and will continue to be affected by the timing of new restaurant openings and their associated costs (which are often materially greater during the first several months of operation than thereafter), restaurant closures and exit-related costs, labor availability and costs for hourly and management personnel, profitability of restaurants, especially in new markets, trends in comparable restaurant sales, changes in borrowings and interest rates, changes in consumer preferences and competitive conditions, fluctuations in food and commodity prices, fluctuations in costs attributable to public company compliance and impairments of goodwill, intangible assets and property, fixtures and equipment. As a result of these and other factors, the Restaurant Group companies' financial results for any quarter may not be indicative of the results that may be achieved for a full fiscal year.

If our restaurant businesses are unable to effectively grow revenue and profitability at certain of their locations, our Restaurant Group companies may be required to record additional impairment charges to their restaurant assets, the carrying value of their goodwill or other intangible assets, which could have a material adverse effect on our financial condition and results of operations.

Our Restaurant Group companies assess the potential impairment of their long-lived assets whenever events or changes in circumstances indicate that the carrying value of the assets or asset group may not be recoverable. Factors considered include, but are not limited to, significant underperformance relative to historical or projected future operating results, significant changes in the manner in which an asset is being used, an expectation that an asset will be disposed of significantly before the end of its previously estimated useful life and significant negative industry or economic trends. Our Restaurant Group companies annually review and compare the carrying value of intangible assets, including goodwill, to the fair value. For the years ended December 31, 2019 and 2018, we recorded $10.4 million and $26.7 million, respectively, of impairment to goodwill in our Restaurant Group segment as a result of deteriorating operating results and cash flow resulting from declining same store sales and increased costs. In addition, for the years ended December 31, 2019, 2018 and 2017, we recorded $17.1 million, $5.8 million and $2.9 million, respectively, of impairment expense related to other intangible assets within our Restaurant Group.

We cannot accurately predict the amount and timing of any future recorded impairment to our Restaurant Group companies' assets. Should the value of goodwill or other intangible or long-lived assets become further impaired, there could be a material adverse effect on our financial condition and results of operations.

Increased commodity, energy and other costs could decrease our Restaurant Group companies' profit margins or cause the Restaurant Group companies to limit or otherwise modify their menus, which could have a material adverse effect on our business, financial condition and results of operations.

The cost, availability and quality of ingredients restaurant operations use to prepare their food is subject to a range of factors, many of which are beyond their control. A significant component of our restaurant businesses' costs will be related to food commodities, including beef, pork, chicken, seafood, poultry, dairy products, oils, produce, fruit, flour and other related costs such as energy and transportation over which we may have little control, which can be subject to significant price fluctuations due to seasonal shifts, climate conditions, industry demand, changes in international commodity markets and other factors. If there is a substantial increase in prices for these commodities, our Restaurant Group companies' results of operations may be negatively affected. In addition, the Restaurant Group companies' restaurants are dependent upon frequent deliveries of perishable food products that meet certain specifications. Shortages or interruptions in the supply of perishable food products caused by unanticipated demand, problems in production or distribution, disease or food-borne illnesses, inclement weather or other conditions could adversely affect the availability, quality, and cost of ingredients, which would likely lower revenues, damage the Restaurant Group companies' reputation or otherwise harm our business.

The Restaurant Group companies are also subject to the general risks of inflation. The performance of our Restaurant Group companies' business is also adversely affected by increases in the price of utilities, such as natural gas, whether as a result of inflation, shortages or interruptions in supply, or otherwise. The Restaurant Group companies' business will also incur significant costs for insurance, labor, marketing, taxes, real estate, borrowing and litigation, all of which could increase due to inflation, changes in laws and regulations, competition or other events beyond the Restaurant Group companies' control.

Negative customer experiences or negative publicity surrounding our Restaurant Group companies' restaurants or other restaurants could adversely affect sales in one or more of our Restaurant Group companies' restaurants and make our concepts less valuable, which could have a material adverse effect on our business, financial condition and results of operations.

Because we believe our Restaurant Group companies' success depends significantly on their ability to provide exceptional food quality, outstanding service and an excellent overall dining experience, adverse publicity, whether or not accurate, relating to food quality, public health concerns, illness, safety, injury or government or industry findings concerning our Restaurant Group companies' restaurants, restaurants operated by other food service providers or others across the food industry supply chain could affect our Restaurant Group companies more than it would other restaurants that compete primarily on price or other factors. If customers perceive or experience a reduction in the food quality, service or ambiance at our Restaurant Group companies' restaurants or in any way believe our Restaurant Group companies' restaurants have failed to deliver a consistently positive experience, the value and popularity of one or more of our Restaurant Group companies' concepts could suffer. Further, because our restaurant businesses rely heavily on "word-of-mouth," as opposed to more conventional mediums of advertisement, to establish concept recognition, our restaurant businesses may be more adversely affected by negative customer experiences than other dining establishments, including those of our restaurant businesses' competitors.

Our restaurant businesses could suffer due to reduced demand for our restaurant businesses' brands or specific menu offerings if our restaurant businesses are the subject of negative publicity or litigation regarding allegations of food-related contaminations or illnesses, which could have a material adverse effect on our business, financial condition and results of operations.

Food safety is a top priority, and our Restaurant Group companies dedicate substantial resources to ensuring that their customers enjoy safe, quality food products. Food-related contaminations and illnesses may be caused by a variety of food-borne pathogens, such as e-coli or salmonella, which are frequently carried on unwashed fruits and vegetables, from a variety of illnesses transmitted by restaurant workers, such as hepatitis A, which may not be diagnosed prior to being infectious, and from contamination of food by foreign substances. Contamination and food borne illness incidents could also be caused at the point of source or by food suppliers and distributors. As a result, we cannot control all of the potential sources of contamination or illness that can be contained in or transmitted from our Restaurant Group companies' food. Regardless of the source or cause, any report of food-borne illnesses or other food safety issues including food tampering or contamination, at one of our Restaurant Group companies' restaurants could adversely affect the reputation of our Restaurant Group companies' brands and have a negative impact on their sales. Even instances of food-borne illness, food tampering or food contamination occurring solely at restaurants of our Restaurant Group companies' competitors or at one of our Restaurant Group companies' suppliers could result in negative publicity about the food service industry generally and adversely impact our Restaurant Group companies' sales.

If any person becomes injured or ill, or alleges becoming injured or ill, as a result of eating our Restaurant Group companies' food, our Restaurant Group companies may temporarily close some restaurants or their bakery facilities, which would decrease their revenues, and our restaurant businesses may be liable for damages or be subject to governmental regulatory action, either of which could have long-lasting, negative effects on our restaurant businesses' reputation, financial condition and results of operations, regardless of whether the allegations are valid or whether our restaurant businesses are found liable. The occurrence of food-borne illnesses or food safety issues could also adversely affect the price and availability of affected ingredients, resulting in higher costs and lower margins.

Our Restaurant Group companies' failure to comply with government regulation, and the costs of compliance or non-compliance, could have a material adverse effect on our business, financial condition and results of operations.

The Restaurant Group companies are subject to various federal, state and local laws and regulations affecting their business. Each of their restaurants and their bakery division are subject to licensing and regulation by a number of federal, state and local governmental authorities, which may include, among others, alcoholic beverage control, health and safety, nutritional menu labeling, health care, environmental and fire agencies. Difficulty in obtaining or failure to obtain the required licenses, including liquor or other licenses, permits or approval could delay or prevent the development of a new restaurant in a particular area. Additionally, difficulties or inabilities to retain or renew licenses, or increased compliance costs due to changed regulations, could adversely affect operations at existing restaurants.

While only approximately 9% of the Restaurant Group companies' consolidated restaurant sales in 2019 were attributable to the sale of alcoholic beverages, approximately 19% of the restaurant sales at Ninety Nine were attributable to the sale of alcoholic beverages in 2019. Alcoholic beverage control regulations require each restaurant to apply to a state authority and, in certain locations, county or municipal authorities for a license or permit to sell alcoholic beverages on the premises and to provide service for extended hours and on Sundays. Typically, licenses must be renewed annually and may be revoked or suspended for cause at any time. Alcoholic beverage control regulations relate to numerous aspects of daily operations of the Restaurant Group companies' restaurants, including minimum ages of patrons and employees, hours of operation, advertising, training, wholesale purchasing, inventory control and the handling, storage and dispensation of alcoholic beverages. The failure of a restaurant to obtain or retain liquor or food service licenses would adversely affect the restaurant's operations.

There is also a potential for increased regulation of certain food establishments in the U.S., where compliance with Hazard Analysis & Critical Control Points ("HACCP") management systems may now be required. HACCP refers to a management system in which food safety is addressed through the analysis and control of potential hazards from raw material production, procurement and handling, to manufacturing, distribution and consumption of the finished product. Many states have required restaurants to develop and implement HACCP programs and the U.S. government continues to expand the sectors of the food industry that must adopt and implement HACCP programs. For example, the Food Safety Modernization Act, signed into law in January 2011, granted the FDA new authority regarding the safety of the entire food system, including through increased inspections and mandatory food recalls. We anticipate that the new requirements may impact the restaurant industry. Additionally, our Restaurant Group companies' suppliers may initiate or otherwise be subject to food recalls that may impact the availability of certain products, result in adverse publicity or require the Restaurant Group companies' to take actions that could be costly for them or otherwise harm their business.

The Restaurant Group companies are subject to laws and regulations relating to information security, privacy, cashless payments, gift cards and consumer credit, protection and fraud, and any failure or perceived or alleged failure to comply with these laws and regulations could harm their reputation or lead to litigation, which could have a material adverse effect on our financial condition and results of operations.

The impact of current laws and regulations, the effect of future changes in laws or regulations that impose additional requirements and the consequences of litigation relating to current or future laws and regulations, or an insufficient or ineffective response to significant regulatory or public policy issues, could increase our Restaurant Group companies' cost structure or lessen their operational efficiencies and talent availability, and therefore have a material adverse effect on our financial condition and results of operations. Failure to comply with the laws and regulatory requirements of federal, state and local authorities could result in, among other things, revocation of required licenses, administrative enforcement actions, fines and civil and criminal liability. Compliance with these laws and regulations can be costly and can increase the Restaurant Group companies' exposure to litigation or governmental investigations or proceedings.

Restaurant companies, including our restaurant companies, are the target of claims and lawsuits from time to time in the ordinary course of business. Proceedings of this nature, if successful, could result in our payment of substantial costs and damages, which could have a material adverse effect on our business, financial condition and results of operations.

Our Restaurant Group companies and other restaurant companies have been subject to claims and lawsuits alleging various matters from time to time in the ordinary course of business, including those that follow. Claims and lawsuits may include class action lawsuits, alleging violations of federal and state laws regarding workplace and employment matters, discrimination and similar matters. A number of these lawsuits have resulted in the payment of substantial damages by the defendants. Similar lawsuits have been instituted from time to time alleging violations of various federal and state wage and hour laws regarding, among other things, employee meal deductions, the sharing of tips amongst certain employees, overtime eligibility of assistant managers and failure to pay for all hours worked. Although our restaurant businesses will maintain what we believe to be adequate levels of insurance, insurance may not be available at all or in sufficient amounts to cover any liabilities with respect to these matters. Accordingly, if our restaurant businesses are required to pay substantial damages and expenses as a result of these types or other lawsuits, such payments or expenses could have a material adverse effect on our business and results of operations.

Occasionally, our Restaurant Group companies' customers may file complaints or lawsuits against the Restaurant Group companies alleging that they are responsible for some illness or injury the customers suffered at or after a visit to one of the Restaurant Group companies' restaurants, including actions seeking damages resulting from food-borne illness and relating to notices with respect to chemicals contained in food products required under state law. Our Restaurant Group companies may also be subject to a variety of other claims from third parties arising in the ordinary course of their business, including personal injury claims, contract claims and claims alleging violations of federal and state laws. In addition, most of our Restaurant Group companies' restaurants are subject to state "dram shop" or similar laws which generally allow a person to sue our restaurant businesses if that person was injured by a legally intoxicated person who was wrongfully served alcoholic beverages at one of our Restaurant Group companies' restaurants. The restaurant industry has also been subject to a growing number of claims that the menus and actions of restaurant chains have led to the obesity of certain of their customers. In addition, the Restaurant Group companies may also be subject to lawsuits from their employees or others alleging violations of federal and state laws regarding workplace and employment matters, discrimination and similar matters. A number of these lawsuits in the restaurant industry have resulted in the payment of substantial damages by the defendants.

Additionally, certain of the Restaurant Group companies' tax returns and employment practices are subject to audits by the IRS and various state tax authorities. Such audits could result in disputes regarding tax matters that could lead to litigation that would be costly to defend or could result in the payment of additional taxes, which could have a material adverse effect on our business, results of operations and financial condition.

Regardless of whether any claims against the Restaurant Group companies are valid or whether they are liable, claims may be expensive to defend and may divert resources away from their operations. In addition, such claims may generate negative publicity, which could reduce customer traffic and sales. Although our restaurant businesses will maintain what they believe to be adequate levels of insurance, insurance may not be available at all or in sufficient amounts to cover any liabilities with respect to these or other matters. Defense costs, even for unfounded claims, or a judgment or other liability in excess of our restaurant businesses' insurance coverage for any claims or any adverse publicity resulting from claims could have a material adverse effect on our business, results of operations and financial condition.

The Restaurant Group companies rely heavily on information technology and any material failure, interruption, or security breach in their systems could have a material adverse effect on our business, financial condition and results of operations.

The Restaurant Group companies rely heavily on information technology systems across their operations and corporate functions, including for order and delivery from suppliers and distributors, point-of-sale processing in their restaurants, management of their supply chains, payment of obligations, collection of cash, bakery production, data warehousing to support analytics, finance or accounting systems, labor optimization tools, gift cards, online business and various other processes and transactions, including the storage of employee and customer information. The Restaurant Group companies' ability to effectively manage their business and coordinate the production, distribution and sale of their products will depend significantly on the reliability and capacity of these systems. In 2015, the Restaurant Group companies upgraded their information systems using a third-party provider. However, the failure of these systems to operate effectively, maintenance problems or problems with transitioning to upgraded or replacement systems could cause delays in product sales and reduced efficiency of our restaurant businesses' operations, and significant capital investments could be required to remediate the problem.

The regulatory environment surrounding information security and privacy is increasingly demanding, with the frequent imposition of new and constantly changing requirements. Compliance with these requirements may result in cost increases due to necessary systems changes and the development of new administrative processes. In addition, customers and employees have a high expectation that our restaurant businesses will adequately protect their personal information. The majority of our restaurant businesses' restaurant sales are by credit or debit cards. We and other restaurants and retailers have experienced security breaches in which credit and debit card information of their customers has been stolen.

In addition, any breach in customer payment information could result in investigations by the U.S. Secret Service Electronic Crimes Task Force ("ECTF") and increased cost in our restaurant businesses' efforts to cooperate with the ECTF.

The Restaurant Group companies also maintain certain personal information regarding their employees. In addition to government investigations, the Restaurant Group companies may in the future become subject to lawsuits or other proceedings for purportedly fraudulent transactions arising out of the actual or alleged theft of their customers' credit or debit card information or if customer or employee information is obtained by unauthorized persons or used inappropriately. If the Restaurant Group companies fail to comply with these laws and regulations or experience a significant breach of customer, employee or company data, their reputation could be damaged and they could experience lost sales, fines or lawsuits. Additionally, if a person is able to circumvent the security measures intended to protect our Restaurant Group companies' employee or customer private data, he or she could destroy or steal valuable information and disrupt our restaurant businesses' operations. The Restaurant Group companies may also be required to incur additional costs to modify or enhance their systems in order to prevent or remediate any such attacks.

The success of the Restaurant Group depends, in part, on its intellectual property, which we may be unable to protect.

We regard our Restaurant Group's service marks, including "O'Charley's", "Ninety Nine", "Village Inn", "Legendary Baking", and "Bakers Square", and other service marks and trademarks as important factors in the marketing of our restaurants. We have also obtained trademarks for several of our brand's menu items and for various advertising slogans. We are aware of names and marks similar to our Restaurant Group's service marks and trademarks used by other persons in certain geographic areas where we have restaurants. We believe such uses will not adversely affect us and our policy is to pursue registration of our marks whenever possible and to oppose vigorously any infringement of our marks.

We license the use of our registered trademarks and service marks to franchisees and third parties through franchise arrangements and licenses. The franchise and license arrangements restrict franchisees' and licensees' activities with respect to the use of our trademarks and service marks, and impose quality control standards in connection with goods and services offered in connection with the trademarks and service marks.

Occasionally, third parties may assert that we are, or may be, infringing on or misappropriating their intellectual property rights. In these cases, we intend to defend against claims or negotiate licenses when we consider these actions appropriate. Intellectual property cases are uncertain and involve complex legal and factual questions. If we become involved in this type of litigation, it could consume significant resources and divert our attention from business operations.

If we are found to infringe on the intellectual property rights of others, we could incur significant damages, be enjoined from continuing to use certain marks, or be required to obtain a license to continue using the affected marketing and promotional materials. A license could be very expensive to obtain or may not be available at all. Similarly, changing our marketing plan to avoid infringing the rights of others may be costly or impracticable.

We are subject to risks and uncertainties associated with the Blue Ribbon Reorganization

On January 27, 2020, Blue Ribbon, which owns the Village Inn, Bakers Square and Legendary Baking concepts, and its wholly-owned subsidiaries, filed voluntary petitions for relief under chapter 11 of the United States Bankruptcy Code in the U.S. Bankruptcy Court for the District of Delaware (the "Blue Ribbon Reorganization"). Blue Ribbon is subject to risks and uncertainties associated with the Blue Ribbon Reorganization, including but not limited to (i) its ability to maintain relationships with its suppliers, service providers, customers, employees and other third parties, (ii) the ability of third parties to seek and obtain court approval to terminate contracts and other agreements with Blue Ribbon, (iii) the actions and decisions of Blue Ribbons' creditors and other third parties who have interests in the Blue Ribbon Reorganization that may be inconsistent with our plans, (iv) limitations on Blue Ribbons operating flexibility during the proceedings and (v) our ability to compromise certain claims through the Blue Ribbon Reorganization. While we do not expect the Blue Ribbon Reorganization to have a material adverse effect on the Company, adverse changes in facts and circumstances as the Blue Ribbon Reorganization progresses could change that assertion and result in a material adverse effect on our financial condition and results of operations.

Risks Relating to the Company's Investment in Ceridian

An information security breach of Ceridian's systems or the loss of, or unauthorized access to, customer information, failure to comply with the U.S. Federal Trade Commission’s (“FTC”) ongoing consent order regarding data protection, or a system disruption could have a material adverse effect on our business, market brand, financial condition, and results of operations.

Ceridian's business is dependent on its payroll, transaction, financial, accounting, and other data processing systems. Ceridian relies on these systems to process, on a daily and time sensitive basis, a large number of complicated transactions. Ceridian electronically receives, processes, stores, and transmits data and personally identifiable information (“PII”) about its customers and their employees, as well as its vendors and other business partners, including names, social security numbers, and checking account numbers. Ceridian keeps this information confidential. However, Ceridian's websites, networks, applications and technologies, and other information systems may be targeted for sabotage, disruption, or data misappropriation. The uninterrupted operation of Ceridian's information systems and Ceridian's ability to maintain the confidentiality of PII and other customer and individual information that resides on its systems are critical to the successful operation of Ceridian's business. While Ceridian has information security and business continuity programs, these plans may not be sufficient to ensure the uninterrupted operation of its systems or to prevent unauthorized access to the systems by unauthorized third parties. Because techniques used to obtain unauthorized access or to sabotage systems change frequently and may not be recognized until launched against a target, Ceridian may be unable to anticipate these techniques or to implement adequate preventative measures. These concerns about information security are increased with the mounting sophistication of social engineering. Ceridian's network security hardening may be bypassed by phishing and other social engineering techniques that seek to use end user behaviors to distribute computer viruses and malware into its systems, which might disrupt Ceridian's delivery of services and make them unavailable, and might also result in the disclosure or misappropriation of PII or other confidential or sensitive information. In addition, a significant cyber security breach could prevent or delay Ceridian's ability to process payment transactions.

Any information security breach in Ceridian's business processes or of its processing systems has the potential to impact its customer information and its financial reporting capabilities, which could result in the potential loss of business and Ceridian's ability to accurately report financial results. If any of these systems fail to operate properly or become disabled even for a brief period of time, Ceridian could potentially miss a critical filing period, resulting in potential fees and penalties, or lose control of customer data, all of which could result in financial loss, a disruption of Ceridian's businesses, liability to customers, regulatory intervention, or damage to its reputation. The continued occurrence of high-profile data breaches provides evidence of an external environment increasingly hostile to information security. If Ceridian's security measures are breached as a result of third party action, employee or subcontractor error, malfeasance or otherwise, and, as a result, someone obtains unauthorized access to customer data, Ceridian's reputation may be damaged, its business may suffer, and Ceridian could incur significant liability. Ceridian may also experience security breaches that may remain undetected for an extended period of time. Techniques used to obtain unauthorized access or to sabotage systems change frequently and are growing increasingly sophisticated. As a result, Ceridian may be unable to anticipate these techniques or to implement adequate preventative measures.

This environment demands that Ceridian continuously improve its design and coordination of security controls throughout the company. Despite these efforts, it is possible that Ceridian's security controls over data, training, and other practices it follows may not prevent the improper disclosure of PII or other confidential information. Any issue of data privacy as it relates to unauthorized access to or loss of customer and/or employee information could result in the potential loss of business, damage to Ceridian's market reputation, litigation, and regulatory investigation and penalties. Maintaining, updating, monitoring, and revising an information security program in an effort to ensure that it remains reasonable and appropriate in light of changes in security threats, changes in technology, and security vulnerabilities that arise from legacy systems is time-consuming and complex, and is an ongoing effort.

There may be other such security vulnerabilities that come to Ceridian's attention. The independent third party that reviews Ceridian's security program pursuant to the FTC consent order may determine that the existence of vulnerabilities in its security controls or the failure to remedy them in a timeframe they deem appropriate means that its security program does not provide a reasonable level of assurance that the security, confidentiality, and integrity of PII is protected by Ceridian (or that there was a failure to protect at some point in the reporting period). While Ceridian has taken and continues to take steps to ensure compliance with the consent order, if they are determined not to be in compliance with the consent order, or if any new breaches of security occur, the FTC may take enforcement actions or other parties may initiate a lawsuit. Any such resulting fines and penalties could have a material adverse effect on Ceridian's liquidity and financial results, and any reputational damage therefrom could adversely affect Ceridian's relationships with its existing customers and its ability to attain new customers. Ceridian's continued investment in the security of its technology systems, continued efforts to improve the controls within its technology systems, business processes improvements and the enhancements to its culture of information security may not successfully prevent attempts to breach Ceridian's security or unauthorized access to PII or other confidential, sensitive or proprietary information. In addition, in the event of a catastrophic occurrence, either natural or man-made, Ceridian's ability to protect its infrastructure, including PII and other customer data, and to maintain ongoing operations could be significantly impaired. Ceridian's business continuity and disaster recovery plans and strategies may not be successful in mitigating the effects of a catastrophic occurrence. Insurance may be inadequate or may not be available in the future on acceptable terms, or at all. In addition, Ceridian's insurance policies may not cover all claims made against them, and defending a suit, regardless of its merit, could be costly and divert management’s attention. If Ceridian's security is breached, if PII or other confidential information is accessed, if Ceridian fails to comply with the consent order or if Ceridian experiences a catastrophic occurrence, it could have a material adverse effect on its business, financial condition, and results of operations, and ultimately the value of our investment in Ceridian.

Ceridian's solutions and business are subject to a variety of U.S. and international laws and regulations, including those regarding privacy, data protection, and information security. Any failure by Ceridian or its third party service providers, as well as the failure of its platform or services, to comply with applicable laws and regulations could have a material adverse effect on our business, financial condition, and results of operations.

Ceridian is subject to a variety of U.S. and international laws and regulations, including regulation by various federal government agencies, including the FTC, and state and local agencies. The United States and various state and foreign governments have adopted or proposed limitations on, or requirements regarding, the collection, distribution, use, security, and storage of PII of individuals; and the FTC and many state attorneys general are applying federal and state consumer protection laws to impose standards on the online collection, use and dissemination of data. Self-regulatory obligations, other industry standards, policies, and other legal obligations may apply to Ceridian's collection, distribution, use, security, or storage of PII or other data relating to individuals. In addition, most states and some foreign governments have enacted laws requiring companies to notify individuals of data security breaches involving certain types of PII. These obligations may be interpreted and applied in an inconsistent manner from one jurisdiction to another and may conflict with one another, other regulatory requirements, or Ceridian's internal practices. Any failure or perceived failure by Ceridian to comply with U.S., E.U., or other foreign privacy or security laws, regulations, policies, industry standards, or legal obligations, or any security incident that results in the unauthorized access to, or acquisition, release, or transfer of, PII may result in governmental enforcement actions, litigation, fines and penalties, or adverse publicity and could cause Ceridian's customers to lose trust in it, which could harm its reputation and have a material adverse effect on our business, financial condition, and results of operations.

We expect that there will continue to be new proposed laws, regulations, and industry standards concerning privacy, data protection and information security in the United States, Canada, the European Union, and other jurisdictions, and we cannot yet determine the impact such future laws, regulations, and standards may have on Ceridian's business. For example, in May 2018, the General Data Protection Regulation came into force, bringing with it a complete overhaul of E.U. data protection laws: the new rules supersede E.U. data protection legislation, impose more stringent E.U. data protection requirements, and provide for greater penalties for non-compliance. Changing definitions of what constitutes PII may also limit or inhibit Ceridian's ability to operate or to expand its business, including limiting strategic partnerships that may involve the sharing of data. Also, some jurisdictions require that certain types of data be retained on servers within these jurisdictions. Ceridian's failure to comply with applicable laws, directives, and regulations may result in enforcement action against it, including fines and imprisonment, and damage to Ceridian's reputation, any of which may have an adverse effect on its business and operating results. Further, in October 2015, the European Court of Justice issued a ruling invalidating the U.S.-E.U. Safe Harbor Framework, which facilitated transfers of PII to the United States in compliance with applicable E.U. data protection laws. In July 2016, the E.U. and the U.S. political authorities adopted the E.U.-U.S. Privacy Shield, replacing the Safe Harbor Framework and providing a new mechanism for companies to transfer E.U. PII to the United States. U.S. organizations wishing to self-certify under the Privacy Shield must pledge their compliance with its seven core and sixteen supplemental principles, which are based on European Data Protection Law.

If Ceridian's service is perceived to cause, or is otherwise unfavorably associated with, violations of privacy or data security requirements, it may subject it or its customers to public criticism and potential legal liability. Public concerns regarding PII processing, privacy and security may cause some of its customers' end users to be less likely to visit their websites or otherwise interact with them. If enough end users choose not to visit Ceridian's customers' websites or otherwise interact with them, Ceridian's customers could stop using its platform. This, in turn, may reduce the value of its services and slow or eliminate the growth of its business. Existing and potential privacy laws and regulations concerning privacy and data security and increasing sensitivity of consumers to unauthorized processing of PII may create negative public reactions to technologies, products, and services such as Ceridian's.

Evolving and changing definitions of what constitutes PII and / or "Personal Data" within the United States, Canada, the European Union, and elsewhere, especially relating to the classification of internet protocol, or IP addresses, machine or device identification numbers, location data and other information, may limit or inhibit Ceridian's ability to operate or to expand its business. Future laws, regulations, standards and other obligations could impair Ceridian's ability to collect or to use information that it utilizes to provide email delivery and marketing services to its customers, thereby impairing its ability to maintain and to grow its customer base and to increase revenue. Future restrictions on the collection, use, sharing, or disclosure of our customers' data or additional requirements for express or implied consent of customers for the use and disclosure of such information may limit our ability to develop new services and features.

Privacy concerns and laws or other domestic or foreign data protection regulations may reduce the effectiveness of Ceridian's applications, which could have a material adverse effect on our business, financial condition, and results of operations.

Ceridian's customers can use its applications to collect, to use, and to store PII regarding their employees, independent contractors, and job applicants. Federal, state, and foreign government bodies and agencies have adopted, are considering adopting, or may adopt laws and regulations regarding the collection, use, storage and disclosure of PII obtained from individuals. The costs of compliance with, and other burdens imposed by, such laws and regulations that are applicable to the businesses of Ceridian's customers, or to its business directly, may limit the use and adoption of Ceridian's applications and reduce overall demand, or lead to significant fines, penalties, or liabilities for any non-compliance with such privacy laws. Furthermore, privacy concerns may cause Ceridian's customers' workers to resist providing PII necessary to allow its customers to use its applications effectively. Even the perception of privacy concerns, whether or not valid, may inhibit market adoption of Ceridian's applications in certain industries.

All of these domestic and international legislative and regulatory initiatives may adversely affect Ceridian's customers' ability to process, to handle, to store, to use, and to transmit demographic information and PII from their employees, independent contractors, job applicants, customers, and suppliers, which could reduce demand for Ceridian's applications. The European Union and many countries in Europe have stringent privacy laws and regulations, which may impact Ceridian's ability to profitably operate in certain European countries.

Further, international data protection regulations trending toward increased localized data residency rules make transfers from outside the regulation's jurisdiction increasingly complex and may impact Ceridian's ability to deliver solutions that meet all customers' needs. If the processing of PII were to be further curtailed in this manner, Ceridian's solutions could be less effective, which may reduce demand for our applications, which could have a material adverse effect on its business, financial condition, and results of operations, and ultimately the value of our investment in Ceridian.

In addition to government activity, privacy advocacy groups and the technology and other industries are considering various new, additional, or different self-regulatory standards that may place additional burdens on Ceridian. If the processing of PII were to be curtailed in this manner, Ceridian's solutions would be less effective, which may reduce demand for its applications, which could have a material adverse effect on its business, financial condition, and results of operations, and ultimately the value of our investment in Ceridian.

Litigation and regulatory investigations aimed at Ceridian or resulting from actions of its predecessor may result in significant financial losses and harm to its reputation.

Ceridian faces risk of litigation, regulatory investigations, and similar actions in the ordinary course of its business, including the risk of lawsuits and other legal actions relating to breaches of contractual obligations or tortious claims from customers or other third parties, fines, penalties, interest, or other damages as a result of erroneous transactions, breach of data privacy laws, or lawsuits and legal actions related to Ceridian's predecessors. Any such action may include claims for substantial or unspecified compensatory damages, as well as civil, regulatory, or criminal proceedings against Ceridian's directors, officers, or employees; and the probability and amount of liability, if any, may remain unknown for significant periods of time. Ceridian may be also subject to various regulatory inquiries, such as information requests, and book and records examinations, from regulators and other authorities in the geographical markets in which Ceridian operates. A substantial liability arising from a lawsuit judgment or settlement or a significant regulatory action against Ceridian or a disruption in its business arising from adverse adjudications in proceedings against its directors, officers, or employees could have a material adverse effect on Ceridian's business, financial condition, and results or operations and ultimately the value of our investment in Ceridian.

Additionally, Ceridian is subject to claims and investigations as a result of its predecessor, Control Data Corporation (“CDC”), Ceridian Corporation, and other former entities for which Ceridian is successor-in-interest with respect to assumed liabilities. For example, in September 1989, CDC became party to an environmental matters agreement with Seagate Technology plc (“Seagate”) related to groundwater contamination on a parcel of real estate in Omaha, Nebraska sold by CDC to Seagate. In February 1988, CDC entered into an arrangement with Northern Engraving Corporation and the Minnesota Pollution Control Agency in relation to groundwater contamination at a site in Spring Grove, Minnesota. In August 2017, Ceridian received notice of a mesothelioma claim related to CDC. Although Ceridian is fully reserved for the groundwater contamination liabilities, Ceridian cannot at this time accurately assess the merits of these claims, and cannot be certain if additional liabilities related to such predecessor companies will surface. Moreover, even if Ceridian ultimately prevails in or settles any litigation, regulatory action, or investigation, Ceridian could suffer significant harm to its reputation, which could materially affect its ability to attract new customers, to retain current customers, and to recruit and to retain employees, which could have a material adverse effect on Ceridian's business, financial condition, and results of operations, and ultimately, the value of our investment in Ceridian.

Risks Relating to the Company's Investment in Dun & Bradstreet

Our investment in D&B may expose us to certain risks, which could have a material adverse effect on our results of operations or financial position.

D&B’s transformation strategy is based on several strategic initiatives and growth strategies. The achievement of its strategic initiatives and growth strategies depends on a number of factors, including but not limited to its ability to maintain the integrity of its brand and reputation, client demand for its solutions, the effect of macro-economic challenges on its clients and vendors, its reliance on third parties to provide data and certain operational services and its ability to protect its information technology. D&B may not be able to successfully implement its strategic initiatives in accordance with its expectations, or in the timeframe it desires, which may result in us not realizing our expected return on our investment in D&B, or result in a negative return on investment.

We record our investment in D&B using the equity method of accounting, through which we record our proportionate share of their net earnings or loss in our consolidated financial statements. Equity-method investments are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the investment may not be recoverable. If our equity-method investment is not recoverable, we may be required to record an impairment charge, which could have a material adverse effect on our results of operations.

We share certain directors with D&B or its affiliated entities, which may lead to conflicting interests.

One of our directors, William P. Foley, II, and our CEO and director, Richard N. Massey, also serve on the boards of directors of D&B or its parent and subsidiaries. From time to time, we may enter into transactions with D&B and/or its respective subsidiaries or other affiliates. There can be no assurance that the terms of any such transactions will be as favorable to our company, D&B or any of our or its respective subsidiaries or affiliates as would be the case where there is no overlapping director.

D&B's ability to implement and execute its strategic plans to transform the business may not be successful and, accordingly, D&B may not be successful in achieving its goals to transform its business, which could have a material adverse effect on its business, financial condition and results of operations.

D&B may not be successful in developing and implementing its strategic plans to transform its businesses, including realigning management, simplifying and scaling technology, expanding and enhancing data and optimizing its client services. If the development or implementation of D&B's plans are not successful, they may not produce the revenue, margins, earnings or synergies that we expect, including offsetting the impact of adverse economic conditions that may exist currently or develop in the future. D&B may also face delays or difficulties in implementing technological, organizational and operational improvements, including its plans to leverage our data insights in new functional areas and utilize existing data architecture to generate high contribution incremental revenue streams, which could adversely affect its ability to successfully compete. In addition, the costs associated with implementing such plans may be more than anticipated and D&B may not have sufficient financial resources to fund all of the desired or necessary investments required in connection with its plans. The existing and future execution of D&B's strategic and operating plans to transform its business will, to some extent, also be dependent on external factors that they cannot control. In addition, these strategic and operational plans need to be continually reassessed to meet the challenges and needs of its business in order for D&B to remain competitive. The failure to implement and execute its strategic and operating plans in a timely manner or at all, realize or maintain the cost savings or other benefits or improvements associated with such plans, have financial resources to fund the costs associated with such plans or incur costs in excess of anticipated amounts, or sufficiently assess and reassess these plans could have a material adverse effect on D&B's business, financial condition and results of operations, and ultimately the value of our investment in D&B.

D&B's brand and reputation are key assets and a competitive advantage, and its business may be affected by how it is perceived in the marketplace.

D&B's brand and reputation are key assets of its business and a competitive advantage. D&B's ability to attract and retain clients is highly dependent upon the external perceptions of its level of data quality, effective provision of solutions, business practices, including the actions of its employees, third-party providers, members of D&B's world-wide network of partners and other brand licensees, some of which may not be consistent with its policies and standards. Negative perception or publicity regarding these matters could damage D&B's reputation with clients and the public, which could make it difficult for it to attract and maintain clients. Adverse developments with respect to its industry may also, by association, negatively impact its reputation, or result in higher regulatory or legislative scrutiny. Negative perceptions or publicity could have a material adverse effect on D&B's business, financial condition and results of operations, and ultimately the value of our investment in D&B.

Data security and integrity are critically important to D&B's business, and cybersecurity incidents, including cyberattacks, breaches of security, unauthorized access to or disclosure of confidential information, business disruption, or the perception that confidential information is not secure, could result in a material loss of business, regulatory enforcement, substantial legal liability and/or significant harm to its reputation.

D&B collects, stores and transmits a large amount of confidential company information on over 355 million total businesses as of December 31, 2019, including financial information and personal information. D&B operates in an environment of significant risk of cybersecurity incidents resulting from unintentional events or deliberate attacks by third parties or insiders, which may involve exploiting highly obscure security vulnerabilities or sophisticated attack methods. These cyberattacks can take many forms, but they typically have one or more of the following objectives, among others:

- obtain unauthorized access to confidential information;
- manipulate or destroy data; or
- disrupt, sabotage or degrade service on D&B's systems.

D&B has experienced and expects to continue to experience numerous attempts to access its computer systems, software, networks, data and other technology assets on a daily basis. The security and protection of its data is a top priority for D&B. D&B devotes significant resources to maintain and regularly upgrade the wide array of physical, technical and contractual safeguards that it employs to provide security around the collection, storage, use, access and delivery of information D&B has in its possession. Despite D&B's physical security, implementation of technical controls and contractual precautions to identify, detect and prevent the unauthorized access to and alteration and disclosure of its data, D&B cannot be certain that third party systems that have access to its systems will not be compromised or disrupted in the future, whether as a result of criminal conduct or other advanced, employee error or malfeasance, or other disruptions during the process of upgrading or replacing computer software or hardware, power outages, computer viruses, telecommunication or utility failures or natural disasters or other catastrophic events. Due to the sensitive nature of the information D&B collects, stores and transmits, it is not unusual for efforts to occur (coordinated or otherwise) by unauthorized persons to attempt to obtain access to its systems or data, or to inhibit D&B's ability to deliver products or services to a consumer or a business customer.

D&B must continually monitor and develop its information technology networks and infrastructure to prevent, detect, address and mitigate the risk of unauthorized access, misuse, computer viruses and other events that could have a security impact. The preventive actions D&B takes to address cybersecurity risk, including protection of its systems and networks, may be insufficient to repel or mitigate the effects of cyberattacks as it may not always be possible to anticipate, detect or recognize threats to its systems, or to implement effective preventive measures against all cybersecurity risks. This is because, among other things:

- the techniques used in cyberattacks change frequently and may not be recognized until after the attacks have succeeded;
- cyberattacks can originate from a wide variety of sources, including sophisticated threat actors involved in organized crime, sponsored by nation-states, or linked to terrorist or hacktivist organizations; and
- third parties may seek to gain access to our systems either directly or using equipment or security passwords belonging to employees, clients, third-party service providers or other users.

Although D&B has not incurred material losses or liabilities to date as a result of any breaches, unauthorized disclosure, loss or corruption of its data or inability of its clients to access its systems, such events could disrupt D&B's operations, subject it to substantial regulatory and legal proceedings and potential liability and fines, result in a material loss of business and/or significantly harm its reputation.

D&B may not be able to immediately address the consequences of a cybersecurity incident because a successful breach of its computer systems, software, networks or other technology assets could occur and persist for an extended period of time before being detected due to, among other things:

- the breadth and complexity of its operations and the high volume of transactions that is processes;
- the large number of clients, counterparties and third-party service providers with which D&B does business with;
- the proliferation and increasing sophistication of cyberattacks; and
- the possibility that a third party, after establishing a foothold on an internal network without being detected, might obtain access to other networks and systems.

The extent of a particular cybersecurity incident and the steps that D&B may need to take to investigate it may not be immediately clear, and it may take a significant amount of time before such an investigation can be completed and full and reliable information about the incident is known. While such an investigation is ongoing, D&B may not necessarily know the extent of the harm or how best to remediate it, and certain errors or actions could be repeated or compounded before they are discovered and remediated, any or all of which could further increase the costs and consequences of a cybersecurity incident.

Due to concerns about data security and integrity, a growing number of legislative and regulatory bodies have adopted breach notification and other requirements in the event that information subject to such laws is accessed by unauthorized persons and additional regulations regarding the use, access, accuracy and security of such data are possible. In the United States, we are subject to laws that provide for at least 50 disparate notification regimes. Complying with such numerous and complex regulations in the event of unauthorized access would be expensive and difficult, and failure to comply with these regulations could subject D&B to regulatory scrutiny and additional liability.

If D&B is unable to protect its computer systems, software, networks, data and other technology assets it could have a material adverse effect on its business, financial condition and results of operations, and ultimately the value of our investment in D&B.

D&B's substantial indebtedness could have a material adverse effect on its financial condition and its ability to operate its business or react to changes in the economy or its industry, prevent them from fulfilling its obligations and could divert its cash flow from operations for debt payments.

D&B has a substantial amount of indebtedness, which requires significant interest and principal payments. As of December 31, 2019, D&B has $3,818.9 million in total long-term debt outstanding, consisting of borrowings under its senior secured credit facilities (the ‘‘New Senior Secured Credit Facilities’’), senior secured and unsecured notes (the ‘‘New Notes’’) and its repatriation bridge facility (the ‘‘New Repatriation Facility’’). In addition, subject to the limitations contained in the credit agreements governing D&B's New Senior Secured Credit Facilities and the indentures governing its New Notes, D&B may be able to incur substantial additional debt from time to time to finance working capital, capital expenditures, investments or acquisitions or for other purposes. If D&B does so, the risks related to its high level of debt could increase. This substantial amount of indebtedness could have important consequences to D&B, including the following:

- it may be difficult for D&B to satisfy its obligations, including debt service requirements under its outstanding indebtedness;
- D&B's ability to obtain additional financing for working capital, capital expenditures, debt service requirements, acquisitions or other general corporate purposes may be impaired;
- requiring a substantial portion of cash flow from operations to be dedicated to the payment of principal and interest on its indebtedness, thereby reducing D&B's ability to use its cash flow to fund its operations, capital expenditures, future business opportunities and other purposes;
- D&B will be more vulnerable to economic downturns and adverse industry conditions and its flexibility to plan for, or react to, changes in its business or industry will be more limited;
- D&B's ability to capitalize on business opportunities and to react to competitive pressures, as compared to its competitors, may be compromised due to its high level of indebtedness and the restrictive covenants in its credit agreements and indentures;
- D&B's ability to borrow additional funds or to refinance indebtedness may be limited; and

- it may cause potential or existing clients or vendors to not contract with D&B due to concerns over its ability to meet its financial obligations.

Risks Relating to the Company's Corporate and Other Businesses

Competition and technology may erode the Corporate and Other business franchises and result in lower earnings, which could have a material adverse effect on our business, financial condition and results of operations.

Each of the Corporate and Other businesses face intense competitive pressures within markets in which they operate. While we will manage our businesses with the objective of achieving long-term sustainable growth by developing and strengthening competitive advantages, many factors, including market and technology changes, may erode or prevent the strengthening of competitive advantages. Accordingly, future operating results will depend to some degree on whether our Corporate and Other businesses are successful in protecting or enhancing their competitive advantages. If our Corporate and Other businesses are unsuccessful in these efforts, our periodic operating results in the future may decline from current levels.

The Corporate and Other businesses, from time to time in the ordinary course of business, are involved in legal proceedings and may experience unfavorable outcomes, which could have a material adverse effect on our business, financial condition and results of operations.

The Corporate and Other businesses, from time to time in the ordinary course of business, are involved in pending and threatened litigation matters, some of which include claims for punitive or exemplary damages. These companies are also subject to compliance with extensive government laws and regulations related to employment practices and policies. The Corporate and Other businesses may not be able to successfully resolve these types of conflicts to their satisfaction, and these matters may involve claims for substantial amounts of money or for other relief that might necessitate changes to their business or operations. The defense of these actions may be both time consuming and expensive and their outcomes cannot be predicted with certainty. Determining reserves for pending litigation is a complex, fact-intensive process that requires significant legal judgment. It is possible that unfavorable outcomes in one or more such proceedings could result in substantial payments that could have a material adverse effect on the Corporate and Other businesses' cash flows in a particular period or on our business, financial condition and results of operations.

Failure to comply with, or changes in, laws or regulations applicable to the Corporate and Other businesses could have a material adverse effect on our business, financial condition and results of operations.

The Corporate and Other businesses will be subject to certain laws, such as certain environmental laws, takeover laws, anti-bribery and anti-corruption laws, escheat or abandoned property laws, and antitrust laws, that may impose requirements on us and them as an affiliated group. As a result, we could become jointly and severally liable for all or part of fines imposed on our Corporate and Other businesses or be fined directly for violations committed by these businesses, and such fines imposed directly on us could be greater than those imposed on such businesses. Compliance with these laws or contracts could also require us to commit significant resources and capital towards information gathering and monitoring thereby increasing our operating costs.

Similarly, the Corporate and Other businesses may be subject to contractual obligations which may impose obligations or restrictions on their affiliates. The interpretation of such contractual provisions will depend on local laws. Given that we do not control all of the Corporate and Other businesses and that they generally operate independently of each other, there is a risk that we could contravene one or more of such laws, regulations and contractual arrangements due to limited access and opportunities to monitor compliance. In addition, compliance with these laws or contracts could require us to commit significant resources and capital towards information gathering and monitoring thereby increasing our operating costs.

We need qualified personnel to manage and operate our Corporate and Other businesses, and any inability to adequately satisfy these needs could have a material adverse effect on our business, financial condition and results of operations.

In our decentralized business model, we need qualified and competent management to direct day-to-day business activities of our Corporate and Other businesses. Our Corporate and Other businesses also need qualified and competent personnel in executing their business plans and serving their customers, suppliers and other stakeholders. Changes in demographics, training requirements and the unavailability of qualified personnel could negatively impact our Corporate and Other businesses' ability to meet demands of customers to supply goods and services. Recruiting and retaining qualified personnel is important to all of our Corporate and Other businesses' operations. Although our Corporate and Other businesses have adequate personnel for the current business environment, unpredictable increases in demand for goods and services may exacerbate the risk of not having sufficient numbers of trained personnel, which could have a negative impact on our operating results, financial condition and liquidity.

Risks Relating to the Company's Investments

Our management may seek growth through acquisitions in lines of business that will not necessarily be limited to our current areas of focus or geographic areas. This expansion of our business subjects us to associated risks, such as the diversion of management's attention and lack of experience in operating such businesses, which could have a material adverse effect on our business, financial condition and results of operations.

We may make acquisitions in lines of business that are not directly tied to or synergistic with our current portfolio companies. Accordingly, we may in the future acquire businesses in industries or geographic areas with which management is less familiar than we are with our current businesses.

The acquisition and integration of any business we may acquire involves a number of risks and may result in unforeseen operating difficulties and expenditures in assimilating or integrating the businesses, technologies, products, personnel or operations of the acquired business. Furthermore, acquisitions may:

- involve our entry into geographic or business markets in which we have little or no prior experience;
- involve difficulties in retaining the customers of the acquired business;
- involve difficulties and expense associated with regulatory requirements, competition controls or investigations;
- result in a delay or reduction of sales for both us and the business we acquire; and
- disrupt our ongoing business, divert our resources and require significant management attention that would otherwise be available for ongoing development of our current business.

To complete future acquisitions, we may determine that it is necessary to use a substantial amount of our cash or engage in equity or debt financing. If we raise additional funds through further issuances of equity or convertible debt securities, our existing stockholders could suffer significant dilution, and any new equity securities we issue could have rights, preferences and privileges senior to those of holders of our common stock. Any debt financing obtained by us in the future could involve restrictive covenants relating to our capital-raising activities and other financial and operational matters that make it more difficult for us to obtain additional capital in the future and to pursue other business opportunities, including potential acquisitions. In addition, we may not be able to obtain additional financing on terms favorable to us, if at all, which could limit our ability to engage in acquisitions. Moreover, we can make no assurances that the anticipated benefits of any acquisition, such as operating improvements or anticipated cost savings, would be realized or that we would not be exposed to unexpected liabilities in connection with any acquisition.

Further, an acquisition may negatively affect our operating results because it may require us to incur charges and substantial debt or other liabilities, may cause adverse tax consequences, substantial depreciation and amortization of deferred compensation charges, may require the amortization, write-down or impairment of amounts related to deferred compensation, goodwill and other intangible assets, may include substantial contingent consideration payments or other compensation that reduce our earnings during the quarter in which incurred, or may not generate sufficient financial return to offset acquisition costs.

We may often pursue investment opportunities that involve business, regulatory, legal or other complexities, which could have a material adverse effect on our business, financial condition and results of operations.

As an element of our investment strategy, we may pursue unusually complex investment opportunities. This could often take the form of substantial business, regulatory or legal complexity. Our tolerance for complexity may present risks, as such transactions can be more difficult, expensive and time-consuming to finance and execute; it may be more difficult to manage or realize value from the assets acquired in such transactions; and such transactions may sometimes entail a higher level of regulatory scrutiny or a greater risk of contingent liabilities. Any of these risks could harm our performance.

The loss of key personnel could impair our operating abilities and could have a material adverse effect on our business, financial condition and results of operations.

Our success will substantially depend on our ability to attract and retain key members of our senior management team and officers. If we lose one or more of these key employees, our operating results and in turn the value of our common stock could be materially adversely affected. Although we will have employment agreements with many of our officers, there can be no assurance that the entire term of the employment agreement will be served or that the employment agreement will be renewed upon expiration.

The due diligence process that we undertake in connection with new acquisitions may not reveal all facts that may be relevant in connection with an investment.

Before making acquisitions, we will conduct due diligence that we deem reasonable and appropriate based on the facts and circumstances applicable to each investment. When conducting due diligence, we may be required to evaluate important and complex business, financial, tax, accounting, environmental and legal issues. Outside consultants, legal advisers, accountants and investment banks may be involved in the due diligence process in varying degrees depending on the type of investment. Nevertheless, when conducting due diligence and making an assessment regarding an acquisition, we will rely on the resources available to us, including information provided by the target of the investment and, in some circumstances, third party investigations. The due diligence investigation that we will carry out with respect to any opportunity may not reveal or highlight all relevant facts (including fraud) that may be necessary or helpful in evaluating such opportunity. Moreover, such an investigation will not necessarily result in the investment being successful.

Risks Relating to the Split-Off

We may incur material costs as a result of our separation from FNF, which could have a material adverse effect on our business, financial condition and results of operations.

As a result of our separation from FNF, we have incurred and will continue to incur costs and expenses not previously incurred. These increased costs and expenses may arise from various factors, including financial reporting or costs associated with complying with the federal securities laws (including compliance with the Sarbanes-Oxley Act of 2002, tax administration and human resources related functions.) Although FNF will continue to provide many of these services for us at no-cost (other than reimbursement of FNF's out-of-pocket costs and expenses) under the corporate services agreement for up to three years following the Split-Off. The initial three-year term is set to expire in November 2020 and we are still evaluating our options for ongoing services currently provided by FNF. If the corporate services agreement is not mutually terminated by Cannae Holdings and FNF prior to the expiration of the initial three-year term, the corporate services agreement will automatically renew for successive one-year terms on mutually agreeable arm's length terms unless FNF and Cannae Holdings mutually agree to terminate the agreement. We cannot assure you that we will not incur third-party vendor costs or out-of-pocket expenses under the corporate services agreement that are material to our business. Moreover, we will have to develop internal departments/functions to perform the services at the end of the term of the corporate services agreement.

We share certain directors and officers with FNF, which may lead to conflicting interests.

Two of our executive officers, Richard L. Cox and Michael L. Gravelle, are also contracted to provide services or employed by FNF or FNF's subsidiaries and one of our directors, William P. Foley, II and one of our executive officers, Richard N. Massey, also serve on the boards of directors of FNF or its subsidiaries. Our executive officers and members of our board of directors have fiduciary duties to our stockholders. Likewise, any such persons who serve in similar capacities at FNF or any other public company have fiduciary duties to that company's stockholders. We also are party to a variety of related party agreements and relationships with FNF and certain of FNF's subsidiaries and FNF and subsidiaries of FNF have an ownership interest in Cannae Holdings. From time to time, we may enter into transactions with FNF and/or its respective subsidiaries or other affiliates. There can be no assurance that the terms of any such transactions will be as favorable to our company, FNF or any of our or its respective subsidiaries or affiliates as would be the case where there is no overlapping officer or director.

Our agreements with FNF were negotiated while we were a subsidiary of FNF.

We have a number of inter-company agreements covering matters such as tax sharing and our responsibility for certain liabilities previously undertaken by FNF for certain of our businesses. In addition, we have entered into (i) a corporate services agreement with FNF, pursuant to which FNF provides to us certain "back office" services at no-cost (other than reimbursement of FNF's out-of-pocket costs and expenses), (ii) a voting agreement with FNF, pursuant to which FNF agrees to appear or cause all shares of Cannae Holdings common stock that FNF or its subsidiaries, as applicable, own after the Split-Off to be counted as present at any meeting of the stockholders of Cannae Holdings, for the purpose of establishing a quorum, and agrees to vote all of such Cannae Holdings shares (or cause them to be voted) in the same manner as, and in the same proportion to, all shares voted by holders of Cannae Holdings common stock (other than FNF and its subsidiaries), (iii) a registration rights agreement, pursuant to which FNF or its subsidiaries, as applicable, received registration rights with respect to the shares in Cannae held by FNF and (iv) a revolver note with FNF, pursuant to which Cannae Holdings may borrow revolving loans, the proceeds of which may be used for investment purposes and working capital needs, from FNF from time to time in an aggregate amount not to exceed $100.0 million. The terms of all of these agreements were established while we were a wholly-owned subsidiary of FNF, and hence may not be the result of arm's length negotiations. We believe that the terms of these inter-company agreements are commercially reasonable and fair to all parties under the circumstances; however, conflicts could arise in the interpretation or any extension or renegotiation of the foregoing agreements after the Split-Off.

Risks Relating to the Company's Common Stock and the Securities Market

Our charter, bylaws and provisions of Delaware law may discourage or prevent strategic transactions, including a takeover of our company, even if such a transaction would be beneficial to our stockholders.

Provisions contained in our charter and bylaws and provisions of the Delaware General Corporate Law ("DGCL"), could delay or prevent a third party from entering into a strategic transaction with us, as applicable, even if such a transaction would benefit our stockholders. For example, our charter and bylaws:

- authorize the issuance of "blank check" preferred stock that could be issued by us upon approval of our board of directors to increase the number of outstanding shares of capital stock, making a takeover more difficult and expensive;

- provide that directors may be removed from office only for cause and that any vacancy on our board of directors may only be filled by a majority of our directors then in office, which may make it difficult for other stockholders to reconstitute our board of directors;

- provide that special meetings of the stockholders may be called only upon the request of a majority of our board of directors or by our executive chairman, chief executive officer or president, as applicable;

- require advance notice to be given by stockholders for any stockholder proposals or director nominees;

- provide that directors are elected by a plurality of the votes cast by stockholders, which results in each director nominee elected by a plurality winning his or her seat upon receiving one "for" vote; and

- provide that the board of directors is divided into three classes, as nearly equal in number as possible, with one class being elected at each annual meeting of stockholders, which could make it more difficult for a third party to acquire, or discourage a third party from seeking to acquire, control of Cannae.

These restrictions and provisions could keep us from pursuing relationships with strategic partners and from raising additional capital, which could impede our ability to expand our business and strengthen our competitive position. These restrictions could also limit stockholder value by impeding a sale of our company.

Item 1B. *Unresolved Staff Comments*

None.

Item 2. *Properties*

Our corporate headquarters are located in Las Vegas, Nevada in owned facilities.

Restaurant Group. The Restaurant Group's headquarters are located in Nashville, Tennessee with other office locations in Woburn, Massachusetts. The majority of the restaurants are leased from third parties, and are located in 40 states throughout the United States and Guam. Substantially all of our Restaurant Group's revenues are generated in those states.

Dun & Bradstreet. The principal executive offices of Dun & Bradstreet are located in a leased facility in Short Hills, New Jersey. As of December 31, 2019, D&B leases space in approximately 34 other locations including in Center Valley, Pennsylvania; Austin, Texas; Marlow, England; and Dublin, Ireland.

Ceridian. The principal executive offices of Ceridian are located in Minneapolis, Minnesota and Toronto, Ontario. As of December 31, 2019, Ceridian's principal computer and office facilities are located in the metropolitan areas of Minneapolis, Minnesota; Atlanta, Georgia; Los Angeles, California; Chicago, Illinois; St. Petersburg, Florida; St. Louis, Missouri; Honolulu, Hawaii; Louisville, Kentucky; in Winnipeg, Manitoba, Montreal, Quebec, Ottawa, Ontario, Calgary, Alberta, Halifax, Nova Scotia, Charlottetown, Prince Edward Island, Canada; and in Ebene, Mauritius.

Corporate and Other. The Golf & Real Estate segment of Cannae RE owns a 1,800 acre ranch-style luxury resort and residential community in Bend/Powell Butte, Oregon and an 18-hole championship golf facility located in Rock Creek, Idaho.

Item 3. *Legal Proceedings*

For a description of our legal proceedings see discussion under *Legal and Regulatory Contingencies* in Note M. *Commitments and Contingencies* to our Consolidated and Combined Financial Statements included in Item 8 of Part II of this Annual Report, which is incorporated by reference into this Part I, Item 3.

Item 4. *Mine Safety Disclosures*

None.

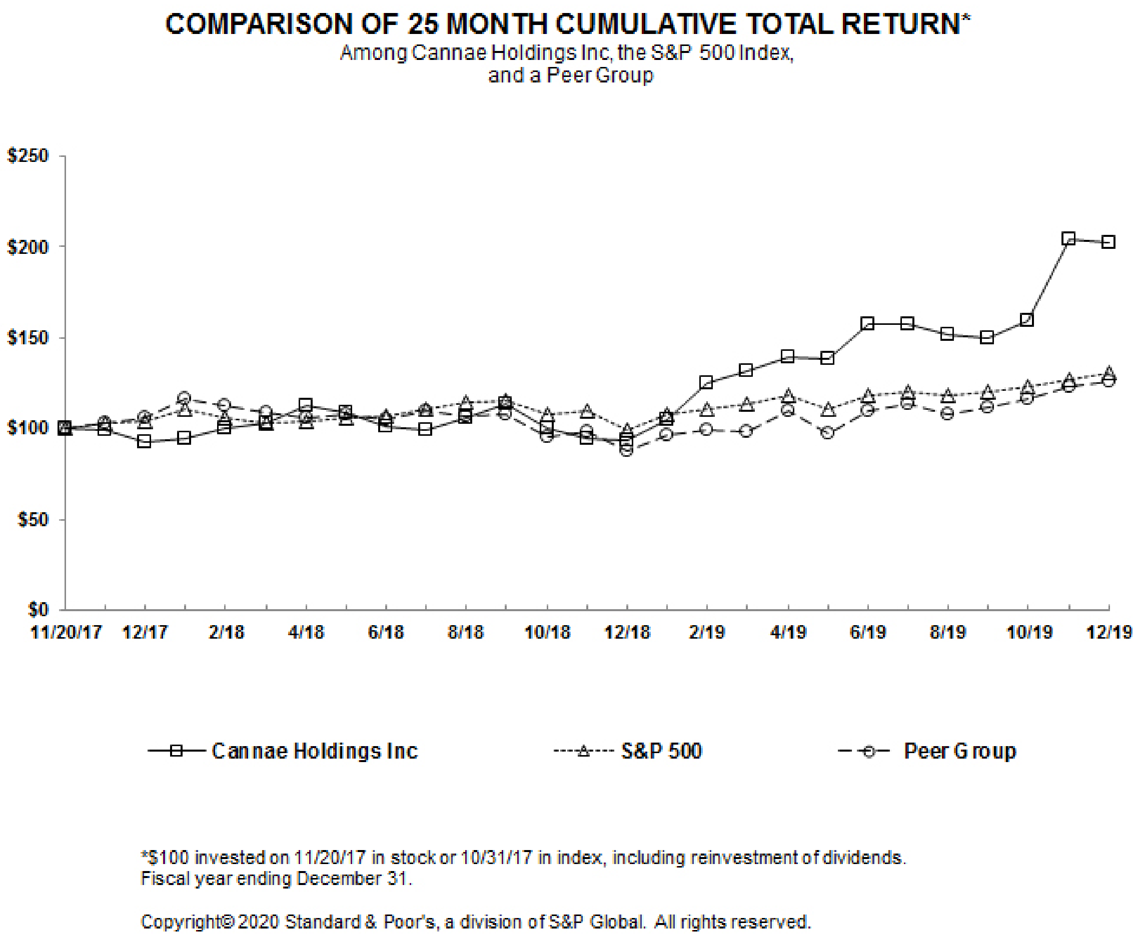
PART II

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

The Company's common stock trades on The New York Stock Exchange under the trading symbol "CNNE".

Performance Graph

Set forth below is a graph comparing cumulative total shareholder return on our common stock against the cumulative total return on the S&P 500 Index and against the cumulative total return of a peer group index consisting of certain companies against which we compete for the period ending December 31, 2019. The peer group comparison has been weighted based on their stock market capitalization. The graph assumes an initial investment of $100.00 on November 20, 2017, the date on which shares of our common stock began trading.



	11/20/2017	12/31/2017	12/31/2018	12/31/2019
Cannae Holdings, Inc.	100.00	92.60	93.09	202.23
S&P 500	100.00	104.21	99.64	131.02
Peer Group (1)	100.00	105.94	88.08	126.33

(1) This peer group consists of the following companies: Apollo Global Management, LLC, Ares Capital Corporation, BlackRock, Inc., The Blackstone Group L.P., The Carlyle Group L.P., Compass Diversified Holdings, Jefferies Financial Group Inc., KKR & Co. Inc., and Qurate Retail Inc.

On January 31, 2020, the last reported sale price of our common stock on The New York Stock Exchange was $40.66 per share. We had approximately 5,556 shareholders of record.

Information concerning securities authorized for issuance under our equity compensation plans will be included in Item 12 of Part III of this Annual Report.

Purchases of Equity Securities by the Issuer

On September 19, 2019, our Board of Directors approved a new three-year stock repurchase program effective September 19, 2019 (the "2019 Repurchase Program") under which we may purchase up to 5 million shares of our common stock through September 30, 2022. We may make repurchases from time to time in the open market, in block purchases or in privately negotiated transactions, depending on market conditions and other factors. We repurchased 178,307 shares of our common stock during the year ended December 31, 2019 for approximately $4.9 million in the aggregate, or an average of $27.35 per share. From the original commencement of the 2019 Repurchase Program through market close on November 8, 2019, we repurchased a total of 178,307 common shares for approximately $4.9 million in the aggregate, or an average of $27.35 per share.

The following table summarizes repurchases of equity securities by Cannae during the year ending December 31, 2019:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (1)	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs (2)
9/1/2019 - 9/30/2019	145,000	$ 27.31	145,000	4,855,000
10/1/2019 - 10/31/2019	33,307	27.53	33,307	4,821,693
Total	178,307	$ 27.35	178,307	

(1) On September 19, 2019, our Board of Directors approved the 2019 Repurchase Program, under which we may purchase up to 5 million shares of our common stock through September 30, 2022.

(2) As of the last day of the applicable month.

Item 6. ***Selected Financial Data***

The information set forth below should be read in conjunction with the Consolidated and Combined Financial Statements and related notes and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included elsewhere in this Form 10-K. Certain reclassifications have been made to the prior year amounts to conform with the 2019 presentation.

On December 31, 2019, we completed the T-System Contribution. As a result, we reclassified the results of operations of T-System as discontinued operations for years ended December 31, 2019, 2018 and 2017 and for all quarterly periods within those years.

On June 6, 2017, we closed on the sale of Digital Insurance, Inc. ("OneDigital") for $560.0 million in an all-cash transaction. The operations of One Digital are included in discontinued operations for the years ended December 31, 2017, 2016 and 2015. We recognized a pre-tax gain of $276.0 million on the sale and $126.3 million in income tax expense, which are included in Net earnings from discontinued operations on the Consolidated and Combined Statement of Operations for year ended December 31, 2017.

On September 28, 2015, we completed the distribution of J. Alexander's to FNFV shareholders. The results of J. Alexander's operations are included through the distribution date.

Summary Balance Sheet Data:

	As of December 31,				
	2019	2018	2017	2016	2015
	(in millions)				
Balance Sheet Data:					
Cash and cash equivalents	$ 533.7	$ 315.7	$ 243.5	$ 141.7	273.8
Total assets	2,092.2	1,459.5	1,487.2	1,473.3	1,469.5
Notes payable, long term	120.1	42.2	12.7	93.3	92.8
Equity	1,529.8	1,199.7	1,153.1	1,009.8	1,056.5

Summary Statement of Operations Data:

	Year Ended December 31,				
	2019	**2018**	**2017**	**2016**	**2015**
	(in millions, except per share amounts)				
Operating Data:					
Operating revenue	$ 1,070.0	$ 1,147.5	$ 1,156.6	$ 1,178.4	$ 1,414.7
Expenses:					
Operating Expenses:					
Cost of restaurant revenues	912.8	991.3	991.0	984.1	1,195.2
Personnel costs	90.3	137.2	95.6	68.3	85.4
Depreciation and amortization	40.7	46.3	46.2	44.7	49.8
Other operating expenses, including asset impairments	133.4	91.8	101.3	83.5	96.4
Goodwill impairment	10.4	26.7	—	—	—
Total operating expenses	1,187.6	1,293.3	1,234.1	1,180.6	1,426.8
Operating loss	(117.6)	(145.8)	(77.5)	(2.2)	(12.1)
Total other income, net	355.5	168.4	3.2	7.4	8.3
Earnings (loss) before income taxes, equity in (loss) earnings of unconsolidated affiliates, and noncontrolling interest	237.9	22.6	(74.3)	5.2	(3.8)
Income tax expense (benefit)	24.2	15.0	(14.2)	(10.4)	(19.7)
Earnings (loss) before equity in (loss) earnings of unconsolidated affiliates	213.7	7.6	(60.1)	15.6	15.9
Equity in (loss) earnings of unconsolidated affiliates	(115.1)	(16.1)	3.4	(29.5)	(26.0)
Earnings (loss) from continuing operations, net of tax	98.6	(8.5)	(56.7)	(13.9)	(10.1)
(Loss) earnings from discontinued operations, net of tax	(51.8)	(2.1)	149.2	2.0	2.8
Net earnings (loss)	46.8	(10.6)	92.5	(11.9)	(7.3)
Less: Net (loss) earnings attributable to noncontrolling interests	(30.5)	(38.2)	(16.3)	0.5	15.6
Net earnings (loss) attributable to Cannae Holdings	$ 77.3	$ 27.6	$ 108.8	$ (12.4)	$ (22.9)
Per Share Data:					
Basic					
Net earnings (loss) from continuing operations attributable to Cannae Holdings common shareholders (1)	$ 1.77	$ 0.42	$ (0.57)	$ (0.21)	$ (0.36)
Net (loss) earnings from discontinued operations attributable to Cannae Holdings common shareholders (1)	(0.70)	(0.03)	2.11	0.03	0.04
Net earnings (loss) per share attributable to Cannae Holdings common shareholders (1)	$ 1.07	$ 0.39	$ 1.54	$ (0.18)	$ (0.32)
Weighted average shares outstanding Cannae Holdings, basic basis (1)	72.2	71.2	70.6	70.6	70.6
Diluted					
Net earnings (loss) from continuing operations attributable to Cannae Holdings common shareholders (1)	$ 1.76	$ 0.42	$ (0.57)	$ (0.21)	$ (0.36)
Net (loss) earnings from discontinued operations attributable to Cannae Holdings common shareholders (1)	(0.69)	(0.03)	2.11	0.03	0.04
Net earnings (loss) per share attributable to Cannae Holdings common shareholders (1)	$ 1.07	$ 0.39	$ 1.54	$ (0.18)	$ (0.32)
Weighted average shares outstanding Cannae Holdings, diluted basis (1)	72.4	71.3	70.6	70.6	70.6
Cash dividends paid per share Cannae Holdings common stock	$ —	$ —	$ —	$ —	$ —
Book value per share Cannae Holdings (1)(2)	$ 19.24	$ 16.61	$ 16.33	$ 14.30	$ 14.96

(1) On November 17, 2017, the date of the consummation of the Split-Off, 70.6 million shares of our common stock were distributed to FNFV Group shareholders. For comparative purposes, the weighted average number of common shares outstanding and basic and diluted earnings per share for the years ended December 31, 2016 and 2015 were calculated using the number of shares distributed as if those shares were issued and outstanding beginning January 1, 2015.

(2) Book value per share is calculated as total equity at December 31 of each year presented divided by actual shares outstanding at December 31 of each year presented.

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Summary Quarterly Financial Data (Unaudited):

	Quarter Ended			
	March 31,	June 30,	September 30,	December 31,
	(in millions, except per share amounts)			
2019:				
Operating revenue	$ 262.3	$ 272.2	$ 257.0	$ 278.5
(Loss) earnings before income taxes, equity in (loss) earnings of unconsolidated affiliates, and noncontrolling interest	(2.2)	49.6	67.5	123.0
(Loss) earnings from continuing operations, net of tax	(17.6)	21.4	44.1	50.7
Loss from discontinued operations, net of tax	(2.3)	(2.5)	(2.5)	(44.5)
Net (loss) earnings	(19.9)	18.9	41.6	6.2
Less: Net loss attributable to noncontrolling interests	(3.1)	(4.5)	(4.6)	(18.3)
Net (loss) earnings attributable to Cannae Holdings	$ (16.8)	$ 23.4	$ 46.2	$ 24.5
Per Share Data:				
Basic				
Net (loss) earnings per share from continuing operations attributable to Cannae Holdings common shareholders	$ (0.20)	$ 0.36	$ 0.69	$ 0.92
Net loss per share from discontinued operations attributable to Cannae Holdings common shareholders	$ (0.04)	$ (0.03)	$ (0.04)	$ (0.59)
Basic (loss) earnings per share attributable to Cannae Holdings common shareholders	$ (0.24)	$ 0.33	$ 0.65	$ 0.33
Diluted				
Net (loss) earnings from continuing operations attributable to Cannae Holdings common shareholders	$ (0.20)	$ 0.36	$ 0.69	$ 0.91
Net loss from discontinued operations attributable to Cannae Holdings common shareholders	$ (0.04)	$ (0.03)	$ (0.04)	$ (0.58)
Diluted (loss) earnings per share attributable to Cannae Holdings common shareholders	$ (0.24)	$ 0.33	$ 0.65	$ 0.33
Cash dividends paid per share Cannae Holdings common stock	$ —	$ —	$ —	$ —
2018:				
Operating revenue	$ 277.0	$ 287.5	$ 279.4	$ 303.6
(Loss) earnings before income taxes, equity in losses of unconsolidated affiliates, and noncontrolling interest	(8.9)	0.9	(11.9)	42.5
(Loss) earnings from continuing operations, net of tax	(6.3)	(21.8)	(7.7)	27.3
Earnings (loss) from discontinued operations, net of tax	1.0	(0.6)	(0.4)	(2.1)
Net (loss) earnings	(5.3)	(22.4)	(8.1)	25.2
Less: Net loss attributable to noncontrolling interests	(4.2)	(2.6)	(9.6)	(21.8)
Net (loss) earnings attributable to Cannae Holdings	$ (1.1)	$ (19.8)	$ 1.5	$ 47.0
Per Share Data:				
Net (loss) earnings from continuing operations attributable to Cannae Holdings common shareholders	$ (0.03)	$ (0.27)	$ 0.03	$ 0.69
Net earnings (loss) from discontinued operations attributable to Cannae Holdings common shareholders	$ 0.01	$ (0.01)	$ (0.01)	$ (0.02)
Basic (loss) earnings per share attributable to Cannae Holdings common shareholders	$ (0.02)	$ (0.28)	$ 0.02	$ 0.67
Diluted				
Net (loss) earnings from continuing operations attributable to Cannae Holdings common shareholders	$ (0.03)	$ (0.27)	$ 0.03	$ 0.69
Net earnings (loss) from discontinued operations attributable to Cannae Holdings common shareholders	$ 0.01	$ (0.01)	$ (0.01)	$ (0.02)
Diluted (loss) earnings per share attributable to Cannae Holdings common shareholders	$ (0.02)	$ (0.28)	$ 0.02	$ 0.67
Cash dividends paid per share Cannae Holdings common stock	$ —	$ —	$ —	$ —

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

The following discussion should be read in conjunction with the Consolidated and Combined Financial Statements and the Notes thereto and Selected Financial Data included elsewhere in this Form 10-K.

Overview

For a description of our business, including descriptions of segments, see the discussion under Business in Item 1 of Part I of this Annual Report, which is incorporated by reference into this Part II, Item 7 of this Annual Report.

Recent Developments

Dun & Bradstreet

In February 2019, we completed our previously announced investment in Dun & Bradstreet for a net investment of $505.6 million in D&B's ultimate parent. Dun & Bradstreet is a leading global provider of business decisioning data and analytics and provides various solutions to help companies improve their operational performance.

In June 2019, we made an additional pro-rata investment of $23.5 million in D&B's ultimate parent. D&B used the proceeds to partially fund its acquisition on July 1, 2019 of Lattice Engines, Inc., an artificial intelligence powered customer data platform used by business-to-business marketing and sales professionals.

Ceridian

During the year ended December 31, 2019, we completed the sale of an aggregate of 9.0 million shares of common stock of Ceridian as part of three separate underwritten secondary public offerings by certain stockholders of Ceridian (the "Ceridian Share Sales"). In connection with the Ceridian Share Sales, we received aggregate proceeds of $477.9 million and recorded a gain of $342.1 million, which is included in Realized gains (losses), net on the Consolidated and Combined Statement of Operations. The recorded gains are net of $21.2 million of losses (exclusive of $4.6 million of income tax benefit) related to reclassification adjustments from Other comprehensive earnings. As of December 31, 2019, we owned 16.4% of the outstanding common stock of Ceridian.

On February 21, 2020, we completed the sale of an additional 3.9 million shares of common stock of Ceridian to a broker pursuant to Rule 144 of the Securities Act of 1933 and received proceeds of $283.7 million. As a result of the sale, we now own 19.8 million shares of Ceridian which represents 13.7% of its outstanding common stock.

Restaurant Group

Blue Ribbon and O'Charley's have entered into plans to sell certain company-owned stores. In conjunction with the plans to sell, $1.6 million and $9.3 million, respectively, of assets are recorded as held for sale and included in Prepaid expenses and other current assets, net as of December 31, 2019 and 2018, respectively.

On March 21, 2019, Blue Ribbon sold its corporate office located in Nashville, Tennessee for net cash proceeds of $13.2 million and entered into a lease agreement with the buyer to lease the office for an initial term of 15 years. The transaction was evaluated and determined not to qualify for sale-leaseback accounting. Accordingly, the transaction is accounted for as a failed sale and leaseback and a financing obligation. During the year ended December 31, 2019, we reclassified $2.4 million from assets held for sale formerly included in Prepaid expenses and other current assets to reflect the real estate assets in Property and equipment, net on our Consolidated and Combined Balance Sheet as if we were the legal owner. We continue to recognize depreciation expense over the building's estimated useful life. On the date of the sale, we recorded a liability for the financing obligation in the amount of the net cash proceeds of $13.2 million, which is included in Accounts payable and other accrued liabilities, long term on our Consolidated and Combined Balance Sheet.

On December 13, 2019, O'Charley's and a third-party lessor partner closed on the exchange of certain company-owned stores (the "Transferred Properties") held by O'Charley's in exchange for properties owned by the lessor, and previously leased by O'Charley's to operate certain of its stores (the "O'Charley's Exchange"). In conjunction with the O'Charley's Exchange, O'Charley's obtained land with a fair value of $10.5 million and will lease back the Transferred Properties. We continue to account for $6.0 million of property associated with the Transferred Properties as if we were the legal owner which is included in Property and equipment, net on our Consolidated and Combined Balance Sheet. The O'Charley's Exchange was evaluated and determined not to qualify for sale-leaseback accounting. Accordingly, the transaction is accounted for as a failed sale and leaseback and a financing obligation. On the date of the sale, O'Charley's recorded a liability for the financing obligation in the amount of the lease liability formerly recorded by O'Charley's for the Transferred Properties of $14.6 million, which is included in Accounts payable and other accrued liabilities, long term on our Consolidated and Combined Balance Sheet.

During the year ended December 31, 2019, Blue Ribbon and O'Charley's also sold Blue Ribbon's corporate office located in Denver, Colorado and certain company-owned O'Charley's stores for total gross proceeds of $18.4 million.

On January 27, 2020, Blue Ribbon and its wholly-owned subsidiaries, filed voluntary petitions for relief under chapter 11 of the United States Bankruptcy Code in the U.S. Bankruptcy Court for the District of Delaware (the "Blue Ribbon Reorganization"). The Blue Ribbon Reorganization does not involve or affect the operations of O'Charley's or 99 Restaurants, which are not part of Blue Ribbon.

Shortly before the Blue Ribbon Reorganization, Blue Ribbon closed 33 underperforming Village Inn and Bakers Square branded stores with 2019 revenue of $47.9 million and historical store-level operating losses.

T-System

On December 31, 2019, we completed our previously announced contribution of T-System Holdings, Inc. ("T-System") into a health care joint venture with an investment vehicle advised by an affiliate of Carlyle Investment Management, L.L.C. ("Carlyle") and certain other investors with deep health care services experience (the "T-System Contribution"). The joint venture, Coding Solutions, plans to focus on acquiring, integrating and operating synergistic health care services companies in the provider and payer space. On the closing date, subsidiaries of Coding Solutions acquired two other healthcare services companies that provide (1) offshore medical coding solutions for the risk adjustment and provider markets and (2) domestic coding and clinical documentation services to providers.

As a result of the T-System Contribution, we received cash proceeds of $60.8 million for the repayment in full of debt loaned by our consolidated subsidiary to T-System and $14.5 million as consideration for a portion of our shares of T-System. We contributed the remainder of our equity interest in T-System for a 22.7% equity interest in Coding Solutions valued at $60.2 million.

We account for our investment in Coding Solutions under the equity method of accounting and the initial investment value of $60.2 million is included in Investments in unconsolidated affiliates on our Consolidated and Combined Balance Sheet as of December 31, 2019.

QOMPLX

On July 23, 2019, Cannae Holdings, in partnership with Motive Partners, closed on an investment in preferred equity of QOMPLX, Inc. ("QOMPLX"), formerly Fractal Industries, Inc., an intelligent decision and analytics platform used by businesses for modeling and planning. We funded $15.0 million at close and funded an additional $15.0 million in the fourth quarter of 2019. $7.5 million of our investment made in the fourth quarter was for a note receivable convertible into preferred equity. Cannae's total preferred investment represents 18.8% of the outstanding voting equity of QOMPLX. Our Chairman William P. Foley II has joined QOMPLX's Board of Directors.

Externalization

On August 27, 2019, we announced the execution of definitive documents for the Externalization, which became effective on September 1, 2019, pursuant to which the Company transitioned to an externally managed structure. In connection with the Externalization, the Company, Cannae LLC and the Manager, entered into the Management Services Agreement, which became effective September 1, 2019. The members of the Manager include certain directors and executive officers of the Company. Pursuant to the Management Services Agreement, certain services related to the management of the Company will be conducted by the Manager through the authority delegated to it in the Management Services Agreement and in accordance with the operational objectives and business plans approved by the Company's Board of Directors. Subject at all times to the supervision and direction of the Board of Directors, the Manager will be responsible for, among other things, (a) managing the day-to-day business and operations of the Company and its subsidiaries, (b) evaluating the financial and operational performance of the Company's subsidiaries and other assets, (c) providing a management team to serve as some of the executive officers of the Company and its subsidiaries and (d) performing (or causing to be performed) any other services for and on behalf of the Company and its subsidiaries customarily performed by executive officers and employees of a public company.

Pursuant to the terms of the Management Services Agreement, Cannae LLC is obligated to pay the Manager a quarterly management fee equal to 0.375% (1.5% annualized) of the Company's cost of invested capital (as defined in the Management Services Agreement) as of the last day of each fiscal quarter, payable in arrears in cash, as may be adjusted pursuant to the terms of the Management Services Agreement. Cannae LLC will be responsible for paying costs and expenses relating to the Company's business and operations. Cannae LLC is required to reimburse the Manager for documented expenses of the Manager incurred on the Company's behalf, including any costs and expenses incurred in connection with the performance of the services under the Management Services Agreement.

The Company conducts its business through Cannae LLC. In connection with the consummation of the Externalization, an Amended and Restated Operating Agreement of Cannae LLC (the "Operating Agreement") was entered into on August 27, 2019, by and among Cannae LLC and the Company, the Manager and Cannae Holdco, Inc., a Delaware corporation and a direct, wholly owned subsidiary of the Company, which became effective on September 1, 2019.

For so long as the Management Services Agreement is in effect, the Company, as managing member of Cannae LLC, authorizes the Manager to (a) designate officers of Cannae LLC and (b) perform, or cause to be performed, the services as are set forth in the Management Services Agreement.

In connection with such services, so long as Cannae LLC's profits with respect to a liquidity event (sale or other disposition) involving an investment (as defined in the Operating Agreement) exceed an annualized hurdle rate of 8%, Cannae LLC is obligated to pay carried interest with respect to such investment to the Manager. Generally, where such hurdle is satisfied, carried interest will be paid to the Manager in an amount equal to: 15% of the profits on such investment (calculated as the proceeds of such investment less allocable management fees (as defined in the Operating Agreement) and the cost of such investment) for returns between 1.0x and 2.0x the cost of such investment (plus allocable management fees), and 20% of the profits on such investment for returns exceeding 2.0x the cost of such investment (plus allocable management fees). However, to the extent that, as of the liquidity event, the value of the portfolio of unrealized investments is less than the aggregate cost of such investments, the Manager's carried interest entitlement will be correspondingly reduced until such time as the investment portfolio has recovered in value.

The Management Services Agreement has an initial term of five years, expiring on September 1, 2024. Pursuant to its terms, the Management Services Agreement will be automatically renewed for one-year terms thereafter unless earlier terminated by either the Company or the Manager in accordance with the terms of the Management Services Agreement.

The Company and Manager began paying fees associated with the Externalization beginning on November 1, 2019.

Equity Fund

On December 12, 2019, we entered into a limited partnership with an investment fund manager designed to opportunistically trade in marketable securities (the "Equity Fund"). We initially contributed $90.9 million of cash in exchange for limited partnership interests in the Equity Fund representing 49.0% of its outstanding equity and a deposit on hand with the Equity Fund. We and the other limited partners of the Equity Fund intend to make pro-rata investments through April 2020. We are committed to invest a total of $245.0 million. Subsequent to December 31, 2019, we invested an additional $100.0 million in the Equity Fund. As of December 31, 2019, $45.3 million of our contribution to the Equity Fund is held on deposit with the Equity Fund until such time as the general partner utilizes the funds and other limited partners make matching pro-rata contributions. The portion of our investment held on deposit is included in Prepaid expense and other current assets on our Consolidated and Combined Balance Sheet as of December 31, 2019. We account for the $45.6 million of our investment that was contributed to the Equity Fund's capital under the equity method of accounting, and such portion is included in Investments in unconsolidated affiliates on our Consolidated and Combined Balance Sheet as of December 31, 2019.

Other Developments

On September 18, 2019, our Board of Directors adopted a resolution increasing to nine the size of our Board of Directors, and elected Mark D. Linehan to serve on our Board of Directors. Mr. Linehan will serve in Class III of our Board of Directors, and his term will expire at the annual meeting of our shareholders to be held in 2020. Mr. Linehan has not been appointed to any committee of our Board.

On December 5, 2019, we completed a public offering of 7,475,000 shares of our common stock pursuant to a prospectus supplement, dated December 3, 2019, and the base prospectus, dated November 27, 2019, included in our registration statement on Form S-3 ASR (File No. 333-235303), which was filed with the Securities and Exchange Commission on November 27, 2019. We received net proceeds from the Offering of approximately $236.0 million, after deducting the underwriting discount and capitalized offering expenses payable by us. We intend to use the net proceeds of the offering to fund future acquisitions, for working capital and general corporate purposes.

On December 24, 2019, we entered into an equity commitment letter with funds associated with Thomas H. Lee Partners L.P. ("THL") pursuant to which Cannae is committed to provide $125.0 million to a partnership (the "AmeriLife Joint Venture") which will invest in the recapitalization of AmeriLife Group, LLC ("AmeriLife"). Cannae, THL and other investors will provide $617.0 million of aggregate equity financing to the AmeriLife Joint Venture to acquire AmeriLife. We have the option to syndicate a portion of our equity commitment prior to closing and expect to be a minority owner of the AmeriLife Joint Venture. The transaction is expected to close in the first or second quarter of 2020. AmeriLife is a leader in marketing and distributing life, health, and retirement solutions.

Related Party Transactions

Our financial statements for all years presented reflect transactions with FNF. See Note R to our Consolidated and Combined Financial Statements included in Item 8 of Part II of this Annual Report for further discussion.

Business Trends and Conditions

Dun & Bradstreet

Businesses rely on business-to-business data and analytics providers to extract data-driven insights and make better decisions. For example, in commercial lending and trade credit, the scarcity of readily available credit history makes the extension of credit a time-consuming and imprecise process. In procurement, businesses face increasingly complex and global supply chains, making the assessment of compliance and viability of all suppliers prohibitively difficult and expensive if not conducted effectively. In sales and marketing, businesses have benefited from the proliferation of CRM, Marketing Automation and Sales Acceleration tools designed to help identify, track and improve both customer management and prospecting growth activities. While these tools are helping to fill sales funnels and improve the progression of opportunities, key challenges remain in salesforce productivity, effective client segmentation and marketing campaign activation. Common stumbling blocks include incorrect, or outdated, contact information, duplicated or inaccurate firmographic data and a lack of synchronization between the various platforms in the marketing technology ecosystem.

D&B helps its clients solve these mission critical business problems. D&B believes the total addressable market (‘‘TAM’’) in which it operates is large, growing and significantly underpenetrated. IDC estimates worldwide revenues of big data and analytics software to be approximately $67 billion in 2019. Within the broader market of data and analytics solutions, D&B serves a number of different markets, including the commercial credit data, sales and marketing data and Governance, Risk and Compliance markets. As D&B continues to drive innovation in its solutions, it expects to address a greater portion of this TAM as new use cases for its data assets and analytical capabilities are introduced.

D&B believes there are several key trends in the global macroeconomic environment generating additional growth in D&B's TAM and increasing the demand for its solutions, including, growing recognition by business of the value of analytics and data-informed business decisioning, growth in data creation and applications driven by the proliferation of new technologies with new data sets and applications, advances in analytical capabilities that are unlocking the value of data, and heightened compliance requirements in the regulatory environment for business driven by the growth of new technologies.

Ceridian

As of December 31, 2019, we own a 16.4% interest in Ceridian. Ceridian is a global company that offers a broad range of services and software designed to help employers more effectively manage employment processes, such as payroll, payroll related tax filing, human resource information systems, employee self-service, time and labor management, and recruitment and applicant screening. As a result of Ceridian's acquisition of Dayforce Corporation in 2012, which built Dayforce, a cloud HCM solution, Ceridian generally stopped actively selling its bureau solutions to new customers in the United States to focus its resources on expanding the Dayforce platform and growing cloud solutions. Through the year ended December 31, 2019, Ceridian’s cloud revenue is more than double its legacy bureau revenue and continues to grow.

Over the last several years, a number of factors have significantly affected Ceridian’s results of operations, including its capital restructuring resulting from the initial acquisition by Thomas H. Lee Partners, L.P., a Delaware limited partnership ("THL") and FNFV, LLC of all of the outstanding equity of the Ceridian entities that was completed on November 9, 2007 (such acquisition, the "2007 Merger"), and the related interest expense, the accounting and purchase price allocations from the 2007 Merger, the acquisition in 2012 of the Dayforce legal entities, and Ceridian’s corporate restructuring following the 2013 separation of Ceridian HCM and Comdata. Other factors that have affected Ceridian’s results of operations over the last several years include the levels of customer trust funds held, transaction volumes, price increases, foreign currency exchange rates, interest rates (including interest earned on customer trust funds and interest expense on debt), customer employment levels, and its cost savings initiatives. Ceridian is subject to the risks arising from adverse changes in domestic and global economic conditions. Ceridian believes all of such factors may continue to significantly affect its results of operations.

Restaurant Group

The restaurant industry is highly competitive and is often affected by changes in consumer tastes and discretionary spending patterns; changes in general economic conditions; public safety conditions or concerns; demographic trends; weather conditions; the cost of food products, labor, energy and other operating costs; and governmental regulations. Higher labor costs due to state and local minimum wage increases and shopping pattern shifts to e-commerce and “ready to eat” grocery and convenience stores have had a negative impact on restaurant performance, particularly in the casual and family dining restaurants in which the company operates.

The restaurant industry is also characterized by high capital investments for new restaurants and relatively high fixed or semi-variable restaurant operating expenses. Because of the high fixed and semi-variable expenses, changes in sales in existing restaurants are generally expected to significantly affect restaurant profitability because many restaurant costs and expenses are not expected to change at the same rate as sales. Restaurant profitability can also be negatively affected by inflationary and regulatory increases in operating costs and other factors. The most significant commodities that may affect our cost of food and beverage are beef, seafood, poultry, and dairy, which accounted for approximately half of our overall cost of food and beverage in the past. Generally, temporary increases in these costs are not passed on to guests; however, in the past, we have adjusted menu prices to compensate for increased costs of a more permanent nature.

Average weekly sales per restaurant are typically higher in the first and fourth quarters than in other quarters, and we typically generate a disproportionate share of our earnings from operations in the first and fourth quarters. Holidays, severe weather and other disruptive conditions may impact sales volumes seasonally in some operating regions.

Our revenues in future periods will continue to be subject to these and other factors that are beyond our control and, as a result, are likely to fluctuate.

Critical Accounting Policies and Estimates

Our consolidated financial statements are prepared in accordance with U.S. GAAP. See Note A to our Consolidated and Combined Financial Statements included in Item 8 of Part II of this Annual Report for discussion our significant accounting policies.

The accounting policies and estimates described below are those we consider critical in preparing our Consolidated and Combined Financial Statements. Management is required to make estimates and assumptions that can affect the reported amounts of assets and liabilities and disclosures with respect to contingent assets and liabilities at the date of the Consolidated and Combined Financial Statements and the reported amounts of revenues and expenses during the reporting period. Actual amounts could differ from those estimates.

Valuation of Goodwill. Goodwill represents the excess of cost over fair value of identifiable net assets acquired and assumed in a business combination. Goodwill and other intangible assets with indefinite useful lives are reviewed for impairment annually or more frequently if circumstances indicate potential impairment, through a comparison of fair value to the carrying amount. We have the option to first assess goodwill for impairment based on a review of qualitative factors to determine if events and circumstances exist which will lead to a determination that the fair value of a reporting unit is greater than its carrying amount, prior to performing a full fair-value assessment. If, after assessing the totality of events or circumstances, we determine it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the quantitative impairment test is unnecessary. However, we conclude otherwise, then we are required to perform the quantitative impairment test by calculating the fair value of the reporting unit and comparing the fair value with the carrying amount of the reporting unit. Goodwill impairment, if any, is measured as the amount by which a reporting unit's carrying value exceeds its fair value.

We allocate goodwill to reporting units based on the reporting unit expected to benefit from the business combination. We evaluate our reporting units on at least an annual basis and, if necessary, reassign goodwill using a relative fair value allocation approach. Goodwill is tested for impairment at the reporting unit level (operating segment or one level below an operating segment) annually in the fourth quarter (October 1) and between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying value. These events or circumstances could include a significant change in the business climate, legal factors, operating performance indicators, competition, or sale or disposition of a significant portion of a reporting unit.

We use a combination of discounted cash flow analyses and market approaches to determine the fair value of each of our reporting units. Our discounted cash flow projections include assumptions for growth rates for revenues, costs and earnings, which are based on various long-range financial and operational plans of each reporting unit. Additionally, discount rates used in our goodwill analysis are based on weighted-average cost of capital, driven by comparable public companies, the prevailing interest rates, credit ratings, financing abilities and opportunities of each reporting unit, among other factors. Our market-based valuations utilize earnings multiples of comparable public companies, which are reflective of the market in which each respective reporting unit operates, and recent comparable market transactions. Changes in the factors used in our fair value estimates, including declines in industry or company-specific sales, margin erosion, discount rates used, and market multiples could have a significant impact on the fair values of the reporting units.

For the year ended December 31, 2019, we recorded $35.1 million of impairment to goodwill in our former T-System segment and $10.4 million of impairment to goodwill in our Restaurant Group segment as a result of our annual goodwill impairment testing. The impairment charge in our Restaurant Group is a result of deteriorating operating results and cash flow resulting from declining same store sales and increased costs, primarily in our Village Inn and Bakers Square branded stores. As a result of the goodwill impairment in the Restaurant Group, the fair value of this reporting unit approximates its carrying value and relatively small decreases in future forecasts or changes in other assumptions could result in additional goodwill impairment. The impairment in our former T-System segment is primarily a result of a decline in earnings multiples from comparable public companies and lower forecasted cash flows for its reporting units. The impairments recorded were calculated as the deficit between the carrying value of the reporting units of each segment compared to the fair value of the reporting unit determined by performing a combination of discounted cash flow and market approaches.

Impairment to goodwill in our former T-System segment is included in Net loss from discontinued operations on the Consolidated and Combined Statement of Operations for the year ended December 31, 2019. See Note N to our Consolidated and Combined Financial Statements included in Item 8 of Part II of this Annual Report.

For the year ended December 31, 2018, we recorded $26.7 million of impairment to goodwill in our Restaurant Group segment. The impairment charge was a result of deteriorating operating results and cash flow resulting from declining same store sales and increased costs. The impairment recorded was calculated as the deficit between the carrying value of a reporting unit of the Restaurant Group segment compared to the fair value of the reporting unit determined by performing a combination of discounted cash flow and market approaches.

For the year ended December 31, 2017, we determined that there were no events or circumstances which indicated that the carrying value of goodwill exceeded the fair value and no impairment was recorded.

Valuation of Other Intangible Assets. We have other intangible assets, not including goodwill, which consist primarily of customer relationships and contracts, trademarks and tradenames that are generally recorded in connection with acquisitions at their fair value, franchise rights, the fair value of purchased software and capitalized software development costs. Intangible assets with estimable lives are amortized over their respective estimated useful lives to their estimated residual values and reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. In general, customer relationships are amortized over their estimated useful lives using an accelerated method, which takes into consideration expected customer attrition rates. Contractual relationships are generally amortized over their respective contractual lives. Useful lives of computer software range from 3 to 10 years. Trademarks and tradenames are generally considered intangible assets with indefinite lives and are reviewed for impairment at least annually. Capitalized software development costs and purchased software are recorded at cost and amortized using the straight-line method over their estimated useful life.

Our primary indefinite-lived other intangible assets are the tradenames of our Restaurant Group brands. Tradenames are tested for impairment annually in the fourth quarter (October 1) and between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of a tradename below its carrying value. We use a relief from royalty method to determine the fair value of our tradenames, which includes assumptions for growth rates for revenues, tax rates, discount rates and royalty rates. Changes in the factors used in our fair value estimates, including declines in industry or company-specific sales, discount rates used, and royalty rates could have a significant impact on the fair values of our tradenames.

We recorded $17.1 million of impairment expense related to the Village Inn and Bakers square tradenames within our Restaurant Group in the year ended December 31, 2019. We recorded $5.8 million of impairment expense related to a tradename and an abandoned software project in our Restaurant Group in the year ended December 31, 2018. We recorded $2.9 million of impairment expense related to a tradename in our Restaurant Group in the year ended December 31, 2017. The impairments are recorded within Other operating expenses on our Consolidated and Combined Statement of Operations for the years then ended.

During our 2019 other intangible impairment testing of the Restaurant Group's O'Charley's tradename, we determined that the excess of the fair value of the tradename over its book value was nominal. Given that the fair value is not substantially in excess of the book value, relatively small decreases in future revenues from forecasted results or changes in royalty rates or other assumptions could result in impairment of the tradename.

Accounting for Income Taxes. We recognize deferred tax assets and liabilities for temporary differences between the financial reporting basis and the tax basis of our assets and liabilities and expected benefits of utilizing net operating loss and credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The impact of changes in tax rates and laws on deferred taxes, if any, is applied to the years during which temporary differences are expected to be settled and reflected in the financial statements in the period enacted.

Refer to Note L to our Consolidated and Combined Financial Statements included in Item 8 of Part II of this Annual Report for further discussion of our accounting for income taxes.

Certain Factors Affecting Comparability

Year ended December 31, 2019. On December 31, 2019, we completed the T-System Contribution. As a result of the T-System Contribution, we reclassified the results of operations of T-System to discontinued operations for all periods presented in our Consolidated and Combined Statements of Operations.

Year ended December 31, 2017. On June 6, 2017, we closed on the sale of OneDigital for $560.0 million in an all-cash transaction. As a result of the sale of OneDigital, we reclassified the results of operations of OneDigital to discontinued operations in our Consolidated and Combined Statements of Operations for the year ended December 31, 2017.

Results of Operations

Consolidated Results of Operations

Net earnings. The following table presents certain financial data for the years indicated:

	Year ended December 31,		
	2019	2018	2017
	(In millions)		
Revenues:			
Restaurant revenue	$ 1,043.3	$ 1,117.8	$ 1,129.0
Other operating revenue	26.7	29.7	27.6
Total operating revenues	1,070.0	1,147.5	1,156.6
Operating expenses:			
Cost of restaurant revenue	912.8	991.3	991.0
Personnel costs	90.3	137.2	95.6
Depreciation and amortization	40.7	46.3	46.2
Other operating expenses, including asset impairments	133.4	91.8	101.3
Goodwill impairment	10.4	26.7	—
Total operating expenses	1,187.6	1,293.3	1,234.1
Operating loss	(117.6)	(145.8)	(77.5)
Other income (expense):			
Interest, investment and other income	15.6	6.3	5.3
Interest expense	(17.8)	(4.7)	(7.0)
Realized gains, net	357.7	166.8	4.9
Total other income	355.5	168.4	3.2
Earnings (loss) from continuing operations before income taxes and equity in (losses) earnings of unconsolidated affiliates	237.9	22.6	(74.3)
Income tax expense (benefit)	24.2	15.0	(14.2)
Earnings (loss) from continuing operations before equity in (losses) earnings of unconsolidated affiliates	213.7	7.6	(60.1)
Equity in (losses) earnings of unconsolidated affiliates	(115.1)	(16.1)	3.4
Earnings (loss) from continuing operations	98.6	(8.5)	(56.7)
Net (loss) earnings from discontinued operations, net of tax	(51.8)	(2.1)	149.2
Net earnings (loss)	46.8	(10.6)	92.5
Less: Net loss attributable to non-controlling interests	(30.5)	(38.2)	(16.3)
Net earnings attributable to Cannae Holdings, Inc. common shareholders	$ 77.3	$ 27.6	$ 108.8

Revenues

Total revenue in 2019 decreased $77.5 million compared to 2018, primarily driven by a decline in revenue in the Restaurant Group segment. Total revenue in 2018 decreased $9.1 million compared to 2017, primarily driven by a decline in revenue in our Restaurant Group segment.

The change in revenues from our segments is discussed in further detail at the segment level below.

Expenses

Our operating expenses consist primarily of personnel costs, cost of restaurant revenue, other operating expenses, and depreciation and amortization.

Personnel costs include base salaries, commissions, benefits, stock-based compensation and bonuses paid to employees, and are one of our most significant operating expenses. Personnel costs that are directly attributable to the operations of the Restaurant Group are included in Cost of restaurant revenue.

Cost of restaurant revenue includes cost of food and beverage, primarily the costs of beef, groceries, produce, seafood, poultry and alcoholic and non-alcoholic beverages, net of vendor discounts and rebates, payroll and related costs and expenses directly relating to restaurant level activities, and restaurant operating costs including occupancy and other operating expenses at the restaurant level.

Other operating expenses include professional fees, advertising costs, travel expenses and impairments of operating assets.

Depreciation and amortization expense consists of our depreciation related to investments in property and equipment as well as amortization of intangible assets.

The change in expenses from our segments is discussed in further detail at the segment level below.

Income tax expense (benefit) on continuing operations was $24.2 million, $15.0 million, and $(14.2) million for the years ended December 31, 2019, 2018, and 2017, respectively. The effective tax rate for the years ended December 31, 2019, 2018, and 2017 was 10.2%, 66.4%, and 19.1%, respectively. The change in the effective tax rate in 2019 from 2018 is primarily attributable to the decreased impact of non-deductible executive compensation on pretax income, partially offset by the increased impact of equity losses from unconsolidated affiliates. The increase in the effective tax rate in 2018 from 2017 is primarily attributable to the change in tax laws disallowing the tax deductibility of certain executive compensation. The fluctuation in income tax benefit as a percentage of earnings from continuing operations before income taxes is attributable to our estimate of ultimate income tax liability and changes in the characteristics of net earnings year to year, such as the weighting of operating income versus investment income.

For a detailed breakout of our effective tax rate and further discussion on changes in our taxes, see Note L to our Consolidated and Combined Financial Statements included in Item 8 of Part II of this Annual Report.

Other

Net realized gains totaled $357.7 million, $166.8 million, and $4.9 million for the years ended December 31, 2019, 2018, and 2017, respectively. The net realized gain for the year ended December 31, 2019 is primarily attributable to $342.1 million of gains on the Ceridian Share Sales and $3.9 million of gains on sales of property in the Restaurant Group. The net realized gain for the year ended December 31, 2018 is primarily attributable to a $92.6 million gain on the sale of Ceridian shares in the fourth quarter of 2018, $63.2 million of realized gains associated with Ceridian's initial public offering and the gain of $24.0 million on the sale of LifeWorks, partially offset by impairment losses of $12.5 million recognized on fixed maturity securities in the 2018 period. The net realized gain for the year ended December 31, 2017 is primarily attributable to the sale of equity securities available for sale.

Equity in earnings (losses) of unconsolidated affiliates for the periods indicated consisted of the following (in millions):

	Year Ended December 31,		
	2019	2018	2017
Ceridian	$ 16.4	$ (20.5)	$ 1.9
Dun & Bradstreet	(132.8)	—	—
Other	1.3	4.4	1.5
Total	$ (115.1)	$ (16.1)	$ 3.4

Net Earnings

Net earnings attributable to Cannae increased $49.7 million in the year ended December 31, 2019, compared to 2018. Total net earnings attributable to Cannae decreased $81.2 million in the year ended December 31, 2018, compared to 2017.

The change in net earnings is attributable to the factors discussed above and net earnings from the segments is discussed in further detail at the segment level below.

Segment Results of Operations

Restaurant Group

The following table presents the results from operations of our Restaurant Group segment:

	Year ended December 31,		
	2019	2018	2017
	(In millions)		
Revenues:			
Restaurant revenue	$ 1,043.3	$ 1,117.8	$ 1,129.0
Operating expenses:			
Cost of restaurant revenue	912.8	991.3	991.0
Personnel costs	52.1	47.3	52.8
Depreciation and amortization	38.5	44.9	43.6
Other operating expenses, including asset impairments	108.9	86.3	71.1
Goodwill impairment	10.4	26.7	—
Total operating expenses	1,122.7	1,196.5	1,158.5
Operating loss	(79.4)	(78.7)	(29.5)
Other expense:			
Interest expense	(5.4)	(16.0)	(6.6)
Realized gains and losses, net	3.9	(2.1)	—
Total other expense	(1.5)	(18.1)	(6.6)
Loss from continuing operations before income taxes and equity in losses of unconsolidated affiliates	(80.9)	(96.8)	(36.1)

Total revenues for the Restaurant Group segment decreased $74.5 million, or 6.7%, in the year ended December 31, 2019 from 2018. The decrease was primarily driven by decreased revenue related to the closing or sale of 48 company-owned restaurants primarily associated with our O'Charley's, Village Inn and Bakers Square concepts in 2019 and to a lesser extent a decrease in comparable store sales. The decrease was partially offset by increases in the average guest check. Total revenues for the Restaurant Group segment decreased $11.2 million, or 1.0%, in the year ended December 31, 2018 from 2017. The decrease is primarily attributable to a decrease in restaurant sales, primarily driven by closed restaurants, decreased comparable store sales and guest counts overall, partially offset by increases in bakery sales.

Comparable Store Sales. One method we use in evaluating the performance of our restaurants is to compare sales results for restaurants period over period. A new restaurant is included in our comparable store sales figures starting in the first period following the restaurant's first seventy-eight weeks of operations. Changes in comparable store sales reflect changes in sales for the comparable store group of restaurants over a specified period of time. This measure highlights the performance of existing restaurants, as the impact of new restaurant openings is excluded. Comparable store sales for our 99 Restaurants brand changed (0.4)% and 2.6% in the years ended December 31, 2019 and 2018, respectively, from the prior fiscal years. The decrease in 2019 is primarily attributable to lower guest counts partially offset by an increase in the average guest check. Comparable store sales for our O' Charley's brand decreased 2.5% and 2.9% in the years ended December 31, 2019 and 2018, respectively, from the prior fiscal years. Comparable store sales for our Blue Ribbon brands changed as follows for the years ended December 31, 2019 and 2018, respectively, from the prior fiscal years: Village Inn decreased 1.7% and 0.4%, respectively, and Bakers Square changed 3.4% and (0.9)%, respectively. The decrease in both periods at O' Charley's and Village Inn is primarily attributable to decreased guest counts partially offset by an increase in the average guest check. The increase at Bakers Square in 2019 is attributable to increased average guest check, partially offset by a reduction in guest counts.

Other operating expenses increased by $22.6 million, or 26.2%, in the year ended December 31, 2019 from 2018. Other operating expenses increased by $15.2 million, or 21.4%, in the year ended December 31, 2018 from 2017. The increase in both periods is primarily attributable to impairments of other intangible assets and lease assets.

Cost of restaurant revenue decreased $78.5 million, or 7.9%, in the year ended December 31, 2019 from 2018. Cost of restaurant revenue increased $0.3 million, or less than 1.0%, in the year ended December 31, 2018 from 2017. Cost of restaurant revenue as a percentage of restaurant revenue were approximately 87.5%, 88.7%, and 87.8% in the years ended December 31, 2019, 2018 and 2017, respectively. The decrease in cost of restaurant revenue as a percentage of restaurant revenues was primarily driven by the closure of underperforming stores with lower margins and higher operating expenses in 2019. The increase in cost of restaurant revenue as a percentage of restaurant revenue in 2018 compared to 2017 was primarily attributable to increased cost of food and labor.

See Note A to our Consolidated and Combined Financial Statements included in Item 8 of Part II of this Annual Report for further discussion of goodwill impairments in our Restaurant Group.

Loss from continuing operations before income taxes decreased $15.9 million in the year ended December 31, 2019 from 2018. Loss from continuing operations before income taxes increased $60.7 million in the year ended December 31, 2018 from 2017. The change in losses is primarily attributable to the factors discussed above.

Ceridian

We own a 16.4% economic interest in Ceridian. We account for our investment in Ceridian under the equity method of accounting; therefore, its results of operations do not consolidate into ours. Details relating to the results of operations of Ceridian (NYSE: "CDAY") can be found in its periodic filings with the SEC. The audited financial statements of Ceridian can also be found at Exhibit 99.1 to this Annual Report.

Dun & Bradstreet

We own a 24.3% economic interest in Dun & Bradstreet's ultimate parent. We account for our investment in D&B under the equity method of accounting; therefore, its results of operations do not consolidate into ours. The audited financial statements of Dun & Bradstreet's ultimate parent are expected be filed as an amendment to this Annual Report when available.

Summarized financial information is presented below for the ultimate parent of Dun & Bradstreet for the relevant dates and time periods included in Investments in unconsolidated affiliates and Equity in earnings (losses) of unconsolidated affiliates in our Consolidated and Combined Balance Sheet and Statement of Operations, respectively. Our net earnings for the year ended December 31, 2019, include our equity in Dun & Bradstreet’s losses for the period from February 8, 2019, the date we made our initial investment in D&B, through December 31, 2019.

	December 31, 2019
	(In millions)
Total current assets	$ 418.6
Goodwill and other intangible assets, net	8,091.9
Other assets	602.1
Total assets	$ 9,112.6
Current liabilities	$ 1,090.4
Long-term debt	3,818.9
Other non-current liabilities	1,595.9
Total liabilities	6,505.2
Preferred equity	1,030.6
Total capital	1,576.8
Total liabilities and equity	$ 9,112.6

	Year ended December 31, 2019
	(In millions)
Total revenues	$ 1,413.9
Loss before income taxes	(540.0)
Net loss	(425.8)
Dividends attributable to preferred equity and noncontrolling interest expense	(120.5)
Net loss attributable to Dun & Bradstreet	(546.3)

Corporate and Other

The Corporate and Other segment consists of our share in the operations of certain controlled portfolio companies and other equity investments, activity of the corporate holding company and certain intercompany eliminations and taxes.

The following table presents the results from operations of our Corporate and Other segment:

	Year ended December 31,		
	2019	2018	2017
	(In millions)		
Revenues:			
Other operating revenue	$ 26.7	$ 29.7	$ 27.6
Operating expenses:			
Personnel costs	38.2	89.9	42.8
Depreciation and amortization	2.2	1.4	2.6
Other operating expenses	24.5	5.5	30.2
Total operating expenses	64.9	96.8	75.6
Operating loss	(38.2)	(67.1)	(48.0)
Other income (expense):			
Interest, investment and other income	15.6	6.3	5.3
Interest (expense) income	(12.4)	11.3	(0.4)
Realized gains and losses, net	353.8	168.9	4.9
Total other income	357.0	186.5	9.8
Earnings (loss) from continuing operations before income taxes and equity in losses of unconsolidated affiliates	318.8	119.4	(38.2)

Personnel costs decreased $51.7 million, or 57.5%, in the year ended December 31, 2019 compared to 2018, and increased $47.1 million, or 110.1%, in the year ended December 31, 2018 compared to 2017. The change in both periods is primarily driven by a change in investment success bonuses paid related to investment monetization events.

Other operating expenses increased $19.0 million in the year ended December 31, 2019 compared to 2018, and decreased $24.7 million in the year ended December 31, 2018 compared to 2017. The change in both periods is primarily attributable to the inclusion of a $14.8 million elimination of intercompany fees charged to the Restaurant Group in 2018.

Interest and investment income increased $9.3 million, or 147.6%, in the year ended December 31, 2019 compared to 2018. The increase was primarily attributable to $9.1 million of syndication fees earned in relation to our organization of investors for the D&B Acquisition.

Interest expense in the year ended December 31, 2019 consists primarily of interest on our corporate debt instruments. See Note K to our Consolidated and Combined Financial Statements included in Item 8 of Part II of this Annual Report for further discussion of our outstanding debt. Interest expense in the year ended December 31, 2018 consists primarily of eliminations of previously outstanding intercompany debt with our Restaurant Group and T-System.

Net realized gains for the year ended December 31, 2019 is primarily attributable to $342.1 million of gains on the Ceridian Share Sales. Net realized gain for the year ended December 31, 2018 is primarily attributable to a $92.6 million gain on the sale of Ceridian shares in the fourth quarter of 2018, $63.2 million of realized gains associated with Ceridian's initial public offering and the gain of $24.0 million on the sale of LifeWorks, partially offset by impairment losses of $12.5 million recognized on fixed maturity securities in 2018. The net realized gain for the year ended December 31, 2017 is primarily attributable to the sale of equity securities available for sale.

Discontinued Operations

As a result of the T-System Contribution and sale of OneDigital, the financial results of T-System and OneDigital have been reclassified to discontinued operations. See Note N to our Consolidated and Combined Financial Statements included in Item 8 of Part II of this Annual Report for further details on amounts included in discontinued operations for all periods presented.

Liquidity and Capital Resources

Cash Requirements. Our current cash requirements include personnel costs, operating expenses, taxes, payments of interest and principal on our debt, capital expenditures, and business acquisitions. There are no restrictions on our retained earnings regarding our ability to pay dividends to stockholders, although there are limits on the ability of certain subsidiaries to pay dividends to us, as a result of provisions in certain debt agreements. The declaration of any future dividends is at the discretion of our Board of Directors. Additional uses of cash flow are expected to include stock repurchases, acquisitions, and debt repayments.

As of December 31, 2019, we had cash and cash equivalents of $533.7 million, $0.5 million of short-term investments and $325.0 million of available borrowing capacity under our existing holding company credit facilities. On February 18, 2020, we repaid the remaining $75.0 million outstanding under the Margin Facility and terminated the Amended Loan Agreement. Accordingly, we have no borrowing capacity and all of the Company's holdings of Ceridian common stock have been released from the first priority lien under the Margin Facility. As of February 18, 2020, we have $100.0 million of available borrowing capacity under our existing holding company credit facilities.

We continually assess our capital allocation strategy, including decisions relating to reducing debt, repurchasing our stock, and/or conserving cash. We believe that all anticipated cash requirements for current operations will be met from internally generated funds, cash dividends from subsidiaries, cash generated by investment securities, potential sales of non-strategic assets, and borrowings on existing credit facilities. Our short-term and long-term liquidity requirements are monitored regularly to ensure that we can meet our cash requirements. We forecast the needs of all of our subsidiaries and periodically review their short-term and long-term projected sources and uses of funds, as well as the asset, liability, investment and cash flow assumptions underlying such forecasts.

We are focused on evaluating our assets and investments as potential vehicles for creating liquidity. Our intent is to use that liquidity for general corporate purposes, including, potentially reducing debt, repurchasing shares of our stock, other strategic initiatives and/or conserving cash.

Operating Cash Flows. Our cash flows used in operations for the years ended December 31, 2019, 2018, and 2017 were $84.2 million, $22.9 million and $90.7 million, respectively. The increase in cash used in operations of $61.3 million from 2019 to 2018 is primarily attributable to the cash outflow related to amounts on deposit with the Equity Fund. The remainder of the variance is attributable to the timing of payment and receipt of accounts payable and receivable. The increase in cash provided by operations of $67.8 million from 2018 to 2017 is primarily attributable to decreased taxes paid of $117.5 million in 2018 compared to 2017, partially offset by cash provided by discontinued operations of $17.3 million in 2017, increased cash bonus expenses of $26.4 million in 2018, and decreased consolidated pretax loss (increased earnings) in 2018. The remainder of the variance is attributable to the timing of payment and receipt of accounts payable and receivable.

Investing Cash Flows. Our cash flows (used in) provided by investing activities for the years ended December 31, 2019, 2018, and 2017 were $(24.2) million, $186.7 million and $91.7 million, respectively. The decrease in cash provided by investing activities of $210.9 million from 2019 to 2018 is primarily attributable to the D&B Acquisition and other investments, partially offset by proceeds from the Ceridian Share Sales net sales of short term investments. The increase in cash provided by (decrease in cash used in) investing activities of $95.0 million from 2018 to 2017 is primarily attributable to proceeds from the sale of Ceridian shares and LifeWorks in 2018, and decreased outflow for acquisitions in 2018 compared to 2017, partially offset by net purchases of short term investments in 2018 and the sale of One Digital in 2017.

Capital Expenditures. Total capital expenditures for property and equipment and other intangible assets were $28.3 million, $15.9 million and $40.1 million for the years ended December 31, 2019, 2018, and 2017, respectively. Capital expenditures in 2019 and 2018 primarily consisted of purchases of property and equipment in our Restaurant Group segment and property improvements at our real estate operations. The increase in expenditures in 2019 compared to 2018 is reflective of an increase in expenditures in our real estate operations, capital expenditures for new stores and maintenance at 99 Restaurants and store maintenance expenditures at O'Charley's, partially offset by a decrease in capital expenditures at Blue Ribbon. The decrease in expenditures in 2018 compared to 2017 is reflective of a decrease in spending in our Restaurant Group segment and decreased spending at OneDigital due to its sale in June 2017.

Financing Cash Flows. Our cash flows provided by (used in) financing activities for the years ended December 31, 2019, 2018, and 2017 were $319.1 million, $(86.4) million and $98.2 million, respectively. The increase in cash provided by (decrease in cash used in) financing activities of $405.5 million from 2019 compared to 2018 is primarily attributable to proceeds from our registered offering of shares of our common stock in December 2019 and an increase in net borrowings (net of repayments) in 2019. The decrease in cash provided by (increase in cash used in) financing activities of $184.6 million from 2018 to 2017 is primarily attributable to the payoff of Blue Ribbon's external debt and decreased borrowings in 2018.

Financing Arrangements. In our Restaurant Group, financing arrangements are used both as part of its companies' overall capitalization structure as well as to fund purchases of seasonal inventory in advance of sales. For a description of our historical financing arrangements see Note K to our Consolidated and Combined Financial Statements included in Item 8 of Part II of this Annual Report.

Contractual Obligations. Our long term contractual obligations generally include our credit agreements and other debt facilities, lease payments on certain of our premises and equipment and purchase obligations of the Restaurant Group.

See Note B to our Consolidated and Combined Financial Statements included in Item 8 of Part II of this Annual Report for further discussion of our leasing arrangements.

See Note A to our Consolidated and Combined Financial Statements included in Item 8 of Part II of this Annual Report which is incorporated by reference into this Item 2 of Part I, for further discussion of Blue Ribbon and O'Charley's financing obligations associated with its corporate headquarters and certain of its O'Charley's branded stores and our future obligations to pay our Manager fees under the terms of the Management Services Agreement. Management fees payable to our Manager are based on our cost of invested capital of $923.3 million as of December 31, 2019.

Purchase obligations include agreements to purchase goods or services that are enforceable, are legally binding and specify all significant terms, including fixed or minimum quantities to be purchased; fixed, minimum or variable price provisions; and the approximate timing of the transaction. The Restaurant Group has unconditional purchase obligations with various vendors, primarily related to food and beverage obligations with fixed commitments in regards to the time period of the contract and the quantities purchased with annual price adjustments that can fluctuate. Future purchase obligations are estimated by assuming historical purchase activity over the remaining, non-cancellable terms of the various agreements. For agreements with minimum purchase obligations, at least the minimum amounts we are legally required to purchase are included. These agreements do not include fixed delivery terms. We used both historical and projected volume and pricing as of December 31, 2019 to determine the amount of the obligations.

As of December 31, 2019, our required annual payments relating to these contractual obligations were as follows:

	2020	2021	2022	2023	2024	Thereafter	Total
Unconditional purchase obligations	$ 181.9	$ 74.2	$ 15.1	$ 10.3	$ 9.3	$ 10.6	$ 301.4
Operating lease payments	56.1	51.3	40.8	34.0	23.8	97.3	303.3
Notes payable	9.0	7.1	82.1	19.8	0.7	9.4	128.1
Management fees payable to Manager	13.9	13.9	13.9	13.9	11.6	—	67.2
Restaurant Group financing obligations	3.0	3.0	3.1	3.1	3.1	25.6	40.9
Total	$ 263.9	$ 149.5	$ 155.0	$ 81.1	$ 48.5	$ 142.9	$ 840.9

Capital Stock Transactions. For information on our 2019 Repurchase Program, see discussion under the header *Purchases of Equity Securities by the Issuer* included in Item 5 of Part II of this Annual Report.

Off-Balance Sheet Arrangements. We do not engage in off-balance sheet activities.

Recent Accounting Pronouncements

For a description of recent accounting pronouncements, see Note S to our Consolidated and Combined Financial Statements included in Item 8 of Part II of this Annual Report.

Item 7A. *Quantitative and Qualitative Disclosure about Market Risk*

Commodity Price Risk

In our Restaurant Group segment, we are exposed to market price fluctuations in beef, seafood, produce and other food product prices. Given the historical volatility of beef, seafood, produce and other food product prices, these fluctuations can materially impact the food and beverage costs incurred in our Restaurant Group segment. While our Restaurant Group companies have taken steps to qualify multiple suppliers who meet our standards as suppliers for our restaurants and have entered into agreements with suppliers for some of the commodities used in our restaurant operations, there can be no assurance that future supplies and costs for such commodities will not fluctuate due to weather and other market conditions outside of our control. Consequently, such commodities can be subject to unforeseen supply and cost fluctuations. Dairy costs can also fluctuate due to government regulation. Because we typically set our menu prices in advance of our food product prices, our menu prices cannot immediately take into account changing costs of food items. To the extent that we are unable to pass the increased costs on to our guests through price increases, our results of operations would be adversely affected. We do not use financial instruments to hedge our risk to market price fluctuations in beef, seafood, produce and other food product prices at this time.

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

CANNAE HOLDINGS, INC.

INDEX TO FINANCIAL INFORMATION

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Cannae Holdings, Inc.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Cannae Holdings, 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 and combined financial statements as of and for the year ended December 31, 2019, of the Company and our report dated February 28, 2020, expressed an unqualified opinion on those financial statements and included an explanatory paragraph related to a change in accounting principle for leases due to the adoption of FASB ASC 842, *Leases*, on January 1, 2019.

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 Control Over Financial Reporting. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

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

Definition and Limitations of Internal Control over Financial Reporting

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

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

/s/ Deloitte & Touche LLP

Las Vegas, Nevada
February 28, 2020

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Cannae Holdings, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated and combined balance sheets of Cannae Holdings, Inc. and subsidiaries (the "Company") as of December 31, 2019 and 2018, the related consolidated and combined statements of operations, comprehensive earnings, equity, and cash flows, for each of the three years in the period ended December 31, 2019, and the related notes (collectively referred to as the "financial statements"). In our opinion, based on our audits and the report of the other auditors, 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 did not audit the consolidated financial statements of Ceridian HCM Holdings, Inc. (“Ceridian”), the Company's investment in which is accounted for by use of the equity method. The accompanying financial statements of the Company include its equity investment in Ceridian of $309.5 million and $359.7 million as of December 31, 2019 and 2018, respectively, and its equity in earnings (losses) in Ceridian of $16.4 million, $(20.5) million and $1.9 million for the years ended December 31, 2019, 2018 and 2017, respectively. Those statements were audited by other auditors whose report has been furnished to us, and our opinion, insofar as it relates to the amounts included for Ceridian, is based solely on the report of the other auditors.

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 the criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 28, 2020, expressed an unqualified opinion on the Company's internal control over financial reporting based on our audit.

Change in Accounting Principle

As discussed in Notes B and S to the financial statements, the Company has changed its method of accounting for leases due to the adoption of FASB ASC 842, *Leases*, on January 1, 2019.

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 and the report of the other auditors 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 and Other Intangible Assets - Restaurant Group Segment - Refer to Notes A, F, and H to the financial statements

Critical Audit Matter Description

The Company’s evaluation of goodwill and indefinite lived trademarks and tradename intangible assets (“tradenames”) for impairment involves the comparison of the fair value of each reporting unit or tradename to their respective carrying value.

The Company determines the fair value of its reporting units using a combination of discounted cash flow (“DCF”) analyses and market approaches. The Company determines the fair value of its tradenames using the relief from royalty (“RFR”) method. The determination of fair value using a DCF analysis, the market approach, and the RFR method requires management to make significant assumptions and estimates related to forecasts of future growth rates for revenues, costs, and earnings (collectively the “forecasts”), discount rates, earnings multiples, and royalty rates.

The Company’s goodwill and tradenames balances as of December 31, 2019 totaled $66.1 million and $52.1 million, respectively, and are related to the reporting units within the Restaurant Group segment.

The fair value of one reporting unit within the Restaurant Group segment was below its carrying value as of the annual measurement date, and therefore, the Company recorded a $10.4 million impairment. As a result of this goodwill impairment the fair value of this reporting unit approximates its carrying value and relatively small decreases in future forecasts or changes in other assumptions could result in additional goodwill impairment. The fair value of the Village Inn and Bakers Square tradenames within the Restaurant Group segment were below their respective carrying values, and therefore, the Company recorded $17.1 million of impairments in the period ended December 31, 2019. The fair value of the O'Charley's tradename within the Restaurant Group segment exceeded its carrying value as of the annual measurement date, however, relatively small decreases in future forecasts or changes in royalty rates or other assumptions could result in impairment of the tradename.

Management’s forecasts for this reporting unit and these tradenames involves significant management assumptions and estimates due to deteriorating operating results and cash flows resulting from declining same store sales and increased costs. Therefore, auditing the forecasts for this reporting unit and these tradenames and the related valuation methodologies, discount rate, earnings multiples, and royalty rate valuation assumptions involved a higher degree of auditor judgment and subjectivity as well as an increased level of audit effort, including the involvement of valuation specialists.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the Company’s forecasts and the selection of the valuation methodologies, discount rate, earnings multiples, and royalty rate valuation assumptions for this reporting unit and these tradenames included the following:

- We tested the effectiveness of the Company's internal controls over goodwill and tradenames, including internal controls over management’s forecasts and the selection of the valuation methodologies, discount rates, earnings multiples, and royalty rates.

- We assessed the sensitivity of the Company’s impairment conclusions to changes in the forecasts, discount rates, earnings multiples, and royalty rates.

- We evaluated management’s ability to accurately forecast by comparing actual results to management’s historical forecasts.

- We evaluated the reasonableness of management’s forecasts by: (1) comparing the forecasts to historical results; (2) obtaining supporting evidence for assumptions and estimates related to management’s planned operational initiatives and restructurings that were incorporated into the forecasts; (3) corroborating assumptions and estimates with management’s communications to the Board of Directors; and (4) comparing forecast assumptions and estimates with information included in Company press releases, analyst reports of the Company and companies in its peer group, and restaurant industry reports.

- With the assistance of our valuation specialists, we evaluated the valuation methodologies, discount rates, earnings multiples, and royalty rates selected by management, by assessing the impact of the uncertainty in management's forecast due to deteriorating operating results and cash flows on these valuation assumptions, testing the underlying market-based source information and the mathematical accuracy of the valuation assumptions, and developing a range of independent valuation assumptions and comparing those to the discount rate, earnings multiples, and royalty rate valuation assumptions selected by management.

/s/ Deloitte & Touche LLP

Las Vegas, Nevada
February 28, 2020

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

CANNAE HOLDINGS, INC.
CONSOLIDATED AND COMBINED BALANCE SHEETS

	December 31, 2019	December 31, 2018
	(in millions)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 533.7	$ 315.7
Short-term investments	0.5	31.4
Trade receivables	16.0	30.4
Inventory	16.3	22.3
Prepaid expenses and other current assets	64.4	22.1
Current assets of discontinued operations - see Note N	—	29.8
Total current assets	630.9	451.7
Investments in unconsolidated affiliates	836.5	397.2
Lease assets - see Note B	192.9	—
Property and equipment, net	162.6	175.5
Other intangible assets, net	63.1	92.4
Goodwill	66.1	76.5
Fixed maturity securities available for sale, at fair value	19.2	17.8
Deferred tax assets	54.5	23.8
Other long term investments and noncurrent assets	66.4	48.2
Noncurrent assets of discontinued operations - see Note N	—	176.4
Total assets	$ 2,092.2	$ 1,459.5
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable and other accrued liabilities, current	$ 86.4	$ 95.6
Lease liabilities, current - see Note B	41.5	—
Income taxes payable	37.4	24.3
Deferred revenue, current	26.4	25.8
Notes payable, current	7.0	5.9
Current liabilities of discontinued operations - see Note N	—	8.4
Total current liabilities	198.7	160.0
Lease liabilities, long-term - see Note B	199.7	—
Deferred revenue, long-term	—	—
Notes payable, long-term	120.1	42.2
Accounts payable and other accrued liabilities, long-term	43.9	57.1
Noncurrent liabilities of discontinued operations - see Note N	—	0.5
Total liabilities	562.4	259.8
Commitments and contingencies - see Note M		
Equity:		
Cannae common stock, $0.0001 par value; authorized 115,000,000 shares as of December 31, 2019 and December 31, 2018; issued of 79,727,972 and 72,234,330 shares as of December 31, 2019 and December 31, 2018, respectively; and outstanding of 79,516,833 and 72,223,692 shares as of December 31, 2019 and December 31, 2018, respectively	—	—
Preferred stock, $0.0001 par value; authorized 10,000,000 shares; issued and outstanding, none as of December 31, 2019 and December 31, 2018	—	—
Retained earnings	143.6	45.8
Additional paid-in capital	1,396.7	1,146.2
Less: Treasury stock, 211,139 and 10,638 shares as of December 31, 2019 and December 31, 2018, respectively, at cost	(5.9)	(0.2)
Accumulated other comprehensive loss	(45.9)	(67.2)
Total Cannae shareholders' equity	1,488.5	1,124.6
Noncontrolling interests	41.3	75.1
Total equity	1,529.8	1,199.7
Total liabilities and equity	$ 2,092.2	$ 1,459.5

See Notes to Consolidated and Combined Financial Statements

CANNAE HOLDINGS, INC.
CONSOLIDATED AND COMBINED STATEMENTS OF OPERATIONS

	Year ended December 31,		
	2019	2018	2017
		(in millions)	
Revenues:			
Restaurant revenue	$ 1,043.3	$ 1,117.8	$ 1,129.0
Other operating revenue	26.7	29.7	27.6
Total operating revenues	1,070.0	1,147.5	1,156.6
Operating expenses:			
Cost of restaurant revenue	912.8	991.3	991.0
Personnel costs	90.3	137.2	95.6
Depreciation and amortization	40.7	46.3	46.2
Other operating expenses, including asset impairments	133.4	91.8	101.3
Goodwill impairment	10.4	26.7	—
Total operating expenses	1,187.6	1,293.3	1,234.1
Operating loss	(117.6)	(145.8)	(77.5)
Other income (expense):			
Interest, investment and other income	15.6	6.3	5.3
Interest expense	(17.8)	(4.7)	(7.0)
Realized gains, net	357.7	166.8	4.9
Total other income	355.5	168.4	3.2
Earnings (loss) from continuing operations before income taxes and equity in (losses) earnings of unconsolidated affiliates	237.9	22.6	(74.3)
Income tax expense (benefit)	24.2	15.0	(14.2)
Earnings (loss) from continuing operations before equity in (losses) earnings of unconsolidated affiliates	213.7	7.6	(60.1)
Equity in (losses) earnings of unconsolidated affiliates	(115.1)	(16.1)	3.4
Earnings (loss) from continuing operations	98.6	(8.5)	(56.7)
Net (loss) earnings from discontinued operations, net of tax - see Note N	(51.8)	(2.1)	149.2
Net earnings (loss)	46.8	(10.6)	92.5
Less: Net loss attributable to non-controlling interests	(30.5)	(38.2)	(16.3)
Net earnings attributable to Cannae Holdings, Inc. common shareholders	$ 77.3	$ 27.6	$ 108.8
Amounts attributable to Cannae Holdings, Inc. common shareholders			
Net earnings (loss) from continuing operations attributable to Cannae Holdings, Inc. common shareholders	$ 127.6	$ 29.5	$ (40.4)
Net (loss) earnings from discontinued operations attributable to Cannae Holdings, Inc. common shareholders	(50.3)	(1.9)	149.2
Net earnings attributable to Cannae Holdings, Inc. common shareholders	$ 77.3	$ 27.6	$ 108.8
Earnings per share			
Basic			
Net earnings (loss) per share from continuing operations	$ 1.77	$ 0.42	$ (0.57)
Net (loss) earnings per share from discontinued operations	(0.70)	(0.03)	2.11
Net earnings per share	$ 1.07	$ 0.39	$ 1.54
Diluted			
Net earnings (loss) per share from continuing operations	$ 1.76	$ 0.42	$ (0.57)
Net (loss) earnings per share from discontinued operations	(0.69)	(0.03)	2.11
Net earnings per share	$ 1.07	$ 0.39	$ 1.54
Weighted average shares outstanding Cannae Holdings common stock, basic basis	72.2	71.2	70.6
Weighted average shares outstanding Cannae Holdings common stock, diluted basis	72.4	71.3	70.6

See Notes to Consolidated and Combined Financial Statements

CANNAE HOLDINGS, INC.
CONSOLIDATED AND COMBINED STATEMENTS OF COMPREHENSIVE EARNINGS

	Year Ended December 31,		
	2019	2018	2017
	(in millions)		
Net earnings (loss)	$ 46.8	$ (10.6)	$ 92.5
Other comprehensive earnings (loss), net of tax:			
Unrealized gain (loss) on investments and other financial instruments, net (excluding investments in unconsolidated affiliates) (1)	0.1	0.9	(8.7)
Unrealized gain (loss) relating to investments in unconsolidated affiliates (2)	7.1	(12.0)	8.9
Reclassification of unrealized losses on investments in unconsolidated affiliates, net of tax, included in net earnings (3)	19.1	24.0	—
Reclassification of unrealized losses (gains) on investments and other financial instruments, net of tax, included in net earnings (4)	—	7.0	(3.1)
Other comprehensive earnings (loss)	26.3	19.9	(2.9)
Comprehensive earnings	73.1	9.3	89.6
Less: Comprehensive loss attributable to noncontrolling interests	(30.5)	(38.2)	(16.3)
Comprehensive earnings attributable to Cannae	$ 103.6	$ 47.5	$ 105.9

(1) Net of income tax expense (benefit) of less than $0.1 million, $0.3 million and $(3.1) million for the years ended December 31, 2019, 2018 and 2017, respectively.

(2) Net of income tax expense (benefit) of $1.9 million, $(3.2) million and $2.4 million for the years ended December 31, 2019, 2018 and 2017, respectively.

(3) Net of income tax benefit of $5.1 million and $6.4 million for the years ended December 31, 2019 and 2018, respectively.

(4) Net of income tax (benefit) expense of $(1.9) million and $1.9 million for the years ended December 31, 2018 and 2017, respectively.

See Notes to Consolidated and Combined Financial Statements

CANNAE HOLDINGS, INC.
CONSOLIDATED AND COMBINED STATEMENTS OF EQUITY

	Common Stock		Parent Investment in FNFV	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comp (Loss) Earnings	Treasury Stock		Non-controlling Interests	Total Equity
	Shares	$					Shares	$		
						(in millions)				
Balance, December 31, 2016	—	$ —	$ 961.6	$ —	$ —	$ (68.1)	$ —	$ —	$ 116.3	$ 1,009.8
Other comprehensive earnings — unrealized loss on investments and other financial instruments, net of tax	—	—	—	—	—	(8.7)	—	—	—	(8.7)
Other comprehensive earnings — unrealized gain on investments in unconsolidated affiliates, net of tax	—	—	—	—	—	8.9	—	—	—	8.9
Reclassification adjustments for unrealized gains and losses included in net earnings	—	—	—	—	—	(3.1)	—	—	—	(3.1)
Stock-based compensation	—	—	—	0.2	—	—	—	—	0.3	0.5
Issuance of restricted stock	0.3	—	—	—	—	—	—	—	—	—
Sale of OneDigital	—	—	—	—	—	—	—	—	(6.2)	(6.2)
Contribution of CSA services from FNF	—	—	—	0.1	—	—	—	—	—	0.1
Ceridian stock-based compensation	—	—	—	5.7	—	—	—	—	—	5.7
Net change in Parent investment in FNFV	—	—	(46.0)	—	—	—	—	—	—	(46.0)
Subsidiary dividends paid to noncontrolling interests	—	—	—	—	—	—	—	—	(0.4)	(0.4)
FNF investment	5.7	—	—	100.0	—	—	—	—	—	100.0
FNF contribution of FNFV	64.9	—	(1,024.2)	1,024.2	—	—	—	—	—	—
Net earnings (loss)	—	—	108.6	—	0.2	—	—	—	(16.3)	92.5
Balance, December 31, 2017	70.9	$ —	$ —	$ 1,130.2	$ 0.2	$ (71.0)	—	$ —	$ 93.7	$ 1,153.1
Adjustment for cumulative effect of adoption of ASC Topic 606	—	—	—	—	1.9	—	—	—	—	1.9
Adjustment for adoption of ASU 2018-02	—	—	—	—	16.1	(16.1)	—	—	—	—
Reclassification of unrealized losses on investments in unconsolidated affiliates, net of tax, included in net earnings	—	—	—	—	—	24.0	—	—	—	24.0
Reclassification of unrealized losses on investments and other financial instruments, net of tax, included in net earnings	—	—	—	—	—	7.0	—	—	—	7.0
Other comprehensive earnings — unrealized gain on investments and other financial instruments, net of tax	—	—	—	—	—	0.9	—	—	—	0.9
Other comprehensive earnings — unrealized losses of investments in unconsolidated affiliates, net of tax	—	—	—	—	—	(12.0)	—	—	—	(12.0)
Stock-based compensation	—	—	—	2.0	—	—	—	—	—	2.0
Issuance of restricted stock	0.3	—	—	—	—	—	—	—	—	—
Shares withheld for taxes and in treasury	—	—	—	—	—	—	—	(0.2)	—	(0.2)
Shares issued for investment success bonuses, net of issuance costs	1.0	—	—	19.8	—	—	—	—	—	19.8
Contribution of CSA services from FNF	—	—	—	1.3	—	—	—	—	—	1.3
Ceridian stock-based compensation	—	—	—	6.5	—	—	—	—	—	6.5
Restaurant Group Restructuring	—	—	—	(13.6)	—	—	—	—	15.6	2.0
Subsidiary dividends paid to noncontrolling interests	—	—	—	—	—	—	—	—	(0.1)	(0.1)
Sale of noncontrolling interest in consolidated subsidiary	—	—	—	—	—	—	—	—	4.1	4.1
Net earnings (loss)	—	—	—	—	27.6	—	—	—	(38.2)	(10.6)
Balance, December 31, 2018	72.2	$ —	$ —	$ 1,146.2	$ 45.8	$ (67.2)	—	$ (0.2)	$ 75.1	$ 1,199.7
Adjustment for cumulative effect of adoption of accounting standards by unconsolidated affiliates, net of tax	—	—	—	—	20.5	(5.0)	—	—	—	15.5
Other comprehensive earnings — unrealized gain on investments and other financial instruments, net of tax	—	—	—	—	—	0.1	—	—	—	0.1
Other comprehensive earnings — unrealized earnings of investments in unconsolidated affiliates, net of tax	—	—	—	—	—	7.1	—	—	—	7.1
Reclassification of unrealized losses on investments in unconsolidated affiliates, net of tax, included in net earnings	—	—	—	—	—	19.1	—	—	—	19.1
Proceeds from equity offering, net of offering costs	7.5	—	—	236.0	—	—	—	—	—	236.0
Dun & Bradstreet equity issuance costs	—	—	—	(1.4)	—	—	—	—	—	(1.4)
Treasury stock repurchases	—	—	—	—	—	—	0.2	(4.9)	—	(4.9)
Shares withheld for taxes and in treasury	—	—	—	—	—	—	—	(0.8)	—	(0.8)
Stock-based compensation, consolidated subsidiaries	—	—	—	4.0	—	—	—	—	0.6	4.6
Contribution of CSA services from FNF	—	—	—	1.3	—	—	—	—	—	1.3
Stock-based compensation, unconsolidated affiliates	—	—	—	10.6	—	—	—	—	—	10.6
Deconsolidation of T-System	—	—	—	—	—	—	—	—	(2.9)	(2.9)
Subsidiary dividends paid to noncontrolling interests	—	—	—	—	—	—	—	—	(1.0)	(1.0)
Net earnings (loss)	—	—	—	—	77.3	—	—	—	(30.5)	46.8
Balance, December 31, 2019	79.7	$ —	$ —	$ 1,396.7	$ 143.6	$ (45.9)	0.2	$ (5.9)	$ 41.3	$ 1,529.8

See Notes to Consolidated and Combined Financial Statements.

CANNAE HOLDINGS, INC.
CONSOLIDATED AND COMBINED STATEMENTS OF CASH FLOWS

	Year ended December 31,		
	2019	2018	2017
	(in millions)		
Cash flows from operating activities:			
Net earnings (loss)	$ 46.8	$ (10.6)	$ 92.5
Adjustments to reconcile net earnings (loss) to net cash used in operating activities:			
Depreciation and amortization	54.5	61.3	58.1
Equity in losses (earnings) of unconsolidated affiliates	115.1	16.1	(3.4)
Distributions from investments in unconsolidated affiliates	2.0	1.4	—
Realized gains, net	(354.1)	(182.7)	(4.9)
Loss (gain) on sale of consolidated subsidiaries	6.4	—	(276.0)
Impairment of assets	90.8	55.2	9.9
Lease asset amortization	38.8	—	—
Stock-based compensation cost	4.6	21.8	0.5
Changes in assets and liabilities, net of effects from acquisitions:			
Net decrease (increase) in trade receivables	18.2	(7.3)	(1.2)
Net (increase) decrease in inventory, prepaid expenses and other assets	(36.2)	9.5	(12.2)
Net increase in accounts payable, accrued liabilities, deferred revenue and other	8.4	0.9	15.0
Net decrease in lease liabilities	(46.9)	—	—
Net change in income taxes	(32.6)	11.5	31.0
Net cash used in operating activities	(84.2)	(22.9)	(90.7)
Cash flows from investing activities:			
Proceeds from sale of equity securities	—	17.7	31.6
Proceeds from sale of Ceridian shares	477.9	152.5	—
Proceeds from sale of LifeWorks	—	56.2	—
Additions to property and equipment and other intangible assets	(28.3)	(15.9)	(40.1)
Purchases of investment securities	—	(3.5)	(1.3)
Investments in unconsolidated affiliates	(45.7)	—	(1.4)
Investments in Dun & Bradstreet, net of capitalized syndication fees	(526.1)	—	—
Proceeds from the sale of other investments	4.8	7.8	1.3
Proceeds from the sale of property and equipment	21.4	4.9	—
Purchases of other long-term investments	(30.0)	(7.4)	(4.3)
Distributions from investments in unconsolidated affiliates	1.0	0.4	1.1
Net proceeds from (purchases of) short term investments	30.9	(31.4)	—
Net other investing activities	3.0	0.1	1.4
Acquisition of T-System, net of cash acquired	—	0.7	(201.6)
Cash proceeds from the T-System Contribution, net of cash transferred - see Note A	66.9	—	—
Proceeds from sale of OneDigital	—	4.6	326.0
Other acquisitions/disposals of businesses, net of cash acquired/disposed	—	—	(21.0)
Net cash (used in) provided by investing activities	(24.2)	186.7	91.7
Cash flows from financing activities:			
Borrowings, net of debt issuance costs	367.3	33.9	84.4
Debt service payments	(290.8)	(124.1)	(35.8)
Equity offering proceeds, net of capitalized costs	236.0	—	—
Sale of noncontrolling interest in consolidated subsidiary	—	4.1	—
Proceeds from FNF Investment	—	—	100.0
Subsidiary distributions paid to noncontrolling interest shareholders	(0.9)	(0.1)	(0.4)
Payment of contingent consideration for prior period acquisitions	—	—	(4.0)
Proceeds from Blue Ribbon sale and leaseback of corporate office, net of issuance costs - see Note A	13.2	—	—
Payment for shares withheld for taxes and in treasury	(0.8)	(0.2)	—
Purchases of treasury stock	(4.9)	—	—
Equity transactions with Parent, net	—	—	(46.0)
Net cash provided by (used in) financing activities	319.1	(86.4)	98.2
Net increase in cash and cash equivalents	210.7	77.4	99.2
Cash and cash equivalents at beginning of period, including cash of discontinued operations	323.0	245.6	146.4
Cash and cash equivalents at end of period, including cash of discontinued operations	$ 533.7	$ 323.0	$ 245.6

See Notes to Consolidated and Combined Financial Statements

CANNAE HOLDINGS, INC.
NOTES TO CONSOLIDATED AND COMBINED FINANCIAL STATEMENTS

Note A. Business and Summary of Significant Accounting Policies

The following describes the significant accounting policies of Cannae Holdings, Inc. and its subsidiaries (collectively, “we,” “us,” “our,” "Cannae," or the "Company”) which have been followed in preparing the accompanying Consolidated and Combined Financial Statements.

Description of Business

We are a holding company engaged in actively managing and operating a group of companies and investments, as well as making additional majority and minority equity portfolio investments in businesses, in order to achieve superior financial performance and maximize the value of these assets. Our primary investments as of December 31, 2019 include our minority ownership interests in The Dun & Bradstreet Corporation ("Dun & Bradstreet" or "D&B") and Ceridian HCM Holding, Inc.; majority equity ownership stakes in O'Charley's Holdings, LLC ("O'Charley's") and 99 Restaurants Holdings, LLC ("99 Restaurants"); and various other controlled portfolio companies and minority equity and debt investments.

See Note Q *Segment Information* for further discussion of the businesses comprising our reportable segments.

Split-off of Cannae from FNF

On November 17, 2017, Fidelity National Financial, Inc. (“FNF”) redeemed each outstanding share of its FNF Ventures ("FNFV") Group common stock, par value $0.0001, for one share of common stock, par value $0.0001, of a newly formed entity, Cannae (the "Split-Off"). In conjunction with the Split-Off, FNF contributed to us its portfolio of investments unrelated to its primary insurance and real estate operations, which included majority and minority equity investment stakes in a number of entities and certain fixed income investments. On November 20, 2017, Cannae common stock began “regular-way” trading on The New York Stock Exchange under the “CNNE” stock symbol.

Following the Split-Off, FNF and Cannae operate as separate, publicly-traded companies. In connection with the Split-Off, FNF and Cannae entered into certain agreements in order to govern certain of the ongoing relationships between the two companies after the Split-Off and to provide for an orderly transition. These agreements include a reorganization agreement, a corporate services agreement, a registration rights agreement, a voting agreement and a tax matters agreement.

The reorganization agreement provides for, among other things, the principal corporate transactions (including the internal restructuring) required to effect the Split-Off, certain conditions to the Split-Off and provisions governing the relationship between Cannae and FNF with respect to and resulting from the Split-Off. The tax matters agreement provides for the allocation and indemnification of tax liabilities and benefits between FNF and Cannae and other agreements related to tax matters. The voting and registration rights agreements provide for certain appearance and voting restrictions and registration rights on shares of Cannae owned by FNF after consummation of the Split-Off. Pursuant to the corporate services agreement (the "CSA"), FNF will provide Cannae with certain "back office" services including legal, tax, accounting, treasury and investor relations support. FNF will generally provide these services at no-cost for up to three years. Cannae will reimburse FNF for direct, out-of-pocket expenses incurred by FNF in providing these services.

The Split-Off was accounted for at historical cost due to the pro rata nature of the distribution to holders of FNFV Group common stock.

Principles of Consolidation and Combination and Basis of Presentation

The accompanying Consolidated and Combined Financial Statements are prepared in accordance with generally accepted accounting principles in the United States ("GAAP") and include the historical accounts as well as wholly-owned and majority-owned subsidiaries of the Company. Prior to the Split-Off, these financial statements represent a combination of the historical financial information of the operations attributed to FNFV, of which Cannae is comprised. The Company is allocated certain corporate overhead and management services expenses from FNF based on the terms of the CSA and our proportionate share of the expense determined on actual usage and our best estimate of management's allocation of time. Both FNF and Cannae believe such allocations are reasonable; however, they may not be indicative of the actual results of operations or cash flows of the Company had the Company been operating as an independent, publicly traded company for the periods presented or the amounts that will be incurred by the Company in the future.

All intercompany profits, transactions and balances have been eliminated. Certain of our investments in non-majority-owned partnerships and affiliates are accounted for using the equity method until such time that they may become wholly or majority-owned. Earnings attributable to noncontrolling interests are recorded on the Consolidated and Combined Statements of Operations relating to majority-owned subsidiaries with the appropriate noncontrolling interest that represents the portion of equity not related to our ownership interest recorded on the Consolidated and Combined Balance Sheets in each period.

Management Estimates

The preparation of these Consolidated and Combined Financial Statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the Consolidated and Combined Financial Statements and the reported amounts of revenues and expenses during the reporting period. Significant estimates made by management include the carrying amount and depreciation of property and equipment (Note E), the valuation of acquired intangible assets (Note H), fair value measurements (Note C), and accounting for income taxes (Note L). Actual results could differ from estimates.

Recent Developments

Dun & Bradstreet

In February 2019, we completed our previously announced investment in Dun & Bradstreet for a net investment of $505.6 million in D&B's ultimate parent. Dun & Bradstreet is a leading global provider of business decisioning data and analytics and provides various solutions to help companies improve their operational performance.

In June 2019, we made an additional pro-rata investment of $23.5 million in D&B's ultimate parent. D&B used the proceeds to partially fund its acquisition on July 1, 2019 of Lattice Engines, Inc. ("Lattice"), an artificial intelligence powered customer data platform used by business-to-business marketing and sales professionals.

See Note D for further discussion of our accounting for our investment in D&B.

Ceridian

During the year ended December 31, 2019, we completed the sale of an aggregate of 9.0 million shares of common stock of Ceridian as part of three separate underwritten secondary public offerings by certain stockholders of Ceridian (the "Ceridian Share Sales"). In connection with the Ceridian Share Sales, we received aggregate proceeds of $477.9 million and recorded a gain of $342.1 million, which is included in Realized gains (losses), net on the Consolidated and Combined Statement of Operations. The recorded gains are net of $21.2 million of losses (exclusive of $4.6 million of income tax benefit) related to reclassification adjustments from Other comprehensive earnings. As of December 31, 2019, we owned 16.4% of the outstanding common stock of Ceridian.

On February 21, 2020, we completed the sale of an additional 3.9 million shares of common stock of Ceridian to a broker pursuant to Rule 144 of the Securities Act of 1933 and received proceeds of $283.7 million. As a result of the sale, we now own 19.8 million shares of Ceridian which represents 13.7% of its outstanding common stock.

Restaurant Group

On January 27, 2020, American Blue Ribbon Holdings, LLC ("Blue Ribbon") and its wholly-owned subsidiaries, filed voluntary petitions for relief under chapter 11 of the United States Bankruptcy Code in the U.S. Bankruptcy Court for the District of Delaware (the "Blue Ribbon Reorganization"). The Blue Ribbon Reorganization does not involve or affect the operations of O’Charley’s or 99 Restaurants, which are not part of Blue Ribbon. See Note M for further discussion.

Blue Ribbon has entered into plans to sell certain company-owned stores. In conjunction with the plans to sell, $1.6 million and $9.3 million, respectively, of assets are recorded as held for sale and included in Prepaid expenses and other current assets, net as of December 31, 2019 and 2018, respectively.

On March 21, 2019, Blue Ribbon sold its corporate office located in Nashville, Tennessee for net cash proceeds of $13.2 million and entered into a lease agreement with the buyer to lease the office for an initial term of 15 years. The transaction was evaluated and determined not to qualify for sale-leaseback accounting. Accordingly, the transaction is accounted for as a failed sale and leaseback and a financing obligation. During the year ended December 31, 2019, we reclassified $2.4 million from assets held for sale formerly included in Prepaid expenses and other current assets to reflect the real estate assets in Property and equipment, net on our Consolidated and Combined Balance Sheet as if we were the legal owner. We continue to recognize depreciation expense over the building's estimated useful life. On the date of the sale, Blue Ribbon recorded a liability for the financing obligation in the amount of the net cash proceeds of $13.2 million, which is included in Accounts payable and other accrued liabilities, long term on our Consolidated and Combined Balance Sheet.

On December 13, 2019, O'Charley's and a third-party lessor partner closed on the exchange of certain company-owned stores (the "Transferred Properties") held by O'Charley's in exchange for properties owned by the lessor, and previously leased by O'Charley's to operate certain of its stores (the "O'Charley's Exchange"). In conjunction with the O'Charley's Exchange, O'Charley's obtained land with a fair value of $10.5 million and will lease back the Transferred Properties. We continue to account for $6.0 million of property associated with the Transferred Properties as if we were the legal owner which is included in Property and equipment, net on our Consolidated and Combined Balance Sheet. The O'Charley's Exchange was evaluated and determined not to qualify for sale-leaseback accounting. Accordingly, the transaction is accounted for as a failed sale and leaseback and a financing obligation. On the date of the sale, O'Charley's recorded a liability for the financing obligation in the amount of the lease liability formerly recorded by O'Charley's for the Transferred Properties of $14.6 million, which is included in Accounts payable and other accrued liabilities, long term on our Consolidated and Combined Balance Sheet.

During the year ended December 31, 2019, Blue Ribbon and O'Charley's sold Blue Ribbon's corporate office located in Denver, Colorado and certain company-owned O'Charley's stores for total gross proceeds of $18.4 million.

T-System

On December 31, 2019, we completed our previously announced contribution of T-System Holdings, Inc. ("T-System") into a health care joint venture with an investment vehicle advised by an affiliate of Carlyle Investment Management, L.L.C. (“Carlyle”) and certain other investors with deep health care services experience (the "T-System Contribution"). The joint venture, Coding Solutions Topco, Inc. (“Coding Solutions”) will focus on acquiring, integrating and operating synergistic health care services companies in the provider and payer space. On the closing date, subsidiaries of Coding Solutions acquired two other healthcare services companies that provide (1) offshore medical coding solutions for the risk adjustment and provider markets and (2) domestic coding and clinical documentation services to providers.

As a result of the T-System Contribution, Cannae received cash proceeds of $60.8 million for the repayment in full of debt loaned by a consolidated subsidiary of Cannae to T-System and $14.5 million as consideration for a portion of its shares of T-System. Cannae contributed the remainder of its equity interest in T-System for a 22.7% equity interest in Coding Solutions valued at $60.2 million based on the terms of the agreement with Carlyle.

See Note N for further discussion of the T-System Contribution.

We account for our investment in Coding Solutions under the equity method of accounting and the initial investment value of $60.2 million is included in Investments in unconsolidated affiliates on our Consolidated and Combined Balance Sheet as of December 31, 2019.

QOMPLX

On July 23, 2019, Cannae Holdings, in partnership with Motive Partners, closed on an investment in preferred equity of QOMPLX, Inc. ("QOMPLX"), formerly Fractal Industries, Inc., an intelligent decision and analytics platform used by businesses for modeling and planning. We funded $15.0 million at close and funded an additional $15.0 million in the fourth quarter of 2019. $7.5 million of our investment made in the fourth quarter was for a note receivable convertible into preferred equity. Both the preferred equity and note receivable investments are included in Other long term investments and noncurrent assets on our Consolidated and Combined Balance Sheet. Cannae's total preferred investment represents 18.8% of the outstanding voting equity of QOMPLX. Our Chairman William P. Foley II has joined QOMPLX’s Board of Directors.

See Note D for further discussion of our accounting for our investment in QOMPLX.

Externalization

On August 27, 2019, we announced the execution of definitive documents, which became effective on September 1, 2019, pursuant to which the Company transitioned to an externally managed structure (such externalization of certain management functions, the “Externalization”). In connection with the Externalization, the Company, Cannae Holdings, LLC, a Delaware limited liability company and a subsidiary of the Company (“Cannae LLC”), and Trasimene Capital Management, LLC, a Delaware limited liability company (the “Manager”), entered into a Management Services Agreement (the “Management Services Agreement”), which became effective September 1, 2019. The members of the Manager include certain directors and executive officers of the Company. Pursuant to the Management Services Agreement, certain services related to the management of the Company will be conducted by the Manager through the authority delegated to it in the Management Services Agreement and in accordance with the operational objectives and business plans approved by the Company’s Board of Directors. Subject at all times to the supervision and direction of the Board of Directors, the Manager will be responsible for, among other things, (a) managing the day-to-day business and operations of the Company and its subsidiaries, (b) evaluating the financial and operational performance of the Company's subsidiaries and other assets, (c) providing a management team to serve as some of the executive officers of the Company and its subsidiaries and (d) performing (or causing to be performed) any other services for and on behalf of the Company and its subsidiaries customarily performed by executive officers and employees of a public company.

Pursuant to the terms of the Management Services Agreement, Cannae LLC is obligated to pay the Manager a quarterly management fee equal to 0.375% (1.5% annualized) of the Company’s cost of invested capital (as defined in the Management Services Agreement) as of the last day of each fiscal quarter, payable in arrears in cash, as may be adjusted pursuant to the terms of the Management Services Agreement. Cannae LLC will be responsible for paying costs and expenses relating to the Company’s business and operations. Cannae LLC is required to reimburse the Manager for documented expenses of the Manager incurred on the Company’s behalf, including any costs and expenses incurred in connection with the performance of the services under the Management Services Agreement.

The Company conducts its business through Cannae LLC. In connection with the consummation of the Externalization, an Amended and Restated Operating Agreement of Cannae LLC (the “Operating Agreement”) was entered into on August 27, 2019, by and among Cannae LLC and the Company, the Manager and Cannae Holdco, Inc., a Delaware corporation and a direct, wholly owned subsidiary of the Company, which became effective on September 1, 2019.

For so long as the Management Services Agreement is in effect, the Company, as managing member of Cannae LLC, authorizes the Manager to (a) designate officers of Cannae LLC and (b) perform, or cause to be performed, the services as are set forth in the Management Services Agreement.

In connection with such services, so long as Cannae LLC’s profits with respect to a liquidity event (sale or other disposition) involving an investment (as defined in the Operating Agreement) exceed an annualized hurdle rate of 8%, Cannae LLC is obligated to pay carried interest with respect to such investment to the Manager. Generally, where such hurdle is satisfied, carried interest will be paid to the Manager in an amount equal to 15% of the profits on such investment (calculated as the proceeds of such investment less allocable management fees (as defined in the Operating Agreement) and the cost of such investment) for returns between 1.0x and 2.0x the cost of such investment (plus allocable management fees), and 20% of the profits on such investment for returns exceeding 2.0x the cost of such investment (plus allocable management fees). However, to the extent that, as of the liquidity event, the value of the portfolio of unrealized investments is less than the aggregate cost of such investments, then the Manager’s carried interest entitlement will be correspondingly reduced until such time as the investment portfolio has recovered in value.

The Management Services Agreement has an initial term of five years, expiring on September 1, 2024. Pursuant to its terms, the Management Services Agreement will be automatically renewed for one-year terms thereafter unless earlier terminated by either the Company or the Manager in accordance with the terms of the Management Services Agreement.

The Company and Manager began paying fees associated with the Externalization on November 1, 2019.

Equity Fund

On December 12, 2019, we entered into a limited partnership with an investment fund manager designed to opportunistically trade in marketable securities (the "Equity Fund"). We initially contributed $90.9 million of cash in exchange for limited partnership interests in the Equity Fund representing 49.0% of its outstanding equity and a deposit on hand with the Equity Fund. Cannae and the other limited partners of the Equity Fund intend to make pro-rata investments through April 2020. We are committed to invest a total of $245.0 million. Subsequent to December 31, 2019, we invested an additional $100.0 million in the Equity Fund. As of December 31, 2019, $45.3 million of our contribution to the Equity Fund is held on deposit with the Equity Fund until such time as the general partner utilizes the funds and other limited partners make matching pro-rata contributions. Our investment held on deposit is included in Prepaid expense and other current assets on our Consolidated and Combined Balance Sheet as of December 31, 2019. We account for the $45.6 million of our investment which was contributed to the Equity Fund's capital under the equity method of accounting and such portion is included in Investments in unconsolidated affiliates on our Consolidated and Combined Balance Sheet as of December 31, 2019.

Other Developments

On September 18, 2019, the Board of Directors of the Company adopted a resolution increasing to nine the size our Board of Directors to nine, and elected Mark D. Linehan to serve on our Board of Directors. Mr. Linehan will serve in Class III of our Board of Directors, and his term will expire at the annual meeting of our shareholders to be held in 2020. Mr. Linehan has not been appointed to any committee of our Board.

On December 5, 2019, we completed a public offering of 7,475,000 shares of our common stock pursuant to a prospectus supplement, dated December 3, 2019, and the base prospectus, dated November 27, 2019, included in our registration statement on Form S-3 ASR (File No. 333-235303), which was filed with the Securities and Exchange Commission on November 27, 2019. We received net proceeds from the Offering of approximately $236.0 million, after deducting the underwriting discount and capitalized offering expenses payable by the Company. We intend to use the net proceeds of the offering to fund future acquisitions and for working capital and general corporate purposes.

On December 24, 2019, we entered into an equity commitment letter with funds associated with Thomas H. Lee Partners L.P. ("THL") pursuant to which Cannae is committed to provide $125.0 million to a partnership (the “AmeriLife Joint Venture”) which will invest in the recapitalization of AmeriLife Group, LLC ("AmeriLife"). Cannae, THL and other investors will provide $617.0 million of aggregate equity financing to the AmeriLife Joint Venture to acquire AmeriLife. We have the option to syndicate a portion of our equity commitment prior to closing and expect to be a minority owner of the AmeriLife Joint Venture. The transaction is expected to close in the first or second quarter of 2020. AmeriLife is a leader in marketing and distributing life, health, and retirement solutions.

Cash and Cash Equivalents

Highly liquid instruments, including money market instruments, purchased as part of cash management with original maturities of three months or less, and certain amounts in transit from credit and debit card processors, are considered cash equivalents. The carrying amounts reported in the Consolidated and Combined Balance Sheets for these instruments approximate their fair value.

Restricted Cash

The Restaurant Group is required to hold cash collateralizing its outstanding letters of credit. Included in Cash and cash equivalents on our Consolidated and Combined Balance Sheet as of December 31, 2019 is $11.4 million of such restricted cash. There was no restricted cash as of December 31, 2018.

Investments

Fixed maturity securities are purchased based on factors including rate of return, maturity, credit risk, duration, and tax considerations. Fixed maturity securities, which may be sold prior to maturity, are carried at fair value and are classified as available for sale as of the balance sheet dates. Fair values for fixed maturity securities are principally a function of current market conditions and are valued based on quoted prices in markets that are not active or model inputs that are unobservable. See Note C. Discount or premium is recorded for the difference between the purchase price and the principal amount. The discount or premium is amortized or accrued using the interest method and is recorded as an adjustment to interest and investment income. The interest method results in the recognition of a constant rate of return on the investment equal to the prevailing rate at the time of purchase or at the time of subsequent adjustments of book value.

Investments in unconsolidated affiliates are recorded using the equity method of accounting.

Realized gains and losses on the sale of investments are determined on the basis of the cost of the specific investments sold and are credited or charged to income on a trade date basis. Unrealized gains or losses on fixed maturity securities, which are classified as available for sale, net of applicable deferred income tax expenses (benefits), are excluded from earnings and credited or charged directly to a separate component of equity. If any unrealized losses on available for sale securities are determined to be other-than-temporary, such unrealized losses are recognized as realized losses. Unrealized losses are considered other-than-temporary if factors exist that cause us to believe that the value will not increase to a level sufficient to recover our cost basis. Some factors considered in evaluating whether or not a decline in fair value is other-than-temporary include (i) our need and intent to sell the investment prior to a period of time sufficient to allow for a recovery in value; (ii) the duration and extent to which the fair value has been less than cost; and (iii) the financial condition and prospects of the issuer. Such reviews are inherently uncertain and the value of the investment may not fully recover or may decline in future periods resulting in a realized loss.

Fair Value of Financial Instruments

The fair values of financial instruments presented in the Consolidated and Combined Financial Statements are estimates of the fair values at a specific point in time using available market information and appropriate valuation methodologies. These estimates are subjective in nature and involve uncertainties and significant judgment in the interpretation of current market data. We do not necessarily intend to dispose of or liquidate such instruments prior to maturity. See Note C for further details.

Trade Receivables

Trade receivables on the Consolidated and Combined Balance Sheets for the Restaurant Group consists primarily of billings to third-party customers of Blue Ribbon's bakery business, business to business gift card sales, insurance-related reimbursement, rebates, tenant improvement allowances, and billings to franchisees for royalties, initial and renewal fees, equipment sales and rent. Trade receivables are recorded net of an allowance for doubtful accounts, which is our best estimate of the amount of probable credit losses related to existing receivables.

The carrying values reported in the Consolidated and Combined Balance Sheets for trade receivables approximate their fair value.

Inventory

Inventory primarily consists of raw materials, finished pies, food, beverages packaging and supplies in our Restaurant Group segment and is stated at the lower of cost or net realizable value. Cost is determined using the first in, first out method for restaurant inventory and standard cost that approximates actual cost on a first in, first out basis for the bakery operations.

Prepaid expenses and other current assets

Prepaid expenses and other current assets consist of cash on deposit with the Equity Fund, prepaid operating expenses, the current portion of notes receivable and other miscellaneous current assets.

Other long term investments and non-current assets

Other long-term investments consist of land held for investment purposes and investments in equity securities without a readily determinable fair value. Land is carried at historical cost. See Note D for further discussion of our accounting for equity securities without a readily determinable fair value.

Other non-current assets include notes receivable from third-parties and other miscellaneous non-current assets.

Leases

Refer to Note B.

Goodwill

Goodwill represents the excess of cost over fair value of identifiable net assets acquired and assumed in business combinations. Goodwill and other intangible assets with indefinite useful lives are reviewed for impairment annually or more frequently if circumstances indicate potential impairment, through a comparison of fair value to the carrying amount. We have the option to first assess goodwill for impairment based on a review of qualitative factors to determine if events and circumstances exist that will lead to a determination that the fair value of a reporting unit is greater than its carrying amount, prior to performing a full fair-value assessment. If, after assessing the totality of events or circumstances, the Company determines it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the quantitative impairment test is unnecessary. However, if the Company concludes otherwise, then it is required to perform the quantitative impairment test by calculating the fair value of the reporting unit and comparing the fair value with the carrying amount of the reporting unit. Goodwill impairment, if any, is measured as the amount by which a reporting unit's carrying value exceeds its fair value.

For the year ended December 31, 2019 we recorded $35.1 million of impairment to goodwill in our former T-System segment and $10.4 million of impairment to goodwill in our Restaurant Group segment. The impairment in our former T-System segment is primarily a result of a decline in earnings multiples from comparable public companies and lower forecasted cash flows for its reporting units. The impairment charge in our Restaurant Group is a result of deteriorating operating results and cash flow resulting from declining same store sales and increased costs, primarily in our Village Inn and Bakers Square branded stores. The impairments recorded were calculated as the deficit between the carrying value of the reporting units of each segment compared to the fair value of the reporting unit determined by performing a combination of discounted cash flow and market approaches.

Impairment to goodwill in our former T-System segment is included in Net loss from discontinued operations on the Consolidated and Combined Statement of Operations for the year ended December 31, 2019. See Note N.

For the year ended December 31, 2018 we recorded $26.7 million of impairment to goodwill in our Restaurant Group segment. The impairment charge was a result of deteriorating operating results and cash flow resulting from declining same store sales and increased costs. The impairment recorded was calculated as the deficit between the carrying value of a reporting unit of the Restaurant Group segment compared to the fair value of the reporting unit determined by performing a combination of discounted cash flow and market approaches.

For the year ended December 31, 2017, we determined that there were no events or circumstances which indicated that the carrying value of goodwill exceeded the fair value and no impairment was recorded.

Other Intangible Assets

We have other intangible assets, not including goodwill, which consist primarily of customer relationships and contracts, trademarks and tradenames that are generally recorded in connection with acquisitions at their fair value, franchise rights, the fair value of purchased software and capitalized software development costs. Intangible assets with estimable lives are amortized over their respective estimated useful lives to their estimated residual values and reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. In general, customer relationships are amortized over their estimated useful lives using an accelerated method, which takes into consideration expected customer attrition rates. Contractual relationships are generally amortized over their respective contractual lives. Useful lives of computer software range from three to ten years. Trademarks and tradenames are generally considered intangible assets with indefinite lives and are reviewed for impairment at least annually. Capitalized software development costs and purchased software are recorded at cost and amortized using the straight-line method over their estimated useful life.

We recorded $17.1 million of impairment expense related to the Village Inn and Bakers Square tradenames within our Restaurant Group in the year ended December 31, 2019. We recorded $5.8 million of impairment expense related to a tradename and an abandoned software project in our Restaurant Group in the year ended December 31, 2018. We recorded $2.9 million of impairment expense related to a tradename in our Restaurant Group in the year ended December 31, 2017. The impairments are recorded within Other operating expenses on our Consolidated and Combined Statement of Operations for the years then ended.

Property and Equipment, net

Property and equipment, net are recorded at cost, less accumulated depreciation. Depreciation is computed primarily using the straight-line method based on the estimated useful lives of the related assets: thirty to forty years for buildings and three to twenty-five years for furniture, fixtures and equipment. Leasehold improvements are amortized on a straight-line basis over the lesser of the term of the applicable lease or the estimated useful lives of such assets.

In our Restaurant Group, all direct external costs associated with obtaining the land, building and equipment for each new restaurant, as well as construction period interest, are capitalized. Direct external costs associated with obtaining the dining room and kitchen equipment, signage and other assets and equipment are also capitalized. In addition, for each new restaurant and re-branded restaurant, a portion of the internal direct costs of its real estate and construction department are also capitalized.

Property and equipment are reviewed for impairment when events or circumstances indicate that the carrying amounts may not be recoverable. We recorded $6.6 million, $8.1 million, and $6.9 million of impairment expense related to Property and equipment in our Restaurant Group segment in the years ended December 31, 2019, 2018 and 2017, respectively, which is recorded within Other operating expenses on our Consolidated and Combined Statement of Operations for the years then ended.

Insurance Reserves

Our Restaurant Group companies are currently self-insured for a portion of its workers' compensation, general liability, and liquor liability losses (collectively, casualty losses) as well as certain other insurable risks. To mitigate the cost of the Restaurant Group's exposures for certain property and casualty losses, we make annual decisions to either retain the risks of loss up to a certain maximum per occurrence, aggregate loss limits negotiated with its insurance carriers, or fully insure those risks. Our Restaurant Group companies are also self-insured for healthcare claims for eligible participating employees subject to certain deductibles and limitations. We have accounted for such retained liabilities for casualty losses and healthcare claims, including reported and incurred but not reported claims, based on information provided by third-party actuaries. As of December 31, 2019, our Restaurant Group companies were committed under letters of credit totaling $16.3 million issued primarily in connection with casualty insurance programs.

Income Taxes

We recognize deferred tax assets and liabilities for temporary differences between the financial reporting basis and the tax basis of our assets and liabilities and expected benefits of utilizing net operating loss and credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The impact of changes in tax rates and laws on deferred taxes, if any, is applied to the years during which temporary differences are expected to be settled and reflected in the financial statements in the period enacted.

We recognize the benefits of uncertain tax positions in the financial statements only after determining a more likely than not probability that the uncertain tax positions will withstand challenge, if any, from taxing authorities. When facts and circumstances change, we reassess these probabilities and record any changes in the financial statements as appropriate. Uncertain tax positions are accounted for by determining the minimum recognition threshold that a tax position is required to meet before being recognized in the financial statements. This determination requires the use of judgment in assessing the timing and amounts of deductible and taxable items. Tax positions that meet the more likely than not recognition threshold are recognized and measured as the largest amount of tax benefit that is more than 50% likely to be realized upon settlement with a taxing authority that has full knowledge of all relevant information. The Company recognizes interest and penalties accrued related to unrecognized tax benefits as components of income tax expense.

Parent Investment in FNFV

Parent investment in FNFV on the Consolidated and Combined Statement of Equity represents FNF's historical investment in the Company, the Company's accumulated net earnings after taxes prior to the Split-Off, and the net effect of transactions with and allocations from FNF prior to the Split-Off. In conjunction with the Split-Off, Parent investment in FNFV was reclassified to Additional paid-in capital.

Revenue Recognition

Refer to Note U.

Advertising Costs

The Company expenses advertising and marketing costs as incurred, except for certain advertising production costs that are initially capitalized and subsequently expensed the first time the advertising takes place. During the years ended December 31, 2019, 2018, and 2017, the Company incurred $30.0 million, $34.7 million, and $35.5 million of advertising and marketing costs, respectively, related to advertising in our Restaurant Group and in our real estate operations. These costs are included in Other operating expenses on the Consolidated and Combined Statements of Operations.

Comprehensive Earnings

We report comprehensive earnings in accordance with GAAP on the Consolidated and Combined Statements of Comprehensive Earnings. Total comprehensive earnings are defined as all changes in shareholders' equity during a period, other than those resulting from investments by and distributions to shareholders. While total comprehensive earnings is the activity in a period and is largely driven by net earnings in that period, accumulated other comprehensive earnings or loss represents the cumulative balance of other comprehensive earnings, net of tax, as of the balance sheet date. Amounts reclassified to net earnings relate to realized losses and are included in Realized gains and losses, net on the Consolidated and Combined Statements of Operations. Our policy is to release income tax effects from accumulated other comprehensive income at such time as the earnings or loss of the related activity are recognized in earnings (e.g., upon sale of an investment).

Changes in the balance of other comprehensive earnings by component are as follows:

	Unrealized gain (loss) on investments and other financial instruments, net (excluding investments in unconsolidated affiliates)	Unrealized (loss) gain relating to investments in unconsolidated affiliates	Total Accumulated Other Comprehensive (Loss) Earnings
		(In millions)	
Balance December 31, 2017	$ (6.9)	$ (64.1)	$ (71.0)
Other comprehensive earnings (loss)	0.9	(12.0)	(11.1)
Adjustment for adoption of ASU 2018-02	(1.6)	(14.5)	(16.1)
Reclassification adjustments	7.0	24.0	31.0
Balance December 31, 2018	(0.6)	(66.6)	(67.2)
Other comprehensive earnings	0.1	7.1	7.2
Cumulative effect of adoption of accounting standards by unconsolidated affiliates	—	(5.0)	(5.0)
Reclassification adjustments	—	19.1	19.1
Balance December 31, 2019	$ (0.5)	$ (45.4)	$ (45.9)

Stock-Based Compensation Plans

Stock-based compensation expense includes restricted stock awards granted to certain members of management in Cannae common stock, as well as in historical FNFV Group tracking stock. We account for stock-based compensation plans using the fair value method. Under the fair value method of accounting, compensation cost is measured based on the fair value of the award at the grant date, using quoted market prices of the underlying stock, and recognized over the service period. See Note O.

Earnings Per Share

Basic earnings per share, as presented on the Consolidated and Combined Statement of Operations, is computed by dividing net earnings available to common shareholders by the weighted average number of common shares outstanding during the period.

In periods when earnings are positive, diluted earnings per share is calculated by dividing net earnings available to common shareholders by the weighted average number of common shares outstanding plus the impact of assumed conversions of potentially dilutive securities. For periods when we recognize a net loss, diluted earnings per share is equal to basic earnings per share as the impact of assumed conversions of potentially dilutive securities is considered to be antidilutive. We have granted certain shares of restricted stock, which have been treated as common share equivalents for purposes of calculating diluted earnings per share for periods in which positive earnings have been reported.

Instruments that provide the ability to purchase shares of our common stock that are antidilutive are excluded from the computation of diluted earnings per share. For the year ended December 31, 2019 and 2018, no antidilutive shares were outstanding. For the year ended December 31, 2017, 0.1 million shares of restricted stock were excluded from the calculation of diluted earnings per share as they were antidilutive.

Note B. Leases

We adopted Topic 842 on January 1, 2019 using a modified retrospective approach. Prior years continue to be reported under Accounting Standards Codification ("ASC") Topic 840. See Note S for further discussion of the current period effects of adoption of *Topic 842*.

We are party to operating lease arrangements primarily for leased real estate for restaurants and office space. Right-of-use assets and lease liabilities related to operating leases under ASC 842 are recorded at commencement when we are party to a contract that conveys the right for the Company to control an asset for a specified period of time. We are not a party to any material contracts considered finance leases. Right-of-use assets and lease liabilities related to operating leases are recorded as Lease assets and Lease liabilities, respectively, on the Consolidated and Combined Balance Sheet as of December 31, 2019.

Our material operating leases range in term from one year to eighteen years. As of December 31, 2019, the weighted-average remaining lease term of our operating leases was approximately eight years. Leases with an initial term of twelve months or less are not recorded on the balance sheet and we recognize lease expense for these leases on a straight-line basis over the lease term.

Our operating lease agreements do not contain any material buyout options, residual value guarantees or restrictive covenants.

Most of our leases include one or more options to renew, with renewal terms that can extend the lease term by varying amounts. The exercise of lease renewal options is at our sole discretion. We include options to renew, not to exceed a total lease term of twenty years, in our measurement of right-of-use assets and lease liabilities when they are considered reasonably certain of exercise. We consider a lease probable for renewal when the duration of the lease extensions are in the foreseeable future and related to assets for which continued use is reasonably assured.

Excluding certain immaterial classes of leases in our Restaurant Group, we do not separate lease components from non-lease components for any of our right of use assets.

Our operating lease liabilities are determined by discounting future lease payments using a discount rate which represents our best estimate of the incremental borrowing rate our subsidiaries would have to pay to borrow money to finance the asset over the underlying lease term and for an amount equal to the lease payments. Our discount rate is based on interest rates associated with comparable public company secured debt for companies similar to our operating subsidiaries and of similar duration to the underlying lease. As of December 31, 2019, the weighted-average discount rate used to determine our operating lease liabilities was 7.67%.

Our lease costs are directly attributable to restaurant operations, primarily for real estate and to a lesser extent certain restaurant equipment. $58.5 million of operating lease costs are included in Cost of restaurant revenue on the Consolidated and Combined Statement of Operations for the year ended December 31, 2019.

During the year ended December 31, 2019, we recorded impairment expense of $21.1 million related to lease assets in our Restaurant Group which is recorded within Other operating expenses on our Consolidated and Combined Statement of Operations.

We do not have any material short term lease costs, variable lease costs, or sublease income.

Future payments under operating lease arrangements accounted for under ASC Topic 842 as of December 31, 2019 are as follows (in millions):

2020	$ 56.1
2021	51.3
2022	40.8
2023	34.0
2024	23.8
Thereafter	97.3
Total lease payments, undiscounted	$ 303.3
Less: discount	62.1
Total operating lease liability as of December 31, 2019, at present value	$ 241.2
Less: operating lease liability as of December 31, 2019, current	41.5
Operating lease liability as of December 31, 2019, long term	$ 199.7

Future payments under operating lease arrangements accounted for under ASC Topic 840 as of December 31, 2018, excluding payments related to T-System which is now reflected in discontinued operations, are as follows (in millions):

2019	$ 61.3
2020	57.0
2021	51.3
2022	40.7
2023	34.1
Thereafter	133.2
Total future minimum operating lease payments	$ 377.6

Rent expense incurred under operating leases during the years ended December 31, 2018 and 2017 recorded pursuant to ASC Topic 840 was $60.8 million and $61.7 million, respectively. No abandoned lease charges were recorded in the years ended December 31, 2018 or 2017.

Note C. Fair Value Measurements

The fair value hierarchy established by the accounting standards on fair value measurements includes three levels, which are based on the priority of the inputs to the valuation technique. The fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). If the inputs used to measure the financial instruments fall within different levels of the hierarchy, the categorization is based on the lowest level input that is significant to the fair value measurement of the instrument. Financial assets and liabilities that are recorded in the Consolidated and Combined Balance Sheets are categorized based on the inputs to the valuation techniques as follows:

Level 1. Financial assets and liabilities whose values are based on unadjusted quoted prices for identical assets or liabilities in an active market that we have the ability to access.

Level 2. Financial assets and liabilities whose values are based on quoted prices in markets that are not active or model inputs that are observable either directly or indirectly for substantially the full term of the asset or liability.

Level 3. Financial assets and liabilities whose values are based on model inputs that are unobservable.

Recurring Fair Value Measurements

The following table presents our fair value hierarchy for those assets and liabilities measured at fair value on a recurring basis as of December 31, 2019 and 2018, respectively:

	December 31, 2019			
	Level 1	Level 2	Level 3	Total
	(In millions)			
Assets:				
Fixed-maturity securities available for sale:				
Corporate debt securities	$ —	$ —	$ 19.2	$ 19.2
Total assets	$ —	$ —	$ 19.2	$ 19.2

	December 31, 2018			
	Level 1	Level 2	Level 3	Total
	(In millions)			
Assets:				
Fixed-maturity securities available for sale:				
Corporate debt securities	$ —	$ —	$ 17.8	$ 17.8
Total assets	$ —	$ —	$ 17.8	$ 17.8

Our Level 3 fair value measurement for our fixed maturity securities available for sale are provided by a single third-party pricing service. Depending on security specific characteristics, either an income or a contingent claims approach was utilized in determining fair value of our Level 3 fixed-maturity securities available for sale. Discount rates are the primary unobservable inputs utilized for the securities valued using an income approach. The discount rates used are based on company-specific risk premiums, public company comparable securities, and leveraged loan indices. The discount rates used in our determination of the fair value of our Level 3 fixed-maturity securities available for sale varies by security type and ranged from 14.8% to 16.0% and had a weighted average of 16.0% as of December 31, 2019. Based on the total fair value of our Level 3 fixed-maturity securities available for sale as of December 31, 2019, changes in the discount rate utilized will not result in a fair value significantly different than the amount recorded.

The following table presents a summary of the changes in the fair values of Level 3 assets, measured on a recurring basis.

	Corporate debt securities
Fair value, December 31, 2017	$ —
Transfers from Level 2	21.4
Paid-in-kind dividends (1)	0.3
Accretion of original purchase discount (1)	0.7
Impairment (2)	(12.5)
Reclassification of impairment previously included in other comprehensive earnings to net earnings	7.9
Fair value, December 31, 2018	$ 17.8
Paid-in-kind dividends (1)	0.2
Impairment (2)	(0.4)
Net valuation gain included in other comprehensive earnings (3)	1.6
Fair value, December 31, 2019	$ 19.2

(1) Included in Interest and investment income on the Consolidated and Combined Statements of Operations
(2) Included in Realized gains, net on the Consolidated and Combined Statements of Operations
(3) Included in Unrealized gain (loss) on investments and other financial instruments, net (excluding investments in unconsolidated affiliates) on the Consolidated and Combined Statements of Comprehensive Earnings

Transfers into or out of the Level 3 fair value category occur when unobservable inputs become more or less significant to the fair value measurement or upon a change in valuation technique. For the year ended December 31, 2018, transfers between Level 2 and Level 3 were based on changes in significance of unobservable inputs used associated with a change in the service provider and in the valuation technique used to value our corporate debt securities. The Company's policy is to recognize transfers between levels in the fair value hierarchy at the end of the reporting period in which they occur.

All of the unrealized gain (loss) on investments and other financial instruments, net (excluding investments in unconsolidated affiliates) on our Consolidated Statements of Comprehensive Income for the year ended December 31, 2019 and 2018 relate to fixed maturity securities considered Level 3 fair value measures.

Additional information regarding the fair value of our investment portfolio is included in Note D.

The carrying amounts of trade receivables and notes receivable approximate fair value due to their short-term nature. The fair value of our notes payable is included in Note K.

Note D. Investments

Investments in Unconsolidated Affiliates

Investments in unconsolidated affiliates recorded using the equity method of accounting as of December 31, 2019 and 2018 consisted of the following (in millions):

	Ownership at December 31, 2019	2019	2018
Dun & Bradstreet	24.3%	$ 385.9	$ —
Ceridian	16.4%	309.5	359.7
Other	various	141.1	37.5
Total		$ 836.5	$ 397.2

Equity in earnings (losses) of unconsolidated affiliates for the periods indicated consisted of the following (in millions):

	Year Ended December 31,		
	2019	2018	2017
Ceridian	$ 16.4	$ (20.5)	$ 1.9
Dun & Bradstreet	(132.8)	—	—
Other	1.3	4.4	1.5
Total	$ (115.1)	$ (16.1)	$ 3.4

Dun & Bradstreet

Of our previously disclosed $900.0 million commitment to purchase common equity of the ultimate parent of D&B, we retained and funded a $505.6 million investment (the "D&B Investment"), representing 24.5% of the outstanding common equity of Dun & Bradstreet's ultimate parent, and syndicated the remainder to other investors. We funded the D&B Investment through a combination of cash on hand and borrowings on the Margin Loan and FNF Revolver (each, as defined below in Note F). On the closing date, we recorded income of $9.1 million for syndication fees from D&B which is recorded in Other income in our Consolidated and Combined Statement of Operations for the year ended December 31, 2019. We also recorded a reduction in our investment of $2.9 million for our ratable portion of the syndication fees capitalized as equity issuance costs by Dun & Bradstreet.

In April and August 2019, we syndicated an additional $2.6 million and $0.5 million, respectively, of our D&B Investment to other investors. The syndications resulted in a reduction in the Company's ownership to 24.3% of the outstanding common equity of Dun & Bradstreet's ultimate parent.

On June 27, 2019, we made an additional pro-rata investment of $23.5 million in D&B's ultimate parent. Dun & Bradstreet used the proceeds to partially fund its acquisition of Lattice (see Note A).

Summarized financial information for the ultimate parent of Dun & Bradstreet, Star Parent, L.P, for the relevant dates and time periods included in Investments in unconsolidated affiliates and Equity in losses of unconsolidated affiliates in our Consolidated and Combined Balance Sheets and Statements of Operations, respectively, is presented below. Our net earnings for the year ended December 31, 2019 include the Company's equity in Dun & Bradstreet's losses for the period from February 8, 2019, the date of the D&B Investment, through December 31, 2019.

	December 31, 2019
	(In millions)
Total current assets	$ 418.6
Goodwill and other intangible assets, net	8,091.9
Other assets	602.1
Total assets	$ 9,112.6
Current liabilities	$ 1,090.4
Long-term debt	3,818.9
Other non-current liabilities	1,595.9
Total liabilities	6,505.2
Preferred equity	1,030.6
Total capital	1,576.8
Total liabilities and equity	$ 9,112.6

	Year ended December 31, 2019
	(In millions)
Total revenues	$ 1,413.9
Loss before income taxes	(540.0)
Net loss	(425.8)
Dividends attributable to preferred equity and noncontrolling interest expense	(120.5)
Net loss attributable to Dun & Bradstreet	(546.3)

Ceridian

Based on quoted market prices, the aggregate value of our ownership of Ceridian common stock was $1.6 billion as of December 31, 2019.

As of December 31, 2019, we hold less than 20% of the outstanding common equity of Ceridian but continue to account for our investment under the equity method because we continue to exert significant influence through our 16.4% ownership, representation on its board of directors and, in combination with other of its equity sponsors, control of the size of its board of directors.

Available for Sale Securities

The carrying amounts and fair values of our available for sale securities at December 31, 2019 and 2018 are as follows:

	December 31, 2019				
	Carrying Value	Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
	(In millions)				
Fixed maturity securities available for sale:					
Corporate debt securities	$ 19.2	$ 19.6	$ 0.7	$ (1.1)	$ 19.2
Total	$ 19.2	$ 19.6	$ 0.7	$ (1.1)	$ 19.2

	December 31, 2018				
	Carrying Value	Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
	(In millions)				
Fixed maturity securities available for sale:					
Corporate debt securities	$ 17.8	$ 18.8	$ 0.9	$ (1.9)	$ 17.8
Total	$ 17.8	$ 18.8	$ 0.9	$ (1.9)	$ 17.8

The cost basis of fixed maturity securities available for sale includes an adjustment for amortized premium or discount since the date of purchase.

As of December 31, 2019, $16.9 million of our fixed maturity securities are corporate debt securities with a maturity of greater than one year, but less than five years, and $2.3 million are corporate debt securities with a maturity of less than 1 year. Expected maturities may differ from contractual maturities because certain borrowers have the right to call or prepay obligations with or without call or prepayment penalties.

Net unrealized losses on investment securities and the fair value of the related securities, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position at December 31, 2019 were as follows (in millions):

	Less than 12 Months	
	Fair Value	Unrealized Losses
Corporate debt securities	$ 10.8	$ (1.1)
Total temporarily impaired securities	$ 10.8	$ (1.1)

During the year ended December 31, 2019 and 2018, we incurred $0.4 million and $12.5 million, respectively, of other-than-temporary impairment charges relating to corporate debt securities, which is included in Realized gains (losses), net on the Consolidated and Combined Statements of Operations. The impairments recorded relate to a corporate debt holding that has experienced a prolonged period of declining earnings and which we are uncertain of our ability to recover our initial investment. The entire loss represents credit loss recognized in earnings and no portion of the loss was included in other comprehensive earnings.

During the year ended December 31, 2017 we incurred no other-than-temporary impairment charges relating to available for sale investments.

As of December 31, 2019, we held $2.2 million of corporate debt securities for which an other-than-temporary impairment had been previously recognized. It is possible that future events may lead us to recognize potential future impairment losses related to our investment portfolio and that unanticipated future events may lead us to dispose of certain investment holdings and recognize the effects of any market movements in our results of operations.

Short-term Investments

Short-term investments consist primarily of commercial paper and short-duration U.S. agency securities, which have an original maturity of greater than three months but less than one year. Short-term investments are carried at amortized cost, which approximates fair value.

Investments Without Readily Determinable Fair Values

We account for our investment in QOMPLX's preferred equity as an investment in equity securities at cost less impairment, if any, plus or minus changes resulting from observable price changes in orderly market transactions. As of December 31, 2019, we have $22.5 million recorded for our investment in the preferred equity of QOMPLX. We have not recorded any upward or downward adjustments to our investment in QOMPLX's preferred equity.

Note E. Property and Equipment

Property and equipment consists of the following:

	December 31,	
	2019	2018
	(In millions)	
Furniture, fixtures and equipment	$ 166.0	$ 190.0
Leasehold improvements	158.9	137.8
Land	40.6	34.4
Buildings	28.9	27.2
Other	6.1	2.4
	400.5	391.8
Accumulated depreciation and amortization	(237.9)	(216.3)
	$ 162.6	$ 175.5

Depreciation expense on property and equipment was $35.8 million, $38.0 million, and $41.8 million for the years ended December 31, 2019, 2018, and 2017, respectively.

Note F. Goodwill

Goodwill consists of the following:

	Restaurant Group	Corporate and Other	Total
		(in millions)	
Balance, December 31, 2017	$ 103.2	$ —	$ 103.2
Impairment	(26.7)	—	(26.7)
Balance, December 31, 2018	$ 76.5	$ —	$ 76.5
Impairment	(10.4)	—	(10.4)
Balance, December 31, 2019	$ 66.1	$ —	$ 66.1

Note G. Variable Interest Entities

The Company, in the normal course of business, engages in certain activities that involve variable interest entities ("VIEs"), which are legal entities in which the equity investors as a group lack any of the characteristics of a controlling interest. The primary beneficiary of a VIE is generally the enterprise that has both the power to direct the activities most significant to the economic performance of the VIE and the obligation to absorb losses or receive benefits that could potentially be significant to the VIE. The Company evaluates its interest in certain entities to determine if these entities meet the definition of a VIE and whether the Company is the primary beneficiary and should consolidate the entity based on the variable interests it held both at inception and when there is a change in circumstances that requires a reconsideration. If the Company is determined to be the primary beneficiary of a VIE, it must account for the VIE as a consolidated subsidiary. If the Company is determined not to be the primary beneficiary of a VIE but holds a variable interest in the entity, such variable interests are accounted for under accounting standards as deemed appropriate. As of and for the years ended December 31, 2019, 2018 and 2017, we are not the primary beneficiary of any VIEs.

Unconsolidated VIEs

The table below summarizes select information related to variable interests held by the Company as of December 31, 2019 and 2018, of which we are not the primary beneficiary:

	2019		2018	
	Total Assets	Maximum Exposure	Total Assets	Maximum Exposure
	(in millions)			
Investments in unconsolidated affiliates	440.2	440.2	9.2	9.2

Investments in Unconsolidated Affiliates

The Company holds variable interests in certain unconsolidated affiliates, outlined in the table above, which are primarily comprised of Dun & Bradstreet (see Note D), the Equity Fund and, to a lesser extent, funds that hold minority ownership interests primarily in healthcare-related entities. The principal risk to which these investments and funds are exposed is the credit risk of the underlying investees. We do not provide any implicit or explicit liquidity guarantees or principal value guarantees to these VIEs. The assets are included in investments in unconsolidated affiliates on the Consolidated and Combined Balance Sheets and accounted for under the equity method of accounting.

Note H. Other Intangible Assets

Other intangible assets consist of the following:

	December 31,	
	2019	2018
	(In millions)	
Trademarks and tradenames	$ 53.9	$ 71.0
Software	17.1	17.0
Franchise rights	7.2	7.2
Customer relationships and contracts	5.2	5.2
Other	—	44.2
	83.4	144.6
Accumulated amortization	(20.3)	(52.2)
	$ 63.1	$ 92.4

Amortization expense for amortizable intangible assets, which consist primarily of software, franchise rights, and customer relationships and contracts, was $4.9 million, $8.3 million, and $4.4 million for the years ended December 31, 2019, 2018 and 2017, respectively. Estimated amortization expense for the next five years for assets owned at December 31, 2019, is $3.7 million in 2020, $2.7 million in 2021, $0.9 million in 2022, $0.7 million in 2023 and $0.7 million in 2024. As of December 31, 2019 and 2018, we had $52.1 million and $69.2 million, respectively of indefinite-lived tradenames.

Note I. Inventory

Inventory consists of the following:

	December 31,	
	2019	2018
	(In millions)	
Bakery inventory:		
Raw materials	$ 2.8	$ 6.8
Semi-finished and finished goods	3.6	5.6
Packaging	1.2	2.4
Obsolescence reserve	(0.9)	(3.0)
Total bakery inventory	6.7	11.8
Restaurant and other inventory	9.4	10.3
Other, non-restaurant inventory	0.2	0.2
Total inventory	$ 16.3	$ 22.3

Note J. Accounts Payable and Other Accrued Liabilities

Accounts payable and other accrued liabilities, current consist of the following:

	December 31,	
	2019	2018
	(In millions)	
Accrued payroll and employee benefits	$ 25.3	$ 22.8
Trade accounts payable	19.6	23.0
Accrued casualty insurance expenses	13.3	16.7
Tax liabilities, excluding income taxes payable	11.9	13.4
Other accrued liabilities	16.3	19.7
	$ 86.4	$ 95.6

Accounts payable and other accrued liabilities, long term consist of the following:

	December 31,	
	2019	2018
	(In millions)	
Restaurant Group Financing Obligations	$ 27.5	$ —
Unfavorable lease liability and rent payable	—	34.9
Other accrued liabilities	16.4	22.2
	$ 43.9	$ 57.1

Note K. Notes Payable

Notes payable consists of the following:

	December 31,	
	2019	2018
	(In millions)	
99 Term Loan	30.9	36.1
99 Revolver	3.0	—
DLOC Loan	—	—
Margin Facility	75.0	—
FNF Revolver	—	—
Brasada Interstate Loans	13.4	11.7
Other	4.8	0.3
Notes payable, total	$ 127.1	$ 48.1
Less: Notes payable, current	7.0	5.9
Notes payable, long term	$ 120.1	$ 42.2

At December 31, 2019, the carrying value of our outstanding notes payable approximated fair value. The respective carrying values of the loans under the 99 Restaurants Credit Facility and the B Note, Development Loan and Line of Credit Loan pursuant to the Interstate Credit Agreement, each as defined below, approximate fair value as they are variable rate instruments with monthly reset periods which reflect current market rates. The revolving credit facilities are considered Level 2 financial liabilities. The fixed-rate A Note, as defined below, pursuant to the Interstate Credit Agreement approximates fair value as of December 31, 2019.

Notes Payable

On December 21, 2018, 99 Restaurants LLC, a direct, wholly-owned subsidiary of 99 Restaurants entered into the 99 Restaurants Credit Facility with Fifth Third Bank and other lenders thereto. The 99 Restaurants Credit Facility provides for (i) a maximum revolving loan of $15.0 million (the “99 Revolver”) with a maturity date of December 21, 2023; (ii) a maximum term loan of $37.0 million (the "99 Term Loan") with monthly installment repayments through November 30, 2023 and a maturity date of December 21, 2023 for the outstanding unpaid principal balance; and (iii) a maximum Development Line of Credit loan (the

“DLOC Loan”) of up to $10.0 million to be advanced from time to time through December 21, 2020, with quarterly installment payments through (a) September 30, 2024 with respect to DLOC Loans borrowed prior to December 21, 2019, and (b) September 30, 2025 with respect to DLOC Loans borrowed on or after December 21, 2019. Interest on the 99 Credit Facility is based on, at our option, an applicable margin of (x) two and one half percent (2.50%) per annum with respect to Base Rate Loans, as provided therein, and (y) three and one half percent (3.50%) per annum with respect to LIBOR Loans, as provided therein. The 99 Restaurants Credit Facility also allows for 99 Restaurants LLC to request up to $5.0 million of letters of credit commitments and $2.5 million in swingline debt from Fifth Third Bank as the administrative agent. The obligations of the 99 Restaurants LLC under the 99 Restaurants Credit Facility are guaranteed by 99 Restaurants. The 99 Restaurants Credit Facility is subject to affirmative, negative and financial covenants customary for financings of this type, including, among other things, limits on the Borrower’s creation of liens, sales of assets, incurrence of indebtedness, restricted payments and transactions with affiliates. The 99 Restaurants Credit Facility includes customary events of default for facilities of this type (with customary grace periods, as applicable). The 99 Restaurants Credit Facility provides that, upon the occurrence of an event of default, Fifth Third Bank, as administrative agent, may (i) declare the principal of, and any and all accrued and unpaid interest and all other amounts owed in respect of, the loans immediately due and payable, (ii) terminate loan commitments and (iii) exercise all other rights and remedies available to Fifth Third Bank or the lenders under the loan documents. Proceeds of $36.2 million for the 99 Term Loan were received at closing and primarily used to repay the remaining balance outstanding under an intercompany credit facility. As of December 31, 2019, interest on the 99 Term Loan and 99 Revolver is payable monthly at a rate of 5.25% and 5.38%, respectively, and there is $22.0 million available to borrow under the 99 Revolver and DLOC Loan. On February 26, 2020, 99 Restaurants repaid $10.0 million of the outstanding balance under the 99 Term Loan.

On November 7, 2018, Cannae Funding, LLC (the "Borrower"), a wholly-owned special purpose subsidiary of the Company, entered into a Margin Loan Agreement (the "Original Loan Agreement"), and certain other related agreements, with Credit Suisse AG (in such capacity, "Administrative Agent") and other lenders thereto. On December 18, 2019, the Borrower entered into an Amended and Restated Margin Loan Agreement (the “Amended Loan Agreement”) with the lenders thereto, the Administrative Agent, and others which amended the Original Loan Agreement. Pursuant to the Amended Loan Agreement, the Borrower may borrow up to $300.0 million (the "Margin Facility") in term loans at an interest rate of the three-month LIBOR plus an applicable margin. Interest on term loans under the Margin Facility is payable in-kind or cash at the Borrower's election. The Original Loan Agreement was secured by a first priority lien on 25.0 million shares of Ceridian held by the Company which was contributed to the Borrower prior to any draws under the Margin Facility. On November 13, 2019 and December 18, 2019, 5,000,000 and 200,000 shares, respectively, of Ceridian were released from such lien. Accordingly, the Amended Loan Agreement is secured by a first priority lien on 19,800,000 shares of Ceridian. The Margin Facility is subject to maintenance and margin LTV ratios pursuant to which the Borrower will be required to maintain a certain loan to value ratio (based on the value of Ceridian common stock held by Borrower). In the event that this ratio is not maintained, the Borrower must post additional cash collateral under the Loan Agreement and/or elect to repay a portion of the term loans thereunder. The Amended Loan Agreement contains customary representations and warranties, covenants, event-of-default, and margin maintenance provisions for financings of this nature which, subject to certain terms and conditions, can result in the acceleration of the principal amount of, and accrued interest on, all outstanding term loans under the Margin Facility upon occurrence. On December 18, 2019, the Borrower repaid $75.0 million of the outstanding balance under the Margin Facility. As of December 31, 2019, $75.0 million was outstanding under the Margin Facility which accrues interest at a rate of 4.7% and there was $225 million available to borrow under the Margin Facility.

On February 18, 2020, we repaid the remaining $75.0 million outstanding under the Margin Facility and terminated the Amended Loan Agreement. Accordingly, we have no borrowing capacity and all of the Company's holdings of Ceridian common stock have been released from the first priority lien under the Margin Facility.

On January 29, 2016, FNF NV Brasada, LLC, an Oregon limited liability company and majority-owned subsidiary of Cannae ("NV Brasada"), entered into a credit agreement with an aggregate borrowing capacity of $17.0 million (the "Interstate Credit Agreement") originally with Bank of the Cascades, as lender. The Interstate Credit Agreement provides for (i) a $12.5 million acquisition loan (the "Acquisition Loan"), (ii) a $3.0 million development loan (the "Development Loan"), and (iii) a $1.5 million line of credit loan (the "Line of Credit Loan", and collectively with the Acquisition Loan and the Development Loan, the "Interstate Loans"). On June 13, 2018, the Interstate Credit Agreement was modified to add an additional line of credit of $3.6 million the ("C Note") and to assign the loan from the Bank of the Cascades to First Interstate Bank. Pursuant to the Acquisition Loan, NV Brasada executed a $6.25 million "A Note", which accrues interest at a rate of 4.51% per annum and matures on the tenth anniversary of the issuance thereof, and a $6.25 million "B Note", which accrues interest at the rate of LIBOR plus 225 basis points, adjusted monthly, and matures on the tenth anniversary of the issuance thereof. NV Brasada makes equal monthly payments of principal and interest under the Acquisition Loan. Each of the Development Loan and the Line of Credit Loan accrue interest at the rate of LIBOR plus 225 basis points, adjusted monthly, and mature on the second anniversary of the respective issuances thereof. NV Brasada makes equal monthly payments of interest under the Development Loan and the Line of Credit Loan. The Interstate Loans are secured by certain single-family residential lots that can be sold for construction, owned by NV Brasada, and certain other operating assets owned by NV Brasada. The Company does not provide any guaranty or stock pledge under the Interstate Credit Agreement. As of December 31, 2019, there was $13.4 million, net of debt issuance costs, outstanding under the Interstate Credit Agreement; the B Note and Line of Credit Loan incurred interest at 3.97%; the C Note had $2.1 million outstanding and incurred interest at 3.94%; and there was $3.8 million of aggregate borrowing capacity under the Development Loan and Line of Credit Loan.

On August 19, 2014, Blue Ribbon entered into a credit agreement (the “Blue Ribbon Credit Facility”) with Wells Fargo Bank, National Association as administrative agent, Swingline Lender and Issuing Lender, Bank of America, N.A. as syndication agent and the other financial institutions party thereto. In March 2018, the borrowings outstanding under the Blue Ribbon Credit Facility was assigned to Cannae and subsequently paid off in its entirety.

FNF Revolver

On November 17, 2017, FNF issued to Cannae a revolver note in aggregate principal amount of up to $100.0 million (the "FNF Revolver"). Pursuant to the FNF Revolver, FNF may make one or more loans to us in increments of $1.0 million, with up to $100.0 million outstanding at any time. The FNF Revolver accrues interest at LIBOR plus 450 basis points and matures on the five-year anniversary of the date of the FNF Revolver. The maturity date is automatically extended for additional five-year terms unless notice of non-renewal is otherwise provided by either FNF or Cannae, in their sole discretion. On February 7, 2019, we drew the $100.0 million available and used the proceeds to fund, in part, the Dun & Bradstreet Investment. On June 12, 2019 we repaid to FNF the $100.0 million outstanding under the FNF Revolver. On July 5, 2019, we again drew the $100.0 million available and used the proceeds for general corporate purposes. On September 11, 2019, we again repaid to FNF the $100.0 million outstanding amount under the FNF Revolver. As of December 31, 2019, there was no outstanding balance and $100.0 million of available borrowing capacity under the FNF Revolver.

Gross principal maturities of notes payable at December 31, 2019 are as follows (in millions):

2020	$ 9.0
2021	7.1
2022	82.1
2023	19.8
2024	0.7
Thereafter	9.4
	$ 128.1

Note L. Income Taxes

Income tax expense (benefit) on continuing operations consists of the following:

	Year Ended December 31,		
	2019	2018	2017
	(In millions)		
Current	$ 64.7	$ 27.3	$ (28.4)
Deferred	(40.5)	(12.3)	14.2
	$ 24.2	$ 15.0	$ (14.2)

A reconciliation of the federal statutory rate to our effective tax rate is as follows:

	Year Ended December 31,		
	2019	2018	2017
Federal statutory rate	21.0 %	21.0 %	35.0 %
State income taxes, net of federal benefit	(0.2)	3.6	3.1
Tax credits	(2.6)	(22.7)	8.7
Valuation allowance	0.5	—	6.0
Non-deductible expenses and other, net	0.1	0.2	(4.4)
Non-deductible executive compensation	1.8	67.5	—
Dividends received deduction	—	(34.0)	—
Noncontrolling interests	2.6	35.5	(7.7)
Basis difference in investments	(2.8)	—	—
Tax Reform	—	0.4	(13.4)
Other	(1.0)	3.8	(3.8)
Effective tax rate excluding equity investments	19.4 %	75.3 %	23.5 %
Equity investments	(9.2)	(8.9)	(4.4)
Effective tax rate	10.2 %	66.4 %	19.1 %

The Company’s effective tax rate at December 31, 2019, 2018, and 2017 is 10.2%, 66.4% and 19.1%, respectively. The decrease from 2019 to 2018 primarily relates to the decreased impact of non-deductible executive compensation on pretax income. The increase in 2018 from 2017 primarily relates to increased non-deductible executive compensation expense which was partially offset by a dividends received deduction. Additionally, the impact of the non-controlling interests, permanent items, and tax credits on pretax income was greater in 2018 than the impact of those same items on pretax earnings and losses in 2019 and 2017, respectively.

The significant components of deferred tax assets and liabilities at December 31, 2019 and 2018 consist of the following:

	December 31,	
	2019	2018
	(In millions)	
Deferred tax assets:		
Employee benefit accruals	$ —	$ 0.2
Net operating loss carryforwards	1.1	0.3
Equity investments	—	8.9
Investment securities	—	2.8
Partnerships	54.1	11.1
Accrued liabilities	—	0.1
Other	0.4	0.6
Total gross deferred tax asset	55.6	24.0
Less: valuation allowance	(1.1)	—
Total deferred tax asset	$ 54.5	$ 24.0
Deferred tax liabilities:		
Depreciation	$ —	$ (0.2)
Total deferred tax liability	$ —	$ (0.2)
Net deferred tax asset	$ 54.5	$ 23.8

The Company's net deferred tax asset was $54.5 million and $23.8 million at December 31, 2019, and 2018, respectively. In conjunction with an internal reorganization of the Company whereby Cannae LLC, formerly a disregarded entity under Cannae Holdings, Inc., became a partnership and now holds all of the Company’s investments, our deferred tax assets are now reflected primarily as the book to tax difference in the Company's investment in Cannae LLC. The Company, through its direct and indirect interests, holds a 100% ownership percentage of Cannae LLC.

The increase in our net deferred tax asset as of December 31, 2019 from 2018 is primarily related to book losses from the Company’s investments in Blue Ribbon and D&B, as well as the difference between the book and tax basis for the Company's initial investment in Coding Solutions.

The Company’s gross federal and state NOL carryforwards were $19.7 million and $6.3 million at December 31, 2019 and 2018, respectively. The NOLs expire in various tax years through 2040.

ASC 740 requires that companies assess whether a valuation allowance should be established against their deferred tax assets based on the consideration of all of the available evidence using a “more likely than not” standard. A valuation allowance is established for deferred tax assets if, based on the weight of available evidence, it is more likely than not that some portion or all of the deferred tax assets may not be realized. Management evaluated the Company’s deferred tax assets for recoverability using a consistent approach which considers the relative impact of negative and positive evidence, in particular, the Company’s historical profitability and any projections of future taxable income or potential future tax planning strategies. The Company recorded a valuation allowance of $1.1 million related to state NOLs, as it is more likely than not that the tax benefit of the state NOLs will not be realized before the NOLs expire.

Unrecognized tax benefits are recorded for differences between tax positions the Company takes, or expects to take, on its income tax return compared to the benefit recognized for financial statement purposes. The Company does not have any unrecognized tax benefits as of December 31, 2019, 2018 or 2017.

The Company's federal and state income tax returns for the tax years ended December 31, 2019, 2018 and 2017 remain subject to examination.

Note M. Commitments and Contingencies

Legal Contingencies

In the ordinary course of business, we are involved in various pending and threatened litigation and regulatory matters related to our operations, some of which include claims for punitive or exemplary damages. Our ordinary course litigation includes purported class action lawsuits, which make allegations related to various aspects of our business. From time to time, we also receive requests for information from various state and federal regulatory authorities, some of which take the form of civil investigative demands or subpoenas. Some of these regulatory inquiries may result in the assessment of fines for violations of regulations or settlements with such authorities requiring a variety of remedies. We believe that no actions, other than those discussed below, if any, depart from customary litigation or regulatory inquiries incidental to our business.

Our Restaurant Group companies are a defendant from time to time in various legal proceedings arising in the ordinary course of business, including claims relating to injury or wrongful death under “dram shop” laws that allow a person to sue us based on any injury caused by an intoxicated person who was wrongfully served alcoholic beverages at one of the restaurants; individual and purported class or collective action claims alleging violation of federal and state employment, franchise and other laws; and claims from guests or employees alleging illness, injury or other food quality, health or operational concerns. Our Restaurant Group companies are also subject to compliance with extensive government laws and regulations related to employment practices and policies and the manufacture, preparation, and sale of food and alcohol. We may also become subject to lawsuits and other proceedings, as well as card network fines and penalties, arising out of the actual or alleged theft of our customers' credit or debit card information.

We review lawsuits and other legal and regulatory matters (collectively “legal proceedings”) on an ongoing basis when making accrual and disclosure decisions. When assessing reasonably possible and probable outcomes, management bases its decision on its assessment of the ultimate outcome assuming all appeals have been exhausted. For legal proceedings in which it has been determined that a loss is both probable and reasonably estimable, a liability based on known facts and which represents our best estimate is recorded. As of December 31, 2019 and 2018, we had $0.1 million and $0.2 million, respectively, accrued for legal proceedings. Actual losses may materially differ from the amounts recorded and the ultimate outcome of our pending legal proceedings is generally not yet determinable. While some of these matters could be material to our operating results or cash flows for any particular period in the event of an unfavorable outcome, at present, we do not believe that the ultimate resolution of currently pending legal proceedings, either individually or in the aggregate, will have a material adverse effect on our financial condition, results of operations or cash flows.

Blue Ribbon Reorganization

In conjunction with the Blue Ribbon Reorganization, we have agreed to provide debtor-in-possession financing (the "DIP Loan") of up to $20.0 million to Blue Ribbon and its subsidiaries. Subsequent to December 31, 2019, we have provided $7.5 million of financing to Blue Ribbon and its subsidiaries under the DIP Loan. As part of the Blue Ribbon Reorganization, Blue Ribbon also expects landlords to assert claims relating to the breakage of leases associated with its unprofitable stores which closed prior to the Blue Ribbon Reorganization. As of the date of this Annual Report, we estimate the potential claims from landlords of the stores closed prior to the Blue Ribbon Reorganization to be a maximum of approximately $7.0 million and the liability for professional fees associated with the Blue Ribbon Reorganization to be approximately $5.0 million to $7.0 million. These amounts may change or be compromised as the Blue Ribbon Reorganization progresses.

Unconditional Purchase Obligations

We have certain unconditional purchase obligations, primarily in our Restaurant Group segment. These purchase obligations are with various vendors and primarily related to food and beverage obligations with fixed commitments in regards to the time period of the contract and the quantities purchased with annual price adjustments that can fluctuate. We used both historical and projected volume and pricing as of December 31, 2019 to determine the amount of the obligations. Purchase obligations as of December 31, 2019 are as follows (in millions):

2020	$ 181.9
2021	74.2
2022	15.1
2023	10.3
2024	9.3
Thereafter	10.6
Total purchase commitments	$ 301.4

Note N. Discontinued Operations

T-System

On December 31, 2019, we completed the T-System Contribution. As a result of the T-System Contribution, the results of operations of T-System have been reclassified to discontinued operations for all periods presented in our Consolidated and Combined Statements of Operations. We retained a 22.7% equity interest in Coding Solutions, the company to which we contributed our equity in T-System. We recognized a pre-tax loss of $6.4 million on the sale and $1.4 million in income tax benefit which are included in Net loss from discontinued operations on the Consolidated and Combined Statement of Operations for the year ended December 31, 2019.

A summary of the operations of T-System included in the Consolidated and Combined Statement of Operations is shown below:

	Year Ended December 31,		
	2019	2018	2017
	(in millions)		
Revenues:			
Other operating revenue	$ 50.4	$ 57.9	$ 12.9
Total operating revenues	50.4	57.9	12.9
Operating expenses:			
Personnel costs	33.1	33.1	7.6
Depreciation and amortization	13.7	15.0	3.1
Other operating expenses	19.1	13.8	3.1
Goodwill impairment	35.1	—	—
Total operating expenses	101.0	61.9	13.8
Operating loss	(50.6)	(4.0)	(0.9)
Other expense:			
Realized loss	(6.9)	—	—
Total other expense	(6.9)	—	—
Loss before income taxes	(57.5)	(4.0)	(0.9)
Income tax benefit	(5.7)	(1.9)	(2.4)
Net (loss) earnings from discontinued operations	$ (51.8)	$ (2.1)	$ 1.5
Cash flow from discontinued operations data:			
Net cash provided by operations	$ 2.7	$ 5.2	(a)
Net cash used in investing activities	$ (0.5)	$ (0.1)	(a)

(a) Cash flow information for the period from October 16, 2017, the date on which we initially acquired T-System, through December 31, 2017 is not material for disclosure.

A reconciliation of the financial position of T-System to the Consolidated and Combined Balance Sheet is shown below:

	December 31, 2018
Cash and cash equivalents	$ 7.4
Trade receivables	19.4
Prepaid expenses and other current assets	3.0
Total current assets of discontinued operations	29.8
Property and equipment, net	0.9
Other intangible assets, net	83.3
Goodwill	88.3
Other long term investments and noncurrent assets	10.7
Deferred tax asset	(6.8)
Total noncurrent assets of discontinued operations	176.4
Total assets of discontinued operations	$ 206.2
Accounts payable and other accrued liabilities, current	$ 2.7
Deferred revenue	5.7
Total current liabilities of discontinued operations	8.4
Accounts payable and other accrued liabilities, long term	0.5
Total noncurrent liabilities of discontinued operations	0.5
Total liabilities of discontinued operations	$ 8.9

OneDigital

On June 6, 2017, we closed on the sale of Digital Insurance, Inc. ("OneDigital") for $560.0 million in an all-cash transaction. After repayment of debt, payout to option holders and a minority equity investor and other transaction-related payments, the Company received $331.4 million from the sale, which includes $326.0 million in cash and $5.4 million in purchase price holdback receivable. As a result of the sale, the results of operations of OneDigital have been reclassified to discontinued operations for all periods presented in our Consolidated and Combined Statements of Operations. We recognized a pre-tax gain of $276.0 million on the sale and $126.3 million in income tax expense, which are included in Net earnings from discontinued operations on the Consolidated and Combined Statement of Operations for the year ended December 31, 2017. We received $4.5 million of the purchase price holdback and wrote-off the remainder in the year ended December 31, 2018. We retained no ownership in OneDigital and have no continuing involvement with OneDigital as of the date of the sale.

A summary of the operations of OneDigital included in the Consolidated and Combined Statement of Operations is shown below:

	Year Ended December 31, 2017
	(in millions)
Revenues:	
Other operating revenue	$ 80.9
Total operating revenues	80.9
Operating expenses:	
Personnel costs	56.9
Depreciation and amortization	8.8
Other operating expenses	11.3
Total operating expenses	77.0
Operating income	3.9
Other income (expense):	
Interest expense	(2.9)
Realized gain	276.0
Total other income	273.1
Earnings before income taxes	277.0
Income tax expense	129.3
Net earnings from discontinued operations	$ 147.7
Cash flow from discontinued operations data:	
Net cash provided by operations	$ 17.3
Net cash used in investing activities	(27.3)

Other acquisitions/disposals of businesses, net of cash acquired, on the Consolidated and Combined Statements of Cash Flows for the year ended December 31, 2017 includes $25.9 million related to acquisitions made by OneDigital. Borrowings on the Consolidated and Combined Statements of Cash Flows for the year ended December 31, 2017 includes $23.0 million related to borrowings made by OneDigital. Debt service payments on the Consolidated and Combined Statements of Cash Flows for the year ended December 31, 2017 includes $3.0 million related to debt principal payments made by OneDigital.

Reconciliation to Consolidated Financial Statements

A reconciliation of the net earnings of T-System and OneDigital to the Consolidated and Combined Statements of Operations is shown below:

	Year Ended December 31,		
	2019	2018	2017
	(in millions)		
(Loss) earnings from discontinued operations attributable to T-System	$ (51.8)	$ (2.1)	$ 1.5
Earnings from discontinued operations attributable to One Digital	—	—	147.7
Total (loss) earnings from discontinued operations, net of tax	$ (51.8)	$ (2.1)	$ 149.2

Note O. Employee Benefit Plans

Omnibus Plan

In 2017, we established the 2017 Omnibus Incentive Plan (the “Omnibus Plan”) authorizing the issuance of up to 3.9 million shares of common stock, subject to the terms of the Omnibus Plan. The 2017 Omnibus Plan provides for the grant of stock options, stock appreciation rights, restricted stock, restricted stock units and performance shares, performance units, other cash and stock-based awards and dividend equivalents. As of December 31, 2019, there were 370,520 shares of Cannae restricted stock outstanding (the "CNNE Awards") under the Omnibus Plan. Awards granted are approved by the Compensation Committee of the Board of Directors of the Company.

Restricted stock transactions under the Omnibus Plan in 2019, 2018 and 2017 are as follows:

	Shares	Weighted Average Grant Date Fair Value
Balance, December 31, 2016	—	$ —
Granted	287,059	18.45
Balance, December 31, 2017	287,059	$ 18.45
Granted	384,281	17.98
Vested	(95,685)	18.45
Balance, December 31, 2018	575,655	$ 18.13
Granted	18,642	34.45
Vested	(223,777)	18.18
Balance, December 31, 2019	370,520	$ 18.93

Compensation cost relating to share-based payments is recognized in the Consolidated and Combined Statements of Operations based on the grant-date fair value of each award. Using the fair value method of accounting, compensation cost is measured based on the fair value of the award at the grant date and recognized over the service period of 3 years. Fair value of restricted stock awards and units is based on the grant date value of the underlying stock derived from quoted market prices. Net earnings attributable to Cannae reflects stock-based compensation expense for the CNNE Awards of $4.1 million, $2.0 million and $0.2 million for the years ended December 31, 2019, 2018 and 2017, respectively, which are included in personnel costs on the Consolidated and Combined Statements of Operations. The total fair value of restricted stock awards granted in the years ended December 31, 2019, 2018 and 2017 was $0.6 million, $6.9 million and $5.3 million, respectively.

As of December 31, 2019, the unrecognized compensation cost related to the CNNE Awards is $6.5 million and is expected to be recognized over a period of 1.39 years.

On May 16, 2018, we issued 991,906 shares of our common stock (unrestricted) under the Omnibus Plan for the stock portion of bonuses paid in conjunction with Ceridian's initial public offering.

Note P. Concentration of Risk

Financial instruments that potentially subject us to concentrations of credit risk consist primarily of cash equivalents and trade receivables.

We place cash equivalents with high credit quality financial institutions and, by policy, limit the amount of credit exposure with any one financial institution.

Concentrations of credit risk with respect to trade receivables are limited because a large number of geographically diverse customers make up our customer base, thus spreading the trade receivables credit risk. We control credit risk through monitoring procedures.

Our Restaurant Group companies obtain a majority of their restaurant food products and supplies from five distributors. Although we believe alternative vendors could be found in a timely manner, any disruption of these services could potentially have an adverse impact on operating results.

Note Q. Segment Information

Summarized financial information concerning our reportable segments is shown in the following tables. There are several intercompany corporate related arrangements between our various businesses. The effects of these arrangements including intercompany notes and related interest and any other non-operational intercompany revenues and expenses have been eliminated in the segment presentations below.

On December 31, 2019, we completed the T-System Contribution. As a result, T-System is no longer a reportable segment of the Company and its results of operations have been reclassified as discontinued operations. See Note N.

On February 8, 2019, we completed the D&B Investment. Our chief operating decision maker reviews the full financial results of Dun & Bradstreet for purposes of assessing performance and allocating resources. Accordingly, we consider Dun & Bradstreet a reportable segment and have included the full results of Dun & Bradstreet subsequent to the D&B Investment in the tables below. See below for further discussion of Dun & Bradstreet and our accounting for our related investment.

As of and for the year ended December 31, 2019:

	Restaurant Group	Ceridian	Dun & Bradstreet	Corporate and Other	Ceridian and Dun & Bradstreet Elimination	Total
			(in millions)			
Restaurant revenues	$ 1,043.3	$ —	$ —	$ —	$ —	**$ 1,043.3**
Other revenues	—	824.1	1,413.9	26.7	(2,238.0)	**26.7**
Revenues from external customers	1,043.3	824.1	1,413.9	26.7	(2,238.0)	**1,070.0**
Interest and investment income, including realized gains and losses	3.9	—	2.4	369.4	(2.4)	**373.3**
Total revenues and other income	1,047.2	824.1	1,416.3	396.1	(2,240.4)	**1,443.3**
Depreciation and amortization	38.5	57.1	482.4	2.2	(539.5)	**40.7**
Interest expense	(5.4)	(32.4)	(303.5)	(12.4)	335.9	**(17.8)**
(Loss) earnings from continuing operations, before income taxes and equity in earnings (loss) of unconsolidated affiliates	(80.9)	34.3	(540.0)	318.8	505.7	**237.9**
Income tax expense (benefit)	0.3	(44.4)	(110.0)	23.9	154.4	**24.2**
(Loss) earnings from continuing operations, before equity in earnings (loss) of unconsolidated affiliates	(81.2)	78.7	(430.0)	294.9	351.3	**213.7**
Equity in earnings (losses) of unconsolidated affiliates	—	—	4.2	1.3	(120.6)	**(115.1)**
(Loss) earnings from continuing operations	$ (81.2)	$ 78.7	$ (425.8)	$ 296.2	$ 230.7	**$ 98.6**
Assets	$ 572.8	$ 6,085.7	$ 9,112.6	$ 1,519.4	$ (15,198.3)	**$ 2,092.2**
Goodwill	66.1	1,973.5	2,840.5	—	(4,814.0)	**66.1**

As of and for the year ended December 31, 2018:

	Restaurant Group	Ceridian	Corporate and Other	Ceridian Elimination	Total
	(in millions)				
Restaurant revenues	$ 1,117.8	$ —	$ —	$ —	**$ 1,117.8**
Other revenues	—	740.7	29.7	(740.7)	**29.7**
Revenues from external customers	1,117.8	740.7	29.7	(740.7)	**1,147.5**
Interest and investment income, including realized gains and losses	(2.1)	—	175.2	—	**173.1**
Total revenues and other income	1,115.7	740.7	204.9	(740.7)	**1,320.6**
Depreciation and amortization	44.9	56.6	1.4	(56.6)	**46.3**
Interest expense	(16.0)	(83.2)	11.3	83.2	**(4.7)**
(Loss) earnings from continuing operations, before income taxes and equity in earnings (loss) of unconsolidated affiliates	(96.8)	(26.9)	119.4	26.9	**22.6**
Income tax expense (benefit)	0.6	8.4	14.4	(8.4)	**15.0**
(Loss) earnings from continuing operations, before equity in earnings (loss) of unconsolidated affiliates	(97.4)	(35.3)	105.0	35.3	**7.6**
Equity in earnings of unconsolidated affiliates	0.1	—	4.3	(20.5)	**(16.1)**
(Loss) earnings from continuing operations	$ (97.3)	$ (35.3)	$ 109.3	$ 14.8	**$ (8.5)**
Assets	$ 432.3	$ 5,247.8	$ 1,027.2	$ (5,247.8)	**$ 1,459.5**
Goodwill	76.5	1,927.4	—	(1,927.4)	**76.5**

As of and for the year ended December 31, 2017:

	Restaurant Group	Ceridian	Corporate and Other	Ceridian Elimination	Total
	(in millions)				
Restaurant revenues	$ 1,129.0	$ —	$ —	$ —	**$ 1,129.0**
Other revenues	—	670.8	27.6	(670.8)	**27.6**
Revenues from external customers	1,129.0	670.8	27.6	(670.8)	**1,156.6**
Interest and investment (loss) income, including realized gains and losses	—	—	10.2	—	**10.2**
Total revenues and other income	1,129.0	670.8	37.8	(670.8)	**1,166.8**
Depreciation and amortization	43.6	53.8	2.6	(53.8)	**46.2**
Interest expense	(6.6)	(87.1)	(0.4)	87.1	**(7.0)**
Loss from continuing operations, before income taxes and equity in losses of unconsolidated affiliates	(36.1)	(54.1)	(38.2)	54.1	**(74.3)**
Income tax expense (benefit)	0.7	(49.6)	(14.9)	49.6	**(14.2)**
Loss from continuing operations, before equity in losses of unconsolidated affiliates	(36.8)	(4.5)	(23.3)	4.5	**(60.1)**
Equity in losses of unconsolidated affiliates	0.1	—	1.4	1.9	**3.4**
Loss from continuing operations	$ (36.7)	$ (4.5)	$ (21.9)	$ 6.4	**$ (56.7)**
Assets	$ 501.0	$ 6,729.9	$ 986.2	$ (6,729.9)	**$ 1,487.2**
Goodwill	103.2	1,961.0	—	(1,961.0)	**103.2**

The activities in our segments include the following:

- *Restaurant Group.* This segment consists of the operations of Blue Ribbon, O'Charley's and 99 Restaurants, in which we have 65.4%, 65.4% and 88.5% ownership interests, respectively. Blue Ribbon and its affiliates are the owners and operators of the Village Inn and Bakers Square food service and restaurant concepts, as well as the Legendary Baking bakery operation. O'Charley's and its affiliates are the owners and operators of the O'Charley's restaurant concept. 99 Restaurants and its affiliates are the owners and operators of Ninety Nine Restaurants restaurant concept.

- *Dun & Bradstreet.* This segment consists of our 24.3% ownership interest in Dun & Bradstreet. Dun & Bradstreet is a leading global provider of business decisioning data and analytics. Its mission is to deliver a global network of trust, enabling clients to transform uncertainty into confidence, risk into opportunity and potential into prosperity. Clients embed D&B's trusted, end-to-end solutions into their daily workflows to enhance salesforce productivity, gain visibility into key markets, inform commercial credit decisions and confirm that suppliers are financially viable and compliant with laws and regulations. Dun & Bradstreet's solutions support its clients' mission critical business operations by providing proprietary and curated data and analytics to help drive informed decisions and improved outcomes. Dun & Bradstreet's global commercial database as of December 31, 2019 contained more than 355 million business records. Our chief operating decision maker reviews the full financial results of Dun & Bradstreet for purposes of assessing performance and allocating resources. Thus, we consider Dun & Bradstreet a reportable segment and have included the full results of Dun & Bradstreet subsequent to the D&B Acquisition in the tables above. We account for Dun & Bradstreet using the equity method of accounting, and therefore its results do not consolidate into ours. Accordingly, we have presented the elimination of Dun & Bradstreet's results in the *Ceridian and Dun & Bradstreet Elimination* section of the segment presentation above. Our net earnings for the year ended December 31, 2019, includes our equity in Dun & Bradstreet's losses for the period from February 8, 2019, the date of the D&B Investment, to December 31, 2019. See Note D for further discussion of our investment in Dun & Bradstreet and related accounting.

- *Ceridian.* This segment consists of our 16.4% ownership interest in Ceridian. Ceridian is a global human capital management ("HCM") software company. Dayforce, Ceridian's flagship cloud HCM platform, provides human resources ("HR"), payroll, benefits, workforce management, and talent management functionality. Dayforce is a single application that provides continuous real-time calculations across all modules to enable, for example, payroll administrators access to data through the entire pay period, and managers access to real-time data to optimize work schedules. Dayforce offers a comprehensive range of functionality, including global HR, payroll, benefits, workforce management, and talent management on web and native iOS and Android platforms. Ceridian's Dayforce mobile app enables employees not only to request and to trade schedules, but also to see the real-time impact of schedule changes on their pay. Our chief operating decision maker reviews the full financial results of Ceridian for purposes of assessing performance and allocating resources. Thus, we consider Ceridian a reportable segment and have included the full financial results of Ceridian in the table above. We account for our investment in Ceridian under the equity method of accounting and therefore its results of operations do not consolidate into ours. Accordingly, we have presented the elimination of Ceridian's results in the *Ceridian and Dun & Bradstreet Elimination* section of the segment presentation above.

- *Corporate and Other.* This aggregation of nonreportable segments consists of our share in the operations of certain controlled portfolio companies and other equity investments, activity of the corporate holding company and certain intercompany eliminations and taxes. Total assets for this segment as of December 31, 2018 and 2017 also include the assets of T-System. See Note N *Discontinued Operations* for further details.

Note R. Related Party Transactions

FNF

As a former wholly-owned subsidiary of FNF, we have incurred payables related to historical intercompany transactions, taxes and cost allocations between us and FNF. FNF forgave these historical intercompany receivables due from us which amounted to $4.5 million in the year ended December 31, 2017.

The Company is allocated certain corporate overhead and management services expenses from FNF based on the terms of the CSA and our proportionate share of the expense determined on actual usage and our best estimate of management's allocation of time. Total operating expenses allocated from FNF to us was $1.3 million, $1.3 million and $9.5 million in the years ended December 31, 2019, 2018 and 2017, respectively.

On January 17, 2020, we completed the purchase of our corporate office headquarters in Las Vegas, Nevada from an affiliate of FNF for $9.3 million.

On November 16, 2017, certain subsidiaries of FNF contributed an aggregate of $100.0 million to us (the "FNF Investment") in exchange for 5,706,134 shares of our common stock.

On November 17, 2017, FNF issued to the Company the $100.0 million FNF Revolver. As of December 31, 2019 and 2018, there was no outstanding balance and $100.0 million of borrowing capacity under the FNF Revolver. Refer to Note K for further discussion.

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Our Manager is considered a related party. During the year ended December 31, 2019, we incurred $2.1 million of management fees payable to our Manager for the period from November 1, 2019 to December 31, 2019.

Note S. Recent Accounting Pronouncements

In February 2016, the FASB issued Accounting Standards Update ("ASU") No. 2016-02 *Leases (Topic 842)*. The amendments in this ASU introduce broad changes to the accounting and reporting for leases by lessees. The main provisions of the new standard include: clarifications to the definitions of a lease, components of leases, and criteria for determining lease classification; requiring virtually all leased assets, including operating leases and related liabilities, to be reflected on the lessee's balance sheet; and expanding and adding to the required disclosures for lessees. In July 2018, the FASB issued ASU 2018-11 *Leases (Topic 842): Targeted Improvements* which allows entities the option to adopt this standard by recording a cumulative-effect adjustment to opening equity, if necessary, and only include required disclosures for prior periods.

We adopted Topic 842 on January 1, 2019 using a modified retrospective approach prescribed by ASU 2018-11 and recorded an operating lease right-of-use asset (Lease assets) of $246.0 million and an operating lease liability for future discounted lease payment obligations (Lease liabilities) of $279.4 million at the date of adoption. The other material impacts of the adoption of Topic 842 also resulted in a decrease of $9.1 million and $42.3 million to our Other intangible assets, net and Accounts payable and accrued liabilities, respectively. We elected to apply the following package of practical expedients on a consistent basis permitting entities not to reassess: (i) whether any expired or existing contracts are or contain a lease; (ii) lease classification for any expired or existing leases and (iii) whether initial direct costs for any expired or existing leases qualify for capitalization under the amended guidance.

See Note B for further discussion of our leasing arrangements and related accounting.

In June 2016, the FASB issued ASU No. 2016-13 *Financial Instruments—Credit Losses: Measurement of Credit Losses on Financial Instruments*. The amendments in this ASU introduce broad changes to accounting for credit impairment of financial instruments. The primary updates include the introduction of a new current expected credit loss ("CECL") model that is based on expected rather than incurred losses and amendments to the accounting for impairment of debt securities available for sale. This update is effective for annual periods beginning after December 15, 2019, including interim periods within those fiscal years. Early adoption is permitted for annual periods beginning after December 15, 2018, including interim periods within those fiscal years. The standard will primarily impact our accounting for the allowance for bad debt on certain of our subsidiaries' trade receivables and credit losses for our notes receivable and fixed maturity securities. We do not expect the changes to result in a material impact to our recorded balances for these assets. We will not early adopt the standard.

In December 2019, the FASB issued ASU 2019-12 *Income Taxes - Simplifying the Accounting for Income Taxes (Topic 740)*, which simplifies various aspects of the income tax accounting guidance and will be applied using different approaches depending on what the specific amendment relates to and, for public entities, are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020. Early adoption is permitted. We are still evaluating the impact of this guidance and have not yet concluded on its anticipated impact on our Consolidated and Combined Financial Statements and related disclosures upon adoption.

Note T. Supplementary Cash Flow Information

The following supplemental cash flow information is provided with respect to interest and tax payments, as well as certain non-cash investing and financing activities.

	Year Ended December 31,		
	2019	2018	2017
		(In millions)	
Cash paid during the year:			
Interest	$ 15.6	$ 3.3	$ 8.7
Income taxes	48.6	0.2	117.7
Operating leases	62.6	—	—
Non-cash investing activities:			
Acquisition of Ceridian HCM common shares through non-cash private placement investment - see Note A	$ —	$ (33.4)	—
Non-cash distribution of LifeWorks from Ceridian - see Note A	—	32.5	—
Investment in Coding Solutions received as partial consideration for the T-System Contribution	60.2	—	—
Non-cash financing activities:			
Liabilities and noncontrolling interests assumed in connection with acquisitions (1):			
Fair value of net assets acquired	$ —	$ —	$ 252.5
Less: Total cash purchase price	—	—	222.7
Liabilities and noncontrolling interests assumed	$ —	$ —	$ 29.8
Debt extinguished through the sale of OneDigital	$ —	$ —	$ 151.1
Financing obligations assumed by O'Charley's in exchange for property	14.6	—	—
Property obtained by O'Charley's in exchange for stores	10.5	—	—

(1) Business combinations in the year ended December 31, 2017 related to acquisitions made by our former subsidiary, One Digital. See Note N.

Note U — Revenue Recognition

On January 1, 2018, we adopted ASC Topic 606 by applying the modified retrospective method. Results for reporting periods beginning after January 1, 2018 are presented under ASC Topic 606, while prior period amounts are not adjusted and continue to be reported under the accounting standards in effect for the prior period. The adoption of ASC Topic 606 did not have a significant impact on the timing or amount of recognition of revenue for our primary sources of revenue. Differences between our historical revenue recognition and revenue which would have been recorded had we retrospectively restated prior periods to conform with ASC Topic 606 are not considered material. We recorded a cumulative effect adjustment to opening equity as of January 1, 2018 of $1.9 million as a result of adoption of ASC Topic 606.

Disaggregation of Revenue

Our revenue consists of the following:

Revenue Stream	Segment	Year ended December 31, 2019	2018
		Total Revenue	
Restaurant revenue:		(in millions)	
Restaurant sales	Restaurant Group	$ 958.4	$ 1,023.0
Bakery sales	Restaurant Group	78.9	88.8
Franchise and other	Restaurant Group	6.0	6.0
Total restaurant revenue		1,043.3	1,117.8
Other operating revenue:			
Real estate and resort	Corporate and other	25.9	23.2
Other	Corporate and other	0.8	6.5
Total other operating revenue		26.7	29.7
Total operating revenue		1,070.0	1,147.5

Restaurant revenue consists of restaurant sales, bakery operations, and, to a lesser extent, franchise revenue and other revenue. Restaurant sales include food and beverage sales and gift card breakage, are net of applicable state and local sales taxes and discounts, and are recognized at a point in time as services are performed and goods are provided.

Revenue from bakery operations is recognized at a point in time in the period during which the products are shipped and control transfers to the customer.

Franchise revenue and other revenue consist of development fees and royalties on sales by franchised units. Initial franchise fees are recognized as income upon commencement of the franchise operation and completion of all material services and conditions by the Company. Royalties are calculated as a percentage of the franchisee sales and recognized in the period in which the sales are generated. Revenue resulting from the sale of gift cards is recognized in the period in which the gift card is redeemed and is recorded as deferred revenue until recognized.

Other operating revenue consists of income generated by our resort operations which includes sales of real estate, lodging rentals, food and beverage sales, and other income from various resort services offered. Revenue is recognized upon closing of the sale of real estate or once goods and services have been provided and billed to the customer.

Contract Balances

The following table provides information about receivables and deferred revenue:

	December 31, 2019	December 31, 2018
	(In millions)	
Trade receivables, net	$ 16.0	$ 30.4
Deferred revenue (contract liabilities)	26.4	25.8

Deferred revenue is recorded primarily for restaurant gift card sales. The unrecognized portion of such revenue is recorded as Deferred revenue in the Consolidated and Combined Balance Sheets. Revenue of $20.4 million was recognized in the year ended December 31, 2019 and was included in Deferred revenue at the beginning of the period.

There was no impairment related to contract balances.

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

As of the end of the year covered by this Annual Report, we carried out an evaluation, under the supervision and with the participation of our principal executive officer and principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures as such term is defined in Rule 13a-15(e) or 15d-15(e) under the Exchange Act. Based on this evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures are effective to ensure that information required to be disclosed by the Company in the reports that we file or submit under the Exchange Act is: (a) recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms; and (b) accumulated and communicated to management, including our principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure.

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f) or 15d-15(f). Because of its inherent limitations, internal control over financial reporting may not prevent or detect all misstatements. 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 using the criteria set forth under the framework in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on our evaluation under this framework, our management concluded that our internal control over financial reporting was effective as of December 31, 2019.

The effectiveness of our internal control over financial reporting as of December 31, 2019 has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which is included herein.

Changes in Internal Control over Financial Reporting

During the year ended December 31, 2019, management executed its remediation plan including (i) utilizing external resources to assist with the redesign, refinement and implementation of the processes and controls over the accounting for Accounting Standards Codification (“ASC”) Topic 606 Revenue from Contracts with Customers ("ASC Topic 606") at T-System, (ii) improving the monitoring activities around the application of ASC Topic 606 at T-System including more detailed reviews of underlying data and calculations, (iii) enhancing the information shared and communication between the Company and T-System management, and (iv) testing the operating effectiveness of the controls impacted by our remediation efforts. Management believes that as a result of the measures described above, the previously disclosed material weaknesses that existed as of December 31, 2018, have been fully remediated and no longer exist as of December 31, 2019.

As described in Note A to our Consolidated and Combined Financial Statements included in this Annual Report, we completed the T-System Contribution on December 31, 2019 and as a result it was deconsolidated and is no longer included in our internal control over financial reporting.

Other than the actions taken above in response to the material weaknesses previously identified, there were no changes in our internal control over financial reporting that occurred during the year ended December 31, 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. ***Other Information***

None.

PART III

Items 10-14.

Within 120 days after the close of our fiscal year, we intend to file with the SEC the matters required by these items.

PART IV

Item 15. ***Exhibits, Financial Statement Schedules and Reports on Form 8-K***

(a) (1) *Financial Statements.* The following is a list of the Consolidated and Combined Financial Statements of Cannae Holdings, Inc. and its subsidiaries included in Item 8 of Part II:

All other schedules are omitted because they are not applicable or not required, or because the required information is included in the Consolidated and Combined Financial Statements or notes thereto.

(a) (2) The following exhibits are incorporated by reference or are set forth on pages to this Form 10-K:

Exhibit Number	Description
2.1	Reorganization Agreement, dated as of November 17, 2017, between Cannae Holdings, Inc. and Fidelity National Financial, Inc. (filed as Exhibit 2.1 to the Company's Current Report on Form 8-K, filed November 20, 2017)
3.1	Restated Certificate of Incorporation of Cannae Holdings, Inc. (filed as Exhibit 3.1 to the Company's Current Report on Form 8-K, filed November 20, 2017)
3.2	Restated Bylaws of Cannae Holdings, Inc. (filed as Exhibit 3.2 to the Company's Current Report on Form 8-K, filed November 20, 2017)
4.1	Specimen Certificate for shares of Common Stock (incorporated by reference to Exhibit 4.1 to Amendment No. 2 to the Company's Registration Statement on Form S-1 on Form S-4 (File No. 333-217-886), filed July 24, 2017)
4.2	Description of Common Stock
10.1	Revolver Note, dated as of November 17, 2017, by and between Cannae Holdings, Inc. and Fidelity National Financial, Inc. (filed as Exhibit 10.1 to the Company's Current Report on Form 8-K, filed November 20, 2017)
10.2	Tax Matters Agreement, dated as of November 17, 2017, by and between Cannae Holdings, Inc. and Fidelity National Financial, Inc. (filed as Exhibit 10.2 to the Company's Current Report on Form 8-K, filed November 20, 2017)
10.3	Corporate Services Agreement, dated as of November 17, 2017, by and between Cannae Holdings, Inc. and Fidelity National Financial, Inc. (filed as Exhibit 10.3 to the Company's Current Report on Form 8-K, filed November 20, 2017)
10.4	Voting Agreement, dated as of November 17, 2017, by and between Cannae Holdings, Inc. and Fidelity National Financial, Inc. (filed as Exhibit 10.4 to the Company's Current Report on Form 8-K, filed November 20, 2017)
10.5	Registration Rights Agreement, dated as of November 17, 2017, by and between Cannae Holdings, Inc. and Chicago Title Insurance Company. (filed as Exhibit 10.5 to the Company's Current Report on Form 8-K, filed November 20, 2017)
10.6	Registration Rights Agreement, dated as of November 17, 2017, by and between Cannae Holdings, Inc. and Fidelity National Title Insurance Company (filed as Exhibit 10.6 to the Company's Current Report on Form 8-K, filed November 20, 2017)
10.7	Registration Rights Agreement, dated as of November 17, 2017, by and between Cannae Holdings, Inc. and Commonwealth Land Title Insurance Company (filed as Exhibit 10.7 to the Company's Current Report on Form 8-K, filed November 20, 2017)
10.8	First Amendment to Credit Agreement, dated as of February 24, 2017, by and among ABRH, LLC, a Delaware limited liability company, and Fidelity Holdings, LLC, as the borrowers, and Wells Fargo Bank, N.A. as administrative agent (incorporated by reference to Exhibit 10.1 to FNF's Current Report on Form 8-K (File No. 001-32630), filed with the SEC on March 2, 2017).
10.9	Master Assignment and Assumption, dated as of March 13, 2018, by and between Cannae Holdings, LLC as the assignee, Wells Fargo Bank, N.A. as assignor, and other assignors party thereto (incorporated by reference to Exhibit 10.9 to the Company's Annual Report on Form 10-K for the year ended December 31, 2017, filed March 26, 2018)
10.10	Agency Succession Agreement, dated as of March 13, 2018, by and between Cannae Holdings, LLC and Wells Fargo Bank, N.A. (incorporated by reference to Exhibit 10.10 to the Company's Annual Report on Form 10-K for the year ended December 31, 2017, filed March 26, 2018).
10.11	Form of Notice of Restricted Stock Grant and Restricted Stock Award Agreement under Cannae Holdings, Inc. 2017 Omnibus Incentive Plan (time-based vesting) for November 2017 Awards (incorporated by reference to Exhibit 10.11 to the Company's Annual Report on Form 10-K for the year ended December 31, 2017, filed March 26, 2018). (1)
10.12	Second Amendment to Credit Agreement, dated as of March 15, 2018, by and among ABRH, LLC, a Delaware limited liability company, and Fidelity Holdings, LLC, as the borrowers, and Cannae Holdings, LLC as administrative agent (incorporated by reference to Exhibit 10.12 to the Company's Annual Report on Form 10-K for the year ended December 31, 2017, filed March 26, 2018).
10.13	Voting Agreement dated April 30, 2018 by and among Ceridian HCM Holding Inc., Cannae Holdings, LLC and certain affiliates of Thomas H. Lee Partners L.P. (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the period ended June 30, 2018, filed August 13, 2018).
10.14	Amended and Restated Margin Loan Agreement, dated as of December 18, 2019, among Cannae Funding, LLC, as Borrower, the lenders party thereto, Credit Suisse AG, Cayman Islands Branch, as administrative agent and Credit Suisse Securities (USA) LLC, as calculation agent. (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed December 23, 2019).
10.15	Guarantee Agreement, dated as of November 7, 2018, of Cannae Holdings, Inc. (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K, filed November 8, 2018).

Exhibit Number	Description
10.16	Form of Notice of Restricted Stock Grant and Restricted Stock Award Agreement under Cannae Holdings, Inc. 2017 Omnibus Incentive Plan (time-based vesting) for November 2018 Awards (incorporated by reference to Exhibit 10.16 to the Company Annual Report on Form 10-K for the year ended December 31, 2018, filed March 14, 2019) (1)
10.17	Management Services Agreement, dated as of August 27, 2019, with effect September 1, 2019, by and among the Cannae Holdings, Inc., Cannae Holdings, LLC and Trasimene Capital Management, LLC (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed August 27, 2019)
10.18	Amended and Restated Operating Agreement of Cannae Holdings, LLC, dated August 27, 2019, with effect September 1, 2019 (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K, filed August 27, 2019)
10.19	Agreement and Plan of Merger, dated as of November 12, 2019, by and among Coding Solutions Acquisition, Inc., Coding Solutions Merger Sub, Inc., T-System Group, Inc., and Cannae Holdings, Inc.
21.1	List of Subsidiaries
23.1	Consent of Deloitte & Touche LLP.
23.2	Consent of KPMG LLP with respect to reports related to Ceridian HCM Holding, Inc.
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification by Chief Executive Officer of Periodic Financial Reports pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350
32.2	Certification by Chief Financial Officer of Periodic Financial Reports pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350.
99.1	Audited Financial Statements of Ceridian HCM Holding Inc. as of and for the year ended December 31, 2019
101.INS	Inline XBRL Instance Document (2)
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
104	Cover Page Interactive Data File formatted Inline XBRL and contained in Exhibit 101.

(1) A management or compensatory plan or arrangement required to be filed as an exhibit to this report pursuant to Item 15(b) of Form 10-K
(2) The instance document does not appear in the interactive data file because its XBRL tags are embedded within the inline XBRL document.

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

None.

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.

Cannae Holdings, Inc.
By: */s/ Richard N. Massey*
Richard N. Massey
Chief Executive Officer and Director

Date: February 28, 2020

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

Signature	Title	Date
/s/ Richard N. Massey Richard N. Massey	Chief Executive Officer and Director (Principal Executive Officer)	February 28, 2020
/s/ Richard L. Cox Richard L. Cox	Executive Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)	February 28, 2020
/s/ William P. Foley, II William P. Foley, II	Director	February 28, 2020
/s/ Hugh R. Harris Hugh R. Harris	Director	February 28, 2020
/s/ C. Malcolm Holland C. Malcolm Holland	Director	February 28, 2020
/s/ Mark D. Linehan Mark D. Linehan	Director	February 28, 2020
/s/ Frank R. Martire Frank R. Martire	Director	February 28, 2020
/s/ Erika Meinhardt Erika Meinhardt	Director	February 28, 2020
/s/ James B. Stallings, Jr. James B. Stallings, Jr.	Director	February 28, 2020
/s/ Frank P. Willey Frank P. Willey	Director	February 28, 2020

EXHIBIT 4.2

DESCRIPTION OF COMMON STOCK

The following describes the general terms and provisions of the common stock and certain provisions of the Amended and Restated Certificate of Incorporation (the “Certificate of Incorporation”), and Amended and Restated Bylaws (the “Bylaws”) of Cannae Holdings, Inc. (the “Company”), and certain related rights. This description is only a summary, does not purport to be complete, and is subject to and qualified in its entirety by reference to the Certificate of Incorporation and the Bylaws, each of which have been filed with the Securities and Exchange Commission.

General

The authorized capital stock of the Company consists of 115,000,000 shares of common stock, par value $0.0001per share (the “common stock”), and 10,000,000 shares of preferred stock (the “preferred stock”), par value $0.0001 per share. The common stock is listed on the New York Stock Exchange under the symbol “CNNE.”

Voting Rights

Each outstanding share of common stock entitles the holder thereof to one vote for each share held of record on the applicable record date on all matters to be voted upon by the stockholders. Holders of common stock shall vote on all matters (including the election of directors) submitted to a vote of stockholders, unless otherwise required by law. The Company’s stockholders are not entitled to cumulative voting of their shares in elections of directors.

Dividend Rights

Subject to applicable law and the preferences that may be applicable to any outstanding preferred stock, holders of common stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by the Company’s board of directors (the “Board of Directors”) and paid out of funds legally available therefor.

No Preemptive, Conversion, Redemption or Similar Rights

Holders of common stock have no preemptive or conversion rights or other subscription rights, and there are no redemption or sinking fund provisions applicable to the common stock.

Liquidation Rights

In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company’s affairs, the holders of common stock are entitled to share ratably in all assets remaining after payment of the Company’s debts and other liabilities, and after payment of the preferential and other amounts, if any, to which holders of then outstanding preferred stock, if any, may be entitled.

Registration Rights

The Company is party to separate registration rights agreements with each of Chicago Title Insurance Company, Fidelity National Title Insurance Company and Commonwealth Land Title Insurance Company in respect of the shares of common stock held by such holder immediately following the Company’s split-off (the “Split-Off”) from Fidelity National Financial, Inc. (“FNF”). These agreements provide these stockholders (and their permitted transferees) with the right to require the Company, at its expense, to register shares of the common stock held by them. The agreements also provide that the Company is required to pay certain expenses of these electing holders relating to such registrations and indemnify them against certain liabilities that may arise under the Securities Act of 1933, as amended.

Voting Agreement

The Company entered into a voting agreement with FNF, pursuant to which FNF agreed to appear or cause all shares of the Company's common stock that FNF or its subsidiaries, as applicable, own after the Split-Off to be counted as present at any meeting of the Company's stockholders, for the purpose of establishing a quorum, and agreed to vote all of such shares (or cause them to be voted) in the same manner as, and in the same proportion to, all shares voted by holders of the Company's common stock (other than FNF and its subsidiaries).

Certain Certificate of Incorporation and Bylaw Provisions

Number of Directors. The Certificate of Incorporation provides that the Board of Directors shall consist of not less than one and not more than 12 members, with the exact number of members to be determined from time to time by resolution adopted by the Board of Directors. On September 18, 2019, the Board of Directors adopted a resolution increasing to nine the size of the Board of Directors. The Board of Directors is divided into three classes, designated Class I, Class II and Class III. The Certificate of Incorporation also provides that, subject to any rights of any preferred stock then outstanding, any director may be removed from office at any time, but only for cause and only by the affirmative vote of the holders of a majority of the outstanding capital stock of the Company then entitled to vote generally in the election of directors, considered for this purpose as one class.

Special Meetings. The Certificate of Incorporation provides that special meetings of stockholders may be called by a majority vote of the Board of Directors or by the Company's executive chairman, chief executive officer or president, as applicable, and may not be called by any other person or persons. Stockholders may not call a special meeting or require that the Board of Directors call a special meeting of stockholders.

Blank Check Preferred. The Certificate of Incorporation provides for 10,000,000 shares of preferred stock. The existence of authorized but unissued shares of preferred stock may enable the Board of Directors to render more difficult or to discourage an attempt to obtain control of the Company by means of a merger, tender offer or otherwise. To the extent the Board of Directors causes shares of preferred stock to be issued, the voting or other rights of a potential acquirer might be diluted. Any such issuance may have the effect of delaying, deterring or preventing a change of 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.

Section 203 of the General Corporation Law of the State of Delaware (the "DGCL"). By virtue of not opting out of Section 203 of the DGCL in the Certificate of Incorporation, the Company is subject to Section 203 of the DGCL, Section 203 of the DGCL generally prohibits "business combinations," including mergers, sales and leases of assets, issuances of securities and similar transactions by a corporation or a subsidiary with an interested stockholder who beneficially owns 15% or more of a corporation's voting stock, within three years after the person or entity becomes an interested stockholder, unless: (i) the board of directors of the target corporation has approved, before the acquisition time, either the business combination or the transaction that resulted in the person becoming an interested stockholder, (ii) upon consummation of the transaction that resulted in the person becoming an interested stockholder, the person owns at least 85% of the corporation's voting stock (excluding shares owned by directors who are officers and shares owned by employee stock plans in which participants do not have the right to determine confidentially whether shares will be tendered in a tender or exchange offer) or (iii) at or after the person or entity becomes an interested stockholder, the business combination is approved by the board of directors and authorized at a meeting of stockholders by the affirmative vote of at least 66 2/3% of the outstanding voting stock not owned by the interested stockholder.

Exhibit 10.19

EXECUTION VERSION

AGREEMENT AND PLAN OF MERGER

BY AND AMONG

CODING SOLUTIONS ACQUISITION, INC.

CODING SOLUTIONS MERGER SUB, INC.,

T-SYSTEM GROUP, INC.

AND

Cannae Holdings, Inc., AS SECURITYHOLDER REPRESENTATIVE

Dated as of November 12, 2019

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AGREEMENT AND PLAN OF MERGER

THIS AGREEMENT AND PLAN OF MERGER (the "Agreement") is made and entered into as of November 12, 2019 by and among Coding Solutions Acquisition, Inc., a Delaware corporation ("Parent"), Coding Solutions Merger Sub, Inc., a Delaware corporation and a wholly-owned subsidiary of Parent ("Merger Sub"), T-System Group, Inc., a Delaware corporation (the "Company") and Cannae Holdings, Inc., a Delaware corporation, as representative of the Company Securityholders (the "Securityholder Representative").

RECITALS

WHEREAS, the boards of directors or similar governing bodies of Parent, Merger Sub and the Company have each determined that it is advisable and in the best interests of their respective securityholders for Parent to acquire the Company upon the terms and subject to the conditions set forth herein;

WHEREAS, the board of directors of the Company has unanimously (i) approved this Agreement, the Merger and the other transactions contemplated by this Agreement (the "Transactions"), (ii) recommended that the Company Stockholders adopt and approve this Agreement and approve the Merger and (iii) authorized the Company, to execute, deliver and perform this Agreement and the Transactions;

WHEREAS, the Company has obtained the adoption and approval of this Agreement and approval of the Merger pursuant to an Action by Written Consent signed by each of the Company Stockholders, each of which is listed on Schedule I hereto, which shall constitute the "Company Stockholder Approval";

WHEREAS, contemporaneously with the execution and delivery of this Agreement, and as a condition and inducement to Parent's willingness to enter into this Agreement, the Company Stockholders and certain of their affiliates are entering joinder and release agreements with Parent (collectively, the "Joinder and Release Agreements");

WHEREAS, concurrently with the execution of this Agreement, each of T-Sys Holdco, LLC ("Cannae Company Stockholder") and TTCP Executive Fund - TS, LLC ("TT Company Stockholder" and together with Cannae Company Stockholder, the "Rollover Holders") are entering into rollover agreements (collectively, the "Rollover Agreements") with Coding Solutions Topco, Inc., a Delaware corporation and the sole shareholder of the sole shareholder of Parent ("TopCo"), pursuant to which, on the Closing Date but prior to the Effective Time, such Rollover Holders will exchange the Rollover Shares (defined below) for a number of newly issued shares of common stock, $0.001 par value per share, of Topco ("TopCo Shares") in accordance with, and subject to the terms and conditions of, such Rollover Agreements (all of such transactions, the "Rollovers");

WHEREAS, the parties intend that the Rollovers will each qualify as a transfer of property under Section 351 of the Code;

WHEREAS, the board of directors or similar governing body of Parent and Merger Sub have unanimously approved this Agreement, the Merger and the Transactions; and

NOW, THEREFORE, in consideration of the covenants, promises, representations, warranties and agreements set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

ARTICLE I

DEFINITIONS

Section 1. 1 Defined Terms. For all purposes of this Agreement, the following terms shall have the following respective meanings:

"Accounting Arbitrator" shall have the meaning set forth in Section 2.10(d).

"Accounting Principles" shall have the meaning set forth in Section 2.10(b).

"Accounts Receivable" means all trade accounts receivable and other rights to payment from customers receivable in respect of goods shipped, products sold or services rendered to such customers by the Company or any Subsidiary of the Company.

"Action" shall mean any litigation, claim, action, suit, proceeding, investigation, arbitral action, mediation, audit, enforcement, inquiry, examination or criminal prosecution or investigation, in each case by, before, filed with or otherwise involving a Governmental Authority, arbiter or mediator.

"Adjustment Calculation" shall have the meaning set forth in Section 2.10(b).

"Affiliate" shall mean, with respect to any specified Person, any other Person that directly, or indirectly through one or more intermediaries, controls, is controlled by, or is under common control with, such specified Person.

"Affiliated Group" means an affiliated group as defined in Section 1504 of the Code (or any analogous combined, consolidated or unitary group defined under state, local or foreign income Tax Law) of which the Company or any Subsidiary is or has been a member.

"Agreement" shall have the meaning set forth in the preamble to this Agreement.

"ASC 605 Income Statements" shall have the meaning set forth in Section 3.7(a).

"Authorized Action" shall have the meaning set forth in Section 8.9.

"Balance Sheet" shall have the meaning set forth in Section 3.7(a).

"Balance Sheet Date" shall have the meaning set forth in Section 3.7(a).

"Benefit Plans" shall have the meaning set forth in Section 3.10(a).

"Business Day" shall mean each day that is not a Saturday, Sunday or other day on which banking institutions located in New York, New York are authorized or obligated by Law or executive order to close.

"Cash" shall mean all cash and cash equivalents (including money market accounts, money market funds, money market instruments and demand deposits with original maturities of ninety (90) days of less) of the Company and its Subsidiaries. For the avoidance of doubt, (a) Cash shall be increased by the amount of deposits or other payments received by the Company and its Subsidiaries but not yet credited to the bank accounts of the Company or its Subsidiaries and (b) Cash shall be reduced by the amount of any outstanding, unpaid, uncleared or in transit checks, wires or other payments issued by the Company or its Subsidiaries but not yet deducted from the bank accounts of the Company or its Subsidiaries and any declared and unpaid dividends or distributions by the Company.

"Certificates" shall have the meaning set forth in Section 2.9(a).

"Certificate of Merger" shall have the meaning set forth in Section 2.2.

"Closing" shall have the meaning set forth in Section 2.2.

"Closing Balance Sheet" shall have the meaning set forth in Section 2.10(b).

"Closing Certificates" shall have the meaning set forth in Section 7.2(a).

"Closing Date" shall have the meaning set forth in Section 2.2.

"Code" shall mean the U.S. Internal Revenue Code of 1986, as amended.

"Commitment Letters" means the Debt Commitment Letter and the Parent Equity Commitment Letter.

"Commercially Available Agreements" shall mean non-exclusive licenses of generally commercially available software.

"Common Stock" means the common stock, par value $0.001 per share, of the Company.

"Company" shall have the meaning set forth in the preamble to this Agreement.

"Company Charter Documents" shall have the meaning set forth in Section 3.2.

"Company Disclosure Schedule" shall have the meaning set forth in Article III.

"Company Intellectual Property" shall mean the Owned Intellectual Property and the Licensed Intellectual Property.

"Company IP Agreements" shall mean all (a) Outbound IP Agreements, excluding non-exclusive licenses to customers and end-users granted in the ordinary course of business consistent with past practice, non-exclusive, ancillary licenses granted to vendors, contractors and partners for them to provide services to the Company granted in the ordinary course of business consistent with past practice, and non-disclosure agreements entered in the ordinary course of business consistent with past practice; and (b) Inbound IP Agreements, excluding Commercially Available Agreements, licenses to Open Source Software, and non-disclosure agreements entered into in the ordinary course of business consistent with past practice.

"Company Material Adverse Effect" shall mean any event, circumstance, change, occurrence or state of facts that, individually or in the aggregate, (a) has had, or would reasonably be expected to have, a material adverse effect on the business, assets (tangible or intangible), results of operations or condition (financial or otherwise) of the Company and its Subsidiaries, taken as a whole; provided, however, that none of the following shall be deemed, either alone or in combination, to constitute a Company Material Adverse Effect (provided that with respect to clauses (i), (ii), (iii) and (iv), such exclusions do not materially and disproportionately affect the Company or its Subsidiaries in a manner that is materially disproportionate from similarly situated businesses engaged in the same industry as the Company or its Subsidiaries): (i) any change or event generally affecting the industries or markets in which the Company conducts operations or the economy; (ii) general economic, capital market, financial or political conditions, worldwide or in any particular region; (iii) an occurrence, outbreak, escalation or material worsening of war, armed hostilities, acts of terrorism, political instability or other national or international calamity, crisis or emergency or direct consequences thereof; (iv) any change in applicable accounting requirements, principles or applicable Laws or the implementation or interpretation thereof (provided that this clause (iv) shall not apply with respect to any representation or warranty the purpose of which is to address compliance with GAAP or applicable Law); (v) the announcement, pendency or consummation of the Transactions (provided that this clause (v) and the following clause (vi) do not apply in the context of the representations and warranties explicitly addressing the execution, delivery or performance of this Agreement or any other Transaction Document or the consummation of the transactions contemplated hereby or thereby, or any condition to Closing as it relates to such representations and warranties); (vi) any action taken or omission by the Company at Parent's written request after the date hereof or expressly required to be taken pursuant to this Agreement; (vii) any failure of the Company to meet its financial projections (including, without limitation, revenues, bookings or earnings) relating to any period after the date hereof (it being understood that other than as specifically excluded herein, the facts or occurrences giving rise or contributing to such failure may be deemed to constitute, or be taken into account in determining whether there has been or will be, a Company Material Adverse Effect), or (b) would or would reasonably be expected to prevent, materially delay or materially impede the performance by the Company of its obligations under this Agreement or the consummation of the Transactions.

"Company Options" shall have the meaning set forth in Section 3.4(b).

"Company Privacy Policies" shall mean each and every past or present, internal or public-facing policy, notice, and statement concerning the privacy, security, or the Processing of any Personally Identifiable Information.

"Company Products" shall mean all products (including software) and services from which the Company or any of its Subsidiaries has derived in the past six years or is currently deriving revenue from the sale, license, maintenance, subscription, support or provision thereof.

"Company Representatives" shall have the meaning as set forth in Section 6.2.

"Company Restricted Stock" shall mean any outstanding share of Common Stock that is subject to any vesting requirements that remain unsatisfied.

"Company Securities" shall mean the Company's Common Stock, Company Restricted Stock and Company Options.

"Company Securityholder" shall mean the holders of Company Securities as of immediately prior to the consummation of the Rollovers, taken together.

"Company Stockholder" shall mean the holders of Common Stock as of immediately prior to the Effective Time, taken together.

"Company Stockholder Approval" shall have the meaning set forth in the recitals.

"Competing Transaction" shall have the meaning set forth in Section 6.2.

"Confidentiality Agreement" shall mean the Confidentiality Agreement, by and between the TripleTree, LLC and Carlyle Investment Management, L.L.C., dated September 16, 2019.

"Contract" shall mean any written or oral contract, agreement, instrument, commitment or understanding, including, without limitation, supply contracts, purchase orders, sale orders or commitments, customer agreements, mortgages, subcontracts, indentures, leases, subleases, licenses, sublicenses, deeds of trust, notes or guarantees, pledges, liens, or conditional sales agreements to which the Person referred to is a party or by which any of its assets may be bound.

"Control" (including the terms "controlled by" and "under common control with"), with respect to the relationship between or among two or more Persons, shall mean the possession, directly or indirectly or as trustee, personal representative or executor, of the power to direct or cause the direction of the affairs or management of a Person, whether through the ownership of voting securities, as trustee, personal representative or executor, by Contract, credit arrangement or otherwise.

"Cooley" shall have the meaning set forth in Section 10.15.

"Current Government Contracts" means any Government Contract that is in effect on the date of this Agreement.

"Data Room" means all sub-folders to the "T-System" folder in that certain Firmex virtual data room titled "TTCP - RCMF Deal Room" hosted by TT Company Stockholder.

"Debt Commitment Letter" means the debt financing commitment letter between Parent and the lenders named therein, under which the lenders and other Persons party thereto have committed, on the terms and subject to the conditions set forth therein, to loan to Parent the amount set forth therein for the purposes of financing the Transactions, as such document may be amended or modified.

"Debt Financing" means the debt financing incurred or to be incurred under the Debt Commitment Letter.

"Debt Financing Sources" means the Persons, including the lenders that have committed to provide or arrange, or are considering committing to provide or arrange, any Debt Financing or alternative debt financing in connection with the transactions contemplated hereby, including the parties named in the Debt Commitment Letter and any joinder agreements, note purchase agreements, indentures or credit agreements entered into pursuant thereto or relating thereto and, in each case, their respective successors and assigns.

"D&O Policy" shall have the meaning set forth in Section 6.3(b).

"Damages" shall have the meaning set forth in Section 8.1(a).

"Deductible" shall have the meaning set forth in Section 8.5(c).

"Deemed Value" shall mean, calculated on a per share basis, with respect to the Rollover Shares held by a Company Securityholder the greater of (i) the Rollover Amount attributable to such Rollover Shares and (ii) the fair market value of such Rollover Shares as determined in good faith by the board of directors of TopCo.

"Delaware Law" shall mean the General Corporation Law of the State of Delaware.

"Determination Time" means 11:59 p.m. Eastern Time on the Closing Date.

"Disputed Items" shall have the meaning set forth in Section 2.10(d).

"Effective Time" shall have the meaning set forth in Section 2.2.

"Employee List" shall have the meaning set forth in Section 3.10(h).

"Employee Awardholder" shall mean any holder of Company Restricted Stock who is or was an employee of the Company or any of its Subsidiaries at or prior to the Closing and who received his or her Company Restricted Stock in connection with the performance of services to the Company or any of its Subsidiaries as an employee thereof.

"Employee PII" means, with respect to any employee of the Company or any of its Subsidiaries, any information relating to such employee that alone, or in combination with other information held by the Company or any of its Subsidiaries, can be used, or is intended to be used, to specifically identify, contact or precisely locate such employee, including name, street address, telephone number, e-mail address, user name and password, photograph, government-issued identifier (including Social Security number, tax identification number, driver's license number, or passport number), credit card number, bank information, or customer or account number, or biometric identifiers.

"Equity Financing" means the equity financing incurred or to be incurred under the Parent Equity Commitment Letter.

"ERISA" shall mean the Employee Retirement Income Security Act of 1974, as amended.

"ERISA Affiliate" shall have the meaning set forth in Section 3.10(e).

"Estimated Cash" shall have the meaning set forth in Section 2.10(a).

"Estimated Indebtedness" shall have the meaning set forth in Section 2.10(a).

"Estimated Net Working Capital" shall have the meaning set forth in Section 2.10(a).

"Estimated Transaction Expenses" shall have the meaning set forth in Section 2.10(a).

"Exchange Shares" shall have the meaning set forth in the Rollover Agreements.

"Export and Import Approvals" shall mean all export licenses, license exceptions, consents, notices, waivers, approvals, orders, authorizations, registrations, declarations and filings, from or with any Governmental Authority, that are required for compliance with Export and Import Control Laws.

"Export and Import Control Laws" shall mean any United States or applicable non United States Law, regulation, or order governing (a) imports, exports, reexports, or transfers of information, products, services, software, or technologies from or to the United States or another country, including the Export Administration Regulations administered by the U.S. Department of Commerce and the International Traffic in Arms Regulations administered by the U.S. Department of State; (b) any release of technology or software in any foreign country or to any foreign person (anyone other than a citizen or lawful permanent resident of the United States, or a protected individual as defined by 8 U.S.C. § 1324b(a)(3)) located in the United States or abroad; (c) economic sanctions or embargoes on any Person, including all Laws administered by the US Treasury Department Office of Foreign Assets Control and all sanctions Laws or embargoes imposed or administered by the U.S. Department of State, the United Nations Security Council, Her Majesty's Treasury or the European Union; or (d) compliance with unsanctioned foreign boycotts.

"FAR" means the Federal Acquisition Regulation (48 C.F.R., Chapter 1).

"Final Cash" shall have the meaning set forth in Section 2.10(b).

"Final Indebtedness" shall have the meaning set forth in Section 2.10(b).

"Final Net Working Capital" shall have the meaning set forth in Section 2.10(b).

"Final Statements" shall have the meaning set forth in Section 2.10(b)."Final Transaction Expenses" shall have the meaning set forth in Section 2.10(b).

"Financial Statements" shall have the meaning set forth in Section 3.7(a).

"Financing Conditions" means: (a) with respect to the Debt Financing, the conditions precedent set forth in the Debt Commitment Letter; and (b) with respect to the Equity Financing, the conditions precedent set forth in Section 2(a) of the Parent Equity Commitment Letter.

"FIRPTA Certificate" shall have the meaning set forth in Section 6.4(a).

"Fraud" means an actual fraud (as opposed to any fraud claim based on constructive knowledge, negligent misrepresentation or a similar theory) with respect to (i) the representations and warranties made pursuant to Article III (as modified by the Company Disclosure Schedule) or in any Rollover Agreement, Joinder and Release Agreement or Letter of Transmittal or (ii) any Closing Certificate, in each case, which involves a knowing and intentional misrepresentation of a fact material to the Company, any of its Subsidiaries, its or their respective businesses, a Company Securityholder or any of the Transactions, with the intent of inducing (x) Parent or Merger Sub to enter into this Agreement, (y) TopCo to enter into a Rollover Agreement and/or (iii) Parent, Merger Sub or TopCo to consummate any transaction contemplated hereby or thereby, including the Transactions, and upon which Parent, Merger Sub or TopCo have relied to their detriment.

"Fundamental Representations" shall mean the representations and warranties set forth in Section 3.1 (Organization and Qualification; Subsidiaries); Section 3.3 (Authorization of Agreement); Section 3.4 (Capitalization); Section 3.22 (Brokers); and (solely for purposes of Article VIII) Section 3.10(b)(ix) (Benefit Plans - Excluded Participants).

"GAAP" shall mean United States generally accepted accounting principles consistently applied, as in effect from time to time.

"General Survival Date" shall mean the date that is fifteen (15) months after the Closing Date.

"Governmental Authority" shall mean any federal, national, foreign, supranational, state, provincial, local or other government, governmental, quasi-governmental, regulatory or administrative authority, body, instrumentality, department or agency or any court, tribunal, administrative hearing body, arbitration panel, commission, or other similar dispute-resolving panel or body of competent jurisdiction.

"Government Bid" means any quotation, offer, bid or proposal made by the Company or any of the Subsidiaries prior to the effective date of this Agreement that, if accepted, would result in or lead to a Government Contract. For avoidance of doubt, the term Government Bid includes only quotations, offers, bids, or proposals that have not expired and for which award has not been made.

"Government Contract" means any Contract of any kind between the Company or any of the Subsidiaries, on the one hand, and (i) any Governmental Authority, (ii) any prime contractor of a Governmental Authority in its capacity as a prime contractor, or (iii) any higher-tier subcontractor of a Governmental Authority in its capacity as a subcontractor, on the other hand, that is currently in effect, or that has been in effect at any time during the last six years.

"Healthcare Laws" means all applicable healthcare Laws relating to the regulation, provision or administration of, and payment for, healthcare services and items, including (a) anti-kickback, false claims, self-referral and fraud and abuse Laws, including the federal Anti-kickback Statute (42 U.S.C. § 1320a-7b(b)), the civil False Claims Act (31 U.S.C. §§3729 et seq.), all criminal Laws relating to health care fraud and abuse, including but not limited to the criminal False Claims Law (42 U.S.C. § 1320a-7b(a)), 18 U.S.C. Sections 286 and 287, and the health care fraud criminal provisions under HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act (42 U.S.C. §§ 17921 et seq.), the exclusion laws (42 U.S.C. § 1320a-7), the civil monetary penalties law (42 U.S.C. § 1320a-7a); the beneficiary inducement law (42 U.S.C. 1320a-7a(a)(5)); (b) Medicare (Title XVIII of the Social Security Act); (c) Medicaid (Title XIX of the Social Security Act); (d) Laws relating to billing, coding, documentation or submission of claims for healthcare products and services; (e) HIPAA; and (f) in each case, all regulations promulgated thereunder.

"HIPAA" shall mean the Health Insurance Portability and Accountability Act of 1996, as amended, including those regulations addressing the privacy, security, maintenance, disclosure, confidentiality, and transmission of certain health related information that are promulgated at 45 CFR Parts 160, 162 and 164 (such regulations specifically, the "HIPAA Regulations").

"Inbound IP Agreements" shall mean any license of, or other grant of rights to use, Intellectual Property granted to the Company or any Subsidiary of the Company from any third party.

"Incentive Plan" shall have the meaning set forth in Section 3.4(b).

"Income Taxes" means Taxes based on or measured by net income or earnings (however denominated).

"Income Tax Return" means any Tax Return that is required to be filed with a Governmental Authority that relates to Income Taxes during a particular period of time.

"Indebtedness" shall mean (a) any Liabilities for borrowed money or purchase money financing, capitalized lease obligations or amounts owed or indebtedness issued in substitution for or exchange of indebtedness for borrowed money; (b) obligations evidenced by notes, bonds, debentures or other similar instruments; (c) obligations for amounts drawn under acceptances, letters of credit, surety or performance bonds, contingent reimbursement liabilities with respect to letters of credit or similar facilities; (d) all guaranties and other contingent obligations in respect of liabilities for borrowed money of others and similar commitments relating to any of the foregoing items; (e) obligations for the deferred purchase price of property or services (other than any accounts payable or accrued expenses incurred in the ordinary course of business consistent with past practice and included as a liability in the Estimated Net Working Capital); (f) deferred compensation (including severance) owed to current or former employees of the Company; (g) an amount equal to 26% of the deferred revenue balance related to the Documentation Business of the Company and its Subsidiaries; and (h) any accrued and unpaid interest, fees, expenses on, and any prepayment premiums, penalties or similar contractual charges (including other contingent liabilities) in respect of, any of the foregoing.

"Indemnified Party" shall have the meaning set forth in Section 6.3(a).

"Insurance Policies" shall have the meaning set forth in Section 3.18(a).

"Intellectual Property" shall mean all intellectual property rights throughout the world, including all (a) patents, and rights in and to inventions, processes, developments, methods, formulae, algorithms, designs, technology and know-how; (b) trademarks, service marks, trade names, trade dress, Internet domain names and other source indicators, together with the goodwill associated therewith; (c) copyrights and rights in and to copyrighted works, including computer software, databases, documentation and related items; (d) registrations, provisionals, divisions, continuations, continuations-in-part, re-examinations, re-issues, foreign counterparts, renewals, and applications for registration of anything in the foregoing clauses (a)-(c); and (e) rights in and to trade secrets and confidential, proprietary or non-public information.

"IRS" shall mean the U.S. Internal Revenue Service.

"Joinder and Release Agreements" shall have the meaning set forth in the recitals to this Agreement.

"Knowledge of the Company" and any other phrases of similar import shall mean, with respect to any matter in question relating to the Company or its Subsidiaries, the actual knowledge of the individuals set forth on Schedule II, and the knowledge such individuals would reasonably be expected to have had he or she made reasonable inquiry within the Company and its Subsidiaries of Persons who would reasonably be expected to have knowledge of the relevant matters.

"Laws" shall mean any United States, federal, national, supranational, provincial, state, local, foreign or other statute, law, ordinance, regulation, rule, code, decision, decree, judgment, award, writ, injunction or other order or determination, or other requirement or rule of law.

"Leased Real Property" shall have the meaning set forth in Section 3.12(b).

"Leases" shall have the meaning set forth in Section 3.12(b).

"Letter of Transmittal" shall have the meaning set forth in Section 2.9(a).

"Liability" or "Liabilities" shall mean any and all debts, liabilities and obligations of any nature whatsoever, whether known or unknown, accrued or fixed, absolute or contingent, mature or unmatured or determined or indeterminable.

"Liability Cap" shall mean $9,750,000.

"Licensed Intellectual Property" shall mean all Intellectual Property that the Company or a Subsidiary of the Company is licensed to use.

"Liens" shall mean any mortgage, deed of trust, hypothecation, pledge, lien (statutory or otherwise), lease, sublease, claim, security interest, charge or encumbrance or transfer restriction (such as a right of first refusal or other similar rights) of any kind, whether voluntary or involuntary (including any conditional sale or other title retention agreement, any lease in the nature thereof and any Contract to give any security interest) and, with respect to securities, any option or other right to purchase or any restriction on voting or other rights. For the avoidance of doubt, the foregoing shall not include non-exclusive licenses of or other grants of non-exclusive rights to use Intellectual Property.

"Material Contracts" shall have the meaning set forth in Section 3.14(a).

"Material Customers" shall have the meaning set forth in Section 3.17(a).

"Material Suppliers" shall have the meaning set forth in Section 3.17(b).

"Merger" shall have the meaning set forth in Section 2.1.

"Merger Consideration" shall mean (a) One Hundred and Thirty Million Dollars ($130,000,000) minus (b) the Rollover Amount; plus (c) the Final Cash; plus (d) an amount equal to the Final Net Working Capital minus the Target Net Working Capital (which resulting calculation may be positive or negative); minus (e) the Final Indebtedness; minus (f) the Final Transaction Expenses; provided, that, for purposes of preparing the Spreadsheet and determining the Merger Consideration payable in connection with the Closing pursuant to Section 2.5(a) and Section 2.9 (which, for clarity, is subject to the adjustments set forth in Section 2.10) (the "Closing Consideration"), (i) the Company shall use the Estimated Cash, the Estimated Net Working Capital, the Estimated Indebtedness and the Estimated Transaction Expenses and (ii) if such Closing Consideration would be less than $0.00, then the Exchange Shares held by each Company Securityholder, in accordance with such Company Securityholder's Pro Rata Portion, shall be cancelled (and each such Exchange Share so cancelled shall be deemed to be cancelled at the Per Share Price (as such term is defined in the Rollover Agreements)) to the extent necessary to reduce the Rollover Amount in clause (b) above (recalculated as if the Rollover Shares had not been exchanged for such canceled Exchange Shares)) such that the Closing Consideration equals $0.00.

"Merger Sub" shall have the meaning set forth in the preamble to this Agreement.

"Net Working Capital" shall mean an amount (which may be negative) equal to the current assets of the Company and its Subsidiaries minus the current liabilities of the Company and its Subsidiaries, in each case prepared in accordance with the Accounting Principles; provided that (a) current assets shall exclude (i) Cash, (ii) Income Tax assets, (iii) deferred Tax assets, (iv) any billed Accounts Receivable aged greater than 90 days that exceeds $2,678,000 as of the Closing Date, (v) any billed Accounts Receivable related to customer sites not going live and for which an equivalent amount of deferred revenue has been recorded on the Closing Balance Sheet and (vi) any unbilled Accounts Receivable for the Documentation Business of the Company and its Subsidiaries; and (b) current liabilities shall exclude Income Tax liabilities, Transaction Expenses, deferred Tax liabilities and Indebtedness. An example calculation of Net Working Capital prepared in accordance with the Accounting Principles and this definition as of the Balance Sheet Date is set forth on Annex I.

"Objection Notice" shall have the meaning set forth in Section 2.10(c).

"Open Source Software" means any software or content subject to any license meeting the Open Source Definition (as promulgated by the Open Source Initiative) or the Free Software Definition (as promulgated by the Free Software Foundation), or any substantially similar license, including any license approved by the Open Source Initiative or any Creative Commons License.

"Outbound IP Agreement" means any license of, or other grant of rights to use, Intellectual Property granted from the Company or any Subsidiary of the Company to any third party.

"Outside Date" shall have the meaning set forth in Section 9.1(e).

"Owned Intellectual Property" shall mean all Intellectual Property owned, or purported to be owned, by the Company or any Subsidiary of the Company.

"Parent" shall have the meaning set forth in the preamble to this Agreement.

"Parent Equity Commitment Letter" means the equity financing commitment letter between Parent and the investment funds named therein, naming the Company as an express third-party beneficiary (to the extent provided therein) and under which such investment funds have committed, on the terms and subject to the conditions set forth therein, to invest or cause to be invested in the equity capital of Parent the amount set forth therein for the purposes of financing the Transactions.

"Parent Indemnified Party" shall have the meaning set forth in Section 8.1(a).

"Parent Representatives" shall have the meaning set forth in Section 5.2.

"Parent Tax Contest" shall have the meaning set forth in Section 6.4(g)(iii).

"Payoff Letters" written confirmation in a form reasonably satisfactory to Parent from the holders of Indebtedness, as to all amounts owed by Company and its Subsidiaries as of the Closing.

"PCI DSS" means the Payment Card Industry Data Security Standard issued by the Payment Card Industry Security Standards Council, as amended from time to time.

"Per Share Consideration" shall mean an amount equal to the (a) Merger Consideration plus the Rollover Amount; divided by (b) the number of shares of Common Stock issued and outstanding immediately prior to the Effective Time (including, for the avoidance of doubt, the Company Restricted Stock and the Rollover Shares).

"Permits" shall have the meaning set forth in Section 3.6.

"Permitted Liens" shall have the meaning set forth in Section 3.12(c).

"Person" shall mean an individual or entity, including a partnership, a limited liability company, a corporation, an association, a joint stock company, a trust, a joint venture, an unincorporated organization or other entity, or a Governmental Authority (or any department, agency, or political subdivision thereof).

"Personally Identifiable Information" shall mean any information that (a) relates to an identified or identifiable individual or device, including name, street address, telephone number, e-mail address, user name and password, photograph, government-issued identifier (including Social Security number, tax identification number, driver's license number, or passport number), credit card number, bank information, or customer or account number, biometric identifiers or any other piece of information that alone or in combination with other information held by the Company or any of its Subsidiaries can be used or is intended to be used to specifically identify, contact, or precisely locate a Person or device, including Employee PII, or (b) is governed, regulated or protected by one or more Laws concerning information relating to an identified or identifiable natural person, including PHI.

"PHI" or "Protected Health Information" has the meaning set forth in the HIPAA Regulations.

"Post-Closing Tax Period" shall mean any taxable period (including a portion of any Straddle Period) beginning after the Closing Date.

"Pre-Closing Tax Period" shall mean any taxable period (including a portion of any Straddle Period) ending on or before the Closing Date.

"Pre-Closing Taxes" shall mean (A) all Taxes for which the Company or any of its Subsidiaries are liable for any Pre-Closing Tax Period (including the pre-closing portion of any Straddle Period as determined in accordance with Section 6.4(d), but excluding for the avoidance of doubt any Taxes incurred by the Company or any of its Subsidiaries in a Post-Closing Tax Period that relate to the Company's adoption of ASC 606 as described in Section 3.11 of the Company Disclosure Schedules); (B) any and all Taxes for which the Company or any of its Subsidiaries are liable as a result of their participation in a consolidated, combined or unitary group during any Pre-Closing Tax Period (including by reason of Treasury Regulation Section 1.1502-6(a) or any analogous or corresponding provision under state, local or non-U.S. Law); (C) Taxes of any Person (other than the Company and its Subsidiaries) imposed on the Company or any of its Subsidiaries as a transferee or successor, by Contract (other than pursuant to Customary Commercial Contracts) or pursuant to any Law, which Taxes relate to an event or transaction occurring, or a Contract entered into, before the Closing; and (D) the portion of any Transfer Taxes that the Company Securityholders are responsible for pursuant to Section 6.4(f); in each case except to the extent such Taxes are reflected as a liability in the calculation of the Final Net Working Capital or are included in Indebtedness or Transaction Expenses (as finally determined hereunder). Notwithstanding the foregoing, Pre-Closing Taxes shall not include (a) any Transfer Taxes for which Parent is responsible pursuant to Section 6.4(f) hereof, (b) any Taxes resulting solely from a breach by Parent of Section 6.4, or (c) any Taxes of or attributable to TrustHCS, Trust Healthcare Consulting Services, LLC, WindRose Health Investors III, L.P., MTS III Splitter, L.P. or MTS III Coding Blocker Corp., or the acquisition thereof.

"Privacy and Security Laws" means all applicable laws, governmental orders, and guidance issued by any Governmental Authority concerning the privacy, security, or Processing of PII (including laws of jurisdictions where PII was collected), including, as applicable, data breach notification laws, consumer protection laws, laws concerning requirements for website and mobile application privacy policies and practices, Social Security number protection laws, data security laws, and laws concerning email, text message, or telephone communications. Without limiting the foregoing, Privacy and Security Laws include: the Federal Trade Commission Act, the Telephone Consumer Protection Act, the Telemarketing and Consumer Fraud and Abuse Prevention Act, the Controlling the Assault of Non-Solicited Pornography and Marketing Act of 2003, the Children's Online Privacy Protection Act, the California Consumer Privacy Act of 2018, the Computer Fraud and Abuse Act, the Electronic Communications Privacy Act, the Fair Credit Reporting Act, the Fair and Accurate Credit Transaction Act, the Health Insurance Portability and Accountability Act of 1996, as amended and supplemented by the Health Information Technology for Economic and Clinical Health Act of the American Recovery and Reinvestment Act of 2009, the GDPR, and all other similar international, federal, state, provincial, and local laws.

"Privilege Assets" means (a) any attorney-client privilege of the Company and its Subsidiaries, the Company Securityholders (in their capacities as such) or the Securityholder Representative as of the immediately prior to the Effective Time, in each case, to the extent pertaining to the Merger and the Transactions, and (b) all emails, correspondence, invoices, recordings, and other documents or files, evidencing or reflecting communications between the Company and its Subsidiaries, the Company Securityholders (in their capacities as such) or the Securityholder Representative, on the one hand, and Cooley, on the other hand, to the extent pertaining to the Merger and the Transactions and as to which there exists any attorney-client privilege of the Company and its Subsidiaries as of immediately prior to the Effective Time.

"Process" (and the corollary term "Processing") means to perform any operation or set of operations upon electronic data, whether manually or by automatic means, including blocking, erasing, destroying, collecting, compiling, combining, analyzing, enhancing, enriching, recording, sorting, organizing, structuring, accessing, storing, processing, adapting, retaining, retrieving, consulting, using, transferring, aligning, transmitting, disclosing, altering, distributing, disseminating or otherwise making available electronic data.

"Pro Rata Portion" shall mean, with respect to each Company Securityholder, a fraction equal to (a) the aggregate Merger Consideration and Rollover Amount attributable to such Company Securityholder in respect of its Company Common Stock and Company Restricted Stock (including, for the avoidance of doubt, any Rollover Shares); divided by (b) the aggregate amount of the Merger Consideration and Rollover Amount attributable to all Company Securityholders in respect of their Company Common Stock and Company Restricted Stock (including, for the avoidance of doubt, any Rollover Shares).

"RWI Policy" shall mean that certain insurance policy (policy number QPL-07669112) issued by QBE Specialty Insurance Company to Cannae Holdings, Inc.

"Registered" shall mean issued by, registered or filed with, renewed by or the subject of a pending application before any Governmental Authority or Internet domain name registrar.

"Related Persons" shall have the meaning set forth in Section 3.21.

"RevCycle" means RevCycle+, Inc., a Delaware Corporation.

"Rollover Agreements" shall have the meaning set forth in the recitals to this Agreement.

"Rollover Amount" means an amount equal to (a) the Cannae Rollover Amount (as defined in the Rollover Agreement with Cannae Company Stockholder) and (b) the TT Rollover Amount (as defined in the Rollover Agreement with TT Company Stockholder).

"Rollover Holders" shall have the meaning set forth in the recitals to this Agreement.

"Rollover Shares" means the number of shares of Common Stock equal to (a) the Rollover Amount divided by (b) the Closing Per Share Consideration.

"Rollovers" shall have the meaning set forth in the recitals to this Agreement.

"Securityholder Matter" shall mean (a) any error in the Spreadsheet, or (b) any claim by a Company Securityholder or former holder of Company Securities, or by any other Person, seeking to assert, or based upon: (i) ownership or rights to ownership of any Company Securities; (ii) any right of a Company Securityholder or equityholder in their capacity as such, including any option, preemptive right or right to notice or to vote; (iii) any claim by a Company Securityholder for contribution or other right under the Company Charter Documents, Subsidiary Charter Documents, any Contract between the Company and any holder of Company Securities related to such Company Securities or under any indemnification agreement between such Person and the Company or any Subsidiary of the Company; (iv) any claim that such Person's shares were wrongfully repurchased by the Company; or (v) the allocation of any consideration to be received pursuant to this Agreement.

"Securityholder Representative" shall have the meaning set forth in the preamble to this Agreement.

"Securityholders' Tax Contest" shall have the meaning set forth in Section 6.4(g)(iii).

"Settlement Date" shall have the meaning set forth in Section 2.10(e).

"Specified Business Conduct Laws" shall mean (a) the U.S. Foreign Corrupt Practices Act of 1977, the UK Bribery Act of 2010, the Indian Prevention of Corruption Act, all Laws enacted to implement the OECD Convention on Combating Bribery of Foreign Officials in International Business Transactions and all other applicable Laws relating to bribery, corruption, kick-backs or other improper payments, (b) all anti-money laundering Laws (including related to recordkeeping and reporting requirements), including the U.S. Currency and Foreign Transaction Reporting Act of 1970, the U.S. Money Laundering Control Act of 1986, the UK Proceeds of Crime Act of 2002 and the UK Terrorism Act of 2000 and/or (c) Export and Import Control Laws.

"Specified Representations" shall mean the representations and warranties set forth in each of (a) the last sentence of Section 3.10(h) (Shared Employees) and (b) Section 3.21 (Related Party Transactions).

"Spreadsheet" means a spreadsheet in form reasonably acceptable to Parent, which spreadsheet shall be dated as of the Closing Date and shall set forth, as of the Closing Date and immediately prior to the Effective Time, the following factual information relating to each holder of Company Securities: (a) the names of all holders of Company Securities (including Rollover Holders), their respective addresses, email addresses and wire instructions, if the Company has such wire instructions, for such holder of Company Securities (unless such holder only holds vested Company Restricted Stock and is not an Employee Awardholder), (b) the number of shares of Company Common Stock (including, for the avoidance of doubt, such holder's Rollover Shares), Company Restricted Stock and Company Options held by each such Person, (c) with respect to each outstanding award of Company Restricted Stock, (i) the respective name of the holder of such Company Restricted Stock, (ii) the number of shares of Company Restricted Stock subject to each such award, (iii) the date of grant of such shares of Company Restricted Stock, and (iv) the vesting schedule of such award of Company Restricted Stock, (d) the calculation of the Merger Consideration and Per Share Consideration as of the Closing (the "Closing Per Share Consideration"), (e) the calculation of the Rollover Shares attributable to each Rollover Holder, (f) a calculation based on Section 2.5 of the amount payable to each such holder at Closing, with and without giving effect to the consummation of the Rollover, (g) the Pro Rata Portion for each holder of Company Securities (including the Rollover Holders), and (h) whether or not each payment made under this Agreement is subject to employment or payroll Tax withholding (but not the amount). An example of the waterfall (i.e. clauses (d), (e) and (f) of this definition), which assumes that the transactions contemplated by this Agreement were consummated as of the Balance Sheet Date, and has other assumptions that the Securityholder Representative has determined are reasonable, is set forth on Annex II.

"Straddle Period" shall mean any taxable period beginning on or before the Closing Date and ending after the Closing Date.

"Subsidiary" shall mean, with respect to any Person, any corporation, partnership, limited liability company, association or other business entity of which (a) if a corporation, a majority of the total voting power of shares of stock entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers or trustees thereof is at the time owned or controlled, directly or indirectly, by that Person or one or more of the other Subsidiaries of that Person or a combination thereof; or (b) if a partnership, limited liability company, association or other business entity, a majority of the partnership or other similar ownership interest thereof is at the time owned or controlled, directly or indirectly, by any Person or one or more Subsidiaries of that Person or a combination thereof. For purposes hereof, a Person or Persons shall be deemed to have a majority ownership interest in a partnership, limited liability company, association or other business entity if such Person or Persons shall be allocated a majority of partnership, limited liability company, association or other business entity gains or losses or shall be or control the managing director or general partner of such partnership, limited liability company, association or other business entity.

"Subsidiary Charter Documents" shall have the meaning set forth in Section 3.2.

"Surviving Company" shall have the meaning set forth in Section 2.1.

"Target Cash" shall mean One Million Dollars ($1,000,000).

"Target Net Working Capital" shall mean Eleven Million and Fifty Seven Thousand Dollars ($11,057,000).

"Tax" shall mean any U.S. federal, state, local or municipal, non-U.S. or other tax (including any income tax, alternative or add-on minimum tax, franchise tax, capital gains tax, gross receipts tax, value-added tax, surtax, estimated tax, unemployment tax, severance tax, abandoned property tax, unclaimed property tax, excise tax, ad valorem tax, transfer tax, stamp tax, sales tax, use tax, property tax, business tax, profits tax, environmental tax, escheat tax, securities tax, occupation tax, windfall profits tax, social security tax, disability tax, employment tax, withholding tax or payroll tax), including any customs duty or tariff, (including any fine, penalty, interest or addition to tax with respect thereto), in each case, imposed by a taxing authority.

"Tax Contest" shall have the meaning set forth in Section 6.4(g)(i).

"Tax Representations" shall mean the representations and warranties set forth in Section 3.11 (Taxes).

"Tax Returns" shall mean all returns, reports, declarations, notices, statements, information returns, claims for refund, estimated tax returns, declarations of estimated tax, forms or other similar documents or statements, including any attachments thereto and any amendments thereof, which are filed or required to be filed with any taxing authority

"Technology Systems" shall mean the hardware, third party software, networks, peripherals, communication and record keeping systems, and other computer and information technology systems used by the Company and its Subsidiaries in the operation of their businesses.

"Third Party Claim" shall have the meaning set forth in Section 8.2.

"TopCo" shall have the meaning set forth in the recitals to this Agreement.

"TopCo Shares" shall have the meaning set forth in the recitals to this Agreement.

"Transaction Expenses" shall mean (a) any bonus, transaction completion, stay, sale, or change in control bonus, severance payment, or retention payment triggered in connection with the execution of this Agreement, the Transactions or a change of control of the Company or any of its Subsidiaries (but excluding post-Closing severance payments that are triggered under so-called "double-trigger" provisions where the first trigger arises from the Transactions or any transactions contemplated by this Agreement to be taken in connection with the Transactions and the second trigger arises from a termination of employment without cause or resignation for good reason after the Effective Time) or other similar payments or benefits (for the avoidance of doubt, other than any payments made or to be made in connection with the Company Options or Company Restricted Stock) made or required to be made by the Company or any of its Subsidiaries to any of their current or former employees or other individual service providers as a result of or in connection with the execution of this Agreement or the Transactions, (b) to the extent not paid by the Company prior to the Determination Time, the aggregate amount of all fees, costs, disbursements and other payments and expenses of all investment banking, financial, legal, tax, accounting, consulting or other service providers or vendors incurred by any of the Company, any of its Subsidiaries or the Securityholder Representative on behalf of the Company or any of its Subsidiaries and as a result of or in connection with the Transactions or any transactions contemplated by this Agreement to be taken in connection with the Transactions, including any fees payable pursuant to any advisory, consulting or management agreements and any other similar agreements or arrangements with the Securityholder Representative or any Affiliates of the Securityholder Representative as a result of or in connection with the Transactions, (c) any fees, costs or expenses payable by the Surviving Company to the Securityholder Representative, (d) fifty percent (50%) of any Transfer Taxes, (e) all other miscellaneous fees, expenses or costs, in each case, incurred by the Company or any of its Subsidiaries as a result of or in connection with the Transactions or any transactions contemplated by this Agreement to be taken in connection with the Transactions (including the cost of the D&O Policy) and (f) any Transaction Payroll Taxes.

"Transaction Payroll Taxes" means the employer portion of any payroll, social security employment or other Taxes associated with any (i) Transaction Expenses, (ii) Company Options, (iii) Company Restricted Stock or (iv) to the extent vested on or before the Closing Date, other compensatory payments made in connection with this Agreement.

"Transactions" shall have the meaning set forth in the recitals to this Agreement.

"Transfer Taxes" means sales, use, transfer, real property transfer, recording, documentary, stamp, conveyance, registration and stock transfer Taxes and any similar Taxes.

"T-System Holding" means T-System Holding, Inc., a Delaware corporation.

"T-System Holding LLC" means T-System Holding, LLC, a Delaware limited liability company.

"T-System Subsidiary" means T-System, Inc., a Texas corporation.

"WARN Act" shall have the meaning set forth in Section 3.10(i).

"Withholding Party" shall have the meaning set forth in Section 2.12.

ARTICLE II

THE MERGER

Section 2.1 The Merger. At the Effective Time and subject to and upon the terms and conditions of this Agreement and the applicable provisions of Delaware Law, Merger Sub shall be merged with and into the Company (the "Merger"), the separate corporate existence of Merger Sub shall cease and the Company shall continue as the surviving corporation. The Company, as the surviving corporation after the Merger, is hereinafter sometimes referred to as the "Surviving Company".

Section 2.2 Effective Time; Closing. Upon the terms and subject to the conditions of this Agreement, the parties hereto shall cause the Merger to be consummated by filing a certificate of merger (the "Certificate of Merger") with the Secretary of State of the State of Delaware in accordance with the relevant provisions of Delaware Law (the time of such filing (or such later time as may be agreed in writing by the Company and Parent prior to the Closing and specified in the Certificate of Merger) being the "Effective Time") as soon as practicable on or after the execution and delivery of this Agreement by each of the parties hereto, but in any event no later than three (3) Business Days after the satisfaction or waiver of the conditions set forth in Article VII (other than those conditions, which by their terms, are to be satisfied or waived on the Closing Date), or at such other time, date and location as the parties hereto agree in writing (the "Closing Date"). Unless the context otherwise requires, the term "Agreement" as used herein refers collectively to this Agreement and Plan of Merger (as the same may be amended from time to time in accordance with the terms hereof) and the Certificate of Merger. The closing of the Merger (the "Closing") shall take place at the offices of Latham & Watkins, 555 Eleventh Street NW, Washington D.C., at 8:00 a.m. (Pacific Time) on the Closing Date. At the written request of Parent, the Company shall cause T-System, Inc. to timely deliver a written notice to the Seller Representative (as defined in the TrustHCS Agreement) pursuant to Section 2.1(a) of the TrustHCS Agreement designating the Closing Date (as defined herein) as the Closing Date (as such term is defined in the TrustHCS Agreement) for purposes of the TrustHCS Agreement, such that Parent will have the right to cause the TrustHCS Acquisition and the Transactions to be consummated on the same date.

Section 2.3 Effect of the Merger. At the Effective Time, the effect of the Merger shall be as provided in this Agreement and the applicable provisions of Delaware Law. Without limiting the generality of the foregoing, and subject thereto, at the Effective Time all of the assets, properties, rights, privileges, powers and franchises of the Company and Merger Sub (other than the Privilege Assets) shall vest in the Surviving Company, and all of the debts, liabilities, obligations, restrictions and duties of the Company and Merger Sub shall become the debts, liabilities, obligations, restrictions and duties of the Surviving Company.

Section 2.4 Certificate of Incorporation, Bylaws, Directors and Officers of Surviving Company.

a. Certificate of Incorporation. As of the Effective Time, by virtue of the Merger and without any action on the part of Merger Sub or the Company, the certificate of incorporation of the Surviving Company shall be amended and restated to read the same as the certificate of incorporation of Merger Sub, as in effect immediately prior to the Effective Time, subject to Section 6.3, until thereafter amended in accordance with Delaware Law and such certificate of incorporation; provided, however, that as of the Effective Time the certificate of incorporation shall provide that the name of the Surviving Company is “T-System Group, Inc.”.

b. Bylaws. As of the Effective Time, by virtue of the Merger and without any action on the part of Merger Sub or the Company, the bylaws of the Surviving Company shall be amended and restated to read the same as the bylaws of Merger Sub, as in effect immediately prior to the Effective Time, subject to Section 6.3, until thereafter amended in accordance with Delaware Law, the certificate of incorporation of the Surviving Company and such bylaws; provided, however, that all references in such bylaws to Merger Sub shall be amended to refer to “T-System Group, Inc.”.

c. Directors. As of the Effective Time, the directors of Merger Sub immediately prior to the Effective Time shall be the initial directors of the Surviving Company and shall hold office until their respective successors shall have been duly elected or appointed and qualified or until their earlier death, resignation or removal in accordance with the certificate of incorporation and bylaws of the Surviving Company.

d. Officers. As of the Effective Time, the officers of Merger Sub immediately prior to the Effective Time shall be the initial officers of the Surviving Company and shall hold office until their respective successors are duly elected and qualified or until their earlier death, resignation or removal in accordance with the certificate of incorporation and bylaws of the Surviving Company.

Section 2.5 Effect of Merger on the Securities of the Constituent Corporations.

a. Effect on Company Securities. Upon the terms and subject to the conditions of this Agreement, including, without limitation, this Section 2.5, at the Effective Time, by virtue of the Merger and without any action on the part of Parent, Merger Sub, the Company or the Company Securityholders, each outstanding Company Security, other than the Rollover Shares, will be canceled and extinguished and be converted automatically into the right to receive the consideration set forth below, payable in each case without interest to the Company Securityholders. Each share of Common Stock, other than the Rollover Shares, will be cancelled and extinguished and be converted automatically into the right to receive an amount in cash equal to the Per Share Consideration (and any amount payable pursuant to the first sentence of Section 6.4(c)). At the Effective Time, by virtue of the Merger and without any action on the part of Parent, Merger Sub, the Company or the Company Securityholders, each Rollover Share shall be converted into common stock of the Surviving Company such that Parent owns the same percentage of common stock of the Surviving Company immediately following the Effective Time that such Rollover Shares represented in the Company immediately prior to the Effective Time and no consideration shall be delivered in exchange therefor other than as provided in Section 2.10(f), the first sentence of Section 6.4(c) or Section 8.1.

b. Effect on Merger Sub Securities. Each share of common stock of Merger Sub issued and outstanding immediately prior to the Effective Time shall be converted into a share of common stock of the Surviving Company.

Section 2.6 Treatment of Company Options.

a. Contingent on the Closing, by virtue of the Merger and without any action on the part of Parent, Merger Sub, the Company or the holder of the Company Option each Company Option (whether vested or unvested) at the Effective Time shall automatically be cancelled and extinguished and no cash or other consideration shall be paid with respect thereto.

b. At or prior to the Effective Time, the Company's board of directors shall adopt appropriate resolutions, and the Company shall take all other actions necessary, to terminate the Incentive Plan and to effect the treatment of the Company Options as set forth in this Section 2.6 and the treatment of the Company Restricted Stock as set forth in Section 2.7.

Section 2.7 Treatment of Company Restricted Stock.

a. Each share of Company Restricted Stock that is outstanding immediately prior to the Effective Time shall, as of the Effective Time, become fully vested and shall be cancelled and converted into the right to receive an amount in cash equal to the Per Share Consideration (and any amount payable pursuant to the first sentence of Section 6.4(c)) in the same manner as other shares of Common Stock in accordance with Section 2.5(a).

b. As promptly as practicable following the Effective Time or at the next or following regularly scheduled payroll date, the Surviving Company shall cause to be disbursed through the Surviving Company's payroll system, net of applicable Tax withholding, to each Employee Awardholder that held Company Restricted Stock as of immediately prior to the Effective Time, the payment required under this Section 2.7.

Section 2.8 [Intentionally Omitted].

Section 2.9 Surrender of Shares.

a. Letter of Transmittal. Prior to Closing, Parent or the Company shall deliver, or cause to be delivered, to each Company Stockholder a letter of transmittal (the "Letter of Transmittal") in a customary form. Each Company Stockholder shall deliver an executed Letter of Transmittal, together with its certificates representing shares of Common Stock (the "Certificates"), if any, to Parent no less than one (1) Business Day prior to the Closing Date, to be held in escrow by Parent until the Closing. If each such Company Stockholder has complied with the foregoing, Parent shall deliver and cause to be issued, without interest, the consideration payable in respect of such shares of Common Stock in accordance with Section 2.5, and the Common Stock so surrendered shall forthwith be canceled. If a Company Stockholder has not complied with the foregoing, Parent shall deliver and cause to be issued, without interest, the consideration payable in respect of such shares of Common Stock in accordance with Section 2.5, promptly upon receipt of an executed Letter of Transmittal and Certificates, if any, from such Company Stockholder and the Common Stock so surrendered shall forthwith be canceled. Until so surrendered, shares of Common Stock shall be deemed from and after the Effective Time, for all corporate purposes, to evidence only the ownership of the consideration payable in respect of such shares in accordance with this Agreement and shall otherwise cease to have any ownership rights with respect to such shares except as provided in this Agreement or under applicable Law.

b. Payments with respect to Unsurrendered Shares of Common Stock; No Liability. At any time following the one (1) year anniversary of the Effective Time, if any funds have not been disbursed to holders of Common Stock, such holders shall be entitled to look to the Surviving Company (subject to abandoned property, escheat and other similar laws) only as general creditors thereof with respect to any consideration that may be payable upon due surrender of the Certificates held by them, if any. Notwithstanding the foregoing, neither Parent nor the Surviving Company shall be liable to any holder of shares of Common Stock for any consideration delivered in respect of such shares to a public official pursuant to any abandoned property, escheat or other similar Law.

c. Transfers of Ownership. If the payment of the consideration payable in respect of shares of Common Stock in accordance with this Section 2.9 is to be paid to a Person other than the Person whose name is listed as member and as a holder of such shares in the Company's stock registrar, it will be a condition of payment that the Certificates so surrendered, if any, be properly endorsed and otherwise in proper form for transfer (including, without limitation, if requested by Parent, an indemnification agreement, medallion guarantee or bond), and that the Persons requesting such payment will have paid to Parent or any agent designated by it any transfer or other Taxes required by reason of the payment of such consideration to a Person other than the Person whose name is listed in the Company's stock registrar as a holder of shares of Common Stock, or established to the satisfaction of Parent or any agent designated by it that such Tax has been paid or is not applicable.

d. Adjustments. If during the period from the date of this Agreement through the Effective Time, any change in the outstanding number of Company Securities or securities convertible or exchangeable into or exercisable for Company Securities, shall occur by reason of any reclassification, recapitalization, securities split or combination, exchange or readjustment of shares of Common Stock, shares of Company Restricted Stock, Company Options or any similar transaction, or any dividend thereon with a record date during such period, the consideration payable in respect of such Company Securities in accordance with Section 2.5, Section 2.6, and Section 2.7 shall be appropriately adjusted to reflect such change.

e. No Further Ownership Rights in Company Securities. Payment of the consideration (if any) pursuant to Section 2.5, Section 2.6 and Section 2.7, shall be deemed to have been paid in full satisfaction of all rights pertaining to the Company Securities (other than the Rollover Shares) and there shall be no further registration of transfers on the records of the Surviving Company of Company Securities which were outstanding immediately prior to the Effective Time (other than the Rollover Shares).

f. Lost, Stolen or Destroyed Certificates. In the event that any Certificates shall have been lost, stolen or destroyed, Parent shall pay in exchange for such lost, stolen or destroyed Certificates, upon (i) the making of an affidavit of that fact by the holder thereof and (ii) the execution and delivery to Parent by such Person of an indemnity agreement, and if requested, a bond, in each case in form and substance reasonably acceptable to Parent, the consideration payable in respect of such shares of Common Stock in accordance with Section 2.5.

Section 2.10 Consideration Adjustments. The amounts payable under Section 2.5, Section 2.6, and Section 2.7 shall be adjusted (such adjustment may be positive or negative), if at all, on an aggregate (as provided for herein) dollar-for-dollar basis as set forth below:

a. No less than five (5) Business Days prior to the Closing, the Company shall prepare and deliver to Parent an officer's certificate of the Company that contains (i) the Spreadsheet in substantially the form as set forth on Annex II, (ii) a good faith estimate of the Cash, Net Working Capital and Indebtedness of the Company and its Subsidiaries as of the Determination Time (the "Estimated Cash", "Estimated Net Working Capital" and "Estimated Indebtedness", respectively) and (iii) the Transaction Expenses (the "Estimated Transaction Expenses"). The Company shall consider in good faith any comments made by Parent to the Spreadsheet, Estimated Cash, Estimated Net Working Capital, Estimated Indebtedness and Estimated Transaction Expenses and any changes so agreed to by the Company will be included in the Spreadsheet and used to calculate the Merger Consideration.

b. Parent shall prepare and deliver to the Securityholder Representative within ninety (90) days after the Closing Date (i) an unaudited balance sheet of the Company as of the Determination Time (the "Closing Balance Sheet") which shall also set forth a calculation of Net Working Capital determined from the Closing Balance Sheet (the "Final Net Working Capital"), (ii) Parent's calculation of Cash and Indebtedness of the Company and its Subsidiaries as of the Determination Time (the "Final Cash" and the "Final Indebtedness"), (iii) Parent's calculation of the Transaction Expenses (the "Final Transaction Expenses") and (iv) the amount, if any, by which the Merger Consideration so determined using Final Net Working Capital, Final Cash, Final Indebtedness and Final Transaction Expenses is greater than or less than the Merger Consideration so determined using Estimated Net Working Capital, Estimated Cash, Estimated Indebtedness and Estimated Transaction Expenses (such difference between the Merger Consideration calculated using the estimated amounts and the final amounts referred to as the "Adjustment Calculation" and the items referred to in clauses (i) through (iii) the "Final Statements"). The Final Statements shall be prepared in accordance with this Agreement, including Annex I, and use the same accounting methods, policies and practices as were used to prepare the December 31, 2018 balance sheet included in the Financial Statements to the extent consistent with GAAP, except that the Closing Balance Sheet and the resulting calculations shall not have footnotes (the "Accounting Principles"). To the extent that any actions taken by Parent following the Closing and prior to the Settlement Date with respect to the accounting books and records of the Company on which the Final Statements or the Adjustment Calculation are to be based on are inconsistent with the Accounting Principles, such changes shall not be taken into account in preparing the Final Statements.

c. On or prior to the thirtieth (30th) day following Parent's delivery of the Final Statements and the Adjustment Calculation, the Securityholder Representative may give Parent written notice stating in reasonable detail the Securityholder Representative's objections to the Final Statements or the Adjustment Calculation based on (i) a failure of Final Net Working Capital, Final Cash, Final Indebtedness and/or Final Transaction Expenses to be determined in accordance with the Accounting Principles and the applicable defined terms of (or incorporated into) Final Net Working Capital, Final Cash, Final Indebtedness and/or Final Transaction Expenses and/or (ii) mathematical errors in the Final Statements (an "Objection Notice"). During such thirty (30) day period, Parent and the Surviving Company shall provide the Securityholder Representative and its representatives with reasonable access to the Company's facilities, books and records and its personnel and accountants. Any Objection Notice shall specify in reasonable detail the dollar amount of any objection and the basis therefor together with relating supporting documentation and calculations. Any determination set forth on the Final Statements or the Adjustment Calculation that is not objected to in an Objection Notice shall be deemed acceptable and shall be final and binding upon Parent and the Company Securityholders upon delivery of the Objection Notice. If the Securityholder Representative does not give Parent an Objection Notice within such thirty (30) day period, then the Final Statements and the Adjustment Calculation will be conclusive and binding upon Parent and the Company Securityholders and the Final Statements and the Adjustment Calculation for purposes of Section 2.10(b) above.

d. Following Parent's receipt of any Objection Notice, the Securityholder Representative and Parent shall attempt to negotiate in good faith to resolve such dispute. In the event that the Securityholder Representative and Parent fail to agree on one or more of the Securityholder Representative's proposed adjustments set forth in the Objection Notice within thirty (30) days after Parent receives the Objection Notice, the Securityholder Representative and Parent agree that a national independent accounting firm selected by Parent and reasonably acceptable to the Securityholder Representative (the "Accounting Arbitrator") shall, within the thirty (30)-day period immediately following such appointment, make the final determination of the disputed items (the "Disputed Items") regarding the differences between the Objection Notice, on one hand, and the Final Statements and the Adjustment Calculation, on the other hand, in accordance with the terms of this Agreement, including the Accounting Principles. Upon such notice, Parent and the Securityholder Representative shall each execute an engagement letter in customary form with the Accounting Arbitrator. The Accounting Arbitrator shall make an independent determination of the Disputed Items that shall be final and binding on the Company Securityholders and the parties hereto; provided that (i) each of the Securityholder Representative and Parent shall have a reasonable opportunity to meet with the Accounting Arbitrator, (ii) the Accounting Arbitrator shall be limited to only make a determination regarding the Disputed Items and (iii) each Disputed Item determined by the Accounting Arbitrator shall be no greater than the higher corresponding amount calculated by the Securityholder Representative or Parent and no lower than the lower corresponding amount calculated by the Securityholder Representative or Parent. The Accounting Arbitrator determination of the Disputed Items shall be based solely on the presentations and supporting material provided by Parent or the Securityholder Representative. The fees, costs and expenses of the Accounting Arbitrator shall initially be paid fifty percent (50%) by Parent and fifty percent (50%) by the Securityholder Representative. Except as provided in the preceding sentence, all other costs and expenses incurred by the parties in connection with resolving any dispute hereunder before the Accounting Arbitrator shall be borne by the party incurring such cost and expense.

e. The date on which the final calculation of the Merger Consideration is finally determined pursuant to this Section 2.10 shall hereinafter be referred to as the "Settlement Date".

f. If the Adjustment Calculation is negative, then each of the Company Securityholders shall pay to Parent such Company Securityholder's Pro Rata Portion of an amount equal to the absolute value of the Adjustment Calculation. If the Adjustment Calculation is positive, then Parent shall pay or cause to be paid to each of the Company Securityholders its Pro Rata Portion of the amount of the Adjustment Calculation in accordance with the procedures set forth in Section 2.9.

g. Any payment or transfer required to be made under Section 2.10(f), (i) by the Company Securityholders, shall be made within five (5) Business Days after the Settlement Date, and (ii) by or on behalf of Parent, shall be (A) made within five (5) Business Days after the Settlement Date to the Company Securityholders (other than Employee Awardholders in respect of his or her Company Restricted Stock), or (B) disbursed through the Surviving Company's payroll system at the next or following regularly scheduled payroll date following the Settlement Date, net of applicable Tax withholding, to each Employee Awardholder that held Company Restricted Stock as of immediately prior to the Effective Time, in each case, without set off for any other matter, by wire transfer of immediately available funds to an account designated by the receiving party.

h. Except as otherwise expressly provided in this Agreement, the parties hereto covenant and agree that no amount shall be (or is intended to be) included, in whole or in part (either as an increase or a reduction), more than once in the calculation of (including any component of) the items included in the Final Statements and the related Adjustment Calculation (including the components included therein) if the effect of such additional inclusion (either as an increase or a reduction) would be to cause such amount to be over- or under-counted for purposes of such calculation.

Section 2.11 Taking of Necessary Action; Further Action. If, at any time after the Effective Time, any further action is necessary or desirable to carry out the purposes of this Agreement and to vest the Surviving Company with full right, title and possession to all assets, property, rights, privileges, powers and franchises of the Company and Merger Sub, the parties hereto and the officers and directors of the Company and Merger Sub will take all such lawful and necessary action.

Section 2.12 Withholding. If, at any time after the Effective Each of Parent, Merger Sub, the Company, the Surviving Company, the Escrow Agent and their respective agents (each, a "Withholding Party") shall be entitled to deduct and withhold (or have deducted and withheld) from any amounts payable in connection with this Agreement such amounts as are required to be deducted or withheld therefrom or in connection therewith under the Code or any provision of state, local or foreign Tax Law or under any other Law; provided that before making any such deduction or withholding, other than a deduction or withholding from a payment properly treated as compensation for applicable Tax purposes, any Withholding Party acting at the direction of Parent shall use commercially reasonable efforts to provide reasonable advance notice of such deduction or withholding, and any such Withholding Party will use commercially reasonable efforts to cooperate with the Securityholder Representative to obtain a reduction of or relief from such deduction or withholding. To the extent such amounts are so deducted or withheld and are timely remitted to the applicable Governmental Authority in accordance with applicable Law, such amounts shall be treated for all purposes under this Agreement as having been paid to the Person to whom such amounts would otherwise have been paid..

ARTICLE III
REPRESENTATIONS AND WARRANTIES OF THE COMPANY

The Company hereby represents and warrants to and for the benefit of Parent and Merger Sub, subject only to such exceptions as are specifically disclosed in writing in the disclosure schedule supplied by the Company to Parent and Merger Sub dated as of the date hereof in accordance with Section 10.5 (the "Company Disclosure Schedule"), as of the date hereof and the Closing Date, as follows:

Section 3.1 Organization and Qualification; Subsidiaries. Each of the Company and its Subsidiaries (a) is a legal entity duly organized, validly existing and in good standing (where such concept is applicable) under the Laws of the jurisdiction of its organization; (b) has the requisite organizational power and authority necessary to own, lease and operate its properties and to carry on its business as it is now being conducted; and (c) is duly qualified or licensed and in good standing to do business in each jurisdiction in which the nature of the business conducted by it or the ownership or leasing of its properties makes such qualification or license necessary, except where the failure to be so qualified or licensed or in good standing (x) has not had and would not reasonably be expected to have a material and adverse impact on the Company's and its Subsidiaries' ability to carry on its and their business as currently conducted or (y) would not or would not reasonably be expected to prevent, materially delay or materially impede the performance by the Company of its obligations under this Agreement or the consummation of the Transactions.

Section 3.2 Organizational Documents. The Company has made available to (a) Parent complete and correct copies as of the date hereof of the certificate of incorporation and bylaws of the Company (collectively, the "Company Charter Documents") and the equivalent organizational documents of each of its Subsidiaries (collectively, the "Subsidiary Charter Documents"), in each case as amended or restated as of the date hereof, (b) the stock records (including certificates, if applicable) of the Company and its Subsidiaries and (c) the minutes and other records and other proceeding of the board of directors (or other similar governing body) and equityholders of the Company and its Subsidiaries. There has not been any violation of any of the provisions of the applicable Company Charter Documents, and none of its Subsidiaries is in violation of any of the provisions of the applicable equivalent organizational documents of the Company's Subsidiaries.

Section 3.3 Authorization of Agreement.

a. The Company has all requisite corporate power and authority to execute and deliver this Agreement and each other agreement, document, instrument or certificate contemplated by this Agreement (collectively, the "Transaction Documents") to be executed by the Company, to perform its obligations hereunder and thereunder, and to consummate the Transactions. Subject to the foregoing, the execution and delivery of this Agreement and each other Transaction Document to be executed and delivered by the Company, the performance of its obligations hereunder and thereunder, and the consummation by the Company of the Transactions have been duly authorized by all necessary corporate action and, except as contemplated by this Agreement, no other corporate proceedings on the part of the Company are necessary to authorize this Agreement or to consummate the Transactions. This Agreement has been, and each other Transaction Document to be executed by the Company will be, at or prior to the Closing, duly executed and delivered by the Company and, assuming the due authorization, execution and delivery hereof by the other parties thereto, constitutes the legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, except as enforcement hereof may be limited by bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium or other similar Laws relating to or affecting the enforcement of creditors' rights generally and legal principles of general applicability governing the availability of equitable remedies (whether considered in a proceeding in equity or at law or under applicable legal codes).

b. The Company Stockholder Approval is the only vote of the holders of any class or series of Company Securities necessary to approve and adopt this Agreement, approve the Merger and consummate the Transactions.

Section 3.4 Capitalization.

a. The authorized equity of the Company consists of 20,000,000 shares of Common Stock, of which 13,600,000 shares are issued and outstanding as of the date hereof. Section 3.4(a) of the Company Disclosure Schedule sets forth a true and complete list of all issued and outstanding shares of Common Stock as of the date hereof as well as the holders of record of such shares. No other equity securities of the Company are authorized, issued or outstanding.

b. Except for the T-System Group, Inc. Omnibus Incentive Plan (the "Incentive Plan"), the Company does not have or maintain any option plan, equity incentive plan or other similar plan providing for equity or equity-based compensation of any Person. The Company has reserved 2,025,000 shares of Common Stock for issuance to employees and directors of, and consultants to, the Company and its Subsidiaries upon the exercise of options to purchase Common Stock ("Company Options"), of which 897,000 shares are issuable, as of the date of this Agreement, upon the exercise of outstanding, unexercised Company Options. None of the Company Options have a per unit exercise price that is less than the Per Share Consideration. Section 3.4(b)(i) of the Company Disclosure Schedule sets forth a list of all holders of outstanding Company Options as of the date hereof, including the number of shares of Common Stock subject to each such Company Option, the grant and expiration dates, exercise price and vesting schedule for such Company Options. Section 3.4(b)(ii) of the Company Disclosure Schedule sets forth a complete and accurate list of (i) all outstanding awards of Company Restricted Stock, (ii) the respective name of the holder of such Company Restricted Stock, (iii) the number of Company Restricted Stock subject to each such award, (iv) the date of grant of such Company Restricted Stock, (v) the vesting schedule of such Company Restricted Stock and (vi) whether an election under Section 83(b) of the Code was filed as to each award of Company Restricted Stock. The Company has heretofore provided or made available to Parent (or Parent's Representatives) true and complete copies of the standard form of option agreement and any option agreements that differ from such standard form.

c. All of the issued and outstanding shares of Common Stock are, and shares of Common Stock issuable upon exercise of the Company Options, upon issuance on the terms and conditions specified in the Company Options pursuant to which they are issuable, will be, (i) duly authorized, validly issued, fully paid and nonassessable and issued in compliance with all applicable federal securities Laws and (ii) free and clear of all Liens. Except as set forth on Section 3.4(c)(i) of the Company Disclosure Schedule , there are no options, warrants, calls, rights, commitments or agreements of any character, written or oral, to which the Company or any Subsidiary of the Company is a party or by which it is bound obligating the Company or any of its Subsidiaries to issue, deliver, sell, repurchase or redeem, or cause to be issued, delivered, sold, repurchased or redeemed, any securities of the Company or any of its Subsidiaries or obligating the Company or any Subsidiary of the Company to grant, extend, accelerate the vesting of, change the price of, otherwise amend or enter into any such option, warrant, call, right, commitment or agreement, and there are no securities of the Company or any Subsidiary of the Company outstanding which upon conversion, exercise or exchange would require the issuance of any equity interests of the Company or that have the right to vote (or which are convertible into, or exercisable or exchangeable for, securities having the right to vote) in any matters on which the members of the Company are entitled to vote. Except as set forth on Section 3.4(c)(i) of the Company Disclosure Schedule, there are no outstanding or authorized phantom equity, profit participation, equity appreciation rights, equity-based compensation awards or other similar rights with respect to the Company or any Subsidiary of the Company. There are no repurchase or registration rights, and there is no voting trust, proxy, rights plan, antitakeover plan or other agreements or understandings to which the Company or any Subsidiary of the Company is a party or by which the Company or any Subsidiary of the Company is bound with respect to any equity security of the Company or any Subsidiary of the Company. None of the issued and outstanding Company Securities are subject to, or were issued in violation of, any preemptive or similar right, purchase option, call or right of first refusal or similar right.

d. All of the issued and outstanding shares or other equity interests of each Subsidiary of the Company are duly authorized, validly issued, fully paid and nonassessable and issued in compliance with all applicable federal securities Laws, and each such share, or other equity interest, is owned by the Company or another Subsidiary of the Company free and clear of all Liens. None of the issued and outstanding shares or other equity interests of each Subsidiary of the Company is subject to, or was issued in violation of, any preemptive or similar right, purchase option, call or right of first refusal or similar right.

e. Neither the Company nor any Subsidiary of the Company (i) owns any stock, partnership interest, joint venture interest or other equity ownership interest in any Person other than the Subsidiaries of the Company set forth on Schedule 3.4(e) of the Company Disclosure Schedule or (ii) is a party to any Contract with a requirement to provide funds to, or make any investment in (in the form of a loan, capital contribution or otherwise), or provide any guarantee with respect to the obligations of, any Person other than the Subsidiaries of the Company set forth on Schedule 3.4(e) of the Company Disclosure Schedule.

Section 3.5 No Conflict; Required Filings and Consents.

a. Assuming that the filings and notifications described in Section 3.5(b) have been made, the execution and delivery and performance by the Company of this Agreement and each other Transaction Document to which the Company is a party does not, and the consummation of the Transactions pursuant to the terms of this Agreement will not, (i) conflict with or violate the Company Charter Documents; (ii) conflict with or violate any Laws or Permits applicable to the Company or any of its Subsidiaries or by which any of their respective assets or properties is bound or subject; or (iii) result in any breach of or constitute a default or loss of a benefit (or an event that with or without notice or lapse of time or both would become a default or loss of a benefit) under, or give to others any rights of termination, acceleration or cancellation of, or require payment under, or result in the creation of a Lien (other than Permitted Liens) on any of the properties or assets of the Company or any of its Subsidiaries pursuant to, (A) any Contract other than any Material Contract or (B) any Material Contract, except, with respect to clause (iii)(A), for such conflicts, violations, breaches, defaults, rights of termination, acceleration, cancellation, payments or Liens that would not reasonably be expected to have, individually or in the aggregate, a material and adverse impact on the ability of the Company or any Subsidiary of the Company to carry on its and their business as currently conducted.

b. The execution and delivery of this Agreement (and each other Transaction Document to which the Company is a party) by the Company does not, and consummation of the Transactions will not, require the Company or any of its Subsidiaries to obtain any consent, license, permit, approval, waiver, authorization or order of, or to make any filing with or notification or declaration to, any Governmental Authority or third Person other than the filing of the Certificate of Merger with the Secretary of State of the State of Delaware.

Section 3.6 Permits; Compliance with Law.

a. Each of the Company and its Subsidiaries is in possession of all material franchises, grants, authorizations, licenses, permits, easements, variances, exemptions, consents, certificates, approvals and orders necessary to own, lease, maintain and operate its properties and to carry on its business as it is now being conducted (collectively, the "Permits"). All fees and charges with respect to such Permits have been paid in full. Section 3.6(a) of the Company Disclosure Schedule lists all such Permits issued to the Company and its Subsidiaries, including the names of the Permits and their respective dates of issuance and expiration. There is no Action pending or, to the Knowledge of the Company, threatened in writing that has resulted in (or with or without notice or lapse of time or both could reasonably be expected to result in), revocation, suspension, adverse modification, non-renewal, impairment, restriction, termination or cancellation of, or order of forfeiture or substantial fine with respect to, any Permit. The Company and its Subsidiaries are, and since October 16, 2017 have been, in compliance in all material respects with all of the Permits and all Laws (including Healthcare Laws) applicable to them or by or to which any of their respective assets or properties are bound or subject. Since October 16, 2017, neither the Company nor any Subsidiary of the Company has received any written notice from any Governmental Authority to the effect that the Company or any Subsidiary of the Company is not in compliance with any Permit or any applicable Law (including Healthcare Laws).

b. Each of the Company and its Subsidiaries is, and since October 16, 2017, has been conducting its business in compliance in all material respects with all federal and state privacy and data security Laws governing health information, including, without limitation, HIPAA, and has conducted its business in compliance, in all material respects, with each applicable HIPAA Regulation since October 16, 2017. Neither the Company nor any Subsidiary of the Company is a "covered entity" (as that term is defined in the HIPAA Regulations), and the Company, or to the extent applicable, a Subsidiary of the Company, has executed business associate agreements (as such agreements are required by the HIPAA Regulations) with each "covered entity" or "business associate" (i) for whom it provides functions or activities that render the Company or any Subsidiary of the Company a "business associate" (as that term is defined in the HIPAA Regulations); and (ii) with each of their service providers that collects, stores, accesses, transmits, transfers, discloses, processes or uses PHI, on their behalf.

c. Neither the Company nor any Subsidiary, nor any of their directors, officers, or employees, nor to the Knowledge of the Company, independent contractors or agents, have been debarred, excluded, or suspended from, or are otherwise ineligible to participate in, any "federal health care program," as such term is defined in 42 U.S.C. § 1320a-7b(f), or any other third-party payor program.

Section 3.7 Financial Statements; Undisclosed Liabilities.

a. The Company has provided to Parent true and complete copies of (i) the audited consolidated balance sheet of the Company and its Subsidiaries as of December 31, 2016 and the related audited consolidated statements of income and cash flows for the calendar year then ended (including the notes or other supplementary information thereto); (ii) the unaudited consolidated balance sheet of the Company and its Subsidiaries as of December 31, 2017 and December 31, 2018, and the related statement of income for the applicable calendar year then ended; (iii) the unaudited consolidated balance sheet of the Company as of September 30, 2019 (the "Balance Sheet" and the date of such balance sheet, the "Balance Sheet Date") and the related unaudited and consolidated statement of income for the nine (9) month period then ended; and (iv) the unaudited consolidated statement of income of the Company and its Subsidiaries for the twelve (12) month period ended December 31, 2018 and the nine (9) month period ended on the Balance Sheet Date prepared under ASC 605 (collectively, the "ASC 605 Income Statements", and all of such financial statements described in this Section 3.7(a), collectively, the "Financial Statements".

b. The Financial Statements (i) other than the ASC 605 Income Statements, have been prepared in accordance with GAAP, consistently applied, subject, in the case of the unaudited interim Financial Statements, to normal year-end adjustments (none of which individually or in the aggregate will be material) and the absence of footnotes, (ii) that comprise the ASC 605 Income Statements have been prepared in accordance with ASC 605, consistently applied, subject, in the case of the unaudited interim ASC 605 Income Statement, to normal year-end adjustments (none of which individually or in the aggregate will be material) and the absence of footnotes, (iii) fairly present in all material respects the consolidated financial condition of the Company and its Subsidiaries as of such dates and the results of the Company's and its Subsidiaries' operations and cash flows for the periods specified, and (iv) were compiled from books and records regularly maintained by the Company used to prepare the financial statements of the Company and its Subsidiaries. Neither the Company nor any Subsidiary of the Company owes any Indebtedness other than as set forth on the Balance Sheet.

c. Except (i) as disclosed and adequately reserved against in the Balance Sheet; (ii) for liabilities and obligations incurred in the ordinary course of business, consistent with past practice of the Company and its Subsidiaries since the date of the Balance Sheet; or (iii) arising under this Agreement, neither the Company nor any of its Subsidiaries has any Liability that would be required to be reflected or reserved against on a balance sheet or in the notes thereto prepared in accordance with GAAP.

Section 3.8 Absence of Certain Changes or Events. Since December 31, 2018, until the date of the Agreement:

a. The Company and its Subsidiaries have conducted their respective businesses only in the ordinary course and in a manner consistent with past practice;

b. There has not been a Company Material Adverse Effect; and

c. there has not been, occurred or arisen, any action, change or event that would have been a violation of Section 5.1(b) if taken or occurring after the date hereof.

Section 3.9 Absence of Litigation. Section 3.9 of the Company Disclosure Schedule sets forth, since October 16, 2017, each Action (a) (i) that has been commenced by or against the Company or any Subsidiary of the Company; or (ii) that challenges, or that may have the effect of preventing, delaying, making illegal, or otherwise interfering with, any of the Transactions, or (b) to the Knowledge of the Company, threatened against the Company or any of its Subsidiaries or any of their assets, properties or rights. To the Knowledge of the Company, no event has occurred or circumstance exists that may give rise to or serve as a basis for the commencement of any of the foregoing Actions. Neither the Company nor any of its Subsidiaries is subject to any material decision, judgment, order, writ, injunction, decree or award of, or any settlement agreement with or subject to, any Governmental Authority, arbitration tribunal or similar party. The Company has made available to Parent true and correct copies of all pleadings, correspondence, and other documents (including settlement agreements) relating to each Action listed or required to be listed in Section 3.9 of the Company Disclosure Schedule.

Section 3.10 Employee Benefit Plans; Labor Matters.

a. Section 3.10(a) of the Company Disclosure Schedule sets forth an accurate and complete list of each material Benefit Plan. "Benefit Plan" means all employee benefit or compensation plans, programs, policies, agreements, or arrangements, including (i) each "employee benefit plan" (as such term is defined in Section 3(3) of ERISA, whether or not subject thereto) and (ii) each other plan, program, arrangement, agreement or policy, including any funding mechanism therefor now in effect or in the future required as a result of the Transactions or otherwise, whether or not subject to ERISA, relating to: severance, retention, referral incentive, stock purchase, stock option or other equity-based compensation, bonus, incentive, vacation, deferred compensation, supplemental income, employee loan, collective bargaining, employment, workers' compensation, consulting, change-of-control, fringe benefit or other employee benefits, that, in each case (A) is sponsored, maintained or contributed to, or required to be sponsored, maintained or contributed to, by the Company or any of its Subsidiaries for the benefit of any current or former employee, officer, manager, director or individual consultant of the Company or any Subsidiary of the Company; or (B) under which the Company or any of its Subsidiaries has or could have any actual or contingent material liability, whether present or future. With respect to each Benefit Plan, the Company has made available to Parent copies, to the extent applicable, of (i) the plan (including any amendments thereto) and related trust documents, the most recent summary plan description and any other material employee communications regarding such plan; (ii) the most recent annual report (Form 5500 series); (iii) the most recent financial statements; (iv) the most recent IRS determination letter or opinion letter; (v) any non-routine correspondence with a Governmental Authority during the past three years and (vi) any material associated administrative agreements or insurance policies.

b. With respect to the Benefit Plans:

i. Each Benefit Plan has been (A) maintained, operated and administered in all material respects and (B) funded, in each case in accordance with its terms and applicable Law;

ii. There are no Actions, suits or claims (other than routine claims for benefits) that are pending, in progress or, to the Knowledge of the Company, threatened against, or with respect to, any of the Benefit Plans or their assets; and, to the Knowledge of the Company, no fact or circumstance exists that would reasonably be expected to give rise to any such Action, suits or claims that could reasonably be expected to result in material Liability to the Company or any of its Subsidiaries;

iii. All premiums, contributions or payments required to be made to the Benefit Plans pursuant to their terms and provisions and applicable Law have been made timely;

iv. All material liabilities or expenses of the Company and its Subsidiaries in respect of any Benefit Plan that have not been paid, have been properly accrued in all material respects on the Company's or its Subsidiaries' most recent financial statements in accordance with GAAP;

v. Each Benefit Plan that is intended to be qualified under Section 401(a) of the Code has received a favorable determination letter from the IRS or is the subject of a favorable opinion from the IRS on the form of such Benefit Plan and, to the Knowledge of the Company, there are no facts or circumstances since the date of such determination or opinion letter that would be reasonably likely to cause the loss of such qualified status;

vi. Neither the Company nor any of its Subsidiaries, or, to the Knowledge of the Company, any other "party in interest" or "disqualified person," with respect to any Benefit Plan, has engaged in a non-exempt "prohibited transaction" within the meaning of Section 406 of ERISA or Section 4975 of the Code involving such Benefit Plan. To the Knowledge of the Company, no fiduciary has any liability for breach of fiduciary duty or any other failure to act or comply with the requirements of ERISA, the Code or any other applicable laws in connection with the administration or investment of the assets of any Benefit Plan;

vii. There is no matter (other than routine qualification determination filings) pending, in progress or to the Knowledge of the Company, threatened against or relating to any of the Benefit Plans before any Governmental Authority; and, to the Knowledge of the Company, no fact or circumstance exists that would reasonably be expected to give rise to any such matter that could reasonably be expected to result in material Liability to the Company or any of its Subsidiaries; and

viii. Each Benefit Plan that is a "nonqualified deferred compensation plan" (as defined for purposes of Code Section 409A) has been since inception (or, if later, January 1, 2009) in documentary and operational compliance in all respects with Code Section 409A and the applicable guidance issued thereunder in all material respects.

ix. There are no Liabilities, costs, Taxes, expenses or penalties under, in connection with, or relating to any Benefit Plan, in each case, with respect to an Excluded Participant, nor are any such Liabilities, costs, Taxes, expenses or penalties reasonably expected to be incurred or arise. For purposes of this Agreement, the term "Excluded Participant" shall mean (i) any current or former employee of Rock Creek Golf Club Idaho, LLC or its Subsidiaries, and (ii) any other participant in a Benefit Plan who is not a current or former employee, director or consultant of the Company or its Subsidiaries (or a beneficiary or dependent thereof).

c. Except as set forth on Section 3.10(c) of the Company Disclosure Schedule, neither the Company nor any of its Subsidiaries have any indemnification or reimbursement obligation pursuant to any Contract to which the Company or any of its Subsidiaries is a party or otherwise for any Taxes imposed under the Code (including Sections 409A or 4999 of the Code) or related gross-up payment.

d. Other than in connection with the treatment of Company Restricted Stock contemplated under Section 2.7 the execution and delivery of this Agreement and the consummation of the Transactions in and of itself, will not (A) require the Company or any of its Subsidiaries to make a larger contribution to, or pay greater benefits or provide other rights under, any Benefit Plan than it otherwise would, or (B) create or give rise to any additional vested rights or service credits under any Benefit Plan.

e. The Company and its Subsidiaries and any ERISA Affiliate do not sponsor, maintain, contribute to (or have any obligation to contribute to) or have any liability, whether contingent or otherwise, with respect to, and have not within the preceding six years sponsored, maintained, contributed to (or had any obligation to contribute to) or had any liability, whether contingent or otherwise, with respect to any Benefit Plan (including, for such purpose, any "employee benefit plan," within the meaning of Section 3(3) of ERISA, which the Company or any of its Subsidiaries or any ERISA Affiliate previously maintained or contributed to within such preceding six years) that is, or has been, (i) subject to Title IV of ERISA or Section 412 of the Code; (ii) maintained by more than one employer within the meaning of Section 413(c) of the Code; (iii) subject to Sections 4063 or 4064 of ERISA; (iv) a "multiemployer plan," within the meaning of Section 4001(a)(3) of ERISA; or (v) a "multiple employer welfare arrangement" as defined in Section 3(40) of ERISA. For this purpose, "ERISA Affiliate" shall mean each entity that is or at any relevant time, was, treated as a single employer with the Company and/or its Subsidiaries within the meaning of Section 414(b), (c), (m) or (o) of the Code, or Section 4001(b)(1) of ERISA. The Company and its Subsidiaries have not incurred any current or projected liability in respect of post-employment or post-retirement health or other welfare benefits to former employees, managers, directors or individual consultants of the Company or any of its Subsidiaries (or their dependents or beneficiaries), except as required to avoid an excise tax under Code Section 4980B or as may be required under any other similar Law.

f. Neither the Company nor any of its Subsidiaries is a party to any collective bargaining or other labor union Contracts. No collective bargaining agreement or other labor union Contract is being negotiated by the Company or any of its Subsidiaries and, to the Knowledge of the Company, no Person is currently seeking to organize or represent the Company's or any of its Subsidiaries' current employees and there have not been any union organizing activities with respect to employees of the Company or any of its Subsidiaries. There is no pending or, to the Knowledge of the Company, threatened labor dispute, strike, slowdown, lockout, work stoppage, material grievance, labor arbitration, or other concerted activity against the Company or any of its Subsidiaries, nor to the Knowledge of the Company has there been any such activity within the past five years. Neither the Company nor any of its Subsidiaries or, to the Knowledge of the Company, any of their respective representatives or employees has committed (or has been alleged to have committed) any unfair labor practices in connection with the operation of the respective businesses of the Company and its Subsidiaries. There is no pending or, to the Knowledge of the Company, threatened, charge or complaint against the Company or any of its Subsidiaries by or before any Governmental Authority asserting any claim for violation of any employment Law.

g. Section 3.10(g) of the Company Disclosure Schedule sets forth: (i) all employment agreements with any present director or officer of the Company or any of its Subsidiaries that provides for an annual base salary in excess of $150,000 or are not freely terminable at-will by the Company without advance notice of more than 30 days, financial cost or penalty, severance payment, or other obligation; (ii) any Person who has accepted an offer of employment made by the Company or any of its Subsidiaries but whose employment has not yet started and of any outstanding offer of employment made to any Person by the Company or any of its Subsidiaries providing for annual base salary in excess of $150,000, (iii) all agreements with present consultants of or independent contractors to the Company or any of its Subsidiaries that provide for annual cost to the Company and its Subsidiaries in excess of $150,000 and all such agreements with former consultants of or independent contractors to the Company or any of its Subsidiaries if any such Contracts provide for any continuing obligations of the Company, other than a nondisclosure covenant; (iv) all post-termination non-competition agreements with the Company or any of its Subsidiaries executed by directors or officers of the Company or any of its Subsidiaries that are currently in effect; and (v) all agreements that provide for any severance payment, change of control payment, bonus payment, or other payment obligation to any current employee, manager, director or consultant of the Company or any of its Subsidiaries upon the consummation of the Transactions.

h. The Company has provided Parent a true and correct list (the "Employee List") setting forth for each employee or contractor of the Company, as applicable: (i) the names; (ii) status as employee or contractor; (iii) current annual salary, current hourly wages, or other remuneration; (iv) bonus opportunity; (v) title; (vi) hire date or date of engagement; (vii) any other material compensation or benefits payable; (viii) accrued vacation and paid-time-off; (ix) any legally binding commitments made with respect to compensation or benefits other than base compensation, bonus, vacation and paid-time-off accruals; (x) principal work location; (xi) leave status; and (xii) each such employee's status as being exempt or nonexempt under the state and federal wage and hour laws. The Company has indicated on the Employee List each employee that provides services both to (x) the Company and its Subsidiaries and (y) the Securityholder Representative or any of its Affiliates (other than the Company and its Subsidiaries).

i. Neither the Company nor any of its Subsidiaries has implemented any "plant closing" or "mass layoff" of employees, as those terms are defined in the Worker Adjustment Retraining and Notification Act of 1988, as amended, or any similar state or local Law (collectively, the "WARN Act"), within the past three years and no layoffs that could implicate the WARN Act are currently contemplated by the Company.

j. The Company and its Subsidiaries have complied in all material respects with the proper classification under applicable Laws of all current and former employees, managers, directors, individual consultants, temporary employees, leased employees, or any agents for Tax purposes and for participation in any Benefit Plans. The Company and its Subsidiaries have complied in all material respects with all applicable Laws relating to the payment of wages and have, within the time and in the manner prescribed by Law, withheld and paid over to the proper Tax authority all amounts required to be so withheld and paid over under applicable Law.

k. The Company and its Subsidiaries: (i) are and have been in compliance with all applicable Laws, rules and regulations relating to the employment of labor, including, but not limited to, discrimination, wages and hours, labor relations, leave of absence requirements, occupational health and safety, privacy, harassment, retaliation, immigration, employee classification, wrongful discharge or violation of the personal rights of employees, former employees or prospective employees; and (ii) are and have been in compliance with any order, ruling, decree, judgment or arbitration award of any arbitrator or any court or other Governmental Authority respecting employment, employment practices, terms and conditions of employment, wages, hours or other labor-related matters. Each employee of the Company and, to the Knowledge of the Company, each employee of its Subsidiaries working in the United States has the lawful right to work in the United States.

l. The Company and its Subsidiaries: (i) have paid in full to all of their respective employees, consultants, and independent contractors, or adequately accrued in accordance with GAAP, all wages, salaries, commissions, bonuses, benefits and other compensation due to or on behalf of such Persons; and (ii) there is no claim with respect to payment of wages, salary, overtime pay, or other obligation that has, since October 16, 2017, been asserted or is now pending or, to the Knowledge of the Company, threatened before any Governmental Authority with respect to any such Persons currently or formerly employed or engaged by the Company or its Subsidiaries.

m. Neither the execution of this Agreement nor the consummation of the Transactions (either alone or in combination with another event) will: (i) result in any severance, change of control payment, bonus payment, or other payment, benefit or obligation becoming due to any current or former employee, manager, director or consultant of the Company or any of its Subsidiaries from the Company or any of its Subsidiaries under any Benefit Plan or otherwise; (ii) increase any benefits otherwise payable under any Benefit Plan or otherwise; (iii) result in any acceleration of the time of payment or vesting of any benefits under any Benefit Plan or otherwise; or (iv) result in any loan forgiveness to any employee, consultant or officer.

n. No amount or benefit that has been or could be received (whether in cash or property or the vesting of property) by any current or former employee, consultant, director or other service provider of the Company or any of its Subsidiaries who is a “disqualified individual” (as such term is defined in Treasury Regulation Section 1.280G-1) could be characterized as an “excess parachute payment” (as such term is defined in Section 280G(b)(1) of the Code) as a result of any of the transactions contemplated by this Agreement.

o. There is no Benefit Plan sponsored, maintained or contributed to by the Company or any of its Subsidiaries under the Law or applicable custom or rule of a jurisdiction outside of the United States.

Section 3.11 Taxes.

a. All income and other material Tax Returns, taking into account valid extensions of time for filing, by or with respect to the Company or any of its Subsidiaries have been filed and are true, correct and complete in all material respects and have been prepared in compliance with applicable Law in all material respects; (i) all Income Taxes and all other material Taxes for which the Company or any of its Subsidiaries are liable have been paid in full; and (ii) the Company and each of its Subsidiaries has withheld or collected from each payment or deemed payment made to its past or present employees, officers, managers, directors and independent contractors, suppliers, creditors, securityholders or other parties all material Taxes required to be withheld and has, properly reported and paid such withheld or collected amounts to the proper Governmental Authorities.

b. Copies of federal, state, local, and foreign income and other material Tax Returns filed by or with respect to the Company or its Subsidiaries for which the applicable statute of limitations has not expired, and all audit reports and statements of deficiencies assessed against or agreed to by or with respect to the Company or any of its Subsidiaries that are included in the Data Room are true and complete. Neither the Company nor any of its Subsidiaries has waived any statute of limitations in respect of Taxes or agreed to any extension of time with respect to a Tax assessment or deficiency which waiver or extension is still in effect as of the date hereof other than pursuant to customary extensions of the due date for filing a Tax Return obtained in the ordinary course of business of no more than six months. There are no outstanding written requests, agreements, consents or waivers to extend the statutory period of limitations applicable to the assessment or collection of any Taxes or deficiencies against the Company or any of its Subsidiaries other than pursuant to customary extensions of the due date for filing a Tax Return obtained in the ordinary course of business of no more than six months.

c. Neither the Company nor any of its Subsidiaries (i) has received written notice that it is currently the subject of a Tax audit, action, suit, claim, proceeding or examination, and no such audit, action, suit, claim, proceeding or examination has, since October 16, 2017 been proposed in writing, (ii) has received from any Governmental Authority any written notice of proposed adjustment, deficiency, underpayment of material Taxes or any other such written notice which has not been satisfied or withdrawn or otherwise resolved with no further liability to the Company or any of its Subsidiaries, or (iii) has, since October 16, 2017 received any written notice from any Governmental Authority raising any issues with respect to any Tax Return which issues have not been resolved with no further liability to the Company or any of its Subsidiaries. No written claim has, since October 16, 2017, been received by the Company or its Subsidiaries from a tax authority in a jurisdiction where the Company or its Subsidiaries do not file a Tax Return asserting that such entity is or may be subject to taxation by that jurisdiction in respect of Taxes that would be covered by or the subject of such Tax Return.

d. Except for Liens for Taxes not yet due and payable, no Liens for Taxes exist upon the assets of any of the Company or its Subsidiaries.

e. Neither the Company nor any of its Subsidiaries has pending any ruling requests filed by it or on its behalf with any Governmental Authority or has entered into any agreement, ruling or arrangement concerning Taxes with any Governmental Authority that would have a continuing effect on the Company or any of its Subsidiaries in a Post-Closing Tax Period.

f. As of the date hereof, neither the Company nor any of its Subsidiaries (i) has been a member of an affiliated group filing a combined, affiliated, consolidated or similar Tax Return (other than the consolidated Tax Return for which the Company or Cannae Holdings, Inc. is the common parent); or (ii) has any liability for Taxes of any Person (other than any of the Company’s Subsidiaries) arising from the application of Treasury Regulation section 1.1502-6 or any analogous provision of state, local or foreign Law, or as a transferee or successor, by Contract or other written agreement or otherwise (other than pursuant to a customary commercial Contract entered into in the ordinary course of business consistent with past practice the principal purpose of which does not relate to Taxes (such contracts, “Customary Commercial Contracts”)

g. Neither the Company nor any of its Subsidiaries is a party to, is bound by or has any obligation under any written Tax sharing or Tax indemnity agreement or similar Contract (other than Customary Commercial Contracts), nor does the Company or any Subsidiary of the Company have any Liability to another party under any such agreement.

h. Neither the Company nor any of its Subsidiaries has been (i) a "United States real property holding corporation" within the meaning of Section 897(c)(2) of the Code during the applicable period specified in Section 897(c)(1)(A)(ii) of the Code, or (ii) either a "distributing corporation" or a "controlled corporation" in a distribution occurring during the last two (2) years in which the parties to such distribution treated the distribution as one to which Section 355 (or so much of Section 356 of the Code as relates to Section 355 of the Code) of the Code is applicable. Neither the Company nor any of its Subsidiaries has engaged in a "listed transaction" under Treasury Regulation Section 1.6011-4(b) (or any similar provision of non-U.S., state or local Law).

i. Neither the Company nor any of its Subsidiaries has or ever had a permanent establishment in any country other than the United States, as defined in any applicable Tax treaty between the United States and such other country.

j. Other than (i) the Company's direct interests in T-System Holding LLC, (ii) T-System Holdings LLC's direct interest in T-System Holding and RevCycle, and (iii) T-System Holding's direct interest in the T-System Subsidiary, none of the Company nor any of its Subsidiaries has (or, since October 16, 2017, has had) any direct or indirect interest in any trust, partnership, corporation, limited liability company, or other business entity for U.S. federal Income Tax purposes. The entity classification of the Company and its Subsidiaries for U.S. federal income tax purposes (and any entity classification elections that have been made since October 16, 2017) are listed on Section 3.11(j) of the Company Disclosure Schedule.

k. None of the Company or its Subsidiaries will be required to include any item of income in, or exclude any item of deduction from, taxable income for any Post-Closing Tax Period as a result of: (i) Section 481(a) of the Code (or similar provision of U.S. state, local or foreign Tax Law) as the result of a change in method of accounting made prior to the Closing, or use of an improper method of accounting, in each case, for a taxable period ending on or prior to the Closing Date; (ii) any closing agreement as described in Section 7121 of the Code (or any corresponding or similar provision of applicable Tax Law) executed prior to the Closing; (iii) any intercompany transactions or any excess loss account described in Treasury Regulations under Section 1502 of the Code (or any corresponding or similar provision of U.S. state, local or foreign income Tax Law), in each case, as a result of transactions occurring prior to the Closing; (iv) any installment sale or open transaction disposition made on or prior to the Closing Date; (v) any election under Section 108(i) of the Code (or similar provision of U.S. state, local or foreign Tax Law) made prior to the Closing Date; or (vi) any prepaid amount received or deferred revenue accrued outside the ordinary course of business on or prior to the Closing Date.

l. All material intercompany transactions between or among the Company and its Affiliates have met the applicable requirements of Section 482 of the Code and the regulations thereunder in all material respects.

m. Section 3.12(c), this Section 3.11, and Section 3.10 (to the extent it relates to Taxes), constitute the exclusive representations and warranties of the Company and its Subsidiaries with respect to Taxes and any claim for breach of representation with respect to Taxes shall be based solely on the representations in Section 3.12(c), this Section 3.11 or Section 3.10 (to the extent it relates to Taxes) and shall not be based on the representations set forth in any other provision of this Agreement. The representations and warranties in this Section 3.11, other than the representations and warranties included in Section 3.11(j) or Section 3.11(k), may not be relied upon for purposes of establishing the liability of Company Securityholders for Taxes attributable to any Tax periods (or portions thereof) beginning, or Tax positions taken, after the Closing Date.

Section 3.12 Properties.

a. Neither the Company nor any of its Subsidiaries owns any real property.

b. Section 3.12(b) of the Company Disclosure Schedule lists all real property and interests in real property leased or subleased (the "Leased Real Property") by the Company or any of its Subsidiaries and all lease and sublease agreements applicable to the Leased Real Property (including any amendments or supplements thereto, the "Leases"). Except for Permitted Liens, each of the Company and its Subsidiaries has a valid leasehold interest in the Leased Real Property (including all rights, title, privileges and appurtenances pertaining or relating thereto) free and clear of any Liens, and neither the Company nor any of its Subsidiaries has subleased, licensed or otherwise granted to any Person the right to use or occupy the Leased Real Property or any portion thereof. The Leased Real Property is the only real property or interest in real property used or held for use in the operation of the business of the Company and its Subsidiaries.

c. The Company and each of its Subsidiaries has good and marketable title, free and clear of all Liens, to all of their material tangible properties and assets, real and personal, except for dispositions of such properties or assets in the ordinary course of business consistent with past practice and except for (i) Liens for Taxes or assessments and similar charges (A) not delinquent or (B) being contested through appropriate procedures and for which adequate reserves have been established in accordance with GAAP that are disclosed in the Balance Sheet; (ii) mechanic's, materialmen's, contractor's, repairman's or similar Liens arising in the ordinary course of business consistent with past practice for amounts which are not yet due and payable; (iii) Liens to secure landlords, sublandlords, licensors or sublicensors under real estate leases or rental agreements; (iv) deposits or pledges made in connection with, or to secure payment of, workers' compensation, unemployment insurance, pension or other social security programs mandated under Laws; (v) zoning, entitlement, building and other similar restrictions which are not violated by the current conduct of the Company's business; and (vi) imperfections of title, easements, covenants, rights of way and other encumbrances or restrictions, if any, as do not materially interfere with the use or occupancy of or materially detract from the value of the property as such property is used on the date of this Agreement (the items in clauses (i) through (vi) collectively, the "Permitted Liens"). Such items of tangible property and assets have been maintained in accordance with the normal practice of the Company and its Subsidiaries and are in all material respects in useable or saleable condition and quality for the operation of its business, ordinary wear, tear and ageing excepted.

Section 3.13 Intellectual Property.

a. Section 3.13(a) of the Company Disclosure Schedule lists all Owned Intellectual Property that is Registered. The Owned Intellectual Property is subsisting, and, to the Knowledge of the Company, valid and enforceable and, to the extent applicable, all registration, renewal and maintenance fees due and payable in respect of each such item of Intellectual Property have been paid.

b. The Company or one of its Subsidiaries (i) exclusively owns all right, title and interest in and to the Owned Intellectual Property, free and clear of all Liens, (ii) exclusively owns and has the sole and unrestricted right to exploit each of the Company Products, and (iii) has a written license to use, all Intellectual Property (other than the Owned Intellectual Property) that is used in or necessary for the operation of the Company's businesses as presently conducted.

c. The Owned Intellectual Property and all material Licensed Intellectual Property shall be available for use by the Company and its Subsidiaries immediately after the Closing Date on substantially similar terms and conditions to those under which the Company and its Subsidiaries owned or used such Owned Intellectual Property and Licensed Intellectual Property immediately prior to the Closing Date.

d. The Company and its Subsidiaries, and the operation of their businesses in the last six (6) years from the date hereof has not infringed, misappropriated, or otherwise violated, and does not infringe, misappropriate or otherwise violate, any Intellectual Property rights of any other Person. There is no Action pending, threatened in writing (including any "cease and desist" letters, indemnification requests, invitations to take a patent license, or other notices) or, to the Knowledge of the Company, threatened orally in the last three (3) years from the date hereof, against the Company or any Subsidiary of the Company concerning any such infringement, misappropriation or other violation, or concerning the ownership, validity, registrability or enforceability of any Owned Intellectual Property (other than the review of pending patent and trademark applications by applicable Governmental Authorities in the ordinary course consistent with past practice).

e. To the Knowledge of the Company, no Person has engaged, or is engaging, in any activity that infringes, misappropriates or otherwise violates any Owned Intellectual Property.

f. The Company and its Subsidiaries have taken commercially reasonable measures to maintain in confidence all material trade secrets and confidential information owned or used by the Company and its Subsidiaries in connection with the operation of their businesses as presently conducted. Neither the Company nor any of its Subsidiaries has disclosed any such trade secrets or confidential information to any third party other than pursuant to a commercially reasonable and written confidentiality agreement pursuant to which such third party agrees to maintain in confidence such trade secrets and confidential information.

g. All Persons who have contributed, developed or conceived of any Owned Intellectual Property have done so pursuant to a valid and enforceable written Contract that protects the confidential information of the Company and its Subsidiaries and assigns to the Company exclusive ownership of all right, title, and interest in and to such Person's contribution, development or conception. No Owned Intellectual Property was created using funds, facilities, or equipment provided or made available by any Governmental Authority or educational institution.

h. Each Company Product is free from material defects and conforms with its functionality descriptions. The Company possesses all code and documentation necessary to compile and operate the Company Products as presently compiled and operated and (i) no source code included in the Owned Intellectual Property has been disclosed, delivered, licensed or otherwise made available to any third party, and (ii) neither the Company nor any of its Subsidiaries has a duty or obligation (whether present, contingent, or otherwise) to disclose, deliver, license or otherwise make available, any source code included in the Owned Intellectual Property to any third party.

i. Section 3.13(i) of the Company Disclosure Schedule lists (i) all Open Source Software embedded in, or integrated or distributed with (including as a programming dependency), any Company Product, and (ii) the Open Source Software license (including the applicable version number, if any, to the extent known by the Company) under which the Company uses each such item of Open Source Software.

j. The Company and its Subsidiaries are in material compliance with the terms of all relevant licenses for all Open Source Software used by them, including all copyright notice and attribution requirements, and all requirements to offer access to source code and, since October 16, 2017, neither the Company nor any of its Subsidiaries has received any written notice alleging any non-compliance with such licenses.

k. Neither the Company or any of its Subsidiaries has used any Open Source Software (i) in a manner that would grant or purport to grant to any Person any rights to or immunities under any of the Owned Intellectual Property, or (ii) under any license that requires or that conditions any rights granted in such license upon: (a) the disclosure, distribution, or licensing of any of the source code included within the Owned Intellectual Property; (b) a requirement that any disclosure, distribution, or licensing of any Owned Intellectual Property be at no charge; (c) a requirement that any other licensee of such item of Open Source Software be permitted to access the source code of, modify, make derivative works of, or reverse engineer any Owned Intellectual Property; (d) a requirement that any Owned Intellectual Property be redistributable by other licensees thereof; or (e) the grant of any patent rights, including non-assertion or patent license obligations, with respect to any of the Owned Intellectual Property.

l. The Company or one of its Subsidiaries owns or leases or licenses pursuant to a written Contract, all Technology Systems, to the Knowledge of the Company, and such Technology Systems are reasonably sufficient for the needs of the Company's business as it is currently conducted. As applicable, the Company has purchased a sufficient number of seat or concurrent user licenses for all Technology Systems for the Company's business as it is currently conducted. The Company maintains commercial reasonable security, disaster recovery and business continuity plans, procedures, policies and facilities, and, there has not been any material failure or malfunction with respect to any of the Technology Systems owned by the Company or any of its Subsidiaries that has not been remedied or replaced in all respects. The Company and its Subsidiaries have taken commercially reasonable measures to (i) protect the security and integrity of the Technology Systems and the data stored or contained therein or transmitted thereby, including by implementing technical, administrative, organizational and physical safeguards designed to prevent unauthorized access and the introduction of any virus, worm, Trojan horse, or similar disabling code or program, and the backup of critical data and (ii) identify and address internal and external risks to the privacy and security of Personally Identifiable Information in its possession or control.

m. The Company and its Subsidiaries have at all times (i) complied in all material respects with the Company Privacy Policies, contractual obligations, all applicable Privacy and Security Laws and all applicable industry standards, including PCI DSS; and (ii) implemented and maintained commercially reasonable measures to (A) protect Personally Identifiable Information in the Company's or any of its Subsidiaries' control against breach, loss, and unauthorized access and use including adequate and effective administrative technical, and physical safeguards to protect such Personally Identifiable Information and the operation, integrity, and security of its Technology Systems involved in the Processing of Personally Identifiable Information and (B) identify and address internal and external risks to the privacy and security of Personally Identifiable Information in its possession or control. Since October 16, 2017, there has been no internal investigation or audit by the Company or any of its Subsidiaries with respect to unauthorized acquisition, access, use, or disclosure of Personally Identifiable Information. Since October 16, 2017, the Company and each of its Subsidiaries has regularly conducted, or retained a third party to conduct on its behalf, security risk assessments and privacy impact assessments, in each case to the extent required by applicable Privacy and Security Laws or industry standards. The Company and each of its Subsidiaries has used reasonable efforts to address and remediate all material threats and deficiencies identified in each such assessment. Except as set forth in Section 3.13(m) of the Company Disclosure Schedule, since October 16, 2017, there has been no material breach or loss of, or unauthorized access to or use of any such Personally Identifiable Information under the Company's or any of its Subsidiaries' control and to the Knowledge of the Company, under the control of their respective subcontractors with respect to Personally Identifiable Information Processed or used on behalf of the Company or any of its Subsidiaries. Except as set forth in Section 3.13(m) of the Company Disclosure Schedule, since October 16, 2017, no Person (including any Governmental Authority) commenced any Action against or has provided any notice or submitted any complaints to the Company or any of its Subsidiaries relating to any data security breach, data privacy complaint, or loss of or unauthorized access to or Processing of any Personally Identifiable Information in the Company's or any of its Subsidiaries' control, and to the Knowledge of the Company, there is no reasonable basis for any such Action. None of the Company or any of its Subsidiaries is subject to any resolution agreement, corrective action or remediation plan or other settlement agreement with or imposed by any Governmental Authority with respect to any actual or alleged violation of any applicable Privacy and Security Laws with respect to Personally Identifiable Information in the Company's or any of its Subsidiaries' control, including HIPAA. The execution, delivery and performance of this Agreement and the consummation of the Transactions complies with the Company's and its Subsidiaries' privacy policies, contractual obligations, and all applicable Privacy and Security Laws in all material respects. Except with respect to PHI and Employee PII, the Company does not collect, store, transfer, or otherwise Process any Personally Identifiable Information.

n. The Company has a standalone human resource information system and payroll system that does not rely on any license agreement shared with or held by Cannae Holdings, Inc. or any of its other Subsidiaries.

Section 3.14 Material Contracts.

a. Section 3.14(a) of the Company Disclosure Schedule contains a complete and accurate list, organized pursuant to the subsections set forth in this Section 3.14(a), as of the date hereof, of each of the following Contracts to which either the Company or any Subsidiary of the Company is a party or by or to which any of them or any of their respective assets or properties is bound or subject (collectively, and with all Leases, Current Government Contracts and Government Bids, the "Material Contracts"):

i. any Contract with a Material Customer or Material Supplier;

ii. any Contract requiring payments by the Company or any of its Subsidiaries in excess of $100,000 annually;

iii. any Contract requiring the payment by or to the Company or its Subsidiaries of a royalty, "finders' fee," brokerage commission, override or similar commission;

iv. any Contract under which the Company or any of its Subsidiaries has agreed to indemnify any third Person in any manner outside the ordinary course of business consistent with past practice;

v. any Contract or other commitment to make a capital expenditure or to purchase a capital asset in excess of $100,000 individually by or on behalf of the Company or any of its Subsidiaries;

vi. any Contract relating to Indebtedness or to the direct or indirect guarantee or assumption of the obligations of any other Person for Indebtedness;

vii. any Contract limiting or restricting the freedom of the Company or any of its Affiliates (A) to engage or compete in any line of business; (B) to own, operate, sell, transfer, pledge or otherwise dispose of or encumber any asset; (C) to compete with any Person; or (D) to engage in any business or activity in any geographic region;

viii. any Contract pursuant to which the Company or any of its Subsidiaries has granted rights to produce, license, market, distribute or sell any Company Product to any other Person, and any Contract that affects the exclusive right of the Company and its Subsidiaries to develop, distribute, market, or sell any Company Product;

ix. any lease or similar Contract under which the Company or any of its Subsidiaries is the lessor of, or makes available for use by any third Person, any tangible personal property owned by the Company or any of its Subsidiaries, in each case for an annual rent in excess of $100,000 individually;

x. any joint venture, strategic alliance, partnership or profit-sharing (or other ownership arrangement) Contracts;

xi. any Contract granting any Person a Lien on all or any material portion of the assets or properties of the Company or any Subsidiary of the Company, taken as a whole, other than Permitted Liens.

xii. any Contract that contains restrictions with respect to the payment of dividends or any other distribution in respect of the Company Securities or the shares of any of its Subsidiaries' securities or the purchase, redemption or other acquisition of any such shares;

xiii. any Contract relating to the acquisition or divestiture by the Company or any of its Subsidiaries of (A) Company Securities, (B) shares of any of the Company's Subsidiaries or (C) the securities, assets, or business of any Person, which provides for consideration or payments not made in the ordinary course of business consistent with past practice, including without limitation those Contracts set forth on Section 3.14(a)(xiii) of the Company Disclosure Schedule;

xiv. any Contract making or relating to any outstanding loan, advance or investment by the Company or any of its Subsidiaries to or in any Person (excluding trade receivables and advances to employees for normally incurred business expenses each arising in the ordinary course of business consistent with past practice);

xv. any Company IP Agreements;

xvi. any Contract for the development of Intellectual Property for the benefit of the Company or any of its Subsidiaries (other than Contracts entered into with employees in the ordinary course of business consistent with past practice and any customary employee policies, manuals or handbooks made available to Parent);

xvii. any Contract relating to the provision of co-location or software or data hosting services to the Company or any of its Subsidiaries;

xviii. any collective bargaining agreement and all Contracts relating to employment, compensation, benefits, termination, retention or severance (other than (A) any at-will offer letters, that are terminable without any right to non-statutory severance, confidentiality agreements and invention assignment agreements, and (B) any customary employee policies, manuals or handbooks made available to Parent);

xix. any Contract that provides for payments and/or compensation (either from or to any Person, including any employee) based upon any customer's collections (or percentage thereof); and

xx. any Contract including any "most favored nation" clause.

b. The Company has made available to Parent true and correct copies of all of the Material Contracts and any amendments or modifications thereto. With respect to each Material Contract set forth or required to be set forth on Section 3.14(a) of the Company Disclosure Schedule (i) such Material Contract is in full force and effect and is valid and enforceable against the Company or the applicable Subsidiary of the Company, and as of the date hereof to the Knowledge of the Company, each other party thereto, in accordance with its terms, except as enforcement thereof may be limited by bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium or other similar Laws relating to or affecting the enforcement of creditors' rights generally and legal principles of general applicability governing the availability of equitable remedies (whether considered in a proceeding in equity or at law or under applicable legal codes); (ii) neither the Company nor any of its Subsidiaries is in breach or default thereof, nor has the Company or any of its Subsidiaries received written notice that the Company or any of its Subsidiaries is in breach or default thereof or that any counterparty intends to cancel, terminate or not renew any Material Contract; and (iii) no event has occurred which, with or without notice, or lapse of time or both, would constitute a breach or default thereof by the Company or any of its Subsidiaries or, to the Knowledge of the Company, by any other party thereto or would permit termination, modification, or acceleration thereof by any other party thereto, except in each of (i), (ii) or (iii) as would not be material to the Company and its Subsidiaries taken as a whole.

Section 3.15 Environmental, Health and Safety. To the Knowledge of the Company, the Company and its Subsidiaries have complied with all applicable Laws of Governmental Authorities concerning the environment, public health and safety, and employee health and safety in each case in all material respects, and no Action has been filed or commenced against the Company or any of its Subsidiaries alleging any material failure to comply with any such Laws. Neither the Company nor any of its Subsidiaries has any material Liability under any applicable Law concerning the release or threatened release of hazardous substances, public health and safety, or pollution or protection of the environment.

Section 3.16 Accounts Receivable. All Accounts Receivable of the Company and its Subsidiaries that (a) are reflected on the Financial Statements or (b) that will be included in the Estimated Net Working Capital, represent bona fide transactions and were or will be incurred in the ordinary course of business consistent with past practice for bona fide products delivered or services rendered. The Company and its Subsidiaries have provided reserves for Accounts Receivable in accordance with GAAP, as consistently applied in the ordinary course of business consistent with past practice. There is no contest, claim, or right of set-off other than returns in the ordinary course of business consistent with past practice under any contract or otherwise with any obligor of an Accounts Receivable relating to the amount or validity of such Accounts Receivable included in the Financial Statements.

Section 3.17 Customers and Suppliers.

a. Section 3.17(a) of the Company Disclosure Schedule sets forth (i) the top 20 customers by revenue for (x) the 12-months ending December 31, 2018 and (y) the nine months ending on the Balance Sheet Date for the Company and its Subsidiaries, taken as a whole (collectively, the "Material Customers"); and (ii) the amount of consideration paid by each Material Customer during such 12-month or 9-month period. Neither the Company nor any of its Subsidiaries has received any written or, to the Knowledge of the Company, oral notice, and, to the Knowledge of the Company, has no reason to believe, that any of its Material Customers has ceased, or intends to cease after the Closing, to use its goods or services or to otherwise terminate or materially reduce or adversely modify its relationship with the Company or any Subsidiary of the Company.

b. Section 3.17(b) of the Company Disclosure Schedule sets forth (i) the top 10 suppliers by the amount of consideration paid by the Company and its Subsidiaries, taken as a whole, to suppliers for (x) the 12-months ending December 31, 2018 and (y) the nine months ending on the Balance Sheet Date (collectively, the "Material Suppliers"); and (ii) the amount of consideration paid by the Company and its Subsidiaries to each such Material Supplier during such period. Except as set forth on Section 3.17(b) of the Company Disclosure Schedule, neither the Company nor any of its Subsidiaries has received any written or, to the Knowledge of the Company, oral notice, and, to the Knowledge of the Company, has no reason to believe, that any of its Material Suppliers has ceased, or intends to cease, to supply goods or services to the Company or any of its Subsidiaries or to otherwise terminate or materially reduce or adversely modify its relationship with the Company or any of its Subsidiaries.

Section 3.18 Insurance.

a. Section 3.18(a) of the Company Disclosure Schedule contains a true and complete list of all policies or binders of fire, liability, product liability, umbrella liability, real and personal property, workers' compensation, vehicular, directors' and officers' liability, fiduciary liability and other casualty and property insurance maintained by Company or its Subsidiaries and relating to the assets, business, operations, employees, officers and directors of the Company or its Subsidiaries and all pending applications for policies of insurance, including self-insurance programs and those which pertain to the assets, business or operations of the Company or its Subsidiaries which are owned by the Company or any of its Subsidiaries and which name the Company or a Subsidiary of the Company as an insured (collectively, the "Insurance Policies"). The Insurance Policies provide at least the coverage required by any Contract with any Material Customer or Material Supplier. The Company has made available to Parent true and correct copies of all such Insurance Policies. The Insurance Policies are in full force and effect. Neither the Company nor any of its Subsidiaries has received any written notice of cancellation of, premium increase with respect to, or alteration of coverage under, any of the Insurance Policies. All premiums due on such Insurance Policies have either been paid or, if due and payable prior to Closing, will be paid prior to Closing in accordance with the payment terms of each Insurance Policy. The Insurance Policies do not provide for any retrospective premium adjustment or other experience-based liability on the part of the Company or any Subsidiary of the Company.

b. There are no claims related to the business of the Company or any Subsidiary of the Company pending under any Insurance Policies as to which coverage has been questioned, denied or disputed or in respect of which there is an outstanding reservation of rights, in each case by written notice to the Company. Neither the Company nor any Subsidiary of the Company is in default under, and has not otherwise failed to comply with, in any material respect, any provision contained in any such Insurance Policy.

Section 3.19 Bank Accounts. Section 3.19 of the Company Disclosure Schedule sets forth the names and locations of all banks, trust companies, savings and loan associations and other financial institutions at which the Company or any of its Subsidiaries maintains accounts of any nature, the account numbers of all such accounts and the names of all Persons authorized to draw thereon or make withdrawals therefrom.

Section 3.20 Accounting Controls. The Company and its Subsidiaries maintain books and records, accurately reflecting in all material respects, their assets and Liabilities and maintain proper and adequate internal accounting controls which provide reasonable assurance that (a) transactions are executed pursuant to management's general or specific guidelines or authorization, (b) transactions are recorded as necessary to permit preparation of the Financial Statements and to maintain accountability for the material assets of the Company and its Subsidiaries; (c) access to the assets of the Company or its Subsidiaries is permitted only in accordance with management's general or specific guidelines or authorization; (d) the reporting of the assets of the Company and its Subsidiaries is compared with existing assets at regular intervals; and (e) accounts, notes and other receivables are recorded accurately, and proper and adequate procedures are implemented to effect the collection thereof on a timely and current basis, in each case to a standard reasonably consistent with similarly sized, privately-held businesses engaged in similar business.

Section 3.21 Related Party Transactions. Except as set forth in Section 3.21 of the Company Disclosure Schedule, none of (i) the Company Securityholders or any of their respective Affiliates (other than the Company and its Subsidiaries), (ii) the employees, officers or directors of the Company or any of its Subsidiaries, (iii) the individuals related by blood, marriage or adoption to any of the Persons described in clause (i) or (iv) the entities in which any of the Persons described in clause (ii) or (iii) owns, individually or in the aggregate, a beneficial interest of more than five percent (5%) (each of the Persons in clauses (i) through (iv), a "Related Person") (a) owes any amount to the Company or any of its Subsidiaries nor does the Company or any of its Subsidiaries owe any amount to, or has the Company or any of its Subsidiaries committed to make any loan or extend or guarantee credit to or for the benefit of any Related Person, (b) is a party to any Contract with or binding upon the Company, its Subsidiaries or any of their assets, rights or properties or is involved in any business arrangement, including the provision of services to or from, or other relationship with the Company or any of its Subsidiaries (whether written or oral), (c) owns, leases, licenses or has the right to use any property, asset or right, tangible or intangible, that is used by the Company or any of its

Subsidiaries, or (d) has any claim or cause of action against the Company or any of its Subsidiaries. Section 3.21 of the Seller Disclosure Schedule identifies any Contract between the Company or any of its Subsidiaries, on the one hand, and any Company Securityholder or any Affiliate of any Company Securityholder (other than the Company or any of its Subsidiaries), on the other hand, that will continue in effect after the Closing. Neither the Securityholder Representative nor any of its Affiliates (other than the Company or any of its Subsidiaries) provides any services to the Company or any of its Subsidiaries other than pursuant to Contracts set forth on Section 3.21 of the Seller Disclosure Schedule. There are no guarantees, letters of credit, bonds or similar arrangements that were issued by any Company Securityholder or any of its Affiliates (other than the Company or any of its Subsidiaries) and there are no other Contracts in which a Company Securityholder or any of its Affiliates (other than the Company or any of its Subsidiaries) is the primary obligor, in any such case to support the Company or any of its Subsidiaries or facilitate the business of the Company or any of its Subsidiaries.

Section 3.22 Brokers. No broker, finder or investment banker is entitled to any brokerage, finder's or other fee or commission in connection with the Transactions from, or based upon arrangements made by or on behalf of, the Company or any of its Subsidiaries.

Section 3.23 Government Contracts.

a. Section 3.23(a) of the Company Disclosure Schedule, respectively, set forth, as of the date hereof, complete and accurate lists of (i) all of the Current Government Contracts; and (ii) all of the Government Bids.

b. The Company and its Subsidiaries are not currently, and in the past six (6) years have not been, party to any Government Contract with, or has made any Government Bid to, any Governmental Authority other than the U.S. Government.

c. The Company and its Subsidiaries are, and for the past six (6) years have been, in compliance with all Laws where and as applicable to each of the Government Contracts and Government Bids.

d. The Company and its Subsidiaries have complied with all material terms and conditions, including (but not limited to) all clauses, provisions, and specifications, and all quality assurance, testing, inspection, and physical and information security requirements of the Government Contracts, whether incorporated expressly, by reference, or by operation of law.

e. All facts set forth in or acknowledged by any representations, certifications, or disclosure statements made or submitted by or on behalf of the Company or any of the Subsidiaries in connection with each of the Government Contracts and each of the Government Bids were true and accurate as of the date of submission and were made by an authorized representative of the Company, and from and after submission, the Company and its Subsidiaries have complied with all such representations, certifications and disclosure requirements.

f. Neither the Company nor any Subsidiary of the Company has received written notice terminating any of the Current Government Contracts for convenience or indicating an intention to terminate any of the Current Government Contracts for convenience; and no stop work order has been issued with respect to any Current Government Contract or Government Bid and is in effect as of the date of this Agreement.

g. There are no outstanding disputes or Actions relating to the Government Contracts that have been asserted by the Company or any of its Subsidiaries or, to the Knowledge of the Company, by the U.S. Government, any prime contractor, any higher-tier subcontractor, or any third party against the Company or any of its Subsidiaries and, to the Knowledge of the Company, no facts or allegations exist that are reasonably likely to give rise to such a dispute or Action.

h. None of the Company, its Subsidiaries or any their respective officers or directors has been or is now suspended, debarred, or proposed for suspension or debarment by any Governmental Authority.

i. Neither the Company nor any Subsidiary of the Company has undergone in the past six (6) years or is undergoing any audit, investigation, or examination of records relating to the Government Contracts and, to the Knowledge of the Company, there is no basis for any such audit, investigation, or examination of records.

j. Neither the Company nor any Subsidiary nor, to the Knowledge of the Company, any of their respective employees, officers, directors, agents, or representatives has been or is now under any administrative, civil, or criminal investigation or indictment involving alleged false statements or false claims relating to the Government Contracts or Government Bids. To the Knowledge of the Company, no facts or allegations exist that are reasonably likely to give rise to such an investigation or indictment. Neither the Company, any Subsidiary of the Company nor, to the Knowledge of the Company, any of their respective employees, officers, directors, agents, or representatives has made payment, directly or indirectly, to any Person in violation of applicable Laws, including (but not limited to) Laws relating to bribes, gratuities, kickbacks, lobbying expenditures, political contributions, or contingent fee payments.

k. Neither the Company nor any of its Subsidiaries has any Contracts which require it or its employees to have access to classified information during contract performance. Neither the Company, its Subsidiaries nor, to the Knowledge of the Company, any of its employees, hold facility or personnel security clearances subject to the requirements of the National Industrial Security Program Operating Manual.

l. Neither the Company nor any Subsidiary of the Company is (i) subject to or bound by any Organizational Conflict of Interest (as defined by Subpart 9.5 of the FAR, an "Organizational Conflict of Interest") contractual provisions that have had or reasonably would be expected to have a material adverse effect on the ability of the Company or any Subsidiary of the Company to perform or seek to perform future Government Contracts, or (ii) a party to or bound by any mitigation plan resulting from any actual or perceived Organizational Conflict of Interest involving the Company or any Subsidiary of the Company. In the past six (6) years, none of the Company, it Subsidiaries or any of their respective employees, officers, directors, agents, or representatives has engaged in any conduct that would create in any procurement an Organizational Conflict of Interest.

m. Neither the Company nor any Subsidiary of the Company has made any assignments of the Current Government Contracts or of any interests in the Current Government Contracts. Neither the Company nor any Subsidiary of the Company has entered into any financing arrangements with respect to the performance of any Current Government Contract.

n. As of the date of this Agreement, the Company and its Subsidiaries are not performing at-risk under a Current Government Contract or for a prospective Current Government Contract. For the avoidance of doubt, “performing at-risk” means incurring direct costs, other than costs as defined FAR 31.205-32, at the Company’s or the applicable Subsidiary’s sole risk prior to or in anticipation of and without obligation of funding under a Government Contract.

o. During the past six (6) years, neither the Company nor any Subsidiary has made any mandatory or voluntary disclosures to any Governmental Authority, nor is the Company or any Subsidiary of the Company aware of any facts or circumstances that should have given rise to any such disclosure.

p. None of the Government Contracts or Government Bids are premised or were awarded based on the status of the Company or its applicable Subsidiary, nor did the Company nor any Subsidiary of the Company represent itself at time of submission of such Government Contract or Government Bid as, a small business (including small disadvantaged business, woman-owned small business, service-disabled veteran owned small business, Section 8(a) SBA program company, etc.) under the size standard applicable to such Government Contract or Government Bid. At the time of submission, each such representation was accurate, complete, and in compliance with all applicable Laws. The Company and its Subsidiaries have been in compliance with all limitations on subcontracting, including FAR 52.219-14, under its Government Contracts.

Section 3.24 Export and Import Control Laws; Specified Business Conduct Laws. The Company and its Subsidiaries and their respective officers and directors (and, to the Knowledge of the Company, the Company’s and its Subsidiaries’ respective employees, agents and representatives) have, at all times, complied in all material respects in accordance with all applicable Specified Business Conduct Laws, including Export and Import Control Laws. Without limiting the foregoing: (i) the Company and each Subsidiary of the Company is in compliance with the terms of all applicable Export and Import Approvals; (ii) there are no pending or, to the Knowledge of the Company, threatened claims, charges, investigations, violations, settlements, civil or criminal enforcement Actions, lawsuits, or other Actions against the Company or any Subsidiary of the Company with respect to any Specified Business Conduct Laws, including Export and Import Control Laws; (iii) there are no Actions, conditions or circumstances pertaining to the operations, including export or import transactions, of the Company or any of its Subsidiaries that may give rise to any future claims, charges, investigations, violations, settlements, civil or criminal Actions, lawsuits, or other Actions under the Export and Import Control Laws; and (iv) neither the Company nor any of its Subsidiaries has received written notice of any actual, alleged or potential violation of any Specified Business Conduct Law. Since October 16, 2017, neither the Company nor any of its Subsidiaries has made any mandatory or voluntary disclosures to any Governmental Authority or conducted any internal investigation for which it engaged outside counsel or a forensic accounting firm related to actual or potential violations of the Business Conduct Laws.

Section 3.25 Disclaimer. Except for the representations and warranties contained in this Article III (including the Company Disclosure Schedule), the representations and warranties of the applicable Company Securityholders in the Joinder and Release Agreements, the Letters of Transmittal and the Rollover Agreements, and the representations and warranties contained in any other Transaction Document, neither the Company nor any of its Subsidiaries nor any of their respective managers, directors, officers, employees, securityholders, agents, Affiliates or representatives, nor any other Person, has made or shall be deemed to have made any representation or warranty to Parent or Merger Sub, express or implied, at law or in equity, with respect to the Company or its Subsidiaries or the execution and delivery of this Agreement or the Transactions, including, without limitation, as to the accuracy or completeness of any information, documents or materials regarding the Company or its Subsidiaries furnished or made available to Parent and its representatives in any “data rooms,” “virtual data rooms,” (including the Data Room) management presentations or in any other form in expectation of, or in connection with, the Transactions.

ARTICLE IV

REPRESENTATIONS AND WARRANTIES OF PARENT AND MERGER SUB

Parent and Merger Sub hereby represent and warrant to the Company, as follows:

Section 4.1 Organization and Qualification; Subsidiaries. Each of Parent and Merger Sub (a) is a legal entity duly organized, validly existing and in good standing (where such concept is applicable) under the Laws of the jurisdiction of its organization; (b) has the requisite organizational power and authority necessary to own, lease and operate its properties and to carry on its business as it is now being conducted; and (c) is duly qualified or licensed and in good standing to do business in each jurisdiction in which the nature of the business conducted by it or the ownership or leasing of its properties makes such qualification or license necessary, except, in the case of clause (c), where the failure to be so qualified or licensed or in good standing would not or would not reasonably be expected to prevent, materially delay or materially impede the performance by Parent or Merger Sub of their obligations under this Agreement or the consummation of the Transactions.

Section 4.2 Authorization of Agreement. Each of Parent and Merger Sub has all requisite corporate power and authority to execute and deliver this Agreement and each other Transaction Document to be executed by Parent or Merger Sub, respectively, to perform its obligations hereunder and thereunder, and to consummate the Transactions. The execution and delivery of this Agreement and each other Transaction Document to be executed and delivered by each of Parent and Merger Sub, the performance of each of their obligations hereunder and thereunder the consummation by each of Parent and Merger Sub of the Transactions have been duly authorized by all necessary corporate action and no other corporate proceedings on the part of Parent and Merger Sub are necessary to authorize this Agreement or to consummate the Transactions. This Agreement has been, and each other Transaction Document to be executed by Parent or Merger Sub will be, at or prior to the Closing, duly executed and delivered by Parent and Merger Sub and, assuming the due authorization, execution and delivery hereof by the other parties thereto, constitutes the legal, valid and binding obligation of Parent and Merger Sub, enforceable against Parent and Merger Sub in accordance with its terms, except as enforcement hereof may be limited by bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium or other similar Laws relating to or affecting the enforcement of creditors' rights generally and legal principles of general applicability governing the availability of equitable remedies (whether considered in a proceeding in equity or at law or under applicable legal codes).

Section 4.3 No Conflict; Required Filings and Consents.

a. The execution and delivery of this Agreement by each of Parent and Merger Sub does not, and the consummation of the Transactions pursuant to the terms of this Agreement will not (i) conflict with or violate the certificate of incorporation and bylaws, in each case as amended or restated, of Parent and Merger Sub; (ii) conflict with or violate any Laws applicable to Parent and Merger Sub or by which any of their respective assets or properties is bound or subject; or (iii) result in any breach of or constitute a default (or an event that with notice or lapse of time or both would become a default) under, or give to others any rights of termination, acceleration or cancellation of, or require payment under, or result in the creation of a Lien (other than Permitted Liens) on any of the properties or assets of Parent and Merger Sub pursuant to, any note, bond, mortgage, indenture, Contract, lease, license, permit, franchise or other instrument or obligation to which Parent or Merger Sub is a party or by or to which any of them or any of their respective assets or properties is bound or subject, except, with respect to clauses (ii) and (iii), for such conflicts, violations, breaches, defaults, rights of termination, acceleration or cancellation, payments or Liens that would not or would not reasonably be expected to prevent, materially delay or materially impede the performance by Parent or Merger Sub of their obligations under this Agreement or the consummation of the Transactions.

b. The execution and delivery of this Agreement by each of Parent and Merger Sub does not, and consummation of the Transactions will not, require Parent or Merger Sub to obtain any consent, license, permit, approval, waiver, authorization or order of, or to make any filing with or notification to, any Governmental Authority or third Person, except (i) the filing of the Certificate of Merger with the Secretary of State of the State of Delaware and (ii) as would not or would not reasonably be expected to prevent, materially delay or materially impede the performance by Parent or Merger Sub of their obligations under this Agreement or the consummation of the Transactions.

Section 4.4 Brokers. No broker, finder or investment banker is entitled to any brokerage, finder's or other fee or commission in connection with the Transactions based upon arrangements made by or on behalf of Parent or Merger Sub.

Section 4.5 Financing.

a. Parent has delivered to the Company a true and complete copy of each executed Commitment Letter and the neither Commitment Letter has been amended or modified in any manner prior to the date hereof. As of the date hereof, neither Parent nor any of its Affiliates has entered into any agreement, side letter or other contract relating to the financing of its obligations hereunder, other than as set forth in the Commitment Letters and the fee letters related thereto.

b. Assuming (i) the satisfaction of the conditions in Section 7.1 and Section 7.2, (ii) the funding in full on the Closing Date of the Debt Financing and the Equity Financing (collectively, the "Financing") in accordance with the terms of the Debt Commitment Letter and the Parent Equity Commitment Letter, respectively, and (iii) the consummation of the Rollovers in accordance with the terms of the Rollover Agreements, the proceeds of the Financing (both before and after giving effect to the exercise of any or all "market flex" provisions related thereto) will be sufficient to consummate the Transactions and the other transactions contemplated hereby, including related fees and expenses and the refinancing of any outstanding indebtedness of the Company and its Subsidiaries, as applicable. As of the date hereof, the commitments contained in the Commitment Letters have not been withdrawn or rescinded in any respect. As of the date hereof, each Commitment Letter is in full force and effect and represents a valid, binding and enforceable obligation of Parent and, to Parent's knowledge, each other party thereto, to provide the financing contemplated thereby subject only to the satisfaction or waiver of the Financing Conditions and subject to the applicable bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and similar Laws affecting creditors' rights generally and subject, as to enforceability, to general principles of equity. Parent has fully paid (or caused to be paid) any commitment fees and other amounts that are due and payable on or prior to the date hereof in connection with the Financing. As of the date hereof, no event has occurred which, with or without notice, lapse of time or both, would reasonably be expected to constitute a breach or default on the part of Parent or, to Parent's knowledge, any other party thereto under the Commitment Letters. There are no conditions precedent including in any side letters or other agreements, contracts or arrangements related to the funding of the full amount of the Financing, other than the Financing Conditions. As of the date hereof, assuming satisfaction of the conditions set forth in Section 7.1 and Section 7.2, Parent has no reason to believe that (a) any of the Financing Conditions will not be satisfied on a timely basis or (b) any portion of the Debt Financing or the Equity Financing will not be made available to Parent on the Closing Date to consummate the Transactions.

c. The Commitment Letters provide and will continue to provide, that the Company is a third party beneficiary thereto and can enforce such agreement, on the terms and subject to the conditions of the Commitment Letters.

Section 4.6 Solvency. As of the Effective Time and only immediately after giving effect to all of the Transactions, including the payment of the Merger Consideration and the consideration payable to holders of Company Restricted Stock pursuant hereto, and payment of all related fees and expenses of Parent, Merger Sub, the Company and their respective Subsidiaries in connection therewith, and assuming (a) the compliance by the Company with its obligations hereunder and the accuracy of the representations and warranties of the Company set forth in Article III, disregarding any qualifiers as to materiality or Company Material Adverse Effect, (b) the most-recent projections, forecasts or revenue or earnings predictions regarding the Company and its Subsidiaries and their respective businesses and operations prepared by or on behalf of the Company and made available to Parent have been prepared in good faith based on assumptions that were and continue to be reasonable and (c) the consummation of the Financing transactions on the terms set forth in the Commitment Letters and the consummation of the Rollovers on the terms set forth in the Rollover Agreements, (i) the amount of the “fair saleable value” of the assets of the Surviving Company and its Subsidiaries, on a consolidated basis, will exceed (A) the value of the consolidated liabilities of the Surviving Company and such Subsidiaries, including contingent and other liabilities, and (B) the amount that will be required to pay the probable consolidated liabilities of the Surviving Company and such Subsidiaries on their existing debts (including contingent liabilities) as such debts become absolute and matured, (ii) the Surviving Company and its Subsidiaries, on a consolidated basis, will not have an unreasonably small amount of capital for the operation of the businesses in which they are engaged or proposed to be engaged, and (iii) the Surviving Company and its Subsidiaries, on a consolidated basis, will be able to pay their liabilities, including contingent and other liabilities, as they mature. For purposes of the foregoing, “not have an unreasonably small amount of capital for the operation of the businesses in which it is engaged or proposed to be engaged” and “able to pay its liabilities, including contingent and other liabilities, as they mature” means that the Surviving Company and its Subsidiaries will be able to generate enough cash from operations, asset dispositions or refinancing, or a combination thereof, to meet their consolidated obligations as they become due.

Section 4.7 Parent’s Due Diligence; Limitations on Representations and Warranties of the Company.

a. Parent and Merger Sub hereby acknowledge that: except for the representations and warranties of the Company expressly set forth in Article III or the Closing Certificates, the representations and warranties of the applicable Company Securityholders in the Joinder and Release Agreements, the Letters of Transmittal and the Rollover Agreements, they are relying on their own investigation and analysis in entering into this Agreement and the Transactions. Parent and Merger Sub acknowledge that they are consummating the Transactions without any representation or warranty, express or implied, by the Company or any of its Subsidiaries or any of their respective managers, directors, officers, employees, securityholders, agents, Affiliates or representatives, or any other Person, except as expressly set forth in Article III, in the Joinder and Release Agreements, the Rollover Agreements, the Letters of Transmittal or the Closing Certificates.

b. Parent and Merger Sub hereby make those certain acknowledgments set forth on Schedule 4.7(b).

ARTICLE V

CONDUCT PRIOR TO THE CLOSING

Section 5.1 Company Covenants.

a. The Company hereby covenants and agrees that, prior to the earlier of the Closing or the termination of this Agreement pursuant to its terms, unless (x) expressly required by this Agreement or set forth on Section 5.1(a) of the Company Disclosure Schedule, (y) consented to by Parent (which consent shall not be unreasonably withheld, conditioned or delayed), or (z) required by Law, it will, and will cause each of its Subsidiaries (i) to operate its business in the usual and ordinary course consistent with past practice and (ii) to use its reasonable best efforts to preserve intact its businesses and material assets, including all Permits.

b. Other than as is set forth on Section 5.1(b) of the Company Disclosure Schedule, the Company hereby covenants and agrees that, prior to the earlier of the Closing or the termination of this Agreement pursuant to its terms, unless otherwise consented to by Parent (which consent shall not be unreasonably withheld, conditioned or delayed) or required by Law, it will not, and will cause each of its Subsidiaries not to:

i. amend or otherwise change its certificate of incorporation or formation, bylaws, limited liability company agreement or other similar governing documents;

ii. issue, sell, license, pledge, dispose of, transfer, grant or encumber, or authorize the issuance, sale, license, pledge, disposition, grant or encumbrance of any securities of any class of the equity of the Company or any of its Subsidiaries, except pursuant to the exercise or settlement of Company Options, each as outstanding as of the date hereof in accordance with their existing terms, or any options, warrants, convertible securities or other rights of any kind to acquire any such securities, or any other ownership interest (including, without limitation, any phantom interest), of the Company or any of its Subsidiaries;

iii. disclose or fail to maintain the enforceability of any trade secrets used in the business of the Company or any of its Subsidiaries;

iv. take any action or fail to take any action that would result in the lapse, abandonment, cancellation or unenforceability of any of the Intellectual Property used by the Company or any of its Subsidiaries in the operation of their businesses;

v. effect a recapitalization, reclassification or similarly effect any change in the capitalization of the Company or any of its Subsidiaries or declare, set aside, make or pay any dividend or other distribution, payable in cash, stock, property or otherwise, with respect to any of the securities of the Company;

vi. incur or modify the terms of any Indebtedness for borrowed money or cancel or compromise any material debt or claim or waive or release any material right of the Company or any of its Subsidiaries or assume, guarantee, endorse or otherwise become responsible for the obligations of any Person for borrowed money or indebtedness;

vii. enter into any commitment for capital expenditures of the Company and its Subsidiaries in excess of $50,000 for any individual commitment and $100,000 for all commitments in the aggregate;

viii. enter into, modify or terminate any labor or collective bargaining agreement of the Company or any of its Subsidiaries;

ix. except in the ordinary course of business consistent with past practice, (A) terminate (excluding any termination or non-renewal upon expiration of a Contract in accordance with its terms in existence prior to the date of this Agreement) any Material Contract, (B) agree to any material modification, amendment or extension of any Material Contract or (C) enter into or amend any Contract (1) pursuant to which any Person is granted exclusive marketing, licensing, manufacturing or other rights with respect to any Company Intellectual Property or any Company Product, (2) that contains a covenant of the Company or any Affiliate of the Company prohibiting or materially limiting the right to compete in any line of business or prohibiting or restricting any of their ability to conduct business with any Person or in any geographical area or (3) that otherwise, if entered into prior to the date hereof, would have been required to be listed on Section 3.14(a) of the Company Disclosure Schedule pursuant to any of Section 3.14(a)(iv) - (xiv) or (xix) - (xx), other than renewals of existing Contracts in the ordinary course of business, consistent with past practice;

x. communicate in writing with any Governmental Authority unless Parent has reviewed and consented to such communication;

xi. reclassify, combine, split, subdivide or redeem, or purchase, cancel or otherwise acquire, directly or indirectly, any of the securities of the Company or any of its Subsidiaries;

xii. acquire (including, without limitation, by merger, consolidation, or acquisition of stock or assets or any other business combination) any interest in any corporation, partnership, other business organization or any division thereof or any material properties or assets thereof;

xiii. purchase, lease, sublease, license, sell, grant, assign, abandon, allow to lapse or otherwise dispose or transfer, or enter into any arrangement for the purchase, lease, sublease, license, sale, assignment, abandonment or disposition or transfer, of any of its material assets (including any real property and material Company Intellectual Property), properties or goodwill, other than non-exclusive licenses in the ordinary course of business consistent with past practice or subject any of the properties or assets of the Company and its Subsidiaries to any Lien (except for Permitted Liens);

xiv. adopt a plan or agreement of complete or partial liquidation, dissolution, merger, consolidation, restructuring, recapitalization or other material reorganization of the Company or any of its Subsidiaries;

xv. waive, release, assign, settle or compromise any Action in a manner that would be material to the Company and its Subsidiaries taken as a whole;

xvi. make, change or rescind any material election relating to Taxes, amend any material Tax Return or file a material Tax Return in a manner that is materially inconsistent with past practice, settle or compromise any material Tax claim or liability, agree to an extension or waiver of the statute of limitations with respect to the assessment or determination of material Taxes (other than in connection with customary extensions of the due date for filing a Tax Return obtained in the ordinary course of business of not more than six months), enter into any Tax sharing or similar agreement (other than customary commercial Contracts entered into in the ordinary course of business consistent with past practice, the principal purpose of which does not relate to Taxes), or make any material change to any of its methods of accounting or methods of reporting income or deductions for Tax or accounting practice or policy from those employed in the preparation of its most recent Tax Return;

xvii. adopt or amend any employee or compensation benefit plan, including any stock issuance or stock option plan, or amend any compensation, benefit, entitlement, grant or award provided or made under any such plan, except in each case as required under ERISA or other applicable Laws or as necessary to maintain the qualified status of such plan under the Code or as necessary to conform the terms of an Plan with applicable Laws, materially amend any deferred compensation plan within the meaning of Section 409A of the Code and the regulations thereunder, except to the extent necessary to meet the requirements of such Section;

xviii. other than as required by any Benefit Plan existing on the date hereof or applicable Law, (A) increase the amount of compensation or other benefits payable or provided to any employee, officer, director, consultant or other service provider of the Company or any Subsidiary of the Company (except for, with respect to non-officer employees whose annual base salary is less than $100,000, increases in salary or hourly wage rates in the ordinary course of business consistent with past practice), (B) take any action to accelerate the vesting or timing of payment of any compensation or benefit payable or provided to any employee, officer, director, consultant or other service provider, (C) materially increase the coverage or benefits available under any Benefit Plan, (D) hire or terminate (other than for cause) any employee, consultant or other service provider who is entitled to receive annual salary in excess of $100,000, or (E) enter into any employment contract providing for annual compensation in excess of $100,000 with an employee or enter into or modify any severance, retention, change of control, or similar Contract (or amend any such arrangement to increase benefits thereunder or otherwise grant any equity or equity-based compensation or any severance, retention or change in control, transaction or similar payments to any employee, consultant or other individual service provider) with a director, executive officer, consultant or employee of the Company or any of its Subsidiaries;

xix. terminate or allow to lapse any of the Insurance Policies;

xx. make any loans or advances to any Person (other than to or among any wholly-owned Subsidiaries of the Company);

xxi. terminate, agree to any modification, amendment or extension of, or waive any right under the TrustHCS Agreement or any other Transaction Document (as defined in the TrustHCS Agreement); or

xxii. enter into a Contract, commitment or arrangement to do any of the foregoing, or authorize, recommend, propose or announce an intention to do any of the foregoing.

Section 5.2 Access and Information. The Company shall, and the Company shall cause each of its Subsidiaries to, (a) afford to Parent, its Affiliates and each such Person’s officers, managers, directors, employees, accountants, consultants, financial advisors, legal counsel, agents and other representatives (collectively, the “Parent Representatives”) reasonable access during normal business hours, upon reasonable prior notice, to the officers, employees, agents, properties, offices, facilities, books and records of the Company and its Subsidiaries; and (b) furnish to Parent and the Parent Representatives such information concerning the business, properties, contracts, records and personnel (including, without limitation, financial, operating and other data and information) of the Company and each of its Subsidiaries as is prepared or compiled by the Company in the ordinary course of business consistent with past practice and as may be reasonably requested from time to time by Parent. Parent shall treat all information obtained from the Company as Confidential Information (as such term is defined in the Confidentiality Agreement) and Parent shall continue to honor, and cause the Parent Representatives to honor, its obligations thereunder. Notwithstanding the foregoing, the Company shall not be required to provide access to or to disclose information where such access or disclosure would jeopardize the attorney-client privilege of the Company or violate any Law applicable to the Company or the confidentiality provisions of any Contract to which the Company is a party on the date of this Agreement (it being agreed that, in the event the restrictions of this sentence apply, the Company shall cooperate in good faith to design and implement alternative disclosure arrangements to enable Parent to evaluate any such information without jeopardizing the attorney-client privilege or violating any Law or applicable confidentiality provisions).

ARTICLE VI

ADDITIONAL AGREEMENTS

Section 6.1 Public Announcements. The parties shall cooperate in good faith to jointly prepare all press releases and similar public announcements pertaining to this Agreement and the Transactions and no party shall issue or otherwise make any public announcement pertaining to this Agreement or the Transactions without the prior consent of Parent and the Company, except as required by applicable Law, by the rules and regulations of, pursuant to any Contract of a stock exchange or securities trading system or in the case of Parent in connection with the Debt Financing; provided that Parent may report and disclose the status of this Agreement and the Transactions to the direct or indirect limited partners of investment funds managed or advised by its Affiliates or current or prospective investors (so long as such limited partners or investors are subject to an obligation of confidentiality and have been informed of the confidential nature of such information). Each party will not unreasonably delay, withhold or condition approval from the others with respect to any such press release or public announcement.

Section 6.2 No Solicitation. The Company and each of its Subsidiaries and Affiliates (including, for purposes of this Section 6.2, the Securityholder Representative and its Affiliates) shall not, directly or indirectly through any officer, employee, manager, director, representative, consultant, financial advisor, attorney, accountant or other agent of the Company or any of its Subsidiaries (collectively, the "Company Representatives") (and the Company shall cause all such Company Representatives under the Company's control and direct all such other Company Representatives not to) (a) take any action to encourage, solicit, initiate, resume, facilitate or engage in discussions or negotiations with, or provide any non-public information, or afford access to the properties, books or records of the Company or any of its Subsidiaries to, any Person, other than Parent (and its Affiliates and Parent Representatives), concerning any potential direct or indirect acquisition, purchase or recapitalization of the Company or any of its Subsidiaries or any material part of the capital stock, business, properties, assets or technologies of the Company or any of its Subsidiaries, or any amount of Company Securities or any securities of its Subsidiaries (whether or not outstanding), regardless of form or structure (a "Competing Transaction"), (b) enter into any agreement, arrangement or understanding with respect to a Competing Transaction or (c) disclose any non-public information relating to the Company or any of its Subsidiaries or afford access to the properties, books or records of the Company or any of its Subsidiaries (other than Parent, its financing sources, the Parent Representatives and their respective Affiliates and advisors) concerning a Competing Transaction. The Company shall, and shall cause each of its Subsidiaries and the Company Representatives to, cease and cause to be terminated any existing activities, discussions or negotiations with any Persons, other than with Parent (and its Affiliates and Parent Representatives), with respect to any inquiries or proposals relating to a Competing Transaction. The Company shall notify Parent promptly (but in any case within one (1) Business Day) after receipt by it of any communication regarding a Competing Transaction or any request for information in connection with a Competing Transaction or for access to the properties, books or records of the Company or any of its Subsidiaries by any Person that informs the Company that it is considering making, or has made, a proposal relating to a Competing Transaction.

Section 6.3 D&O Insurance.

a. From and after the Effective Time, Parent shall cause the Surviving Company and its Subsidiaries to fulfill its indemnification obligations to each present and former manager, director and officer of the Company and its Subsidiaries (each, an "Indemnified Party") pursuant to (i) the Company Charter Documents, (ii) the Subsidiary Charter Documents, (iii) applicable Law and (iv) any indemnification Contract listed in Section 6.3(a) of the Company Disclosure Schedule between the Company or its Subsidiary, on one hand, and such Indemnified Party, on the other hand and provided to Parent prior to the date hereof. Notwithstanding the foregoing, the obligations of Parent and the Surviving Company (1) shall be subject to any limitation imposed by applicable Law, (2) shall not be deemed to release any Indemnified Party that is also a Company Securityholder from, or otherwise limit in any way (including by permitting any Indemnified Party from obtaining any advancement or reimbursement from the Surviving Company or any Subsidiary of the Surviving Company of Damages owed by such Indemnified Party pursuant to an indemnification claim by a Parent Indemnified Person), his or her obligations pursuant to this Agreement and (3) shall not, if applicable, limit in any way the terms of the Joinder and Release Agreements, the Letters of Transmittal and/or the Rollover Agreements.

b. Prior to the Closing, the Company shall purchase a "tail" insurance policy for a period of six (6) years after the Effective Time (such policy, the "D&O Policy"), with reputable and financially sound carriers of at least the same coverage and amounts containing terms and conditions that are no less advantageous in the aggregate than the current policies of directors' and officers' liability insurance maintained by the Company with respect to claims arising from or related to facts or events that occurred at or before the Effective Time, for which cost shall be included in Transaction Expenses.

c. The provisions of this Section 6.3 are intended to be for the benefit of, and shall be enforceable by, each Indemnified Party and each party entitled to insurance coverage under this Section 6.3, respectively, and his or her heirs and legal representatives, which shall be deemed as third party beneficiaries under this Agreement, and shall be in addition to, and shall not impair, any other rights an Indemnified Party may have under the Company Charter Documents or the similar organization documents of any of the Company's Subsidiaries, as applicable, or the comparable organization documents of the Surviving Company or any of its Subsidiaries, under applicable Law or indemnification agreement listed in Section 6.3(a) of the Company Disclosure Schedule. Parent shall ensure that the Surviving Company complies with all of its obligations under this Section 6.3, and Parent shall guaranty all such obligations of the Surviving Company under this Section 6.3.

d. If Parent or the Surviving Company or any of their respective successors or assigns (i) consolidates with or merges into any other Person and is not the continuing or surviving company or entity of such consolidation or merger; or (ii) transfers or conveys all or substantially all its properties and assets to any Person, Parent shall cause proper provisions to be made so that the successors and assigns of Parent or the Surviving Company assume the obligations set forth in this Section 6.3.

Section 6.4 Tax Matters. Notwithstanding anything to the contrary in this Section 6.4, and without limiting any right of indemnification in favor of the Parent Indemnified Parties hereunder, Parent, the Company and the Company's Subsidiaries shall use commercially reasonable efforts to comply with their obligations owed to the Company Securityholders (as that term is used in the Company Acquisition Agreement), and shall reasonably cooperate with the Cannae Company Stockholder to permit it to be in compliance with its obligations owed to the Company Securityholders (as that term is used in the Company Acquisition Agreement) with respect to taxable periods ending on or including the Closing Date (as that term is used in the Company Acquisition Agreement) under Section 6.5 of that certain Agreement and Plan of Merger between and among Fidelity National Financial Ventures, LLC, a Delaware limited liability company, Project F Merger Sub LLC, a Delaware limited liability company, T-System Holding LLC, and Francisco Partners II, L.P. a Delaware limited partnership, as representative of the Company Securityholders (as defined therein) dated as of September 1, 2017 (the "Company Acquisition Agreement").

a. The Company shall deliver to Parent, in form reasonably acceptable to Parent, a properly completed and executed (A) certification that meets the requirements of Treasury Regulations Sections 1.897-2(h)(1) and 1.1445-2(c)(3), dated as of the Closing Date, and (B) a notice to the Internal Revenue Service, in accordance with the requirements of Treasury Regulations Section 1.897-2(h)(2), together with written authorization for Parent to deliver such notice and a copy of the certification to the Internal Revenue Service on behalf of the Company after Closing (the "FIRPTA Certificate").

b.

i. The Cannae Company Stockholder shall prepare, in a manner consistent with applicable Law, and shall properly file or cause to be filed any Tax Returns required to be filed by the Company and its Subsidiaries for any taxable period ending on or before the Closing Date that are Tax Returns of an Affiliated Group that includes Cannae Holdings, Inc. (such Tax Returns, "Cannae Tax Returns" and such Affiliated Group, the "Cannae Affiliated Group"), and the Cannae Company Stockholder shall pay and cause to be paid any Taxes required to be paid in connection therewith. To the extent relevant to determining any Tax liability for which Parent or its Affiliates would be responsible, Cannae Tax Returns shall be prepared in a manner consistent with the past practices of the Cannae Affiliated Group. The Cannae Company Stockholder shall provide Parent with a copy of the Company's and its Subsidiaries' pro forma short year U.S. federal and applicable state income Tax Return prepared in connection with the preparation of the 2019 consolidated Tax Return of the Cannae Affiliated Group (together with all workpapers reasonably necessary for Parent to calculate the tax attributes (including any net operating losses, Tax basis and depreciation) of the Company and its Subsidiaries, but excluding all other Tax Returns of the Cannae Affiliated Group and all related workpapers).

ii. Notwithstanding anything herein to the contrary, neither Parent nor any Affiliate thereof shall have any right to access or review any Tax Return or Tax work papers of Cannae Holdings, Inc. or any of its Subsidiaries or Affiliates (including any Tax Return of any consolidated, combined or unitary group that includes Cannae Holdings, Inc. or its Subsidiaries or Affiliates, and any pro forma Tax Return used to create any such Tax Return, but excluding (i) any Tax Returns or workpapers of only the Company and its Subsidiaries; (ii) all workpapers and other documentation reasonably necessary for Parent to calculate the tax attributes of the Company and its Subsidiaries or undertake other Tax compliance responsibilities with respect to the Company and its Subsidiaries required by Law), and (iii) the Company's and its Subsidiaries' pro forma Tax Return referenced in Section 6.4(b)(i).

iii. Subject to Section 6.4(e), Parent shall timely and properly prepare, or cause to be timely and properly prepared and filed, the initial filing of all Tax Returns of the Company and its Subsidiaries that relate in whole or in part to any Pre-Closing Tax Period that are initially due after the Closing Date other than Cannae Tax Returns (the "Pre-Closing Date Tax Returns"). All Pre-Closing Date Tax Returns shall be prepared in accordance with applicable Law and consistent with the past practices of the Company and its Subsidiaries in all material respects, except to the extent necessary to comply with applicable Law. Drafts of such Pre-Closing Date Tax Returns that are Income Tax Returns or that reflect a Tax or a Tax position that could form the basis of a claim for indemnification pursuant to Article VIII or otherwise pursuant to this Agreement shall be provided to the Securityholder Representative for its review at least twenty (20) days prior to the proposed date of filing of such Pre-Closing Date Tax Returns (or, if such deadline is not reasonably practical considering the circumstances of the applicable Tax Return, as soon as reasonably practical after such time). Parent shall make such changes to the draft Pre-Closing Date Tax Returns as are reasonably requested by the Securityholder Representative that are both consistent with the past practice of the applicable entity and more-likely-than-not to be upheld under applicable Law, and shall not file such Pre-Closing Date Tax Returns without the prior consent of the Securityholder Representative (which consent shall not be unreasonably withheld, conditioned or delayed). The Company Securityholders shall pay to Parent, at least two (2) days prior to the due date for any such Tax Return, any amounts with respect to such Tax Return for which they are liable pursuant to Article VIII. The Company shall provide the Securityholder Representative and its representatives with reasonable access to the books and records of the Company and its Subsidiaries to assist in the reasonable review of such Pre-Closing Date Tax Returns. If Parent and the Securityholder Representative are unable to resolve any dispute regarding any Pre-Closing Date Tax Return within five (5) days after the Securityholder Representative delivers such notice of disagreement, then the dispute will be finally and conclusively resolved by the Accounting Arbitrator in accordance with the dispute resolution procedure set forth in Section 2.10(d), provided that in the event the Accounting Arbitrator has not yet resolved any such dispute prior to the deadline for filing the applicable Pre-Closing Date Tax Return, Parent shall be entitled to timely file (or cause to be timely filed) any such Pre-Closing Date Tax Return in the form provided to and reviewed by the Securityholder Representative, provided that Parent agrees to promptly amend such Pre-Closing Date Tax Return to reflect the determination of the Accounting Arbitrator upon the resolution of such dispute. The Accounting Arbitrator shall resolve any dispute in favor of the Securityholder Representative if the Securityholder Representative's position is supported by the "more-likely-than-not" standard under the Code and is consistent with the past practice of the applicable entity as provided for in this Section 6.4(b)(iii).

c. The Company Securityholders shall be entitled (in accordance with their respective Pro Rata Portions) to any cash refunds of Taxes or credits in lieu of cash refunds of Taxes actually received by Parent, the Surviving Company or any of its Subsidiaries (including a credit received in lieu of a cash refund of taxes that results in a reduction of Taxes owed by Parent), for Taxes of the Company or its Subsidiaries for any Pre-Closing Tax Period (including the pre-Closing portion of a Straddle Period, with the determination of the allocation of any such refund payable hereunder made consistent with the principles of Section 6.4(d)), net of (i) any reasonable costs, expenses and Taxes incurred by Parent, the Surviving Company or any of its Subsidiaries in connection with such refunds and making any payments to the Company Securityholders under this provision and (ii) any amounts then due from the Company Securityholders to the Parent Indemnified Parties under Article VIII, provided, however, that the Company Securityholder shall not be entitled to any Tax refunds that (i) were taken into account in determining Final Net Working Capital, (ii) are attributable to Taxes borne by the Parent Indemnified Parties and not indemnified under this Agreement, (iii) are attributable to carrybacks of net operating losses or Tax credits arising from Tax periods, or portions thereof, beginning after the Closing Date, or (iv) for the avoidance of doubt, that are required to be paid to any other party pursuant to any agreement or arrangement entered into prior to the Closing (in which case, Parent shall pay such amounts in accordance with such agreement or arrangement). Parent shall be entitled to all Tax refunds of the Surviving Company and its Subsidiaries to which the Company Securityholders are not entitled under the preceding sentence. At the Securityholder Representative's written request, and at the expense of the Company Securityholders, Parent will timely and properly prepare, or cause to be prepared (in a manner consistent with Section 6.4(b)(iii), and subject to the requirement outlined in such section that the relevant Tax Returns be prepared with past practice and meet a "more likely than not" standard), and file, or cause to be filed, any claim for refund, amended Tax Return, or other Tax Return required to obtain available Tax refunds or credits from any Pre-Closing Tax Period required to be paid to the Company Securityholders pursuant to this Section 6.4(c) (provided, that in no event will Parent be required pursuant to this Section 6.4(c) to file any Form 4466 or other "quickie refund" request).

d. For purposes of allocating Taxes under this Agreement, in the case of any Straddle Period, the amount of Taxes (or any Tax refund, or a credit received in lieu of a cash Tax refund) allocable to the Pre-Closing Tax Period shall be deemed to be (i) in the case of property, ad valorem or similar Taxes imposed on a periodic basis, the amount of such Taxes for the entire period multiplied by a fraction, the numerator of which is the number of calendar days in the Pre-Closing Tax Period and the denominator of which is the number of calendar days in the entire relevant Straddle Period and (ii) in the case of Taxes not described in (i) above, the amount of any such Taxes shall be determined as if such taxable period ended as of the end of the Closing Date (and in the case of any Taxes attributable to the ownership of any equity interest in any partnership or other "flowthrough" entity, even if the relevant period for the equityholders of such partnership or other "flowthrough" entity is not a Straddle Period, Taxes attributable to the activities of such partnership or other "flowthrough entity" shall be allocated as if the taxable period of such partnership or other "flowthrough" entity ended as of the end of the Closing Date) (provided, however, that any exemptions or allowances that are calculated on an annual or other periodic basis shall be allocated between the Pre-Closing Tax Period and the Post-Closing Tax Period in proportion to the number of days in each such period).

e. Parent shall not, and shall not permit any of its Affiliates (including, after the Closing for the avoidance of doubt, the Company or any of its Subsidiaries) to, (i) file a Tax Return for the Company or any of its Subsidiaries for any Pre-Closing Period (except as permitted in Section 6.4(b)) or re-file, supplement or amend any Tax Return of the Company or its Subsidiaries for any Pre-Closing Tax Period, (ii) voluntarily approach any taxing authority regarding any Taxes or Tax Returns of the Company or its Subsidiaries for any Pre-Closing Tax Period, (iii) make an election under Section 338 or Section 336 of the Code (or any comparable applicable provision of state, local or foreign Tax Law) with respect to the Transactions that would increase any liability of the Company Securityholders, (iv) make any Tax election for the Company or its Subsidiaries that has retroactive effect to any Pre-Closing Tax Period, (v) except pursuant to Section 6.4(c) and Section 6.4(i), carryback any net operating losses to a Tax period (or portion thereof) of the Company or any of its Subsidiaries ending on or before the Closing Date, or (vi) agree to extend or waive the statute of limitations with respect Taxes of the Company or its Subsidiaries for a Pre-Closing Tax Period, in each such case except as required by applicable Law or, other than the elections described in clause (iii), with the prior written consent of the Securityholder Representative (which consent shall not be unreasonably withheld, conditioned or delayed (provided that the Securityholder Representative must inform Parent within 60 days after Parent's request for consent whether the Securityholder Representative's consent is or is not given). The parties will (and will cause their Affiliates to) reasonably cooperate with respect to the administration of Tax matters pertaining to the Company and its Subsidiaries for Pre-Closing Tax Periods, including with respect to the filing of Tax Returns and the conduct of Tax Contests. Such cooperation shall include retaining and providing records and information that are reasonably relevant to any such Tax Return, audit, assessment, suit, dispute, proceeding or similar claim, and making employees available on a mutually convenient basis to provide additional information and explanation of any materials provided hereunder.

f. Parent, on the one hand, and the Company Securityholders (as Transaction Expenses), on the other hand, shall each bear fifty percent (50%) of all Transfer Taxes arising out of or in connection with the Transactions or otherwise in connection with this Agreement. The party legally obligated to do so will file or cause to be filed in a timely manner all necessary documentation and Tax Returns with respect to such Transfer Taxes. Parent shall provide the Securityholder Representative with evidence satisfactory to the Securityholder Representative that any Transfer Taxes payable by Parent have been paid, and the parties will reasonably cooperate to mitigate any Transfer Taxes arising out of the Transactions.

g. Tax Contests.

i. If any party hereto receives notice that a taxing authority intends to audit, examine or conduct an Action, or written notice of a taxing authority's determination of an objection to an assessment with respect to Taxes or Tax Returns of the Company or any of its Subsidiaries relating in whole or in part to a Pre-Closing Tax Period (a "Tax Contest"), then the party hereto first receiving notice of such Tax Contest shall promptly provide written notice thereof to the other party or parties hereto describing the claim, the amount thereof (if known or quantifiable) and the basis thereof, provided however, that the failure to provide such notice shall not relieve the other party from any of its obligations under this Section 6.4(g) except to the extent that such other party is prejudiced as a consequence of such failure.

ii. Except as otherwise described below in this Section 6.4(g)(ii), the Securityholder Representative shall have the right to control, at the sole cost and expense of the Company Securityholders, any Tax Contest of the Company or any of its Subsidiaries relating solely to a Pre-Closing Tax Period (a "Securityholders' Tax Contest"); provided, that: (A) Parent, at its sole cost and expense, shall have the right to participate in such Securityholders' Tax Contest and receive copies of any written materials relating to such Securityholders' Tax Contest received from the relevant Governmental Authority, and (B) the Securityholder Representative shall keep Parent reasonably informed regarding such Securityholders' Tax Contest, and the Securityholder Representative shall not agree to settle such Securityholders' Tax Contest without the written consent of Parent, which consent shall not be unreasonably withheld, conditioned or delayed. Notwithstanding anything to the contrary in this Agreement, Cannae Holdings, Inc. shall control (at Cannae Holdings, Inc.'s expense) any Tax Contest with respect to the Cannae Affiliated Group, and Parent shall not participate in or control any such Tax Contest. The Cannae Company Stockholder shall keep Parent reasonably informed as to the status and resolution of such Tax Contest, to the extent such Tax Contest could reasonably be expected to affect any Tax liability of Parent or its Subsidiaries (including the Company and its Subsidiaries), and shall not settle any such Tax Contest in a manner that would have a material and adverse effect on Parent or its Subsidiaries (including the Company and its Subsidiaries) without the prior written consent of Parent (not to be unreasonably withheld, conditioned or delayed).

iii. Parent shall have the right to control, any Tax Contest of the Company or any of its Subsidiaries that neither the Securityholder Representative nor Cannae Holdings, Inc. can control pursuant to Section 6.4(g)(ii) (a "Parent Tax Contest"), provided that, (A) the Securityholder Representative, at its sole cost and expense, shall have the right to participate in such Parent Tax Contest and receive copies of any written materials relating to such Parent Tax Contest received from the relevant Governmental Authority to the extent relevant to determining any Tax liability for which it is responsible under this Agreement, and (B) Parent shall keep the Securityholder Representative reasonably informed regarding such Parent Tax Contest and Parent shall not agree to settle such Parent Tax Contest in a manner that would give rise to any Tax liability for with the Company Securityholders are responsible under this Agreement without the written consent of the Securityholder Representative (such consent not to be unreasonably withheld, conditioned or delayed).

iv. Notwithstanding anything to the contrary in this Agreement, only this Section 6.4(g), and not Section 8.2 shall control the conduct of Tax Contests and other Tax proceedings with respect to the Company and its Subsidiaries.

h. Tax Sharing Agreements or Arrangements. Any and all existing written Tax sharing, allocation or like agreements or arrangements for the Company or any of its Subsidiaries (other than such agreement or arrangement entered into in the ordinary course of business consistent with past practice, the principal subject matter of which is not Taxes) shall be terminated on or prior to the Closing Date, and from and after the Closing Date, Parent and its Affiliates shall not be bound thereby or have any liability thereunder. The Tax sharing, allocation or like agreements to be cancelled pursuant to this Section 6.4(h) are listed on Section 6.4(h) of the Company Disclosure Schedule.

i. Income Tax Matters. Pre-Closing Taxes and the Tax items included in Net Working Capital or Transaction Expenses shall be calculated in accordance with the following assumptions (whether or not the Tax Returns described in Section 6.4(b) are in fact prepared in accordance with these assumptions):

(i) The taxable year of the Company ends as of the end of the day on the Closing Date;

(ii) No election under Section 338 of the Code (or any comparable applicable provision of state, local or foreign Tax Law) is made with respect to the acquisition of the stock of the Company;

(iii) Taxes that are incurred by the Company on the Closing Date after the Closing as a result of actions taken at the direction of Parent that are not contemplated by this Agreement shall not be taken into account;

(iv) The Company makes a timely election under Revenue Procedure 2011-29, 2011-18 I.R.B. 746, to apply the seventy percent (70%) safe-harbor to any Transaction Expenses that are “success based fees” as defined in Treasury Regulation Section 1.263(a)-5(f);

(v) To the extent “more likely than not” deductible under applicable Law in such period, all Transaction Deductions are deducted on Tax Returns for the taxable period that ends (or is deemed to end) as of the end of the day on the Closing Date;

(vi) To the extent “more likely than not” permitted by Law, any net operating losses of the Company arising in taxable periods ending (or deemed to end) on or prior to the Closing Date are applied against income arising in Pre-Closing Tax Periods (including, if permitted by applicable Law, pursuant to a carryback); and

(vii) For purposes of this Section 6.4, “Transaction Deduction” means all items of loss or deduction for applicable Income Tax purposes resulting from or attributable to: (a) the payment of bonuses, or other compensatory payments made in connection with the transactions contemplated by this Agreement on or about the Closing Date; (b) Transaction Expenses; (c) any fees, expenses, premiums and penalties with respect to the prepayment of debt and the write-off of the amortization of deferred financing, in each case with respect to Indebtedness repaid at Closing; or (d) any liabilities included in Final Net Working Capital or Final Indebtedness; in each case (with respect to clauses (a), (b), (c) or (d)), only to the extent the relevant expense giving rise to such items was (i) paid prior to the Closing Date or (ii) included as a liability in the final determination of the Merger Consideration.

Section 6.5 Employee Matters. Prior to the Closing Date, the Company and its Subsidiaries shall cause each Excluded Participant to cease participating in any Benefit Plan.

Section 6.6 Confidentiality. Parent, Merger Sub, the Company and the Securityholder Representative hereby agree to be bound by and comply with the terms of the Confidentiality Agreement, which are hereby incorporated into this Agreement by reference and shall continue in full force and effect until the earlier of the Effective Time or until such agreement terminates pursuant to its terms such that, in each case, the information obtained by Parent, Merger Sub, the Company and the Securityholder Representative, or their respective Affiliates, officers, employees, agents or representatives, during any investigation conducted pursuant to Section 5.2, or in connection with the negotiation and execution of this Agreement or the consummation of the Transactions, or otherwise, shall be governed by the terms of the Confidentiality Agreement. The Confidentiality Agreement is hereby amended to include in the definition of “Representatives” contained therein all of Parent’s Affiliates (other than other portfolio companies of investment funds affiliated with Carlyle Investment Management, L.L.C.) and its and their respective advisors, representatives and all existing or prospective equity investors, co-investors and Debt Financing Sources (including their respective directors, officers, employees, accountants and legal counsel). The execution of this Agreement shall constitute written consent by the Company pursuant to the Confidentiality Agreement to all actions by Parent and its Affiliates expressly contemplated by this Agreement. Carlyle Investment Management, L.L.C. is an express third party beneficiary of each waiver to, or amendment of, the Confidentiality Agreement contained herein.

Section 6.7 Financing.

a. Prior to the earlier of the Closing or the termination of this Agreement pursuant to its terms, the Company will use its reasonable best efforts to provide to Parent such assistance (and to cause its Subsidiaries and its and their respective personnel and advisors to provide such assistance) with the Debt Financing as is reasonably requested by Parent in connection with the arrangement, obtaining and syndication of the Debt Financing. Such assistance will include the following: (i) as promptly as reasonably practicable, furnishing Parent, its Affiliates and its Financing Sources with such financial and other pertinent information regarding the Company and its Subsidiaries as may be reasonably requested by Parent (and updates thereto as reasonably requested), including furnishing to Parent (A) the unaudited consolidated balance sheet of the Company and its Subsidiaries, and the related unaudited consolidated statements of income, stockholders' equity and cash flows, as of and for each fiscal quarter ending after September 30, 2019, no later than 45 days after the last day of such fiscal quarter, (B) unaudited monthly financial statements within thirty (30) days after the completion of such month and customary "flash" or "recent development" revenue and EBITDA information (which may be provided in a reasonable range or estimate and may be provided on a non-GAAP basis) for any completed fiscal quarters not described in sub-clause (B) above and (C) the pro forma financial information identified in paragraph 6 of Exhibit C of the Debt Commitment Letter; (ii) using reasonable best efforts to cooperate with the marketing efforts of Parent and the Financing Sources relating to the Debt Financing, including reasonably assisting with the preparation of lender and investor presentations, bank information memoranda and similar documents and materials, including other marketing and syndication materials, in each case as are customarily required by financing sources in connection with debt financings similar to the Debt Financing, together with customary authorization letters authorizing the distribution of information to prospective lenders or investors (which customary authorization letters shall be required notwithstanding the reasonable efforts standard required of the Company above) including with respect to the presence or absence of material non-public information and the accuracy of the information contained in the disclosure and marketing materials related to the Financing; (iii) causing the Company's and its Subsidiaries' management teams, with appropriate seniority and expertise, including senior officers, to participate in, including the preparation for, a reasonable number of meetings, drafting sessions, due diligence sessions and presentations with prospective lenders (including customary meetings with lenders and potential Debt Financing Sources), in each case upon reasonable notice and at mutually agreeable dates and times in connection with the Debt Financing; (iv) executing and delivering customary authorization letters authorizing the distribution of information to prospective lenders or investors or otherwise relating to the Debt Financing; (v) furnishing Parent and its financing sources as promptly as reasonably practicable, and in any event no later than five (5) Business Days prior to the Closing Date, with all documentation and other information required by regulatory authorities or reasonably requested by Debt Financing Sources under applicable "beneficial ownership", "know your customer" and anti-money laundering rules and regulations, including the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001, as amended, that has been reasonably requested by Parent in writing, at least nine (9) Business Days prior to the Closing Date, (vi) providing all relevant information with respect to the collateral, delivering original copies of all certificated securities (with transfer powers executed in blank) and assisting with the preparation of, and executing and delivering, any pledge and security documents or other definitive financing documents or certificates as may be reasonably be requested by Parent, (vii) providing a certificate of the individual who is the chief financial officer or an officer serving the equivalent function of the Company with respect to solvency matters in the form set forth as an annex to the Debt Commitment Letter; and (viii) obtaining customary pay-off letters and lien releases in respect of Indebtedness of the Company and its Subsidiaries. Such assistance will not require the Company or any of its Affiliates to agree to any contractual obligation relating to the Debt Financing that is not conditioned upon the Closing and that does not terminate without liability to the Company or any of its Affiliates upon the termination of this Agreement; provided that this sentence shall not affect the obligation of the Company to provide the authorization letters referred to in clause (iv) of the immediately preceding sentence.

b. In each case of this Section 6.7(b), the Company's cooperation will be at Parent's written request with reasonable prior notice and at Parent's sole cost and expense and Parent will reimburse the Company for any documented and reasonable out-of-pocket costs and expenses (including attorneys' fees) incurred by the Company and its Subsidiaries in connection with the cooperation by the Company and its Subsidiaries contemplated by this Section 6.7. The Company and its Subsidiaries will not be required to deliver or cause the delivery of any legal opinions in connection with the Debt Financing. The Company (for itself and its Subsidiaries) hereby consents to the use of all of the Company's and its Subsidiaries' logos in connection with the Debt Financing; provided that such logos are used solely in a manner that is not reasonably likely to harm or disparage the Company or its Subsidiaries or the trademarks, reputation or goodwill of the Company and its Subsidiaries. All information provided by the Company and its Subsidiaries or any of their respective personnel or advisors under this Section 6.7 will be kept confidential in accordance with the Confidentiality Agreement as amended by Section 6.6. Parent will indemnify and hold harmless the Company and its Subsidiaries and their respective directors, managers, officers, equityholders, employees and agents from and against any liabilities, losses, damages, claims, costs, expenses (including attorney's fees), interest, awards, judgments and penalties suffered or incurred in connection with any assistance or activities provided under this Section 6.7.

c. Parent acknowledges and agrees that none of the Company, the Company Securityholders or any of their respective Affiliates have any responsibility for any financing that Parent may raise in connection with the Transactions, other than the Rollover Agreements.

Section 6.8 Affiliate Contracts and Balances

. At or prior to the Closing, the Company shall (a) except as set forth on Section 6.8 of the Company Disclosure Schedule cause each Contract required to be set forth on Section 3.21 of the Company Disclosure Schedule to be terminated in accordance with the terms and conditions of each such Contract, without any consideration payable after the Closing or further Liability on the part of any party thereunder and (b) eliminate by discharge or otherwise in their entirety all balances between any Company Securityholder or any of its Affiliates (other than the Company and its Subsidiaries), on the one hand, and the Company or any of its Subsidiaries, on the other hand either pursuant to the Payoff Letters to be satisfied at Closing or otherwise.

Section 6.9 Appropriate Action; Consents; Filings.

a. The Company and Parent shall not enter into any agreement with any Governmental Authority agreeing not to consummate the Transactions. The Company shall give (and the Company shall cause any applicable Subsidiary of the Company to give) any notices to third Persons, and use (and the Company shall cause any applicable Subsidiary of the Company to use) commercially reasonable efforts to obtain any consents from third Persons required under any Contracts, licenses, leases or other agreements in connection with the consummation of the Transactions to the extent requested, and in the form provided, by Parent. Parent shall use commercially reasonable efforts to assist the Company in obtaining all consents and providing such notices, including providing any reasonable information or executing any documents reasonably required in connection therewith. Notwithstanding the foregoing, no party hereto nor any of the Company's Subsidiaries shall have any obligation to pay any money or thing of value to any third Person for the purpose of obtaining such consent or any costs and expenses of any third Person resulting from the process of obtaining any such consent (and the Company and its Subsidiaries should not pay (or commit to pay) any amount (other than customary nominal administrative costs) or grant any accommodation to obtain any such consent with the prior written consent of Parent.

b. The Company shall give prompt notice to Parent upon becoming aware of (i) any notices, complaints, investigations or hearings (or communications indicating that the same may be contemplated) of any Governmental Authorities with respect to the Transactions, (ii) any written notices or other written communications from any third Persons alleging that the consent of such Person is or may be required with respect to the Transactions, (iii) the institution or the overt threat of material litigation involving the Company or any of its Subsidiaries or (iv) any event or condition that has caused any of the representations or warranties set forth in Article III not to be true and correct such that the conditions set forth Article VII would not be satisfied. Parent will give prompt notice to the

Company upon becoming aware of (i) any notices, complaints, investigations or hearings (or communications indicating that the same may be contemplated) of any Governmental Authorities with respect to the Transactions, or (ii) any written notices or other written communications from any third Persons alleging that the consent of such Person is or may be required with respect to the Transactions, or (iii) any event or condition that would reasonably be expected to cause any of the representations or warranties set forth in Article IV not to be true and correct such that the conditions set forth in Article VII would not be satisfied.

Section 6.10 Trust Purchaser Termination Fee. In the event of a Parent Participating Qualified Termination (as defined in the Parent Equity Commitment Letter), Parent shall pay to the Company an amount equal to 64.5% multiplied by the Purchaser Termination Fee (as defined in the Parent Equity Commitment Letter) within two (2) Business Days following such termination.

ARTICLE VII

CONDITIONS

Section 7.1 Conditions to Obligations of Each Party. The respective obligations of each party to effect the Transactions shall be subject to the satisfaction as of the Closing of the following conditions, any or all of which may be waived in writing by the parties hereto:

a. No Order. No Governmental Authority of competent jurisdiction shall have enacted, issued, promulgated, enforced or entered any Law (whether temporary, preliminary or permanent) that is in effect and has the direct effect of making the Transactions illegal or otherwise directly prohibiting consummation of the Transactions.

b. Pending Actions. There shall not be pending any Action by any Governmental Authority challenging, or seeking material damages in connection with, the Transactions or seeking to restrain, prohibit or limit the exercise of full rights of ownership or operation by Parent of all or any material portion of the Company or its Subsidiaries.

Section 7.2 Additional Conditions to Obligations of Parent and Merger Sub. The obligations of Parent and Merger Sub to effect the Transactions are also subject to the satisfaction as of the Closing of the following conditions, any or all of which may be waived in writing by Parent:

a. Representations and Warranties. (i) The representations and warranties of the Company set forth in Section 3.1 (Organization and Qualification; Subsidiaries); Section 3.3 (Authorization of Agreement); Section 3.4 (Capitalization) and Section 3.22 (Brokers) shall have been true and correct in all respects as of the date of this Agreement and shall be true and correct in all respects (other than *de minimis* inaccuracies) on and as of the Closing Date, as though made on the Closing Date; and (ii) each other representation and warranty of the Company contained in this Agreement shall have been true and correct as of the date of this Agreement and shall be true and correct on and as of the Closing Date, in each case, without giving effect to any "Company Material Adverse Effect" or materiality qualification therein (except in each case for those representations and warranties which address matters only as of a particular date which representations shall have been true and correct as of such particular date), except in the case of this clause (ii) where the failure of such representations and warranties to be true and correct as of the Closing Date would not reasonably be expected to have a Company Material Adverse Effect. Parent shall have received a certificate with respect to the foregoing signed on behalf of the Company by the Chief Executive Officer of the Company (which, together with the certificate referred to in Section 7.2(b), the "Closing Certificates").

b. Agreements and Covenants. The Company shall have performed or complied in all material respects with all of its obligations, agreements and covenants required by this Agreement to be performed or complied with by it on or prior to the Closing. Parent shall have received a certificate to such effect signed on behalf of the Company by the Chief Executive Officer of the Company.

c. Material Adverse Effect. Since the date of this Agreement, there shall not have occurred any event, circumstance or other matter that, individually or together with all such other events, circumstances or matters, has had, or would reasonably be expected to have, a Company Material Adverse Effect.

d. Specified Conditions. The conditions set forth on Schedule 7.2(d) shall have been satisfied.

e. Deliverables. The Company shall have delivered, or caused to be delivered, the following to Parent:

i. evidence reasonably satisfactory to Parent that the assets of the Company and its Subsidiaries have been released from all security interests thereon and the Company and its Subsidiaries shall have taken all steps necessary to terminate all UCC financing statements which have been filed with respect to such security interests;

ii. evidence reasonably satisfactory to Parent that the Action by Written Consent signed by the Company Stockholders, which provides for the adoption and approval of this Agreement and the Transactions shall have been executed by the Company Stockholders and is in full force and effect, and such Action by Written Consent shall not have been modified or rescinded, on and as of the Closing Date, which shall be certified by the Secretary of the Company;

iii. evidence reasonably satisfactory to Parent that the resolutions duly adopted by the board of directors of the Company (A) approved this Agreement, the Merger and the Transactions, (B) recommended that the Company Stockholders adopt and approve this Agreement and approve the Merger and (C) authorized the Company, to execute, deliver and perform this Agreement and the Transactions, and such resolutions shall not have been modified or rescinded, on and as of the Closing Date, which shall be certified by the Secretary of the Company;

iv. certified copies of the certificate of incorporation and/or other applicable organizational documents of the Company and its Subsidiaries from their respective states of incorporation, formation or organization, as the case may be;

v. the Payoff Letters;

vi. written resignations of all officers, managers and directors of the Company and each of its Subsidiaries requested by Parent, each effective as of the Effective Time;

vii. the FIRPTA Certificate;

viii. evidence reasonably satisfactory to Parent that the Estimated Cash exceeds the Target Cash; and

ix. each of the Joinder and Release Agreements and Rollover Agreements executed by Cannae Holdings, Inc. and Cannae Company Stockholder contemporaneously with this Agreement shall remain in full force and effect as of the Closing, none of the aforementioned agreements shall have been breached (which breach is continuing), rescinded or threatened in writing to be rescinded by any of the parties thereto, and the Rollovers (for purposes of this Section 7.2(e)(ix), solely with respect to Cannae Holdings, Inc. and Cannae Company Stockholder) shall have been consummated in accordance with the terms of the Rollover Agreements executed by Cannae Holdings, Inc. and Cannae Company Stockholder.

Section 7.3 Additional Conditions to Obligations of the Company. The obligations of the Company to effect the Transactions are also subject to the satisfaction at or prior to the Closing of the following conditions, any or all of which may be waived in writing by the Company:

a. Representations and Warranties. (i) The representations and warranties of Parent and Merger Sub set forth in Section 4.3 (Authorization of Agreement) shall have been true and correct in all material respects as of the date of this Agreement and shall be true and correct in all material respects on and as of the Closing Date; and (ii) each other representation and warranty of Parent and Merger Sub contained in this Agreement shall have been true and correct as of the date of this Agreement and shall be true and correct on and as of the Closing Date (except in each case for those representations and warranties which address matters only as of a particular date which representations shall have been true and correct as of such particular date), except with respect to clause (ii) hereof, in each case, or in the aggregate, as does not have a material adverse effect on Parent's ability to consummate the Transactions. The Company shall have received a certificate with respect to the foregoing signed on behalf of Parent and Merger Sub by the Chief Executive Officer of Parent.

b. Agreements and Covenants. Parent shall have performed or complied in all material respects with all of its obligations, agreements and covenants required by this Agreement to be performed or complied with by it on or prior to the Closing. The Company shall have received a certificate to such effect signed on behalf of Parent by the Chief Executive Officer of Parent.

c. Specified Conditions. The conditions set forth on Schedule 7.3(c) shall have been satisfied.

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ARTICLE VIII

INDEMNIFICATION; SURVIVAL OF REPRESENTATIONS AND WARRANTIES

Section 8.1 Indemnification.

a. Subject to the terms and conditions of this Article VIII, upon the Closing of the Transactions, each of the Company Securityholders, severally and not jointly, in accordance with each such Company Securityholder's Pro Rata Portion, hereby agrees to indemnify, defend and hold harmless (i) Parent, (ii) Parent's Affiliates and (iii) the officers, managers, directors and employees of Parent and Parent's Affiliates (collectively, but excluding the Company Securityholders in such capacity, the "Parent Indemnified Parties" and individually, each a "Parent Indemnified Party") from and against all losses, Liabilities, damages, deficiencies, costs, Taxes, expenses and penalties (including interest imposed or assessed by any judicial or administrative body), as well as reasonable legal fees, disbursements and costs related thereto, whether or not arising out of a Third Party Claim and including all amounts for the investigation, defense or settlement of the foregoing ("Damages") actually paid, suffered or incurred (as reasonably documented) at any time by a Parent Indemnified Party based upon, arising out of or otherwise in respect of:

i. any inaccuracy or breach of any representation or warranty of the Company contained in this Agreement or any of the Closing Certificates (without giving effect to any "Material Adverse Effect" or other materiality qualification or any similar qualification contained or incorporated directly or indirectly in such representation or warranty);

ii. any breach of any covenant or agreement of the Company or the Securityholder Representative contained in this Agreement;

iii. any Securityholder Matter;

iv. any and all litigation or arbitrations set forth or required to be set forth on Section 3.9 of the Company Disclosure Schedule (provided, that such indemnifiable Damages shall only be the amount in excess of any reserve Liability included in the determination of Final Net Working Capital pursuant to Section 2.10);

v. any Indebtedness existing as of the Closing Date or Transaction Expenses in excess of those set forth on the Payoff Letters (in the case of Indebtedness) and not taken into account in the calculation of the Merger Consideration as of the Settlement Date;

vi. any Pre-Closing Taxes set forth in clause (A), clause (C) and/or clause (D) of the definition thereof;

vii. any Pre-Closing Taxes set forth in clause (B) of the definition thereof; or

viii. the Section 3.23 Disclosure (as defined in the Company Disclosure Schedule).

b. The maximum amount that any Parent Indemnified Party may recover from the Company Securityholders pursuant to Section 8.1(a)(i) (other than in respect of any claim arising from (x) Fraud or (y) any breach or inaccuracy of the Fundamental Representations or the Tax Representations), or Section 8.1(a)(viii) shall not exceed the Liability Cap. For purposes of clarity, the limitations set forth in this Section 8.1(b) shall not apply to (i) claims based on inaccuracies in or breaches of any of the Fundamental Representations or Tax Representations and (ii) claims based on any of the matters set forth in Sections 8.1(a)(ii) through Section 8.1(a)(vii).

c. The maximum amount that any Parent Indemnified Party may recover (i) from each of the Company Securityholders shall not exceed such Company Securityholder's Pro Rata Portion of such Damages and (ii) pursuant to Section 8.1(a)(i) in respect of any breach or inaccuracy of the Fundamental Representations or Tax Representations, Sections 8.1(a)(ii), Section 8.1(a)(iii), Section 8.1(a)(iv), Section 8.1(a)(v) and Section 8.1(a)(vi) shall be limited to the total amount of consideration actually paid to such Company Securityholder pursuant to this Agreement and the Rollover Amount attributable to such Company Securityholder's Rollover Shares. For purposes of clarity, the limitations set forth in Section 8.1(c)(ii) shall not apply to any claim arising from Fraud or under Section 8.1(a)(vii).

d. The parties acknowledge and agree that, if the Surviving Company or any of its Subsidiaries suffers, incurs or otherwise becomes subject to any Damages as a result of or in connection with any breach of or inaccuracy of any representation, warranty, covenant or Contract (such Damages, the "Surviving Company Damages"), then (without limiting any of the rights of the Surviving Company as a Parent Indemnified Party) Parent shall also be deemed, by virtue of its ownership of the equity of the Surviving Company, to have incurred Damages as a result of and in connection with such breach or inaccuracy (it being understood that any Damages suffered or incurred by the Surviving Company shall be recoverable under this Article VIII by either Parent or the Surviving Company, but not both of them).

e. Notwithstanding anything to the contrary in this Agreement, (i) Parent and Parent's Affiliates shall not have any right to indemnification under this Agreement with respect to, or based on, Taxes to the extent such Taxes were taken into account in the Final Net Working Capital, Indebtedness or Transaction Expenses and actually reduced the Merger Consideration pursuant to Section 2.10 and (ii) Damages shall exclude (A) any special, indirect, consequential (to the extent not reasonably foreseeable), exemplary or punitive damages except to the extent such damages are awarded to a third party and (B) any losses or damages associated with any lost profits or lost opportunities (to the extent not reasonably foreseeable) except to the extent such damages are awarded to a third party.

f. Nothing in this Agreement shall limit the rights or remedies of any Parent Indemnified Party against any particular Company Securityholder, or the liability of any particular Company Securityholder, for the Fraud of such Company Securityholder or a breach by such Company Securityholder of any provision of such Company Securityholder's Letter of Transmittal, Joinder and Release or Rollover Agreement (as applicable).

g. Notwithstanding anything to the contrary in this Agreement, Parent and Parent's Affiliates shall not have any right to indemnification under this Agreement with respect to, or based on, Taxes to the extent such Taxes (i) are claimed pursuant to Section 8.1(a)(vi) or Section 8.1(a)(vii) and result from transactions or actions taken by Parent or any of its Affiliates (including, for the avoidance of doubt, the Company and any of its Subsidiaries) on the Closing Date after the Closing that are outside the ordinary course of business consistent with past practice other than as expressly contemplated or required by this Agreement), or (ii) result from a Parent debt financing transaction (which, for the avoidance of doubt, would not include the Rollover).

h. The provisions of this Article VIII are intended to be for the benefit of, and shall be enforceable by, each Parent Indemnified Party and their respective legal representatives, which shall each be deemed to be third party beneficiaries under this Agreement; provided that no Parent Indemnified Party will initiate or pursue a claim pursuant to this Section 8.1 over the objections of Parent.

Section 8.2 Defense of Third Party Claims. In addition to the provisions of Section 8.3, the obligations and liabilities of the Company Securityholders to indemnify any party under this Article VIII with respect to Damages relating to or arising from third Person claims or actions (a "Third Party Claim"), shall be subject to the following terms and conditions:

a. Any Parent Indemnified Party to be indemnified hereunder (whether one or more) will give the Securityholder Representative reasonably prompt written notice following receipt of any such Third Party Claim. Failure of the Parent Indemnified Party to give such notice shall not affect the Company Securityholders' duty or obligation under this Article VIII, except to the extent the Company Securityholders are materially prejudiced thereby. If such Third Party Claim involves a demand for injunctive relief against a Parent Indemnified Party, the Parent Indemnified Party will have the right to undertake the defense, compromise or settlement discussions of such Third Party Claim, which right shall be exercised upon written notice to the Securityholder Representative upon written notice of any such Third Party Claim or promptly following such time that the third-party assets a demand for injunctive relief. Subject to the preceding sentence, the Securityholder Representative may undertake the defense thereof by representatives chosen by it and reasonably acceptable to the Parent Indemnified Party upon written notice to the Parent Indemnified Party within ten (10) days of receiving notice of such Third Party Claim (or sooner if the nature of the Third Party Claim so requires). If the Securityholder Representative undertakes the defense of a Third Party Claim, (i) it will conduct the defense actively and diligently and in good faith, (ii) the Parent Indemnified Party shall make available to the Securityholder Representative or its representatives all records and other materials required by them and in the possession or under the control of the Parent Indemnified Party, for the use of the Securityholder Representative and its representatives in defending any such Third Party Claim, and shall in other respects give reasonable cooperation in such defense and (iii) the Parent Indemnified Party may retain separate co-counsel at its sole cost and expense; provided, however, that such Parent Indemnified Party will be entitled to participate in any such defense with separate counsel at the expense of the Company Securityholders if (A) requested by the Securityholder Representative to participate; (B) in the reasonable opinion of counsel to the Parent Indemnified Party, a conflict or potential conflict exists between the Parent Indemnified Party and the Company Securityholders that would make such separate representation advisable; or (C) to the extent the applicable Third Party Claim involves the seeking of injunctive or equitable relief.

b. If the Securityholder Representative, within ten (10) days after written notice of any such Third Party Claim (or sooner if the nature of the Third Party Claim so requires), elects not to defend such Third Party Claim or thereafter fails or ceases to defend such Third Party Claim, actively (given the nature of the case) and in good faith, then the Parent Indemnified Party will (upon further advance written notice of at least three (3) days) have the right to undertake the defense, compromise or settlement discussions of such Third Party Claim, or discuss consent to the entry of a judgment with respect thereto, and the Company Securityholders and the Securityholder Representative shall thereafter have no right to undertake the defense, compromise or settlement thereof. Any such assumption, compromise or settlement by such Parent Indemnified Party shall not be dispositive of the amount of Damages, but shall not otherwise relieve the Company Securityholders of their other obligations under this Article VIII.

c. Notwithstanding anything in this Section 8.2 to the contrary the Securityholder Representative shall not, without the written consent of the Parent Indemnified Party, settle or compromise any Third Party Claim or consent to the entry of any judgment which (i) does not include as an unconditional term thereof the giving by the claimant or the plaintiff to the Parent Indemnified Party of a customary unconditional release from all liability in respect of such Third Party Claim, and (ii) provides relief other than monetary damages that are to be paid in full by the Company Securityholders.

d. The party controlling the defense of any Third Party Claim shall deliver, or cause to be delivered, to the other parties copies of all correspondence, pleadings, motions, briefs, appeals or other written statements relating to or submitted in connection with the defense of the Third Party Claim, and timely notices of, and the right to participate in (as an observer) any hearing or other court proceeding relating to the Third Party Claim. Each party shall make available to any other party controlling the defense of any Third Party Claim all records and other materials required by the other party and in the possession or under the control of such party, for the use of the other party in defending such Third Party Claim, and shall in other respects give reasonable cooperation in such defense.

e. To the extent that this Section 8.2 conflicts with Section 6.4(g), Section 6.4(g) shall control.

Section 8.3 Other Claims, Payment.

a. Upon the occurrence of Damages for which indemnification is believed (in good faith) by Parent to be due under this Article VIII, the Parent Indemnified Party shall provide notice of such Damages to the Securityholder Representative, stating in reasonable detail the circumstances giving rise to the Damages, specifying the representation, warranty or covenant of this Agreement alleged to have been breached, specifying the estimated amount of the Damages (if known), and making a request for any payment then believed due. Such notice of dispute shall describe the basis for such objection and the amount of the claim as to which the Securityholder Representative does not believe should be subject to indemnification. Upon receipt of any such notice of objection, both the Parent Indemnified Party and the Securityholder Representative shall use commercially reasonable efforts to cooperate and arrive at a mutually acceptable resolution of such dispute within the next thirty (30) days. If a mutually acceptable resolution cannot be reached between the Parent Indemnified Party and the Securityholder Representative within such thirty (30) day period, each party may thereupon proceed to pursue any and all available remedies at law.

b. In connection with any claim, each of the parties shall grant the other parties and their representatives all reasonable access to the books, records, employees and properties of such Person to the extent reasonably related to the matters to which the applicable claim relates.

Section 8.4 Satisfaction of Claims.

a. If the Company Securityholders are determined to owe, or have paid, an amount in the aggregate pursuant to this Article VIII less than or equal to the Liability Cap, then such amount due to the Parent Indemnified Party hereunder shall be satisfied by the delivery to the Parent Indemnified Party from the Company Securityholders directly, in each case, in accordance with each such Company Securityholder's Pro Rata Portion, an amount in cash equal to the amount owed pursuant to this Article VIII, subject in all cases to the provisions of Section 8.1(b) and Section 8.1(c), which amount shall be paid by the Company Securityholders promptly after such amount is finally determined in accordance with this Article VIII.

b. If the Company Securityholders are determined to owe, or have paid, an amount pursuant to this Article VIII in excess of the Liability Cap (other than such amounts relating to any claims with respect to a breach or inaccuracy of the Fundamental Representations or the matters set forth in Section 8.1(a)(ii), Section 8.1(a)(iii), Section 8.1(a)(v) and Section 8.1(a)(vii)), then any additional amount due to the Parent Indemnified Party hereunder shall be satisfied, in each case, in accordance with each such Company Securityholder's Pro Rata Portion, first by the cancellation of such Company Securityholder's Exchange Shares (and each Exchange Share so cancelled shall be deemed to be extinguished at the Deemed Value of such Exchange Share) and to the extent the cancellation of such Exchange Shares is insufficient to satisfy the total amount due, then by the delivery to the Parent Indemnified Party from the Company Securityholder directly such shortfall amount in cash.

c. Notwithstanding the foregoing, if a Company Securityholder has validly filed a claim under the RWI Policy, the Company Securityholder's obligation to pay any amount owed pursuant to this Article VIII shall be extended until the earlier of (i) six (6) months following the date such claim has been delivered against such Company Securityholder and (ii) such time as such claim is resolved or affirmatively denied by the insurer.

Section 8.5 Survival of Representations and Warranties, Liability Limitations.

a. All representations and warranties of the Company in this Agreement shall survive the Closing and any investigation thereof and all covenants and agreements of the Company, the Securityholder Representative and Parent shall survive the Closing until performed; provided, however, that in no event shall any Parent Indemnified Party be permitted to make any claim unless a bona fide written claim delivered in compliance with Section 8.2(a) (in the case of a Third Party Claim) or Section 8.3 (in the case of any other claim under this Article VIII) shall have been delivered (i) on or before the General Survival Date for any claim made pursuant to Section 8.1(a)(i) (other than in respect of the Fundamental Representations, the Tax Representations or any claim involving Fraud), (ii) on or before the thirtieth (30th) day after the expiration of the applicable statute of limitations, including any extensions thereof, for any claim made pursuant to Section 8.1(a)(i) in respect of the Tax Representations or any claim made under Section 8.1(a)(vi) or Section 8.1(a)(vii) or (iii) on or before the fifth anniversary of the Closing Date for any other claim made pursuant to Section 8.1(a) (including, but subject to Section 8.1(f), any claim involving Fraud); provided that if, at any time prior to such date, any Parent Indemnified Party delivers to the Securityholder Representative any such notice, then the claim asserted in such notice shall survive until such time as such claim is fully and finally resolved.

b. Except with respect to remedies provided by Section 10.8, after the Closing, indemnification pursuant to this Article VIII shall be the sole and exclusive remedy of the Parent Indemnified Parties against the Company Securityholders under this Agreement.

c. A Parent Indemnified Party shall not be entitled to indemnification for Damages under Section 8.1(a)(i) (other than in respect of any claim arising from (x) Fraud or (y) any breach or inaccuracy of the Fundamental Representations or the Tax Representations) until the Parent Indemnified Parties shall have first incurred aggregate Damages indemnifiable under Section 8.1(a)(i) in excess of $975,000 (the "Deductible") (at which time the Company Securityholders shall be obligated for all such Damages of the Parent Indemnified Parties in excess of the Deductible, but subject to the limitations set forth in Section 8.1(b) and Section 8.1(c)).

d. The waiver of any condition to the consummation of this Agreement in Article VII on the accuracy of any representation or warranty, or on the performance of or compliance with any covenant or agreement, will not affect the right to indemnification, payment of damages, or other remedy based on any such representation, warranty, covenant or agreement.

e. No Parent Indemnified Party shall make an indemnification claim hereunder to the extent the Damages underlying such claim were taken into account and actually reduced the Merger Consideration pursuant to Section 2.10.

f. No Company Securityholder shall exercise or assert (or attempt to exercise or assert) any right of contribution, right of indemnity or other right or remedy against the Surviving Company or any Parent Indemnified Party in connection with any indemnification obligation or any other liability to which such Company Securityholder may become subject under or in connection with this Agreement.

Section 8.6 Insurance Effect. If a Parent Indemnified Party has received the payment required by this Agreement from the Company Securityholders in respect of any Damages and later receives proceeds from insurance policies maintained by the Company prior to Closing in respect of such Damages, then it shall hold such proceeds or other amounts in trust for the benefit of the Company Securityholders and shall pay to the Company Securityholders as promptly as practicable after receipt, a sum equal to the amount of such proceeds or other amount received, up to the aggregate amount of any payments or distributions from the Company Securityholders pursuant to this Agreement in respect of such Damages (net of any out-of-pocket costs reasonably incurred pursuing or obtaining such insurance proceeds, deductibles, and increased premium amounts for the applicable policy that are directly attributable to such claim, which increased amounts are payable within one year of such Parent Indemnified Party receiving such proceeds).

Section 8.7 Tax Effect. Notwithstanding anything to the contrary contained herein, the parties acknowledge that any Tax benefit actually realized by the Parent Indemnified Party as a result of the incurrence or payment of Damages shall be taken into account in calculation of the Damages incurred or suffered by the Parent Indemnified Party to the extent such Tax benefit is realized in the taxable period during which the Damages are incurred or in the immediately following taxable period. The amount of the reduction to Damages arising from any Tax benefit shall be determined on a “with and without” basis by comparing the excess of (i) the Tax liability of the Parent Indemnified Party without taking into account the effects of the incurrence of the applicable Damages; and (ii) the Tax liability of the Parent Indemnified Party taking into account the effects of the incurrence of the applicable Damages. The amount of Damages incurred by any Parent Indemnified Party shall take into account and be increased by the Tax costs of receiving any indemnity payment hereunder.

Section 8.8 Mitigation. Upon any Parent Indemnified Party becoming aware of any claim as to which indemnification may be sought by such Parent Indemnified Party pursuant to this Article VIII, such Parent Indemnified Party shall utilize commercially reasonable efforts, consistent with normal practices and policies and good commercial practice, to mitigate such Damages.

Section 8.9 Securityholder Representative; Fees and Expenses.

(a) For purposes of this Agreement, each Company Securityholder shall, without any further action on the part of any such Company Securityholder, be deemed (by virtue of the adoption and approval of this Agreement and approval of the Merger) to have consented to the appointment of Cannae Holdings, Inc., as the representative of such Company Securityholder, as the attorney-in-fact for and on behalf of each such Company Securityholder, and the taking by the Securityholder Representative of any and all actions and the making of any decisions required or permitted to be taken by them under or contemplated by this Agreement and the other documents contemplated hereby, including the exercise of the power to (i) execute this Agreement and any other agreements, documents and certificates pursuant hereto (except for the Letters of Transmittal which each Company Stockholder is required to execute), including all amendments to such agreements, and take all actions required or permitted to be taken under such agreements; (ii) authorize delivery to any Parent Indemnified Party from the Company Securityholders, in satisfaction of indemnification or other claims contemplated by this Agreement; (iii) agree to, negotiate, enter into settlements and compromises of and comply with orders of courts and awards of arbitrators with respect to such indemnification or other claims; (iv) resolve any indemnification or other claims; (v) receive and forward notices and communications pursuant to this Agreement; and (vi) take all actions necessary in the judgment of the Securityholder Representative for the accomplishment of the foregoing and all of the other terms, conditions and limitations of this Agreement and any other agreements, documents and certificates hereto. Cannae Holdings, Inc. hereby accepts its appointment as the Securityholder Representative. The Securityholder Representative is authorized by each Company Securityholder by virtue of the adoption and approval of this Agreement and approval of the Merger to act on its behalf as required hereunder. The Company Securityholders entitled to a majority of the Merger Consideration can appoint a new Securityholder Representative by written consent by sending notice and a copy of the duly executed written consent appointing such new Securityholder Representative to Parent. Such appointment will be effective upon the later of the date indicated in the consent or the date such consent is received by Parent.

(b) Notwithstanding anything to the contrary in this Agreement or otherwise, Parent and Merger Sub shall be entitled to rely on any action taken by the Securityholder Representative, on behalf of the Company Securityholders, pursuant to this Section 8.9 (each, an "Authorized Action"), and that each Authorized Action shall be binding on each Company Securityholder as fully as if such Person had taken such Authorized Action. Parent and Merger Sub may rely upon the authority of the Securityholder Representative to act as the agent of the Company Securityholders. In furtherance of the foregoing, Parent and Merger Sub may rely, without independent verification or investigation, upon all decisions, communications or writings made, given or executed by the Securityholder Representative or actions omitted to be taken by the Securityholder Representative in connection with this Agreement and the transactions contemplated hereby. Any action taken or not taken or decisions, communications or writings made, given or executed by the Securityholder Representative shall be deemed an action taken or not taken or decisions, communications or writings made, given or executed by the Company Securityholders. Any notice or communication delivered by Parent or Merger Sub to the Securityholder Representative shall be deemed to have been delivered to all Company Securityholders. Parent and Merger Sub shall be entitled to disregard any decisions, communications or writings made, given or executed by any Company Securityholder in connection with this Agreement and any of the transactions contemplated by this Agreement unless the same is made, given or executed by the Securityholder Representative. Any payment by Parent or Merger Sub to the Securityholder Representative under this Agreement on behalf of or for the benefit of the Company Securityholders will be considered a payment by such Person to the Company Securityholders. Subject to actual payment of any such amounts by Parent or Merger Sub in accordance with this Agreement, neither Parent nor Merger Sub shall have any liability or other obligation to any Company Securityholders or any other Person with respect to any claim that the amounts paid in accordance with such allocation are incomplete or inaccurate.

(c) The parties acknowledge that the Securityholder Representative's obligations under this Article VIII are solely as a representative of the Company Securityholders with respect to the obligations to indemnify the Parent Indemnified Parties under this Article VIII and that the Securityholder Representative (only in its capacity as such and not with respect to its obligations, to the extent applicable, as a Company Securityholder) shall have no personal responsibility for any expenses incurred by it in such capacity or for any indemnification obligations of the other Company Securityholders. Out- of-pocket expenses of the Securityholder Representative for attorneys' and accountants' fees and other costs shall be reimbursed from the Company Securityholders based on their Pro Rata Portion of such expenses.

ARTICLE IX

TERMINATION, AMENDMENT AND WAIVER

Section 9.1 Termination. This Agreement may be terminated at any time prior to the Closing:

a. by mutual written consent of Parent and the Company;

b. by Parent, upon a breach of any representation, warranty, covenant or agreement on the part of the Company set forth in this Agreement, which (i) would give rise to the failure of a condition set forth in Section 7.2; and (ii) has not been cured within thirty (30) days following the earlier of receipt by Parent of written notice of such breach or untruth from the Company, as the case may be, or receipt by the Company of written notice of such breach or untruth from Parent unless such breach cannot by its natured be cured;

c. by the Company, upon a breach of any representation, warranty, guarantee, covenant or agreement on the part of Parent set forth in this Agreement, which (i) would give rise to the failure of a condition set forth in Section 7.3; and (ii) has not been cured within thirty (30) days following the earlier of receipt by the Company of written notice of such breach or untruth from Parent or receipt by Parent of written notice of such breach or untruth from the Company unless such breach by its nature cannot be cured;

d. by either Parent or the Company, if there shall be any Law, order, injunction or decree which is final and nonappealable preventing the consummation of the Transactions or that makes consummation of the Transactions illegal; or

e. by either Parent or the Company, if the Closing shall not have occurred by February 28, 2020 (the "Outside Date"); provided, however, that the right to terminate this Agreement under this Section 9.1(e) shall not be available to any party whose failure to perform any material covenant, agreement or obligation hereunder has been the principal cause of the failure of the Closing to occur on or before such Outside Date.

Section 9.2 Effect of Termination. In the event of the termination of this Agreement pursuant to Section 9.1, this Agreement shall forthwith become void, there shall be no liability on the part of Parent, Merger Sub or the Company or their respective officers, managers, directors, securityholders, managers or partners and all rights and obligations of any party hereto shall cease, except that nothing herein shall relieve any party hereto of any liability for any and all of the damages suffered by the other party hereto as a result of any Fraud or intentional breach of such party's representations, warranties, covenants or agreements contained in this Agreement provided, however, for the avoidance of doubt, that following termination of this Agreement (a) Parent's and Merger Sub's right to pursue legal remedies under this Agreement shall be limited to the Company, and Parent and Merger Sub shall have no right to pursue remedies under this Agreement or otherwise against the Securityholder Representative or any Company Securityholder individually, and (b) the Company's, the Securityholder Representative's and any Company Securityholder's right to pursue legal remedies under this Agreement shall be limited to Parent, and none of the Company, the Securityholder Representative or any Company Securityholder shall have any right to pursue remedies under this Agreement or otherwise against any other Person (whether a Parent Indemnified Person or otherwise). Notwithstanding the foregoing, the provisions of Section 6.10, this Section 9.2, Section 9.3 and Article X shall survive any termination of this Agreement. No termination of this Agreement shall affect the obligations of the parties under the Confidentiality Agreement.

Section 9.3 Amendment. Subject to applicable Law, this Agreement may not be amended except by an instrument in writing signed by Parent, Merger Sub and the Company.

Section 9.4 Waiver. At any time prior to the Closing, any party hereto entitled to the benefits thereof may (a) extend the time for the performance of any of the obligations or other acts of the other party hereto; (b) waive any inaccuracies in the representations and warranties of the other party contained herein or in any document delivered pursuant hereto, and (c) waive compliance by the other party with any of the agreements or conditions contained herein. Any such extension or waiver shall be valid only if set forth in an instrument in writing signed by the party or parties to be bound thereby.

ARTICLE X

GENERAL PROVISIONS

Section 10.1 Notices. All notices and other communications given or made pursuant hereto shall be in writing and shall be deemed to have been duly given (a) upon receipt, if delivered personally, (b) one (1) business day after mailed by registered or certified mail (postage prepaid, return receipt requested) to the parties at the following addresses (or at such other address for a party as shall be specified by like changes of address) or (c) if sent by electronic transmission to the email address specified below, when transmitted and receipt is confirmed:

If to Parent or Merger Sub, to:

c/o The Carlyle Group
520 Madison Avenue
New York, NY 10022
Attention: Stephen Wise and James Shillito
E-mail: Stephen.Wise@carlyle.com; James.Shillito@carlyle.com

with a copy to:

Latham & Watkins LLP
555 11th Street NW
Washington D.C. 20004
Attention: Paul Sheridan
E-mail: paul.sheridan@lw.com

If to the Company, to:

T-System Holding LLC
4020 McEwen Road
Dallas, Texas 75244
Attention: General Counsel
Email: mgravelle@fnf.com

with a copy to:

Cooley LLP
1333 2nd Street, Suite 400
Santa Monica, California 90401
Attention: Matt Hallinan
E-mail: mhallinan@cooley.com

If to the Securityholder Representative, to:

Cannae Holdings, Inc.

1701 Village Center Circle
Las Vegas, NV 89134
Attention: General Counsel
E-mail: mgravelle@fnf.com

with a copy to:

Cooley LLP
1333 2nd Street, Suite 400
Santa Monica, California 90401
Attention: Matt Hallinan
E-mail: mhallinan@cooley.com

Section 10.2 Headings. The headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement. Section references herein are, unless the context otherwise requires, references to sections of this Agreement.

Section 10.3 Severability. If any term or other provision of this Agreement is invalid, illegal or incapable of being enforced by any rule of Law or public policy, all other conditions and provisions of this Agreement shall nevertheless remain in full force and effect so long as the economic or legal substance of the Transactions is not affected in any manner materially adverse to any party. Upon such determination that any term or other provision is invalid, illegal or incapable of being enforced, the parties hereto shall negotiate in good faith to modify this Agreement so as to effect the original intent of the parties as closely as possible in an acceptable manner to the end that the Transactions are fulfilled to the extent possible.

Section 10.4 Entire Agreement. This Agreement (together with the Company Disclosure Schedule), the Confidentiality Agreement, the Joinder and Release Agreements, the Rollover Agreements, the Parent Equity Commitment Letter and the Letters of Transmittal and the other Transaction Documents constitute the entire agreement of the parties, and supersede all prior agreements and undertakings, both written and oral, among the parties or between any of them, with respect to the subject matter hereof.

Section 10.5 Company Disclosure Schedule. The Company Disclosure Schedule to this Agreement is hereby incorporated and made a part hereof and is an integral part of this Agreement. The Company Disclosure Schedule shall be arranged in paragraphs corresponding to the numbered and lettered paragraphs contained in this Agreement, and the disclosure in any such numbered and lettered paragraph shall qualify only the corresponding numbered and lettered paragraph of this Agreement (except to the extent disclosure in any numbered and lettered paragraph is specifically cross-referenced or it is reasonably apparent on its face that such disclosed information is applicable to such numbered and lettered paragraph). The Company and Securityholder Representative may, at their option, include in the Company Disclosure Schedule items that are not material in order to avoid any misunderstanding, and such inclusion, or any references to dollar amounts, shall not be deemed to be an acknowledgement or representation that such items are material, to establish any standard of materiality or to define further the meaning of such terms for purposes of this Agreement. Headings and introductory language have been inserted on the sections of the Company Disclosure Schedule for convenience of reference only and shall to no extent have the effect of amending or changing the express description of the sections as set forth in this Agreement.

Section 10.6 Assignment. This Agreement shall be binding upon, and shall be enforceable by and inure solely to the benefit of, the parties hereto and their respective successors and assigns; provided, however, that neither this Agreement nor any of the rights or obligations of any party hereunder may be assigned or delegated by such party without the prior written consent of the other parties; provided that, without such consent, Parent or the Surviving Company may assign its rights hereunder to any of its Affiliates or make a collateral assignment of rights hereunder to any lender or other debt financing source.

Section 10.7 Parties in Interest. Subject to Section 10.6 and Section 10.16, this Agreement shall be binding upon and inure solely to the benefit of each party hereto, and, except as set forth in Section 6.3, Section 6.6 or Section 8.1(h), nothing in this Agreement, express or implied, is intended to or shall confer upon any other Person any right, benefit or remedy of any nature whatsoever under or by reason of this Agreement. Without limiting the generality of the foregoing, the parties expressly confirm their agreement that, in addition to Parent, the Parent Indemnified Parties shall also enjoy the benefits of indemnities made herein which are expressly stated to be in their favor.

Section 10.8 Specific Performance.

a. Except as otherwise limited or provided herein, any and all remedies available to a party under the law will be deemed cumulative with and not exclusive of any other remedy conferred hereby, or by law or equity upon such party, and the exercise by a party of any one remedy will not preclude the exercise of any other remedy.

b. The parties hereby acknowledge and agree that the failure of any party to perform its agreements and covenants hereunder, including its failure to take all actions as are necessary on its part to the consummation of the Transactions, will cause irreparable injury to the other parties for which damages, even if available, will not be an adequate remedy. Accordingly, each party hereby consents to the issuance of injunctive relief and other equitable relief (without posting a bond) by any court of competent jurisdiction to compel performance of such party's obligations and to the granting by any court of the remedy of specific performance of its obligations hereunder.

Section 10.9 Failure or Indulgence Not Waiver; Remedies Cumulative. No failure or delay on the part of any party hereto in the exercise of any right hereunder shall impair such right or be construed to be a waiver of, or acquiescence in, any breach of any representation, warranty or agreement herein, nor shall any single or partial exercise of any such right preclude other or further exercise thereof or of any other right. Except as otherwise explicitly provided for elsewhere herein, all rights and remedies existing under this Agreement are cumulative to, and not exclusive to, and not exclusive of, any rights or remedies otherwise available.

Section 10.10 Governing Law; Waiver of Jury Trial. THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE DOMESTIC LAWS OF THE STATE OF DELAWARE, WITHOUT GIVING EFFECT TO ANY CHOICE OF LAW OR CONFLICTING PROVISION OR RULE (WHETHER OF THE STATE OF DELAWARE OR ANY OTHER JURISDICTION) THAT WOULD CAUSE THE LAWS OF ANY JURISDICTION OTHER THAN THE STATE OF DELAWARE TO BE APPLIED. IN FURTHERANCE OF THE FOREGOING, THE INTERNAL LAW OF THE STATE OF DELAWARE WILL CONTROL THE INTERPRETATION AND CONSTRUCTION OF THIS AGREEMENT, EVEN IF UNDER SUCH JURISDICTION'S CHOICE OF LAW OR CONFLICT OF LAW ANALYSIS, THE SUBSTANTIVE LAW OF SOME OTHER JURISDICTION WOULD ORDINARILY APPLY. EACH PARTY HERETO HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVES, TO THE FULLEST EXTENT SUCH PARTY MAY LEGALLY AND EFFECTIVELY DO SO, TRIAL BY JURY IN ANY ACTION ARISING UNDER THIS AGREEMENT.

Section 10.11 Consent to Jurisdiction. EACH PARTY HERETO AGREES AND CONSENTS TO THE JURISDICTION OF ANY DELAWARE STATE OR FEDERAL COURT SITTING IN WILMINGTON, DELAWARE, AND ANY APPROPRIATE APPELLATE COURTS THEREFROM, WITH RESPECT TO ALL MATTERS RELATING TO THIS AGREEMENT AND TO THE TRANSACTIONS, WAIVES ALL OBJECTIONS BASED ON LACK OF VENUE AND FORUM NON CONVENIENS, AND IRREVOCABLY CONSENTS TO THE PERSONAL JURISDICTION OF ALL SUCH COURTS.

Section 10.12 Personal Liability. Except as otherwise specifically set forth herein, this Agreement shall not create or be deemed to create or permit any personal liability or obligation on the part of (i) any Affiliate of the Company or Parent, (ii) any direct or indirect shareholder, partner or member of any such Affiliate or the Company or Parent or (iii) any officer, manager, director, employee, agent, representative or investor of any of the foregoing or of any other party hereto.

Section 10.13 Counterparts. This Agreement may be executed in multiple counterparts, and by the different parties hereto in separate counterparts, each of which when executed shall be deemed to be an original but all of which taken together shall constitute one and the same agreement. The Agreement shall become effective when Parent, Merger Sub, the Company and the Securityholder Representative shall have executed and delivered this Agreement.

Section 10.14 Expenses. Except as otherwise expressly provided in this Agreement, all costs and expenses (including all fees and disbursements of counsel, financial advisors and accountants) incurred in connection with the negotiation and preparation of this Agreement, the performance of the terms of this Agreement and the consummation of the Transactions, shall be paid by the respective party incurring such costs and expenses, whether or not the Closing shall have occurred; provided that in the event of a Closing, all Transaction Expenses will be for the account of the Company Securityholders, regardless of whether incurred by them (or, for example, by the Company).

Section 10.15 Conflict of Interest. If the Securityholder Representative so desires, acting on behalf of the Company Securityholders and without the need for any consent or waiver by Parent, the Company or the Surviving Company, Cooley LLP ("Cooley") shall be permitted to represent the Company Securityholders after the Closing in connection with any matter, including, without limitation, anything related to the Merger or the other Transactions or any disagreement or dispute relating thereto. Without limiting the generality of the foregoing, after the Closing, Cooley shall be permitted to represent the Company Securityholders, any of their agents and affiliates, or any one or more of them, in connection with any negotiation, transaction or dispute ("dispute" includes litigation, arbitration or other adversary proceeding) with Parent, the Company or the Surviving Company or any of their agents or affiliates under or relating to this Agreement, the Merger or the other Transactions, and any related matter, such as claims or disputes arising under other agreements entered into in connection with this Agreement. Upon and after the Closing, the Company shall cease to have any attorney-client relationship with Cooley , unless and to the extent Cooley is specifically engaged in writing by the Company to represent the Company after the Closing and either such engagement involves no conflict of interest with respect to the Company Securityholders or the Securityholder Representative consents in writing at the time to such engagement. Any such representation of Parent, the Company or the Surviving Company by Cooley after the Closing shall not affect the foregoing provisions hereof. For example, and not by way of limitation, even if Cooley is representing Parent, the Company or the Surviving Company after the Closing, Cooley shall be permitted simultaneously to represent the Company Securityholders in any matter, including any disagreement or dispute relating hereto. Furthermore, Cooley shall be permitted to withdraw from any representation of Parent, the Company or the Surviving Company in order to be able to represent or continue so representing the Company Securityholders, even if such withdrawal causes Parent, the Company or the Surviving Company additional legal expense (such as to bring new counsel "up to speed"), delay or other prejudice. Following the Effective Time, except with the consent of the Securityholder Representative, neither Parent, the Company nor the Surviving Company, nor any Person acting on behalf of or through Parent, the Company or the Surviving Company, will seek to obtain or use the Privilege Assets without the Securityholder Representative's consent, provided that the Securityholder Representative shall not unreasonably withhold its consent if any such Person is seeking to use such Privilege Assets in defense or prosecution of a claim brought by or against a third party that is not a Company Securityholder. Notwithstanding the foregoing, nothing shall prevent Parent, the Company, the Surviving Company or any Person acting on behalf of or through any of them from complying with applicable Law or court order.

Section 10.16 Provisions Relating to Debt Financing Sources.

a. Notwithstanding anything to the contrary contained in this Agreement, each of the parties hereto: (i) agrees that it will not bring or support any person in any action, suit, proceeding, cause of action, claim, cross-claim or third-party claim of any kind or description, whether in law or in equity, whether in contract or in tort or otherwise, against any of the Debt Financing Sources (which defined term for the purposes of this provision shall include the Debt Financing Sources and their respective Affiliates, equityholders, members, partners, officers, directors, employees, agents, advisors and representatives involved in the financing contemplated by the Debt Commitment Letters) in any way relating to this Agreement or any of the transactions contemplated by this Agreement, including, but not limited to, any dispute arising out of or relating in any way to the Debt Commitment Letters or the performance thereof or the financings contemplated thereby, in any forum other than the federal and New York State courts located in the Borough of Manhattan of the City of New York; (ii) agrees that, except as specifically set forth in the Debt Commitment Letters, all claims or causes of action (whether at law, in equity, in contract, in tort or otherwise) against any of the Debt Financing Sources in any way relating to the Debt Commitment Letters or the performance thereof or the financings contemplated thereby, shall be exclusively governed by, and construed in accordance with, the Laws of the State of New York; and (iii) hereby irrevocably and unconditionally waives any right such party may have to a trial by jury in respect of any litigation (whether in law or in equity, whether in contract or in tort or otherwise) directly or indirectly arising out of or relating in any way to the Debt Commitment Letters or the performance thereof or the financings contemplated thereby.

b. Notwithstanding anything to the contrary contained in this Agreement, (i) the Company, the Securityholder Representative and each of their respective Subsidiaries, Affiliates, directors, officers, employees, agents, partners, managers, members or stockholders shall not have any rights or claims against any Debt Financing Sources, in any way relating to this Agreement or any of the transactions contemplated by this Agreement, or in respect of any, or in respect of any oral representations made or alleged to have been made in connection herewith or therewith, including any dispute arising out of or relating in any way to the Debt Commitment Letters or the performance thereof or the financings contemplated thereby, whether at law or equity, in contract, in tort or otherwise and (ii) no Debt Financing Source shall have any liability (whether in contract, in tort or otherwise) to the Company, the Securityholder Representative and their respective Subsidiaries, Affiliates, directors, officers, employees, agents, partners, managers, members or stockholders for any obligations or liabilities of any party hereto under this Agreement or for any claim based on, in respect of, or by reason of, the transactions contemplated hereby and thereby or in respect of any oral representations made or alleged to have been made in connection herewith or therewith, including any dispute arising out of or relating in any way to the Debt Commitment Letters or the performance thereof or the financings contemplated thereby, whether at law or equity, in contract, in tort or otherwise.

c. Notwithstanding anything to the contrary contained in this Agreement, (i) the Debt Financing Sources are intended third-party beneficiaries of, and shall be entitled to the protections of this Section 10.16, along with Section 9.3, and (ii) this Section 10.16, along with Section 9.3, shall not be amended, modified, supplemented or waived in a manner that is materially adverse to any Debt Financing Source without the prior written consent of such Debt Financing Source.

[*remainder of page intentionally left blank*]

IN WITNESS WHEREOF, Parent, Merger Sub, the Company and the Securityholder Representative have caused this Agreement to be signed, all as of the date first written above.

COMPANY

T-SYSTEM GROUP, INC.

By: *_/s/ Brent Bickett_*

Name: Brent B. Bickett

Title: President

IN WITNESS WHEREOF, Parent, Merger Sub, the Company and the Securityholder Representative have caused this Agreement to be signed, all as of the date first written above.

PARENT

Coding Solutions Acquisition, Inc.

By: *__/s/ Joseph Z. Bress__*

Name: Joseph Z. Bress

Title: President

MERGER SUB

Coding Solutions Merger Sub, Inc.

By: *__/s/Joseph Z. Bress__*

Name: Joseph Z. Bress

Title: President

IN WITNESS WHEREOF, Parent, Merger Sub, the Company and the Securityholder Representative have caused this Agreement to be signed, all as of the date first written above.

SECURITYHOLDER REPRESENTATIVE

Cannae Holdings, Inc.

By: *<u>/s/Brent Bickett</u>*

Name: Brent B. Bickett

Title: President

EXHIBIT 21.1

CANNAE HOLDINGS, INC.
List of Subsidiaries December 31, 2019
Significant Subsidiaries

COMPANY	INCORPORATION
Cannae Holdings, LLC	Delaware
Ceridian HCM Holding Inc.	Delaware
Star Parent, L.P.	Delaware
The Dun & Bradstreet Corporation	Delaware
Fidelity Newport Holdings, LLC	Delaware
ABRH, LLC	Delaware
O' Charley's Holdings LLC	Delaware
O' Charley's LLC	Tennessee
99 Restaurants Holdings, LLC	Delaware
99 Restaurants, LLC	Delaware

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-221694 on Form S-8 and Registration Statement No. 333-235303 on Form S-3 of Cannae Holdings, Inc. (the “Company”) of our reports dated February 28, 2020 relating to the financial statements of the Company and the effectiveness of the Company’s internal control over financial reporting appearing in this Annual Report on Form 10-K for the year ended December 31, 2019.

/s/ Deloitte & Touche LLP

Las Vegas, Nevada
February 28, 2020

Exhibit 23.2

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the registration statements (No. 333-235303) on Form S-3 and (No. 333-221694) on Form S-8 of Cannae Holdings, Inc. of our report dated February 28, 2020, with respect to the consolidated balance sheets of Ceridian HCM Holding Inc. and subsidiaries 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 years in the three-year period ended December 31, 2019, and the related notes, and the effectiveness of internal control over financial reporting as of December 31, 2019, which report appears in the December 31, 2019 annual report on Form 10-K of Cannae Holdings, Inc.

Our report refers to a change in the method of accounting for leases.

/s/ KPMG LLP

Minneapolis, Minnesota
February 28, 2020

Exhibit 31.1

CERTIFICATIONS

I, Richard N. Massey, certify that:

1. I have reviewed this annual report on Form 10-K of Cannae Holdings, 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 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.

Date: February 28, 2020

By: */s/ Richard N. Massey*
Richard N. Massey
Chief Executive Officer

Exhibit 31.2

CERTIFICATIONS

I, Richard L. Cox, certify that:

1. I have reviewed this annual report on Form 10-K of Cannae Holdings, 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 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.

Date: February 28, 2020

By: */s/ Richard L. Cox*
Richard L. Cox
Chief Financial Officer

Exhibit 32.1

CERTIFICATION OF PERIODIC FINANCIAL REPORTS PURSUANT TO 18 U.S.C. §1350

The undersigned hereby certifies that he is the duly appointed and acting Chief Executive Officer of Cannae Holdings, Inc., a Delaware corporation (the "Company"), and hereby further certifies as follows.

1. The periodic report containing financial statements to which this certificate is an exhibit fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934.

2. The information contained in the periodic report to which this certificate is an exhibit fairly presents, in all material respects, the financial condition and results of operations of the Company.

In witness whereof, the undersigned has executed and delivered this certificate as of the date set forth opposite his signature below.

Date: February 28, 2020

By: */s/Richard N. Massey*
Richard N. Massey
Chief Executive Officer

Exhibit 32.2

CERTIFICATION OF PERIODIC FINANCIAL REPORTS PURSUANT TO 18 U.S.C. §1350

The undersigned hereby certifies that he is the duly appointed and acting Chief Financial Officer of Cannae Holdings, Inc., a Delaware corporation (the "Company"), and hereby further certifies as follows.

1. The periodic report containing financial statements to which this certificate is an exhibit fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934.

2. The information contained in the periodic report to which this certificate is an exhibit fairly presents, in all material respects, the financial condition and results of operations of the Company.

In witness whereof, the undersigned has executed and delivered this certificate as of the date set forth opposite his signature below.

Date: February 28, 2020

By: */s/ Richard L. Cox*
Richard L. Cox
Chief Financial Officer

Exhibit 99.1

INDEX TO FINANCIAL STATEMENTS

CONSOLIDATED FINANCIAL STATEMENTS OF CERIDIAN HCM HOLDING INC.

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors

Ceridian HCM Holding Inc.:

Opinions on the Consolidated Financial Statements and Internal Control Over Financial Reporting

We have audited the accompanying consolidated balance sheets of Ceridian HCM Holding 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 years in the three-year period ended December 31, 2019, and the related notes (collectively, the consolidated financial statements). We also have audited 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.

In our opinion, the consolidated financial statements referred to above 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 years in the three-year period ended December 31, 2019, in conformity with U.S. generally accepted accounting principles. Also 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 the Committee of Sponsoring Organizations of the Treadway Commission.

Change in Accounting Principle

As discussed in Note 2 to the consolidated financial statements, the Company has changed its method of accounting for leases in 2019 due to the adoption of FASB Accounting Standard Codification (Topic 842) *Leases*.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, 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 Control over Financial Reporting. Our responsibility is to express an opinion on the Company's consolidated financial statements and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated 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 consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Evaluation of the realizability of deferred tax assets

As discussed in Note 16 to the consolidated financial statements, as of December 31, 2019, the Company had gross deferred tax assets of $124.6 million. The Company records a valuation allowance for the portion of the deferred tax assets that are not expected to be realized. Based on an analysis of future taxable income, the Company reduced the valuation allowance and an income tax benefit of $62.6 million was recognized in the consolidated statement of operations for the year ended December 31, 2019.

We identified the evaluation of the realizability of the deferred tax assets as a critical audit matter. Subjective and complex auditor judgment was required in assessing forecasted future taxable income, including the impact of changes in the Company's debt and equity structure.

The primary procedures we performed to address this critical audit matter included the following. We tested certain internal controls over the Company's evaluation of the recoverability of gross deferred tax assets, including controls related to management's analysis of forecasted future taxable income, including management's evaluation of the impact of changes in the Company's debt and equity structure. We compared the Company's projected taxable income to actual historical results, evaluated management's consideration of changes in the Company's debt and equity structure, and evaluated the sensitivity of projected taxable income to the recoverability of the gross deferred tax assets. We involved income tax professionals with specialized skills and knowledge, who assisted in assessing the Company's evaluation of the realizability of deferred tax assets.

Assessment of the stand-alone selling price of the cloud professional services

As discussed in Notes 2 and 13 to the consolidated financial statements, the Company recognized $142 million of cloud professional services revenue for the year ended December 31, 2019. The related contract assets were $43.2 million as of December 31, 2019. The Company's cloud service arrangements include professional services revenue for the implementation of new customers or customer migrations, followed by access to the Company's hosted payroll processing solution. Revenue recognized for the professional services and payroll processing performance obligations is based on an allocation of the total transaction price to each performance obligation using their respective stand-alone selling prices. This results in revenue being recognized in an amount that exceeds the amount the Company is contractually allowed to bill their customer, which results in the recognition of a contract asset. The determination of the stand-alone selling price for the performance obligations requires the Company to make assumptions based on market conditions and observable inputs, as well as an estimate of the total professional service hours expected to be incurred in connection with the implementation.

We identified the assessment of the Company's estimation of the total hours expected to be incurred when determining the stand-alone selling price of the cloud professional services performance obligation for implementation as a critical audit matter. The testing of the professional services hours assumption required a higher degree of auditor subjectivity as the assumption is internally-developed and there is no observable market information.

The primary procedures we performed to address this critical audit matter included the following. We tested certain internal controls over the Company's process for estimating the total expected hours to be incurred in determining the estimated selling price of the cloud professional services performance obligation, as well as internal controls related to the ongoing monitoring and accounting for changes to the total estimated professional services hours during the implementation phase. We evaluated the Company's ability to accurately estimate the total hours expected to be incurred for the professional services performance obligation by comparing the estimated hours to the actual hours incurred for a sample of contracts. We performed inquiries with the project managers regarding the estimation of the total hours to be incurred for a sample of contracts, and compared the project managers' estimates to the Company's revenue model used to determine the estimated selling price of the cloud professional services performance obligation for implementation.

/s/ KPMG LLP

We have served as the Company's auditor since 1958.

Minneapolis, Minnesota

February 28, 2020

Ceridian HCM Holding Inc.
Consolidated Balance Sheets
(Dollars in millions, except share data)

	December 31, 2019	December 31, 2018
ASSETS		
Current assets:		
Cash and equivalents	$ 281.3	$ 217.8
Trade and other receivables, net	80.4	63.9
Prepaid expenses and other current assets	57.9	48.9
Total current assets before customer trust funds	419.6	330.6
Customer trust funds	3,204.1	2,603.5
Total current assets	3,623.7	2,934.1
Right of use lease asset	32.0	—
Property, plant, and equipment, net	128.3	104.4
Goodwill	1,973.5	1,927.4
Other intangible assets, net	177.9	187.5
Other assets	150.3	94.4
Total assets	$ 6,085.7	$ 5,247.8
LIABILITIES AND EQUITY		
Current liabilities:		
Current portion of long-term debt	$ 10.8	$ 6.8
Current portion of long-term lease liabilities	8.8	—
Accounts payable	43.2	41.5
Deferred revenue	25.5	23.2
Employee compensation and benefits	75.9	54.5
Other accrued expenses	13.9	23.9
Total current liabilities before customer trust funds obligations	178.1	149.9
Customer trust funds obligations	3,193.6	2,619.7
Total current liabilities	3,371.7	2,769.6
Long-term debt, less current portion	666.3	663.5
Employee benefit plans	117.2	153.3
Long-term lease liabilities, less current portion	30.1	—
Other liabilities	18.1	45.9
Total liabilities	4,203.4	3,632.3
Commitments and contingencies (Note 18)		
Stockholders' equity:		
Common stock, $0.01 par, 500,000,000 shares authorized, 144,386,618 and 139,453,710 shares issued and outstanding as of December 31, 2019, and 2018, respectively	1.4	1.4
Additional paid in capital	2,449.1	2,325.6
Accumulated deficit	(229.8)	(335.6)
Accumulated other comprehensive loss	(338.4)	(375.9)
Total stockholders' equity	1,882.3	1,615.5
Total liabilities and equity	$ 6,085.7	$ 5,247.8

See accompanying notes to consolidated financial statements.

Ceridian HCM Holding Inc.
Consolidated Statements of Operations
(Dollars in millions, except share and per share data)

	Year Ended December 31, 2019	2018	2017
Revenue:			
Recurring services	$ 680.1	$ 625.0	$ 573.9
Professional services and other	144.0	115.7	102.3
Total revenue	824.1	740.7	676.2
Cost of revenue:			
Recurring services	201.8	200.3	196.8
Professional services and other	149.8	132.2	135.0
Product development and management	67.9	59.0	43.6
Depreciation and amortization	36.4	34.3	31.3
Total cost of revenue	455.9	425.8	406.7
Gross profit	368.2	314.9	269.5
Selling, general and administrative	295.9	258.8	214.1
Operating profit	72.3	56.1	55.4
Interest expense, net	32.4	83.2	87.1
Other expense (income), net	5.6	(0.2)	8.8
Income (loss) from continuing operations before income taxes	34.3	(26.9)	(40.5)
Income tax (benefit) expense	(44.4)	8.4	(48.5)
Income (loss) from continuing operations	78.7	(35.3)	8.0
Loss from discontinued operations	—	(25.8)	(6.0)
Net income (loss)	78.7	(61.1)	2.0
Net loss attributable to noncontrolling interest	—	(0.5)	(1.3)
Net income (loss) attributable to Ceridian	$ 78.7	$ (60.6)	$ 3.3
Net income (loss) per share attributable to Ceridian:			
Basic	$ 0.55	$ (0.60)	$ (0.26)
Diluted	$ 0.53	$ (0.60)	$ (0.26)
Weighted-average shares outstanding:			
Basic	142,049,112	114,049,682	65,204,960
Diluted	148,756,592	114,049,682	65,204,960

See accompanying notes to consolidated financial statements.

Ceridian HCM Holding Inc.
Consolidated Statements of Comprehensive Income (Loss)
(Dollars in millions)

	Year Ended December 31,		
	2019	**2018**	**2017**
Net income (loss)	$ 78.7	$ (61.1)	$ 2.0
Items of other comprehensive income (loss) before income taxes:			
Change in foreign currency translation adjustment	29.1	(48.7)	40.6
Change in unrealized gain from invested customer trust funds	37.7	(10.5)	(17.3)
Change in pension liability adjustment (1)	9.8	(7.6)	13.8
Other comprehensive income (loss) before income taxes	76.6	(66.8)	37.1
Income tax expense (benefit), net	12.0	(1.2)	(3.6)
Other comprehensive income (loss) after income taxes	64.6	(65.6)	40.7
Comprehensive income (loss)	143.3	(126.7)	42.7
Comprehensive loss attributable to noncontrolling interest	—	(0.5)	(0.9)
Comprehensive income (loss) attributable to Ceridian	$ 143.3	$ (126.2)	$ 43.6

(1) The amount of the pension liability adjustment recognized in the Consolidated Statements of Operations within other expense (income), net was $10.1 million, $11.7 million, and $10.1 million during the years ended December 31, 2019, 2018, and 2017, respectively.

See accompanying notes to consolidated financial statements.

Ceridian HCM Holding Inc.
Consolidated Statements of Stockholders' Equity
(Dollars in millions, except share data)

	Senior Preferred Stock		Junior Preferred Stock		Common Stock								
	Shares	$	Shares	$	Shares	$	Additional Paid In Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Receivable from Stockholder	Total Stockholders Equity	Non-controlling Interest	Total Equity
Balance as of December 31, 2016	16,802,144	$164.3	58,244,308	$0.6	65,001,037	$0.7	$ 1,546.8	$ (250.1)	$ (351.5)	$ (75.2)	$ 1,035.8	$ 38.7	$1,074.5
Net loss	—	—	—	—	—	—	—	3.3	—	—	3.3	(1.3)	2.0
Issuance of common stock	—	—	—	—	183,425	—	3.2	—	—	—	3.2	—	3.2
Issuance of common stock under share-based compensation plans	—	—	—	—	729,404	—	—	—	—	—	—	—	—
Share repurchase	—	—	—	—	(627,904)	—	(1.8)	—	—	—	(1.8)	—	(1.8)
Payment for Issuance of Senior Preferred Stock	—	—	—	—	—	—	—	—	—	75.2	75.2	—	75.2
Senior preferred dividends declared	—	20.5	—	—	—	—	—	(20.5)	—	—	—	—	—
Share-based compensation	—	—	—	—	—	—	17.2	—	—	—	17.2	—	17.2
Foreign currency translation	—	—	—	—	—	—	—	—	40.2	—	40.2	0.4	40.6
Change in unrealized loss, net of tax ($3.6)	—	—	—	—	—	—	—	—	(13.7)	—	(13.7)	—	(13.7)
Change in minimum pension & postretirement liability, net of tax of $0.0	—	—	—	—	—	—	—	—	13.8	—	13.8	—	13.8
Balance as of December 31, 2017	16,802,144	$184.8	58,244,308	$0.6	65,285,962	$0.7	$ 1,565.4	$ (267.3)	$ (311.0)	$ —	$ 1,173.2	$ 37.8	$1,211.0
Net loss	—	—	—	—	—	—	—	(60.6)	—	—	(60.6)	(0.5)	(61.1)
Issuance of common stock	—	—	—	—	28,695,455	0.3	594.7	—	—	—	595.0	—	595.0
Issuance of common stock under share-based compensation plans	—	—	—	—	3,225,643	—	45.0	—	—	—	45.0	—	45.0
Senior preferred dividends declared	—	7.7	—	—	—	—	—	(7.7)	—	—	—	—	—
Conversion of senior and junior preferred shares	(16,802,144)	(192.5)	(58,244,308)	(0.6)	42,246,650	0.4	192.7	—	—	—	—	—	—
LifeWorks Disposition	—	—	—	—	—	—	(95.7)	—	0.7	—	(95.0)	(37.3)	(132.3)
Share-based compensation	—	—	—	—	—	—	23.5	—	—	—	23.5	—	23.5
Foreign currency translation	—	—	—	—	—	—	—	—	(48.7)	—	(48.7)	—	(48.7)
Change in unrealized loss, net of tax ($1.2)	—	—	—	—	—	—	—	—	(9.3)	—	(9.3)	—	(9.3)
Change in minimum pension & postretirement liability, net of tax of $0.0	—	—	—	—	—	—	—	—	(7.6)	—	(7.6)	—	(7.6)
Balance as of December 31, 2018	—	$ —	—	$ —	139,453,710	$1.4	$ 2,325.6	$ (335.6)	$ (375.9)	$ —	$ 1,615.5	$ —	$1,615.5
Cumulative-effect adjustments to accumulated deficit related to the adoptions of ASU 2018-02 (Please refer to Note 2)	—	—	—	—	—	—	—	27.1	(27.1)	—	—	—	—
Net income	—	—	—	—	—	—	—	78.7	—	—	78.7	—	78.7

Issuance of common stock under share-based compensation plans	—	—	—	—	4,932,908	—	87.0	—	—	—	87.0	—	87.0
Share-based compensation	—	—	—	—	—	—	36.5	—	—	—	36.5	—	36.5
Foreign currency translation	—	—	—	—	—	—	—	—	29.1	—	29.1	—	29.1
Change in unrealized loss, net of tax $9.6	—	—	—	—	—	—	—	—	28.1	—	28.1	—	28.1
Change in minimum pension & postretirement liability, net of tax of $2.4	—	—	—	—	—	—	—	—	7.4	—	7.4	—	7.4
Balance as of December 31, 2019	—	$ —	—	$ —	144,386,618	$1.4	$ 2,449.1	$ (229.8)	$ (338.4)	$ —	$ 1,882.3	$ —	$1,882.3

See accompanying notes to consolidated financial statements.

Ceridian HCM Holding Inc.
Consolidated Statements of Cash Flows
(Dollars in millions)

	Year Ended December 31,		
	2019	2018	2017
Net income (loss)	$ 78.7	$ (61.1)	$ 2.0
Loss from discontinued operations	—	25.8	6.0
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:			
Deferred income tax benefit	(69.4)	(16.1)	(61.2)
Depreciation and amortization	57.1	56.6	53.8
Amortization of debt issuance costs and debt discount	1.2	2.1	3.7
Loss on debt extinguishment	—	25.7	—
Net periodic pension and postretirement cost	5.2	2.7	1.5
Provision for doubtful accounts	3.2	0.7	0.2
Share-based compensation	36.5	23.2	16.1
Other	(0.4)	(0.4)	(0.7)
Changes in operating assets and liabilities excluding effects of acquisitions and divestitures:			
Trade and other receivables	(16.4)	(3.6)	5.7
Prepaid expenses and other current assets	(8.0)	0.6	(6.3)
Accounts payable and other accrued expenses	3.8	(6.4)	0.1
Deferred revenue	0.8	7.0	4.5
Employee compensation and benefits	(11.1)	(22.1)	(26.1)
Accrued interest	—	(15.7)	(4.8)
Accrued taxes	(11.1)	8.4	(6.7)
Other assets and liabilities	(19.5)	(16.7)	(17.2)
Net cash provided by (used in) operating activities-continuing operations	50.6	10.7	(29.4)
Net cash used in operating activities-discontinued operations	—	(1.2)	(10.4)
Net cash provided by (used in) operating activities	50.6	9.5	(39.8)
Cash Flows from Investing Activities			
Purchase of customer trust funds marketable securities	(408.4)	(855.2)	(598.5)
Proceeds from sale and maturity of customer trust funds marketable securities	374.5	844.3	610.2
Expenditures for property, plant, and equipment	(16.3)	(8.0)	(17.5)
Expenditures for software and technology	(38.9)	(32.2)	(33.1)
Acquisition costs, net of cash acquired	(30.2)	—	—
Net proceeds from divestitures	—	—	(0.5)
Net cash used in investing activities-continuing operations	(119.3)	(51.1)	(39.4)
Net cash used in investing activities-discontinued operations	—	—	(0.2)
Net cash used in investing activities	(119.3)	(51.1)	(39.6)
Cash Flows from Financing Activities			
Increase (decrease) in customer trust funds obligations, net	529.9	(1,415.1)	356.1
Net proceeds from issuance of stock	—	595.0	78.4
Repayment of long-term debt obligations	(7.2)	(1,134.0)	(25.9)
Proceeds from issuance of common stock under share-based compensation plans	87.0	45.8	—
Repurchase of stock	—	—	(1.8)
Proceeds from debt issuance	—	680.0	—
Payment of debt refinancing costs	—	(23.3)	—
Net cash provided by (used in) financing activities	609.7	(1,251.6)	406.8
Effect of Exchange Rate Changes on Cash	11.3	(12.8)	11.0
Net increase (decrease) in cash and equivalents	552.3	(1,306.0)	338.4
Elimination of cash from discontinued operations	—	0.5	5.2
Cash, restricted cash, and equivalents at beginning of year	1,106.3	2,411.8	2,068.2
Cash, restricted cash, and equivalents at end of year	$ 1,658.6	$ 1,106.3	$ 2,411.8
Reconciliation of cash, restricted cash, and equivalents to the consolidated balance sheets			
Cash and equivalents	$ 281.3	$ 217.8	$ 94.2
Restricted cash and equivalents included in customer trust funds	$ 1,377.3	$ 888.5	$ 2,317.6
Total cash, restricted cash, and equivalents	$ 1,658.6	$ 1,106.3	$ 2,411.8
Supplemental Cash Flow Information:			
Cash paid for interest	$ 37.4	$ 74.5	$ 89.7
Cash paid for income taxes	$ 36.2	$ 21.1	$ 21.3
Cash received from income tax refunds	$ 0.3	$ 4.4	$ 1.9

See accompanying notes to consolidated financial statements.

1. Organization

Ceridian HCM Holding Inc. and its subsidiaries (also referred to in this report as "Ceridian," "we," "our," and "us") offer a broad range of services and software designed to help employers more effectively manage employment processes, such as payroll, payroll-related tax filing, human resource information systems, employee self-service, time and labor management, and recruitment and applicant screening. Our technology-based services are typically provided through long-term customer relationships that result in a high level of recurring revenue. Our operations are primarily located in the United States and Canada.

On April 30, 2018, we completed our initial public offering ("IPO"), in which we issued and sold 21,000,000 shares of common stock at a public offering price of $22.00 per share. We granted the underwriters a 30-day option to purchase an additional 3,150,000 shares of common stock at the offering price, which was exercised in full. A total of 24,150,000 shares of common stock were issued in our IPO. Concurrently with our IPO, we issued an additional 4,545,455 shares of our common stock in a private placement at $22.00 per share. We received gross proceeds of $631.3 million from the IPO and concurrent private placement before deducting underwriting discounts, commissions, and other offering related expenses.

The use of the proceeds from the IPO were as follows (Dollars in millions):

Gross proceeds	$	631.3
Less:		
Underwriters' discount and commissions		29.2
IPO-related expenses		11.8
Redemption of 11% Senior Notes due 2021 (Note 10)		475.0
Call premium on redemption of 11% Senior Notes due 2021		13.1
Interest on redemption of 11% Senior Notes due 2021		10.9
Sponsor management fee		11.3
Debt refinancing expenses		11.4
Cash to balance sheet	$	68.6

Since our IPO, we have completed multiple secondary offerings, in which certain of our stockholders (the "Selling Stockholders") have sold common stock in underwritten public offerings. All proceeds from the sale of this common stock went to the Selling Stockholders. Our secondary offerings were as follows:

- 12,650,000 shares of common stock sold at a public offering price of $36.00 per share on November 16, 2018
- 14,222,142 shares of common stock sold at a public offering price of $50.50 per share on March 22, 2019 (including 1,222,142 shares purchased pursuant to the underwriters' option to purchase additional shares on April 3, 2019)
- 8,000,000 shares of common stock sold at a public offering price of $50.50 per share on May 23, 2019
- 10,000,000 shares of common stock sold at a public offering price of $49.75 per share on August 8, 2019
- 9,000,000 shares of common stock sold at a public offering price of $56.30 per share on September 6, 2019
- 10,000,000 shares of common stock sold at a public offering price of $53.08 per share on November 15, 2019

We incurred $2.9 million and $1.3 million of expenses related to our secondary offerings during the years ended December 31, 2019, and 2018, respectively. Expenses associated with our secondary offerings are recorded within selling, general, and administrative expense in our consolidated statements of operations.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP"). The accompanying consolidated financial statements include the operations and accounts of Ceridian and all subsidiaries, as well as any variable interest entity ("VIE") in which we have controlling financial interest. All intercompany balances and transactions have been eliminated from our consolidated financial statements.

We consolidate the grantor trusts that hold funds provided by our payroll and tax filing customers pending remittance to employees of those customers or tax authorities in the United States and Canada, although Ceridian does not own the grantor trusts. Under consolidation accounting, the enterprise with a controlling financial interest consolidates a VIE. A controlling financial interest in an entity is determined through analysis that identifies the primary beneficiary which has (1) the power to direct the activities of a VIE that most significantly impact the entity's economic performance and (2) the obligation to absorb losses of the entity that could potentially be significant to the VIE or the right to receive benefits from the entity that could potentially be significant to the VIE. In addition, ongoing reassessments must be performed to confirm whether an enterprise is the primary beneficiary of a VIE. The grantor trusts are VIEs, and we are deemed to have a controlling financial interest as the primary beneficiary. Please refer to Note 6, "Customer Trust Funds," for further information on our accounting for these funds.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of our financial statements and our reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Estimates that could significantly affect our results of operations or financial condition include the assignment of fair values to goodwill and other intangible assets and testing for impairment; the testing of impairment of long-lived assets; the determination of our liability for pensions and postretirement benefits; the determination of fair value of stock options granted; and the resolution of tax matters and legal contingencies. Further discussion on these estimates can be found in related disclosures elsewhere in our notes to the consolidated financial statements.

Reclassifications

Certain prior year amounts have been reclassified to conform to the current year presentation.

Cash and Equivalents

As of December 31, 2019, and 2018, cash and equivalents were comprised of cash held in bank accounts and investments with an original maturity of three months or less.

Concentrations

Cash deposits of client and corporate funds are maintained primarily in large credit-worthy financial institutions in the countries in which we operate. These deposits may exceed the amount of any deposit insurance that may be available through government agencies. All deliverable securities are held in custody with large credit-worthy financial institutions, which bear the risk of custodial loss. Non-deliverable securities, primarily money market securities, are held in custody by large, credit-worthy broker-dealers and financial institutions.

Trade and Other Receivables, Net

Trade and other receivables balances are presented on the consolidated balance sheets net of the allowance for doubtful accounts of $2.4 million and $1.3 million and the reserve for sales adjustments of $3.7 million and $3.8 million as of December 31, 2019, and 2018, respectively. We experience credit losses on accounts receivable and, accordingly, must make estimates related to the ultimate collection of the receivables. Specifically, management analyzes accounts receivable, historical bad debt experience, customer concentrations, customer creditworthiness, and current economic trends when evaluating the adequacy of the allowance for doubtful accounts. We estimate the reserve for sales adjustment based on historical sales adjustment experience. We write off accounts receivable when we determine that the accounts are uncollectible, generally upon customer bankruptcy or the customer's nonresponse to continued collection efforts.

Property, Plant, and Equipment, Net

Our property, plant, and equipment assets are stated at cost less accumulated depreciation. Depreciation is calculated on a straight-line basis over the shorter of the remaining lease term or estimated useful life of the related assets, which are generally as follows:

Buildings	40 years
Building improvements	5 years
Machinery and equipment	4-6 years
Computer equipment	3-4 years

Repairs and maintenance costs are expensed as incurred. We capitalized interest of $0.8 million and $0.5 million in property, plant, and equipment, net during the years ended December 31, 2019, and 2018, respectively. Property, plant, and equipment assets are assessed for impairment as described under the heading “Impairment of Long-Lived Assets” below.

Assignment of Fair Values Upon Acquisition of Goodwill and Other Intangible Assets

In the event of a business combination where we are the acquiring party, we are required to assign fair values to all identifiable assets and liabilities acquired, including intangible assets, such as customer lists, identifiable intangible trade names, technology, and non-compete agreements. We are also required to determine the useful life for definite-lived identifiable intangible assets acquired. These determinations require significant judgments, estimates, and assumptions; and, when appropriate, we utilize the assistance of third-party valuation consultants. The remainder of the purchase price of the acquired business not assigned to identifiable assets or liabilities is then recorded as goodwill.

Goodwill and Intangible Assets

Goodwill, which represents the excess purchase price over the fair value of net assets of businesses acquired, is assigned to reporting units based on the benefits derived from the acquisition. Goodwill and indefinite-lived intangibles are not amortized against earnings, but instead are subject to impairment review on at least an annual basis. We perform our annual assessment of goodwill and indefinite-lived intangible balances as of October 1 of each year. There was no indication of impairment at October 1, 2019.

We assess goodwill impairment risk by first performing a qualitative review of entity-specific, industry, market, and general economic factors for each reporting unit. If the qualitative assessment indicates it is more likely than not the fair value of a reporting unit is less than the carrying amount, we apply a quantitative test. The quantitative test compares the reporting unit’s estimated fair value with its carrying amount. In estimating fair value of our reporting units, we use a combination of the income approach and the market-based approach. A number of significant assumptions and estimates are involved in determining the current fair value of the reporting units, including operating cash flows, markets and market share, sales volumes and prices, and working capital changes. We consider historical experience and all available information at the time the fair values of our reporting units are estimated. However, fair values that could be realized in an actual transaction may differ from those used to evaluate the goodwill for impairment. The evaluation of impairment involves comparing the current fair value of the reporting unit to the carrying amount. To the extent that the carrying amount of goodwill of the reporting unit exceeds the fair value of the reporting unit, an impairment loss is recognized.

Intangible assets represent amounts assigned to specifically identifiable intangible assets at the time of an acquisition. Definite-lived assets are amortized on a straight-line basis generally over the following periods:

Customer lists and relationships	5-15 years
Trade name	3 years
Technology	3-4 years

Indefinite-lived intangible assets, which consist of trade names, are tested for impairment on an annual basis, or more frequently if certain events or circumstances occur that could indicate impairment. When evaluating whether the indefinite-lived intangible assets are impaired, we first perform a qualitative review. If the qualitative assessment indicates it is more likely than not the fair value of an indefinite-lived intangible asset is less than the carrying amount, a quantitative test is applied and, the carrying amount is compared to its estimated fair value. The estimate of fair value is based on a relief from royalty method which calculates the cost savings associated with owning rather than licensing the trade name. An estimated royalty rate is applied to forecasted revenue and the resulting cash flows are discounted. Definite-lived assets are assessed for impairment as described under the heading "Impairment of Long-Lived Assets" below.

Internally Developed Software Costs

In accordance with Accounting Standards Codification ("ASC") Topic 350, we capitalize costs associated with software developed or obtained for internal use when both the preliminary project stage is completed and our management has authorized further funding for the project, which it deems probable of completion. Capitalized software costs include only: (1) external direct costs of materials and services consumed in developing or obtaining the software; (2) payroll and payroll-related costs for employees who are directly associated with and who devote time to the project; and (3) interest costs incurred while developing the software. Capitalization of these costs ceases no later than the point at which the project is substantially complete and ready for its intended purpose. We do not include general and administrative costs and overhead costs in capitalizable costs. Research and development costs, product management, and other software maintenance costs related to software development are expensed as incurred.

We had capitalized software costs, net of accumulated amortization, of $70.4 million and $61.9 million as of December 31, 2019, and 2018, respectively, included in property, plant, and equipment, net in the accompanying consolidated balance sheets. We amortize software costs on a straight-line basis over the expected life of the software, generally a range of two to seven years. Amortization of software costs totaled $28.3 million, $26.2 million, and $23.6 million for the years ended December 31, 2019, 2018, and 2017, respectively.

Impairment of Long-Lived Assets

Long-lived assets, such as property, plant, and equipment, net, capitalized software, net, and definite-lived intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset group may not be recoverable. Recoverability of asset groups to be held and used is measured by a comparison of the carrying amount of an asset group to the estimated undiscounted future cash flows expected to be generated by the asset group. If the carrying amount of an asset group exceeds its estimated future cash flows, an impairment charge is recognized for the amount by which the carrying amount of the asset group exceeds the fair value of the asset group.

Deferred Costs

Deferred costs primarily consist of deferred sales commissions. Sales commissions paid based on the annual contract value of a signed customer contract are considered incremental and recoverable costs of obtaining a contract with a customer. Sales commission paid based on the annual contract value are deferred and then amortized on a straight-line basis over a period of benefit that we have determined to be five years.

Deferred costs included within Other assets on our consolidated balance sheets were $106.4 million and $83.5 million as of December 31, 2019, and 2018, respectively. Amortization expense for the deferred costs was $32.2 million, $26.2 million, and $21.2 million for the years ended December 31, 2019, 2018, and 2017, respectively.

Revenue Recognition

The core principle of ASC Topic 606 is that revenue is recognized upon transfer of control of promised products or services to customers in an amount that reflects the consideration we expect to receive in exchange for those products or services. In accordance with ASC Topic 606, we perform the following steps to determine revenue to be recognized:

1) Identify the contract(s) 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) we satisfy a performance obligation.

The significant majority of our two major revenue sources (recurring and professional services and other) are derived from contracts with customers. Recurring revenues are primarily related to our cloud subscription performance obligations. Professional services and other revenues are primarily related to professional services for our cloud customers (including implementation services to activate new accounts, as well as post-go live professional services typically billed on a time and materials basis) and, to a much lesser extent, fees for other non-recurring services, including sales of time clocks and certain client reimbursable out-of-pocket expenses. Fees charged to cloud subscription performance obligations are generally priced either on a per-employee, per-month (“PEPM”) basis for a given month or on a per-employee, per-process basis for a given process, both based on usage; and fees charged for professional services are typically priced on a fixed fee basis for activating new accounts and on a time and materials basis for post go-live professional services.

Our recurring cloud subscription performance obligations are generally priced based on the number of active customer employees, as of the signing of the contract, at the contract PEPM rate over the initial contract term. Our professional services are generally based on a fixed fee charged to our customers for activating new accounts and on a time and materials basis for post go-live professional services. There is typically no variable consideration related to our recurring cloud subscriptions or our activation services, nor do they include a significant financing component, non-cash consideration, or consideration payable to a customer. Our recurring cloud subscriptions are typically billed one month in advance while our professional services are billed over the implementation period for activation of new accounts and as work is performed for post go-live professional services.

Our cloud services arrangements include multiple performance obligations, and transaction price allocations are based on the stand-alone selling price ("SSP") for each performance obligation. Our contract renewal rates serve as an observable input to establish SSP for our recurring cloud subscription performance obligations. The SSP for professional services performance obligations is estimated based on market conditions and observable inputs, including rates charged by third parties to perform implementation services.

For our performance obligations, the consideration allocated to cloud subscription revenues is recognized as recurring revenues, typically commencing with the date the customer processes their first live payroll using the solution (referred to as the "go-live" date). The consideration allocated to professional services to activate a new account is recognized as professional services revenues based on the proportion of total work performed, using reasonably dependable estimates (in relation to progression through the implementation phase), by solution

Recurring Services Revenues

Revenues are presented within the consolidated statements of operations in two categories: recurring services and professional services and other. Recurring services revenues consist of monthly fees that we charge for our Cloud and Bureau solutions. For our Dayforce solutions, we primarily charge monthly recurring fees on a per employee, per month (“PEPM”) basis, generally one-month in advance of service, based on the number and type of solutions provided to the customer and the number of employees at the customer. We charge Powerpay customers monthly recurring fees on a per-employee, per-process basis. For our Bureau solutions, we typically charge monthly recurring fees on a per-process basis. The typical recurring services customer contract has an initial term of three years. The initial recurring services contracts have general acceptance criteria that consist of the completion of user acceptance testing. Any credits related to service level commitments are recognized as incurred, as service level failures are not anticipated at contract signing. Should a customer cancel the initial contract, an early termination fee may be applicable, and revenue is recognized upon collection. We also generate recurring services revenue from investment income on our Cloud and Bureau customer funds held in trust before such funds are remitted to taxing authorities, customer employees, or other third parties. We refer to this investment income as float revenue. Please refer to Note 13, “Revenue,” for a full description of our sources of revenue.

Professional Services and Other Revenues

Professional services and other revenues consist primarily of charges relating to the work performed to assist customers with the planning, design, and implementation of their solutions. Also included in professional services are any related training services, post-implementation professional services, and purchased time clocks. We also generate professional services and other revenues from custom professional services and consulting services that we provide and for certain third-party services that we arrange for our Bureau customers. Professional services revenue is primarily recognized as hours are incurred.

Costs and Expenses

Cost of Revenue

Cost of revenue consists of costs to deliver our revenue-producing services. Most of these costs are recognized as incurred, that is, as we become obligated to pay for them. Some costs of revenue are recognized in the period that a service is sold and delivered. Other costs of revenue are recognized over the period of use or in proportion to the related revenue.

The costs recognized as incurred consist primarily of customer service staff costs, customer technical support costs, implementation personnel costs, costs of hosting applications, consulting and purchased services, delivery services, and royalties. The costs of revenue recognized over the period of use are depreciation and amortization, rentals of facilities and equipment, and direct and incremental costs associated with deferred implementation service revenue.

Cost of recurring services revenues primarily consists of costs to provide maintenance and technical support to our customers, and the costs of hosting our applications. The cost of recurring services revenues includes compensation and other employee-related expenses for data center staff, payments to outside service providers, data center, and networking expenses.

Cost of professional services and other revenues primarily consists of costs to provide implementation consulting services and training to our customers, as well as the cost of time clocks. Costs to provide implementation consulting services include compensation and other employee-related expenses for professional services staff, costs of subcontractors, and travel.

Product development and management expense includes costs related to software development activities that do not qualify for capitalization, such as development, quality assurance, testing of new technologies, and enhancements to our existing solutions that do not result in additional functionality. Product development and management expense also includes costs related to the management of our service offerings. Research and development expense, which is included within product development and management expense, was $34.1 million, $29.6 million, and $19.0 million for the years ended December 31, 2019, 2018, and 2017, respectively.

Depreciation and amortization related to cost of revenue primarily consists of amortization of capitalized software.

Selling, General, and Administrative Expense

Selling expense includes costs related to maintaining a direct marketing infrastructure and sales force and other direct marketing efforts, such as marketing events, advertising, telemarketing, direct mail, and trade shows. Advertising costs are expensed as incurred. Advertising expense was $5.4 million, $5.8 million, and $5.6 million for the years ended December 31, 2019, 2018, and 2017, respectively.

General and administrative expense includes costs that are not directly related to delivery of services, selling efforts, or product development, primarily consisting of corporate-level costs, such as administration, finance, legal, and human resources. Also included in this category are depreciation, and amortization of other intangible assets not reflected in cost of revenue, and the provision for doubtful accounts receivable.

Other Expense (Income), Net

Other expense (income), net includes the results of transactions that are not appropriately classified in another category. These items are primarily foreign currency translation gains and losses resulting mainly from intercompany receivables and payables denominated in currencies other than the subsidiary’s functional currency, net periodic pension costs, environmental reserve charges, and charges related to the impairment of asset values.

Income Taxes

Income taxes have been provided for using the asset and liability method. The asset and liability method requires an asset and liability based approach in accounting for income taxes. Deferred tax assets and liabilities are recorded for temporary differences between the financial reporting basis and the tax basis of assets and liabilities as adjusted for the expected benefits of utilizing net operating loss carryforwards. The impact on deferred taxes of changes in tax rates and laws, if any, applied to the years during which temporary differences are expected to be settled, is reflected in the consolidated financial statements in the period of enactment.

We classify interest and penalties related to income taxes as a component of income tax expense (benefit).

Fair Value of Financial Instruments

The carrying amounts of cash and equivalents, trade and other receivables, net, customer trust funds obligations, customer advance payments, and accounts payable approximate fair value because of the short-term nature of these items.

Share-Based Compensation

Our employees participate in share-based compensation plans. Under the fair value recognition provisions of share-based compensation accounting, we measure share-based compensation cost at the grant date based on the fair value of the award and recognize the compensation expense over the requisite service period, which is the period during which an employee is required to provide services in exchange for the award.

We use the Black-Scholes standard option pricing model ("Black-Scholes model") to determine the fair value of stock awards with term-based vesting conditions. The determination of the fair value of the awards on the date of grant using the Black-Scholes model is affected by the value of our common stock as well as other inputs and assumptions described below. Prior to our IPO, the value of our common stock was determined by the Board of Directors with assistance from a third-party valuation expert.

If factors change and we employ different assumptions for estimating share-based compensation expense in future periods or if we adopt a different valuation model, future periods may differ significantly from what we have recorded in the current period and could materially affect our operating results.

To determine the fair value of both term- and performance-based stock awards, the risk-free interest rate used was based on the implied yield currently available on U.S. Treasury zero coupon issues with remaining term equal to the contractual term of the performance-based options and the expected term of the term-based awards. Given our limited history as a public company, the estimated volatility of our common stock is based on volatility data for selected comparable public companies over the expected term of our stock awards. Because we do not anticipate paying any cash dividends in the foreseeable future, we use an expected dividend yield of zero. The amount of share-based compensation expense we recognize during a period is based on the portion of the awards that are ultimately expected to vest.

We estimate option forfeitures at the time of grant and revise those estimates in subsequent periods if actual forfeitures differ from those estimates. We analyze historical data to estimate pre-vesting forfeitures and record share-based compensation expense for those awards expected to vest. We recognize term-based stock compensation expense using the straight-line method.

Pension and Other Postretirement Benefits Liability

We present information about our pension and postretirement benefit plans in Note 11 to our consolidated financial statements, "Employee Benefit Plans." Liabilities and expenses for pensions and other postretirement benefits are determined with the assistance of third-party actuaries, using actuarial methodologies and incorporating significant assumptions, including the rate used to discount the future estimated liability, the long-term rate of return on plan assets, and several assumptions relating to the employee workforce (medical costs, retirement age, and mortality). The discount rate assumption utilizes a full yield curve approach by applying the specific spot rates along the yield curve used in the determination of the benefit obligation to the relevant projected cash flows. The impact of a change in the discount rate of 25 basis points would be approximately $13 million on the liabilities and $0.1 million on pre-tax earnings in the following year. The long-term rate of return is estimated by considering historical returns and expected returns on current and projected asset allocations and is generally applied to a five-year average market value of assets. A change in the assumption for the long-term rate of return on plan assets of 25 basis points would impact pre-tax earnings by approximately $1 million. At December 31, 2018, we updated our mortality assumptions utilizing an improvement scale issued by the Society of Actuaries in October 2018, which resulted in a $1.5 million reduction in the projected benefit obligation. At December 31, 2019, we updated our mortality assumptions utilizing a new base mortality table and improvement scale issued by the Society of Actuaries in October 2019, which resulted in a $8.5 million reduction in the projected benefit obligation.

Foreign Currency Translation

We have international operations whereby the local currencies serve as functional currencies. We translate foreign currency denominated assets and liabilities at the end-of-period exchange rates and foreign currency denominated statements of operations at the weighted-average exchange rates for each period. We report the effect of changes in the U.S. dollar carrying values of assets and liabilities of our international subsidiaries that are due to changes in exchange rates between the U.S. dollar and the subsidiaries' functional currency as foreign currency translation within accumulated other comprehensive income (loss) in the accompanying consolidated statements of stockholders' equity and comprehensive income (loss). Gains and losses from transactions and translation of assets and liabilities denominated in currencies other than the functional currency of the subsidiaries are recorded in the consolidated statements of operations within other expense (income), net.

Recently Issued and Adopted Accounting Pronouncements

In February 2016, the FASB issued ASU No. 2016-02, “Leases,” which was intended to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and by disclosing key information about leasing arrangements. This standard requires balance sheet recognition for both financing leases and operating leases. In July 2018, the FASB issued ASU No. 2018-11 “Leases (Topic 842): Targeted Improvement,” which allowed an additional (and optional) transition method to adopt the new lease requirements. We have adopted ASU No. 2016-02 and ASU No. 2018-11 as of January 1, 2019. Please refer to Note 17, “Leases,” for additional information about our leasing arrangements.

In February 2018, the FASB issued ASU No. 2018-02, “Income Statement-Reporting Comprehensive Income,” in response to a narrow-scope financial reporting issue that arose as a consequence of the Tax Cuts and Jobs Act of 2017 (the “Tax Act”). The amendment in this update allows entities to reclassify from accumulated other comprehensive income to retained earnings, the impact of the reduced federal statutory tax rate for corporations included in the Tax Act. We have adopted this guidance as of January 1, 2019, resulting in an increase in accumulated other comprehensive loss of $27.1 million, and a decrease in accumulated deficit for the same amount on our consolidated balance sheets. As of January 1, 2019, we have changed our policy for releasing income tax effects from accumulated other comprehensive loss to comply with this guidance, which is considered a change in accounting principle.

In August 2018, the FASB issued ASU No. 2018-14, “Disclosure Framework-Changes to the Disclosure Requirements for Defined Benefit Plans,” which modifies the disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans. This update removes disclosures that are no longer considered cost beneficial, adds disclosures identified as relevant, and clarifies certain specific requirements of disclosures to improve the effectiveness of disclosures in the notes to financial statements. The amendments in this update are effective for public business entities for fiscal years ending after December 15, 2020. Early adoption is permitted. The amendments in this update should be applied on a retrospective basis to all periods presented. We are currently evaluating the impact of the adoption of this standard.

3. Discontinued Operations

The following dispositions represented strategic shifts in our overall business and had a significant impact on the consolidated financial statement results. Therefore, they have been presented as discontinued operations in our consolidated financial statements and accompanying notes for all periods presented.

Life Works Disposition

In the second quarter of 2018, contemporaneously with our IPO and concurrent private placement, we distributed our controlling financial interest in LifeWorks to our stockholders of record prior to the IPO on a pro rata basis in accordance with their pro rata interest in us (the “LifeWorks Disposition”). Ceridian’s net book value related to LifeWorks of $95.7 million was recorded as a distribution through additional paid in capital within our consolidated balance sheet during the second quarter of 2018. During the year ended December 31, 2018, there was a loss attributable to the noncontrolling interest of $0.5 million.

The amounts in the table below reflect the operating results of LifeWorks reported as discontinued operations, as well as supplemental disclosures of the discontinued operations

	Year Ended December 31,	
	2018	2017
	(Dollars in millions)	
Net revenues	$ 28.3	$ 79.9
Loss from operations before income taxes	(0.9)	(0.4)
Income tax expense	(24.9)	(4.9)
Loss from discontinued operations, net of income taxes	$ (25.8)	$ (5.3)
Depreciation and amortization	$ 1.4	$ 4.1

Sale of UK Business

On June 15, 2016, we completed the stock sale of our United Kingdom and Ireland businesses, along with the portion of our Mauritius operations that supported these businesses (the “UK Business”). For the year ended December 31, 2017, the UK Business had a loss from discontinued operations of $1.0 million.

Sale of Divested Benefits Continuation Businesses

During the third quarter of 2015, we completed two separate transactions that resulted in the sale of our benefits administration and post-employment health insurance portability compliance businesses (the “Divested Benefits Continuation Businesses”). For the year ended December 31, 2017, the Divested Benefits Continuation Businesses had income from discontinued operations, net of income taxes of $0.3 million.

4. Business Combinations

On September 6, 2019, we entered into a purchase agreement with the shareholders of Lusworth Holding Pty Ltd. (“RITEQ”), an Australian-based corporation, to acquire 100% of the issued and outstanding shares of RITEQ for approximately $20.1 million, subject to certain purchase price adjustments. RITEQ is a provider of workforce management solutions and operates within Australia, New Zealand, and the United Kingdom. The share purchase transaction was completed on September 13, 2019.

The financial results of RITEQ have been included within our consolidated financial statements as of the acquisition date. The acquisition of RITEQ was recorded using the acquisition method of accounting and recognized the assets and liabilities assumed at their fair value. As of September 30, 2019, we conducted a preliminary assessment of acquired assets and liabilities related to the acquisition of RITEQ. The allocation of the purchase price to goodwill was completed as of December 31, 2019. The major classes of assets and liabilities to which we allocated the purchase price were as follows:

	(Dollars in millions)	
Cash and equivalents	$	0.7
Trade and other receivables, net		1.3
Goodwill		16.7
Other intangible assets, net		4.8
Other assets		1.0
Accounts payable		(0.6)
Deferred revenue		(1.3)
Employee compensation and benefits		(1.1)
Other liabilities		(1.4)
Total purchase price	$	20.1

5. Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (an exit price). GAAP outlines a valuation framework and creates a fair value hierarchy intended to increase the consistency and comparability of fair value measurements and the related disclosures. Certain assets and liabilities must be measured at fair value, and disclosures are required for items measured at fair value.

We measure our financial instruments using inputs from the following three levels of the fair value hierarchy. The three levels are as follows:

Level 1 inputs are unadjusted quoted prices in active markets for identical assets or liabilities that we have the ability to access at the measurement date.

Level 2 inputs include quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the asset or liability (that is, interest rates, yield curves, etc.), and inputs that are derived principally from or corroborated by observable market data by correlation or other means (market corroborated inputs).

Level 3 inputs include unobservable inputs that reflect our assumptions about the assumptions that market participants would use in pricing the asset or liability. These inputs are developed based on the best information available, including internal data.

Financial Assets and Liabilities Measured at Fair Value on a Recurring Basis

As of December 31, 2019, our financial assets and liabilities measured at fair value on a recurring basis were categorized as follows:

	Total	Level 1	Level 2		Level 3
	(Dollars in millions)				
Assets					
Available for sale customer trust funds assets	$ 1,826.8	$ —	$ 1,826.8	(a)	$ —
Total assets measured at fair value	$ 1,826.8	$ —	$ 1,826.8		$ —

As of December 31, 2018, our financial assets and liabilities measured at fair value on a recurring basis were categorized as follows:

	Total	Level 1	Level 2		Level 3
	(Dollars in millions)				
Assets					
Available for sale customer trust funds assets	$ 1,715.0	$ —	$ 1,715.0	(a)	$ —
Total assets measured at fair value	$ 1,715.0	$ —	$ 1,715.0		$ —

(a) Fair value is based on inputs that are observable for the asset or liability, other than quoted prices.

Assets and Liabilities Measured at Fair Value on a Nonrecurring Basis

During the years ended December 31, 2019, and 2018, we did not re-measure any financial assets or liabilities at fair value on a nonrecurring basis. Assets acquired and liabilities assumed as part of a business combination are measured at fair value. Please refer to Note 4, “Business Combinations,” for additional information on our business combinations and the related non-recurring fair value measurement of the assets acquired and liabilities assumed.

6. Customer Trust Funds

Overview

In connection with our U.S. and Canadian payroll and tax filing services, we collect funds for payment of payroll and taxes; temporarily hold such funds in trust until payment is due; remit the funds to the clients’ employees and appropriate taxing authorities; file federal, state, and local tax returns; and handle related regulatory correspondence and amendments. The assets held in trust are intended for the specific purpose of satisfying client fund obligations and therefore are not freely available for our general business use.

Our customer trust funds are held and invested with the primary objectives being to protect the principal balance and to ensure adequate liquidity to meet cash flow requirements. Accordingly, we maintain on average approximately 47% of customer trust funds in liquidity portfolios with maturities ranging from one to 120 days, consisting of high-quality bank deposits, money market mutual funds, commercial paper, or collateralized short-term investments; and we maintain on average approximately 53% of customer trust funds in fixed income portfolios with maturities ranging from 120 days to 10 years, consisting of U.S. Treasury and agency securities, Canada government and provincial securities, as well as highly rated asset-backed, mortgage-backed, municipal, corporate, and bank securities. To maintain sufficient liquidity in the trust to meet payment obligations, we also have financing arrangements and may pledge fixed income securities for short-term financing.

Financial Statement Presentation

Investment income from invested customer trust funds constitutes a component of our compensation for providing services under agreements with our customers. Investment income from invested customer trust funds included in revenue amounted to $80.2 million, $67.0 million, and $46.5 million for the years ended December 31, 2019, 2018, and 2017, respectively. Investment income includes interest income, realized gains and losses from sales of customer trust funds' investments, and unrealized credit losses determined to be other-than-temporary.

The amortized cost of customer trust funds as of December 31, 2019, and 2018, is comprised of the original cost of assets acquired. The amortized cost and fair values of investments of customer trust funds available for sale at December 31, 2019, and 2018, were as follows:

Investments of Customer Trust Funds at December 31, 2019

	Amortized Cost	Gross Unrealized Gain	Gross Unrealized Loss	Fair Value
	(Dollars in millions)			
Money market securities, investments carried at cost and other cash equivalents	$ 1,348.1	$ —	$ —	$ 1,348.1
Available for sale investments:				
U.S. government and agency securities	542.4	7.1	(0.3)	549.2
Canadian and provincial government securities	406.7	5.4	(0.7)	411.4
Corporate debt securities	562.2	9.0	(0.3)	570.9
Asset-backed securities	270.0	1.7	(0.3)	271.4
Mortgage-backed securities	19.8	0.2	(0.1)	19.9
Other securities	4.0	—	—	4.0
Total available for sale investments	1,805.1	23.4	(1.7)	1,826.8
Invested customer trust funds	3,153.2	$ 23.4	$ (1.7)	3,174.9
Trust receivables (a)	40.4			29.2
Total customer trust funds	$ 3,193.6			$ 3,204.1

(a) The fair value of trust receivable as of December 31, 2019, includes a loss of $11.2 million related to unrecovered duplicate payments resulting from the September 26, 2019, isolated service incident. Ceridian is liable for these unrecovered duplicate payments and will reimburse the customer trust for the resulting losses. Please refer to Note 18, "Commitments and Contingencies," for further discussion of the September 26, 2019, isolated service incident.

Investments of Customer Trust Funds at December 31, 2018

	Amortized Cost	Gross Unrealized Gain	Gross Unrealized Loss	Fair Value
	(Dollars in millions)			
Money market securities, investments carried at cost and other cash equivalents	$ 876.9	$ —	$ —	$ 876.9
Available for sale investments:				
U.S. government and agency securities	573.4	0.2	(11.4)	562.2
Canadian and provincial government securities	392.5	3.4	(1.4)	394.5
Corporate debt securities	495.0	0.5	(4.7)	490.8
Asset-backed securities	247.1	0.2	(2.7)	244.6
Mortgage-backed securities	8.5	—	(0.2)	8.3
Other securities	14.7	—	(0.1)	14.6
Total available for sale investments	1,731.2	4.3	(20.5)	1,715.0
Invested customer trust funds	2,608.1	$ 4.3	$ (20.5)	2,591.9
Trust receivables	11.6			11.6
Total customer trust funds	$ 2,619.7			$ 2,603.5

The following represents the gross unrealized losses and the related fair value of the investments of customer trust funds available for sale, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position at December 31, 2019.

	Less than 12 months Unrealized Losses	Less than 12 months Fair Value	12 months or more Unrealized Losses	12 months or more Fair Value	Total Unrealized Losses	Total Fair Value
	(Dollars in millions)					
U.S. government and agency securities	$ (0.2)	$ 85.3	$ (0.1)	$ 53.8	$ (0.3)	$ 139.1
Canadian and provincial government securities	(0.7)	126.9	—	—	(0.7)	126.9
Corporate debt securities	(0.2)	52.8	(0.1)	38.7	(0.3)	91.5
Asset-backed securities	(0.3)	81.6	(a)	22.1	(0.3)	103.7
Mortgage-backed securities	(a)	0.7	(0.1)	4.6	(0.1)	5.3
Total available for sale investments	$ (1.4)	$ 347.3	$ (0.3)	$ 119.2	$ (1.7)	$ 466.5

(a) These investments have been in an unrealized loss position; however, the amount of unrealized loss is less than $0.05 million.

Management does not believe that any individual unrealized loss as of December 31, 2019, represents an other-than-temporary impairment. The unrealized losses are primarily attributable to changes in interest rates and not to credit deterioration. We currently do not intend to sell or expect to be required to sell the securities before the time required to recover the amortized cost.

The amortized cost and fair value of investment securities available for sale at December 31, 2019, by contractual maturity are shown below. Expected maturities will differ from contractual maturities because borrowers may have the right to call or to prepay obligations with or without call or prepayment penalties.

	December 31, 2019	
	Cost	Fair Value
	(Dollars in millions)	
Due in one year or less	$ 1,666.4	$ 1,666.7
Due in one to three years	719.7	725.7
Due in three to five years	592.7	603.3
Due after five years	174.4	179.2
Invested customer trust funds	$ 3,153.2	$ 3,174.9

7. Trade and Other Receivables, Net

Trade and other receivables, net, consist of the following:

	December 31,	
	2019	2018
	(Dollars in millions)	
Trade receivables from customers	$ 75.7	$ 62.6
Interest receivable from invested customer trust funds	1.3	0.9
Other	9.5	5.5
Total gross receivables	86.5	69.0
Less: reserve for sales adjustments	(3.7)	(3.8)
Less: allowance for doubtful accounts	(2.4)	(1.3)
Trade and other receivables, net	$ 80.4	$ 63.9

The activity related to the allowance for doubtful accounts was as follows for each of the periods:

	Year Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Balance at beginning of year	$ 1.3	$ 1.3	$ 1.8
Provision for doubtful accounts	3.2	0.7	0.2
Charge-offs, net of recoveries	(2.1)	(0.7)	(0.7)
Balance at end of year	$ 2.4	$ 1.3	$ 1.3

8. Property, Plant, and Equipment, Net

Property, plant, and equipment, net consist of the following:

	December 31,	
	2019	2018
	(Dollars in millions)	
Land	$ 7.5	$ 7.5
Software	265.0	225.0
Machinery and equipment	116.1	117.5
Buildings and improvements	59.2	40.5
Total property, plant, and equipment	447.8	390.5
Accumulated depreciation	(319.5)	(286.1)
Property, plant, and equipment, net	$ 128.3	$ 104.4

Depreciation expense related to property, plant, and equipment, net was $40.9 million, $38.1 million, and $35.3 million for the years ended December 31, 2019, 2018, and 2017, respectively.

9. Goodwill and Intangible Assets

Goodwill

Goodwill and changes therein were as follows for the years ended December 31, 2019, and 2018:

		(Dollars in millions)
Balance at December 31, 2017	$	1,961.0
Translation		(33.6)
Balance at December 31, 2018		1,927.4
Acquisitions		25.7
Translation		20.4
Balance at December 31, 2019	$	1,973.5
Tax-deductible goodwill at December 31, 2019	$	19.1

Please refer to Note 4, "Business Combinations," for further discussion of our RITEQ acquisition.

We perform an impairment assessment of our goodwill balances as of October 1 of each year. Goodwill impairment testing is performed at the reporting unit level, which is the operating segment level or one level below. We performed a qualitative impairment test as of October 1, 2019, and concluded that it is not more likely than not that the fair value of our reporting unit is less than its carrying amount.

Intangible Assets

Other intangible assets consist of the following as of December 31, 2019:

		Gross Carrying Amount		Accumulated Amortization		Net	Estimated Life Range (Years)
		(Dollars in millions)					
Customer lists and relationships	$	212.5	$	(208.2)	$	4.3	5-15
Trade name		174.0		(2.1)		171.9	3 and Indefinite
Technology		156.1		(154.4)		1.7	3-4
Total other intangible assets	$	542.6	$	(364.7)	$	177.9	

We perform an impairment assessment of our indefinite-lived intangible assets as of October 1 of each year. We performed a qualitative assessment as of October 1, 2019, and concluded that it is not more likely than not that the fair value of our trade name intangible assets with indefinite lives exceeded their respective carrying amounts. We continue to evaluate the use of our trade names and branding in our sales and marketing efforts. If there is a fundamental shift in the method of our branding in the future, we will assess the impact on the carrying amount of our trade name intangible assets to determine whether an impairment exists. If it is determined that an impairment has occurred, a non-cash impairment loss would be recognized during the period in which the decision was made to make the fundamental shift.

Other intangible assets consist of the following as of December 31, 2018:

	Gross Carrying Amount	Accumulated Amortization	Net	Estimated Life Range (Years)
	(Dollar in millions)			
Customer lists and relationships	$ 205.4	$ (190.2)	$ 15.2	5-15
Trade name	173.5	(1.9)	171.6	—
Technology	152.2	(151.5)	0.7	3-4
Total other intangible assets	$ 531.1	$ (343.6)	$ 187.5	

Amortization expense related to definite-lived intangible assets was $16.2 million, $18.5 million, and $18.5 million for the years ended December 31, 2019, 2018, and 2017, respectively. We estimate the future amortization of other intangible assets held at December 31, 2019, will be:

Years Ending December 31,	Amount
	(Dollars in millions)
2020	$ 1.7
2021	1.7
2022	1.1
2023	0.9
2024	$ 0.6

Long-Lived Assets by Geographic Area

Long-lived assets consist of right of use lease asset, property, plant and equipment, net, goodwill, and other intangible assets, net. Long-lived assets by country consist of the following:

	December 31, 2019	December 31, 2018
	(Dollars in millions)	
United States	$ 1,800.5	$ 1,778.7
Canada	481.2	438.1
Other	30.0	2.5
Total long-lived assets	$ 2,311.7	$ 2,219.3

10. Debt

Overview

Set forth below is a description of certain debt facilities for which Ceridian was obligated during the periods covered by these consolidated financial statements. Our debt obligations consist of the following:

	December 31,	
	2019	2018
	(Dollars in millions)	
Term Debt, interest rate of 4.8% and 5.8% as of December 31, 2019, and 2018, respectively	$ 671.5	$ 678.3
Revolving Credit Facility ($300.0 million available capacity as of December 31, 2019, and 2018, less amounts reserved for letters of credit, which were $1.9 million and $2.7 million as of December 31, 2019, and 2018, respectively.)	—	—
Canada Line of Credit (CDN $7.0 million available capacity as of December 31, 2019, and 2018; USD $5.4 million and USD $5.1 million as of December 31, 2019, and 2018, respectively.)	—	—
Financing lease liabilities (Please refer to Note 17)	12.4	—
Total debt	683.9	678.3
Less unamortized discount on Term Debt	1.4	1.7
Less unamortized debt issuance costs on Term Debt	5.4	6.3
Less current portion of long-term debt	10.8	6.8
Long-term debt, less current portion	$ 666.3	$ 663.5

Senior Secured Credit Facilities

Principal Amounts and Maturity Dates

On November 14, 2014, the 2014 Senior Secured Credit Facility was put into place, consisting of (i) a $702.0 million term loan debt facility (the “2014 Term Debt”) and (ii) a $130.0 million revolving credit facility (the “2014 Revolving Credit Facility”). As of December 31, 2017, the 2014 Term Debt had a maturity date of September 2020, and the 2014 Revolving Credit Facility had a maturity date of September 2019. The 2014 Term Debt required quarterly principal payments of 0.25% of the original principal amount. Ceridian made a mandatory pre-payment towards the principal balance of the 2014 Term Debt with the proceeds received from the sale of the UK Business during the year ended December 31, 2018, of $0.3 million. This pre-payment was applied against the scheduled quarterly principal payments.

On April 30, 2018, Ceridian completed the refinancing of the remaining debt under the 2014 Senior Secured Credit Facility by entering into a new credit agreement. Pursuant to the terms of the new credit agreement, Ceridian became borrower of (i) a $680.0 million term loan debt facility (the “2018 Term Debt”) and (ii) a $300.0 million revolving credit facility (the “2018 Revolving Credit Facility”) (collectively, the “2018 Senior Secured Credit Facility”). The 2018 Senior Secured Credit Facility is secured by all assets of Ceridian.

In connection with the refinancing of the 2014 Senior Secured Credit Facility, we recognized a loss on debt extinguishment of $7.1 million within interest expense, net on our consolidated statement of operations during the year ended December 31, 2018.

Interest

The effective interest rate on the 2018 Term Debt at December 31, 2019, and 2018, was 4.8% and 5.8%, respectively. The 2018 Term Debt was initially subject to an interest rate of LIBOR plus 3.25%. As a result of a ratings upgrade on March 26, 2019, of our 2018 Senior Secured Credit Facility by Moody’s Investor Service, from B3 to B2, the Company’s floating rate 2018 Term Debt interest rate was reduced from LIBOR plus 3.25% to LIBOR plus 3.00%, so long as the rating is maintained. Accrued interest related to the 2018 Senior Secured Credit Facility was $0.1 million and $0.1 million as of December 31, 2019, and 2018, respectively, and is included within Other accrued expenses in our consolidated balance sheets.

Financing Costs and Issuance Discounts

In connection with the refinancing of the 2014 Senior Secured Credit Facility, we capitalized $3.6 million of additional financing costs and wrote off $0.5 million of existing unamortized deferred financing costs, which was included in the loss on extinguishment of debt. The 2018 Term Debt had associated unamortized deferred financing costs of $6.8 million and $8.0 million at December 31, 2019, and 2018, respectively, which are being amortized at an effective interest rate of 5.3%.

Collateral and Guarantees

The 2018 Senior Secured Credit Facility names Ceridian as the sole borrower and is unconditionally guaranteed by Ceridian’s domestic, wholly-owned financially material restricted subsidiaries, subject to certain customary exceptions. The 2018 Senior Secured Credit Facility is secured by a perfected first priority security interest, subject to certain exceptions (including customer trust funds), in substantially all of Ceridian’s and the subsidiary guarantors’ tangible and intangible assets. The security interest includes a pledge of the capital stock of certain of Ceridian’s direct and indirect material restricted subsidiaries.

Representations, Warranties and Covenants

The documents governing the 2018 Senior Secured Credit Facility contain certain customary representations and warranties. In addition, those documents contain customary covenants restricting Ceridian’s ability and certain of its subsidiaries’ ability to, among other things: incur additional indebtedness, issue disqualified stock and preferred stock; create liens; declare dividends; redeem capital stock; make investments; engage in a materially different line of business; engage in certain mergers, consolidations, acquisitions, asset sales, or other fundamental changes; engage in certain transactions with affiliates; enter into certain restrictive agreements; make prepayments on any subordinated indebtedness; modify junior financing documentation; and make changes to our fiscal year.

The 2018 Senior Secured Credit Facility documents contain a requirement that Ceridian maintain a ratio of adjusted first lien debt to Credit Facility EBITDA below specified levels on a quarterly basis; however, such requirement is applicable only if more than 35% of the 2018 Revolving Credit Facility is drawn. As of December 31, 2019, no portion of the 2018 Revolving Credit Facility was drawn.

Events of Default

Events of default under the 2018 Senior Secured Credit Facility documents include, but are not limited to: failure to pay interest, principal and fees, or other amounts when due; material breach of any representation or warranty; covenant defaults; cross defaults to other material indebtedness; events of bankruptcy, invalidity of security interests; a change of control; material judgments for payment of money; involuntary acceleration of any debt; and other customary events of default. There were no events of default as of December 31, 2019.

Senior Notes

General Description

On October 1, 2013, Ceridian issued the Senior Notes due 2021 in the principal amount of $475.0 million.

Using the net proceeds received from the IPO and concurrent private placement, we satisfied and discharged the indenture governing the Senior Notes on April 30, 2018, and the Senior Notes were redeemed on May 30, 2018. In connection with the redemption of the Senior Notes, we recognized a loss on extinguishment of debt of $18.6 million within interest expense, net on our consolidated statement of operations during the year ended December 31, 2018.

Financing Costs and Issuance Discounts

On May 30, 2018, the redemption date, the Senior Notes had unamortized deferred financing costs of $5.5 million, which were included in the loss on extinguishment of debt.

Other Information Relating to Indebtedness

Future Payments and Maturities of Debt

The future principal payments and maturities of our indebtedness, excluding financing lease obligations, are as follows:

Years Ending December 31,	Amount (Dollars in millions)
2020	$ 6.8
2021	6.8
2022	6.8
2023	6.8
2024	6.8
Thereafter	637.5
	$ 671.5

Ceridian may be required to make additional payments on the 2018 Term Debt from various sources, including proceeds of certain indebtedness which may be incurred from time to time, certain asset sales, and a certain percentage of cash flow. There is an excess cash flow calculation associated with the 2018 Term Debt, and based on this calculation, we are not required to make a prepayment on the 2018 Term Debt in 2020.

Fair Value of Debt

Our debt does not trade in active markets. Based on the borrowing rates currently available to us for bank loans with similar terms and average maturities and the limited trades of our debt, the fair value of our indebtedness was estimated to be $675.1 million and $649.5 million as of December 31, 2019, and 2018, respectively.

Other Debt Financing

Ceridian Canada had available a committed bank credit facility that provides up to CDN $7.0 million, for issuance of letters of credit as of December 31, 2019 and 2018. The credit facility is a discretionary line at the option of the bank. The amount of letters of credit outstanding under this facility were CDN $7.0 million (USD $5.4 million) and CDN $7.0 million (USD $5.1 million) at December 31, 2019, and 2018, respectively.

11. Employee Benefit Plans

Ceridian maintains numerous benefit plans for current and former employees. As of December 31, 2019, our current active benefit plans include defined contribution plans for substantially all employees. All defined benefit plans have been frozen.

Defined Contribution Plans

Ceridian maintains defined contribution plans that provide retirement benefits to substantially all of our employees. Contributions are based upon the contractual obligations of each respective plan. We recognized expense of $9.8 million, $8.4 million, and $7.5 million for the years ended December 31, 2019, 2018, and 2017, respectively, related to employer contributions to these plans.

Defined Benefit Plans

Ceridian maintains defined benefit pension plans covering certain of our current and former U.S. employees (the U.S. defined benefit plan and nonqualified defined benefit plan, collectively referred to as our “defined benefit plans”), as well as other postretirement benefit plans for certain U.S. retired employees that include heath care and life insurance benefits.

Pension Benefits

The largest defined benefit pension plan (the “U.S. defined benefit plan”) is a defined benefit plan for certain current and former U.S. employees that closed to new participants on January 2, 1995. In 2007, the U.S. defined benefit plan was amended (1) to exclude from further participation any participant or former participant who was not employed by the Parent or another participating employer on January 1, 2008, (2) to discontinue participant contributions, and (3) to freeze the accrual of additional benefits as of December 31, 2007. The measurement date for pension benefit plans is December 31.

Assets of the U.S. defined benefit plan are held in an irrevocable trust and do not include any Ceridian securities. Benefits under this plan are generally calculated on final or career average earnings and years of participation in the plan. Most participating employees were required to permit salary reduction contributions to the plan on their behalf by the employer as a condition of active participation. Retirees and other former employees are inactive participants in this plan and constitute approximately 99% of the plan participants. This plan is funded in accordance with funding requirements under the Employee Retirement Income Security Act of 1974, based on determinations of a third-party consulting actuary. Investment of the U.S. defined benefit plan assets in Ceridian securities is prohibited by the investment policy. We made contributions amounting to $18.0 million in 2019 to the U.S. defined benefit plan. The required minimum contributions to the U.S. benefit plan are expected to be $17.0 million during 2020.

Ceridian also sponsors a nonqualified supplemental defined benefit plan (the “nonqualified defined benefit plan”), which is unfunded and provides benefits to selected U.S. employees in addition to the U.S. defined benefit plan. We made contributions to the nonqualified defined benefit plan amounting to $1.8 million in 2019 and expect to make contributions of $1.7 million during 2020.

We account for our defined benefit plans using actuarial models. These models use an attribution approach that generally spreads the effect of individual events over the estimated life expectancy of the employees in such plans. These events include plan amendments and changes in actuarial assumptions such as the expected long-term rate of return on plan assets, discount rate related to the benefit obligation, and mortality rates.

One of the principal components of the net periodic pension calculation is the expected long-term rate of return on plan assets. The required use of expected long-term rate of return on plan assets may result in recognized pension income that is greater or less than the actual returns of those plan assets in any given year. Over time, however, the expected long-term returns are designed to approximate the actual long-term returns that contribute to the settlement of the liability. Differences between actual and expected returns are recognized in the net periodic pension calculation over three years. We use long-term historical actual return information, the mix of investments that comprise plan assets, and future estimates of long-term investment returns by reference to external sources to develop our expected return on plan assets.

The discount rate assumption is used to determine the benefit obligation and the interest portion of the net periodic pension cost (credit) for the following year. We utilize a full yield curve approach for our discount rate assumption by applying the specific spot rates along the yield curve used in the determination of the benefit obligation to the relevant projected cash flows. As of December 31, 2019, a 25 basis point decrease in the discount rate would result in a $0.1 million decrease to expense for all pension plans.

At December 31, 2018, we updated our mortality assumptions utilizing an improvement scale issued by the Society of Actuaries in October 2018, which resulted in a $1.5 million reduction in the projected benefit obligation. At December 31, 2019, we updated our mortality assumptions utilizing a new base mortality table and improvement scale issued by the Society of Actuaries in October 2019, which resulted in a $8.5 million reduction in the projected benefit obligation.

The funded status of defined benefit plans represents the difference between the projected benefit obligation and the plan assets at fair value. The projected benefit obligation of defined benefit plans exceeded the fair value of plan assets by $121.6 million and $145.8 million at December 31, 2019, and 2018, respectively. We are required to record the unfunded status as a liability in our consolidated balance sheets and recognize the change in the funded status in comprehensive income, net of deferred income taxes.

The projected future payments to participants from defined benefit plans are included in the table below.

Years Ending December 31,	Amount (Dollars in millions)
2020	$ 45.5
2021	44.3
2022	43.0
2023	41.5
2024	40.0
Next five years	$ 174.6

The accompanying tables reflect the combined funded status and net periodic pension cost and combined supporting assumptions for the defined benefit elements of our defined benefit plans.

	Year Ended December 31,	
	2019	2018
	(Dollars in millions)	
Funded Status of Defined Benefit Retirement Plans at Measurement Date		
Change in Projected Benefit Obligation During the Year:		
Projected benefit obligation at beginning of year	$ 527.4	$ 593.0
Service cost	—	—
Interest cost	18.2	16.3
Actuarial loss (gain)	49.4	(31.6)
Benefits paid and plan expenses	(47.8)	(50.3)
Projected benefit obligation at end of year	$ 547.2	$ 527.4
Change in Fair Value of Plan Assets During the Year:		
Plan assets at fair value at beginning of year	381.6	438.6
Actual return on plan assets	72.0	(27.1)
Employer contributions	19.8	20.4
Benefits paid and plan expenses	(47.8)	(50.3)
Plan assets at fair value at end of year	425.6	381.6
Funded status of plans	$ (121.6)	$ (145.8)

	December 31,	
	2019	2018
	(Dollars in millions)	
Amounts recognized in Consolidated Balance Sheets		
Current liability	$ 18.7	$ 8.1
Noncurrent liability	102.9	137.7
Amounts recognized in Accumulated Other Comprehensive Loss		
Accumulated other comprehensive loss, net of tax of $57.8 million and $91.5 million, respectively (a)	$ 180.6	$ 158.6

(a) A cumulative effect adjustment of $30.8 million related to the adoption of ASC 2018-02 was recorded within accumulated other comprehensive loss, net of tax during the year ended December 31, 2019. Please refer to Note 2, “Summary of Significant Accounting Policies,” for further discussion.

The other comprehensive (income) loss related to pension benefit plans was as follows:

	Year Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Net actuarial loss (gain)	$ 1.0	$ 21.4	$ (3.0)
Amortization of net actuarial loss	(12.7)	(14.2)	(12.8)
Tax expense	2.9	—	—
Other comprehensive (income) loss, net of tax	$ (8.8)	$ 7.2	$ (15.8)

	Year Ended December 31,		
	2019	2018	2017
Assumptions Used in Calculations			
Discount rate used to determine net benefit cost	3.92 %	3.25 %	3.63 %
Expected return on plan assets	6.00 %	6.30 %	6.30 %
Discount rate used to determine benefit obligations%	2.81 %	3.92 %	3.25 %

	Year Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Net Periodic Pension Cost			
Interest cost	$ 18.2	$ 16.3	$ 17.2
Actuarial loss amortization	12.7	14.2	12.8
Less: Expected return on plan assets	(23.6)	(25.8)	(26.3)
Net periodic pension cost	$ 7.3	$ 4.7	$ 3.7

The accumulated benefit obligation of defined benefit plans was $547.2 million and $527.4 million as of December 31, 2019, and 2018, respectively.

The amount in accumulated other comprehensive loss that is expected to be recognized as a component of net periodic pension cost during 2020 is a net actuarial loss of $15.7 million.

Our overall investment strategy for the U.S. defined benefit plan is to achieve a mix of approximately 70% of investments for long term growth, 28% for liability hedging purposes, and 2% for near-term benefit payments. Target asset allocations are based upon actuarial and capital market studies performed by experienced outside consultants. The target allocations for the growth assets are 40% fixed income, 27% domestic equities, 23% international equities, and 10% hedge funds. Specifically, the target allocation is managed through investments in fixed income securities, equity funds, collective investment funds, partnerships and other investment types. The underlying domestic equity securities include exposure to large/mid-cap companies and small-cap companies. Fixed income securities include corporate debt, mortgage-backed securities, U.S. Treasury and U.S. agency debt, emerging market debt, and high yield debt securities. The alternative investment strategy is allocated to investments in hedge funds. The liability hedging portfolio fair value is intended to move in a direction that partially offsets the increase or decrease in the liabilities resulting from changes in interest rates. To achieve this objective, the portfolio will invest in U.S. Treasury strips and various interest rate derivatives contracts. We hire outside managers to manage all assets of the U.S. defined benefit plan.

In determining the fair values of the defined benefit plan’s assets, we calculate the fair value of certain investments using net asset value ("NAV") per share. Collective investment funds are valued at the NAV, which is based on the readily determinable fair value of the underlying securities owned by the fund. The NAV unit price is quoted on a private market or one that is not active. Partnerships consist primarily of a bond fund partnership valued at the NAV as reported by the fund manager and an investment in a venture capital fund valued by an independent appraisal. The NAV represents the value at which the defined benefit plan initiates a transaction. These investments do not have any significant unfunded commitments, conditions or restrictions on redemption, or any other significant restriction on their sale. The hedge fund of funds investment has a quarterly redemption restriction with a 65 day notice period.

The fair values of our defined benefit plan's assets at December 31, 2019, by asset category were as follows:

	Total	Level 1	Level 2	Level 3
	(Dollars in millions)			
Investments, at fair value:				
Short-term investments	$ 17.5	$ 17.5	$ —	$ —
Government securities	137.2	—	137.2	—
Corporate debt securities	19.7	—	19.7	—
Collective investment funds:				
Domestic equity (a)	101.0	—	101.0	—
Foreign equity (a)	62.2	—	62.2	—
Foreign bond (b)	30.4	—	30.4	—
Partnerships (c)	27.6	—	27.6	—
Hedge fund of funds (d)	30.0	—	30.0	—
Total investments, at fair value	$ 425.6	$ 17.5	$ 408.1	$ —

The fair values of our defined benefit plan's assets at December 31, 2018, by asset category were as follows:

	Total	Level 1	Level 2	Level 3
	(Dollars in millions)			
Investments, at fair value:				
Short-term investments	$ 57.9	$ 57.9	$ —	$ —
Government securities	92.4	—	92.4	—
Corporate debt securities	18.7	—	18.7	—
Collective investment funds:				
Domestic equity (a)	80.1	—	80.1	—
Foreign equity (a)	48.5	—	48.5	—
Foreign bond (b)	23.8	—	23.8	—
Partnerships (c)	32.1	—	32.1	—
Hedge fund of funds (d)	28.1	—	28.1	—
Total investments, at fair value	$ 381.6	$ 57.9	$ 323.7	$ —

(a) Funds in this category invest in a diversified portfolio of domestic and/or foreign stocks to achieve a long-term rate of return.
(b) Funds in this category invest in various types of domestic and/or foreign debt securities to achieve a long-term rate of return while preserving capital.
(c) Funds within this category invest in a bond fund partnership which holds various types of domestic debt securities to achieve a long-term rate of return while preserving capital.
(d) Funds within this category invest in various underlying hedge funds and are designed to provide superior risk adjusted returns as well as portfolio diversification relative to traditional asset classes.

Postretirement Benefits

Ceridian provides health care and life insurance benefits for eligible retired employees, including individuals who retired from operations we subsequently sold or discontinued. Ceridian sponsors several health care plans in the United States for both pre- and post-age 65 retirees. The contributions to these plans differ for various groups of retirees and future retirees. Most retirees outside of the United States are covered by governmental health care programs, and our cost is not significant. The measurement date for postretirement benefit plans is December 31.

The discount rate assumption is used to determine the benefit obligation and the interest portion of the net periodic postretirement cost (credit) for the following year. We utilize a full yield curve approach for our discount rate assumption by applying the specific spot rates along the yield curve used in the determination of the benefit obligation to the relevant projected cash flows. As of December 31, 2019, a 25 basis point decrease in the discount rate would result in an immaterial impact on expense for the postretirement plan.

The accompanying tables present the amounts and changes in the aggregate benefit obligation and the components of net periodic postretirement benefit cost for U.S. plans. We fund these costs as they become due.

	Year Ended December 31, 2019	Year Ended December 31, 2018
	(Dollars in millions)	
Funded Status of Postretirement Health Care and Life Insurance Plans		
Change in Benefit Obligation:		
At beginning of year	$ 16.8	$ 19.6
Interest cost	0.5	0.5
Participant contributions	0.4	0.5
Actuarial gain	(0.7)	(2.1)
Benefits paid	(1.6)	(1.7)
At end of year	$ 15.4	$ 16.8
Change in Plan Assets:		
At beginning of year	$ —	$ —
Company contributions	1.2	1.2
Participant contributions	0.4	0.5
Benefits paid	(1.6)	(1.7)
At end of year	—	—
Funded Status	$ (15.4)	$ (16.8)

	December 31, 2019	December 31, 2018
	(Dollars in millions)	
Amounts recognized in Consolidated Balance Sheets		
Current liability	$ 2.1	$ 2.2
Noncurrent liability	13.3	14.6
Amounts recognized in Accumulated Other Comprehensive Loss		
Accumulated other comprehensive income, net of tax of $(6.1) million and $(9.9) million, respectively (a)	$ (10.4)	$ (8.5)

(a) A cumulative effect adjustment of $3.3 million related to the adoption of ASU 2018-02 was recorded within accumulated other comprehensive income, net of tax during the year ended December 31, 2019. Please refer to Note 2, “Summary of Significant Accounting Policies,” for further discussion.

The other comprehensive (income) loss related to postretirement benefits were as follows:

	Year Ended December 31, 2019	2018	2017
	(Dollars in millions)		
Net actuarial gain	$ (0.7)	$ (2.1)	$ (0.7)
Amortization of net actuarial gain	2.6	2.5	2.7
Tax benefit	(0.5)	—	—
Other comprehensive loss, net of tax	$ 1.4	$ 0.4	$ 2.0

	Year Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Net Periodic Postretirement Benefit			
Interest cost	$ 0.5	$ 0.5	$ 0.5
Actuarial gain amortization	(2.3)	(2.2)	(2.4)
Prior service credit amortization	(0.3)	(0.3)	(0.3)
Net periodic postretirement benefit gain	$ (2.1)	$ (2.0)	$ (2.2)

The amount of accumulated other comprehensive loss that is expected to be recognized as a component of net periodic postretirement benefit cost during 2020 is a $2.7 million gain, comprised of $2.4 million of actuarial gain and $0.3 million of prior service credit.

The assumed health care cost trend rate represents the rate at which health care costs are assumed to increase. The assumed health care cost trend rate used in measuring the benefit obligation in 2019 is 6.7% for pre-age 65 retirees and 7.4% for post-age 65 retirees. These rates are assumed to decrease gradually to the ultimate health care cost trend rate of 4.5% in 2028 for both groups. A one percent increase in this rate would increase the benefit obligation at December 31, 2019, by $0.6 million and would have an immaterial impact on the interest cost for 2019. A one percent decrease in this rate would decrease the benefit obligation at December 31, 2019, by $0.6 million and would have an immaterial impact on the interest cost for 2019.

	Year Ended December 31,		
	2019	2018	2017
Assumptions Used in Calculations			
Weighted average discount rate used to determine net periodic postretirement cost (credit)	3.70 %	3.01 %	3.26 %
Weighted average discount rate used to determine benefit obligation at measurement date	2.52 %	3.70 %	3.01 %

The projected future postretirement benefit payments and future receipts from the federal subsidy for each of the next five years and the five-year period following are included in the table below.

Years Ending December 31,	Payments	Receipts
	(Dollars in millions)	
2020	$ 2.1	$ —
2021	1.8	—
2022	1.7	—
2023	1.6	—
2024	1.4	—
Next five years	$ 5.2	$ 0.1

12. Share-Based Compensation

Prior to November 1, 2013, Ceridian employees participated in a share-based compensation plan of the former ultimate parent of Ceridian, the 2007 Stock Incentive Plan ("2007 SIP"). Effective November 1, 2013, although most participants who held stock options under the 2007 SIP converted their options to a newly created option plan, the 2013 Ceridian HCM Holding Inc. Stock Incentive Plan, as amended ("2013 SIP"), a small number of participants maintained their stock options in the 2007 SIP. Concurrent with the IPO and legal reorganization, all outstanding stock options under the 2007 SIP were converted into options to purchase common stock of Ceridian. As of December 31, 2019, there were 2,500 stock options outstanding under the 2007 SIP.

Stock options awarded under the 2013 SIP vest either annually on a pro rata basis over a four- or five-year period or on a specific date if certain performance criteria are satisfied and certain equity values are attained. In addition, upon termination of service, all vested options must be exercised generally within 90 days after termination, or these awards will be forfeited. The stock option awards have a 10-year contractual term and have an exercise price that is not less than the fair market value of the underlying stock on the date of grant. As of December 31, 2019, there were 5,008,087 stock options and restricted stock units outstanding under the 2013 SIP. We do not intend to grant any additional awards under the 2007 SIP or the 2013 SIP.

As part of the 2013 SIP, the Board of Directors approved a stock appreciation rights program that authorized the issuance of up to 600,000 stock appreciation rights. The performance criteria for all stock appreciation rights was met on April 30, 2018, resulting in the vesting and cash settlement of all outstanding stock appreciation rights. We recognized $1.5 million of share-based compensation expense related to the vesting of these stock appreciation rights during the year ended December 31, 2018. As of December 31, 2019, there were no remaining outstanding stock appreciation rights.

On April 24, 2018, in connection with the IPO, the Board of Directors approved the Ceridian HCM Holding Inc. 2018 Equity Incentive Plan (“2018 EIP”), which authorized the issuance of up to 13,500,000 shares of common stock to eligible participants through equity awards (the “Share Reserve”). The Share Reserve may be increased on March 31 of each of the first ten calendar years during the term of the 2018 EIP, by the lesser of (i) three percent of the number of shares of our common stock outstanding on each January 31 immediately prior to the date of increase or (ii) such number of shares of our common stock determined by the Board of Directors. On March 31, 2019, the Share Reserve was increased by three percent of the number of shares of common stock outstanding on January 31, 2019, or 4,196,193 shares.

Equity awards under the 2018 EIP vest annually on a pro rata basis, generally over a four-year period. In addition, upon termination of service, all vested awards must be exercised within 90 days after termination, or these awards will be forfeited. The equity awards have a 10-year contractual term and awards with an exercise price have such that is not less than the fair market value of the underlying stock on the date of the grant. As of December 31, 2019, there were 9,022,449 stock options and restricted stock units outstanding and 8,673,744 shares available for future grants of equity awards under the 2018 EIP.

On November 9, 2018, the Compensation Committee of the Board of Directors approved the Ceridian HCM Holding Inc. Global Employee Stock Purchase Plan (the “GESPP”), which authorizes the issuance of up to 2,500,000 shares of common stock to eligible participants through purchases via payroll deductions. The purchase price is the lower of (i) 85% of the fair market value of a share of common stock on the offering date (the first trading day of the offering period commencing on January 1 and concluding on December 31) or (ii) 85% of the fair market value of a share of common stock on the purchase date. The GESPP shall continue for ten years, unless terminated sooner as provided under the GESPP. During 2019, shares were purchased on June 28, September 30, and December 31. In subsequent years, quarterly purchase periods will commence on January 1, April 1, July 1, and October 1. Shares will be purchased on the last trading day of the respective purchase periods.

Share-based compensation expense was $36.5 million, $24.7 million, and $16.1 million for the years ended December 31, 2019, 2018, and 2017, respectively.

Performance-Based Stock Options

Performance-based option activity under the 2007 SIP and the 2013 SIP for the periods presented was as follows:

	Shares		Weighted Average Exercise Price (per share)	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in millions)
Options outstanding at December 31, 2016	1,230,426		$ 13.46	4.2	$ —
Granted	—		—	—	—
Exercised	(167,202)	(a)	(13.46)	—	—
Forfeited or expired	(25,077)		(13.46)	—	—
Options outstanding at December 31, 2017	1,038,147		$ 13.46	3.5	$ —
Granted	—		—	—	—
Exercised	(663,412)		(13.46)	—	—
Forfeited or expired	(8,358)		(13.46)	—	—
Options outstanding at December 31, 2018	366,377		$ 13.50	3.1	$ 7.7
Granted	—		—	—	—
Exercised	(298,096)		(13.48)	—	—
Forfeited or expired	—		—	—	—
Options outstanding at December 31, 2019	68,281		$ 13.58	2.6	$ 3.7
Options exercisable at December 31, 2019	68,281		$ 13.58	2.6	$ 3.7

(a) During the year ended December 31, 2017, certain performance-based options were modified and exercised.

The performance criteria for all outstanding performance-based stock options was met on June 7, 2018, resulting in the vesting of all outstanding performance-based stock options on this date. We recognized $4.8 million of share-based compensation expense related to the vesting of these performance-based stock options during the year ended December 31, 2018. As of December 31, 2019, there was no share-based compensation expense related to unvested performance-based stock options not yet recognized.

Term-Based Stock Options

Term-based option activity, including stock options under the 2007 SIP, the 2013 SIP, and the 2018 EIP, for the periods presented was as follows:

	Shares	Weighted Average Exercise Price (per share)	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in millions)
Options outstanding at December 31, 2016	9,772,270	$ 16.20	7.1	$ 9.9
Granted	2,285,981	17.46	—	—
Exercised	(595,464)	(15.14)	—	—
Forfeited or expired	(468,606)	(16.10)	—	—
Options outstanding at December 31, 2017	10,994,181	$ 16.52	6.9	$ 48.8
Granted	5,236,037	23.07	—	—
Exercised	(2,501,983)	(15.26)	—	—
Forfeited or expired	(178,466)	(17.30)	—	—
Options outstanding at December 31, 2018	13,549,769	$ 19.28	7.5	$ 206.8
Granted	4,297,472	49.74	—	—
Exercised	(4,358,867)	(17.37)	—	—
Forfeited or expired	(343,437)	(24.14)	—	—
Options outstanding at December 31, 2019	13,144,937	$ 29.74	7.8	$ 501.3
Options exercisable at December 31, 2019	3,725,204	$ 18.34	6.0	$ 184.5

Other information pertaining to term-based options was as follows:

	Year Ended December 31,		
	2019	2018	2017
Weighted average grant date fair value per share	$ 16.12	$ 7.80	$ 5.88

The fair value of the term-based stock options was estimated at the date of grant using the Black-Scholes option pricing model with the following weighted-average assumptions:

	Year Ended December 31,		
	2019	2018	2017
Expected volatility	24.9 %	25.0 %	30.0 %
Expected dividend rate	—	—	—
Risk-free interest rate	2.5 %	2.9 %	2.3 %

For stock options granted under the 2013 SIP and 2018 EIP, we estimated an expected term of 7.0 years, based on the vesting period and contractual life. As of December 31, 2019, there was $83.7 million of share-based compensation expense related to unvested term-based awards not yet recognized, which is expected to be recognized over a weighted average period of 2.1 years. As of December 31, 2019, there were 3,725,204 vested term-based stock options.

Restricted Stock Units

Restricted stock units (“RSUs”) activity, including RSUs under the 2013 SIP and the 2018 EIP, for the periods presented was as follows:

	Shares
RSUs outstanding at December 31, 2016	182,180
Granted	500,000
Shares issued upon vesting of RSUs	(76,190)
Forfeited or canceled	—
RSUs outstanding at December 31, 2017	605,990
Granted	164,073
Shares issued upon vesting of RSUs	(105,990)
Forfeited or canceled	—
RSUs outstanding at December 31, 2018	664,073
Granted	193,033
Shares issued upon vesting of RSUs	(17,288)
Forfeited or canceled	(20,000)
RSUs outstanding at December 31, 2019	819,818
RSUs releasable at December 31, 2019	270,338

Other information pertaining to restricted stock units was as follows:

	Year Ended December 31,		
	2019	2018	2017
Weighted average grant date fair value per share	$ 50.00	$ 35.55	$ 17.26

During the year ended December 31, 2019, 162,626 RSUs vested, of which 17,288 shares of common stock were issued. As of December 31, 2019, there were 270,338 RSUs vested and releasable. Restricted stock units generally vest annually over a one-, three-, or four-year period. As of December 31, 2019, there was $14.0 million of share-based compensation expense related to unvested restricted stock units not yet recognized, which is expected to be recognized over a weighted average period of 2.0 years.

Global Employee Stock Purchase Plan

During the year ended December 31, 2019, GESPP stock purchases were completed on June 28, September 30, and December 31, and resulted in the issuance of 261,895 shares of our common stock at a purchase price of $28.70 per share.

The fair value of the stock purchase rights granted under the GESPP was estimated using the following weighted-average assumptions:

	Year Ended December 31, 2019
Expected volatility	34.8 %
Expected dividend rate	—
Risk-free interest rate	2.2 %
Expected term (in years)	0.4
Grant date fair value per share	$ 9.32

13. Revenue

Our Solutions

We categorize our solutions into two categories: Cloud and Bureau offerings.

- Cloud revenue is generated from solutions that are delivered via two cloud offerings, Dayforce and Powerpay. The Dayforce offering is differentiated from our market competition as being a single application with continuous calculation that offers a comprehensive range of functionality, including global HR, payroll, benefits, workforce management, and talent management on web and native iOS and Android platforms. Dayforce recurring revenue is primarily generated from monthly recurring fees charged on a per-employee, per-month ("PEPM") basis and the allocation of investment income generated from holding Dayforce customer funds in trust before funds are remitted to taxing authorities, Dayforce customer employees, or other third parties. Dayforce professional services and other revenue is primarily generated from implementation and post go-live professional services revenue. Other sources of Dayforce revenues include revenue from the sale, rental and maintenance of time clocks; revenue from the sale of third-party services; and billable travel expenses for Dayforce customers. The Powerpay offering is our solution designed primarily for small market Canadian customers, which typically have fewer than 20 employees. Powerpay recurring revenue is primarily generated from recurring fees charged on a per-employee, per-process basis and the allocation of investment income generated from holding Powerpay customer funds in trust before funds are remitted to taxing authorities, Powerpay customer employees, or other third parties. Typical processes include the customer's payroll runs, year-end tax packages, and delivery of customers' remittance advices or checks. Powerpay professional services revenue is primarily generated from the setup of the Powerpay customer on their platform.
- Bureau revenue is generated primarily from solutions delivered via a service-bureau model. These solutions are delivered via three primary service lines: payroll, payroll-related tax filing services, and outsourced human resource solutions. Revenue from payroll services is generated from recurring fees charged on a per-process basis. Typical processes include the customer's payroll runs, year-end tax packages, and delivery of customers' remittance advices or checks. In addition to customers who use our payroll services, certain customers use our tax filing services on a stand-alone basis. Our outsourced human resource solutions are tailored to meet the needs of individual customers, and entail our contracting to perform many of the duties of a customer's human resources department, including payroll processing, time and labor management, performance management, and recruiting. We also perform individual services for customers, such as check printing, wage attachment and disbursement, and Affordable Care Act ("ACA") management. Additional items included in Bureau revenue are fees for custom professional services to Bureau customers; the allocation of investment income generated from holding Bureau customer funds in trust before funds are remitted to taxing authorities, Bureau customer employees, or other third parties; consulting services related to Bureau offerings; and revenue from the sale of third party services to Bureau customers.

Customer Information

No single customer accounts for 1% or more of our consolidated revenue for any of the periods presented.

Disaggregation of Revenue

Revenue by solution and category was as follows:

	Year Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Revenue:			
Cloud			
Dayforce			
Recurring services	$ 429.0	$ 325.7	$ 228.5
Professional services and other	140.7	111.8	97.0
Total Dayforce revenue	569.7	437.5	325.5
Powerpay			
Recurring services	89.0	90.0	83.1
Professional services and other	1.3	1.3	1.3
Total Powerpay revenue	90.3	91.3	84.4
Total Cloud revenue	660.0	528.8	409.9
Bureau			
Recurring services	162.1	209.3	262.3
Professional services and other	2.0	2.6	4.0
Total Bureau revenue	164.1	211.9	266.3
Total revenue	$ 824.1	$ 740.7	$ 676.2

Revenue by Geographic Area

Revenue by country was as follows. The country in which the revenue is recorded is determined by the legal entity with which the customer has contracted.

	Year Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
United States	$ 578.1	$ 513.8	$ 469.0
Canada	237.0	224.0	205.2
Other	9.0	2.9	2.0
Total revenue	$ 824.1	$ 740.7	$ 676.2

Contract Balances

The Company records a contract asset when revenue recognized for professional services performance obligations exceed the contractual amount of billings for implementation related professional services. Contract assets were $43.2 million and $40.0 million as of December 31, 2019, and 2018, respectively. Contract assets expected to be recognized in revenue within twelve months are included within Prepaid expenses and other current assets, with the remaining contract assets included within Other assets on our consolidated balance sheets.

Deferred Revenue

Deferred revenue primarily consists of payments received in advance of revenue recognition. The changes in deferred revenue were as follows:

	December 31,	
	2019	2018
	(Dollars in millions)	
Deferred revenue, beginning of period	$ 23.2	$ 16.5
New and acquired billings	365.5	259.1
Revenue recognized	(363.5)	(252.0)
Effect of exchange rate	0.3	(0.4)
Deferred revenue, end of period	$ 25.5	$ 23.2

Transaction Price for Remaining Performance Obligations

In accordance with ASC Topic 606, the following represents the aggregate amount of transaction price allocated to the remaining performance obligations that are unsatisfied as of the end of the reporting period. As of December 31, 2019, approximately $838.3 million of revenue is expected to be recognized over the next three years from remaining performance obligations, which represents contracted revenue for recurring services and fixed price professional services, primarily implementation services, that has not yet been recognized, including deferred revenue and unbilled amounts that will be recognized as revenue in future periods. In accordance with the practical expedient provided in ASC Topic 606, performance obligations that are billed and recognized as they are delivered, primarily professional services contracts that are on a time and materials basis, are excluded from the transaction price for remaining performance obligations disclosed above.

14. Supplementary Data to Statements of Operations

	Year Ended December 31,		
	2019	2018	2017
		(Dollars in millions)	
Other Expense (Income), Net			
Foreign currency translation expense (income)	$ 0.4	$ (2.9)	$ 7.3
Net periodic benefit plan expense, excluding service costs	5.2	2.7	1.5
Total other expense (income), net	$ 5.6	$ (0.2)	$ 8.8

Foreign Currency Translation Expense (Income)

The foreign currency translation income and expense for the years ended December 31, 2018, and 2017, was primarily related to foreign currency remeasurement gains and losses resulting from an intercompany payable of a U.S. operating subsidiary which was repaid in Canadian dollars. This intercompany payable was repaid in the second quarter of 2018.

Net Periodic Benefit Plan Expense, Excluding Service Costs

Net periodic benefit plan expense, excluding service cost for the years ended December 31, 2019, 2018, and 2017, is related to our pension and postretirement benefit plans. Please refer to Note 11, “Employee Benefit Plans,” for further discussion regarding our pension and postretirement benefit plans.

15. Accumulated Other Comprehensive Income (Loss)

The components of accumulated other comprehensive income (loss) were as follows:

	Foreign Currency Translation Adjustment	Unrealized Gain (Loss) from Invested Customer Trust Funds	Pension Liability Adjustment	Total
	(Dollars in millions)			
Balance as of December 31, 2017	$ (159.5)	$ (9.0)	$ (142.5)	$ (311.0)
Other comprehensive loss before income taxes and reclassifications	(48.7)	(10.5)	(19.3)	(78.5)
Income tax benefit	—	1.2	—	1.2
Reclassifications to earnings	—	—	11.7	11.7
Other comprehensive income (loss) attributable to Ceridian	(48.7)	(9.3)	(7.6)	(65.6)
LifeWorks Disposition	0.7	—	—	0.7
Balance as of December 31, 2018	(207.5)	(18.3)	(150.1)	(375.9)
Other comprehensive loss before income taxes and reclassifications	29.1	37.7	(0.3)	66.5
Income tax expense	—	(9.6)	(2.4)	(12.0)
Reclassifications to earnings	—	—	10.1	10.1
Other comprehensive income	29.1	28.1	7.4	64.6
Cumulative-effect adjustment related to the adoption of ASU 2018-02 (Please refer to Note 2)	—	0.4	(27.5)	(27.1)
Balance as of December 31, 2019	$ (178.4)	$ 10.2	$ (170.2)	$ (338.4)

16. Income Taxes

	Year Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Components of Earnings and Taxes from Operations			
Income (Loss) Before Income Taxes:			
U.S.	$ 25.9	$ (71.4)	$ (73.9)
International	8.4	44.5	33.4
Total	$ 34.3	$ (26.9)	$ (40.5)
Income Tax Expense (Benefit):			
Current:			
U.S.	$ 7.1	$ 3.8	$ (0.3)
State and local	0.4	0.3	0.1
International	17.5	20.4	12.9
Total current income tax expense	25.0	24.5	12.7
Deferred:			
U.S.	(42.6)	(14.1)	(60.3)
State and local	(19.3)	(2.2)	0.8
International	(7.5)	0.2	(1.7)
Total deferred income tax benefit	(69.4)	(16.1)	(61.2)
Total income tax (benefit) expense	$ (44.4)	$ 8.4	$ (48.5)

	Year Ended December 31,		
	2019	2018	2017
Effective Rate Reconciliation			
U.S. statutory rate%	21.0 %	(21.0) %	(35.0) %
Change in valuation allowance	(176.1)	10.8	(154.6)
State income taxes, net of federal benefit	3.9	(31.2)	(5.9)
Share-based compensation	(5.8)	(10.0)	11.1
International tax rate differential	3.8	13.4	(9.6)
Foreign dividend income	—	20.1	64.2
Foreign capital gain income	3.2	7.1	—
Unremitted foreign earnings	(2.0)	4.1	(47.7)
Global intangible low-taxed income	—	23.0	—
Base erosion tax	19.9	14.1	—
Reserve for tax contingencies	(0.3)	0.4	—
Expiration of un-utilized tax credits	—	—	2.0
Change in tax rate	(1.0)	(5.9)	59.5
Other	4.0	6.3	(3.8)
Income tax provision%	(129.4) %	31.2 %	(119.8) %

Our income tax provision represents federal, state, and international taxes on our income recognized for financial statement purposes and includes the effects of temporary differences between financial statement income and income recognized for tax return purposes. Deferred tax assets and liabilities are recorded for temporary differences between the financial reporting basis and the tax basis of assets and liabilities. We record a valuation allowance to reduce our deferred tax assets to reflect the net deferred tax assets that we believe will be realized. In assessing the likelihood that we will be able to recover our deferred tax assets and the need for a valuation allowance, we consider all available evidence, both positive and negative, including historical levels of pre-tax book income, expiration of net operating losses, changes in our debt and equity structure, expectations and risks associated with estimates of future taxable income, ongoing prudent and feasible tax planning strategies, as well as current tax laws. As of September 30, 2019, we determined that we no longer had a requirement to carry a full valuation allowance against our domestic deferred tax assets that are not offset by the reversal of deferred tax liabilities. As a result of this determination, we released $62.6 million of the valuation allowance, which had a positive impact on our income tax provision for the year ended December 31, 2019. We continue to record a valuation allowance of $15.1 million against certain deferred tax assets primarily attributable to state net operating loss carryovers.

On December 22, 2017, the Tax Cut and Jobs Act legislation (the “Tax Act”) was signed into law. The Tax Act made broad and complex changes to the U.S. tax code including: (a) lower U.S. federal corporate income tax rate from 35% to 21% effective January 1, 2018, (b) accelerated expensing of qualified capital investments for a specific period, and (c) a transition from a worldwide tax system to a territorial tax system.

Other provisions introduced by the Tax Act impacted our current year tax provision including the Base Erosion and Anti-Abuse Tax ("BEAT"). The BEAT resulted in a $6.8 million increase in tax expense during the year ended December 31, 2019.

	December 31, 2019	December 31, 2018
	(Dollars in millions)	
Tax Effect of Items That Comprise a Significant Portion of the Net Deferred Tax Asset and Deferred Tax Liability		
Deferred Tax Asset:		
Employment related accruals	$ 41.6	$ 51.2
Foreign tax credit carryover and other credit carryovers	0.3	0.3
Net operating loss carryforwards	82.7	78.2
Total gross deferred tax asset	124.6	129.7
Valuation allowance	(15.1)	(83.8)
Total deferred tax asset	$ 109.5	$ 45.9
Deferred Tax Liability:		
Intangibles	$ (57.3)	$ (62.1)
Other	(32.0)	(19.5)
Total deferred tax liability	(89.3)	(81.6)
Net deferred tax asset (liability)	$ 20.2	$ (35.7)

	December 31, 2019	December 31, 2018
	(Dollars in millions)	
Net Deferred Tax by Geography		
U.S.	$ 32.2	$ (20.1)
International	(12.0)	(15.6)
Total	$ 20.2	$ (35.7)

As of December 31, 2019, we had federal, state, and foreign net operating loss carryovers, which will reduce future taxable income when utilized. Approximately $54.8 million in net federal tax benefit is available from the loss carryovers and an additional $0.3 million is available in federal tax credit carryovers. The state loss carryovers will result in state tax benefit of approximately $26.3 million when utilized. The federal net operating loss tax benefit will begin to expire in 2031, and state net operating loss carryovers will begin to expire in 2020. The federal credit carryovers are composed of foreign tax credits, which will begin to expire in 2020; research credits, which will begin to expire in 2027; and alternative minimum tax credits, which have no expiration date.

We file income tax returns in the U.S. federal jurisdiction, and various states and foreign jurisdictions. With a few exceptions, we are no longer subject to U.S. federal, state and local, or non-U.S. income tax examinations by tax authorities for years before 2015.

The following table summarizes the activity for unrecognized tax benefits:

	Year Ended December 31, 2019	Year Ended December 31, 2018
	(Dollars in millions)	
Federal, State and Foreign Tax		
Beginning unrecognized tax balance	$ 1.3	$ 1.5
Increase prior period positions	0.1	0.1
Increase current period positions	0.2	0.2
Decrease prior period positions	(0.1)	(0.1)
Decrease current period positions	—	(0.3)
Statutes expiring	—	(0.1)
Ending unrecognized tax benefits	$ 1.5	$ 1.3

The total amount of unrecognized tax benefits as of December 31, 2019, was $1.5 million including $0.2 million of accrued interest and penalties. Of the total amount of unrecognized tax benefits, $1.5 million represents the amount that, if recognized, would impact our effective income tax rate as of December 31, 2019. It is expected that the amount of unrecognized tax benefits will change in the next 12 months; however, we cannot reasonably estimate the amount of the change. We do not expect the change to have a significant impact on our results of operations or financial condition.

The Tax Act imposed a mandatory transition tax on the unremitted earnings of our international subsidiaries and generally eliminated US taxes on foreign subsidiary distributions for years beginning after December 31, 2017. As of December 31, 2019, we have $299.4 million of unremitted foreign earnings. We consider $186.7 million of the unremitted earnings to be indefinitely reinvested. For the portion of the unremitted earnings not considered indefinitely reinvested, $112.7 million, we have provided a deferred tax liability of $5.5 million, which represents the expected withholding tax cost of repatriating such earnings. In the event the portion of the unremitted earnings considered to be indefinitely reinvested were repatriated, we would incur a withholding tax expense of approximately $9.1 million.

17. Leases

Our leases primarily consist of office space. Leases with an initial term of 12 months or less are not recorded on the balance sheet; we recognize lease expense for these leases on a straight-line basis over the lease term. For leases beginning 2019 and later, we account for lease components separately from the non-lease components.

Most leases include options to renew, and the lease renewal is at our sole discretion. Therefore, the depreciable life of assets and leasehold improvements is limited by the expected lease term unless there is a transfer of title or purchase option reasonably certain of exercise. Our lease agreements do not contain any material residual value guarantees or material restrictive covenants.

We rent or sublease certain real estate to third parties. Our sublease portfolio mainly consists of operating leases for space within our office facilities.

Supplemental balance sheet information related to leases were as follows:

Lease Type	Balance Sheet Classification	December 31, 2019 (Dollars in millions)
ASSETS		
Operating lease assets	Trade and other receivables, net	$ 5.5
Operating lease assets	Prepaid expenses and other current assets	1.2
Operating lease assets	Right of use lease asset	32.0
Financing lease assets	Property, plant, and equipment, net	8.8
Total lease assets		$ 47.5
LIABILITIES		
Current		
Financing lease liabilities	Current portion of long-term debt	$ 4.0
Operating lease liabilities	Current portion of long-term lease liabilities	8.8
Noncurrent		
Financing lease liabilities	Long-term debt, less current portion	8.4
Operating lease liabilities	Long-term lease liabilities, less current portion	30.1
Total lease liabilities		$ 51.3

The components of lease expense were as follows:

	Year Ended December 31,		
	2019 ASC Topic 842	2018 ASC Topic 840	2017 ASC Topic 840
Lease Cost	(Dollars in millions)		
Operating lease cost	$ 12.8	$ 17.6	$ 17.0
Financing lease cost:			
Depreciation of lease assets	0.1	—	—
Interest on lease liabilities (a)	—	—	—
Sublease income	(4.4)	(4.9)	(4.2)
Net lease cost	$ 8.5	$ 12.7	$ 12.8

(a) Interest on lease liabilities was less than $0.05 million for the year ended December 31, 2019.

Supplemental cash flow information related to leases was as follows:

	Year Ended December 31, 2019 (Dollars in millions)
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows from operating leases	$ 11.2
Operating cash flows from finance leases	—
Financing cash flows from finance leases	0.4
Lease assets obtained in exchange for new lease liabilities:	
Operating leases	3.7
Financing leases	8.8

The future minimum lease payments under our operating and financing leases were as follows for each period presented:

Years Ending December 31,	2019 ASC Topic 842	2018 ASC Topic 840
	(Dollars in millions)	
2020	$ 13.3	$ 13.6
2021	9.7	11.8
2022	10.0	7.7
2023	8.2	7.4
2024	4.8	6.2
Thereafter	13.9	9.4
Total lease payments (a)	$ 59.9	$ 56.1
Less: Interest	8.6	—
Total	$ 51.3	$ 56.1

(a) Future minimum lease payments have not been reduced by minimum sublease rentals of $8.6 million due in the future under noncancellable subleases.

Weighted average remaining lease term and weighted average discount rate were as follows:

	December 31, 2019
Weighted average remaining lease term (in years)	
Operating leases	5.8
Financing leases	11.6
Weighted average discount rate	
Operating leases	5.02 %
Financing leases	3.91 %

18. Commitments and Contingencies

Legal Matters

We are subject to claims and a number of judicial and administrative proceedings considered normal in the course of our current and past operations, including employment-related disputes, contract disputes, disputes with our competitors, intellectual property disputes, government audits and proceedings, customer disputes, and tort claims. In some proceedings, the claimant seeks damages as well as other relief, which, if granted, would require substantial expenditures on our part.

Our general terms and conditions in customer contracts frequently include a provision indicating we will indemnify and hold our customers harmless from and against any and all claims alleging that the services and materials furnished by us violate any third party's patent, trade secret, copyright or other intellectual property right. We are not aware of any material pending litigation concerning these indemnifications.

Some of these matters raise difficult and complex factual and legal issues and are subject to many uncertainties, including the facts and circumstances of each particular action, and the jurisdiction, forum, and law under which each action is proceeding. Because of these complexities, final disposition of some of these proceedings may not occur for several years. As such, we are not always able to estimate the amount of our possible future liabilities, if any.

There can be no certainty that we may not ultimately incur charges in excess of presently established or future financial accruals or insurance coverage. Although occasional adverse decisions or settlements may occur, it is management's opinion that the final disposition of these proceedings will not, considering the merits of the claims and available resources or reserves and insurance, and based upon the facts and circumstances currently known, have a material adverse effect on our financial position or results of operations.

Unrecovered Duplicate Payments

We identified an isolated service incident on September 26, 2019, that resulted in duplicate payments for certain of our U.S. payroll customers totaling $18.8 million. Through December 31, 2019, $11.2 million remained unrecovered, and we have recorded a loss for this amount within selling, general, and administrative expense in our consolidated statement of operations for the period ended December 31, 2019. Our recovery efforts are ongoing, and future collections will be recognized as a reduction to selling, general, and administrative expense in the period recovered.

Environmental Matters

We accrue for losses associated with environmental remediation obligations when such losses are probable and reasonably estimable. Accruals for estimated losses from environmental remediation obligations generally are recognized no later than completion of the remedial feasibility study. Such accruals are adjusted as further information develops or circumstances change. Costs of future expenditures for environmental remediation obligations are not discounted to their present value.

In February 1988, our predecessor entered into an arrangement with Northern Engraving Corporation ("NEC") and the Minnesota Pollution Control Agency ("MPCA") in relation to groundwater contamination on a parcel of real estate sold by our predecessor to NEC. Ceridian is now responsible for the arrangement with NEC and the MPCA. The arrangement requires expense sharing between Ceridian and NEC for the remediation of groundwater contamination.

In September 1989, our predecessor entered into an EMA with Seagate related to groundwater contamination on a parcel of real estate sold by our predecessor to Seagate. Ceridian is now responsible for the EMA. The EMA requires expense sharing between Ceridian and Seagate for the remediation of groundwater contamination up to a certain limit. We have recognized an environmental reserve liability equal to the EMA limit.

We have recognized an undiscounted liability of approximately $5.0 million and $5.2 million as of December 31, 2019, and 2018, respectively, in our consolidated balance sheets to comply with the NEC arrangement and EMA described above. The ultimate cost, however, will depend on the extent of continued monitoring activities as these projects progress.

19. Related Party Transactions

Management Agreements

Prior to our IPO, Ceridian was party to management agreements with affiliates of THL and Cannae, Fidelity National Financial, Inc. ("FNF") and THL Managers VI, LLC ("THLM"). FNF assigned its management agreement to Cannae in November 2017. Pursuant to these management agreements, Cannae and THLM each, respectively, agreed to provide the Company with financial advisory, strategic, and general oversight services. These management agreements provided that we pay annual management fees to each of Cannae and THLM in an amount equal to the greater of (a) $0.9, or (b) 0.5 percent of Adjusted EBITDA. Adjusted EBITDA, for purposes of the management agreements, is EBITDA as defined in the 2014 Senior Secured Credit Facility, further adjusted to exclude the payments made pursuant to the management agreements and certain stock options or other equity compensation.

In April 2018, the management agreements terminated upon consummation of our IPO. Upon termination, the management agreements provided that we pay a termination fee equal to the net present value of the management fee for a seven-year period, which was $11.3 million.

We recorded a management fee expense in selling, general, and administrative expense of $12.0 million and $1.9 million for the years ended December 31, 2018, and 2017, respectively, related to these management agreements.

Indebtedness

Prior to its split-off from FNF, Cannae was an affiliate of FNF. FNF and its subsidiaries owned a portion of our Senior Notes, which were redeemed on May 30, 2018. Based on this ownership, $1.3 million and $3.2 million in interest payments were made to affiliates of Cannae during the years ended December 31, 2018, and 2017, respectively. The affiliates of Cannae conducted the debt transactions through third parties in the ordinary course of their business and not directly with us. Following Cannae's split-off from FNF, FNF retained ownership of the Senior Notes.

Service and Vendor Related Agreements

Ceridian is a party to a service agreement with CompuCom Systems, Inc. ("CompuCom"), an investment portfolio company of THL Partners. Pursuant to the service agreement, CompuCom agrees to provide us with service desk and desk side support services. Pursuant to this arrangement, we made payments to CompuCom totaling $1.7 million, $1.8 million, and $3.1 million during the years ended December 31, 2019, 2018, and 2017, respectively.

Other Transactions

On July 23, 2018, Ronald F. Clarke was appointed to our Board of Directors. Mr. Clarke has been the chief executive officer of FleetCor Technologies Inc. ("FleetCor Technologies") since August 2000 and its chairman of the board of directors since March 2003. We provide services to FleetCor Technologies or one of its wholly owned affiliates through certain commercial arrangements entered into in the ordinary course of business, which include provision of Dayforce HCM services, reseller or referral arrangements whereby we resell or refer FleetCor Technologies services to its customers, and other administrative services. For these services, we have recorded revenue of $0.8 million, $2.3 million, and $2.9 million for the years ended December 31, 2019, 2018, and 2017, respectively. We were a corporate charge card customer of FleetCor Technologies. FleetCor Technologies received a fee from the merchants from whom purchases were made on the FleetCor Technologies corporate charge card by us. In connection with charge card purchases made by us, FleetCor Technologies provided us with rebates of approximately $0.2 million for year ended December 31, 2017.

We provide Dayforce and related services to The Stronach Group, for which we recorded revenue of $0.2 million and $0.3 million for the years ended December 31, 2019, and 2018, respectively. Alon Ossip, the brother of David D. Ossip, was the chief executive officer, and is currently a minority shareholder, of The Stronach Group.

We provide payroll-related tax filing services to FNF, for which we recorded revenue of $0.4 million, $0.4 million, and $0.5 million for the years ended December 31, 2019, 2018, and 2017, respectively. We provide Dayforce and related services to Cannae Holdings, Inc. and related entities, for which we recorded revenue of $0.2 million, $0.2 million, and $0.1 million for the years ended December 31, 2019, 2018, and 2017, respectively.

We provide Dayforce and related services to certain investment portfolio companies of THL and Cannae. Revenue from these portfolio companies was as follows:

	Year Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
American Blue Ribbon Holdings, LLC	$ 1.6	$ 1.8	$ 1.8
Black Knight Sports and Entertainment, LLC	0.2	—	—
Essex Technology Group, LLC	0.5	0.5	0.5
Guaranteed Rate, Inc.	0.8	0.5	—
Hightower Holding, LLC	0.2	0.1	—
Philips Feed Services, Inc.	0.3	0.3	0.3
System One Holdings LLC	—	0.3	0.1
Ten-X, LLC	0.4	—	—

20. Capital Stock

As of October 1, 2013, Ceridian was authorized to issue 100,000,000 shares of common stock with a par value of $0.01 per share and 70,000,000 shares of junior convertible participating preferred stock ("Junior Preferred Stock") with a par value of $0.01 per share. On March 30, 2016, the Board of Directors increased the number of authorized shares of common stock to 150,000,000 and authorized 70,000,000 shares of senior convertible participating preferred stock ("Senior Preferred Stock") with a par value of $0.01 per share. In April 2018, the Board of Directors increased the number of authorized shares of common stock to 500,000,000 and decreased the number of authorized shares of preferred stock to 10,000,000.

On March 30, 2016, we entered into an equity financing transaction with Ceridian Holding II. Ceridian Holding II raised $150.2 million from THL and Cannae, certain of their co-investors, and certain other existing stockholders of Ceridian Holding. Of such amount, $75.0 million was contributed by Ceridian Holding II to Ceridian on March 30, 2016. The remaining $75.2

million was committed to be funded to Ceridian HCM Holding Inc. within the following three years, and was recorded within equity as a receivable from stockholder. During the second quarter of 2017, the board of directors of Ceridian Holding II approved the funding of the remaining $75.2 million, which was transferred to Ceridian HCM Holding Inc. on June 28, 2017.

In connection therewith, Ceridian issued $150.2 million of the Senior Preferred Stock to Ceridian Holding II. The Senior Preferred Stock was senior in priority to all outstanding equity securities of Ceridian and had the rights to be converted to common stock at the option of the stockholder for a number of shares based on the conversion price. The initial conversion price was equal to the original issuance price and was subject to adjustment for certain events of dilution, including common stock dividends, stock splits, mergers and reorganizations, and the initial public offering price upon such event. In the event of an initial public offering, the Senior Preferred Stock would be automatically converted to common stock. The Senior Preferred Stock received a 12.5% annual dividend (not cash paying). In the event of liquidation, the Senior Preferred Stock had a liquidation preference equal to 1.5 times the initial face amount plus any accrued but unpaid dividends.

The Junior Preferred Stock provided holders with the equivalent number of votes on an “as converted” basis. The Junior Preferred Stock had the rights to be converted to common stock at the option of the holder for a number of shares based on the conversion price. The initial conversion price was equal to the original issuance price adjusted for certain events of dilution other than shares issued to employees and directors pursuant to the 2013 SIP and certain other instances of issuances of shares of common stock. In the event of an initial public offering, the Junior Preferred Stock would be automatically converted to common stock. In the event of liquidation, Junior Preferred Stock received the greater of up to $13.50 per share of preferred stock (adjusted for dividend, stock split, combination or other similar recapitalization with respect to the convertible participating preferred stock) or a pro rata price per share of all common stock if converted in a liquidation event, subject to the total amount of net assets available in liquidation.

On April 30, 2018, we completed our IPO, in which we issued a total of 24,150,000 shares of common stock at a public offering price of $22.00. Concurrently with our IPO, we issued an additional 4,545,455 shares of our common stock in a private placement at $22.00 per share. Concurrent with the IPO and private placement, all outstanding Junior and Senior Preferred Stock were automatically converted into common shares pursuant to their terms.

As of December 31, 2019, there were 144,386,618 shares of common stock issued and outstanding. As of December 31, 2018, there were 139,453,710 shares of common stock issued and outstanding.

Holders of our common stock are entitled to the rights set forth as follows. Directors are elected by a plurality of the votes entitled to be cast except as set forth below with respect to directors to be elected by the holders of common stock. Our stockholders do not have cumulative voting rights. Except as otherwise provided in our third amended and restated certificate of incorporation or as required by law, all matters to be voted on by our stockholders other than matters relating to the elections and removal of directors must be approved by a majority of the shares present in person or by proxy at the meeting and entitled to vote on the subject matter or by a written resolution of the stockholders representing the number of affirmative votes required for such matter at a meeting.

Our stockholders have no preemptive or other rights to subscribe for additional shares. All holders of our common stock are entitled to share equally on a share-for-share basis in any assets available for distribution to common stockholders upon our liquidation, dissolution or winding up. All outstanding shares are validly issued, fully paid and nonassessable.

21. Net Income (Loss) per Share

We compute net income (loss) per share of common stock using the treasury stock method.

Basic net income (loss) per share is computed by dividing net income (loss) attributable to Ceridian available to common stockholders by the weighted-average number of shares of common stock outstanding during the period.

For the calculation of diluted net income (loss) per share, net income (loss) per share is adjusted by the effect of dilutive securities, including awards under our share-based compensation plans. Diluted net income (loss) per share is computed by dividing the resulting net income (loss) attributable to Ceridian available to common stockholders by the weighted-average number of fully diluted common shares outstanding. In the years ended December 31, 2018, and 2017, our potential dilutive shares, such as stock options, RSUs, and shares of senior and junior convertible preferred stock were not included in the computation of diluted net loss per share as the effect of including these shares in the calculation would have been anti-dilutive.

The numerators and denominators of the basic and diluted net income (loss) per share computations were calculated as follows:

	Year Ended December 31,		
	2019	2018	2017
	(Dollars in millions, except share and per share data)		
Numerator:			
Net income (loss) attributable to Ceridian	$ 78.7	$ (60.6)	$ 3.3
Less: Loss from discontinued operations	—	(25.8)	(6.0)
Net income (loss) from continuing operations attributable to Ceridian	78.7	(34.8)	9.3
Less: Senior Preferred Stock dividends declared	—	7.7	20.5
Net income (loss) from continuing operations attributable to Ceridian available to common stockholders	$ 78.7	$ (42.5)	$ (11.2)
Denominator:			
Weighted-average shares outstanding-basic	142,049,112	114,049,682	65,204,960
Effect of dilutive equity instruments	6,707,480	—	—
Weighted-average shares outstanding-diluted	148,756,592	114,049,682	65,204,960
Net income (loss) per share from continuing operations attributable to Ceridian-basic	$ 0.55	$ (0.37)	$ (0.17)
Net loss per share from discontinued operations-basic	$ —	$ (0.23)	$ (0.09)
Net income (loss) per share attributable to Ceridian-basic	$ 0.55	$ (0.60)	$ (0.26)
Net income (loss) per share from continuing operations attributable to Ceridian-diluted	$ 0.53	$ (0.37)	$ (0.17)
Net loss per share from discontinued operations-diluted	$ —	$ (0.23)	$ (0.09)
Net income (loss) per share attributable to Ceridian-diluted	$ 0.53	$ (0.60)	$ (0.26)

The following potentially dilutive shares were excluded from the calculation of diluted net income (loss) per share because their effect would have been anti-dilutive:

	Year Ended December 31,		
	2019	2018	2017
Senior convertible preferred stock	—	5,523,993	16,802,144
Junior convertible preferred stock	—	19,148,814	58,244,308
Stock options	3,307,719	14,227,487	10,201,105
RSUs	18,980	587,283	451,190