

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
FORM 10-K**

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

For the fiscal year ended December 31, 2019

OR

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

For the transition period from _____ to _____

Commission File No. 001-35674

REALOGY HOLDINGS CORP.

(Exact name of registrant as specified in its charter)

20-8050955

(I.R.S. Employer Identification Number)

Delaware

(State or other jurisdiction of incorporation or organization)

175 Park Avenue

Madison, NJ 07940

(Address of principal executive offices) (Zip Code)

(973) 407-2000

(Registrants' telephone number, including area code)

Commission File No. 333-148153

REALOGY GROUP LLC

(Exact name of registrant as specified in its charter)

20-4381990

(I.R.S. Employer Identification Number)

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

	Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Realogy Holdings Corp.	Common Stock, par value \$0.01 per share	RLGY	New York Stock Exchange
Realogy Group LLC	None	None	None

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

Indicate by check mark if the Registrants are a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Realogy Holdings Corp. Yes ☒ No ☐ Realogy Group LLC Yes ☐ No ☒

Indicate by check mark if the Registrants are not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act.

Realogy Holdings Corp. Yes ☐ No ☒ Realogy Group LLC Yes ☒ No ☐

Indicate by check mark whether the Registrants (1) have 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 Registrants were required to file such reports), and (2) have been subject to such filing requirements for the past 90 days.

Realogy Holdings Corp. Yes ☒ No ☐ Realogy Group LLC Yes ☐ No ☒

Indicate by check mark whether the Registrants have 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 Registrants were required to submit such files).

Realogy Holdings Corp. Yes ☒ No ☐ Realogy Group LLC Yes ☒ No ☐

Indicate by check mark whether the Registrants are large accelerated filers, accelerated filers, non-accelerated filers, smaller reporting companies, or emerging growth companies. 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
Realogy Holdings Corp.	☒	☐	☐	☐	☐
Realogy Group LLC	☐	☐	☒	☐	☐

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 Registrants are a shell company (as defined in Rule 12b-2 of the Exchange Act).

Realogy Holdings Corp. Yes ☐ No ☒ Realogy Group LLC Yes ☐ No ☒

The aggregate market value of the voting and non-voting common equity of Realogy Holdings Corp. held by non-affiliates as of the close of business on June 30, 2019 was \$824 million. There were 114,379,296 shares of Common Stock, \$0.01 par value, of Realogy Holdings Corp. outstanding as of February 21, 2020.

Realogy Group LLC meets the conditions set forth in General Instruction I(1)(a) and (b) of Form 10-K and is therefore filing this Form with the reduced disclosure format applicable to Realogy Group LLC.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement prepared for the Annual Meeting of Stockholders to be held May 6, 2020 are incorporated by reference into Part III of this report.

TABLE OF CONTENTS

	Page
Forward-Looking Statements	1
Trademarks and Service Marks	3
Market and Industry Data and Forecasts	3
PART I	
Item 1. Business	4
Item 1A. Risk Factors	25
Item 2. Properties	51
Item 3. Legal Proceedings	51
Item 4. Mine Safety Disclosures	52
Information about our Executive Officers	52
PART II	
Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	54
Item 6. Selected Financial Data	55
Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations	58
Item 7A. Quantitative and Qualitative Disclosures about Market Risk	85
Item 8. Financial Statements and Supplementary Data	86
Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	86
Item 9A. Controls and Procedures	86
Item 9B. Other Information	88
PART III	
Item 10. Directors, Executive Officers and Corporate Governance	89
Item 11. Executive Compensation	89
Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	89
Item 13. Certain Relationships and Related Transactions, and Director Independence	90
Item 14. Principal Accounting Fees and Services	90
PART IV	
Item 15. Exhibits, Financial Statements and Schedules	91
Item 16. Form 10-K Summary	91
SIGNATURES	92
Financial Statements and Notes	F-1
Exhibit Index	G-1

FORWARD-LOOKING STATEMENTS

Forward-looking statements included in this Annual Report on Form 10-K (this "Annual Report") and our other public filings or other public statements that we make from time to time are based on various facts and derived utilizing numerous important assumptions and are subject to known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Forward-looking statements include the information concerning our future financial performance, business strategy, projected plans and objectives, as well as projections of macroeconomic and industry trends, which are inherently unreliable due to the multiple factors that impact economic trends, and any such variations may be material. Statements preceded by, followed by or that otherwise include the words "believes," "expects," "anticipates," "intends," "projects," "estimates," "plans," and similar expressions or future or conditional verbs such as "will," "should," "would," "may" and "could" are generally forward-looking in nature and not historical facts. You should understand that the following important factors could affect our future results and cause actual results to differ materially from those expressed in the forward-looking statements:

- adverse developments or the absence of sustained improvement in general business, economic or political conditions or the U.S. residential real estate markets, either regionally or nationally, including but not limited to:
 - a decline or a lack of improvement in the number of homesales;
 - insufficient or excessive home inventory levels by market and price point;
 - stagnant or declining home prices;
 - a reduction in the affordability of housing;
 - increasing mortgage rates and/or constraints on the availability of mortgage financing;
 - a lack of improvement or deceleration in the building of new housing and/or irregular timing or volume of new development closings;
 - the potential negative impact of certain provisions of the Tax Cuts and Jobs Act of 2017 (the "2017 Tax Act") on (i) home values over time in states with high property, sales and state and local income taxes and (ii) homeownership rates, in particular in light of our market concentration in high-tax states; and/or
 - the impact of recessions, slow economic growth, or a deterioration in other economic factors that particularly impact the residential real estate market and the business segments in which we operate, whether broadly or by geography and price segments;
- the impact of increased competition in the industry for clients, for the affiliation of independent sales agents and for the affiliation of franchisees on our results of operations and market share, including competition from:
 - real estate brokerages, including those seeking to disrupt historical real estate brokerage models;
 - other industry participants seeking to eliminate brokers or agents from, or minimize the role they play in, the homesale transaction;
 - other industry participants otherwise competing for a portion of gross commission income; and
 - other residential real estate franchisors;
- the impact of disruption in the residential real estate brokerage industry, and on our results of operations and financial condition, as a result of listing aggregator concentration and market power;
- continuing pressure on the share of gross commission income paid by our company owned brokerages and affiliated franchisees to affiliated independent sales agents and independent sales agent teams;
- our inability to successfully develop products, technology and programs (including our company-directed affinity programs) that support our strategy to grow the base of independent sales agents at our company owned and franchisee real estate brokerages and the base of our franchisees;
- our geographic and high-end market concentration, including the heightened competition for independent sales agents in those geographies and price points;
- our inability to enter into franchise agreements with new franchisees or renew existing franchise agreements, without reducing contractual royalty rates or increasing the amount and prevalence of sales incentives;
- the lack of revenue growth or declining profitability of our franchisees and company owned brokerage operations or declines in other revenue streams, such as third-party listing fees;
- the potential impact of negative industry or business trends (including further declines in our market capitalization) on our valuation of goodwill and intangibles;

- the extent of the negative impact of the discontinuation of the USAA affinity program on the Company's revenues and profits derived from affinity program referrals (including revenue to Realogy Leads, Realogy Brokerage, Realogy Franchise, and Realogy Title Groups);
- the loss of our next largest affinity client;
- risks related to the planned sale of Cartus Relocation Services to a subsidiary of SIRVA, Inc., including with respect to expected timing, anticipated benefits and the financial impact to our business;
- an increase in the experienced claims losses of our title underwriter;
- our failure or alleged failure to comply with laws, regulations and regulatory interpretations and any changes or stricter interpretations of any of the foregoing (whether through private litigation or governmental action), including but not limited to (1) state or federal employment laws or regulations that would require reclassification of independent contractor sales agents to employee status, (2) privacy or data security laws and regulations, (3) the Real Estate Settlement Procedures Act ("RESPA") or other federal or state consumer protection or similar laws, and (4) antitrust laws and regulations;
- risks related to the impact on our operations and financial results that may be caused by any future meaningful changes in industry operations or structure as a result of governmental pressures, the actions of certain competitors, the introduction or growth of certain competitive models, changes to the rules of the multiple listing services ("MLS"), or otherwise;
- risks relating to our ability to return capital to stockholders including, among other risks, the impact of restrictions contained in our debt agreements, in particular the indenture governing the 9.375% Senior Notes;
- risks associated with our substantial indebtedness and interest obligations and restrictions contained in our debt agreements, including risks relating to having to dedicate a significant portion of our cash flows from operations to service our debt and risks relating to our ability to refinance or repay our indebtedness or incur additional indebtedness; and
- risks and growing costs related to both cybersecurity threats to our data and customer, franchisee, employee and independent sales agent data, as well as those related to our compliance with the growing number of laws, regulations and other requirements related to the protection of personal information.

Other factors not identified above, including those described under "Item 1A.—Risk Factors" and "Item 7.—Management's Discussion and Analysis of Financial Condition and Results of Operations" of this Annual Report, may also cause actual results to differ materially from those described in our forward-looking statements. Most of these factors are difficult to anticipate and are generally beyond our control. You should consider these factors in connection with any forward-looking statements that may be made by us and our businesses generally.

All forward-looking statements herein speak only as of the date of this report and are expressly qualified in their entirety by the cautionary statements included in or incorporated by reference into this report. Except as is required by law, we expressly disclaim any obligation to publicly release any revisions to forward-looking statements to reflect events after the date of this report. For any forward-looking statement contained in this Annual Report, our public filings or other public statements, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995.

TRADEMARKS AND SERVICE MARKS

We own or have rights to use the trademarks, service marks and trade names that we use in conjunction with the operation of our business. Some of the more important trademarks that we own or have rights to use that appear in this Annual Report include the CENTURY 21[®], COLDWELL BANKER[®], ERA[®], CORCORAN[®], COLDWELL BANKER COMMERCIAL[®], SOTHEBY'S INTERNATIONAL REALTY[®], BETTER HOMES AND GARDENS[®] Real Estate, and CARTUS[®] marks, which are registered in the United States and/or registered or pending registration in other jurisdictions, as appropriate to the needs of our relevant business. Each trademark, trade name or service mark of any other company appearing in this Annual Report is owned by such company.

MARKET AND INDUSTRY DATA AND FORECASTS

This Annual Report includes data, forecasts and information obtained from independent trade associations, industry publications and surveys, and other information available to us. Some data is also based on our good faith estimates, which are derived from management's knowledge of the industry and independent sources. As noted in this Annual Report, the National Association of Realtors ("NAR"), the Federal National Mortgage Association ("Fannie Mae") and the Federal Home Loan Mortgage Corporation ("Freddie Mac") were the primary sources for third-party industry data and forecasts. While data provided by NAR and Fannie Mae are two indicators of the direction of the residential housing market, we believe that homesale statistics will continue to vary between us and NAR and Fannie Mae because:

- they use survey data and estimates in their historical reports and forecasting models, which are subject to sampling error, whereas we use data based on actual reported results;
- there are geographical differences and concentrations in the markets in which we operate versus the national market. For example, many of our company owned brokerage offices are geographically located where average homesale prices are generally higher than the national average and therefore NAR survey data will not correlate with Realogy Brokerage Group's results;
- comparability is also diminished due to NAR's utilization of seasonally adjusted annualized rates whereas we report actual period-over-period changes and their use of median price for their forecasts compared to our average price;
- NAR historical data is subject to periodic review and revision and these revisions have been material in the past, and could be material in the future; and
- NAR and Fannie Mae generally update their forecasts on a monthly basis and a subsequent forecast may change materially from a forecast that was previously issued.

In addition, we base our estimate of the gross commission income generated in the United States in part on data from Real Trends, a provider of residential brokerage industry analysis, and we also base certain estimates on data from various MLS systems and the U.S. Census Bureau. While we believe that the industry data presented herein is derived from the most widely recognized sources for reporting U.S. residential housing market statistical data, we do not endorse or suggest reliance on this data alone.

Forecasts regarding rates of home ownership, median sales price, volume of homesales, and other metrics included in this Annual Report to describe the housing industry are inherently uncertain or speculative in nature and actual results for any period could materially differ. Industry publications, surveys and forecasts generally state that the information contained therein has been obtained from sources believed to be reliable, but such information may not be accurate or complete. We have not independently verified any of the data from third-party sources nor have we ascertained the underlying economic assumptions relied upon therein. Statements as to our market position are based on market data currently available to us. While we are not aware of any misstatements regarding industry data provided herein, our estimates involve risks and uncertainties and are subject to change based upon various factors, including those discussed under the headings "Risk Factors" and "Forward-Looking Statements." Similarly, we believe our internal research is reliable, even though such research has not been verified by any independent sources.

PART I

Except as otherwise indicated or unless the context otherwise requires, the terms "we," "us," "our," "our company," "Realogy," "Realogy Holdings" and the "Company" refer to Realogy Holdings Corp., a Delaware corporation, and its consolidated subsidiaries, including Realogy Intermediate Holdings LLC, a Delaware limited liability company ("Realogy Intermediate"), and Realogy Group LLC, a Delaware limited liability company ("Realogy Group"). Neither Realogy Holdings, the indirect parent of Realogy Group, nor Realogy Intermediate, the direct parent company of Realogy Group, conducts any operations other than with respect to its respective direct or indirect ownership of Realogy Group. As a result, the consolidated financial positions, results of operations and cash flows of Realogy Holdings, Realogy Intermediate and Realogy Group are the same.

Realogy Holdings is not a party to the Amended and Restated Credit Agreement dated as of March 5, 2013, as amended, amended and restated, modified or supplemented from time to time (the "Senior Secured Credit Agreement") that governs our senior secured credit facility (the "Senior Secured Credit Facility", which includes our "Revolving Credit Facility" and our "Term Loan B") and the Term Loan A Agreement dated as of October 23, 2015, as amended from time to time (the "Term Loan A Agreement") that governs our senior secured term loan A credit facility (the "Term Loan A Facility") and certain references in this Annual Report to our consolidated indebtedness exclude Realogy Holdings with respect to indebtedness under the Senior Secured Credit Facility and Term Loan A Facility. In addition, while Realogy Holdings is a guarantor of Realogy Group's obligations under its unsecured notes, Realogy Holdings is not subject to the restrictive covenants in the indentures governing such indebtedness.

As used in this Annual Report, the terms "5.25% Senior Notes", "4.875% Senior Notes" and "9.375% Senior Notes" refer to our 5.25% Senior Notes due 2021, our 4.875% Senior Notes due 2023, and our 9.375% Senior Notes due 2027, respectively, and are referred to collectively as the "Unsecured Notes." The term "4.50% Senior Notes" refers to our 4.50% Senior Notes due 2019 (paid in full in February 2019).

Item 1. Business.

Our Company

We are the leading and most integrated provider of residential real estate services in the U.S. We are the world's largest franchisor of residential real estate brokerages with some of the most recognized brands in the real estate industry, the leading U.S. residential real estate brokerage (based upon transaction volume), and a significant provider of title and settlement services.

The core of our integrated business strategy is to grow the base of productive independent sales agents at our company owned and franchisee brokerages and provide them with compelling data and technology products and services, including high-quality lead generation programs, to make them more productive and their businesses more profitable.

Our revenue is derived on a fee-for-service basis, and given our breadth of complementary service offerings, we are able to generate fees from multiple aspects of a residential real estate transaction. Our operating platform is supported by our portfolio of industry leading franchise brokerage brands, including Century 21[®], Coldwell Banker[®], Coldwell Banker Commercial[®], Corcoran[®], ERA[®], Sotheby's International Realty[®] and Better Homes and Gardens[®] Real Estate.

We also own and operate company owned brokerages primarily under the Coldwell Banker[®], Corcoran[®] and Sotheby's International Realty[®] brands.

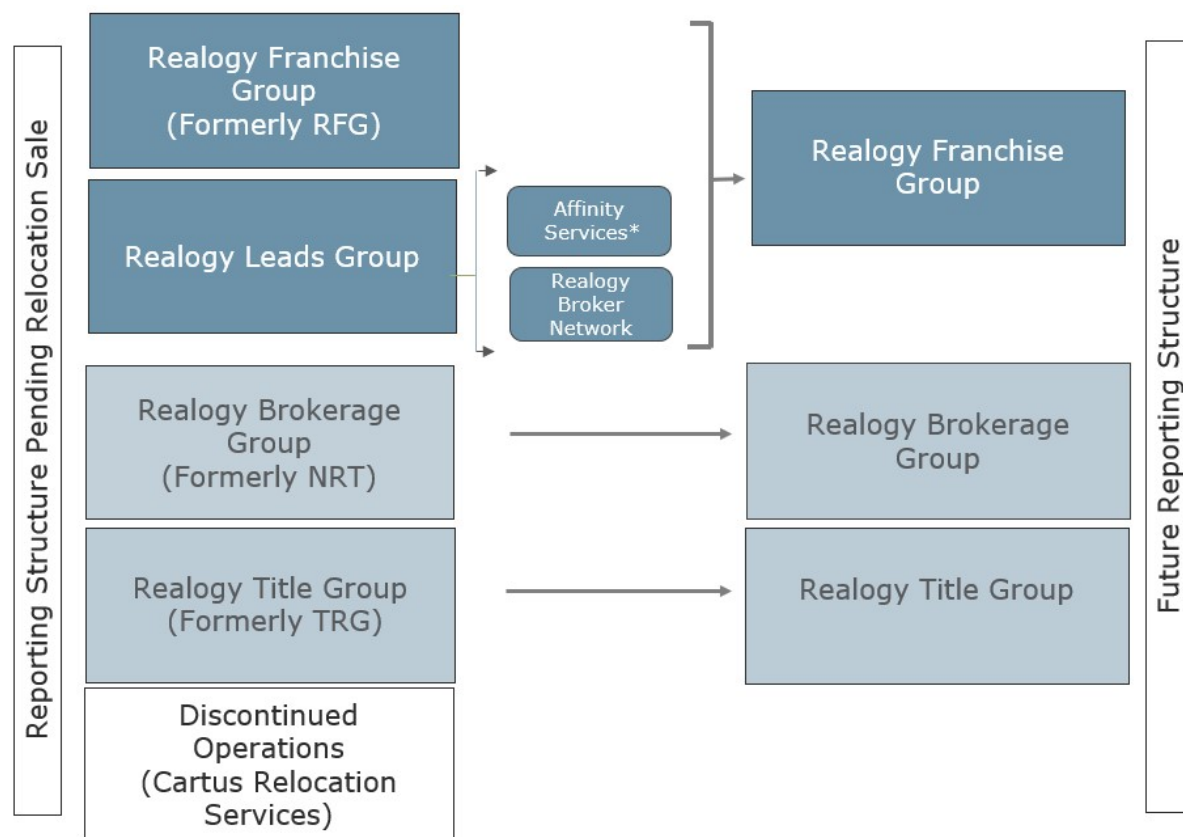
Our multiple brands and operations allow us to derive revenue from multiple segments of the residential real estate market, in many different geographies and at varying price points.

Segment Overview

On November 6, 2019, the Company entered into a definitive Purchase and Sale Agreement (the "Purchase Agreement") with a subsidiary of SIRVA, Inc. ("SIRVA"), pursuant to which SIRVA will acquire our global employee relocation business, or "Cartus Relocation Services," held by Cartus Corporation, an indirect subsidiary of the Company ("Cartus"). The transaction is expected to close in the next couple of months, subject to the satisfaction or waiver of the closing conditions therein. The sale does not include our affinity and broker-to-broker businesses, nor does it include our broker network made up of agents and brokers from Realogy's residential real estate brands and certain independent real estate brokers (which was formerly referred to as the Cartus Broker Network and is referred to herein as the "Realogy Broker Network"). In this report, we refer to this business that will be retained as "Realogy Leads Group."

We report our operations in four segments, each of which receives fees based upon services performed for our customers:

- Realogy Franchise Group (formerly referred to as Real Estate Franchise Services, or RFG);
- Realogy Brokerage Group (formerly referred to as Company Owned Real Estate Brokerage Services, or NRT);
- Realogy Title Group (formerly referred to as Title and Settlement Services, or TRG); and
- Realogy Leads Group (as noted above previously formed part of Cartus, which we formerly referred to as Relocation Services).



* Includes the Company's affinity and broker-to-broker businesses

The assets and liabilities of Cartus Relocation Services are classified as held for sale in the Consolidated Balance Sheets and the results are reported in this Annual Report as discontinued operations. "Net (loss) income from discontinued operations" is reflected on the Consolidated Statements of Operations for all periods presented.

Realogy Franchise Group. We are the largest franchisor of residential real estate brokerages in the world through our portfolio of well-known brokerage brands, including Century 21®, Coldwell Banker®, Coldwell Banker Commercial®, Corcoran®, ERA®, Sotheby's International Realty® and Better Homes and Gardens® Real Estate.

As of December 31, 2019, our real estate franchise systems and proprietary brands had approximately 302,400 independent sales agents worldwide, including approximately 189,900 independent sales agents operating in the U.S. (which included approximately 52,200 company owned brokerage independent sales agents). As of December 31, 2019, our real estate franchise systems and proprietary brands had approximately 18,500 offices worldwide in 114 countries and territories, including approximately 5,900 brokerage offices in the U.S. (which included approximately 710 company owned brokerage offices).

**Realogy U.S.
Independent Sales Agents
(in thousands)**



The average tenure among our U.S. franchisees is approximately 22 years as of December 31, 2019. Our franchisees pay us fees for the right to operate under one of our trademarks and to enjoy the benefits of the systems and business enhancing tools provided by our real estate franchise operations. In addition to highly competitive brands that provide unique offerings to our franchisees, we support our franchisees with dedicated national marketing and servicing programs, technology, training, education, learning and development to facilitate our franchisees in growing their business and increasing their revenue and profitability.

Realogy Brokerage Group. We own and operate the leading residential real estate brokerage business (based upon transaction volume) in the U.S. primarily under the Coldwell Banker®, Corcoran® and Sotheby's International Realty® brand names. We offer full-service residential brokerage services in many of the largest metropolitan areas of the U.S. Realogy Brokerage Group, as the broker for a home buyer or seller, derives revenues primarily from gross commission income received at the closing of real estate transactions. Realogy Brokerage Group also has relationships with developers, primarily in major cities, to provide marketing and brokerage services in new developments.

Realogy Title Group. We assist with the closing of real estate transactions by providing full-service title and settlement (i.e., closing and escrow) services to customers, real estate companies, affinity groups, corporations and financial institutions with many of these services provided in connection with the Company's real estate brokerage. In 2019, Realogy Title Group was involved in the closing of approximately 173,000 transactions of which approximately 49,000 related to Realogy Brokerage Group. In addition to our own title and settlement services, we also coordinate a nationwide network of attorneys, title agents and notaries to service financial institution and relocation clients on a national basis. We also serve as an underwriter of title insurance policies in connection with residential and commercial real estate transactions. This segment also includes the Company's share of equity earnings and losses for our Guaranteed Rate Affinity mortgage origination joint venture.

Realogy Leads Group. Realogy Leads Group consists of affinity programs (both company- and client-directed) as well as broker-to-broker referrals. Through our highly concentrated affinity business, we have traditionally provided (and continue to provide) assistance with residential real estate transactions to members of affinity clients such as insurance companies and credit unions that provide our services to their members. Our launch of Realogy Military Rewards in September 2019 marked our entry into offering a home buying and selling assistance program to an affinity group through a Realogy-branded program. Realogy Military Rewards seeks to provide access to benefits similar to those offered under the Company's former USAA affinity program, which had been our largest affinity client and ceased new enrollments in the third quarter of 2019 (See Part II, Item 7. Management's Discussion and Analysis—Recent Developments for additional information). In addition, in 2019, we announced other affinity programs including our announcement in October 2019 of an agreement to create the first-ever real estate benefits program designed for the nearly 38 million AARP members, which is expected to launch nationally in early 2020.

Referrals from our affinity and broker-to-broker programs are handled by the Realogy Broker Network. Member brokers of the Realogy Broker Network, including certain franchisees and company owned brokerages, have traditionally received referrals from Realogy Leads Group in exchange for a referral fee. The Realogy Broker Network has historically been a key contributor to our lead generation strategy, with approximately 99% of the converted leads generated through the network being directed to independent sales agents affiliated with our franchisees and company owned brokerages in 2019.

Discontinued Operations—Cartus Relocation Services. Cartus Relocation Services is reported as held for sale in this Annual Report. As a provider of global relocation services that operates in key international relocation destinations, Cartus Relocation Services offers a broad range of world-class employee relocation services designed to manage all aspects of an employee's move to facilitate a smooth transition in what otherwise may be a complex and difficult process for the employee and employer. In 2019, Cartus Relocation Services served corporations, including 48% of the Fortune 50 companies. As of December 31, 2019, the top 25 relocation clients had an average tenure of approximately 20 years with Cartus Relocation Services.

Member brokers of the Realogy Broker Network have historically received referrals from Cartus Relocation Services generated by our relocation clients in exchange for a referral fee (that is reported in the financial results for Cartus Relocation Services). Realogy will enter into a non-exclusive five-year broker services agreement with SIRVA in connection with the planned sale of Cartus Relocation Services, pursuant to which Realogy Leads Group could, at the discretion of SIRVA, continue to provide high-quality brokerages services via the Realogy Broker Network to relocation clients of SIRVA. Realogy Leads Group will not receive a referral fee in connection with providing such services to SIRVA relocation clients.

Housing Market and Market Share

U.S. Gross Commission Income. Residential real estate brokerage companies typically realize revenues in the form of a sales commission earned from closed homesale sides (either the "buy" side and/or the "sell" side of a real estate transaction), which we refer to as gross commission income. We believe that the level of gross commission income generated in the U.S., which is generally estimated around \$70 billion, represents a substantial addressable market. Our company owned brokerages and franchisees earned approximately \$12 billion in gross commission income in 2019, as compared to \$13 billion in gross commission income in 2018.

Market Share. As measured in a comparison to the volume of all existing homesale transactions in the U.S. as reported by NAR (regardless of whether an agent or broker was involved in the transaction), we estimate that our market share in 2019 decreased year-over-year to approximately 15.3% compared to 16.1% in 2018. Our estimated share of all U.S. existing homesale unit transactions in 2019 decreased from approximately 13.5% to approximately 13.0%.

Basis of Calculation

Market Share Calculation. We measure our market share transaction volume by the ratio of (a) homesale transaction volume (sides times average price) in which we and our franchisees participate to (b) NAR's existing homesale transaction volume (regardless of whether an agent or broker was involved in the transaction)—calculated by doubling the number of existing homesale transactions reported by NAR to account for both the buy and sell sides of a transaction multiplied by NAR's average sales price. Homesale unit transaction market share is calculated similarly but without including average sales price in either the numerator or denominator.

* * *

Our headquarters is located at 175 Park Avenue, Madison, New Jersey 07940. Our general telephone number is (973) 407-2000. We were incorporated on December 14, 2006 in the State of Delaware. The Company files electronically with the Securities and Exchange Commission (the "SEC") required reports on Form 8-K, Form 10-Q and Form 10-K; proxy materials; ownership reports for insiders as required by Section 16 of the Securities Exchange Act of 1934; registration statements and other forms or reports as required. Certain of the Company's officers and directors also file statements of changes in beneficial ownership on Form 4 with the SEC. Such materials may be accessed electronically on the SEC's Internet site (www.sec.gov). We maintain an Internet website at <http://www.realogy.com> and 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, Section 16 reports and any amendments to these reports in the Investor Relations section of our website as soon as reasonably practicable after such material is electronically filed with or furnished to the SEC. Our website address is provided as an inactive textual reference. The contents of our website are not incorporated by reference herein or otherwise a part of this Annual Report.

Industry Trends

Industry definition. We primarily operate in the U.S. residential real estate industry, which is approximately a \$1.9 trillion industry based on 2019 transaction volume (i.e. average homesale price times number of new and existing homesale transactions) and derive substantially all of our revenues from serving the needs of buyers and sellers of existing homes rather than new homes manufactured and sold by homebuilders. Residential real estate brokerage companies typically realize revenues in the form of a commission that is based on a percentage of the price of each home sold. As a result, the real estate industry generally benefits from rising home prices and increasing homesale transactions (and conversely is adversely impacted by falling prices and lower homesale transactions). We believe that existing homesale transactions and the services associated with these transactions, such as mortgage origination and title services, represent one of the most attractive segments of the residential real estate industry for the following reasons:

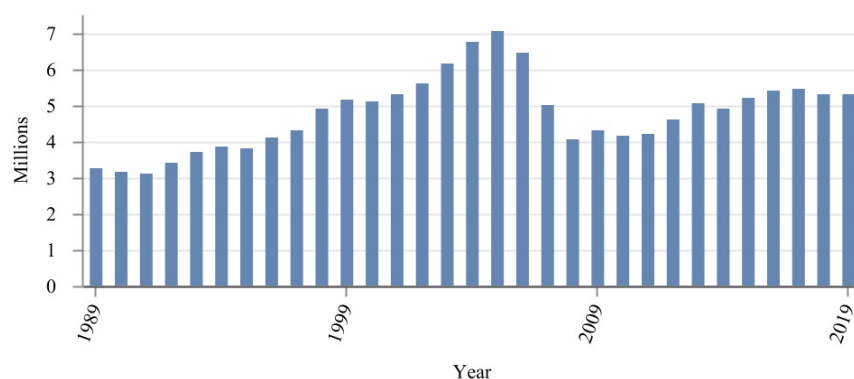
- the existing homesales segment represents a significantly larger addressable market than new homesales. Of the approximately 6.0 million homesales in the U.S. in 2019, NAR estimates that approximately 5.3 million were existing homesales, representing approximately 89% of the overall sales as measured in units;
- existing homesales afford us the opportunity to represent either the buyer or the seller and in some cases both the buyer and the seller; and
- we are able to generate revenues from ancillary services provided to our customers.

Our business model relies heavily on affiliated independent sales agents, who play a critical consumer-facing role in the home buying and selling experience for both our company owned and franchise brokerages. While substantially all homebuyers start their search for a home using the Internet, according to NAR, 89% of home buyers and home sellers used an agent or broker in 2019. We believe that agents or brokers will continue to be directly involved in most home purchases and sales, primarily because real estate transactions have certain characteristics that benefit from the service and value offered by an agent or broker, including the following:

- the average homesale transaction size is very high and generally is the largest transaction one does in a lifetime;
- homesale transactions occur infrequently;
- there is a compelling need for personal service as home preferences are unique to each buyer;
- a high level of support is required given the complexity associated with the process, including specific marketing and technology services;
- the consumer preference to visit properties for sale in person, notwithstanding the availability of on-line images and property tours; and
- there is a high variance in price, depending on neighborhood, floor plan, architecture, fixtures, and outdoor space.

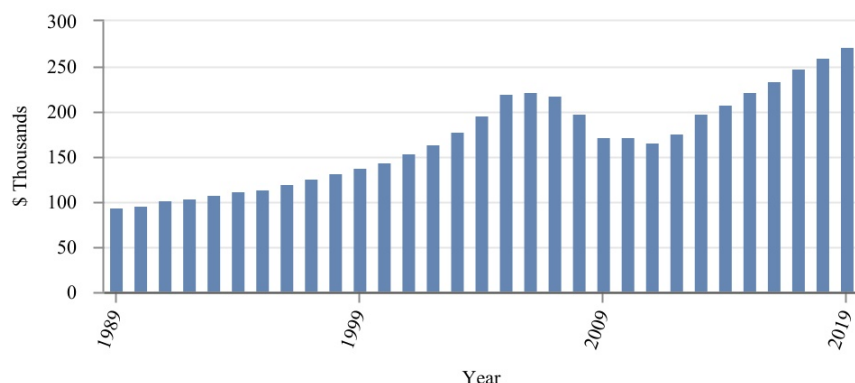
Cyclical nature of industry. The U.S. residential real estate industry is cyclical but has historically shown strong growth over time. Based on information published by NAR, existing homesale units increased at a compound annual growth rate, or CAGR, of 1.6% over the past 30 years, with 19 annual increases, 10 annual decreases and 2019 being flat.

NAR Existing Homesale Transactions



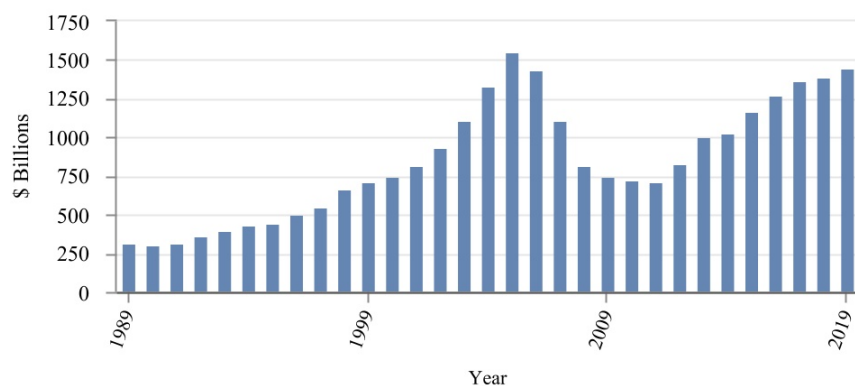
During that same period, median existing homesale prices increased at a CAGR of 3.6% (not adjusted for inflation) over the past 30 years, a period that included three economic recessions.

NAR Median Existing Homesale Price



According to NAR, the existing homesale transaction volume (median homesale price times existing homesale transactions) grew at a CAGR of 5.3% over the past 30 years.

NAR Existing Homesale Transaction Volume



The U.S. residential real estate industry was in a significant and lengthy downturn from the second half of 2005 through 2011. Based upon data published by NAR from 2005 to 2011, the number of annual U.S. existing homesale transactions declined by 40% and the median existing homesale price declined by 24%. Beginning in 2012, the U.S. residential real estate industry began a recovery. Based upon data published by NAR from 2011 to 2019, the number of annual U.S. existing homesale units and the median existing homesale price improved by 25% and 64%, respectively.

Long-term demographics. We believe that long-term demand for housing and the growth of our industry is primarily driven by the affordability of housing, the economic health of the U.S. economy, demographic trends such as generational transitions, increases in U.S. household formation, mortgage rate levels and mortgage availability, certain tax benefits, job growth, increases in renters that qualify as homebuyers, the inherent attributes of homeownership versus renting and the availability of inventory in the consumer's desired location and within the consumer's price range. We believe that the residential real estate market will benefit over the long-term from expected positive fundamentals, including expected growth in the number of U.S. households over the next decade, in particular among the millennial generation.

Participation in Multiple Aspects of the Residential Real Estate Market

We participate in services associated with many aspects of the residential real estate market. Our complementary businesses and mortgage joint venture work together, allowing us to generate revenue at various points in a residential real estate transaction, including the purchase or sale of homes, affinity services, settlement and title services, and franchising of our brands. The businesses each benefit from our deep understanding of the industry, strong relationships with real estate brokers, sales agents and other real estate professionals and expertise across the transactional process. Unlike other industry participants who offer only one or two services, we can offer homeowners, our franchisees and our affinity clients ready access to numerous associated services that facilitate and simplify the home purchase and sale process. These services provide further revenue opportunities for our owned businesses and those of our franchisees. Specifically, our brokerage offices and those of our franchisees participate in purchases and sales of homes involving affinity members through Realty Leads Group and we offer customers (purchasers and sellers) of both our owned and franchised brokerage businesses convenient title and settlement services. These services produce incremental revenues for our businesses and franchisees. In addition, we participate in the mortgage process through our 49.9% ownership of Guaranteed Rate Affinity. All of our businesses and our mortgage joint venture can derive revenue from the same real estate transaction.

Our Brands

Our brands are among the most well-known and established real estate brokerage brands in the real estate industry. Our real estate franchise brands are listed in the following chart, which includes information as of December 31, 2019 for both our franchised and company owned offices:

					
Franchise Brands (1) (2)					
Worldwide Offices (3)	11,600	3,100	2,300	1,000	390
Worldwide Brokers and Sales Agents (3)	131,800	96,300	35,400	23,300	13,000
U.S. Annual Sides	370,289	684,981	117,126	126,211	79,351
# of Countries with Owned or Franchised Operations	84	43	37	70	5
Characteristics	A leader in brand awareness and the most recognized name in real estate Significant international office footprint	The only real estate brand that has been guiding people home for 114 years	Driving performance through innovation, collaboration and shared accountability Unique branding and products providing the flexibility of choice for our customer, community, agent, and brokerage	Synonymous with luxury Strong ties to auction house established in 1744 Powerful global presence	Unique access to consumers, marketing channels and content through its brand licensing relationship with a leading media company

(1) As of December 31, 2019, does not include Corcoran®, a proprietary brand that we own and franchise and others that we do not franchise. We announced the Company's first Corcoran® franchise affiliate on February 5, 2020.

(2) Information presented for Coldwell Banker® includes Coldwell Banker Commercial®.

(3) Includes information reported to us by independently owned franchisees (including approximately 12,600 offices and approximately 112,500 related brokers and independent sales agents of non-U.S. franchisees and franchisors).

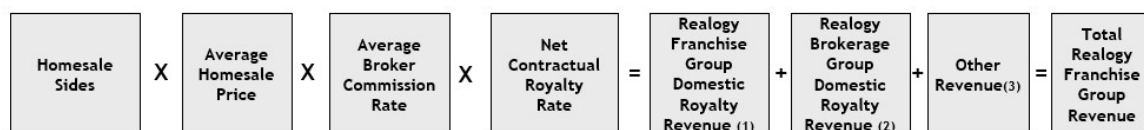
Realogy Franchise Group

Our primary objectives as the largest franchisor of residential real estate brokerages in the world are to retain and expand existing franchises, sell new franchises, and most importantly, provide branding and support to our franchisees and their independent sales agents. At December 31, 2019, our real estate franchise systems and proprietary brands had approximately 18,500 offices worldwide in 114 countries and territories in North and South America, Europe, Asia, Africa, the Middle East and Australia, including approximately 5,900 brokerage offices in the U.S. (which included approximately 710 company owned brokerage offices).

We derive substantially all of our real estate franchising revenues from royalties and marketing fees received under long-term franchise agreements with our domestic franchisees and Realogy Brokerage Group. These royalties are based on a percentage of the franchisees' sales commission earned from closed homesale sides (either the "buy" side and/or the "sell" side of a real estate transaction), which we refer to as gross commission income. Our franchisees pay us royalties, net of volume incentives achieved (other than Realogy Brokerage Group), for the right to operate under one of our trademarks and to utilize the benefits of the franchise systems. We provide our franchisees with systems and tools that are designed to help our franchisees serve their customers, attract new and retain existing independent sales agents, and support our franchisees with servicing programs, technology and education, as well as branding-related marketing which is funded through contributions by our franchisees and us (including Realogy Brokerage Group). We operate and maintain an Internet-based reporting system for our domestic franchisees which generally allows them to electronically transmit listing information and other relevant reporting data to us. We also operate websites for each of our brands for the benefit of our franchisees and their independent sales agents.

Realogy Franchise Group's domestic annual net royalty revenues from franchisees other than our company owned brokerages can be represented by multiplying (1) that year's total number of closed homesale sides in which those franchisees participated by (2) the average sale price of those homesales by (3) the average brokerage commission rate charged by these franchisees by (4) Realogy Franchise Group's net contractual royalty rate. The net contractual royalty rate represents the average percentage of our franchisees' commission revenues paid to us as a royalty, net of volume incentives achieved (or for certain franchisees, flat fee royalties) and net of other incentives granted to franchisees. The domestic royalty revenue from Realogy Brokerage Group is calculated by multiplying homesale sides by average sale price by average brokerage commission rate by their contractual royalty rate. Realogy Brokerage Group does not receive volume incentives or other incentives. In addition to domestic royalty revenue, Realogy Franchise Group earns revenue from marketing fees, listing fees, the preferred alliance program, international affiliates and upfront international fees. The following chart illustrates the key drivers for revenue earned by Realogy Franchise Group:

Realogy Franchise Group Revenue Model



(1) Includes non-sides related royalty fees.

(2) Intercompany royalty is eliminated in consolidation.

(3) Other revenue includes revenue from international royalties, marketing fees, listing fees, upfront international fees and preferred alliance revenue.

On average, our domestic franchisees' tenure with our brands was approximately 22 years as of December 31, 2019. During 2019, none of our franchisees (other than Realogy Brokerage Group) generated more than 1% of the total revenue of our real estate franchise business.

The franchise agreements set forth guidelines on the business and operations of the franchisees and require them to comply with the mandatory identity standards set forth in each brand's policy and procedures manuals. A franchisee's failure to comply with these restrictions and standards could result in a termination of the franchise agreement. The franchisees generally are not permitted to terminate the franchise agreements prior to their expiration, and in those cases where termination rights do exist, they are limited (e.g., if the franchisee retires, becomes disabled or dies). Generally, new domestic franchise agreements have a term of ten years, although we may negotiate shorter extension agreements with existing franchisees.

These franchisee agreements generally require the franchisees to pay us an initial franchise fee for the franchisee's principal office plus, upon the receipt of any commission income, a royalty fee in most cases initially equal to 6% of their

commission income, subject to reduction based upon volume incentives. Under the volume incentive program, each franchisee is eligible to receive a refund of a portion of the royalties paid upon the satisfaction of certain conditions (or in the case of Corcoran®, a reduced royalty based upon volume). The volume incentive is calculated for each eligible franchisee as a progressive percentage of each franchisee's annual gross revenue (paid timely) for each calendar year. Under the current form of the franchise agreements, the volume incentive varies for each franchise system, and generally result in a net or effective royalty rate of 6% to 3% for each individual franchisee (prior to taking into account other incentives that may be applicable to the franchisee).

Certain franchisees (including some of our largest franchisees) have a flat fee royalty arrangement with us of less than 6% and are not eligible for volume incentives. In addition, the volume incentive program is not offered to Better Homes and Gardens® Real Estate capped model franchisees or Coldwell Banker Commercial® franchisees. Our Better Homes and Gardens® Real Estate franchise business launched a "capped fee model" in 2019 that applies to any new franchisee as well as preexisting franchisees who elect to switch from their current royalty fee structure to the capped fee model. Under this capped fee model, franchisees pay a royalty fee (generally equal to 5% of their commission income) capped at a set amount per independent sales agent per year, subject to our right to annually modify or increase the independent sales associate cap.

We provide a detailed table to each eligible franchisee that describes the gross revenue thresholds required to achieve a volume incentive and the corresponding incentive amounts. We reserve the right to increase or decrease the percentage and/or dollar amounts in the table on an annual basis, subject to certain limitations.

Other incentives may be used as consideration to attract new franchisees, grow franchisees (including through independent sales agent recruitment) or extend existing franchise agreements, although in contrast to volume incentives, the majority of other incentives are not homesale transaction based. Under certain circumstances, we extend conversion notes to eligible franchisees for the purpose of providing an incentive to join the brand, to renew their franchise agreements, or to facilitate their growth opportunities. Growth opportunities include the expansion of franchisees' existing businesses by opening additional offices, through the consolidation of operations of other franchisees, as well as through the acquisition of independent sales agents and offices operated by independent brokerages. Many franchisees use the proceeds from the conversion notes to update marketing materials, upgrade technology and websites, or to assist in acquiring companies or recruiting agents. The notes are not funded until appropriate credit checks and other due diligence matters are completed, and the business is opened and operating under one of our brands. Upon satisfaction of certain revenue performance-based thresholds, the notes are forgiven ratably over the term of the franchise agreement. If the revenue performance thresholds are not met, franchisees may be required to repay a portion of the outstanding notes.

Realogy Brokerage Group—our company owned brokerages—pays a contractual royalty rate of approximately 6% and does not participate in volume incentive or other incentive programs.

Each of our current franchise systems require franchisees and company owned offices to make monthly contributions to marketing funds maintained by each brand, which may decrease as certain financial thresholds are achieved in accordance with the applicable franchise agreement. These contributions are used primarily for the development, implementation, production, placement and payment of national and regional advertising, marketing, promotions, public relations and/or other marketing-related activities, such as lead generation, all to promote and further the recognition of each brand and its independent franchisees and their affiliated independent sales agents. In addition to the contributions from franchisees and company owned offices, Realogy Franchise Group may be, in certain instances, required to make contributions to certain marketing funds and may make discretionary contributions (at its option) to any of the marketing funds.

The Company also offers support services to its independent franchisees and their affiliated independent sales agents, including technology-enabled solutions such as customer relationship management (CRM), lead generation and productivity tools.

In addition to offices owned and operated by our franchisees, as of December 31, 2019, we, through Realogy Brokerage Group, own and operate approximately 705 offices under the Coldwell Banker®, Coldwell Banker Commercial®, Sotheby's International Realty® and Corcoran® brand names. Realogy Brokerage Group pays intercompany royalty fees and marketing fees to Realogy Franchise Group in connection with its operation of these offices. These fees are recognized as income or expense by the applicable segment level and eliminated in the consolidation of our businesses.

In the U.S., we employ a direct franchising model whereby we contract with and provide services directly to independent owner-operators. We also utilize a direct franchising model outside of the U.S. for Sotheby's International Realty® and Corcoran® and, in some cases, Better Homes and Gardens Real Estate®. For all other brands, we generally employ a master franchise model outside of the U.S., whereby we contract with a qualified third party to build a franchise

network in the country or region in which franchising rights have been granted. Under both the direct and the master franchise model outside of the U.S., we typically enter into long-term franchise agreements (often 25 years in duration) and receive an initial area development fee and ongoing royalties. Under the master franchise model, the ongoing royalties we receive are generally a percentage of the royalties received by the master franchisor from its franchisees with which it contracts. Under the direct franchise model, a royalty fee is paid to us on transactions conducted by our franchisees in the applicable country or region.

We also offer third-party service providers an opportunity to market their products to our franchisees and their independent sales agents and customers through our preferred alliance program. To participate in this program, service providers generally agree to provide preferred pricing to our franchisees and/or their customers or independent sales agents and to pay us a combination of an initial licensing or access fee, subsequent marketing fees and/or commissions based upon our franchisees' or independent sales agents' usage of the preferred alliance vendors. We also transmit listings to various platforms and services.

We own the trademarks Century 21®, Coldwell Banker®, Coldwell Banker Commercial®, Corcoran®, ERA® and related trademarks and logos, and such trademarks and logos are material to the businesses that are part of our real estate franchise segment. Our franchisees and our subsidiaries actively use these trademarks, and all of the material trademarks are registered (or have applications pending) with the United States Patent and Trademark Office as well as with corresponding trademark offices in major countries worldwide where these businesses have significant franchised operations.

We have an exclusive license to own, operate and franchise the Sotheby's International Realty® brand to qualified residential real estate brokerage offices and individuals operating in eligible markets pursuant to a license agreement with SPTC Delaware LLC, a subsidiary of Sotheby's ("Sotheby's"). Such license agreement has a 100-year term, which consists of an initial 50-year term ending February 16, 2054 and a 50-year renewal option. We pay a licensing fee to Sotheby's for the use of the Sotheby's International Realty® name equal to 9.5% of the net royalties earned by Realogy Franchise Group attributable to franchisees affiliated with the Sotheby's International Realty® brand, including our company owned offices.

In October 2007, we entered into a long-term license agreement to own, operate and franchise the Better Homes and Gardens® Real Estate brand from Meredith. The license agreement between Realogy and Meredith is for a 50-year term, with a renewal option for another 50 years at our option. We pay a licensing fee to Meredith for the use of the Better Homes and Gardens® Real Estate brand name equal to 9.0% of the net royalties earned by Realogy Franchise Group attributable to franchisees affiliated with the Better Homes and Gardens® Real Estate brand, subject to a minimum annual licensing fee.

Each of our franchised brands has a consumer website that offers real estate listings, contacts and services.

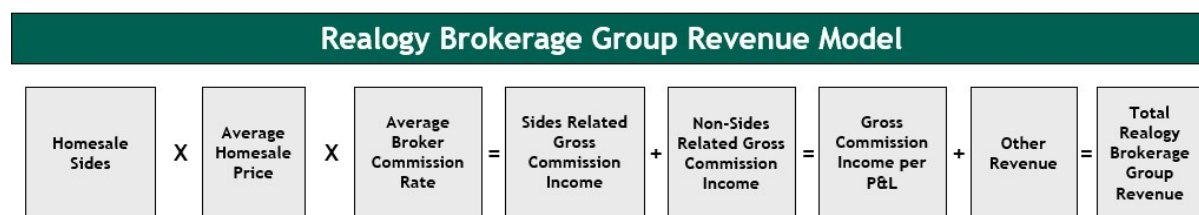
Realogy Brokerage Group

Through Realogy Brokerage Group we own and operate a full-service real estate brokerage business in many of the largest metropolitan areas in the U.S. Our company owned real estate brokerage business operates under the Coldwell Banker®, Sotheby's International Realty® and Corcoran® franchised brands.

As of December 31, 2019, we had approximately 710 company owned brokerage offices and approximately 52,200 independent sales agents working with these company owned offices.

Our company owned real estate brokerage business derives revenue primarily from gross commission income received serving as the broker at the closing of real estate transactions. For the year ended December 31, 2019, our average homesale broker commission rate was 2.41% which represents the average commission rate earned on either the "buy" side or the "sell" side of a homesale transaction. Gross commission income is also earned on non-sale transactions such as home rentals. Realogy Brokerage Group, as a franchisee of Realogy Franchise Group, pays a royalty fee of approximately 6% per transaction to Realogy Franchise Group from the commission earned on a real estate transaction. The remainder of gross commission income is split between the broker (Realogy Brokerage Group) and the independent sales agent in accordance with their applicable independent contractor agreement (which specifies the portion of the broker commission to be paid to the agent), which varies by agent.

The following chart illustrates the key drivers for revenue earned by Realogy Brokerage Group:



In addition, as a full-service real estate brokerage company, we promote the complementary services of our title and settlement services businesses. We believe we provide integrated services that enhance the customer experience.

When we assist the seller in a real estate transaction, independent sales agents generally provide the seller with a full-service marketing program, which may include developing a direct marketing plan for the property, assisting the seller in pricing the property and preparing it for sale, listing it on multiple listing services, advertising the property (including on websites), showing the property to prospective buyers, assisting the seller in sale negotiations, and assisting the seller in preparing for closing the transaction. When we assist the buyer in a real estate transaction, independent sales agents generally help the buyer in locating specific properties that meet the buyer's personal and financial specifications, show properties to the buyer, assist the buyer in negotiating (where permissible) and preparing for closing the transaction. In addition, Realogy Brokerage Group has relationships with developers, primarily in major cities, to provide marketing and brokerage services in new developments.

At December 31, 2019, we operated approximately 89% of our offices under the Coldwell Banker® brand name, approximately 5% of our offices under the Sotheby's International Realty® brand name and 6% of our offices primarily under the Corcoran® brand name. Our offices are geographically diverse with a strong presence in the east and west coast areas, primarily around large metropolitan areas in the U.S., where home prices are generally higher. We operate our Coldwell Banker® offices and Sotheby's International Realty® offices in numerous regions throughout the U.S., and Corcoran® offices in New York City, the Hamptons (New York), and Palm Beach and Miami Beach, Florida.

We intend to grow our business organically. To grow organically, we focus on working with office managers to attract and retain independent sales agents who can successfully engage and promote transactions from new and existing clients. To complement our residential brokerage services, Realogy Brokerage Group offers home ownership services that include comprehensive single-family residential property management in many of the nation's largest rental markets.

To a lesser extent, we may grow our business through strategic acquisitions focused primarily on expanding our existing markets. Following the completion of an acquisition, we tend to consolidate the newly acquired operations with our existing operations to reduce or eliminate duplicative costs and to leverage our existing infrastructure to support newly affiliated independent sales agents.

Realogy Brokerage Group is a broker within the Realogy Broker Network.

Realogy Title Group

Our title and settlement services business, Realogy Title Group, provides full-service title and settlement (i.e., closing and escrow) services to real estate companies and financial institutions. We act in the capacity of a title agent and sell title insurance to property buyers and mortgage lenders. We are licensed as a title agent in 42 states and Washington, D.C., and have physical locations in 21 states and Washington, D.C. We issue title insurance policies on behalf of large national underwriters as well as through our Dallas-based subsidiary, Title Resources Guaranty Company ("Title Resources"). Title Resources is a title insurance underwriter licensed in 37 states and Washington, D.C. We operate mostly in major metropolitan areas. As of December 31, 2019, we had approximately 380 offices, approximately 190 of which are co-located within one of our company owned brokerage offices.

Virtually all lenders require their borrowers to obtain title insurance policies at the time mortgage loans are made on real property. The terms and conditions upon which the real property will be insured are determined in accordance with the standard policies and procedures of the title underwriter. When our title agencies sell title insurance, the title search and examination function is performed by the agent. The title agent and underwriter split the premium. The amount of such premium "split" is determined by agreement between the agency and underwriter, or is promulgated by state law. We derive revenue through fees charged in real estate transactions for rendering the services described above, fees charged for escrow

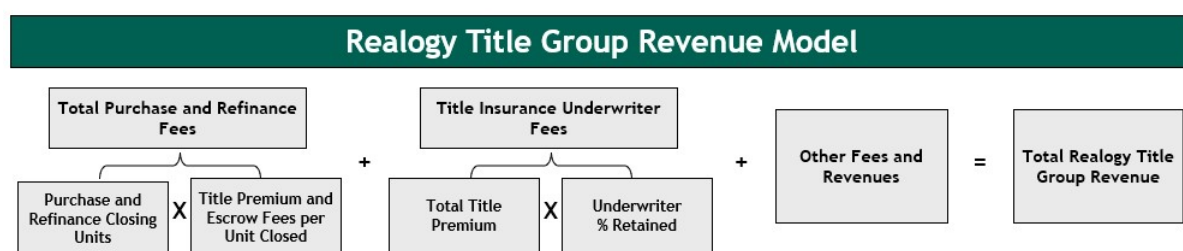
and closing services, and a percentage of the title premium on each title insurance policy sold. We have entered into underwriting agreements with various underwriters, which state the conditions under which we may issue a title insurance policy on their behalf. For policies issued through our agency operations, assuming no negligence on our part, we are not typically liable for losses under those policies; rather the title insurer is typically liable for such losses.

Our company owned brokerage operations are the principal source of our title and settlement services business for homesale transactions. Other sources of our title and settlement services homesale business include our real estate franchise business and unaffiliated brokerage operations. For refinance transactions, we generate title and escrow revenues from financial institutions throughout the mortgage lending industry. Many of our offices have subleased space from and are co-located within our company owned brokerage offices. The capture rate of our title and settlement services business from company owned brokerage operations was approximately 36% in 2019.

We coordinate a national network of escrow and closing agents (some of whom are our employees, while others are attorneys in private practice and independent title companies) to provide full-service title and settlement services to a broad-based group that includes lenders, home buyers and sellers, developers and independent real estate sales agents. Our role is generally that of an intermediary managing the completion of all the necessary documentation and services required to complete a real estate transaction.

Our title and settlement services business measures operating performance based on purchase and refinance closing units and the related title premiums and escrow fees earned on such closings. In addition, we measure net title premiums earned for title policies issued by our underwriting operation.

The following chart illustrates the key drivers for revenue generated by our title and settlement services business:



We intend to grow our title and settlement services business by attracting title and escrow sales agents in existing markets. We will also continue to seek to increase our capture rate of title business from Realogy Brokerage Group homesale sides. In addition, we expect to continue to grow our underwriting business by increasing our agent base.

The equity earnings or losses related to Guaranteed Rate Affinity, our mortgage origination joint venture with Guaranteed Rate, are included in the financial results of Realogy Title Group. We own 49.9% of the home mortgage joint venture and Guaranteed Rate owns the remaining 50.1%.

Realogy Leads Group

Realogy Leads Group consists of affinity programs (both company- and client-directed) as well as broker-to-broker referrals. Referrals generated by Realogy Leads Group are handled by the Realogy Broker Network, a network of real estate brokers consisting of our company owned brokerage operations, select franchisees and independent real estate brokers who have been approved to become members.

Realogy requires that participating brokers and independent sales agents be experienced and obtains background checks on all members of the network. Member brokers of the Realogy Broker Network receive referrals in exchange for a referral fee paid to Realogy Leads Group for affinity and broker to broker transactions.

Member brokers of the Realogy Broker Network have also historically received referrals from Cartus Relocation Services generated by our relocation clients in exchange for a referral fee (that is reported in the financial results for Cartus Relocation Services). In connection with the planned sale of Cartus Relocation Services to SIRVA, we will enter into a non-exclusive five-year broker services agreement with SIRVA, pursuant to which Realogy Leads Group could, at the discretion of SIRVA, continue to provide high-quality brokerage services via the Realogy Broker Network to relocation clients of SIRVA. Realogy Leads Group, however, will not receive a referral fee in connection with providing such services.

The Realogy Broker Network has historically been a key contributor to our lead generation strategy, with 99% of the converted leads generated through the network (from Realogy Leads Group and Cartus Relocation Services) being directed to independent sales agents affiliated with our franchisees and company owned brokerages in 2019. As a result of referrals from Realogy Leads Group and Cartus Relocation Services, the Realogy Broker Network closed approximately 78,700 real estate transactions in 2019, with approximately 68,400 transactions attributable to affinity programs and broker-to-broker activity, and approximately 10,300 transactions attributable to relocation clients.

Affinity Services and Broker-to-Broker Overview

Under our affinity services program, Realogy Leads Group provides real estate services, including home buying and selling assistance to members of organizations such as insurance companies and credit unions that have established members who are buying or selling a home. Through a client-directed affinity program, the applicable affinity organization generally offers our affinity services to their members. Through a company-directed affinity program (such as Realogy Military Rewards or AARP), Realogy drives the marketing for the program. Where permitted by law, affinity members can receive a financial incentive for using these services (such as cash or a gift card, or commission credit based on the home purchase/sale price pursuant to the applicable program), with the financial incentive provided by the affinity client for affinity-directed programs or by the Company for company-directed affinity programs.

In 2019, we launched our first Realogy-branded affinity program with Realogy Military Rewards, a program for U.S. military personnel, veterans and their families that seeks to provide access to benefits from Realogy that are similar to those offered under the former USAA affinity program. In addition, in 2019, we announced other affinity programs in collaboration with partners including our announcement in October 2019 of an agreement to create the first-ever real estate benefits program designed for the nearly 38 million AARP members, which is expected to launch nationally in early 2020. We expect that significant time and effort and meaningful investment will be required to increase awareness of and affinity member participation in these new affinity programs.

Broker-to-broker business includes referrals generated by brokers affiliated with the Realogy Broker Network, inclusive of approximately 2,800 intra-company referrals within Realogy Brokerage Group in 2019. Realogy Leads Group does not receive a referral fee for such intra-company referrals.

Following the closing of the planned sale of Cartus Relocation Services, we expect to consolidate Realogy Leads Group, including the Realogy Broker Network, into Realogy Franchise Group.

Affinity Services Concentration and Discontinuation of USAA Affinity Program

Our affinity revenues are highly concentrated and our affinity relationships are non-exclusive and terminable at any time at the option of the client. In the third quarter of 2019, USAA, which had been our largest affinity client, ceased new enrollments in its long-term affinity program with us. In 2019, referrals generated by the USAA affinity program represented a significant portion of the 78,700 total homesale transactions closed from the Realogy Broker Network. See Part II, Item 7. Management's Discussion and Analysis—Recent Developments for additional information.

Discontinued Operations—Cartus Relocation Services

Cartus Relocation Services is reported as held for sale in this Annual Report. As provider of global relocation services, that operates in key international relocation destinations, Cartus Relocation Services offers a broad range of world-class employee relocation services designed to manage all aspects of an employee's move to facilitate a smooth transition in what otherwise may be a complex and difficult process for employee and employer. In 2019, Cartus Relocation Services served corporations, including 48% of the Fortune 50 companies. As of December 31, 2019, the top 25 relocation clients had an average tenure of approximately 20 years with Cartus.

Cartus Relocation Services provides services in 150 countries and has operations in the U.S., the United Kingdom, Canada, Hong Kong, Singapore, China, India, Brazil, Germany, France, Switzerland and the Netherlands.

Cartus Relocation Services primarily offers corporate clients employee relocation services, such as:

- homesale assistance, including:
 - the valuation, inspection, purchasing and selling of a transferee's home;
 - the issuance of home equity advances to transferees permitting them to purchase a new home before selling their current home (these advances are generally guaranteed by the individual's employer);

- certain home management services;
- assistance in locating a new home; and
- closing on the sale of the old home, generally at the instruction of the client;
- expense processing, relocation policy counseling, relocation-related accounting, including international assignment compensation services, and other consulting services;
- arranging household goods moving services, over 46,000 domestic and international shipments in 2019, and providing support for all aspects of moving a transferee's household goods, including the handling of insurance and claim assistance, invoice auditing and quality control;
- coordinating visa and immigration support, intercultural and language training, and expatriation/repatriation counseling and destination services; and
- group move management services providing coordination for moves involving a large number of transferees to or from a specific regional area over a short period of time.

The wide range of services allows clients to outsource their entire relocation programs to Cartus Relocation Services.

Substantially all homesale service transactions for clients of Cartus Relocation Services are classified as "no risk." Under "no risk" business, the client is responsible for reimbursement of all direct expenses associated with the homesale. Such expenses include, but are not limited to, appraisal, inspection and real estate brokerage commissions. The client also bears the risk of loss on the resale of the transferee's home. Clients are responsible for reimbursement of all other direct costs associated with the relocation including, but not limited to, costs to move household goods, mortgage origination points, temporary living and travel expenses. Generally, we fund the direct expenses associated with the homesale as well as those associated with the relocation on behalf of the client and the client then reimburses us for these costs plus interest charges on the advanced funds. This limits our exposure on "no risk" homesale services to the credit risk of our clients rather than to the potential fluctuations in the real estate market or to the creditworthiness of the individual transferring employee. Historically, due to the credit quality of our clients, we have had minimal losses with respect to these "no risk" homesale services.

The "at risk" business that we conduct is minimal. In "at risk" homesale service transactions, we acquire the home being sold by the transferring employee, incur the cost for all direct expenses (acquisition, carrying and selling costs) associated with the homesale and bear any loss on the sale of the home.

Substantially all of our contracts with relocation clients of Cartus Relocation Services are terminable at any time at the option of the client and are non-exclusive. If a client ceases or reduces volume under its contract, we will be compensated for all services performed up to the time that volume ceases and reimbursed for all expenses incurred.

There are a number of different revenue streams associated with relocation services. We earn referral commissions primarily from real estate brokers and household goods moving companies that provide services to the transferee. Clients may also pay transactional fees for the services performed. We also earn net interest income which represents interest earned from clients on the funds we advance on behalf of the transferring employee net of costs associated with the securitization obligations used to finance these payments.

Products, Technology and Marketing

Our ability to provide independent sales agents at company owned and franchised brokerages with compelling data and technology products and services to make them more productive and their businesses more profitable is core to our integrated business strategy.

The marketing and technology services and support provided by independent sales agents to their customers are an important element of the value offered by an agent in the home purchase and sale process. Our commitment to continuously develop and improve our marketing and technology products and service is part of our value proposition to company owned and franchised real estate brokerages, affiliated independent sales agents and their customers as well as to our other businesses. Increasingly, these products and services are desired as an integrated set of tools, rather than stand-alone products and services.

Products and Technology

Since 2019, we have developed our product and marketing strategies against the backbone of an open-architecture technology strategy. Our open ecosystem is designed to support the continuous creation and delivery of both our proprietary

tools and third-party products to our agents in order to deliver a more comprehensive platform experience. Through this strategy, we are able to selectively enable qualified third-party vendors and products to access and interface with our products and services so that affiliated independent sales agents will be able to build their own customizable technology platform to drive their performance and productivity.

We have expended, and expect to continue to expend, substantial time, capital, and other resources to identify the needs of company owned brokerages, franchisees, independent sales agents and their customers and to develop marketing, technology and service offerings to meet the needs of affiliated independent sales agents.

In 2019, we delivered multiple new technology-driven products designed to improve independent sales agent productivity and enhance the customer experience for home buyers and sellers. For example:

- Social Ad Engine helps affiliated agents create an effective Facebook and Instagram ad in under three minutes via a marketing product launched in partnership with Facebook.
- Listing Concierge allows agents affiliated with Coldwell Banker company owned brokerages to create custom marketing with the support of specialists, resulting in high quality materials.
- Design Concierge provides innovative marketing strategies, custom design support, complete and custom rebranding and other marketing tools needed to promote an agent's personal brand to agents affiliated with Coldwell Banker company owned brokerages.
- RealVitalize enables consumer home sellers to make their property ready for sale by providing resources to fund staging and home improvements with no up-front cost via a consumer program from Coldwell Banker's company owned operations and HomeAdvisor. RealVitalize is currently available in 27 U.S. states.
- RealSure strives to improve the consumer's home selling and buying experience through two core products, RealSure Sell and RealSure Mortgage. Under the RealSure Sell product, home sellers with qualifying properties receive a cash offer valid for 45 days immediately upon listing, and during this time frame have the opportunity to pursue a better price by marketing their property with an affiliated independent sales agent. Sellers who are enrolled in RealSure Sell can utilize RealSure Mortgage to make an offer on their next home without sale or financing contingencies before their current home is sold by leveraging their RealSure Sell cash offer. The programs, created in partnership with Home Partners of America, are currently available in 10 U.S. markets.

Our Realogy-provided platform is designed to increase the value proposition to our independent sales agents, franchisees (and their independent sales agents) and the consumer by:

- aiding in lead generation and obtaining additional homesale transactions;
- connecting affiliated agents and brokers to a CRM tool that allows for the cultivation of productive relationships with consumers at all stages of the transaction;
- enhancing access to listing distributions through mobile applications and websites;
- informing affiliated agents of valuable client insight to help those agents increase their productivity;
- providing consumers with a streamlined yet comprehensive user experience to facilitate the necessary steps for researching homes, communities and independent sales agents;
- providing key back office processes, including listing and transaction management, reporting, marketing, and agent profiles; and
- delivering business planning tools that enable our franchisees to track their progress against key business objectives in real time.

In January 2020, we announced that we plan to launch our next generation customer relationship management (CRM) tool as well as new consumer and agent-facing listing websites, both of which will be developed in partnership with a third-party, as well as other tools including a leads engine and transaction management tool. The new CRM is currently in its first pilot phase.

Marketing

Each of our brands manages a comprehensive system of marketing tools, systems and sales information and data that can be accessed through freestanding brand intranet sites to assist independent sales agents in becoming the best marketer of their listings. Advertising is primarily used by the brands to drive leads to affiliated agents, increase brand awareness and perception, promote our network and offerings to the real estate industry and engage our customer base.

Each of our franchise brands operates a marketing fund that is funded principally by our franchisees (including company owned offices), although we may make discretionary contributions to any of the marketing funds and, in certain instances, are required to make contributions to certain marketing funds.

Likewise, our company owned brokerages sponsor a wide array of marketing programs, materials and opportunities to complement the sales work of our affiliated independent sales agents and increase brand awareness. The effectiveness and quality of marketing programs play a significant role in attracting and retaining independent sales agents.

Our marketing programs and initiatives primarily focus on attracting potential new home buyers and sellers to affiliated independent sales agents by:

- showcasing the inventory of our real estate listings and the affiliated independent sales agents who are the listing agents of these properties;
- building and maintaining brand awareness and preference for the brand; and
- increasing the local recognition of affiliated agents and brokerages.

Marketing programs are executed using a variety of media, including but not limited to social media, advertising, direct marketing and internet advertising. We also offer the independent sales agents broad-based advertising, mailings and other campaigns to generate leads, interest and recognition.

Websites

The Internet has become the primary advertising channel in our industry and we have sought to become a leader among full-service residential real estate brokerage firms in the use and application of marketing technology. We place our property listings on hundreds of real estate websites and we operate a variety of our own websites.

Our brand websites contain listing information on a regional and national market basis, independent sales agent information, community profiles, home buying and selling advice, relocation tips and mortgage financing information and unique property and neighborhood insights from local agents. Additionally, each brand website allows independent sales agents to market themselves to consumers.

Significant focus is placed on developing websites for each brand to create value to the real estate consumer. Each brand website focuses on streamlined, easy search processes for listing inventory and rich descriptive details, multiple photos, full motion videos and in some cases virtual reality tours to market the real estate listing. We also place significant emphasis on distributing our real estate listings with third-party websites to expand a homebuyer's access to such listings, at times enhancing the presentation of the listings on third-party websites to make the listings more attractive to consumers. Consumers seeking more detailed information about a particular listing on a third-party website are generally able to click through to a brand website or a company owned brokerage website or telephone the franchisee or company owned brokerage directly.

Education

Each real estate brand provides learning and development materials and access to continuing education to its franchisees to assist them in building their real estate sales businesses. Each brand's engagement program contains different materials and delivery methods. The marketing materials include a detailed description of the services offered by our franchise systems (which will be available to the independent sales agent). Live instructors at conventions and orientation seminars deliver some engagement modules while other modules can be viewed by brokers anywhere in the world through virtual classrooms over the Internet. Most of the programs and materials are then made available in electronic form to franchisees over the respective system's private intranet site. Many of the materials are customizable to allow franchisees to achieve a personalized look and feel and make modifications to certain content as appropriate for their business and marketplace.

Employees

At December 31, 2019, we had approximately 10,150 employees, including approximately 730 employees outside of the U.S. Approximately 2,000 employees, including almost all of our employees outside of the U.S., are employed by Cartus Relocation Services. None of our employees are represented by a union.

Seasonality

The residential housing market is seasonal, with a higher level of homesale transactions typically occurring in the second and third quarter of each year. As a result, historically, operating results and revenues for all of our businesses have been strongest in the second and third quarters of the calendar year.

Competition

Real Estate Brokerage Industry. The ability of our real estate brokerage franchisees and our company owned brokerage businesses to successfully compete is important to our prospects for growth. Their ability to compete may be affected by the recruitment, retention and performance of independent sales agents, the economic relationship between the broker and the agent (including the share of commission income retained by the agent and fees charged to or paid by the agent for services provided by the broker), the location of offices and target markets, the services provided to independent sales agents, the number and nature of competing offices in the vicinity, affiliation with a recognized brand name, community reputation, technology and other factors, including macro-economic factors such as national, regional and local economic conditions.

We and affiliated franchisees compete for consumer business as well as for independent sales agents with national and regional independent real estate brokerages and franchisors, discount and limited service brokerages, and with franchisees of our brands. Our largest national competitors in this industry include, but are not limited to, HomeServices of America (a Berkshire Hathaway affiliate), Howard Hanna Holdings, EXP Realty, Compass and Weichert, Realtors and several large franchisors: RE/MAX International, Inc., Keller Williams Realty, Inc. and HSF Affiliates LLC (a joint venture controlled by HomeServices of America that operates Berkshire Hathaway HomeServices and Real Living Real Estate). We and affiliated franchisees also compete with leading listing aggregators, such as Zillow, Inc. and Realtor.com^(R) (a listing aggregator held by News Corporation).

Competition for Independent Sales Agents. The successful recruitment and retention of independent sales agents and independent sales agent teams are critical to the business and financial results of a brokerage—whether or not it is affiliated with a franchisor. Most of a brokerage's real estate listings are sourced through the sphere of influence of its independent sales agents, notwithstanding the growing influence of internet-generated leads. Competition for independent sales agents in our industry is high and has intensified particularly with respect to more productive independent sales agents and in the densely populated metropolitan areas in which we operate. The successful recruitment and retention of independent sales agents is influenced by many factors, including remuneration (such as sales commission percentage and other financial incentives paid to independent sales agents), other expenses borne by independent sales agents, leads or business opportunities generated for independent sales agents from the brokerage, independent sales agents' perception of the value of the broker's brand affiliation, technology and data offerings as well as marketing and advertising efforts by the brokerage or franchisor, the quality of the office manager, staff and fellow independent sales agents with whom they collaborate daily, as well as continuing professional education, and other services provided by the brokerage or franchisor.

We believe that a variety of factors in recent years have negatively impacted the recruitment and retention of independent sales agents in the industry generally and have put upward pressure on the average share of commissions earned by affiliated independent sales agents, including increasing competition, such as from brokerages that offer a greater share of commission income to independent sales agents (and/or other compensation such as up-front bonuses and equity), changes in the spending patterns of independent sales agents (as more agents purchase services from third parties outside of their affiliated broker), and growth in independent sales agent teams. The recruitment and retention of independent sales agents has been and may continue to be further complicated by competitive models that do not prioritize traditional business objectives. For example, we believe that certain owned-brokerage competitors have investors that have historically allowed the pursuit of increases in market share over profitability, which exacerbates competition for independent sales agents and pressure on the share of commission income received by the agent, creating challenges to our and our franchisee's margins and profitability. Whether and the extent to which this pattern will continue is not yet certain.

Commission Plan Competition Among Real Estate Brokerages. Some of the firms competing for sales agents use different commission plans, which may be appealing to certain sales agents. There are several different commission plan variations that have been historically utilized by real estate brokerages to compensate their independent sales agents. One of the most common variations has been the traditional graduated commission model where the independent sales agent receives a percentage of the brokerage commission that increases as the independent sales agent increases his or her volume of homesale transactions, and the brokerage frequently provides independent sales agents with a broad set of support offerings and promotion of properties. Other common plans include a desk rental or 100% commission plan, a fixed

transaction fee commission plan, and a capped commission plan. A capped commission plan generally blends aspects of the traditional graduated commission model with the 100% commission plan.

Although less common, some real estate brokerages employ their sales agents and, in such instances, employee agents may earn smaller brokerage commissions in exchange for other employee benefits or bonuses. Most brokerages focus primarily on one type of commission plan though some may offer one or more of commission plan variations to their sales agents.

In most of their markets, Realogy Brokerage Group offers affiliated independent sales agents and sales agent teams a choice between a traditional graduated commission model or a two-tiered commission model, both of which emphasize our value proposition.

Low Barriers to Entry and Influx of Traditional and Non-Traditional Competition as well as Industry Disrupters. The real estate brokerage industry has minimal barriers to entry for new participants, including participants utilizing historical real estate brokerage models and those pursuing alternative variations of those models as well as non-traditional methods of marketing real estate. The significant size of the U.S. real estate market, in particular the addressable market of commission revenues, has continued to attract outside capital investment in traditional and disruptive competitors that seek to access a portion of this market.

There are also market participants who differentiate themselves by offering consumers flat fees, rebates or lower commission rates on transactions (often coupled with fewer services). Although such competitors have yet to have a material impact on overall brokerage commission rates, this could change in the future if they use greater discounts as a means to increase their market share or improve their value proposition.

While real estate brokers using historical real estate brokerage models typically compete for business primarily on the basis of services offered, reputation, utilization of technology, personal contacts and brokerage commission, participants pursuing non-traditional methods of marketing real estate may compete in other ways, including companies that employ technologies intended to disrupt historical real estate brokerage models or minimize or eliminate the role brokers and sales agents perform in the homesale transaction process. A growing number of companies are competing in non-traditional ways for a portion of the gross commission income generated by homesale transactions. For example, listing aggregators and other web-based real estate service providers compete for our company owned brokerage business by establishing relationships with independent sales agents and/or buyers and sellers of homes and actions by such listing aggregators have and may continue to put pressure on our and other industry participant's revenues and profitability. Other business models that have emerged in recent years consist of companies (including certain listing aggregators) that leverage capital to purchase homes directly from sellers, commonly referred to as iBuying.

Franchise Competition. According to NAR, approximately 42% of individual brokers and independent sales agents are affiliated with a franchisor. Competition among the national real estate brokerage brand franchisors to grow their franchise systems is intense. We believe that competition for the sale of franchises in the real estate brokerage industry is based principally upon the perceived value that the franchisor provides to enhance the franchisee's ability to grow its business and improve the recruitment, retention and productivity of its independent sales agents. The value provided by a franchisor encompasses many different aspects including the quality of the brand, tools, technology, marketing and other services, the availability of financing provided to the franchisees, and the fees the franchisees must pay. Franchisee fees can be structured in numerous ways and can include flat royalty and marketing fees, capped royalty fees, and discounted royalty and marketing fees. We launched a capped fee model at one of our brands in 2019 as substantially all of our franchises are structured using a flat fee model and we have faced increasing competition from franchisors utilizing alternative models.

Title and Settlement Business. The title and settlement business is highly competitive. The number and size of competing companies vary in the different areas in which we conduct business. In certain parts of the country we compete with small title agents and attorneys while in other parts of the country our competition is the larger title underwriters and national vendor management companies. In addition, we compete with the various brands of national competitors including Fidelity National Title Insurance Company, First American Title Insurance Company, Stewart Title Guaranty Company and Old Republic Title Company.

Government and Other Regulations

RESPA. RESPA, state real estate brokerage laws and similar laws in countries in which we do business restrict payments which real estate brokers, title agencies, mortgage bankers, mortgage brokers and other settlement service providers may receive or pay in connection with the sales of residences and referral of settlement services (e.g., mortgages,

homeowners insurance and title insurance). Such laws may to some extent impose limitations on arrangements involving our real estate franchise, real estate brokerage, settlement services and relocation businesses or the business of our mortgage origination joint venture. In addition, with respect to our company owned real estate brokerage, relocation and title and settlement services businesses as well as our mortgage origination joint venture, RESPA and similar state laws generally require timely disclosure of certain relationships or financial interests with providers of real estate settlement services. Pursuant to the Dodd-Frank Act, the Consumer Financial Protection Bureau (the “CFPB”) administers RESPA. Some state authorities have also asserted enforcement rights.

RESPA and related regulations do, however, contain a number of provisions that allow for payments or fee splits between providers, including fee splits between title underwriters and agents, real estate brokers and agents and market-based fees for the provision of goods or services and marketing arrangements. In addition, RESPA allows for referrals to affiliated entities, including joint ventures, when specific requirements have been met. We rely on these provisions in conducting our business activities and believe our arrangements comply with RESPA. However, RESPA compliance may become a greater challenge under certain administrations for most industry participants offering settlement services, including mortgage companies, title companies and brokerages, because of expansive interpretations of RESPA or similar state statutes by certain courts and regulators. Permissible activities under state statutes similar to RESPA may be interpreted more narrowly and enforcement proceedings of those statutes by state regulatory authorities may also be aggressively pursued. RESPA also has been invoked by plaintiffs in private litigation for various purposes. Some regulators and other parties have advanced novel and stringent interpretations of RESPA including assertions that any provision of a thing of value in a separate, but contemporaneous transaction with a referral constitutes a breach of RESPA on the basis that all things of value exchanged should be deemed in exchange for the referral.

Franchise Regulation. In the U.S., the sale of franchises is regulated by various state laws, as well as by federal law under the jurisdiction of the Federal Trade Commission (the “FTC”). The FTC requires that franchisors make extensive disclosure to prospective franchisees but does not require registration. A number of states require registration and/or disclosure in connection with franchise offers and sales. In addition, several states have “franchise relationship laws” or “business opportunity laws” that limit the ability of franchisors to terminate franchise agreements or to withhold consent to the renewal or transfer of these agreements. The states with relationship or other statutes governing the termination of franchises include Alaska, Arkansas, California, Connecticut, Delaware, Hawaii, Idaho, Illinois, Indiana, Iowa, Kentucky, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, Rhode Island, Virginia, Washington and Wisconsin. Puerto Rico and the Virgin Islands also have statutes governing termination of franchises. Some franchise relationship statutes require a mandated notice period for termination and some require a notice and cure period. In addition, some require that the franchisor demonstrate good cause for termination. These statutes do not have a substantial effect on our operations because our franchise agreements generally comport with the statutory requirements for cause for termination, and they provide notice and cure periods for most defaults. When state law grants a period longer than permitted under the franchise agreement, we extend our notice and/or cure periods to match the statutory requirements. In some states, case law requires a franchisor to renew a franchise agreement unless a franchisee has given cause for non-renewal. Failure to comply with these laws could result in civil liability to the franchisors. While our franchising operations have not been materially adversely affected by such existing regulation, we cannot predict the effect of any future federal or state legislation or regulation. Internationally, many countries have similar laws affecting franchising.

State Brokerage Laws. Our company owned real estate brokerage business is also subject to numerous federal, state and local laws and regulations that contain general standards for and limitations on the conduct of real estate brokers and sales agents, including those relating to the licensing of brokers and sales agents, fiduciary, and agency and statutory duties, consumer disclosure obligations, administration of trust funds, collection of commissions, restrictions on information sharing with affiliates, fair housing standards and advertising and consumer disclosures. Under state law, our company owned real estate brokers have certain duties to supervise and are responsible for the conduct of their brokerage businesses.

Worker Classification. Although the legal relationship between residential real estate brokers and licensed sales agents throughout most of the real estate industry historically has been that of independent contractor, newer rules and interpretations of state and federal employment laws and regulations, including those governing employee classification and wage and hour regulations, may impact industry practices, our company owned brokerage operations and our affiliated franchisees.

Real estate laws generally permit brokers to engage sales agents as independent contractors. Federal and state agencies have their own rules and tests for classification of independent contractors as well as to determine whether employees meet exemptions from minimum wages and overtime laws. These tests consider many factors that also vary from state to state. The tests continue to evolve based on state case law decisions, regulations and legislative changes. There is active worker

classification litigation in numerous jurisdictions against a variety of industries—including residential real estate brokerages—where the plaintiffs seek to reclassify independent contractors as employees or to challenge the use of federal and state minimum wage and overtime exemptions.

For additional information, see Part I, Item 3. Legal Proceedings and for a summary of certain legal proceedings initiated in California involving the Company that include worker misclassification allegations, see Note 15, "Commitments and Contingencies", in this Annual Report.

Multiple Listing Services Rules. We participate in many multiple listing services ("MLS") and are subject to each MLS' rules, policies, data licenses, and terms of service, which specify, among other things, how we may access and use MLS data and listings and how MLS data and listings must be displayed on our and our franchisees' websites and mobile applications. The rules of each MLS to which we belong can vary widely and are complex.

From time to time, certain industry practices, including MLS rules, have come under regulatory scrutiny. For example, in 2008, the Department of Justice ("DOJ") and the FTC entered into a consent decree with NAR related, in part, to the cooperative sharing of entries in traditional MLSs with online-only brokers, which expired in November 2018. In June 2018, the DOJ and the FTC held a joint public workshop to explore competition issues in the residential real estate brokerage industry since the publication of the FTC and DOJ's 2007 Report on Competition in the Real Estate Brokerage Industry, including the impact of Internet-enabled technologies on the industry and potential barriers to competition.

In the workshop, there were various panels and participants submitted comments that raised a variety of issues, including: whether the current industry practice involving commission sharing by listing brokers was anti-competitive, whether offers of commission sharing—including commission rates—should be public, whether average broker commission rates were too high, whether industry platforms should have free access to listings and concerns around dual agency. There can be no assurances as to whether DOJ or the FTC will determine that any industry practices or developments have an anti-competitive effect on the industry. Any such determination by DOJ or the FTC could result in industry investigations, legislative or regulatory action or other actions, any of which could have the potential to disrupt our business.

For a summary of certain legal proceedings in which NAR, Realogy and other large real estate brokerage companies are named defendants see Note 15, "Commitments and Contingencies—Litigation—Real Estate Litigation", in this Annual Report.

Anti-Discrimination Laws. Our company owned and franchised brokerages, and agents affiliated with such brokerages, as well as our other businesses are subject to federal and state housing laws that generally make it illegal to discriminate against protected classes of individuals in housing or brokerage services. For example, the Fair Housing Act, its state and local law counterparts, and the regulations promulgated by the U.S. Department of Housing and Urban Development and various state agencies, all prohibit discrimination in housing on the basis of race or color, national origin, religion, sex, familial status, disability, and, in some states or locales, financial capability, sexual orientation, gender identity, or military status.

Antitrust and Competition Laws. Our business is subject to antitrust and competition laws in the various jurisdictions where we operate, including the Sherman Antitrust Act, the Federal Trade Commission Act and the Clayton Act and related federal and state antitrust and competition laws in the U.S. The penalties for violating antitrust and competition laws can be severe. These laws and regulations generally prohibit competitors from fixing prices, boycotting competitors, dividing markets, or engaging in other conduct that unreasonably restrains competition. Our company owned and franchised brokerages (and independent sales agents affiliated with such brokerages) are also required to comply with state and local laws related to dual agency (such as where the same brokerage represents both the buyer and seller of a home) and increased regulation of dual agency representation may restrict or reduce the ability of impacted brokerages to participate in certain real estate transactions.

Regulation of Title Insurance and Settlement Services. Nearly all states license and regulate title agencies/settlement service providers or certain employees and underwriters through their Departments of Insurance or other regulatory body. In many states, title insurance rates are either promulgated by the state or are required to be filed with each state by the agent or underwriter, and some states promulgate the split of title insurance premiums between the agent and underwriter. States sometimes unilaterally lower the insurance rates relative to loss experience and other relevant factors. States also require title agencies and title underwriters to meet certain minimum financial requirements for net worth and working capital. In addition, the insurance laws and regulations of Texas, the jurisdiction in which our title insurance underwriter subsidiary, Title Resources, is domiciled, generally provide that no person may acquire control, directly or indirectly, of a Texas domiciled insurer, unless the person has provided required information to, and the acquisition is approved or not

disapproved by, the Texas Department of Insurance. Generally, any person acquiring beneficial ownership of 10% or more of our voting securities would be presumed to have acquired indirect control of our title insurance underwriter subsidiary unless the Texas Department of Insurance, upon application, determines otherwise. Our insurance underwriter is also subject to a holding company act in its state of domicile, which regulates, among other matters, investment policies and the ability to pay dividends.

Certain states in which we operate have "controlled business" statutes which impose limitations on affiliations between providers of title and settlement services on the one hand, and real estate brokers, mortgage lenders and other real estate service providers on the other hand. We are aware of the states imposing such limits and monitor the others to ensure that if they implement such a limit that we will be prepared to comply with any such rule. "Controlled business" typically is defined as sources controlled by, or which control, directly or indirectly, the title insurer or agent. Pursuant to legislation enacted in the State of New York in late 2014 requiring the licensing of title agents, the New York Department of Insurance has issued regulations that provide that title agents with affiliated businesses must make a good faith effort to obtain and be open for title insurance business from all sources and not business only from affiliated persons, including actively competing in the marketplace. A company's failure to comply with such statutes could result in the payment of fines and penalties or the non-renewal of the Company's license to provide title and settlement services. We provide our services not only to our affiliates but also to third-party businesses in the geographic areas in which we operate. Accordingly, we manage our business in a manner to comply with any applicable "controlled business" statutes by ensuring that we generate sufficient business from sources we do not control. We have never been cited for failing to comply with a "controlled business" statute.

Regulation of the Mortgage Industry. We participate in the mortgage origination business through our 49.9% ownership of Guaranteed Rate Affinity. Private mortgage lenders operating in the U.S. are subject to comprehensive state and federal regulation and to significant oversight by government sponsored entities. Dodd-Frank endows the CFPB with rule making, examination and enforcement authority involving consumer financial products and services, including mortgage finance. The CFPB has issued a myriad of rules, including TILA-RESPA Integrated Disclosure rules, which impose significant obligations on Guaranteed Rate Affinity.

Cybersecurity and Data Privacy Regulations. To run our business, it is essential for us to store and transmit sensitive personal information about our customers, prospects, employees, independent agents, and relocation transferees in our systems and networks. At the same time, we are subject to numerous laws, regulations, and other requirements, domestically and globally, that require businesses like ours to protect the security of personal information, notify customers and other individuals about our privacy practices, and limit the use, disclosure, sale, or transfer of personal data. Regulators in the U.S. and abroad continue to enact comprehensive new laws or legislative reforms imposing significant privacy and cybersecurity restrictions. The result is that we are subject to increased regulatory scrutiny, additional contractual requirements from corporate customers, and heightened compliance costs. For example, in the U.S., we are required to comply with the Gramm-Leach-Bliley Act, which governs the disclosure and safeguarding of consumer financial information, as well as state statutes governing privacy and cybersecurity matters like the New York Department of Financial Services ("NYDFS") Cybersecurity Regulation, which went into effect in 2017, and the California Consumer Privacy Act ("CCPA"), which went into effect in 2020. The CCPA imposes new and comprehensive requirements on organizations that collect, sell and disclose personal information about California residents and employees. Other states, including New York and Massachusetts, are expected to implement their own privacy statutes in the near term.

Under the NYDFS cybersecurity regulation, regulated financial institutions, including Realogy Title Group, are required to establish a detailed cybersecurity program. Program requirements include corporate governance, incident planning, data management, system testing, vendor oversight, and regulator notification rules. Other state regulatory agencies have or are expected to enact similar requirements following the adoption of the Insurance Data Security Model Law by the National Association of Insurance Commissioners that is consistent with the New York regulation. For example, the South Carolina Insurance Data Security Act, effective January 1, 2019, is based on the Insurance Data Security Model Law and imposes new breach notification and information security requirements on insurers, agents, and other licensed entities authorized to operate under the state's insurance laws, including Realogy Title Group. Finally, our security systems and IT infrastructure may not adequately protect against all potential security breaches, cyber-attacks, or other unauthorized access to personal information. Third parties, including vendors or suppliers that provide essential services for our global operations, could also be a source of security risk to us if they experience a failure of their own security systems and infrastructure. Any significant violations of privacy and cybersecurity could result in the loss of new or existing business, litigation, regulatory investigations, the payment of fines, damages, and penalties and damage to our reputation, which could have a material adverse effect on our business, financial condition, and results of operations.

In addition, the European Union's General Data Protection Regulation ("GDPR"), which became effective in May 2018, conferred new and significant privacy rights on individuals (including employees and independent agents), and materially increased penalties for violations.

Item 1A. Risk Factors.

You should carefully consider each of the following risk factors and all of the other information set forth in this Annual Report. The risk factors generally have been separated into three primary groups: (1) risks relating to our business; (2) risks relating to our indebtedness; and (3) risks relating to an investment in our common stock. Based on the information currently known to us, we believe that the following information identifies the most significant risk factors affecting our Company and our common stock. However, the risks and uncertainties are not limited to those set forth in the risk factors described below. In addition, past financial performance may not be a reliable indicator of future performance and historical trends should not be used to anticipate results or trends in future periods.

Risks Related to Our Business

Macroeconomic Conditions

The residential real estate market is cyclical and we are negatively impacted by downturns and constraints in this market.

The residential real estate market tends to be cyclical and typically is affected by changes in general economic and residential real estate conditions which are beyond our control. The U.S. residential real estate industry was in a significant and lengthy downturn from the second half of 2005 through 2011. Beginning in 2012, the U.S. residential real estate industry began a recovery. However, according to NAR data, in 2018 the industry saw no growth in homesale transaction volume and while there was 3% growth in homesale transaction volume in 2019, all of such growth was attributable to increases in average homesale price as homesale transactions remained flat. We cannot predict whether the housing market will continue to improve. If the residential real estate market or the economy as a whole does not continue to improve or worsens, our business, financial condition and liquidity may be materially adversely affected, including our ability to access capital and grow our business.

Any of the following could negatively impact the housing market and have a material adverse effect on our business by causing a lack of improvement or a decline in the number of homesales and/or stagnant or declining home prices which in turn, could adversely affect our revenues and profitability:

- a decline or lack of improvement in the number of homesales;
- insufficient or excessive regional home inventory levels;
- stagnant and/or declining home prices;
- a decrease in the affordability of homes;
- high levels of unemployment and/or continued slow wage growth;
- a period of slow economic growth or recessionary conditions;
- increasing mortgage rates and down payment requirements and/or constraints on the availability of mortgage financing;
- decelerated or lack of building of new housing for homesales, increased building of new rental properties, or irregular timing of new development closings leading to lower unit sales at Realogy Brokerage Group;
- a low level of consumer confidence in the economy and/or the residential real estate market due to macroeconomic events domestically or internationally;
- instability of financial institutions;
- legislative or regulatory changes (including changes in regulatory interpretations or regulatory practices) that would adversely impact the residential real estate market;
- federal and/or state income tax changes and other tax reform affecting real estate and/or real estate transactions, including, in particular, the impact of the Tax Cuts and Jobs Act of 2017 (the "2017 Tax Act") as well as certain state and local tax reform, such as the "mansion tax" in New York City;
- other legislative, tax or regulatory changes (including changes in regulatory interpretations or enforcement practices) that would adversely impact the residential real estate market, including changes relating to the Real Estate Settlement Procedures Act ("RESPA"), potential reforms of Fannie Mae and Freddie Mac, immigration

- reform, and further potential federal, state or local tax code reform (including, for example, the proposed "pied-a-terre tax" in New York City);
- an increase in potential homebuyers with low credit ratings or inability to afford down payments;
- renewed high levels of foreclosure activity;
- the inability or unwillingness of homeowners to enter into homesale transactions such as first-time homebuyer concerns about investing in a home and move-up buyers having limited or negative equity in their existing homes or other factors, including difficult mortgage underwriting standards, attractive rates on existing mortgages and the lack of availability in their market;
- homeowners retaining their homes for longer periods of time;
- decreasing home ownership rates, declining demand for real estate and changing social attitudes toward home ownership including as compared to renting, such as among potential first-time homebuyers who may delay, or decide not to, purchase a home, as well as existing homeowners who may decide to sell their home and rent their next home;
- a deterioration in other economic factors that particularly impact the residential real estate market and the business segments in which we operate whether broadly or by geography and price segments;
- geopolitical and economic instability; and/or
- natural disasters, such as hurricanes, earthquakes, wildfires, mudslides as well as public health crises, such as pandemics or epidemics and other events that disrupt local or regional real estate markets.

In addition, homesale inventory levels for the existing home market have been declining over the past several years due to strong demand, in particular in certain highly sought-after geographies and at lower price points. According to NAR, the inventory of existing homes for sale in the U.S. was 1.5 million as of December 2018 and has decreased to 1.4 million at the end of December 2019. As a result, inventory has decreased from 3.7 months of supply in December 2018 to 3.0 months as of December 2019. These levels continue to be significantly below the 10-year average of 5.4 months, the 15-year average of 6.1 months and the 25-year average of 5.7 months. If interest rates were to rise, homebuilders may determine to discontinue or delay new projects, which could further contribute to inventory constraints. In addition, real estate industry models that purchase homes for rental or corporate use (rather than immediate resale) can put additional pressure on available housing inventory. While a continuation of low inventory levels may contribute to favorable demand conditions and improved homesale price growth, insufficient inventory levels have a negative impact on homesale volume growth and can contribute to a reduction in housing affordability, which can result in some potential home buyers deferring entry into the residential real estate market. Ongoing constraints on home inventory levels may continue to have an adverse impact on the number of homesale transactions closed by Realogy Brokerage and Realogy Franchise Group, which may limit our ability to grow revenue.

Adverse developments in general business and economic conditions could have a material adverse effect on our financial condition and our results of operations.

Our business and operations and those of our franchisees are sensitive to general business and economic conditions in the U.S. and worldwide. These conditions include short-term and long-term interest rates, inflation, fluctuations in debt and equity capital markets, levels of unemployment, consumer confidence, rate of economic growth or contraction, and the general condition of the U.S. and the world economy.

The residential real estate market also depends upon the strength of financial institutions, which are sensitive to changes in the general macroeconomic environment. Lack of available credit or lack of confidence in the financial sector could materially and adversely affect our business, financial condition and results of operations.

A host of factors beyond our control could cause fluctuations in these conditions, including the political environment, disruptions in a major geoeconomic region, or equity or commodity markets and acts or threats of war or terrorism which could have a material adverse effect on our financial condition and our results of operations. For example, the United Kingdom's withdrawal from the European Union (referred to as Brexit) could cause significant volatility and uncertainty in global stock markets.

Monetary policies of the federal government and its agencies may have a material impact on our operations.

Our business is significantly affected by the monetary policies of the federal government and its agencies. We are particularly affected by the policies of the Federal Reserve Board. These policies regulates the supply of money and credit

in the U.S. and impact the real estate market through their effect on interest rates as well as the cost of our interest-bearing liabilities.

Increases in mortgage rates adversely impact housing affordability and we have been and could again be negatively impacted by a rising interest rate environment. For example, a rise in mortgage rates could result in decreased homesale transaction volume if potential home sellers choose to stay with their lower mortgage rate rather than sell their home and pay a higher mortgage rate with the purchase of another home or, similarly, if potential home buyers choose to rent rather than pay higher mortgage rates. Increases in mortgage rates could also reduce the number of homesale refinancing transactions, which could materially adversely impact our earnings from our mortgage origination joint venture as well as the revenue stream of our title and settlement services segment. Changes in the Federal Reserve Board's policies, the interest rate environment, and the mortgage market are beyond our control, are difficult to predict, and could have a material adverse effect on our business, results of operations and financial condition.

The passage of the 2017 Tax Act may have a negative impact on homeownership rates and homesale transaction activity, which could adversely affect our profitability.

The 2017 Tax Act, which became law on December 22, 2017, includes provisions that, among other things:

- cap the aggregate amount of property, sales and state and local income tax deductions at \$10,000; and
- reduce the principal amount to which the home mortgage interest deduction will be available to potentially impacted U.S. taxpayers who enter into a mortgage on or after December 15, 2017 from \$1,000,000 to \$750,000, while entirely suspending interest deductibility of home equity loans.

These changes affecting individual taxpayers will cease to apply after December 31, 2025 unless further extended by future legislation. Certain of these provisions of the 2017 Tax Act, alone or in combination, directly impact traditional incentives associated with home ownership and may reduce the financial distinction between renting and owning a home for many households who are U.S. residents for federal income tax purposes at certain income levels, which may have a negative impact on the national homeownership rate. In addition, certain existing homeowners may be less likely to purchase a larger or more expensive home or refinance a mortgage given the reduced mortgage interest deductibility opportunities (from \$1,000,000 to \$750,000 on mortgages that are not grandfathered) and lessened property tax deductibility. The reduction in state and local tax deductibility impacts all households, particularly in states with higher taxes. This may adversely impact the mobility of such state residents, make such states less attractive to home buyers, or adversely impact home values in such geographies, although it may result in some shift in the value of homes from high tax states (where the deductibility of such taxes may be limited beyond previous levels) to those states with low or no state income tax. The effects of the 2017 Tax Act on average homesale prices may be more impactful in states where average home prices, state and local incomes taxes, and/or property taxes are high, including California and the New York tri-state area, where our company owned brokerage and our franchisee businesses maintain a material presence.

Reductions in the number of homesale transactions or average homesale price could have a material adverse effect on our revenues and profitability.

Meaningful decreases in the average brokerage commission rate could materially adversely affect our financial results.

There are a variety of factors that could contribute to declines in the average broker commission rate, including regulation, an increase in the popularity of discount brokers or other utilization of flat fees, rebates or lower commission rates on transactions, the rise of certain other competitive brokerage models as well as other competitive factors.

The average broker commission rate for a homesale transaction is a key driver for both Realogy Brokerage and Realogy Franchise Groups. Since 2014, we have experienced approximately a one basis point decline in the average broker commission rate each year. Meaningful reductions in the average broker commission rate could materially adversely affect our revenues, earnings and financial results.

Strategic and Operational

Our ability to grow earnings is significantly dependent upon our and our franchisees' ability to attract and retain independent sales agents and on our ability to attract and retain franchisees.

The core of our integrated business strategy is aimed at significantly growing the base of productive independent sales agents at our company owned and franchisee brokerages and providing them with compelling data and technology products

and services to make them more productive and their businesses more profitable. In addition, in order to grow earnings we need to enter into franchise agreements with new franchisees and renew existing franchise agreements without materially reducing contractual royalty rates or materially increasing the amount and prevalence of sales incentives.

If we are unable to successfully grow the base of productive independent sales agents at our company owned and franchisee brokerages (or if we or they fail to replace departing successful sales agents with similarly productive sales agents) or grow our base of franchisees, we may be unable to maintain or grow revenues or earnings and our results of operations may be materially adversely affected.

A variety of factors could impact our ability to execute on this strategy and grow revenue and earnings, including, but not limited to:

- intense competition from other brokerages, the iBuying model, as well as other types of companies employing technologies or alternative models intended to disrupt historical real estate brokerage models, which among other things, could continue to put upward pressure on our commission expense;
- our ability to react quickly to changing market dynamics, including with respect to our value proposition to both new and existing independent sales agents and franchisees;
- our ability to develop and deliver compelling data and technology products and services to independent sales agents and franchisees, adopt and implement commission plans (or pricing model structures) that are attractive to such agents (or such franchisees);
- worsening macroeconomic conditions, including a further slowdown in the residential real estate market; and
- our ability to attract and retain talent to drive our strategy.

In 2019, we launched or expanded multiple programs designed to enhance our value proposition to independent sales agents and franchisees, including marketing and technology programs as well as a new pricing model structure for one brand and a new franchise brand. Agents and franchisees may not find these programs compelling and if we fail to successfully enhance our value proposition, including through new products and services and appealing franchise models and brands, we may fail to attract new or retain independent sales agents or franchisees, resulting in a reduction in commission income and royalty fees paid to us, which would have a material adverse affect on our results of operations. In addition, the continued execution of our strategy may also take longer or cost more than we currently anticipate and, even if we are successful in our recruitment and retention efforts, any additional revenue generated may not offset the related expenses we incur.

Our share of the commission income generated by homesale transactions may continue to shift to affiliated independent sales agents or erode due to market factors, which would further negatively affect our profitability.

As noted in the prior risk factor, our integrated business strategy is focused on the attraction and retention of independent sales agents to our company owned and franchised brokerage operations. Intense industry competition for agents combined with our strategic emphasis on the recruitment and retention of independent sales agents has and is expected to continue to put upward pressure on our commission expense, which has and could continue to negatively impact our profitability. Other market factors, including the listing aggregator concentration and market power, could further erode our share of commission income.

If independent sales agents affiliated with our company owned brokerages are paid a higher proportion of the commissions earned on a homesale transaction or the level of commission income we receive from a homesale transaction is otherwise reduced, the operating margins of our company owned residential brokerages could continue to be adversely affected. Our franchisees face similar risks and continued downward pressure on the commission income recognized by our franchisees could negatively impact their view of our value proposition and we may fail to attract new franchisees, expiring franchisees may not renew their agreements with us, or we may be required to offer reduced royalty fee arrangements to new and existing franchisees, any of which would result in a further reduction in royalty fees paid to us.

Our company owned brokerage operations are subject to geographic and high-end real estate market risks, which could adversely affect our revenues and profitability.

Realogy Brokerage Group owns real estate brokerage offices located in and around large U.S. metropolitan areas in the U.S. where competition for independent sales agents and independent sales agent teams is particularly intense. Local and regional economic conditions in these locations could differ materially from prevailing conditions in other parts of the country. For the year ended December 31, 2019, Realogy Brokerage Group realized approximately 25% of its revenues from California, 22% from the New York metropolitan area and 10% from Florida, which in the aggregate totals

approximately 57% of its revenues. A downturn in the residential real estate market or economic conditions that is concentrated in these regions, or in other geographic concentration areas for us, could result in a decline in Realogy Brokerage Group's total gross commission income and profitability disproportionate to the downturn experienced throughout the U.S. and could have a material adverse effect on us.

The effects of the 2017 Tax Act on average homesale prices may also be more impactful in states where average home prices, state and local incomes taxes, and/or property taxes are high, including California and the New York tri-state area. In addition, given the significant geographic overlap of our title and settlement services business with our company owned brokerage offices, such regional declines affecting our company owned brokerage operations could have a disproportionate adverse effect on our title and settlement services and mortgage origination business as well. For example, negative homesale transaction growth in 2018 and 2019 in California and New York City negatively impacted the operating results at both Realogy Brokerage Group and Realogy Title Group.

Realogy Brokerage Group has a significant concentration of transactions at the higher end of the U.S. real estate market and in high-tax states. A shift in Realogy Brokerage Group's mix of property transactions from the high range to lower and middle range homes would adversely affect the average price of Realogy Brokerage Group's closed homesales. Such a shift, absent an increase in transactions, would have an adverse effect on our operating results. Due to Realogy Brokerage Group's concentration in high-end real estate, its business may also be adversely impacted by capital controls imposed by foreign governments that restrict the amount of capital individual citizens may legally transfer out of their countries. In addition, Realogy Brokerage Group continues to face heightened competition for both homesale transactions and high performing independent sales agents because of its prominent position in the higher end housing markets.

Moreover, Realogy Brokerage Group also has relationships with developers, primarily in major cities, to provide marketing and brokerage services in new developments. The irregular volume and timing of new development closings may contribute to uneven financial results and deceleration in the building of new housing may result in lower unit sales in the new development market, which has had and could continue to have a material adverse effect on the revenue generated by Realogy Brokerage Group and our profitability.

We may not successfully develop or procure technology that supports our strategic initiatives aimed at the recruitment and retention of productive independent sales agents and franchisees, which could adversely affect our results of operations.

Our future success depends in part on our ability to continuously develop and improve our technology products and services or procure such technology, in particular for our company owned and franchisee real estate brokerages, affiliated independent sales agents and their customers as well as for our other segments. A strong technology value proposition is critical to the ability of Realogy Brokerage Group to recruit and retain independent sales agents and to the ability of Realogy Franchise Group to enter into new or renew existing franchise agreements.

We have expended and expect to continue to expend substantial time, capital, and other resources to identify the needs of our company owned brokerages, franchisees, independent sales agents and their customers and to develop technology and service offerings to meet those needs. In addition, we have made and may continue to make strategic investments in companies developing technologies that support our strategy and we may not realize the anticipated benefits from these investments and such technologies may not become available to us or may become available to our competitors.

We may incur unforeseen expenses in the development of enhancements to technology products and services, or may experience competitive delays in introducing new technologies as quickly as we would like. In addition, the increasingly competitive industry for technology talent may impact our ability to attract and retain employees involved in developing our technology products and services. Furthermore, the investment and pace of technology development continues to accelerate across the industry, creating risk in the relative timing and attractiveness of our technology products and services, and there can be no assurance that affiliated franchisees, independent sales agents in our franchise system (including those affiliated with our company owned brokerages), or customers will choose to use the technology products and services we may develop or that affiliated agents or franchisees will find such products and services compelling.

We are now building our agent- and franchisee-focused technology products with an open architecture in order to selectively enable qualified third-party vendors and products to access and interface with our products. In addition, we recently engaged with a strategic third-party partner to develop the next generation of certain key brand, broker and agent tools, including our customer relationship management product. We may not be able to accomplish the continued evolution of our technology offerings on a timely basis and there can be no assurance that our strategic partner or third parties utilizing our open architecture will integrate with our solutions or create tools that meet the changing needs and expectations of

agents and franchisees in a timely or effective manner, or at all. Any of the foregoing could adversely affect our value proposition to affiliated agents and franchisees and the productivity of independent sales agents, which in turn could adversely affect our results of operations.

Competition in the residential real estate business is intense and has and could continue to have a negative impact on our homesale transaction volume and market share and put upward pressure on the average share of commissions earned by independent sales agents, any of which has and could continue to adversely affect our financial performance.

We generally face intense competition in the residential real estate services business. Due to competitive factors, we estimate that our market share in 2019 decreased year-over-year to approximately 15.3% compared to 16.1% in 2018.

Some competitive risks are shared among our business units, while others are specific to a business unit. For example, both the Company and our franchisees compete for consumer business as well as for independent sales agents with national and regional independent real estate brokerages and franchisors and discount and limited service brokerages as well as with franchisees of our brands. The recruitment and retention of independent sales agents has been and may continue to be further complicated by competitive models that do not prioritize traditional business objectives. For example, we believe that certain owned-brokerage competitors have investors that have historically allowed the pursuit of increases in market share over profitability, which exacerbates competition for independent sales agents and pressure on the share of commission income received by the agent, creating challenges to both our company owned brokerages and our franchisee's margins and profitability. Whether and the extent to which this pattern will continue is not yet certain.

We are faced with the following related risks:

Our ability to succeed both through our company owned brokerages and as a franchisor is largely dependent on our and our franchisees' ability to attract and retain independent sales agents.

The successful recruitment and retention of independent sales agents and independent sales agent teams are critical to the business and financial results of a brokerage—whether or not it is affiliated with a franchisor. Most of a brokerage's real estate listings are sourced through the sphere of influence of its independent sales agents, notwithstanding the growing influence of internet-generated leads. Competition for independent sales agents in our industry is high and has intensified particularly with respect to more productive independent sales agents and in the densely populated metropolitan areas in which we operate.

Specifically, the intensity of competition for the affiliation of independent sales agents negatively impacted recruitment and retention efforts in 2019 at both Realogy Brokerage and Realogy Franchise Groups. In 2019, these competitive factors drove a loss in our market share (compared to 2018), contributed to the decline in homesale transaction volume at Realogy Brokerage and Realogy Franchise Group and adversely impacted our financial results.

The successful recruitment and retention of independent sales agents is influenced by many factors, including remuneration (such as sales commission percentage and other financial incentives paid to independent sales agents), other expenses borne by independent sales agents, leads or business opportunities generated for independent sales agents from the brokerage, independent sales agents' perception of the value of the broker's brand affiliation, technology and data offerings as well as marketing and advertising efforts by the brokerage or franchisor, the quality of the office manager, staff and fellow independent sales agents with whom they collaborate daily, as well as continuing professional education, and other services provided by the brokerage or franchisor.

We believe that a variety of factors in recent years have negatively impacted the recruitment and retention of independent sales agents in the industry generally and have put upward pressure on the average share of commissions earned by affiliated independent sales agents, including increasing competition, such as from brokerages that offer a greater share of commission income to independent sales agents and/or other compensation such as up-front bonuses and equity, changes in the spending patterns of independent sales agents (as more agents purchase services from third parties outside of their affiliated broker), and growth in independent sales agent teams.

If we or our franchisees fail to attract and retain successful independent sales agents or we or they fail to replace departing successful independent sales agents with similarly productive independent sales agents, the gross commission income generated by our company owned brokerages and franchises may continue to decrease, resulting in a reduction in our profitability. In addition, competition for sales agents has and could further reduce the commission amounts retained by the Company and our affiliated franchisees after giving effect to the split with independent sales agents, and increase the

amounts that we spend on marketing and the development of products and services that we believe will appeal to such agents.

Some of the firms competing for sales agents use different commission plans, which may be appealing to certain sales agents, and we and our franchisees may be unable to adopt and implement alternative commission plans in a profitable and effective manner, which may hinder our ability to attract and retain those agents.

In most of their markets, Realogy Brokerage Group offers affiliated independent sales agents and sales agent teams a choice between a traditional graduated commission model or a two-tiered commission model, both of which emphasize our value proposition. The traditional graduated commission model has experienced declines in market share over the past several years. Increasingly, independent sales agents have affiliated with brokerages that offer a different mix of services to the agent, allowing the independent sales agent to select the services that they believe allow them to retain a greater percentage of the commission and purchase services from other vendors as needed. If this trend continues and we and our franchisees are unable to adopt and implement alternative commission plans that appeal to a broad base of independent sales agents in a profitable and effective manner, we and our franchisees may fail to attract and retain independent sales agents, which may have a material adverse impact on our ability to grow earnings.

The real estate brokerage industry has minimal barriers to entry for new participants, including traditional participants as well as a growing number of companies that are competing in non-traditional ways for a portion of the gross commission income generated by homesale transactions.

The significant size of the U.S. real estate market, in particular the addressable market of commission revenues, has continued to attract outside capital investment in traditional and disruptive competitors that seek to access a portion of this market.

There are also market participants who differentiate themselves by offering consumers flat fees, rebates or lower commission rates on transactions (often coupled with fewer services). Although such competitors have yet to have a material impact on overall brokerage commission rates, this could change in the future if they use greater discounts as a means to increase their market share or improve their value proposition. A decrease in the average brokerage commission rate may adversely affect our revenues.

While real estate brokers using historical real estate brokerage models typically compete for business primarily on the basis of services offered, reputation, utilization of technology, personal contacts and brokerage commission, participants pursuing non-traditional methods of marketing real estate may compete in other ways, including companies that employ technologies intended to disrupt historical real estate brokerage models or minimize or eliminate the role brokers and sales agents perform in the homesale transaction process.

A growing number of companies are competing in non-traditional ways for a portion of the gross commission income generated by homesale transactions. For example, listing aggregators and other web-based real estate service providers compete for our company owned brokerage business by establishing relationships with independent sales agents and/or buyers and sellers of homes and actions by such listing aggregators have and may continue to put pressure on our and other industry participants' revenues and profitability. Other business models that have emerged in recent years consist of companies (including certain listing aggregators) that leverage capital to purchase homes directly from sellers, commonly referred to as iBuying. If iBuying gains market share in the residential real estate industry, it could disintermediate real estate brokers and independent sales agents from buyers and sellers of homes either entirely or by reducing brokerage commissions that may be earned on those transactions. RealSure, the Company's collaboration with Home Partners of America, shares some traits of the iBuying model, but is intended to keep the independent sales agent at the center of the transaction; however, there can be no assurance that the program will be successful or that it will operate as intended.

As a real estate brokerage franchisor, we are also subject to risks unique to franchising, including:

To remain competitive in the sale of franchises and to retain our existing franchisees, we may have to reduce the fees we charge our franchisees, increase the amount of other incentives we issue or take other actions or employ other models to be competitive with fees charged by competitors.

Competition among the national real estate brokerage brand franchisors to grow their franchise systems is intense. Our products are our brand names and the support services we provide to our franchisees and our ability to grow our franchisor business is dependent on the operational and financial success of our franchisees, including the ability of our franchisees to successfully navigate the challenges noted above.

The value provided by a franchisor encompasses many different aspects including the quality of the brand, tools, technology, marketing and other services, the availability of financing provided to the franchisees, and the fees the franchisees must pay. Franchisee fees can be structured in numerous ways and can include flat royalty and marketing fees, capped royalty fees and discounted royalty and marketing fees. We launched a capped fee model at one of our brands in 2019 as substantially all of our franchises are structured using a flat fee model and we have faced increasing competition from franchisors utilizing alternative models. In addition, we launched Corcoran® as a new franchise brand. There can be no assurance that the capped fee model or the new franchise brand will succeed and we may not realize benefits from these investments. If we fail to successfully offer franchisees compelling value propositions, including through compelling products and services as well as through appealing franchise models and brands, we may fail to attract new franchisees and expiring franchisees may not renew their agreements with us, resulting in a reduction in royalty fees paid to us.

Upon the expiration of a franchise agreement, a franchisee may choose to franchise with one of our competitors or operate as an independent broker. Competitors may offer franchisees whose franchise agreements are expiring or prospective franchisees products and services similar to ours at rates that are lower than we charge. We also face the risk that currently unaffiliated brokers may not enter into franchise agreements with us because they believe they can compete effectively in the market without the need to license a brand of a franchisor and receive services offered by a franchisor or because they may believe that their business will be more attractive to a prospective purchaser without the existence of a franchise relationship. Regional and local franchisors as well as franchisors offering different franchise models or services provide additional competitive pressure. To effectively compete with competitor franchisors and to recruit new franchisees, we may have to take actions that would result in increased costs to us (such as increased sales incentives to franchisees) or decreased royalty payments to us (such as a reduction in the fees we charge our franchisees), which may have a material adverse effect on our ability to grow earnings. In addition, our continued implementation of strategic initiatives intended to add new franchisees and grow our agent base through the introduction of new franchisee fee models and brands, while intended to capture additional market share with brokers unaffiliated with our brands, could result in greater intra-brand competition among our brands.

Realty Title Group also faces competitive risks:

The title and settlement services business is highly competitive and fragmented.

The number and size of competing companies vary in the different areas in which we conduct business. In certain parts of the country we compete with small title agents and attorneys while in other parts of the country our competition is the larger title underwriters and national vendor management companies. In addition, we compete with the various brands of national competitors.

Listing aggregator concentration and market power creates, and is expected to continue to create, disruption in the residential real estate brokerage industry, which may have a material adverse effect on our results of operations and financial condition.

The concentration and market power of the top listing aggregators allow them to monetize their platforms by a variety of actions, including expanding into the brokerage business, charging significant referral fees, charging listing and display fees, diluting the relationship between agents and brokers (and between agents and the consumer), tying referrals to use of their products, consolidating and leveraging data, and engaging in preferential or exclusionary practices to favor or disfavor other industry participants. These actions divert and reduce the earnings of other industry participants, including our company owned and franchised brokerages.

One aggregator has recently introduced an iBuying offering to consumers and if this listing aggregator or another aggregator is successful in gaining market share with such offering, it could control significant industry inventory and an increasing portion of agent referrals, including the ability to direct referrals to agents and brokers that share revenue with them.

Aggregators could intensify their current business tactics or introduce new programs that could be materially disadvantageous to our business and other brokerage participants in the industry, including:

- broadening their programs that charge brokerages and their affiliated sales agents fees including, referral, listing, display, advertising and related fees;
- increasing the fees associated with such programs;
- introducing new fees for new or existing services;

- setting up competing brokerages;
- not including our or our franchisees' listings on their websites;
- reducing listing fees they pay to industry participants;
- controlling significant inventory and agent referrals;
- utilizing its aggregated data for competitive advantage;
- disintermediating our relationship with affiliated franchisees and independent sales agents; and/or
- disintermediating the relationship between the independent sales agent and the buyers and sellers of homes.

Such tactics could further increase pressures on the profitability of our company owned and franchised brokerages and affiliated independent sales agents, reduce our franchisor service revenue and dilute our relationships with our franchisees and our and our franchisees' relationships with affiliated independent sales agents and buyers and sellers of homes.

We currently receive meaningful listing fees for our provision of real estate listings and such fees help defray expenses for lead generation and other programs to benefit affiliated agents and franchisees. We do not expect this revenue stream to extend beyond the first quarter of 2022 because of changes in industry practices around syndication and distribution of listings. The loss of this revenue, which could occur prior to 2022, could have a meaningful adverse effect on our revenues and earnings.

The discontinuation of a long-term, significant affinity client program in 2019 is expected to result in a material decline in earnings at Realogy Leads Group and a comparable dollar reduction in earnings for Realogy Brokerage Group and Realogy Franchise Group.

Our affinity revenues are highly concentrated. In September 2019, USAA, a long-time affinity client, ceased new enrollments under its affinity program with us. USAA was our largest affinity client and in 2019, referrals generated by the USAA affinity program represented a significant portion of the 78,700 total homesale transactions closed by our company owned and franchised brokerages from the Realogy Broker Network. We expect that the discontinuation of the USAA business will result in (1) a material decline in earnings at Realogy Leads Group and (2) a comparable dollar reduction in earnings in the aggregate for Realogy Brokerage Group and Realogy Franchise Group as a result of the loss of the referrals from the USAA affinity program.

If our next largest affinity client ceases or reduces volume under their contract with us, our revenues and profitability would be materially adversely affected.

Contracts with an affinity client are generally terminable at any time at the option of the client, do not require such client to maintain any level of business with us and are non-exclusive. Our affinity revenues are highly concentrated.

If our next largest affinity client ceased or reduced volume under their contract with us, our revenues (including at Realogy Leads, Franchise, Brokerage and Title Groups) and profitability would be materially adversely affected.

We may not be able to grow our company-directed affinity programs and such programs may not generate a meaningful number of high-quality referrals.

A key component of our growth strategy is focused on providing affiliated independent sales agents with high-quality referrals. During 2019, we launched our first company-branded affinity program, Realogy Military Rewards, and announced the expected 2020 launch of an affinity program for AARP members. We expect that significant time and effort and meaningful investment will be required to increase awareness of and affinity member participation in new affinity programs and even if we are successful in these efforts, such programs may not generate a meaningful number of high-quality referrals.

Our financial results are affected by the operating results of our franchisees.

Realogy Franchise Group receives revenue in the form of royalties, which are based on a percentage of gross commission income earned by our franchisees. Accordingly, the financial results of Realogy Franchise Group are dependent upon the operational and financial success of our franchisees. If industry trends or economic conditions worsen or do not improve or if one or more of our top performing franchisees become less competitive or leaves our franchise system, our franchisees' financial results may worsen and our royalty revenues may decline, which could have a material adverse effect on our revenues and profitability. In addition, we may have to increase our bad debt and note reserves. We may also have to terminate franchisees due to non-payment.

Consolidation among our top 250 franchisees may cause our royalty revenue to grow at a slower pace than homesale transaction volume.

Although during 2019, none of our franchisees (other than Realogy Brokerage Group) generated more than 1% of the total revenue of our real estate franchise business, a significant majority of this segment's revenue is generated from our top 250 franchisees, which have grown faster than our other franchisees through organic growth and market consolidation in recent years. If the amount of gross commission income generated by our top 250 franchisees continue to grow at a quicker pace relative to our other franchisees, we would expect our royalty revenue to continue to increase, but at a slower pace than homesale transaction volume due to increased volume incentives and other incentives earned by such franchisees, both of which directly impact our royalty revenue.

If a meaningful number of our franchisees do not renew their franchisee agreements with us, our revenues and profitability may be materially adversely affected.

In addition, our franchisees face the same market pressures generally facing the industry (such as margin compression) and may seek lower royalty rates or higher incentives from us. If franchisees, in particular multiple top 250 franchisees, fail to renew their franchise agreements (or otherwise leave our franchise system), or if we induce franchisees to renew these agreements through lower royalty rates or higher incentives, then our royalty revenues may decrease, and profitability may be lower than in the past. These risks and the materiality of the potential impact on our revenues and profitability are pronounced in years when a significant number of franchise agreements, which typically have an initial ten year term that may be extended for a shorter term, are expiring.

Negligence or intentional actions of our franchisees and their independent sales agents could harm our business.

Our franchisees are independent business operators and we do not exercise control over their day-to-day operations. Our franchisees may not successfully operate a real estate brokerage business in a manner consistent with industry standards or may not affiliate with effective independent sales agents or employees. If our franchisees or their independent sales agents were to engage in negligent or intentional misconduct or provide diminished quality of service to customers, our image and reputation may suffer materially and adversely affect our results of operations. Negligent or improper actions involving our franchisees, including regarding their relationships with independent sales agents, clients and employees, may also lead to direct claims against us based on theories of vicarious liability, negligence, joint operations and joint employer liability which, if determined adversely, could increase costs, negatively impact the business prospects of our franchisees and subject us to incremental liability for their actions.

Additionally, franchisees and their independent sales agents may engage or be accused of engaging in unlawful or tortious acts, such as violating the anti-discrimination requirements of the Fair Housing Act or failing to make necessary disclosures under federal and state law. Such acts or the accusation of such acts could harm our brands' image, reputation and goodwill or compromise our relocation business relationships with clients.

The activities of franchisees and master franchisees outside of the U.S. are more difficult and more expensive to monitor and improper activities or mismanagement may be more difficult to detect. Negligent or improper activities involving our franchisees and master franchisees, including regarding their relationships with independent sales agents, clients and employees, may result in reputational damage to us and may lead to direct claims against us based on theories of vicarious liability, negligence, joint operations and joint employer liability which, if determined adversely, could increase costs, negatively impact the business prospects of our franchisees and subject us to incremental liability for their actions.

Franchisees, as independent business operators, may from time to time disagree with us and our strategies regarding the business or our interpretation of our respective rights and obligations under the franchise agreement. To the extent we have such disputes, the attention of our management and our franchisees will be diverted, which could have a material adverse effect on our business, financial condition, results of operations or cash flows.

Negligence or intentional actions of independent sales agents engaged by our company owned brokerages could materially and adversely affect our reputation and subject us to liability.

Our company owned brokerage operations rely on the performance of independent sales agents. If the independent sales agents were to provide lower quality services to our customers or engage in negligent or intentional misconduct, our image and reputation could be materially adversely affected. In addition, we could also be subject to litigation and regulatory claims arising out of their performance of brokerage services, which if adversely determined, could materially and adversely affect us.

We do not own two of our brands and significant difficulties in the business of the brand owners could negatively reflect on the brand and the brand value.

The Sotheby's International Realty® and Better Homes and Gardens® Real Estate brands are owned by the companies that founded these brands. Under separate long-term license agreements, we are the exclusive party licensed to run brokerage services in residential real estate under those brands, whether through our franchisees or our company owned operations. Our future operations and performance with respect to these brands requires the successful protection of those brands. Any significant difficulties in the business of the brand owners could negatively reflect on the brand and the brand value.

Several of our recent strategic initiatives are collaborations with third-party partners and we are reliant on third-party vendors to perform services on our behalf as well as key components of our business, which could have a material adverse effect on our business and results of operations.

We have increasingly entered into strategic collaborations with third parties to enhance our value proposition to independent sales agents and franchisees and other aspects of our business are performed on our behalf by third-party vendors and cover a wide variety of services. Our strategic partners and vendors may be in possession of personal information of our customers. In many instances, these third parties are in direct contact with our customers in order to deliver services on our behalf or to fulfill their role in the applicable collaboration. If our third-party partners or vendors were to provide diminished services to our customers or face cybersecurity breaches of their information technology systems, our image and reputation could be materially adversely affected. In addition, we could also be subject to litigation and regulatory claims arising out of the performance of our third-party suppliers and partners based on theories of breach of contract, vicarious liability, negligence or failure to comply with laws and regulations including those related to anti-bribery and anti-corruption, and those related to data protection and privacy, including the CCPA and GDPR.

In addition, many components of our business, including information technology, key operational processes (such as accounts payable, payroll, and travel and expense) and critical client systems, are provided or hosted by third parties. Moreover, we are now building our agent- and franchisee-focused technology products with an open architecture in order to selectively enable unaffiliated, qualified third-party vendors and products to access and interface with our products. The actions of our third-party vendors and unaffiliated third-party developers are beyond our control. In addition, we recently engaged with a strategic third-party partner to develop the next generation of certain key brand, broker and agent tools, including our customer relationship management product. If our vendors or third-party applications fail to perform as we expect, or if we fail to adequately monitor their performance, our operations and reputation could suffer. Depending on the function involved, vendor or third-party application failure or error may lead to increased costs, business disruption, processing inefficiencies, the loss of or damage to intellectual property or sensitive data through security breaches or otherwise, effects on financial reporting, loss of customers, litigation or remediation costs, or damage to our reputation. In addition, although we have a Vendor Code of Conduct, we may be subject to the consequences of fraud, bribery, or misconduct by employees of our vendors, which can result in significant financial or reputational harm. We face the same risks with respect to subcontractors that might be engaged by our third-party vendors and partners.

We are reliant upon information technology to operate our business and maintain our competitiveness.

Our ability to leverage our technology and data scale is critical to our long-term strategy. Our business, including our ability to attract employees and independent sales agents, increasingly depends upon the use of sophisticated information technologies and systems, including technology and systems (cloud solutions, mobile and otherwise) utilized for communications, marketing, productivity tools, training, lead generation, records of transactions, business records (employment, accounting, tax, etc.), procurement, call center operations and administrative systems. The operation of these technologies and systems is dependent upon third-party technologies, systems and services for which there are no assurances of continued or uninterrupted availability and support by the applicable third-party vendors on commercially reasonable terms. We also cannot assure that we will be able to continue to effectively operate and maintain our information technologies and systems. In addition, our information technologies and systems are expected to require refinements and enhancements on an ongoing basis, and we expect that advanced new technologies and systems will continue to be introduced. We may not be able to obtain such new technologies and systems, or to replace or introduce new technologies and systems as quickly as our competitors or in a cost-effective manner. Also, we may not achieve the benefits anticipated or required from any new technology or system, and we may not be able to devote financial resources to new technologies and systems in the future.

Tightened mortgage underwriting standards could continue to reduce homebuyers' ability to access the credit markets on reasonable terms.

More stringent mortgage underwriting standards or a reduction in the availability of alternative mortgage products could adversely affect the ability and willingness of prospective buyers to finance home purchases or to sell their existing homes. In addition, the combination of tightened mortgage underwriting standards with first-time homebuyers who have heavy debt and may be unable to satisfy down payment requirements may intensify first-time homebuyer concerns about investing in a home and impact their ability or willingness to enter into a homesale transaction. A decline in the number of homesale transactions due to the foregoing would adversely affect our operating results.

We may not realize the expected benefits from our mortgage origination joint venture or from other existing or future joint ventures.

Guaranteed Rate Affinity, our mortgage origination joint venture with Guaranteed Rate, has been and may again be materially adversely affected by changes affecting the mortgage industry, including but not limited to regulatory changes, increases in mortgage interest rates, high levels of competition and decreases in operating margins. In addition, our joint venture or our partner could face operational or liquidity risks, such as litigation or regulatory investigations that may arise. Any of the foregoing could have an adverse impact, which may be material, on our earnings and dividends from Guaranteed Rate Affinity. Operational, liquidity, regulatory, macroeconomic and competitive risks also apply to our other existing joint ventures and would likely apply to any joint venture we may enter into in the future.

In addition, when we hold a minority stake in a joint venture, we generally do not exercise control over day-to-day operations of the joint venture. For example, under the Operating Agreement governing Guaranteed Rate Affinity, we own a 49.9% equity interest and have certain governance rights related to the joint venture, but do not have control of the day-to-day operations of the joint venture. Rather, our joint venture partner, Guaranteed Rate, is the managing partner of the venture and may make decisions with respect to the day-to-day operation of the venture. Our current or future joint venture partners may make decisions which may harm the joint venture or be contrary to our best interests. Additionally, even if we hold a minority interest in any joint venture, improper actions by our joint venture partners may also lead to direct claims against us based on theories of vicarious liability, negligence, joint operations and joint employer liability, which, if determined adversely, could increase costs, negatively impact our reputation and subject us to liability for their actions. Any of the foregoing may have a material adverse effect on our results of operations or equity interest in the applicable joint venture.

We may be unable to achieve or maintain cost savings and other benefits from our restructuring activities.

We continue to engage in business optimization initiatives that focus on maximizing the efficiency and effectiveness of the cost structure of each of the Company's businesses. These actions are designed to improve client service levels across each of the business units while enhancing the Company's profitability and incremental margins. We may not be able to achieve these improvements in the efficiency and effectiveness of our operations. We also may incur greater costs than currently anticipated to achieve these savings and we may not be able to maintain these cost savings and other benefits in the future.

Failure to successfully complete or integrate acquisitions and joint ventures into our existing operations, or to complete or effectively manage divestitures or refranchisings, could adversely affect our business, financial condition or results of operations.

We regularly review our portfolio of businesses and evaluate potential acquisitions, joint ventures, divestitures, refranchisings and other strategic transactions. Potential issues associated with these activities could include, among other things: our ability to complete or effectively manage such transactions on terms commercially favorable to us or at all; our ability to realize the full extent of the expected returns, benefits, cost savings or synergies as a result of a transaction, within the anticipated time frame, or at all; and diversion of management's attention from day-to-day operations. In addition, the success of any future acquisition strategy we may pursue will depend upon our ability to fund such acquisitions given our total outstanding indebtedness, find suitable acquisition candidates on favorable terms and for target companies to find our acquisition proposals more favorable than those made by other competitors. If an acquisition or joint venture is not successfully completed or integrated into our existing operations, or if a divestiture or refranchising is not successfully completed or managed or does not result in the benefits or cost savings we expect, our business, financial condition or results of operations may be adversely affected.

Consummation of the planned sale of Cartus Relocation Services is subject to satisfaction or waiver of closing conditions and even if we successfully consummate the planned sale, we may fail to achieve the anticipated benefits of the transaction.

On November 7, 2019, we announced that we have entered into a Purchase and Sale Agreement (the “Purchase Agreement”) with a subsidiary of SIRVA, Inc. (“SIRVA”) under which we have agreed to sell Cartus Relocation Services. Completion of the planned sale is subject to certain closing conditions and there can be no assurance that all such conditions will be satisfied and that the planned sale will be successfully completed on a timely basis or at all. Failure to complete the sale could have a material adverse effect on our business, financial condition and results of operations.

In addition, the transaction may involve unexpected costs, liabilities or delays. While the transaction is pending, we will be subject to uncertainties that could adversely affect our business and results of operations, including the ability of Cartus Relocation Services to obtain or retain business, which in turn, could adversely impact the revenues and financial result of our other business units. We may also experience negative reactions from our relocation clients, stockholders, creditors, franchisees, vendors, and employees, among others.

While we will enter into a non-exclusive five-year broker services agreement with SIRVA in connection with the transaction, pursuant to which Realogy Leads Group could, at the discretion of SIRVA, continue to provide high-quality brokerage services via the Realogy Broker Network to relocation clients of SIRVA, there can be no assurances as to the number of referrals or underlying homesale transactions, if any, that company owned and affiliated franchisee brokerages participating in the network may handle for SIRVA's relocation business and the volume of such referrals and transactions could be materially lower than the historical level of activity generated from Cartus Relocation Services, which could have a negative impact on our earnings (including at Realogy Franchise, Brokerage and Title Groups) and profitability and could reduce the effectiveness of the role of the Realogy Broker Network in our recruitment and retention efforts for independent sales agents and franchisees.

The planned sale involves a number of additional risks, including among other things, certain indemnification risks and risks associated with the provision of transitional services. We have agreed to provide certain transition services to SIRVA, such as technological support and services. In addition, SIRVA will provide certain systems, services and leased space to us during the transition period. There are risks in providing and transitioning away from shared services, as they may incur unanticipated costs and liabilities, may divert our management's and employees' attention and may adversely affect our continuing business operations. This transition services agreement with SIRVA may also lead to disputes over rights to certain shared property and over the allocation of costs and revenues for products and operations in connection with the transition services agreement. In addition, there are increased opportunities for errors inherent in maintaining the books and records of two separate unrelated companies on a single enterprise resource planning system.

All of these factors could decrease the anticipated benefits of the transaction and could negatively impact our stock price and our business, financial condition and results of operations.

Regulatory and Legal

There may be adverse financial and operational consequences to us and our franchisees if independent sales agents are reclassified as employees.

The legal relationship between residential real estate brokers and licensed sales agents throughout most of the real estate industry historically has been that of independent contractor. Although we believe our classification practices are proper and consistent with the legal framework for such classification, our company owned brokerage operations could face substantial litigation or disputes in direct claims or regulatory procedures, including the risk of court or regulatory determinations that certain groups of real estate agents should be reclassified as employees and entitled to unpaid minimum wage, overtime, benefits, expense reimbursement and other employment obligations. Franchisees affiliated with one of the Company's brands face the same risks with respect to their affiliated independent sales agents. In addition, our franchise business may face similar claims as an alleged joint employer of an affiliated franchisee's independent sales agents.

Real estate laws generally permit brokers to engage sales agents as independent contractors. Federal and state agencies have their own rules and tests for classification of independent contractors as well as to determine whether employees meet exemptions from minimum wages and overtime laws. These tests consider many factors that also vary from state to state. The tests continue to evolve based on state case law decisions, regulations and legislative changes. There is active worker classification litigation in numerous jurisdictions against a variety of industries—including residential real estate brokerages

—where the plaintiffs seek to reclassify independent contractors as employees or to challenge the use of federal and state minimum wage and overtime exemptions.

Certain jurisdictions, including California where Realogy Brokerage Group generated approximately 25% of its revenue in 2019, have adopted or are considering adopting standards that are significantly more restrictive than those historically used in wage and hour cases. Under the newer test, an individual is considered an employee unless the hiring entity satisfies three specific criteria that focus on control of the performance of the work and whether the nature of the work involves a separate trade that is outside the usual course of the hiring entity's business.

In September 2019, California adopted legislation that codifies the newer test, but also provides an alternate worker classification test applicable to real estate professionals that is less stringent than the jurisdictional test. Since the enactment, there have been several challenges to the constitutionality and enforceability of the law as it applies to other industries, which may ultimately impact the less restrictive test currently applicable to real estate professionals.

Similar to California, a number of other states have separate statutory structures and existing case law that articulate different, less stringent standards for real estate agents operating as independent contractors. How these differing tests will be reconciled is presently unclear, and given the evolving nature of this issue, we are currently unable to estimate what impact, if any, this would have on our operations or financial results. For a summary of certain legal proceedings initiated in California involving the Company that include worker misclassification allegations, see Note 15, "Commitments and Contingencies", in this Annual Report.

Significant sales agent reclassification determinations in the absence of available exemptions from minimum wage or overtime laws, including damages and penalties for prior periods (if assessed), could be disruptive to our business, constrain our operations in certain jurisdictions and could have a material adverse effect on the operational and financial performance of the Company.

Cybersecurity incidents could disrupt business operations and result in the loss of critical and confidential information or litigation or claims arising from such incidents, any of which may adversely impact our reputation and results of operations.

We face growing risks and costs related to cybersecurity threats to our operations, our data and customer, franchisee, employee and independent sales agent data, including but not limited to:

- the failure or significant disruption of our operations from various causes, including human error, computer malware, ransomware, insecure software, zero-day threats, threats to or disruption of third-party vendors who provide critical services, or other events related to our critical information technologies and systems;
- the increasing level and sophistication of cybersecurity attacks, including distributed denial of service attacks, data theft, fraud or malicious acts on the part of trusted insiders, social engineering, or other unlawful tactics aimed at compromising the systems and data of our officers, employees, franchisees and company owned brokerage independent sales agents and their customers (including via systems not directly controlled by us, such as those maintained by our franchisees, affiliated independent sales agents, joint venture partners and third party service providers, including our third-party relocation service providers); and
- the reputational and financial risks associated with a loss of data or material data breach (including unauthorized access to our proprietary business information or personal information of our customers, employees and independent sales agents), the transmission of computer malware, or the diversion of homesale transaction closing funds.

Global cybersecurity threats can range from uncoordinated individual attempts to gain unauthorized access to information technology systems via viruses, worms, and other malicious software, to phishing, or to advanced and targeted hacking launched by individuals, organizations or nation states. These attacks may be directed at the Company, its employees, franchisees, third-party service providers, joint venture partners, and/or the independent sales agents of our franchisee and company owned brokerages and their customers. An attack, threat or breach of one system can travel to one or more other systems.

In the ordinary course of our business, we and our third-party service providers, our franchisee and company owned brokerage sales agents and our relocation business collect, store and transmit sensitive data, including our proprietary business information and intellectual property and that of our clients as well as personal information, sensitive financial

information and other confidential information of our employees, customers and the customers of our franchisee and company owned brokerage sales agents.

Additionally, we increasingly rely on third-party data processing, storage providers, and critical infrastructure services, including cloud solution providers. The secure processing, maintenance and transmission of this information are critical to our operations and with respect to information collected and stored by our third-party service providers, we are reliant upon their security procedures. A breach or attack affecting one of our third-party service providers or partners could harm our business even if we do not control the service that is attacked.

Moreover, the real estate industry is actively targeted by cyber-attacker attempts to conduct electronic fraudulent activity (such as phishing), security breaches and similar attacks directed at participants in real estate services transactions. These attacks, when successful, can result in fraud, including wire fraud related to the diversion of home sale transaction funds, or other harm, which could result in significant claims and reputational damage to us, our brands, our franchisees, and our independent sales agents and could also result in material increases in our operational costs. Further, these threats to our business may be wholly or partially beyond our control as our franchisees as well as our customers, franchisee and company owned brokerage independent sales agents and their customers and third-party service providers may use e-mail, computers, smartphones and other devices and systems that are outside of our security control environment. In addition, real estate transactions involve the transmission of funds by the buyers and sellers of real estate and consumers or other service providers selected by the consumer may be the subject of direct cyber-attacks that result in the fraudulent diversion of funds, notwithstanding efforts we have taken to educate consumers with respect to these risks.

In addition, the increasing prevalence and sophistication of cyber-attacks as well as the evolution of cyber-attacks and other efforts to breach or disrupt our systems or those of our employees, customers, third-party service providers, joint venture partners, and/or franchisee and company owned brokerage sales agents and their customers, has led and will likely continue to lead to increased costs to us with respect to preventing, investigating, mitigating, insuring against and remediating these risks, as well as any related attempted or actual fraud.

Moreover, we are required to comply with growing regulations both in the United States and in other countries where we do business that regulate cybersecurity, privacy and related matters, some of which impose steep fines and penalties for noncompliance.

While we, our third-party service providers, franchisees, franchisee and company owned brokerage independent sales agents, and joint venture partners have experienced and expect to continue to experience these types of threats and incidents, none of them to date has been material to the Company. Although we employ measures to prevent, detect, address and mitigate these threats (including access controls, data encryption, penetration testing, vulnerability assessments and maintenance of backup and protective systems), and conduct diligence on the security measures employed by key third-party service providers, cybersecurity incidents, depending on their nature and scope, could potentially result in the misappropriation, destruction, corruption or unavailability of critical systems, data and confidential or proprietary information (our own or that of third parties, including personal information and financial information) and the disruption of business operations.

Our corporate errors and omissions and cybersecurity breach insurance may be insufficient to compensate us for losses that may occur. The potential consequences of a material cybersecurity incident include regulatory violations of applicable U.S. and international privacy and other laws, reputational damage, loss of market value, litigation with third parties (which could result in our exposure to material civil or criminal liability), diminution in the value of the services we provide to our customers, and increased cybersecurity protection and remediation costs (that may include liability for stolen assets or information), which in turn could have a material adverse effect on our competitiveness and results of operations.

If we fail to protect the privacy and personal information of our customers or employees, we may be subject to legal claims, government action and damage to our reputation.

To run our business, it is essential for us to store and transmit sensitive personal information about our customers, prospects, employees, independent agents, and relocation transferees in our systems and networks. At the same time, we are subject to numerous laws, regulations, and other requirements, domestically and globally, that require businesses like ours to protect the security of personal information, notify customers and other individuals about our privacy practices, and limit the use, disclosure, sale or transfer of personal data. Regulators in the U.S. and abroad continue to enact comprehensive new laws or legislative reforms imposing significant privacy and cybersecurity restrictions. The result is that we are subject to increased regulatory scrutiny, additional contractual requirements from corporate customers, and heightened compliance costs. These ongoing changes to privacy and cybersecurity laws also may make it more difficult for us to operate our

business and may have a material adverse effect on our operations. For example, in the U.S., we are required to comply with the Gramm-Leach-Bliley Act, which governs the disclosure and safeguarding of consumer financial information, as well as state statutes governing privacy and cybersecurity matters including the CCPA, which went into effect in 2020, and the NYDFS Cybersecurity Regulation, which went into effect in 2017. The CCPA imposes new and comprehensive requirements on organizations that collect, sell and disclose personal information about California residents and employees. Other states, including New York and Massachusetts, are expected to implement their own privacy statutes in the near term.

Under the NYDFS cybersecurity regulation, regulated financial institutions, including Realogy Title Group, are required to establish a detailed cybersecurity program. Other state regulatory agencies have or are expected to enact similar requirements following the adoption of the Insurance Data Security Model Law by the National Association of Insurance Commissioners that is consistent with the New York regulation. For example, the South Carolina Insurance Data Security Act, effective January 1, 2019, is based on the Insurance Data Security Model Law and imposes new breach notification and information security requirements on insurers, agents, and other licensed entities authorized to operate under the state's insurance laws, including Realogy Title Group. The European Union's GDPR, which became effective in May 2018, conferred new and significant privacy rights on individuals (including employees and independent agents), and materially increased penalties for violations.

Any significant violations of privacy and cybersecurity could result in the loss of new or existing business, litigation, regulatory investigations, the payment of fines, damages, and penalties and damage to our reputation, which could have a material adverse effect on our business, financial condition, and results of operations.

We could also be adversely affected if legislation or regulations are expanded to require changes in our business practices or if governing jurisdictions interpret or implement their legislation or regulations in ways that negatively affect our business, results of operations or financial condition.

In addition, while we disclose our information collection and dissemination practices in a published privacy statement on our websites, which we may modify from time to time, we may be subject to legal claims, government action and damage to our reputation if we act or are perceived to be acting inconsistently with the terms of our privacy statement, customer expectations or state, national and international regulations.

The occurrence of a significant claim in excess of our insurance coverage in any given period could have a material adverse effect on our financial condition and results of operations during the period. In the event we or the vendors with which we contract to provide services on behalf of our customers were to suffer a breach of personal information, our customers, such as our corporate relocation or affinity clients, their employees or members, respectively, franchisees, independent sales agents and lender channel clients, could terminate their business with us. Further, we may be subject to claims to the extent individual employees or independent contractors breach or fail to adhere to Company policies and practices and such actions jeopardize any personal information.

In addition, concern among potential home buyers or sellers about our privacy practices could result in regulatory investigations. Additionally, concern among potential home buyers or sellers could keep them from using our services or require us to incur significant expense to alter our business practices or educate them about how we use personal information.

We are subject to certain risks related to litigation filed by or against us, and adverse results may harm our business and financial condition.

We cannot predict with certainty the cost of defense, the cost of prosecution, insurance coverage or the ultimate outcome of litigation and other proceedings filed by or against us, including remedies or damage awards, and adverse results in such litigation and other proceedings, including treble damages and penalties. Adverse outcomes may harm our business and financial condition. Such litigation and other proceedings may include, but are not limited to:

- actions relating to claims alleging violations of RESPA or state consumer fraud statutes, intellectual property rights, commercial arrangements, franchising arrangements, negligence and fiduciary duty claims arising from franchising arrangements or company owned brokerage operations or violations of similar laws in countries we operate in around the world;
- employment law claims, including claims challenging the classification of sales agents as independent contractors as well as wage and hour and joint employer claims;
- antitrust and anti-competition claims (including claims related to NAR rules regarding buyer broker commissions);

- information security and cyber-crime, including claims under new and emerging data privacy laws related to the protection of customer, employee or third-party information, as well as those related to the diversion of homesale transaction closing funds;
- claims by current or former franchisees that franchise agreements were breached, including improper terminations;
- claims related to the Telephone Consumer Protection Act, including autodialer claims;
- claims generally against the company owned brokerage operations for negligence, misrepresentation or breach of fiduciary duty in connection with the performance of real estate brokerage or other professional services as well as other brokerage claims associated with listing information and property history, including disputes involving buyers of relocation property;
- vicarious or joint liability based upon the conduct of individuals or entities traditionally outside of our control, including franchisees and independent sales agents;
- copyright infringement actions, including those alleging improper use of copyrighted photographs on websites or in marketing materials without consent of the copyright holder;
- actions against our title company for defalcations on closing payments or claims against the title agent contending that the agent knew or should have known that a transaction was fraudulent or that the agent was negligent in addressing title defects or conducting settlement;
- claims concerning breach of obligations to make websites and other services accessible for consumers with disabilities; and
- general fraud claims.

See Note 15, "Commitments and Contingencies—Litigation", to our consolidated financial statements included elsewhere in this Annual Report for additional information on our litigation matters, including class action litigation. Class action lawsuits can often be particularly burdensome litigation given the breadth of claims, the large potential damages claimed and the significant costs of defense. The risks of litigation become magnified and the costs of settlement increase in class actions in which the courts grant partial or full certification of a large class. In the case of intellectual property litigation and proceedings, adverse outcomes could include the cancellation, invalidation or other loss of material intellectual property rights used in our business and injunctions prohibiting our use of business processes or technology that is subject to third-party patents or other third-party intellectual property rights. We may be required to enter into licensing agreements (if available on acceptable terms or at all) and pay royalties. Insurance coverage may be unavailable for certain types of claims and even where available, insurance carriers may dispute coverage for various reasons, including the cost of defense, and such insurance may not be sufficient to cover the losses we incur.

Adverse decisions in litigation against companies unrelated to us could impact our business practices and those of our franchisees in a manner that adversely impacts our financial condition and results of operations.

Litigation, claims and regulatory proceedings against other participants in the residential real estate or relocation industry may impact the Company when the rulings in those cases cover practices common to the broader industry. Examples may include claims associated with RESPA compliance, broker fiduciary duties, and sales agent classification. Similarly, the Company may be impacted by litigation and other claims against companies in other industries. To the extent plaintiffs are successful in these types of litigation matters, and we or our franchisees cannot distinguish our or their practices (or our industry's practices), we and our franchisees could face significant liability and could be required to modify certain business relationships, either of which could materially and adversely impact our financial condition and results of operations.

We may experience significant claims relating to our operations, and losses resulting from fraud, defalcation or misconduct.

We issue title insurance policies which provide coverage for real property to mortgage lenders and buyers of real property. When acting as a title agent issuing a policy on behalf of an underwriter, our insurance risk is typically limited to the first five thousand dollars for claims on any one policy, though our insurance risk is not limited if we are negligent. Our title underwriter typically underwrites title insurance policies of up to \$1.5 million. For policies in excess of \$1.5 million, we typically obtain a reinsurance policy from a national underwriter to reinsure the excess amount. To date, our title underwriter has experienced claims losses that are significantly below the industry average; however, our claims experience could increase in the future, which could negatively impact the profitability of that business. We may also be subject to legal claims or additional claims losses arising from the handling of escrow transactions and closings by our owned title agencies or our underwriter's independent title agents. We carry errors and omissions insurance for errors made by our

company owned brokerage business during the real estate settlement process as well as errors by us related to real estate services. Our franchise agreements also require our franchisees to name us as an additional insured on their errors and omissions and general liability insurance policies. The occurrence of a significant claim in excess of our insurance coverage (including any coverage under franchisee insurance policies) in any given period could have a material adverse effect on our financial condition and results of operations during the period. In addition, insurance carriers may dispute coverage for various reasons and there can be no assurance that all claims will be covered by insurance.

Fraud, defalcation and misconduct by employees are also risks inherent in our business, particularly given the high transactional volumes in our company owned brokerage, title and settlement services and our relocation businesses. We may also from time to time be subject to liability claims based upon the fraud or misconduct of our franchisees. To the extent that any loss or theft of funds substantially exceeds our insurance coverage, our business could be materially adversely affected.

The weakening or unavailability of our intellectual property rights could adversely impact our business, including through the loss of intellectual property we license.

Our trademarks, trade names, domain names and other intellectual property rights are fundamental to our brands and our franchising business. The steps we take to obtain, maintain and protect our intellectual property rights may not be adequate and, in particular, we may not own all necessary registrations for our intellectual property. Applications we have filed to register our intellectual property may not be approved by the appropriate regulatory authorities. Our intellectual property rights may not be successfully asserted in the future or may be invalidated, circumvented or challenged. We may be unable to prevent third parties from using our intellectual property rights without our authorization or independently developing technology that is similar to ours. Also, third parties may own rights in similar trademarks. Any unauthorized use of our intellectual property by third parties could reduce our competitive advantages or otherwise harm our business and brands. If we had to litigate to protect these rights, any proceedings could be costly, and we may not prevail. Our intellectual property rights, including our trademarks, may fail to provide us with significant competitive advantages in the U.S. and in foreign jurisdictions that do not have or do not enforce strong intellectual property rights.

We cannot be certain that our intellectual property does not and will not infringe issued intellectual property rights of others. We may be subject to legal proceedings and claims in the ordinary course of our business, including claims of alleged infringement of the patents, trademarks and other intellectual property rights of third parties. Any such claims, whether or not meritorious, could result in costly litigation. Depending on the success of these proceedings, we may be required to enter into licensing or consent agreements (if available on acceptable terms or at all), or to pay damages or cease using certain service marks or trademarks.

We franchise our brands to franchisees. While we try to ensure that the quality of our brands is maintained by all of our franchisees, we cannot assure that these franchisees will not take actions that hurt the value of our intellectual property or our reputation.

Our license agreement with Sotheby's for the use of the Sotheby's International Realty® brand is terminable by Sotheby's prior to the end of the license term if certain conditions occur, including but not limited to the following: (1) we attempt to assign any of our rights under the license agreement in any manner not permitted under the license agreement, (2) we become bankrupt or insolvent, (3) a court issues a non-appealable, final judgment that we have committed certain breaches of the license agreement and we fail to cure such breaches within 60 days of the issuance of such judgment, or (4) we discontinue the use of all of the trademarks licensed under the license agreement for a period of twelve consecutive months.

Our license agreement with Meredith Corporation ("Meredith") for the use of the Better Homes and Gardens® Real Estate brand is terminable by Meredith prior to the end of the license term if certain conditions occur, including but not limited to the following: (1) we attempt to assign any of our rights under the license agreement in any manner not permitted under the license agreement, (2) we become bankrupt or insolvent, or (3) a trial court issues a final judgment that we are in material breach of the license agreement or any representation or warranty we made was false or materially misleading when made.

Industry structure changes that disrupt the functioning of the residential real estate market could materially adversely affect our operations and financial results.

Through our brokerages, we participate in many multiple listing services ("MLSs") and are subject to each MLS's rules, policies, data licenses, and terms of service. The rules of each MLS to which we belong can vary widely and are complex.

From time to time, certain industry practices, including MLS rules, have come under regulatory scrutiny. For example, in June 2018, the DOJ and the FTC held a joint public workshop to explore competition issues in the residential real estate brokerage industry including potential barriers to competition. In the workshop, there were various panels and participants submitted comments that raised a variety of issues, including: whether the current industry practice involving commission sharing by listing brokers was anti-competitive, whether offers of commission sharing—including commission rates—should be public, and whether average broker commission rates were too high. There can be no assurances as to whether DOJ or the FTC will determine that any industry practices or developments have an anti-competitive effect on the industry. Any such determination by DOJ or the FTC could result in industry investigations, legislative or regulatory action or other actions, any of which could have the potential to disrupt our business.

In addition, in two putative class action complaints filed in 2019, plaintiffs contend that NAR rules regarding buyer-broker commissions, which are adopted by alleged coercion by certain MLSs, are anti-competitive under the Sherman Act and that commission sharing, which provides for the broker representing the seller sharing or paying a portion of its commission to the broker representing the buyer, is anti-competitive and violates the Sherman Act. In both cases, NAR, Realogy and other large real estate brokerage companies are named defendants (See Note 15, "Commitments and Contingencies—Litigation—Real Estate Litigation", to our consolidated financial statements included elsewhere in this Annual Report for additional information on these matters).

Meaningful changes in industry operations or structure, as a result of governmental pressures, the actions of certain competitors or the introduction or growth of certain competitive models, changes to MLS rules, or otherwise could materially adversely affect our operations, revenues, earnings and financial results.

Several of our businesses are highly regulated and any failure to comply with such regulations or any changes in such regulations could adversely affect our business.

Our company owned real estate brokerage business, our relocation business, our mortgage origination joint venture, our title and settlement service business and the businesses of our franchisees (excluding commercial brokerage transactions) must comply with the Real Estate Settlement Procedures Act ("RESPA"). RESPA and comparable state statutes prohibit providing or receiving payments, or other things of value, for the referral of business to settlement service providers in connection with the closing of real estate transactions involving federally-backed mortgages. Such laws may to some extent impose limitations on arrangements involving our real estate franchise, real estate brokerage, settlement services and relocation businesses or the business of our mortgage origination joint venture. RESPA and related regulations do, however, contain a number of provisions that allow for payments or fee splits between providers, including fee splits between title underwriters and agents, brokers and agents, and market-based fees for the provision of goods or services and marketing arrangements. In addition, RESPA allows for referrals to affiliated entities, including joint ventures, when specific requirements have been met. We rely on these provisions in conducting our business activities and believe our arrangements comply with RESPA. However, RESPA compliance may become a greater challenge under certain administrations for most industry participants offering settlement services, including mortgage companies, title companies and brokerages, because of expansive interpretations of RESPA or similar state statutes by certain courts and regulators. Permissible activities under state statutes similar to RESPA may be interpreted more narrowly and enforcement proceedings of those statutes by state regulatory authorities may also be aggressively pursued. RESPA also has been invoked by plaintiffs in private litigation for various purposes and some state authorities have also asserted enforcement rights. Similar laws exist in other countries where we do business. Some regulators and other parties have advanced novel and stringent interpretations of RESPA including assertions that any provision of a thing of value in a separate, but contemporaneous transaction with a referral constitutes a breach of RESPA on the basis that all things of value exchanged should be deemed in exchange for the referral.

The sale of franchises is regulated by various state laws as well as by the Federal Trade Commission (the "FTC"). The FTC requires that franchisors make extensive disclosure to prospective franchisees but does not require registration. A number of states require registration and/or disclosure in connection with franchise offers and sales. In addition, several states have "franchise relationship laws" or "business opportunity laws" that limit the ability of franchisors to terminate franchise agreements or to withhold consent to the renewal or transfer of these agreements. Internationally, many countries have similar laws affecting franchising.

Our company owned real estate brokerage business must comply with the requirements governing the licensing and conduct of real estate brokerage and brokerage-related businesses in the jurisdictions in which we do business. These laws and regulations contain general standards for and limitations on the conduct of real estate brokers and sales agents, including those relating to licensing of brokers and sales agents, fiduciary, agency and statutory duties, administration of trust funds,

collection of commissions, restrictions on information sharing with affiliates, fair housing standards and advertising and consumer disclosures. Under state law, our real estate brokers have certain duties and are responsible for the conduct of their brokerage business.

Title and settlement services are highly regulated. Our title insurance business also is subject to regulation by insurance and other regulatory authorities in each state in which we provide title insurance. State regulations may impede or impose burdensome conditions on our ability to take actions that we may want to take to enhance our operating results.

We are also, to a lesser extent, subject to various other rules and regulations such as "controlled business" statutes, which impose limitations on affiliations between providers of title and settlement services on the one hand, and real estate brokers, mortgage lenders and other real estate service providers on the other hand, or similar laws or regulations that would limit or restrict transactions among affiliates in a manner that would limit or restrict collaboration among our businesses.

We participate in the mortgage origination business through our 49.9% ownership of Guaranteed Rate Affinity. Private mortgage lenders operating in the U.S. are subject to comprehensive state and federal regulation and to significant oversight by government sponsored entities. Dodd-Frank endows the CFPB with rule making, examination and enforcement authority involving consumer financial products and services, including mortgage finance. The CFPB has issued a myriad of rules, including TILA-RESPA Integrated Disclosure rules, which impose significant obligations on Guaranteed Rate Affinity.

General. In all of our business units there is a risk that we could be adversely affected by current laws, regulations or interpretations or that more restrictive laws, regulations or interpretations could increase responsibilities and duties to customers and franchisees and other parties, the adoption of which could make compliance more difficult or expensive. There is also a risk that a change in current laws could adversely affect our business. In addition, any adverse changes in regulatory interpretations, rules and laws that would place additional limitations or restrictions on affiliated transactions could have the effect of limiting or restricting collaboration among our business units. Further, all of our businesses are subject to federal and state law related to numerous topics, including contract, fair trade, antitrust and competition, anti-discrimination, consumer protection, data protection, anti-fraud, disclosure laws, accommodations for disability, tax and employment matters. Increased enforcement of, or regulation with respect to, fair housing (whether at a federal, state or local level) could impact brokerage operations and/or the licenses of affiliated independent sales agents. We cannot assure you that future changes in legislation, regulations or interpretations will not adversely affect our business operations.

Regulatory authorities also have relatively broad discretion to grant, renew and revoke licenses and approvals and to implement regulations. Accordingly, such regulatory authorities could prevent or temporarily suspend us from carrying on some or all of our activities or otherwise penalize us if our financial condition or our practices were found not to comply with the then current regulatory or licensing requirements or any interpretation of such requirements by the regulatory authority. Our failure to comply with any of these requirements or interpretations could limit our ability to renew current franchisees or sign new franchisees or otherwise have a material adverse effect on our operations.

Our international business activities, and in particular our relocation business, must comply with applicable laws and regulations that impose sanctions on improper payments, including the Foreign Corrupt Practices Act, U.K. Bribery Act and similar laws of other countries.

Our failure to comply with any of the foregoing laws and regulations may subject us to fines, penalties, injunctions and/or potential criminal violations. Any changes to these laws or regulations or any new laws or regulations may make it more difficult for us to operate our business and may have a material adverse effect on our operations.

Other Business Risks

We could be subject to significant losses if banks do not honor our escrow and trust deposits.

Our company owned brokerage business and our title and settlement services business act as escrow agents for numerous customers. As an escrow agent, we receive money from customers to hold until certain conditions are satisfied. Upon the satisfaction of those conditions, we release the money to the appropriate party. We deposit this money with various banks and while these deposits are not assets of the Company (and therefore excluded from our consolidated balance sheet), we remain contingently liable for the disposition of these deposits. These escrow and trust deposits totaled \$475 million at December 31, 2019. The banks may hold a significant amount of these deposits in excess of the federal deposit insurance limit. If any of our depository banks were to become unable to honor any portion of our deposits, customers could seek to hold us responsible for such amounts and, if the customers prevailed in their claims, we could be subject to significant losses.

Potential reform of Fannie Mae or Freddie Mac or certain federal agencies or a reduction in U.S. government support for the housing market could have a material impact on our operations.

Numerous pieces of legislation seeking various types of changes for government sponsored entities or GSEs have been introduced in Congress to reform the U.S. housing finance market including among other things, changes designed to reduce government support for housing finance and the winding down of Fannie Mae or Freddie Mac over a period of years. Legislation, if enacted, or additional regulation which curtails Fannie Mae's and/or Freddie Mac's activities and/or results in the wind down of these entities could increase mortgage costs and could result in more stringent underwriting guidelines imposed by lenders or cause other disruptions in the mortgage industry. Other legislation or regulation limiting participation of the Federal Housing Administration and Department of Veterans Affairs could increase mortgage costs or limit availability of mortgages for consumers. Any of the foregoing could have a material adverse effect on the housing market in general and our operations in particular.

Changes in accounting standards, subjective assumptions and estimates used by management related to complex accounting matters could have an adverse effect on results of operations.

Generally accepted accounting principles in the United States and related accounting pronouncements, implementation guidance and interpretations with regard to a wide range of matters, such as revenue recognition, lease accounting, stock-based compensation, asset impairments, valuation reserves, income taxes and fair value accounting, are highly complex and involve many subjective assumptions, estimates and judgments made by management. Changes in these rules or their interpretations or changes in underlying assumptions, estimates or judgments made by management could significantly change our reported results.

Loss or attrition among our senior executives or other key employees and our inability to develop our existing workforce and to recruit top talent could adversely affect our financial performance.

Our success is largely dependent on the efforts and abilities of our executive officers and other key employees, our ability to develop the skills and talent of our workforce and our ability to recruit, retain and motivate top talent. Talent management has been and continues to be a strategic priority and our ability to recruit and retain our executive officers and key employees, including those with significant experience in the residential real estate market, is generally subject to numerous factors, including the compensation and benefits we pay. If we are unable to internally develop or hire skilled executives and other critical positions or if we encounter challenges associated with change management or the competitiveness of compensation actually realized by our executive officers and other key employees, our ability to continue to execute or evolve our strategy may be impaired and our business may be adversely affected.

Severe weather events or natural disasters, including increasing severity or frequency of such events due to climate change or otherwise, or other catastrophic events may disrupt our business and have an unfavorable impact on homesale activity.

Realogy Brokerage Group has a significant concentration of offices and transactions in geographic regions where home prices are at the higher end of the U.S. real estate market, particularly the east and west coasts. Coastal areas, including California and Florida, are particularly subject to severe weather events (including hurricanes and flooding) and natural disasters. Increasingly, wildfires in the west have been difficult to contain and cover large areas.

The occurrence of a severe weather event or natural disaster can reduce the level and quality of home inventory and negatively impact the demand for homes in affected areas, which can delay the closing of homesale transactions and have an unfavorable impact on home prices, homesale transaction volume, relocation transactions, title closing units and broker-to-broker referral fees. These effects may be compounded when the taxes associated with homeownership in the affected area are higher than average. In addition, we could incur damage, which may be significant, to our office locations as a result of severe weather events or natural disasters and our insurance may not be adequate to cover such losses. The impact of climate change, such as more frequent and severe weather events and/or long-term shifts in climate patterns, exacerbates these risks. Likewise our business and operating results could suffer as the result of other catastrophic events, including public health crises, such as pandemics and epidemics.

We may incur substantial and unexpected liabilities arising out of our legacy pension plan.

We have a defined benefit pension plan for which participation was frozen as of July 1, 1997; however, the plan is subject to minimum funding requirements. Although the Company to date has met its minimum funding requirements, the pension plan represents a liability on our balance sheet and will continue to require cash contributions from us, which may

increase beyond our expectations in future years based on changing market conditions. In addition, changes in interest rates, mortality rates, health care costs, early retirement rates, investment returns and the market value of plan assets can affect the funded status of our pension plan and cause volatility in the future funding requirements of the plan.

Our ability to use our net operating losses ("NOLs") and other tax attributes may be limited.

As of December 31, 2019, we had approximately \$588 million of federal and state NOLs. Our federal NOLs begin to expire in 2030 while certain state NOLs begin to expire in 2020. Our ability to utilize NOLs and other tax attributes could be limited by the "ownership change" we underwent within the meaning of Section 382 of the Internal Revenue Code of 1986, as amended (the "Code"), as a result of the sale of our common stock in our initial public offering and the related transactions. An ownership change is generally defined as a greater than 50 percentage point increase in equity ownership by 5% stockholders in any three-year period. Pursuant to rules under Section 382 of the Code and a published Internal Revenue Service (the "IRS") notice, a company's "net unrealized built-in gain" within the meaning of Section 382 of the Code may reduce the limitation on such company's ability to utilize NOLs resulting from an ownership change. Although there can be no assurance in this regard, we believe that the limitation on our ability to utilize our NOLs resulting from our ownership change should be significantly reduced as a result of our net unrealized built-in gain. Even assuming we are able to use our unrealized built-in gain, the cash tax benefit from our NOLs is dependent upon our ability to generate sufficient taxable income. Although we believe that we will be able to generate sufficient taxable income to fully utilize our NOLs, we may be unable to earn enough taxable income prior to the expiration of our NOLs. In addition, divestitures (including the planned sale of Cartus Relocation Services and any other divestitures we may complete in the future) could result in the accelerated use of our NOLs.

We are responsible for certain of Cendant's contingent and other corporate liabilities.

Although we have resolved various Cendant contingent and other corporate liabilities and have established reserves for most of the remaining unresolved claims of which we have knowledge, adverse outcomes from the unresolved Cendant liabilities for which Realogy Group has assumed partial liability under the Separation and Distribution Agreement dated as of July 27, 2006 among Cendant, Realogy Group, Wyndham Worldwide and Travelport could be material with respect to our earnings or cash flows in any given reporting period.

Risks Related to Our Indebtedness

Our significant indebtedness and interest obligations could prevent us from meeting our obligations under our debt instruments and could adversely affect our ability to fund our operations, invest in our business or pursue growth opportunities, react to changes in the economy or our industry, or incur additional borrowings under our existing facilities.

We are significantly encumbered by our debt obligations. As of December 31, 2019, our total debt, excluding our securitization obligations, was \$3,445 million (without giving effect to outstanding letters of credit). Our liquidity position has been, and is expected to continue to be, negatively impacted by the substantial interest expense on our debt obligations.

Our leverage could have important consequences, including the following:

- it causes a substantial portion of our cash flows from operations to be dedicated to the payment of interest and required amortization on our indebtedness and not be available for other purposes, including our operations, capital expenditures, technology, share repurchases, dividends and future business opportunities or principal repayment;
- it could cause us to be unable to comply with the senior secured leverage ratio covenant under our Senior Secured Credit Facility and Term Loan A Facility;
- it could cause us to be unable to meet our debt service requirements under our Senior Secured Credit Facility, the Term Loan A Facility or the indentures governing the Unsecured Notes or meet our other financial obligations;
- it may limit our ability to incur additional borrowings under our existing facilities, including our Revolving Credit Facility, to refinance our indebtedness, or to obtain additional debt or equity financing for working capital, capital expenditures, business development, debt service requirements, acquisitions or general corporate or other purposes;
- it exposes us to the risk of increased interest rates because a portion of our borrowings, including borrowings under our Senior Secured Credit Facility and Term Loan A Facility, are at variable rates of interest;
- it may limit our ability to adjust to changing market conditions and place us at a competitive disadvantage compared to our competitors that have no or less debt;

- it may cause a downgrade of our debt and long-term corporate ratings;
- it may limit our ability to repurchase shares or declare dividends;
- it may limit our ability to attract acquisition candidates or to complete future acquisitions;
- it may cause us to be more vulnerable to periods of negative or slow growth in the general economy or in our business, or may cause us to be unable to carry out capital spending that is important to our growth; and
- it may limit our ability to attract and retain key personnel.

The Senior Secured Credit Facility (including the Revolving Credit Facility) and Term Loan A Facility contain restrictive covenants, including a requirement that we maintain a specified senior secured leverage ratio of 4.75 to 1.00, which is defined as the ratio of our total senior secured debt (net of unrestricted cash and permitted investments) to trailing four quarter EBITDA calculated on a Pro Forma Basis, as those terms are defined in the credit agreement governing the Senior Secured Credit Facility. Total senior secured net debt does not include unsecured indebtedness, including the Unsecured Notes, or the securitization obligations.

For the trailing four quarters ended December 31, 2019, we were in compliance with the senior secured leverage ratio covenant with a ratio of 3.03 to 1.0 with total senior secured debt (net of unrestricted cash and permitted investments) of \$1,895 million and trailing four quarter EBITDA calculated on a Pro Forma Basis of \$626 million. Our Operating EBITDA and EBITDA calculated on a Pro Forma basis have declined year-over-year for the past several years. If our EBITDA calculated on a Pro Forma Basis were to continue to decline and/or we were to incur additional senior secured debt (including additional borrowings under the Revolving Credit Facility), our ability to borrow the full capacity under the Revolving Credit Facility (without refinancing secured debt into unsecured debt) could be limited as we must maintain compliance with the senior secured leverage ratio described above of 4.75 to 1.00. Our debt risk may also be increased as a result of competitive pressures that reduce margins and free cash flow. Our need to borrow under the Revolving Credit Facility is generally at its highest at or around the end of the first quarter every year. Any inability to borrow sufficient funds to operate our business, in the first quarter or otherwise, could have a material adverse impact on our business, results of operations and liquidity.

In addition, the covenants in the indenture governing the 9.375% Senior Notes limit our ability to make restricted payments, including our ability to make dividend payments in excess of \$45 million per calendar year and our ability to repurchase shares of our common stock in any amount until the Company's consolidated leverage ratio (as defined in the indenture governing the 9.375% Senior Notes) is below 4.00 to 1.00.

An event of default under our Senior Secured Credit Facility, the Term Loan A Facility or the indentures governing our other material indebtedness would adversely affect our operations and our ability to satisfy obligations under our indebtedness.

If we are unable to comply with the senior secured leverage ratio covenant described in the prior risk factor or other restrictive covenants under Senior Secured Credit Facility, Term Loan A Facility or the indentures governing our Senior Notes and we fail to remedy or avoid a default as permitted under the applicable debt arrangement, there would be an "event of default" under such arrangement.

Other events of default include, without limitation, nonpayment of principal or interest, material misrepresentations, insolvency, bankruptcy, certain material judgments, change of control, and cross-events of default on material indebtedness as well as, under the Senior Secured Credit Facility and Term Loan A Facility, failure to obtain an unqualified audit opinion by 90 days after the end of any fiscal year. Upon the occurrence of any event of default under the Senior Secured Credit Facility and Term Loan A Facility, the lenders:

- will not be required to lend any additional amounts to us;
- could elect to declare all borrowings outstanding, together with accrued and unpaid interest and fees, to be immediately due and payable;
- could require us to apply all of our available cash to repay these borrowings; or
- could prevent us from making payments on the Unsecured Notes, any of which could result in an event of default under the indentures governing the Unsecured Notes or our Apple Ridge Funding LLC securitization program.

If we were unable to repay the amounts outstanding under our Senior Secured Credit Facility and Term Loan A Facility, the lenders and holders of such debt under our Senior Secured Credit Facility and Term Loan A Facility could proceed against the collateral granted to secure the Senior Secured Credit Facility and Term Loan A Facility. We have pledged a

significant portion of our assets as collateral to secure such indebtedness. If the lenders under our Senior Secured Credit Facility or Term Loan A Facility accelerate the repayment of borrowings, we may not have sufficient assets to repay the Senior Secured Credit Facility and Term Loan A Facility and our other indebtedness or be able to borrow sufficient funds to refinance such indebtedness. Upon the occurrence of an event of default under the indentures governing our Senior Notes, the trustee or holders of 25% of the outstanding applicable notes could elect to declare the principal of, premium, if any, and accrued but unpaid interest on such notes to be due and payable. Any of the foregoing would have a material adverse affect on our business, financial condition and results of operations.

We have substantial indebtedness that will mature or expire beginning in 2021 and 2023 and we may not be able to refinance with terms as favorable as the terms of the maturing debt.

We have substantial indebtedness that will mature in the next few years. We continue to evaluate potential refinancing and financing transactions, including refinancing certain tranches of our indebtedness and extending maturities, among other potential alternatives. There can be no assurance as to which, if any, of these alternatives we may pursue as the choice of any alternative will depend upon numerous factors such as market conditions, our financial performance and the limitations applicable to such transactions under our existing financing agreements and the consents we may need to obtain under the relevant documents. The high-yield market may not be accessible to companies with our debt profile and such or other financing alternatives may not be available to us on commercially reasonable terms, terms that are acceptable to us, or at all. Any future indebtedness may impose various additional restrictions and covenants on us which could limit our ability to respond to market conditions, to make capital investments or to take advantage of business opportunities. Refinancing debt at a higher cost would affect our operating results.

A downgrade, suspension or withdrawal of the rating assigned by a rating agency to us or our indebtedness could make it more difficult for us to refinance our debt or obtain additional debt financing in the future.

Our indebtedness has been rated by nationally recognized rating agencies and may in the future be rated by additional rating agencies. We cannot assure you that any rating assigned to us or our indebtedness will remain for any given period of time or that a rating will not be lowered or withdrawn entirely by a rating agency if, in that rating agency's judgment, circumstances relating to the basis of the rating, such as adverse changes in our business, so warrant. As of December 31, 2019, our corporate credit rating was B+ at S&P Global Ratings and B1 at Moody's and both such ratings agencies rated our outlook as negative. Any downgrade, suspension or withdrawal of a rating by a rating agency (or any anticipated downgrade, suspension or withdrawal) could make it more difficult or more expensive for us to refinance our debt or obtain additional debt financing in the future.

Variable rate indebtedness subjects us to interest rate risk, which could cause our debt service obligations to increase significantly.

At December 31, 2019, \$1,965 million of our borrowings under our Senior Secured Credit Facility and Term Loan A Facility was at variable rates of interest thereby exposing us to interest rate risk. If interest rates continue to increase, our debt service obligations on the variable rate indebtedness would increase even if the amount borrowed remained the same, and our net income would decrease. Although we have entered into interest rate swaps involving the exchange of floating for fixed rate interest payments to reduce interest rate volatility for a significant portion of our variable rate borrowings, such interest rate swaps do not eliminate interest rate volatility for all of our variable rate indebtedness at December 31, 2019.

The phase-out of LIBOR, or the replacement of LIBOR with a different reference rate or modification of the method used to calculate LIBOR, may adversely affect interest rates which may have an adverse impact on us.

Our primary interest rate exposure is interest rate fluctuations, specifically with respect to LIBOR, due to its impact on our variable rate borrowings under our Senior Secured Credit Facility and Term Loan A Facility. Our interest rate swaps are also based on LIBOR.

LIBOR is the subject of recent national, international and other regulatory guidance and proposals for reform. At this time, it is not possible to predict the effect of any changes to LIBOR, any phase out of LIBOR or any establishment of alternative benchmark rates. LIBOR may disappear entirely or perform differently than in the past. Any new benchmark rate will likely not replicate LIBOR exactly and if future rates based upon a successor rate (or a new method of calculating LIBOR) are higher than LIBOR rates as currently determined, it could result in an increase in the cost of our variable rate indebtedness and may have a material adverse effect on our financial condition and results of operations.

Restrictive covenants under our Senior Secured Credit Facility, Term Loan A Facility, and indentures governing the Unsecured Notes may limit the manner in which we operate.

Our Senior Secured Credit Facility, Term Loan A Facility, and the indentures governing the Unsecured Notes contain, and any future indebtedness we may incur may contain, various negative covenants that restrict our ability to, among other things:

- incur or guarantee additional indebtedness, or issue disqualified stock or preferred stock;
- pay dividends or make distributions to our stockholders;
- repurchase or redeem capital stock;
- make investments or acquisitions;
- incur restrictions on the ability of certain of our subsidiaries to pay dividends or to make other payments to us;
- enter into transactions with affiliates;
- create liens;
- merge or consolidate with other companies or transfer all or substantially all of our assets;
- transfer or sell assets, including capital stock of subsidiaries; and
- prepay, redeem or repurchase certain indebtedness.

As a result of these covenants, we are limited in the manner in which we conduct our business and we may be unable to engage in favorable business activities, repurchase shares of our common stock or finance future operations or capital needs.

Risks Related to an Investment in Our Common Stock

The price of our common stock may fluctuate significantly.

The market price for our common stock could fluctuate significantly for various reasons, many of which are outside our control, including those described above and the following:

- our operating and financial performance and prospects;
- future sales of substantial amounts of our common stock in the public market, including but not limited to shares we may issue from time to time as consideration for future acquisitions or investments as well as significant sales by one or more of our top investors, in particular in light of the substantial concentration of ownership of our common stock;
- housing and mortgage finance markets;
- the incurrence of additional indebtedness or other adverse changes relating to our debt;
- our quarterly or annual earnings or those of other companies in our industry;
- future announcements concerning our business or our competitors' businesses;
- the public's reaction to our press releases, other public announcements and filings with the SEC;
- changes in earnings estimates, recommendations or commentary by sell-side securities analysts who track our common stock or other companies within our industry;
- ratings changes or commentary by rating agencies on our debt;
- press releases or other commentary by industry forecasters or other housing market participants;
- market and industry perception of our success, or lack thereof, in pursuing our growth strategy;
- strategic actions by us or our competitors;
- actual or potential changes in laws, regulations and regulatory interpretations, including as a result of the 2017 Tax Act and other federal, state or local tax reform;
- changes in housing fundamentals, including:
 - changes in interest rates,
 - changes in demographics relating to housing such as household formation, and
 - changing consumer attitudes concerning home ownership;
- changes in accounting standards, policies, guidance, interpretations or principles;
- arrival and departure of key personnel;

- commencement of new legal or regulatory proceedings against the Company or adverse resolution of new or pending litigation, arbitration or regulatory proceedings against us;
- actions of current or prospective stockholders (including activists or several top stockholders acting alone or together) that may cause temporary or speculative market perceptions, including market rumors and short selling activity in our stock (which has been and, as of the date of this filing, continues to be well above market norms); and
- changes in general market, economic and political conditions in the United States and global economies or financial markets, including those resulting from natural disasters, terrorist attacks, acts of war and responses to such events.

These broad market and industry factors may materially reduce the market price of our common stock, regardless of our operating performance. In addition, price volatility may be greater if the public float and trading volume of our common stock is low.

If any of the foregoing occurs, it could cause our stock price to fall and may expose us to litigation, including class action lawsuits that, even if unsuccessful, could be costly to defend and a distraction to management.

We recently discontinued our dividend and do not anticipate paying any dividends on our common stock in the foreseeable future and accordingly, capital appreciation, if any, will be our stockholders sole source of gain.

In early November 2019, our Board of Directors discontinued our quarterly dividend and we do not anticipate paying any dividends on our common stock in the foreseeable future. As a result, capital appreciation, if any, of our common stock will be our stockholders sole source of gain for the foreseeable future.

We currently expect to prioritize investing in our business and reducing indebtedness until we are able to reduce our consolidated leverage ratio (as defined in the indenture governing the 9.375% Senior Notes) to below 4.00 to 1.00 and, even if we are able to successfully reduce our consolidated leverage ratio, our Board of Directors may not reinstate the payment of a dividend. The covenants in the indenture governing the 9.375% Senior Notes restrict our ability to make dividend payments in excess of \$45 million per calendar year until our consolidated leverage ratio is below 4.00 to 1.00. In addition, certain of our debt instruments contain covenants that restrict the ability of our subsidiaries to pay dividends to us. We are permitted under the terms of our debt instruments to incur additional indebtedness, which may further restrict or prevent us from paying dividends on our common stock. Agreements governing any future indebtedness, in addition to those governing our current indebtedness, may not permit us to pay dividends on our common stock. Because Realogy Holdings is a holding company and has no direct operations, we will only be able to pay dividends from our available cash on hand and any funds we receive from our subsidiaries. Our title insurance underwriter is subject to regulations that limit its ability to pay dividends or make loans or advances to us, principally to protect policyholders. Under Delaware law, dividends may be payable only out of surplus, which is our assets minus our liabilities and our capital or, if we have no surplus, out of our net profits for the fiscal year in which the dividend is declared and/or the preceding fiscal year. As a result, we may not pay dividends if, among other things, we do not have sufficient cash to pay the intended dividends, our financial performance does not achieve expected results or the terms of our indebtedness prohibit it.

Delaware law and our organizational documents may impede or discourage a takeover, which could deprive our investors of the opportunity to receive a premium for their shares.

We are a Delaware corporation, and the anti-takeover provisions of Delaware law impose various impediments to the ability of a third party to acquire control of us, even if a change of control would be beneficial to our existing stockholders. In addition, provisions of our amended and restated certificate of incorporation and amended and restated bylaws may make it more difficult for, or prevent a third party from, acquiring control of us without the approval of our Board of Directors. Among other things, these provisions:

- do not permit cumulative voting in the election of directors, which would otherwise allow less than a majority of stockholders to elect director candidates;
- delegate the sole power to a majority of the Board of Directors to fix the number of directors;
- provide the power to our Board of Directors to fill any vacancy on our Board of Directors, whether such vacancy occurs as a result of an increase in the number of directors or otherwise;
- authorize the issuance of "blank check" preferred stock without any need for action by stockholders;
- eliminate the ability of stockholders to call special meetings of stockholders;

- prohibit stockholders from acting by written consent; and
- establish advance notice requirements for nominations for election to our Board of Directors or for proposing matters that can be acted on by stockholders at stockholder meetings.

The foregoing factors could impede a merger, takeover or other business combination or discourage a potential investor from making a tender offer for our common stock which, under certain circumstances, could reduce the market value of our common stock and our investors' ability to realize any potential change-in-control premium.

We may issue shares of preferred stock in the future, which could make it difficult for another company to acquire us or could otherwise adversely affect holders of our common stock, which could depress the price of our common stock.

Our amended and restated certificate of incorporation authorizes us to issue one or more series of preferred stock. Our Board of Directors will have the authority to determine the preferences, limitations and relative rights of shares of preferred stock and to fix the number of shares constituting any series and the designation of such series, without any further vote or action by our stockholders. Our preferred stock could be issued with voting, liquidation, dividend and other rights superior to the rights of our common stock. The potential issuance of preferred stock may delay or prevent a change in control of us, discouraging bids for our common stock at a premium to the market price, and materially and adversely affect the market price and the voting and other rights of the holders of our common stock.

Item 2. Properties.

Corporate headquarters. Our corporate headquarters is located at 175 Park Avenue in Madison, New Jersey with a lease term expiring in December 2029 and consists of approximately 270,000 square feet of space.

Realogy Franchise Group. Our real estate franchise business conducts its main operations at our leased office at 175 Park Avenue in Madison, New Jersey.

Realogy Brokerage Group. As of December 31, 2019, our company owned real estate brokerage segment leased approximately 4.4 million square feet of domestic office space under approximately 946 leases. Its corporate headquarters and one regional headquarters facility are located in leased offices at 175 Park Avenue, Madison, New Jersey. As of December 31, 2019, Realogy Brokerage Group leased 5 facilities serving as regional headquarters, 33 facilities serving as local administration, training facilities or storage, and approximately 710 brokerage sales offices under 908 leases. These offices are generally located in shopping centers and small office parks, typically with lease terms of one to five years. Included in the 4.4 million square feet is approximately 392,000 square feet of vacant and/or subleased space, principally relating to brokerage sales office consolidations.

Realogy Title Group. Our title and settlement services business conducts its main operations at a leased facility in Mount Laurel, New Jersey, pursuant to a lease expiring in December 2021. As of December 31, 2019, this business also has leased regional and branch offices in 21 states and Washington, D.C.

Cartus Relocation Services. Our relocation business has its main corporate operations in a leased building in Danbury, Connecticut with a lease term expiring in November 2030. There are leased offices in other locations in the U.S., including in Lisle, Illinois; Irving, Texas; Folsom, California; and Bellevue, Washington. International offices include leased facilities in the United Kingdom, Hong Kong, India, Singapore, China, Brazil, Germany, France, Switzerland, Canada and the Netherlands. These leases will transfer to SIRVA upon the closing of the planned sale, with Realogy Leads Group subletting space from SIRVA in Danbury, Connecticut and Irving, Texas.

We believe that all of our properties and facilities are well maintained.

Item 3. Legal Proceedings.

See Note 15, "Commitments and Contingencies—Litigation", to the Consolidated Financial Statements included elsewhere in this Annual Report for additional information on the Company's legal proceedings.

The Company believes that it has adequately accrued for legal matters as appropriate. The Company records litigation accruals for legal matters which are both probable and estimable.

Litigation and other disputes are inherently unpredictable and subject to substantial uncertainties and unfavorable resolutions could occur and even cases brought by us can involve counterclaims asserted against us. In addition, litigation and other legal matters, including class action lawsuits and regulatory proceedings challenging practices that have broad

impact can be costly to defend and, depending on the class size and claims, could be costly to settle. As such, the Company could incur judgments or enter into settlements of claims with liability that are materially in excess of amounts accrued and these settlements could have a material adverse effect on the Company's financial condition, results of operations or cash flows in any particular period.

* * *

Litigation, investigations and claims against other participants in the residential real estate industry may impact the Company and its affiliated franchisees when the rulings or settlements in those cases cover practices common to the broader industry. Examples may include claims associated with RESPA compliance, broker fiduciary duties, multiple listing service practices, sales agent classification and federal and state fair housing laws. The Company also may be impacted by litigation and other claims against companies in other industries. Changes in current legislation, regulations or interpretations that are applicable to the residential real estate service industry may also impact the Company.

For example, there is active worker classification litigation in numerous jurisdictions against a variety of industries— including residential real estate brokerages in multiple states, including California and New Jersey—where the plaintiffs seek to reclassify independent contractors as employees or to challenge the use of federal and state minimum wage and overtime exemptions. This type of litigation has been particularly prolific in California since the California Supreme Court adopted a worker classification test in the second quarter of 2018 that is significantly more restrictive than those historically used in wage and hour cases. In September 2019, this judicial worker classification test was codified into California statutory law, but the adopted legislation also provides an alternate worker classification test applicable to real estate professionals that is less restrictive than the judicial test. Since the enactment, there have been several challenges to the constitutionality and enforceability of this law as it applies to other industries, which may ultimately impact the less restrictive test currently applicable to real estate professionals. For a summary of certain legal proceedings initiated in California involving the Company that allege worker misclassification, see Note 15, "Commitments and Contingencies—Litigation", in this report.

Item 4. Mine Safety Disclosures.

None.

Information about our Executive Officers

The following provides information regarding individuals who served as executive officers of Realogy Group and Realogy Holdings at February 21, 2020. The age of each individual indicated below is as of February 21, 2020.

Ryan M. Schneider, 50, has served as our Chief Executive Officer and President since December 31, 2017 and as a director since October 20, 2017. From October 23, 2017 until his appointment as our CEO and President, Mr. Schneider served as the Company's President and Chief Operating Officer. Prior to joining the Company, Mr. Schneider served as President, Card of Capital One Financial Corporation ("Capital One"), a financial holding company, from December 2007 to November 2016 where he was responsible for all of Capital One's consumer and small business credit card lines of business in the United States, the United Kingdom and Canada. Mr. Schneider held a variety of other positions within Capital One from December 2001 to December 2007, including Executive Vice President and President, Auto Finance and Executive Vice President, U.S. Card. From November 2016 until April 2017, he served as Senior Advisor to Capital One.

Donald J. Casey, 58, has served as the President and Chief Executive Officer of Realogy Title Group LLC (formerly known as Title Resource Group LLC) since April 2002. From 1995 until April 2002, he served as Senior Vice President, Brands of PHH Mortgage. From 1993 to 1995, Mr. Casey served as Vice President, Government Operations of Cendant Mortgage. From 1989 to 1993, Mr. Casey served as a secondary marketing analyst for PHH Mortgage Services (prior to its acquisition by Cendant).

David L. Gordon, 58, has served as our Executive Vice President and Chief Technology Officer since January 2018. From March 2015 to January 2018, Mr. Gordon served as Executive Vice President, U.S. Chief Technology and Operations Officer for Bank of Montreal (BMO) Financial Group, a diversified financial services provider based in North America. From June 2013 to March 2015, Mr. Gordon served in multiple officer roles at Promontory Financial Group, a global financial services consulting firm and wholly-owned subsidiary of IBM, including Chief Administrative Officer and Chief Technology Officer. For 12 years prior thereto, Mr. Gordon held several leadership positions at Capital One Financial Services, a financial holding company, most recently as Senior Vice President, IT Operations from March 2012 to March 2013.

M. Ryan Gorman, 41, has served as the President and Chief Executive Officer of Realogy Brokerage Group LLC (formerly known as NRT LLC) since January 2018 and as CEO of Coldwell Banker (both company owned and franchised brokerages) since January 2020. Previously he served as the Chief Strategy & Operating Officer of NRT LLC from September 2016 to January 2018. From May 2012 to September 2016, Mr. Gorman served at NRT's Senior Vice President, Strategic Operations and from November 2007 to May 2012 he served as the Company's Head of Strategic Development. From October 2004 to November 2007, Mr. Gorman served as the Head of Strategic Development of TRG (formerly known as Cendant Settlement Services Group). Before joining the Company, he held advisory and principal investment roles with PricewaterhouseCoopers, Credit Suisse and The Blackstone Group.

Timothy B. Gustavson, 51, has served as our Chief Accounting Officer, Controller and Senior Vice President for Realogy since March 2015. In addition to this role, from November 2018 to March 2019, Mr. Gustavson served as our Interim Chief Financial Officer and Treasurer. From 2008 until March 2015, he served as our Assistant Corporate Controller and Vice President of Finance. Mr. Gustavson joined Realogy in 2006 as Vice President of External Reporting and prior to Realogy, Mr. Gustavson spent 16 years in public accounting with the KPMG audit practice. Mr. Gustavson is a certified public accountant.

Katrina Helmkamp, 54, has served as the President and Chief Executive Officer of Cartus Corporation since July 2018. Prior to Realogy, Ms. Helmkamp served as Chief Executive Officer of Lenox Corporation, a market leader in quality tabletop and giftware, from November 2016 to June 2018. From 2015 to 2016, she acted as a consultant, primarily working with private equity firms. From 2010 to 2014, she was Chief Executive Officer of SVP Worldwide, the global leader in consumer sewing machines. From 2007 to 2010, she led teams at Whirlpool Corporation as Vice President, Global Refrigeration, and then Senior Vice President, North America Product. From 2005 to 2007, Ms. Helmkamp held leadership roles at ServiceMaster, including as President of Terminix. In addition to her executive experience, she was a partner for six years at The Boston Consulting Group, from 1998 to 2004.

Sunita Holzer, 58, has served as our Executive Vice President and Chief Human Resources Officer ("CHRO") since March 2015. Prior to Realogy, Ms. Holzer served as Executive Vice President and CHRO for Computer Sciences Corporation from 2012 to 2014, where she had oversight of global human resources for 80,000 employees across 60 countries. Ms. Holzer also was Executive Vice President and CHRO at Chubb Insurance from 2003 to 2012. Prior to her tenure at Chubb Insurance, Ms. Holzer held executive HR roles at GE Capital, American Express and American International Group.

John W. Peyton, 52, has served as the Chief Executive Officer of Realogy Franchise Group since April 2017 after serving as Chief Operating Officer and President of Realogy Franchise Group from October 2016. Previously, he served as a senior executive with Starwood Hotels & Resorts Worldwide Inc., a leading hotel and leisure company, for 17 years, most recently as its Chief Marketing Officer from 2014 to September 2016 and as its Senior Vice President of Global Initiatives from 2012 to 2014, where he directed the implementation of key strategic company priorities around the world, including supply chain and revenue management initiatives.

Charlotte Simonelli, 48, has served as our Executive Vice President, Chief Financial Officer and Treasurer since March 2019. Immediately prior to joining Realogy, Ms. Simonelli was employed by Johnson & Johnson as Vice President and Chief Financial Officer, Medical Devices from September 2017 and, prior thereto, as Vice President and Chief Financial Officer, Enterprise Supply Chain from January 2016. Previously, she held various finance roles in large multi-brand global organizations, including Reckitt Benckiser Inc. (a multinational consumer goods company), Kraft Foods Inc. (now Mondelez International Inc.), and PepsiCo, Inc. Ms. Simonelli served at Reckitt Benckiser from 2011 to 2015, including in the roles of Vice President, Finance, North America (from July 2014 to September 2015), Senior Vice President, Finance, ENA (a territory that included Europe and North America) from January 2012 to July 2014 and Senior Vice President, Finance, NAA (a territory that included North America, Australia and New Zealand) from April 2011 to December 2011. Ms. Simonelli began her career at Unilever US, Inc., focused on financial planning and analysis.

Marilyn J. Wasser, 64, has served as our Executive Vice President, General Counsel and Corporate Secretary since May 10, 2007. From May 2005 until May 2007, Ms. Wasser was Executive Vice President, General Counsel and Corporate Secretary for Telcordia Technologies, a provider of telecommunications software and services. From 1983 until 2005, Ms. Wasser served in several positions of increasing responsibility with AT&T Corporation and AT&T Wireless Services, ultimately serving as Executive Vice President, Associate General Counsel and Corporate Secretary of AT&T Wireless Services from September 2002 to February 2005 and immediately prior thereto, from 1995 until 2002, as Executive Vice President, Law, Corporate Secretary and Chief Compliance Officer of AT&T.

PART II

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

Our common stock is listed on the New York Stock Exchange ("NYSE") under the symbol "RLGY". As of February 21, 2020, the number of stockholders of record was 38.

Share Repurchase Program

The Company did not repurchase common stock during the quarter ended December 31, 2019. The Company expects to prioritize investing in its business and reducing indebtedness. See "Item 7.—Management's Discussion and Analysis of Financial Condition and Results of Operations—Financial Condition, Liquidity and Capital Resources" for additional information.

Shares of common stock repurchased by the Company pursuant to authorizations made from its Board of Directors are retired and not displayed separately as treasury stock on the consolidated financial statements. The par value of the shares repurchased and retired is deducted from common stock and the excess of the purchase price over par value is first charged against any available additional paid-in-capital with the balance charged to retained earnings. Direct costs incurred to repurchase the shares are included in the total cost of the shares.

Although, as of December 31, 2019, \$204 million remained available for repurchase under share repurchase programs previously authorized by the Company's Board of Directors the Company is prohibited from repurchasing shares under such programs under the indenture governing the 9.375% Senior Notes until the Company's consolidated leverage ratio falls below 4.00 to 1.00 and then only to the extent of available cumulative credit, as defined under the indenture governing the 9.375% Senior Notes. Accordingly, the Company suspended repurchases in February 2019. The repurchase programs have no time limit and may be discontinued at any time. Repurchases under these programs may be made at management's discretion from time to time on the open market, pursuant to Rule 10b5-1 trading plans or through privately negotiated transactions. The size and timing of any future repurchases (if any), subject to the limitation noted above, will depend on price, market and economic conditions, legal and contractual requirements and other factors.

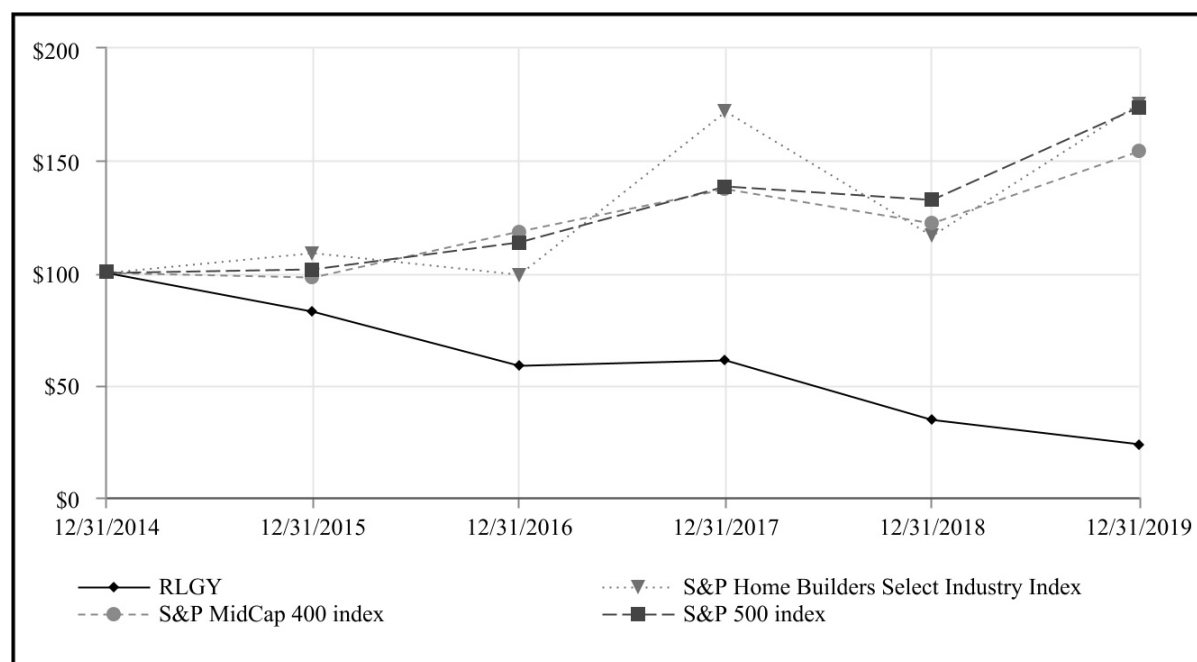
Dividends

In early November 2019, the Company's Board of Directors discontinued the Company's quarterly dividend. The Company does not anticipate paying any dividends on its common stock in the foreseeable future.

Stock Performance Graph

The stock performance graph set forth below is not deemed filed with the Securities and Exchange Commission and shall not be deemed incorporated by reference into any of our prior or future filings made with the Securities and Exchange Commission.

The following graph assumes a \$100 investment on December 31, 2014, and reinvestment of all dividends, in each of the Company's common stock, the S&P 500 index, the S&P MidCap 400 index and the S&P Home Builders Select Industry index, or XHB Index (which includes a diversified group of holdings representing home building, building products, home furnishings and home appliances). A portion of our 2017, 2018 and 2019 long-term incentive compensation awards are tied to the relative performance of our total stockholder return as compared to the S&P MidCap 400 or XHB Index over the three-year period ending December 31, 2019, December 31, 2020 and December 31, 2021, respectively.



Cumulative Total Return

	December 31,					
	2014	2015	2016	2017	2018	2019
Realogy Holdings Corp.	\$ 100.00	\$ 82.42	\$ 58.24	\$ 60.72	\$ 34.20	\$ 23.30
SPDR S&P Homebuilders ETF (XHB) index	\$ 100.00	\$ 108.55	\$ 99.00	\$ 171.62	\$ 116.27	\$ 175.33
S&P MidCap 400 index	\$ 100.00	\$ 97.82	\$ 118.11	\$ 137.30	\$ 122.08	\$ 154.07
S&P 500 index	\$ 100.00	\$ 101.38	\$ 113.51	\$ 138.29	\$ 132.23	\$ 173.86

Item 6. Selected Financial Data.

The following table presents our selected historical consolidated financial data and operating statistics. The consolidated statement of operations data for the years ended December 31, 2019, 2018, and 2017 and the consolidated balance sheet data as of December 31, 2019 and 2018 have been derived from our audited consolidated financial statements included elsewhere herein. The statement of operations data for the year ended December 31, 2016 and 2015 and the consolidated balance sheet data as of December 31, 2017, 2016 and 2015 have been derived from our consolidated financial statements not included elsewhere herein.

In November 2019, the Company entered into a Purchase Agreement under which SIRVA will acquire Cartus Relocation Services. As a result, the operating results of Cartus Relocation Services in the table below are presented as discontinued operations for all periods. See Note 3, "Discontinued Operations", to the Company's Consolidated Financial Statements included in this Annual Report for additional information about discontinued operations.

Neither Realogy Holdings, the indirect parent of Realogy Group, nor Realogy Intermediate, the direct parent company of Realogy Group, conducts any operations other than with respect to its respective direct or indirect ownership of Realogy Group. As a result, the consolidated financial positions and results of operations of Realogy Holdings, Realogy Intermediate and Realogy Group are the same.

The selected historical consolidated financial data and operating statistics presented below should be read in conjunction with our annual consolidated financial statements and accompanying notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere herein. Our annual consolidated financial information may not be indicative of our future performance.

	As of or for the Year Ended December 31,				
	2019	2018	2017	2016	2015
(In millions, except per share data and operating statistics)					
Statement of Operations Data:					
Net revenue	\$ 5,598	\$ 5,782	\$ 5,810	\$ 5,481	\$ 5,373
Total expenses	5,756	5,565	5,466	5,152	5,111
(Loss) income from continuing operations before income taxes, equity in (earnings) losses and noncontrolling interests	(158)	217	344	329	262
Income tax (benefit) expense from continuing operations (a)	(22)	67	(66)	134	103
Equity in (earnings) losses of unconsolidated entities	(18)	4	(18)	(12)	(16)
Net (loss) income from continuing operations	(118)	146	428	207	175
Net (loss) income from discontinued operations	(67)	(6)	6	10	13
Net (loss) income	(185)	140	434	217	188
Less: Net income attributable to noncontrolling interests	(3)	(3)	(3)	(4)	(4)
Net (loss) income attributable to Realogy Holdings and Realogy Group	<u>\$ (188)</u>	<u>\$ 137</u>	<u>\$ 431</u>	<u>\$ 213</u>	<u>\$ 184</u>
Basic (loss) earnings per share attributable to Realogy Holdings shareholders:					
Basic (loss) earnings per share from continuing operations	\$ (1.06)	\$ 1.15	\$ 3.11	\$ 1.40	\$ 1.17
Basic (loss) earnings per share from discontinued operations	(0.59)	(0.05)	0.04	0.07	0.09
Basic (loss) earnings per share	<u>\$ (1.65)</u>	<u>\$ 1.10</u>	<u>\$ 3.15</u>	<u>\$ 1.47</u>	<u>\$ 1.26</u>
Diluted (loss) earnings per share attributable to Realogy Holdings shareholders:					
Diluted (loss) earnings per share from continuing operations	\$ (1.06)	\$ 1.14	\$ 3.07	\$ 1.39	\$ 1.15
Diluted (loss) earnings per share from discontinued operations	(0.59)	(0.05)	0.04	0.07	0.09
Diluted (loss) earnings per share	<u>\$ (1.65)</u>	<u>\$ 1.09</u>	<u>\$ 3.11</u>	<u>\$ 1.46</u>	<u>\$ 1.24</u>
Weighted average common and common equivalent shares used in:					
Basic	114.2	124.0	136.7	144.5	146.5
Diluted	114.2	125.3	138.4	145.8	148.1
Cash dividends declared per share (August 2016 through August 2019)	\$ 0.27	\$ 0.36	\$ 0.36	\$ 0.18	\$ —
Balance Sheet Data:					
Cash and cash equivalents	\$ 235	\$ 203	\$ 196	\$ 240	\$ 391
Total assets	7,543	7,290	7,337	7,421	7,531
Long-term debt, including short-term portion	3,445	3,548	3,348	3,507	3,702
Equity	2,096	2,315	2,622	2,469	2,422
Statement of Cash Flows Data:					
Net cash provided by operating activities	\$ 371	\$ 394	\$ 667	\$ 586	\$ 588
Net cash used in investing activities	(128)	(91)	(146)	(191)	(211)
Net cash used in financing activities	(215)	(297)	(570)	(534)	(275)

	For the Year Ended December 31,				
	2019	2018	2017	2016	2015
Operating Statistics:					
Realogy Franchise Group (b)					
Closed homesale sides (c)	1,061,500	1,103,857	1,144,217	1,135,344	1,101,333
Average homesale price (d)	\$ 314,769	\$ 303,750	\$ 288,929	\$ 272,206	\$ 263,894
Average homesale brokerage commission rate (e)	2.47 %	2.48 %	2.50 %	2.50 %	2.51 %
Net royalty per side (f)	\$ 327	\$ 323	\$ 313	\$ 299	\$ 294
Realogy Brokerage Group (g)					
Closed homesale sides (c)	325,652	336,806	344,446	335,699	336,744
Average homesale price (d)	\$ 522,282	\$ 523,426	\$ 514,685	\$ 489,504	\$ 489,673
Average homesale brokerage commission rate (e)	2.41 %	2.43 %	2.44 %	2.46 %	2.46 %
Gross commission income per side (h)	\$ 13,296	\$ 13,458	\$ 13,309	\$ 12,752	\$ 12,730
Realogy Title Group					
Purchasing title and closing units (i)	146,210	157,228	159,113	152,997	130,541
Refinance title and closing units (j)	26,589	18,495	28,564	50,919	38,544
Average fee per closing unit (k)	\$ 2,297	\$ 2,230	\$ 2,092	\$ 1,875	\$ 1,861

(a) The income tax benefit for the year ended December 31, 2017 reflects the impact of the 2017 Tax Act.

(b) These amounts include only those relating to third-party franchisees and do not include amounts relating to Realogy Brokerage Group.

(c) A closed homesale side represents either the "buy" side or the "sell" side of a homesale transaction.

(d) Represents the average selling price of closed homesale transactions.

(e) Represents the average commission rate earned on either the "buy" side or "sell" side of a homesale transaction.

(f) Represents domestic royalties earned from our franchisees net of volume incentives achieved and other incentives divided by the total number of our franchisees' closed homesale sides.

(g) Our real estate brokerage business has a significant concentration of offices and transactions in geographic regions where home prices are at the higher end of the U.S. real estate market, particularly the east and west coasts. The real estate franchise business has franchised offices that are more widely dispersed across the United States than our real estate brokerage operations. Accordingly, operating results and homesale statistics may differ between our brokerage and franchise businesses based upon geographic presence and the corresponding homesale activity in each geographic region.

(h) Represents gross commission income divided by closed homesale sides. Gross commission income includes commissions earned in homesale transactions and certain other activities, primarily leasing and property management transactions.

(i) Represents the number of title and closing units processed as a result of home purchases.

(j) Represents the number of title and closing units processed as a result of homeowners refinancing their home loans.

(k) Represents the average fee we earn on purchase title and refinancing title units.

In presenting the financial data above in conformity with general accepted accounting principles, we are required to make estimates and assumptions that affect the amounts reported. See "Item 7.—Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies" for a detailed discussion of the accounting policies that we believe require subjective and complex judgments that could potentially affect reported results.

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

The following discussion and analysis should be read in conjunction with our consolidated financial statements and accompanying notes thereto included elsewhere herein. Unless otherwise noted, all dollar amounts in tables are in millions. This Management's Discussion and Analysis of Financial Condition and Results of Operations contain forward-looking statements. See "Forward-Looking Statements" and "Item 1A.—Risk Factors" for a discussion of the uncertainties, risks and assumptions associated with these statements. Actual results may differ materially from those contained in any forward-looking statements.

RECENT DEVELOPMENTS

Entry into a Definitive Agreement to Sell Cartus Relocation Services with Realogy to Retain Realogy Leads Group (including affinity and broker-to-broker business and Realogy Broker Network)

We entered into a definitive Purchase and Sale agreement with a subsidiary of SIRVA, Inc. ("SIRVA") on November 6, 2019 (the "Purchase Agreement"), pursuant to which SIRVA will acquire Cartus Relocation Services, our global employee relocation business. Under the terms of the Purchase Agreement, we will receive \$375 million in cash at closing, subject to certain closing adjustments set forth in the Purchase Agreement, and a \$25 million deferred payment after the closing of the transaction. SIRVA is a portfolio company of Madison Dearborn Partners (MDP), a leading private equity firm, and the deferred payment will be paid upon the consummation of MDP's monetization of its investment in Cartus Relocation Services or such earlier date determined at the discretion of MDP. The sale of Cartus Relocation Services is expected to close in the next couple of months, subject to the satisfaction or waiver of closing conditions described in the Purchase Agreement. We intend to use the substantial majority of the net proceeds from the transaction to pay down corporate debt.

The transaction does not include Realogy Leads Group. Realogy Leads Group consists of affinity programs (both company- and client-directed) as well as broker-to-broker referrals and the Realogy Broker Network (formerly referred to as the Cartus Broker Network). Referrals generated by Realogy Leads Group are handled by the Realogy Broker Network, a network made up of agents and brokers from Realogy's residential real estate brands and certain independent real estate brokers. Member brokers of the Realogy Broker Network, including certain franchisees and company owned brokerages, receive referrals in exchange for a referral fee paid to Realogy Leads Group.

Member brokers of the Realogy Broker Network have also historically received referrals from Cartus Relocation Services generated by our relocation clients in exchange for a referral fee (that is reported in the financial results for Cartus Relocation Services). In connection with the planned sale of Cartus Relocation Services to SIRVA, we will enter into a non-exclusive five-year broker services agreement with SIRVA, pursuant to which Realogy Leads Group could, at the discretion of SIRVA, continue to provide high-quality brokerage services via the Realogy Broker Network to relocation clients of SIRVA. Realogy Leads Group, however, will not receive a referral fee in connection with providing such services.

The assets and liabilities of Cartus Relocation Services are classified as held for sale in the Consolidated Balance Sheets and the results are reported in this Annual Report as discontinued operations. "Net (loss) income from discontinued operations" is reflected on the Consolidated Statements of Operations for all periods presented.

Realogy Leads Group

The Realogy Broker Network has historically been a key contributor to our lead generation strategy, with 99% of the converted leads generated through the network (from Realogy Leads Group and Cartus Relocation Services) being directed to independent sales agents affiliated with our franchisees and company owned brokerages in 2019. As a result of referrals from Realogy Leads Group and Cartus Relocation Services, the Realogy Broker Network closed approximately 78,700 real estate transactions in 2019, with approximately 68,400 transactions attributable to affinity programs and broker-to-broker activity, and approximately 10,300 transactions attributable to relocation clients.

Our affinity business is highly-concentrated and our affinity relationships are terminable at any time at the option of the client and are non-exclusive.

In the third quarter of 2019, USAA, which had been our largest affinity client, ceased new enrollments in its long-term affinity program with us. In 2019, referrals generated by the USAA affinity program represented a significant portion of the 78,700 total homesale transactions closed from the Realogy Broker Network. We expect that the discontinuation of the USAA business will result in (1) a material decline in earnings at Realogy Leads Group and (2) a comparable dollar reduction in earnings in the aggregate for the Realogy Brokerage Group and Realogy Franchise Group as a result of the loss

of the referrals from the USAA affinity program, with most of the impact expected at Realogy Brokerage Group. Approximately 80% of USAA referrals in both 2018 and 2019 were distributed to franchise brokerages affiliated with Realogy Franchise Group and approximately 20% were distributed to Realogy Brokerage Group.

In 2019, we launched our first Realogy-branded affinity program with Realogy Military Rewards, a program for U.S. military personnel, veterans and their families that seeks to provide access to benefits from Realogy that are similar to those offered under the former USAA affinity program. In October 2019, we announced an agreement to create the first-ever real estate benefits program designed for the nearly 38 million AARP members, which is expected to launch nationally in early 2020. The Company expects that significant time and effort and meaningful investment will be required to increase awareness of and affinity member participation in these new affinity programs.

Following the close of the planned sale of Cartus Relocation Services, we expect to consolidate Realogy Leads Group, including the Realogy Broker Network, into Realogy Franchise Group.

Facility and Operational Efficiencies Program

Beginning in the first quarter of 2019, we commenced the implementation of a plan to accelerate our office consolidation to reduce our storefront costs, as well as institute other operational efficiencies to drive increased profitability. In addition, beginning in the first quarter of 2019, we commenced a plan to transform and centralize certain aspects of our operational support and drive changes in how we serve our affiliated independent sales agents from a marketing and technology perspective to help such agents be more productive and enable them to make their businesses more profitable. In the third quarter, we expanded our operational efficiencies program to focus on workforce optimization. This workforce optimization initiative is focused on consolidating similar or overlapping roles, reducing the number of hierarchical layers and streamlining work and decision making. Separately, we also reduced headcount in the third quarter in connection with the wind down of the USAA affinity program. Furthermore, at the end of 2019 the Company identified other strategic initiatives which are expected to result in additional operational and facility related efficiencies in 2020.

As of December 31, 2019, cost savings related to the restructuring activities were estimated to be approximately \$50 million on an annual run rate basis, with approximately \$30 million of those cost savings realized in 2019. In addition to the approximately \$30 million of cost savings realized from restructuring activities, there were approximately \$40 million of additional cost savings initiatives implemented and realized in 2019. These costs savings partially offset inflation and other costs in 2019.

CURRENT BUSINESS AND INDUSTRY TRENDS

According to the National Association of Realtors ("NAR"), during 2019, homesale transaction volume increased 3% due to a 3% increase in the average homesale price and flat homesale transactions.

During 2018, the housing market faced challenging conditions that intensified in severity during the last four months of 2018, including reduced affordability, constrained inventory, higher average homesale prices and mortgage rate volatility, as well as a number of other factors, such as personal income tax reform. While we believe that the difficult market environment in late 2018 continued to negatively impact the first half of 2019, we believe that incremental improvement in certain industry fundamentals, in particular declines in average mortgage rates, contributed to improvement in market conditions in the second half of 2019. We believe this is reflected in the 6% increase and 11% increase in homesale transaction volume in the third and fourth quarter of 2019 as reported by NAR, respectively, versus the 4% decrease and flat homesale transaction volume in the first and second quarter of 2019 as reported by NAR.

Homesale transaction volume on a combined basis for Realogy Franchise and Brokerage Groups decreased 1% during 2019 compared to 2018. Homesale transaction volume at Realogy Brokerage Group decreased 4%, as a result of a 3% decrease in existing homesale transactions while the average homesale price remained flat, and homesale transaction volume at our Realogy Franchise Group remained flat, as a result of a 4% decrease in existing homesale transactions offset by a 4% increase in average homesale price.

We believe that while the industry fundamentals in late 2018 described above drove a significant portion of our decline in homesale transaction volume in the first half of 2019, our results after the first quarter of 2019 reflect some of the modest improvements in market conditions described above. However, during 2019, we were also negatively impacted by the intense competitive environment as well as our geographic concentration, in particular for our brokerage operations in California and the New York metropolitan area.

Specifically, the intensity of competition for the affiliation of independent sales agents negatively impacted recruitment and retention efforts at both Realogy Franchise and Brokerage Groups. While the number of independent sales agents affiliated with Realogy Brokerage Group grew approximately 4% in 2019, that gain did not fully offset the decline in homesale transaction volume driven by the loss of more productive independent sales agents over the same period. Further, the number of independent sales agents in the U.S. affiliated with Realogy Franchise Group (excluding Realogy Brokerage Group) was down approximately 3% in 2019, driven by the competitive environment for independent sales agents as well as franchisee terminations, including the loss of a large high-volume/low-margin franchisee during the second quarter.

These competitive factors drove a loss in our market share for the full-year 2019 compared to 2018. This loss of market share contributed to the decline in homesale transaction volume at both Realogy Franchise and Brokerage Groups and is expected to continue to adversely impact results.

Our market share is largely dependent on the ability of our company owned and franchised brokerages to recruit and retain independent sales agents, which has been and may continue to be further complicated by competitive models that do not prioritize traditional business objectives. For example, we believe that certain owned-brokerage competitors have investors that have historically allowed the pursuit of increases in market share over profitability, which not only exacerbates competition for independent sales agents, but places additional pressure on the share of commission income received by the agent. During 2018 through much of 2019, the business practices of one such competitor in particular had a material adverse impact on recruiting and retention efforts at both our company owned brokerages and certain franchised brands. While we saw signs of a return to a more rational competitive environment in late third quarter 2019, which continued into the fourth quarter of 2019, industry competition continues to be formidable and we expect to experience increased pressure in favor of agents affiliated with our company owned and franchised brokerages on the share of commission income received by such agents. Moreover, the business practices exhibited by the competitor described above could resume and have a further material adverse impact on our company owned and franchised brokerages.

Inventory. Although inventory levels have shown some signs of improvement during the first half of 2019, inventory levels declined during the second half of 2019 compared to 2018. Low housing inventory levels continue to be an industry-wide concern, in particular in certain highly sought-after geographies and at lower price points. According to NAR, the inventory of existing homes for sale in the U.S. decreased from 1.5 million as of December 2018 to 1.4 million at the end of December 2019. As a result, inventory has decreased from 3.7 months of supply in December 2018 to 3.0 months as of December 2019. These levels continue to be significantly below the 10-year average of 5.4 months, the 15-year average of 6.1 months and the 25-year average of 5.7 months.

Mortgage Rates. According to Freddie Mac, mortgage rates on commitments for a 30-year, conventional, fixed-rate first mortgage averaged 3.94% for 2019 and 4.54% for 2018. While mortgage rates reached as high as 4.87% in November 2018, rates have moderated during 2019, and on December 31, 2019 were 3.72%, according to Freddie Mac. Increases in mortgage rates adversely impact housing affordability and we have been and could again be negatively impacted by a rising interest rate environment. For example, a rise in mortgage rates could result in decreased homesale transaction volume if potential home sellers choose to stay with their lower mortgage rate rather than sell their home and pay a higher mortgage rate with the purchase of another home or, similarly, if potential home buyers choose to rent rather than pay higher mortgage rates.

Affordability. The fixed housing affordability index, as reported by NAR, decreased from 155 for 2018 to 153 for 2019, which we believe is primarily attributable to lower inventory levels, which have continued to put upward pressure on home prices. A housing affordability index above 100 signifies that a family earning the median income has sufficient income to purchase a median-priced home, assuming a 20 percent down payment and ability to qualify for a mortgage.

Recruitment and Retention of Independent Sales Agents; Commission Income. Recruitment and retention of independent sales agents and independent sales agent teams are critical to the business and financial results of a brokerage, including our company owned brokerages and those operated by our affiliated franchisees. Aggressive competition for independent sales agents and independent sales agent teams has negatively impacted our company owned and franchised brokerages, in particular with respect to more productive sales agents.

We believe that a variety of factors in recent years have driven intensifying recruitment and retention tactics for independent sales agents in the industry and has increasingly impacted our recruitment and retention of top producing agents. Such factors include increasing competition, increasing levels of commissions paid to agents (including up-front payments and equity), changes in the spending patterns of independent sales agents (as more independent sales agents purchase services from third-parties outside of their affiliated broker) and the growth in independent sales agent teams.

Competition for productive agents could continue to have a negative impact on our homesale transaction volume and market share and could continue to put upward pressure on the average share of commissions earned by independent sales agents. These competitive market factors also impact our franchisees and such franchisees have and may continue to seek reduced royalty fee arrangements or other incentives from us to offset the continued business pressures on such franchisees, which would result in a reduction in royalty fees paid to us.

Non-Traditional Market Participants. While real estate brokers using historical real estate brokerage models typically compete for business primarily on the basis of services offered, brokerage commission, reputation, utilization of technology and personal contacts, participants pursuing non-traditional methods of marketing real estate may compete in other ways, including companies that employ technologies intended to disrupt historical real estate brokerage models or minimize or eliminate the role traditional brokers and sales agents perform in the homesale transaction process.

A growing number of companies are competing in non-traditional ways for a portion of the gross commission income generated by homesale transactions. For example, many iBuying business models seek to disintermediate real estate brokers and independent sales agents from buyers and sellers of homes by reducing brokerage commissions that may be earned on those transactions. In addition, the concentration and market power of the top listing aggregators allow them to monetize their platforms by a variety of actions, including expanding into the brokerage business, charging significant referral fees, charging listing and display fees, diluting the relationship between agents and brokers (and between agents and the consumer), tying referrals to use of their products, consolidating and leveraging data, and engaging in preferential or exclusionary practices to favor or disfavor other industry participants. These actions divert and reduce the earnings of other industry participants, including our company owned and franchised brokerages. Aggregators could intensify their current business tactics or introduce new programs that could be materially disadvantageous to our business and other brokerage participants in the industry and such tactics could further increase pressures on the profitability of our company owned and franchised brokerages and affiliated independent sales agents, reduce our franchisor service revenue and dilute our relationships with our franchisees and our and our franchisees' relationships with affiliated independent sales agents and buyers and sellers of homes.

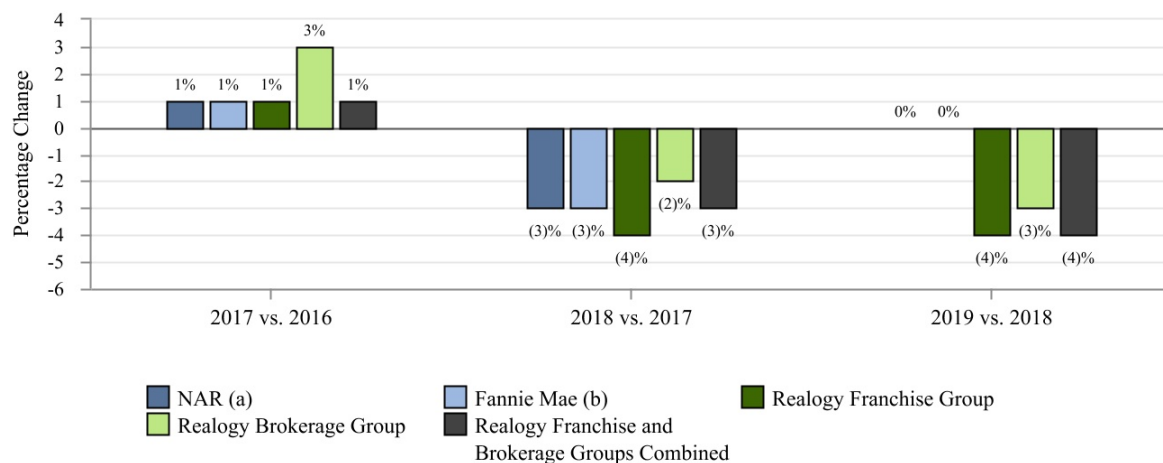
We currently receive meaningful listing fees for our provision of real estate listings and such fees help defray expenses for lead generation and other programs to benefit affiliated agents and franchisees. We do not expect this revenue stream to extend beyond the first quarter of 2022 because of changes in industry practices around syndication and distribution of listings. The loss of this revenue, which could occur prior to 2022, could have a meaningful adverse effect on our revenues and earnings.

New Development. Realogy Brokerage Group has relationships with developers, primarily in major cities, in particular New York City, to provide marketing and brokerage services in new developments. New development closings can vary significantly from year to year due to timing matters that are outside of our control, including long cycle times and irregular project completion timing. Accordingly, earnings attributable to this business can fluctuate meaningfully from year to year, impacting both homesale transaction volume and the share of gross commission income we realize on such transactions.

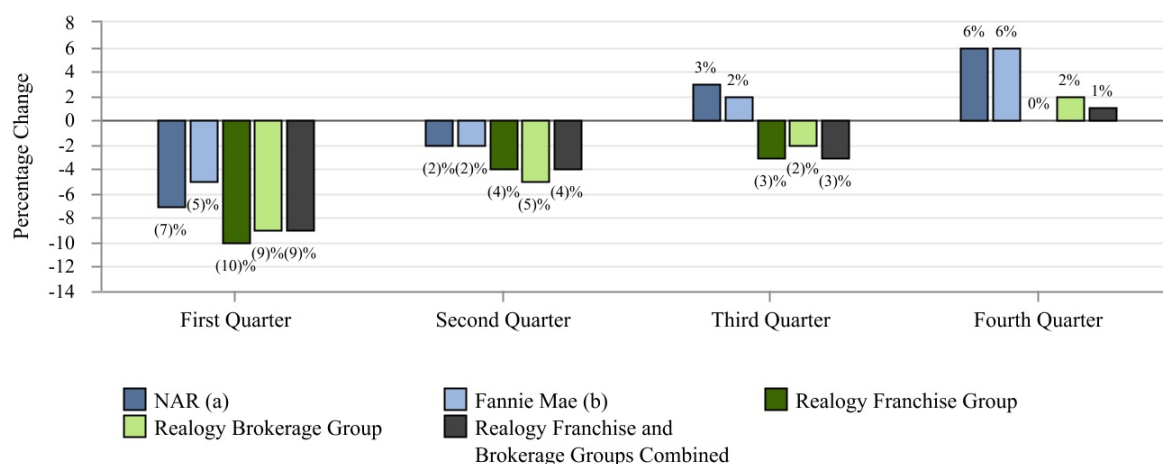
Existing Homesales

For the year ended December 31, 2019, NAR existing homesale transactions remained flat at 5.3 million homes compared to 2018. For the year ended December 31, 2019, homesale transactions on a combined basis for Realogy Franchise and Brokerage Groups decreased 4% compared to 2018. The annual and quarterly year-over-year trends in homesale transactions are as follows:

**Existing Homesale Transactions
Year over Year**



**Existing Homesale Transactions
2019 vs. 2018 by Quarter**



(a) Historical existing homesale data is as of the most recent NAR press release, which is subject to sampling error.

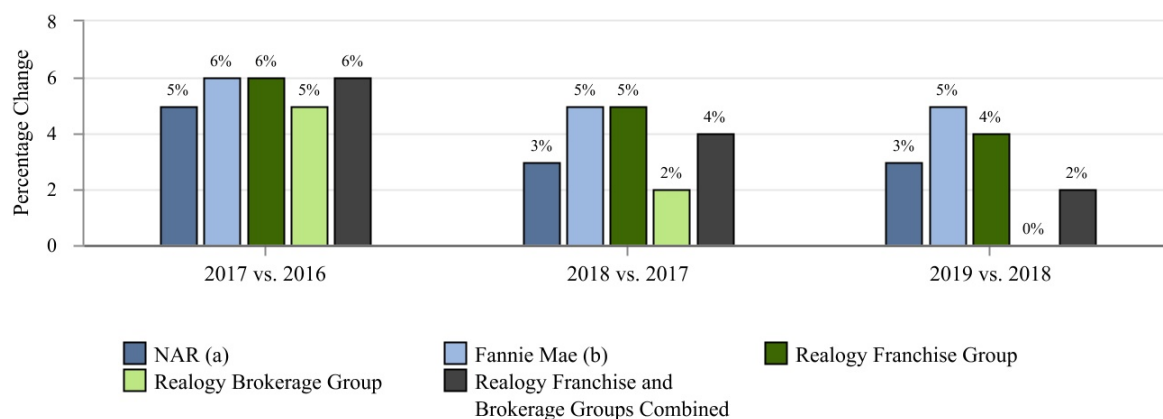
(b) Existing homesale data, on a seasonally adjusted basis, is as of the most recent Fannie Mae press release.

As of their most recent releases, NAR is forecasting existing homesale transactions to increase 3% in 2020 and 1% in 2021 while Fannie Mae is forecasting existing homesale transactions to increase 2% in 2020 and to remain flat in 2021.

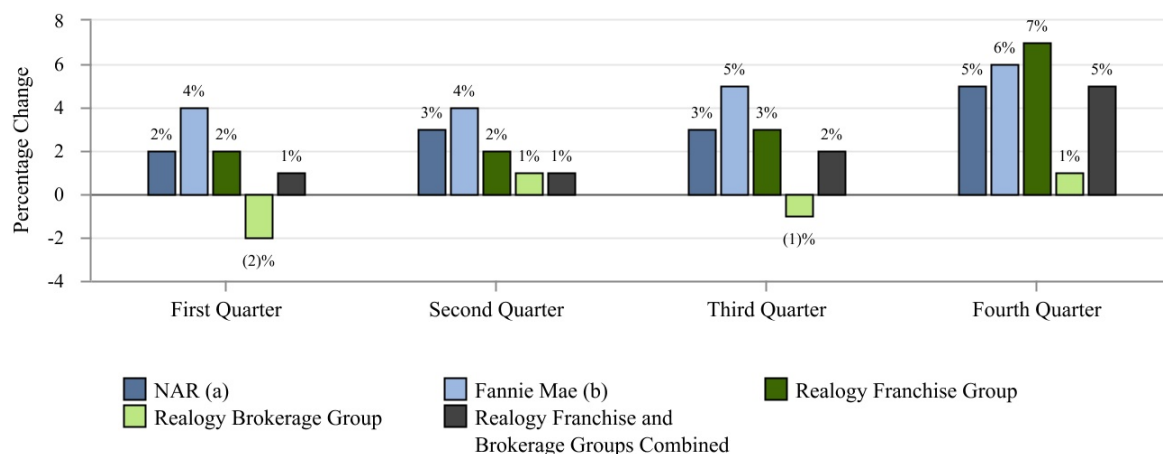
Existing Homesale Price

In 2019, NAR existing homesale average price increased 3% compared to 2018. In 2019, average homesale price on a combined basis for Realogy Franchise and Brokerage Groups increased 2% compared to 2018 and consisted of a 4% increase in average homesale price for Realogy Franchise Group and flat average homesale price for Realogy Brokerage Group. Realogy Brokerage Group's geographic concentration and exposure to the high-end of the market plus the associated competitive pressures drove the year-over-year decline in homesale price compared to the overall industry. The annual and quarterly year-over-year trends in the price of homes are as follows:

**Existing Homesale Price
Year over Year**



**Existing Homesale Price
2019 vs. 2018 by Quarter**



(a) Historical homesale price data is for existing homesale average price and is as of the most recent NAR press release.

(b) Existing homesale price data is for median price and is as of the most recent Fannie Mae press release.

As of their most recent releases, NAR is forecasting median existing homesale price to increase 4% in 2020 and 3% in 2021 while Fannie Mae is forecasting median existing homesale price to increase 4% in 2020 and 3% in 2021.

* * *

We believe that long-term demand for housing and the growth of our industry are primarily driven by the affordability of housing, the economic health of the U.S. economy, demographic trends such as generational transitions, increases in U.S. household formation, mortgage rate levels and mortgage availability, certain tax benefits, job growth, increases in renters that qualify as homebuyers, the inherent attributes of homeownership versus renting and the availability of inventory in the consumer's desired location and within the consumer's price range. At this time, certain of these factors are trending favorably, such as mortgage rate levels, household formation and job growth. Factors that may negatively affect growth in the housing industry include:

- continued insufficient inventory levels or stagnant and/or declining home prices;
- a reduction in the affordability of homes;
- higher mortgage rates due to increases in long-term interest rates and increasing down payment requirements as well as reduced availability of mortgage financing;
- certain provisions of the 2017 Tax Act that directly impact traditional incentives associated with home ownership and may reduce the financial distinction between renting and owning a home, including those that reduce the amount that certain taxpayers would be allowed to deduct for home mortgage interest or state, local and property taxes as well as certain state or local tax reform, such as the "mansion tax" in New York City;
- decelerated or lack of building of new housing for homesales, increased building of new rental properties, or irregular timing of new development closings leading to lower unit sales at Realogy Brokerage Group, which has relationships with developers, primarily in major cities, to provide marketing and brokerage services in new developments;
- homeowners retaining their homes for longer periods of time;
- changing attitudes towards home ownership, particularly among potential first-time homebuyers who may delay, or decide not to, purchase a home, as well as changing preferences to rent versus purchase a home;
- decreasing consumer confidence in the economy and/or the residential real estate market;
- an increase in potential homebuyers with low credit ratings or inability to afford down payments;
- the impact of limited or negative equity of current homeowners, as well as the lack of available inventory may limit their proclivity to purchase an alternative home;
- economic stagnation or contraction in the U.S. economy;
- weak credit markets and/or instability of financial institutions;
- increased levels of unemployment and/or stagnant wage growth in the U.S.;
- a decline in home ownership levels in the U.S.;
- other legislative or regulatory reforms, including but not limited to reform that adversely impacts the financing of the U.S. housing market, changes relating to RESPA, potential reform of Fannie Mae and Freddie Mac, immigration reform, and further potential federal, state or local tax code reform (including, for example, the proposed "pied-a-terre tax" in New York City);
- renewed high levels of foreclosure activity;
- natural disasters, such as hurricanes, earthquakes, wildfires, mudslides and other events that disrupt local or regional real estate markets; and
- geopolitical and economic instability.

Cartus Relocation Services is impacted by these general residential housing trends as well as global corporate spending on relocation services (which continue to shift to lower cost relocation benefits as corporate clients engage in cost reduction initiatives and/or restructuring programs) and changes in employment relocation trends.

KEY DRIVERS OF OUR BUSINESSES

Within Realogy Franchise and Brokerage Groups, we measure operating performance using the following key operating metrics: (i) closed homesale sides, which represents either the "buy" side or the "sell" side of a homesale transaction, (ii) average homesale price, which represents the average selling price of closed homesale transactions, and (iii) average homesale broker commission rate, which represents the average commission rate earned on either the "buy" side or "sell" side of a homesale transaction.

For Realogy Franchise Group, we also use net royalty per side, which represents the royalty payment to Realogy Franchise Group for each homesale transaction side taking into account royalty rates, average broker commission rates, volume incentives achieved and other incentives. We utilize net royalty per side as it includes the impact of changes in average homesale price as well as all incentives and represents the royalty revenue impact of each incremental side.

For Realogy Brokerage Group, we also use gross commission income per side, which represents gross commission income divided by closed homesale sides. Gross commission income includes commissions earned in homesale transactions and certain other activities, primarily leasing and property management transactions. Realogy Brokerage Group, as a franchisee of Realogy Franchise Group, pays a royalty fee of approximately 6% per transaction to Realogy Franchise Group from the commission earned on a real estate transaction. The remainder of gross commission income is split between the broker (Realogy Brokerage Group) and the independent sales agent in accordance with their applicable independent contractor agreement (which specifies the portion of the broker commission to be paid to the agent), which varies by agent agreement, which varies by agent.

In Realogy Title Group, operating performance is evaluated using the following key metrics: (i) purchase title and closing units, which represent the number of title and closing units we process as a result of home purchases, (ii) refinance title and closing units, which represent the number of title and closing units we process as a result of homeowners refinancing their home loans, and (iii) average fee per closing unit, which represents the average fee we earn on purchase title and refinancing title sides. An increase or decrease in homesale transactions will impact the financial results of Realogy Title Group; however, the financial results are not significantly impacted by a change in homesale price. Although the average mortgage rate declined in 2019 compared to 2018, we believe that increases in mortgage rates in the future would most likely have a negative impact on refinancing title and closing units.

Following the close of the planned sale of Cartus Relocation Services, we expect to consolidate Realogy Leads Group, including the Realogy Broker Network, into Realogy Franchise Group, given its size relative to our other business segments. Realogy Leads Group earned referral fee revenue from 64,910 referrals in 2019 as compared to 68,172 referrals in 2018. Cartus Relocation Services earned referral fee revenue from approximately 15,300 referrals in 2019, of which approximately 10,300 were distributed through the Realogy Broker Network.

The following table presents our drivers for the years ended December 31, 2019, 2018 and 2017. See "Results of Operations" below for a discussion as to how these drivers affected our business for the periods presented.

	Year Ended December 31,				Year Ended December 31,		
	2019	2018	% Change		2018	2017	% Change
Realogy Franchise Group (a)							
Closed homesale sides	1,061,500	1,103,857	(4) %		1,103,857	1,144,217	(4) %
Average homesale price	\$ 314,769	\$ 303,750	4 %		\$ 303,750	\$ 288,929	5 %
Average homesale broker commission rate	2.47 %	2.48 %	(1)bps		2.48 %	2.50 %	(2)bps
Net royalty per side	\$ 327	\$ 323	1 %		\$ 323	\$ 313	3 %
Realogy Brokerage Group							
Closed homesale sides	325,652	336,806	(3) %		336,806	344,446	(2) %
Average homesale price	\$ 522,282	\$ 523,426	— %		\$ 523,426	\$ 514,685	2 %
Average homesale broker commission rate	2.41 %	2.43 %	(2)bps		2.43 %	2.44 %	(1)bps
Gross commission income per side	\$ 13,296	\$ 13,458	(1) %		\$ 13,458	\$ 13,309	1 %
Realogy Title Group							
Purchase title and closing units	146,210	157,228	(7) %		157,228	159,113	(1) %
Refinance title and closing units	26,589	18,495	44 %		18,495	28,564	(35) %
Average fee per closing unit	\$ 2,297	\$ 2,230	3 %		\$ 2,230	\$ 2,092	7 %

(a) Includes all franchisees except for Realogy Brokerage Group.

A decline in the number of homesale transactions and/or decline in homesale prices could adversely affect our results of operations by: (i) reducing the royalties we receive from our franchisees, (ii) reducing the commissions our company owned brokerage operations earn, (iii) reducing the demand for our title and settlement services, (iv) reducing the referral fees we earn from Realogy Leads Group, and (v) increasing the risk of franchisee default due to lower homesale volume. Our results could also be negatively affected by a decline in commission rates charged by brokers or greater commission payments to sales agents or by an increase in volume or other incentives paid to franchisees.

Since 2014, we have experienced approximately a one basis point decline in the average homesale broker commission rate each year, which we believe has been largely attributable to increases in average homesale prices (as higher priced homes tend to have a lower broker commission) and, to a lesser extent, competitors providing fewer or similar services for a reduced fee.

Royalty fees are charged to all franchisees pursuant to the terms of the relevant franchise agreements and are included in each of the real estate brands' franchise disclosure documents. Most of our third-party franchisees are subject to a 6% royalty rate and entitled to volume incentives, although a royalty fee generally equal to 5% of franchisee commission (capped at a set amount per independent sales agent per year) is applicable to franchisees operating under the "capped fee model" that was launched for our Better Homes and Gardens® Real Estate franchise business in January 2019. Volume incentives are calculated as a progressive percentage of the applicable franchisee's eligible annual gross commission income and generally result in a net or effective royalty rate ranging from 6% to 3% for the franchisee (prior to taking into account other incentives that may be applicable to the franchisee). Volume incentives increase or decrease as the franchisee's gross commission income generated increases or decreases, respectively. We have the right to adjust the annual volume incentive tables on an annual basis in response to changing market conditions. In addition, certain of our franchisees (including some of our largest franchisees) have a flat royalty rate of less than 6% and are not eligible for volume incentives.

Other incentives may also be used as consideration to attract new franchisees, grow franchisees (including through independent sales agent recruitment) or extend existing franchise agreements, although in contrast to volume incentives, the majority of other incentives are not homesale transaction based.

Transaction volume growth has exceeded royalty revenue growth due primarily to the growth in gross commission income generated by our top 250 franchisees and our increased use of other sales incentives, both of which directly impact royalty revenue. Over the past several years, our top 250 franchisees have grown faster than our other franchisees through organic growth and market consolidation. If the amount of gross commission income generated by our top 250 franchisees continues to grow at a quicker pace relative to our other franchisees, we would expect our royalty revenue to continue to increase, but at a slower pace than homesale transaction volume. Likewise, our royalty revenue would continue to increase, but at a slower pace than homesale transaction volume, if the gross commission income generated by all of our franchisees grows faster than the applicable annual volume incentive table increase or if we increase our use of standard volume or other incentives. However, in the event that the gross commission income generated by our franchisees increases as a result of increased transaction volume, we would expect to recognize an increase in overall royalty payments to us.

We face significant competition from other national real estate brokerage brand franchisors for franchisees and we expect that the trend of increasing incentives will continue in the future in order to attract, retain, and help grow certain franchisees. We expect to experience downward pressures on net royalty per side during 2020, largely due to the impact of competitive market factors noted above, continued concentration among our top 250 franchisees, and the impact of affiliated franchisees of our Better Homes and Gardens® Real Estate brand moving to the "capped fee model" we adopted in 2019.

Realogy Brokerage Group has a significant concentration of real estate brokerage offices and transactions in geographic regions where home prices are at the higher end of the U.S. real estate market, particularly the east and west coasts, while Realogy Franchise Group has franchised offices that are more widely dispersed across the United States. Accordingly, operating results and homesale statistics may differ between Realogy Brokerage Group and Realogy Franchise Group based upon geographic presence and the corresponding homesale activity in each geographic region. In addition, the share of commissions earned by independent sales agents directly impacts the margin earned by Realogy Brokerage Group. Such share of commissions earned by independent sales agents varies by region and commission schedules are generally progressive to incentivize sales agents to achieve higher levels of production. Commission share has been and we expect will continue to be subject to upward pressure in favor of the independent sales agent for a variety of factors, including more aggressive recruitment and retention activities taken by us and our competitors as well as growth in independent sales agent teams.

RESULTS OF OPERATIONS

Discussed below are our consolidated results of operations and the results of operations for each of our reportable segments. The reportable segments presented below represent our segments for which separate financial information is available and which is utilized on a regular basis by our chief operating decision maker to assess performance and to allocate resources. In identifying our reportable segments, we also consider the nature of services provided by our segments. Management evaluates the operating results of each of our reportable segments based upon revenue and Operating EBITDA. Operating EBITDA is defined by us as net income (loss) before depreciation and amortization, interest expense, net, income taxes, and other items that are not core to the operating activities of the Company such as restructuring charges, former parent legacy items, gains or losses on the early extinguishment of debt, impairments, gains or losses on discontinued operations and gains or losses on the sale of investments or other assets. Our presentation of Operating EBITDA may not be comparable to similarly titled measures used by other companies.

Year Ended December 31, 2019 vs. Year Ended December 31, 2018

Our consolidated results comprised the following:

	Year Ended December 31,		
	2019	2018	Change
Net revenues	\$ 5,598	\$ 5,782	\$ (184)
Total expenses	5,756	5,565	191
(Loss) income from continuing operations before income taxes, equity in (earnings) losses and noncontrolling interests	(158)	217	(375)
Income tax (benefit) expense	(22)	67	(89)
Equity in (earnings) losses of unconsolidated entities	(18)	4	(22)
Net (loss) income from continuing operations	(118)	146	(264)
Net loss from discontinued operations	(67)	(6)	(61)
Net (loss) income	(185)	140	(325)
Less: Net income attributable to noncontrolling interests	(3)	(3)	—
Net (loss) income attributable to Realogy Holdings and Realogy Group	\$ (188)	\$ 137	\$ (325)

Net revenues decreased \$184 million or 3% for the year ended December 31, 2019 compared with the year ended December 31, 2018 primarily driven by lower homesale transaction volume at Realogy Brokerage Group.

Total expenses increased \$191 million or 3% compared to 2018 primarily due to:

- impairments of \$249 million including a goodwill impairment charge of \$237 million during the third quarter of 2019 which reduced the net carrying value of Realogy Brokerage Group by \$180 million after accounting for the related income tax benefit of \$57 million (see Note 20, "Selected Quarterly Financial Data", for additional information), and \$12 million of other impairment charges primarily related to lease asset impairments;
- a \$60 million net increase in interest expense primarily due to a \$35 million net expense related to our mark-to-market adjustments for our interest rate swaps that resulted in losses of \$39 million for the year ended December 31, 2019 compared to losses of \$4 million during the same period of 2018, and a \$25 million increase in interest expense primarily due to the refinancing of Senior Notes in the first quarter of 2019;
- an increase of \$10 million in variable operating costs at Realogy Title Group primarily due to an increase in refinance revenue and underwriter revenue; and
- a \$7 million increase in employee-related costs, professional fees and other operating costs.

The expense increases were partially offset by:

- a \$126 million decrease in commission and other sales agent-related costs primarily as a result of the impact of lower homesale transactions at Realogy Brokerage Group; and
- a \$5 million net gain on the early extinguishment of debt during the year ended December 31, 2019 compared to a \$7 million loss on the early extinguishment of debt during the year ended December 31, 2018 as a result of the refinancing transactions in February 2018.

Earnings from equity investments were \$18 million for the year ended December 31, 2019 compared to losses of \$4 million for the year ended December 31, 2018 primarily due to an improvement in earnings of Guaranteed Rate Affinity.

During the year ended December 31, 2019, we incurred \$42 million of restructuring costs primarily related to the Company's restructuring program focused on office consolidation and instituting operational efficiencies to drive profitability. See Note 13, "Restructuring Costs", in the Consolidated Financial Statements for additional information.

The provision for income taxes was a benefit of \$22 million for the year ended December 31, 2019 compared to an expense of \$67 million for the year ended December 31, 2018. Our effective tax rate was 16% for the year ended December 31, 2019. See Note 12, "Income Taxes", in the Consolidated Financial Statements for additional information and a reconciliation of the Company's effective income tax rate.

The following table reflects the results of each of our reportable segments during the years ended December 31, 2019 and 2018:

	Revenues (a)				Operating EBITDA				Operating EBITDA Margin		
	2019	2018	\$ Change	% Change	2019	2018	\$ Change	% Change	2019	2018	Change
Realogy Franchise Group	\$ 803	\$ 820	(17)	(2)%	\$ 535	\$ 564	(29)	(5)%	67 %	69 %	(2)
Realogy Brokerage Group	4,409	4,607	(198)	(4)	4	44	(40)	(91)	—	1	(1)
Realogy Title Group	596	580	16	3	68	49	19	39	11	8	3
Realogy Leads Group	83	81	2	2	53	51	2	4	64	63	1
Corporate and Other	(293)	(306)	13	*	(98)	(85)	(13)	*			
Total continuing operations	\$ 5,598	\$ 5,782	(184)	(3)%	\$ 562	\$ 623	(61)	(10)%	10 %	11 %	(1)
Contribution from discontinued operations					28	35					
Operating EBITDA including discontinued operations					590	658					
Less: Depreciation and amortization (b)					169	166					
Interest expense, net					249	189					
Income tax (benefit) expense					(22)	67					
Restructuring costs, net (c)					42	47					
Impairments (d)					249	—					
Former parent legacy cost, net (e)					1	4					
(Gain) loss on the early extinguishment of debt (e)					(5)	7					
Adjustments attributable to discontinued operations (f)					95	41					
Net (loss) income attributable to Realogy Holdings and Realogy Group					\$ (188)	\$ 137					

* not meaningful

- (a) Includes the elimination of transactions between segments, which consists of intercompany royalties and marketing fees paid by Realogy Brokerage Group of \$293 million and \$306 million during the years ended December 31, 2019 and 2018, respectively.
- (b) Depreciation and amortization for the year ended December 31, 2018 includes \$2 million of amortization expense related to Guaranteed Rate Affinity's purchase accounting included in the "Equity in (earnings) losses of unconsolidated entities" line on the Consolidated Statement of Operations.
- (c) Restructuring charges incurred for the year ended December 31, 2019 include \$2 million at Realogy Franchise Group, \$25 million at Realogy Brokerage Group, \$3 million at Realogy Title Group, \$2 million at Realogy Leads Group and \$10 million at Corporate and Other. Restructuring charges incurred for the year ended December 31, 2018 include \$3 million at Realogy Franchise Group, \$37 million at Realogy Brokerage Group, \$4 million at Realogy Title Group and \$3 million at Corporate and Other.
- (d) Impairments for the year ended December 31, 2019 includes a goodwill impairment charge of \$237 million during the third quarter which reduced the net carrying value of Realogy Brokerage Group by \$180 million after accounting for the related income tax benefit of \$57 million and \$12 million of other impairment charges primarily related to lease asset impairments.
- (e) Former parent legacy items and (Gain) loss on the early extinguishment of debt are recorded in Corporate and Other. During the year ended December 31, 2019, the Company recorded a gain on the early extinguishment of debt of \$5 million which consisted of a \$10 million gain as a result of the repurchase of Senior Notes completed in the third quarter of 2019, partially offset by a \$5 million loss as a result of the refinancing transactions in the first quarter of 2019.
- (f) Includes depreciation and amortization, interest expense, income tax and restructuring charges related to discontinued operations for the years ended December 31, 2019 and 2018. In addition, the year ended December 31, 2019 includes the estimated loss on the sale of discontinued operations of \$22 million and the related tax expense of \$38 million.

As described in the aforementioned table, Operating EBITDA margin for "Total continuing operations" expressed as a percentage of revenues decreased 1 percentage point to 10% from 11% for the year ended December 31, 2019 compared to 2018. On a segment basis, Realogy Franchise Group's margin decreased 2 percentage points to 67% from 69% primarily due to a decrease in royalty revenues. Realogy Brokerage Group's margin decreased 1 percentage point to zero from 1% primarily due to lower transaction volume during 2019 compared to 2018. Realogy Title Group's margin increased 3 percentage points to 11% from 8% for the year ended December 31, 2019 compared to 2018 primarily as a result of improved earnings from equity method investments. Realogy Leads Group's margin increased 1 percentage point to 64% from 63% primarily due to higher average fees partially offset by a reduction in referrals, primarily attributable to the discontinuation of the USAA affinity program which ceased new enrollments in the third quarter of 2019.

Corporate and Other Operating EBITDA for the year ended December 31, 2019 declined \$13 million to negative \$98 million primarily due to an increase in employee-related costs, professional fees and other costs.

Realogy Franchise and Brokerage Groups on a Combined Basis

The following table reflects Realogy Franchise and Brokerage Groups' results before the intercompany royalties and marketing fees, as well as on a combined basis to show the Operating EBITDA contribution of these business units to the overall Operating EBITDA of the Company. The Operating EBITDA margin for the combined segments decreased 1% percentage point from 12% to 11% primarily due to lower transaction volume during the year ended December 31, 2019 compared to 2018:

	Revenues			% Change	Operating EBITDA			% Change	Operating EBITDA Margin		
	2019	2018	Change		2019	2018	Change		2019	2018	Change
Realogy Franchise Group (a)	\$ 510	\$ 514	\$ (4)	(1)%	\$ 242	\$ 258	\$ (16)	(6)%	47 %	50 %	(3)
Realogy Brokerage Group (a)	4,409	4,607	(198)	(4)	297	350	(53)	(15)	7	8	(1)
Realogy Franchise and Brokerage Groups Combined	<u>\$ 4,919</u>	<u>\$ 5,121</u>	<u>\$ (202)</u>	<u>(4)%</u>	<u>\$ 539</u>	<u>\$ 608</u>	<u>\$ (69)</u>	<u>(11)%</u>	<u>11 %</u>	<u>12 %</u>	<u>(1)</u>

(a) The segment numbers noted above do not reflect the impact of intercompany royalties and marketing fees paid by Realogy Brokerage Group to Realogy Franchise Group of \$293 million and \$306 million during the years ended December 31, 2019 and 2018, respectively.

Realogy Franchise Group

Revenues decreased \$17 million to \$803 million and Operating EBITDA decreased \$29 million to \$535 million for the year ended December 31, 2019 compared with 2018.

Revenues decreased \$17 million primarily as a result of:

- a \$13 million decrease in intercompany royalties received from Realogy Brokerage Group;
- an \$8 million decrease in third-party domestic franchisee royalty revenue primarily due to flat homesale transaction volume with an increase in the number of transactions closed by our top 250 franchisees, the impact of the "capped fee model" that was launched for our Better Homes and Gardens® Real Estate franchise business in January 2019 and a decrease in the average broker commission rate;
- a \$6 million decrease in other revenue primarily related to preferred alliance; and
- a \$2 million decrease in international royalties;

partially offset by a \$3 million increase in international area development fee revenue as a result of contract terminations of non-performing master franchisors.

Registration revenue and brand marketing fund revenue increased \$9 million and related expenses increased \$11 million, primarily due to the level and timing of advertising spending and conferences including the RGX event during 2019 compared with 2018.

Realogy Franchise Group revenue includes intercompany royalties received from Realogy Brokerage Group of \$282 million and \$295 million during the years ended December 31, 2019 and 2018, respectively, which are eliminated in consolidation against the expense reflected in Realogy Brokerage Group's results.

The \$29 million decrease in Operating EBITDA was principally due to the \$23 million decrease in royalty revenues, the \$6 million decrease in other revenues and the net \$2 million of marketing expense discussed above, as well as \$3 million higher expense for bad debt and notes reserves, partially offset by a \$3 million increase in international area development fee revenue as a result of contract terminations discussed above.

Realogy Brokerage Group

Revenues decreased \$198 million to \$4,409 million and Operating EBITDA decreased \$40 million to \$4 million for the year ended December 31, 2019 compared with 2018.

The revenue decrease of \$198 million was primarily driven by a 4% decrease in homesale transaction volume at Realogy Brokerage Group. Realogy Brokerage Group saw lower transaction volume primarily driven by the competitive environment as well as our geographic concentration.

Operating EBITDA decreased \$40 million primarily due to the \$198 million decrease in revenues discussed above partially offset by:

- a \$126 million decrease in commission expenses paid to independent sales agents from \$3,282 million for the year ended December 31, 2018 to \$3,156 million for the year ended December 31, 2019. Commission expense decreased primarily as a result of the impact of lower homesale transaction volume as discussed above;
- a \$19 million decrease in other costs including occupancy costs, employee-related costs and other operating costs; and
- a \$13 million decrease in royalties paid to Realogy Franchise Group from \$295 million for the year ended December 31, 2018 to \$282 million in 2019.

Realogy Title Group

Revenues increased \$16 million to \$596 million and Operating EBITDA increased \$19 million to \$68 million for the year ended December 31, 2019 compared with 2018.

Revenues increased \$16 million primarily as a result of a \$20 million increase in refinance revenue due to an increase in activity in the refinance market and a \$14 million increase in underwriter revenue due to an increase of underwriter premiums as a result of a shift in mix to unaffiliated agents, partially offset by a \$17 million decrease in resale revenue due to a decline in purchase transactions.

Operating EBITDA increased \$19 million primarily as a result of the \$16 million increase in revenue discussed above and a \$20 million increase in earnings from equity investments primarily related to Guaranteed Rate Affinity during the year ended December 31, 2019 compared with 2018. These increases were partially offset by an increase of \$10 million in operating costs primarily due to an increase in refinance revenue and underwriter revenue with unaffiliated agents where the revenue and expense is recorded on a gross basis and a \$7 million increase in employee related and other costs.

Realogy Leads Group

Revenues increased \$2 million to \$83 million and Operating EBITDA increased \$2 million to \$53 million for the year ended December 31, 2019 compared with 2018.

Referral revenues increased \$2 million driven by higher average fees which was partially offset by lower referral transactions primarily driven by USAA affinity program which ceased new enrollments in the third quarter of 2019. The Company expects that referral revenues for Realogy Leads Group will be materially impacted on a go-forward basis as a result of the discontinuation of the USAA affinity program. See "Recent Developments—Realogy Leads Group" in this Item 7. for additional information.

Operating EBITDA increased \$2 million primarily as a result of the \$2 million increase in revenues discussed above.

Year Ended December 31, 2018 vs. Year Ended December 31, 2017

Our consolidated results comprised the following:

	Year Ended December 31,		
	2018	2017	Change
Net revenues	\$ 5,782	\$ 5,810	\$ (28)
Total expenses	5,565	5,466	99
Income from continuing operations before income taxes, equity in losses (earnings) and noncontrolling interests	217	344	(127)
Income tax expense (benefit) (a)	67	(66)	133
Equity in losses (earnings) of unconsolidated entities	4	(18)	22
Net income from continuing operations	146	428	(282)
Net (loss) income from discontinued operations	(6)	6	(12)
Net income	140	434	(294)
Less: Net income attributable to noncontrolling interests	(3)	(3)	—
Net income attributable to Realogy Holdings and Realogy Group	\$ 137	\$ 431	\$ (294)

(a) Income tax benefit for the year ended December 31, 2017 reflects the impact of the 2017 Tax Act.

Net revenues decreased \$28 million for the year ended December 31, 2018 compared with the year ended December 31, 2017, principally due to a decrease in gross commission income as a result of lower homesale transaction volume at Realogy Brokerage Group.

Total expenses increased \$99 million or 2% primarily due to:

- a \$52 million increase in commission and other sales agent-related costs due to the impact of initiatives focused on growing and retaining our productive independent sales agent base and a shift in mix in 2018 to lower closing volume in the new development business which typically has lower commission expense compared to traditional brokerage operations, partially offset by lower homesale transaction volume;
- \$47 million of restructuring costs for the year ended December 31, 2018 primarily for the Company's restructuring program related to leadership realignment and other restructuring activities compared to \$12 million of restructuring costs incurred in 2017 related to the Company's business optimization plan;
- a \$32 million net increase in interest expense to \$189 million for the year ended December 31, 2018 compared to \$157 million for the year ended December 31, 2017 primarily due to an increase in interest expense due to LIBOR rates increases, as well as mark-to-market adjustments for our interest rate swaps that resulted in losses of \$4 million for the year ended December 31, 2018 compared to gains of \$4 million for the year ended December 31, 2017, and a \$2 million write off of financing costs to interest expense as a result of the refinancing transactions in February 2018; and
- a net cost of \$4 million for former parent legacy items in 2018 compared to a net benefit of \$10 million for former parent legacy items related to the settlement of a Cendant legacy tax matter in 2017.

The expense increases were partially offset by a \$31 million decrease in operating and general and administrative expenses primarily driven by:

- a \$35 million decrease in employee related and other operating costs primarily due to lower incentive accruals and cost savings initiatives;
- the absence in 2018 of an \$8 million expense related to the transition of the Company's CEO which occurred in 2017; and
- the absence in 2018 of an \$8 million expense related to the settlement of the Strader legal matter which occurred in 2017;

partially offset by:

- a \$22 million increase in costs at Realogy Title Group primarily due to an increase in underwriter revenue with unaffiliated agents where the revenue and expense is recorded on a gross basis and other operating costs.

Losses from equity investments were \$4 million during the year ended December 31, 2018 primarily related to losses from the operations of Guaranteed Rate Affinity. Guaranteed Rate Affinity, which began doing business in August 2017 on a phased-in basis, experienced operational challenges at the joint venture in addition to tight industry margins in a highly competitive industry as well as rising mortgage rates. During the year ended December 31, 2017, the Company recorded earnings from equity investments of \$18 million, which related to \$35 million in earnings from the sale of PHH Home Loans LLC's ("PHH Home Loans") assets to Guaranteed Rate Affinity, partially offset by the recognition of \$7 million exit costs at PHH Home Loans, losses of \$6 million from the continuing operations of PHH Home Loans and \$4 million of costs associated with the start up of operations of Guaranteed Rate Affinity.

The provision for income taxes was an expense of \$67 million for the year ended December 31, 2018 compared to a benefit of \$66 million for the year ended December 31, 2017. The income tax benefit for the year ended December 31, 2017 reflects the impact of the 2017 Tax Act. Our effective tax rate was 31% for the year ended December 31, 2018. See Note 10, "Income Taxes", in the Consolidated Financial Statements in our Annual Report on Form 10-K for the year ended December 31, 2018 for additional information and a reconciliation of the Company's effective income tax rate.

The following table reflects the results of each of our reportable segments for the years ended December 31, 2018 and 2017:

	Revenues (a)		\$ Change	% Change	Operating EBITDA		\$ Change	% Change	Operating EBITDA Margin		Change
	2018	2017			2018	2017			2018	2017	
Realogy Franchise Group	\$ 820	\$ 830	\$ (10)	(1)%	\$ 564	\$ 560	\$ 4	1 %	69 %	67 %	2
Realogy Brokerage Group	4,607	4,643	(36)	(1)	44	135	(91)	(67)	1	3	(2)
Realogy Title Group	580	570	10	2	49	59	(10)	(17)	8	10	(2)
Realogy Leads Group	81	78	3	4	51	45	6	13	63	58	5
Corporate and Other	(306)	(311)	5	*	(85)	(107)	22	*			
Total continuing operations	<u>\$ 5,782</u>	<u>\$ 5,810</u>	<u>\$ (28)</u>	— %	<u>\$ 623</u>	<u>\$ 692</u>	<u>\$ (69)</u>	(10)%	11 %	12 %	(1)
Contribution from discontinued operations					35	40					
Operating EBITDA including discontinued operations					658	732					
Less: Depreciation and amortization (c)					166	169					
Interest expense, net					189	157					
Income tax expense (benefit) (d)					67	(66)					
Restructuring costs, net (e)					47	12					
Former parent legacy cost (benefit), net (f)					4	(10)					
Loss on the early extinguishment of debt (f)					7	5					
Adjustments attributable to discontinued operations (g)					41	34					
Net income attributable to Realogy Holdings and Realogy Group	<u>\$ 137</u>	<u>\$ 431</u>									

* not meaningful

- (a) Includes the elimination of transactions between segments, which consists of intercompany royalties and marketing fees paid by Realogy Brokerage Group of \$306 million and \$311 million during the years ended December 31, 2018 and 2017, respectively.
- (b) Realogy Brokerage Group Operating EBITDA includes \$22 million of equity earnings from PHH Home Loans for the year ended December 31, 2017.
- (c) Depreciation and amortization for the years ended December 31, 2018 and 2017 includes \$2 million and \$3 million, respectively, of amortization expense related to Guaranteed Rate Affinity's purchase accounting included in the "Equity in (earnings) losses of unconsolidated entities" line on the Consolidated Statement of Operations.
- (d) Income tax benefit for the year ended December 31, 2017 reflects the impact of the 2017 Tax Act.
- (e) Restructuring charges incurred for the year ended December 31, 2018 include \$3 million at Realogy Franchise Group, \$37 million at Realogy Brokerage Group, \$4 million at Realogy Title Group and \$3 million at Corporate and Other. Restructuring charges incurred for the year ended December 31, 2017 include \$1 million at Realogy Franchise Group, \$9 million at Realogy Brokerage Group, \$1 million at Realogy Title Group and \$1 million at Corporate and Other.
- (f) Former parent legacy items and Loss on the early extinguishment of debt are recorded in Corporate and Other.
- (g) Includes depreciation and amortization, interest expense, income tax and restructuring charges related to discontinued operations for the years ended December 31, 2018 and 2017.

As described in the aforementioned table, Operating EBITDA margin for "Total continuing operations" expressed as a percentage of revenues decreased 1 percentage point to 11% from 12% for the year ended December 31, 2018 compared to 2017. On a segment basis, Realogy Franchise Group's margin increased 2 percentage points to 69% from 67% primarily due to a decrease in employee related costs as a result of lower incentive accruals. Realogy Brokerage Group's margin decreased 2 percentage points to 1% from 3% primarily due to higher sales commission percentages paid to its independent sales agents during 2018 compared to 2017 and the impact of lower closing volume in our new development business, which typically has higher margins. Realogy Title Group's margin decreased 2 percentage points to 8% from 10% for the year ended December 31, 2018 compared to 2017 primarily as a result of a decrease in refinancing revenue. Realogy Leads Group's margin increased 5 percentage points to 63% from 58% primarily due to a decrease in employee related costs as a result of cost savings initiatives.

Corporate and Other Operating EBITDA for the year ended December 31, 2018 improved \$22 million to negative \$85 million primarily due to the absence in 2018 of an \$8 million expense related to the settlement of the Strader legal matter which occurred in 2017, the absence in 2018 of \$8 million of costs related to the transition of the Company's CEO which occurred in 2017 and a \$2 million decrease in other employee costs primarily related to lower employee incentive accruals offset by an increase in technology related headcount.

Realogy Franchise and Brokerage Groups on a Combined Basis

The following table reflects Realogy Franchise and Brokerage Groups' results before the intercompany royalties and marketing fees, as well as on a combined basis to show the Operating EBITDA contribution of these business units to the overall Operating EBITDA of the Company. The Operating EBITDA margin for the combined segments decreased 1% percentage point from 13% to 12% primarily due to higher sales commission percentages paid to Realogy Brokerage Group's independent sales agents affiliated with Realogy Brokerage Group and the impact of lower closing volume in Realogy Brokerage Groups' new development business, which typically has higher margins:

	Revenues			% Change	Operating EBITDA			% Change	Operating EBITDA Margin		
	2018	2017	Change		2018	2017	Change		2018	2017	Change
Realogy Franchise Group (a)	\$ 514	\$ 519	\$ (5)	(1)%	\$ 258	\$ 249	\$ 9	4 %	50 %	48 %	2
Realogy Brokerage Group (a)(b)	4,607	4,643	(36)	(1)	350	446	(96)	(22)	8	10	(2)
Realogy Franchise and Brokerage Groups Combined	<u>\$ 5,121</u>	<u>\$ 5,162</u>	<u>\$ (41)</u>	<u>(1)%</u>	<u>\$ 608</u>	<u>\$ 695</u>	<u>\$ (87)</u>	<u>(13)%</u>	<u>12 %</u>	<u>13 %</u>	<u>(1)</u>

(a) The segment numbers noted above do not reflect the impact of intercompany royalties and marketing fees paid by Realogy Brokerage Group to Realogy Franchise Group of \$306 million and \$311 million during the years ended December 31, 2018 and 2017, respectively.

(b) Realogy Brokerage Group Operating EBITDA includes \$22 million of equity earnings from PHH Home Loans for the year ended December 31, 2017.

Realogy Franchise Group

Revenues decreased \$10 million to \$820 million while Operating EBITDA increased \$4 million to \$564 million for the year ended December 31, 2018 compared with 2017.

Revenues decreased \$10 million as a result of a \$4 million increase in other incentives, a \$4 million decrease in intercompany royalties received from Realogy Brokerage Group and a \$2 million decrease in other revenue primarily due to the timing of brand conferences and franchisee events.

Realogy Franchise Group revenue includes intercompany royalties received from Realogy Brokerage Group of \$295 million and \$299 million during the years ended December 31, 2018 and 2017, respectively, which are eliminated in consolidation against the expense reflected in Realogy Brokerage Group's results.

The \$4 million increase in Operating EBITDA was principally due to a \$9 million decrease in employee related costs primarily due to lower incentive accruals and a \$5 million decrease in expenses related to the timing of brand conferences and franchisee events, partially offset by the \$10 million decrease in revenues discussed above.

Realogy Brokerage Group

Revenues decreased \$36 million to \$4,607 million and Operating EBITDA decreased \$91 million to \$44 million for the year ended December 31, 2018 compared with 2017.

The revenue decrease of \$36 million was primarily driven by a 1% decrease in homesale transaction volume at Realogy Brokerage Group which consisted of a 2% decrease in the number of homesale transactions, mostly offset by a 2% increase in average homesale price. Realogy Brokerage Group saw lower transaction volume in the New York metropolitan area and in the west coast, as well as a lower closing volume in its new development business, which is generally at a higher price point, compared to 2017.

Operating EBITDA decreased \$91 million primarily due to:

- a \$52 million increase in commission expenses paid to independent sales agents from \$3,230 million for the year ended December 31, 2017 to \$3,282 million for the year ended December 31, 2018. Commission expense increased as a result of the impact of initiatives focused on growing and retaining our productive independent sales agent base and a shift in mix in 2018 to lower closing volume in the new development business, which typically has lower commission expense compared to traditional brokerage operations, partially offset by the impact of lower homesale transaction volume;
- a \$36 million decrease in revenues discussed above;
- the absence in 2018 of \$22 million in earnings from our equity method investment in PHH Home Loans primarily due to gains from the sale of PHH Home Loans' assets to Guaranteed Rate Affinity which occurred in 2017; and
- a \$10 million increase in other costs including a \$4 million increase in outsourcing costs and a \$3 million increase in occupancy costs.

Operating EBITDA decreases were partially offset by:

- a \$21 million decrease in employee related costs primarily due to lower incentive accruals;
- a \$4 million decrease in royalties paid to Realogy Franchise Group from \$299 million in 2017 to \$295 million in 2018; and
- a \$3 million decrease in marketing expenses.

Realogy Title Group

Revenues increased \$10 million to \$580 million while Operating EBITDA decreased \$10 million to \$49 million for the year ended December 31, 2018 compared with 2017.

Revenues increased \$10 million as a result of a \$20 million increase in underwriter revenue due to an increase of underwriter premiums as a result of a shift in mix to unaffiliated agents, as well as a \$5 million increase in resale revenue due to an increase in average fees, partially offset by a \$13 million decrease in refinancing revenue due to an overall decrease in activity in the refinance market.

Operating EBITDA decreased \$10 million as a result of an increase of \$19 million in costs primarily due to an increase in underwriter revenue with unaffiliated agents where the revenue and expense is recorded on a gross basis and a \$3 million increase in other operating costs, partially offset by the \$10 million increase in revenues discussed above and a \$3 million decrease in employee related costs.

Realogy Leads Group

Revenues increased \$3 million to \$81 million while Operating EBITDA increased \$6 million to \$51 million for the year ended December 31, 2018 compared with 2017.

Revenues increased \$3 million as a result of a \$3 million increase in affinity revenue primarily driven by higher volume and fees.

Operating EBITDA increased \$6 million primarily as a result of the \$3 million increase in revenues discussed above and a \$3 million decrease in employee related costs primarily due to cost savings initiatives.

FINANCIAL CONDITION, LIQUIDITY AND CAPITAL RESOURCES

Financial Condition

	December 31, 2019	December 31, 2018	Change
Total assets	\$ 7,543	\$ 7,290	\$ 253
Total liabilities	5,447	4,975	472
Total equity	2,096	2,315	(219)

For the year ended December 31, 2019, total assets increased \$253 million primarily due to:

- the addition of \$515 million of operating lease assets to the balance sheet in the first quarter of 2019 as a result of the adoption of the new leasing standard;
- a \$39 million increase in other current and non-current assets primarily related to strategic investments and prepaid assets;
- a \$35 million increase in property and equipment; and
- a \$32 million increase in cash and cash equivalents.

Total asset increases were partially offset by:

- a \$236 million decrease in goodwill;
- a \$76 million net decrease in franchise agreements and other amortizable intangible assets primarily due to amortization;
- a \$49 million decrease in assets held for sale; and
- a \$6 million decrease in trade receivables due to preferred alliance vendor payments.

For the year ended December 31, 2019, total liabilities increased \$472 million primarily due to:

- the addition of \$589 million of operating lease liabilities to the balance sheet in the first quarter of 2019 as a result of the adoption of the new leasing standard; and
- a \$6 million increase in accrued expenses and other current liabilities.

Total liability increases were partially offset by:

- a \$103 million decrease in corporate debt primarily due to the repurchase of \$93 million of 4.875% Senior Notes during the third quarter of 2019, quarterly amortization payments of \$30 million on the term loan facilities and an \$80 million decrease in borrowings under the Revolving Credit Facility, partially offset by a net increase in corporate debt due to the issuance of 9.375% \$550 million Senior Notes and redemption of 4.50% \$450 million Senior Notes during the first quarter of 2019; and
- a \$23 million decrease in other non-current liabilities primarily due to the reclassification of deferred rent liabilities which were credited against operating lease assets as a result of the adoption of the new leasing standard partially offset by increased mark-to-market liabilities for the Company's interest rate swaps.

Total equity decreased \$219 million primarily due to a net loss of \$188 million for the year ended December 31, 2019 and a \$27 million decrease in additional paid in capital for the year ended December 31, 2019. The decrease in additional paid in capital primarily related to the \$31 million of dividend payments during the first three quarters of 2019 and the Company's repurchase of \$20 million of common stock during the first quarter of 2019, partially offset by stock-based compensation activity of \$22 million for the year ended December 31, 2019.

Liquidity and Capital Resources

We have historically satisfied our liquidity needs with cash flows from operations and funds available under our Revolving Credit Facility. Our primary liquidity needs have been to service our debt and finance our working capital and capital expenditures. We currently expect to prioritize investing in our business and reducing indebtedness. Accordingly, we discontinued acquiring stock under our share repurchase programs in the first quarter of 2019 and discontinued our quarterly dividend in the fourth quarter of 2019.

We are significantly encumbered by our debt obligations. As of December 31, 2019, our total debt, excluding our securitization obligations, was \$3,445 million. Our liquidity position has been and is expected to continue to be negatively

impacted by the interest expense on our debt obligations, which could be intensified by a significant increase in LIBOR (or any replacement rate) or ABR. We intend to use the substantial majority of the net proceeds from the planned sale of Cartus Relocation Services to pay down corporate debt, though we will continue to have substantial indebtedness.

We will continue to evaluate potential refinancing and financing transactions, including refinancing certain tranches of our indebtedness and extending maturities, among other potential alternatives. There can be no assurance as to which, if any, of these alternatives we may pursue as the choice of any alternative will depend upon numerous factors such as market conditions, our financial performance and the limitations applicable to such transactions under our existing financing agreements and the consents we may need to obtain under the relevant documents. Financing may not be available to us on commercially reasonable terms, on terms that are acceptable to us, or at all. Any future indebtedness may impose various additional restrictions and covenants on us which could limit our ability to respond to market conditions, to make capital investments or to take advantage of business opportunities.

In addition, our Senior Secured Credit Facility and Term Loan A Facility require us to maintain a senior secured leverage ratio, which may not exceed 4.75 to 1.00. For the trailing twelve months ended December 31, 2019, we were in compliance with the senior secured leverage ratio covenant with a ratio of 3.03 to 1.0 with total senior secured debt (net of unrestricted cash and permitted investments) of \$1,895 million and trailing twelve months EBITDA calculated on a Pro Forma Basis (as those terms are defined in the credit agreement governing the Senior Secured Credit Facility) of \$626 million. For additional information, see below under the header "Financial Obligations—Covenants under the Senior Secured Credit Facility, Term Loan A Facility and Indentures".

Our Operating EBITDA and EBITDA calculated on a Pro Forma basis has declined year-over-year for the past several years. If our EBITDA calculated on a Pro Forma Basis were to continue to decline and/or we were to incur additional senior secured debt (including additional borrowings under the Revolving Credit Facility), our ability to borrow the full capacity under the Revolving Credit Facility (without refinancing secured debt into unsecured debt) could be limited as we must maintain compliance with the senior secure leverage ratio described above of 4.75 to 1.00.

Historically, operating results and revenues for all of our businesses have been strongest in the second and third quarters of the calendar year. A significant portion of the expenses we incur in our real estate brokerage operations are related to marketing activities and commissions and therefore, are variable. However, many of our other expenses, such as interest payments, facilities costs and certain personnel-related costs, are fixed and cannot be reduced during the seasonal fluctuations in the business. Consequently, our debt balances are generally at their highest levels at or around the end of the first quarter of every year.

During the third quarter of 2019, the Company repurchased \$93 million of its 4.875% Senior Notes through open market purchases at an aggregate purchase price of \$83 million.

In March 2019, the Company issued \$550 million of 9.375% Senior Notes due in April 2027. We used \$540 million of the net proceeds to repay a portion of outstanding borrowings under our Revolving Credit Facility. In February 2019, the Company had used borrowings under its Revolving Credit Facility and cash on hand to fund the redemption of all of its outstanding \$450 million 4.50% Senior Notes. The covenants in the indenture governing the 9.375% Senior Notes are substantially similar to the covenants in the indentures governing the 5.250% Senior Notes and the 4.785% Senior Notes, with certain exceptions, including changes relating to the Company's ability to make restricted payments, including its ability to make dividend payments in excess of \$45 million per calendar year or its ability to repurchase shares in any amount until the Company's consolidated leverage ratio is below 4.00 to 1.00.

In addition, we are required to pay quarterly amortization payments for the Term Loan B and Term Loan A facilities. We expect payments in 2020 to total \$33 million and \$11 million for the Term Loan A and Term Loan B facilities, respectively.

We may from time to time seek to repurchase our outstanding Unsecured Notes through tender offers, open market purchases, privately negotiated transactions or otherwise. Such repurchases, if any, will depend on prevailing market conditions, our liquidity requirements, contractual restrictions and other factors.

If the residential real estate market or the economy as a whole does not improve or continues to weaken, our business, financial condition and liquidity may be materially adversely affected, including our ability to access capital, grow our business and return capital to stockholders.

Cash Flows

Year ended December 31, 2019 vs. Year ended December 31, 2018

At December 31, 2019, we had \$235 million of cash, cash equivalents and restricted cash, an increase of \$30 million compared to the balance of \$205 million at December 31, 2018. The following table summarizes our cash flows for the years ended December 31, 2019 and 2018:

	Year Ended December 31,		
	2019	2018	Change
Cash provided by (used in):			
Operating activities	\$ 371	\$ 394	\$ (23)
Investing activities	(128)	(91)	(37)
Financing activities	(215)	(297)	82
Effects of change in exchange rates on cash, cash equivalents and restricted cash	—	(2)	2
Net change in cash from discontinued operations	2	5	(3)
Net change in cash, cash equivalents and restricted cash from continuing operations	<u>\$ 30</u>	<u>\$ 9</u>	<u>\$ 21</u>

For the year ended December 31, 2019, \$23 million less cash was provided by operating activities compared to the same period in 2018 principally due to \$131 million less cash provided by operating results, partially offset by:

- \$61 million more cash provided by discontinued operations;
- \$32 million less cash used for accounts payable, accrued expenses and other liabilities;
- \$9 million less cash used for other assets; and
- \$8 million more cash provided by other operating activities.

For the year ended December 31, 2019, we used \$37 million more cash for investing activities compared to the same period in 2018 primarily due to:

- the absence in 2019 of \$19 million of net cash proceeds received from the dissolution of our interest in PHH Home Loans, LLC which occurred in 2018;
- \$16 million more cash used for property and equipment additions; and
- \$7 million less cash provided by other investing activities,

partially offset by \$3 million less cash used for investments in unconsolidated entities.

For the year ended December 31, 2019, \$215 million of cash was used in financing activities compared to \$297 million of cash used during the same period in 2018. For the year ended December 31, 2019, \$215 million of cash was used for:

- \$80 million repayment of borrowings under the Revolving Credit Facility;
- \$31 million of dividend payments;
- \$30 million of quarterly amortization payments on the term loan facilities;
- \$25 million of other financing payments primarily related to finance leases;
- \$23 million related to discontinued operations;
- \$20 million for the repurchase of our common stock;
- \$6 million of tax payments related to net share settlement for stock-based compensation; and
- \$3 million for payments of contingent consideration,

partially offset by:

- \$3 million of cash received as a result of the refinancing transactions in 2019.

For the year ended December 31, 2018, \$297 million of cash was used for:

- \$402 million for the repurchase of our common stock;
- \$45 million of dividend payments;
- \$25 million of other financing payments primarily related to finance/capital leases;
- \$25 million of quarterly amortization payments on the term loan facilities;

- \$22 million for payments of contingent consideration;
 - \$10 million of tax payments related to net share settlement for stock-based compensation; and
 - \$3 million for cash paid as a result of the refinancing transactions in February 2018 related to \$16 million of debt issuance costs and \$4 million repayment of borrowings under the Term Loan B Facility, partially offset by \$17 million of proceeds received under the Term Loan A Facility,
- partially offset by:
- \$200 million of additional borrowings under the Revolving Credit Facility; and
 - \$34 million related to discontinued operations.

Year ended December 31, 2018 vs. Year ended December 31, 2017

At December 31, 2018, we had \$205 million of cash, cash equivalents and restricted cash, an increase of \$9 million compared to the balance of \$196 million at December 31, 2017. The following table summarizes our cash flows for the years ended December 31, 2018 and 2017:

	Year Ended December 31,		
	2018	2017	Change
Cash provided by (used in):			
Operating activities	\$ 394	\$ 667	\$ (273)
Investing activities	(91)	(146)	55
Financing activities	(297)	(570)	273
Effects of change in exchange rates on cash, cash equivalents and restricted cash	(2)	2	(4)
Net change in cash from discontinued operations	5	3	2
Net change in cash, cash equivalents and restricted cash from continuing operations	<u>\$ 9</u>	<u>\$ (44)</u>	<u>\$ 51</u>

For the year ended December 31, 2018, \$273 million less cash was provided by operating activities compared to the same period in 2017. The change was principally due to:

- \$128 million less cash provided by operations;
- \$83 million related to discontinued operations;
- \$49 million less cash received as dividends from unconsolidated entities primarily related to PHH Home Loans in 2017; and
- \$39 million more cash used for accounts payable, accrued expenses and other liabilities,

partially offset by:

- \$12 million less cash used for other assets;
- \$9 million more cash provided by the net change in trade receivables; and
- \$5 million less cash used for other operating activities.

For the year ended December 31, 2018, we used \$55 million less cash for investing activities compared to the same period in 2017 primarily due to:

- \$40 million less cash used for investments in unconsolidated entities primarily related to Guaranteed Rate Affinity;
- \$17 million less cash used for acquisition related payments;
- \$8 million of net cash proceeds received from the dissolution of our interest in PHH Home Loans, LLC; and
- \$7 million more cash provided by other investing activities,

partially offset by \$15 million related to discontinued operations.

For the year ended December 31, 2018, \$297 million of cash was used in financing activities compared to \$570 million of cash used during the same period in 2017. For the year ended December 31, 2018, \$297 million of cash was used for:

- \$402 million for the repurchase of our common stock;
- \$45 million of dividend payments;
- \$25 million of other financing payments primarily related to finance/capital leases;

- \$25 million of quarterly amortization payments on the term loan facilities;
 - \$22 million for payments of contingent consideration;
 - \$10 million of tax payments related to net share settlement for stock-based compensation; and
 - \$3 million for cash paid as a result of the refinancing transactions in February 2018 related to \$16 million of debt issuance costs and \$4 million repayment of borrowings under the Term Loan B Facility, partially offset by \$17 million of proceeds received under the Term Loan A Facility,
- partially offset by:
- \$200 million of additional borrowings under the Revolving Credit Facility; and
 - \$34 million related to discontinued operations.

For the year ended December 31, 2017, \$570 million of cash was used for:

- \$280 million for the repurchase of our common stock;
- \$130 million net repayment of borrowings under the Revolving Credit Facility
- \$49 million of dividend payments;
- \$42 million of quarterly amortization payments on the term loan facilities;
- \$30 million of other financing payments partially related to finance/capital leases and interest rate swaps;
- \$22 million for payments of contingent consideration;
- \$11 million of tax payments related to net share settlement for stock-based compensation;
- \$7 million related to discontinued operations; and
- \$6 million of debt issuance costs,

partially offset by:

- \$8 million proceeds from exercise of stock options.

Financial Obligations

See Note 10, "Short and Long-Term Debt", to the Consolidated Financial Statements for information on the Company's indebtedness as of December 31, 2019.

LIBOR Transition

In July 2017, the Financial Conduct Authority, the UK regulator responsible for the oversight of the London Interbank Offering Rate ("LIBOR"), announced that it would no longer require banks to participate in the LIBOR submission process and would cease oversight over the rate after the end of 2021. Various industry groups continue to discuss replacement benchmark rates, the process for amending existing LIBOR-based contracts, and the potential economic impacts of different alternatives. For example, in the U.S., a proposed replacement benchmark rate is the Secured Overnight Funding Rate ("SOFR"), which is an overnight rate based on secured financing, although uncertainty exists as to the transition process and broad acceptance of SOFR as the primary alternative to LIBOR.

Our primary interest rate exposure is interest rate fluctuations, specifically with respect to LIBOR, due to its impact on our variable rate borrowings under the Senior Secured Credit Facility (for our Revolving Credit Facility and Term Loan B) and the Term Loan A Facility (for our Term Loan A). As of December 31, 2018, we had interest rate swaps based on LIBOR with a notional value of \$1,600 million to manage a portion of our exposure to changes in interest rates associated with our variable rate borrowings.

At this time, it is not possible to predict the effect of any changes to LIBOR, any phase out of LIBOR or any establishment of alternative benchmark rates. LIBOR may disappear entirely or perform differently than in the past. Any new benchmark rate will likely not replicate LIBOR exactly and if future rates based upon a successor rate (or a new method of calculating LIBOR) are higher than LIBOR rates as currently determined, it could result in an increase in the cost of our variable rate indebtedness and may have a material adverse effect on our financial condition and results of operations.

Covenants under the Senior Secured Credit Facility, Term Loan A Facility and Indentures

The Senior Secured Credit Agreement, Term Loan A Agreement, the Unsecured Letter of Credit Facility and the indentures governing the Unsecured Notes contain various covenants that limit (subject to certain exceptions) Realogy Group's ability to, among other things:

- incur or guarantee additional debt or issue disqualified stock or preferred stock;
- pay dividends or make distributions to Realogy Group's stockholders, including Realogy Holdings;
- repurchase or redeem capital stock;
- make loans, investments or acquisitions;
- incur restrictions on the ability of certain of Realogy Group's subsidiaries to pay dividends or to make other payments to Realogy Group;
- enter into transactions with affiliates;
- create liens;
- merge or consolidate with other companies or transfer all or substantially all of Realogy Group's and its material subsidiaries' assets;
- transfer or sell assets, including capital stock of subsidiaries; and
- prepay, redeem or repurchase subordinated indebtedness.

As a result of the covenants to which we remain subject, we are limited in the manner in which we conduct our business and we may be unable to engage in favorable business activities or finance future operations or capital needs. In addition, the Senior Secured Credit Agreement and Term Loan A Agreement require us to maintain a senior secured leverage ratio. We are further restricted under the indenture governing the 9.375% Senior Notes from making restricted payments, including our ability to issue dividends in excess of \$45 million per calendar year or our ability to repurchase shares in any amount for so long as our consolidated leverage ratio is equal to or greater than 4.0 to 1.0 and then (unless that ratio falls below 3:00 to 1:00) only to the extent of available cumulative credit, as defined under the indenture governing the 9.375% Senior Notes.

Senior Secured Leverage Ratio applicable to our Senior Secured Credit Facility and Term Loan A Facility

The senior secured leverage ratio is tested quarterly and may not exceed 4.75 to 1.00. The senior secured leverage ratio is measured by dividing Realogy Group's total senior secured net debt by the trailing twelve-month EBITDA calculated on a Pro Forma Basis, as those terms are defined in the Senior Secured Credit Agreement. Total senior secured net debt does not include unsecured indebtedness, including the Unsecured Notes, or the securitization obligations. EBITDA calculated on a Pro Forma Basis, as defined in the Senior Secured Credit Agreement, includes adjustments to EBITDA for restructuring costs, former parent legacy cost (benefit) items, net, loss (gain) on the early extinguishment of debt, non-cash charges and incremental securitization interest costs, as well as pro forma cost savings for restructuring initiatives, the pro forma effect of business optimization initiatives and the pro forma effect of acquisitions and new franchisees, in each case calculated as of the beginning of the twelve-month period. The Company was in compliance with the senior secured leverage ratio covenant at December 31, 2019.

A reconciliation of net loss attributable to Realogy Group to Operating EBITDA and EBITDA calculated on a Pro Forma Basis, as those terms are defined in the Senior Secured Credit Agreement, for the twelve months ended December 31, 2019 is set forth in the following table:

	For the Year Ended December 31, 2019
Net loss attributable to Realogy Group (a)	\$ (188)
Income tax benefit	(22)
Loss before income taxes	(210)
Depreciation and amortization	169
Interest expense, net	249
Restructuring costs, net	42
Impairments	249
Former parent legacy cost, net	1
Gain on the early extinguishment of debt	(5)
Income statement impact of discontinued operations	95
Operating EBITDA (b)	590
Bank covenant adjustments:	
Operating EBITDA for discontinued operations	(28)
Pro forma effect of business optimization initiatives (c)	31
Non-cash charges (d)	30
Pro forma effect of acquisitions and new franchisees (e)	3
EBITDA as defined by the Senior Secured Credit Agreement	\$ 626
Total senior secured net debt (f)	\$ 1,895
Senior secured leverage ratio	3.03 x

- (a) Net loss attributable to Realogy consists of: (i) loss of \$99 million for the first quarter of 2019, (ii) income of \$69 million for the second quarter of 2019, (iii) loss of \$113 million for the third quarter of 2019 and (iv) loss of \$45 million for the fourth quarter of 2019.
- (b) Consists of total Company Operating EBITDA including discontinued operations of: (i) negative \$4 million for the first quarter of 2019, (ii) \$245 million for the second quarter of 2019, (iii) \$223 million for the third quarter of 2019 and (iv) \$126 million for the fourth quarter of 2019.
- (c) Represents the twelve-month pro forma effect of business optimization initiatives.
- (d) Represents the elimination of non-cash expenses including \$28 million of stock-based compensation expense and \$2 million for the change in the allowance for doubtful accounts for the twelve months ended December 31, 2019.
- (e) Represents the estimated impact of acquisitions and franchise sales activity, net of brokerages that exited our franchise system as if these changes had occurred on January 1, 2019. Franchisee sales activity is comprised of new franchise agreements as well as growth through acquisitions and independent sales agent recruitment by existing franchisees with our assistance. We have made a number of assumptions in calculating such estimates and there can be no assurance that we would have generated the projected levels of Operating EBITDA had we owned the acquired entities or entered into the franchise contracts as of January 1, 2019.
- (f) Represents total borrowings under the senior secured credit facilities and borrowings secured by a first priority lien on our assets of \$1,965 million plus \$35 million of finance lease obligations less \$105 million of readily available cash as of December 31, 2019. Pursuant to the terms of our senior secured credit facilities, total senior secured net debt does not include our securitization obligations or unsecured indebtedness, including the Unsecured Notes.

Consolidated Leverage Ratio applicable to our 9.375% Senior Notes

The consolidated leverage ratio is measured by dividing Realogy Group's total net debt by the trailing twelve-month EBITDA. EBITDA, as defined in the indenture governing the 9.375% Senior Notes, is substantially similar to EBITDA calculated on a Pro Forma Basis, as those terms are defined in the Senior Secured Credit Agreement. Net debt under the indenture is Realogy Group's total indebtedness (excluding securitizations) less (i) its cash and cash equivalents in excess of restricted cash and (ii) a \$200 million seasonality adjustment permitted when measuring the ratio on a date during the period of March 1 to May 31.

The consolidated leverage ratio under the indenture governing the 9.375% Senior Notes for the twelve months ended December 31, 2019 is set forth in the following table:

	As of December 31, 2019
Revolver	\$ 190
Term Loan A	717
Term Loan B	1,058
5.25% Senior Notes	550
4.875% Senior Notes	407
9.375% Senior Notes	550
Finance lease obligations	35
Corporate Debt (excluding securitizations)	3,507
Less: Cash and cash equivalents	235
Net debt under the indenture governing the 9.375% Senior Notes due 2027	\$ 3,272
EBITDA as defined under the indenture governing the 9.375% Senior Notes due 2027 (a)	\$ 626
Consolidated leverage ratio under the indenture governing the 9.375% Senior Notes due 2027	5.2 x

(a) As set forth in the immediately preceding table, for the twelve months ended December 31, 2019, EBITDA, as defined under the indenture governing the 9.375% Senior Notes, was the same as EBITDA calculated on a Pro Forma Basis, as those terms are defined in the Senior Secured Credit Agreement.

See Note 10, "Short and Long-Term Debt—Senior Secured Credit Facility", "—Term Loan A Facility" and "—Unsecured Notes" to the Consolidated Financial Statements for additional information.

At December 31, 2019, the amount of the Company's cumulative credit under the 9.375% Senior Notes was approximately \$74 million. The Company made approximately \$21 million in dividend payments since issuance of the 9.375% Senior Notes, which applied against the cumulative credit basket under the indenture governing the 9.375% Senior Notes, would result in approximately \$53 million remaining under that basket for restricted payments. This basket cannot be utilized until the Company's consolidated leverage ratio is less than 4.0 to 1.0.

Non-GAAP Financial Measures

The SEC has adopted rules to regulate the use in filings with the SEC and in public disclosures of "non-GAAP financial measures," such as Operating EBITDA. These measures are derived on the basis of methodologies other than in accordance with GAAP.

Operating EBITDA is defined by us as net income (loss) before depreciation and amortization, interest expense, net, income taxes, and other items that are not core to the operating activities of the Company such as restructuring charges, former parent legacy items, gains or losses on the early extinguishment of debt, impairments, gains or losses on discontinued operations and gains or losses on the sale of investments or other assets. Operating EBITDA is our primary non-GAAP measure.

We present Operating EBITDA because we believe it is useful as a supplemental measure in evaluating the performance of our operating businesses and provides greater transparency into our results of operations. Our management, including our chief operating decision maker, uses Operating EBITDA as a factor in evaluating the performance of our business. Operating EBITDA should not be considered in isolation or as a substitute for net income or other statement of operations data prepared in accordance with GAAP.

We believe Operating EBITDA facilitates company-to-company operating performance comparisons by backing out potential differences caused by variations in capital structures (affecting net interest expense), taxation, the age and book depreciation of facilities (affecting relative depreciation expense) and the amortization of intangibles, as well as other items that are not core to the operating activities of the Company such as restructuring charges, gains or losses on the early extinguishment of debt, former parent legacy items, impairments, gains or losses on discontinued operations and gains or losses on the sale of investments or other assets, which may vary for different companies for reasons unrelated to operating performance. We further believe that Operating EBITDA is frequently used by securities analysts, investors and other interested parties in their evaluation of companies, many of which present an Operating EBITDA measure when reporting their results.

Operating EBITDA has limitations as an analytical tool, and you should not consider Operating EBITDA either in isolation or as a substitute for analyzing our results as reported under GAAP. Some of these limitations are:

- this measure does not reflect changes in, or cash required for, our working capital needs;
- this measure does not reflect our interest expense (except for interest related to our securitization obligations), or the cash requirements necessary to service interest or principal payments on our debt;
- this measure does not reflect our income tax expense or the cash requirements to pay our taxes;
- this measure does not reflect historical cash expenditures or future requirements for capital expenditures or contractual commitments;
- although depreciation and amortization are non-cash charges, the assets being depreciated and amortized will often require replacement in the future, and this measure does not reflect any cash requirements for such replacements; and
- other companies may calculate this measure differently so they may not be comparable.

Contractual Obligations

The following table summarizes our future contractual obligations as of December 31, 2019:

	2020	2021	2022	2023	2024	Thereafter	Total
Revolving Credit Facility (a)	\$ —	\$ —	\$ —	\$ 190	\$ —	\$ —	\$ 190
Term Loan B (b)	11	11	11	11	11	1,003	1,058
Term Loan A (c)	33	51	70	563	—	—	717
5.25% Senior Notes	—	550	—	—	—	—	550
4.875% Senior Notes	—	—	—	407	—	—	407
9.375% Senior Notes	—	—	—	—	—	550	550
Interest payments on long-term debt (d)	194	192	160	114	99	127	886
Securitized obligations (e)	206	—	—	—	—	—	206
Leases (including imputed interest) (f)(g)	164	146	118	89	66	153	736
Purchase commitments (h)	44	24	11	9	8	217	313
Total (i)(j)	<u>\$ 652</u>	<u>\$ 974</u>	<u>\$ 370</u>	<u>\$ 1,383</u>	<u>\$ 184</u>	<u>\$ 2,050</u>	<u>\$ 5,613</u>

- (a) The Revolving Credit Facility expires in February 2023; however outstanding borrowings under this facility are classified on the balance sheet as current due to the revolving nature of the facility.
- (b) The Company's Term Loan B has quarterly amortization payments totaling 1% per annum of the \$1,080 million original principal amount of the Term Loan B issued under the Amended and Restated Credit Agreement with the balance payable in February 2025.
- (c) The Company's Term Loan A has quarterly amortization payments, which commenced June 30, 2018, totaling per annum 2.5%, 2.5%, 5.0%, 7.5% and 10.0% of the \$750 million original principal amount of the Term Loan A with the balance payable in February 2023.
- (d) Interest payments are based on applicable interest rates in effect at December 31, 2019 and include the impact of derivative instruments designed to fix the interest rate of a portion of the Company's variable rate debt.
- (e) The securitization facilities are held by Cartus Relocation Services and will no longer be assets or obligations of the Company after the planned sale of that business.
- (f) The lease amounts included in the above table are not discounted and do not include variable costs.
- (g) Includes \$7 million associated with operating leases related to discontinued operations.
- (h) Purchase commitments include a minimum licensing fee that the Company is required to pay to Sotheby's from 2009 through 2054. The annual minimum licensing fee is approximately \$2 million. Purchase commitments also include a minimum licensing fee to be paid to Meredith from 2009 through 2058 for the licensing of the Better Homes and Gardens Real Estate brand. The annual minimum fee was \$4 million in 2019 and will generally remain the same thereafter.
- (i) The contractual obligations table does not include other non-current liabilities such as pension liabilities of \$35 million and unrecognized tax benefits of \$20 million as the Company is not able to estimate the year in which these liabilities could be paid.
- (j) The contractual obligations table does not include other incentives offered to certain franchisees which are paid at certain points during the franchise agreement period provided the franchisee maintains a certain level of annual gross commission income and the franchisee is in compliance with the terms of the franchise agreement at the time of payment. If current annual gross commission income levels are maintained by our franchisees, we would pay a total of \$14 million over the next five years.

Critical Accounting Policies

The preparation of our consolidated financial statements in accordance with generally accepted accounting principles is based on the selection and application of accounting policies that require us to make significant estimates and assumptions about the effects of matters that are inherently uncertain. Several of the estimates and assumptions we are required to make relate to matters that are inherently uncertain as they pertain to future events. We consider the accounting policies discussed below to be critical to the understanding of our financial statements and involve subjective and complex judgments that could potentially affect reported results. Actual results could differ from our estimates and assumptions and any such differences could be material to our consolidated financial statements.

Impairment of goodwill and other indefinite-lived intangible assets

Goodwill represents the excess of acquisition costs over the fair value of the net tangible assets and identifiable intangible assets acquired in a business combination. Other indefinite-lived intangible assets primarily consist of trademarks acquired in business combinations. Goodwill and other indefinite-lived assets are not amortized, but are subject to impairment testing. The aggregate carrying values of our goodwill and other indefinite-lived intangible assets were \$3,300 million and \$692 million, respectively, at December 31, 2019 and are subject to an impairment assessment annually as of October 1, or whenever events or changes in circumstances indicate that the carrying amount may not be fully recoverable. This assessment compares carrying values of the goodwill reporting units and other indefinite lived intangible assets to their respective fair values and, when appropriate, the carrying value is reduced to fair value.

In testing goodwill, the fair value of each reporting unit is estimated using the income approach, a discounted cash flow approach. For the other indefinite lived intangible assets, fair value is estimated using the relief from royalty method. Management utilizes long-term cash flow forecasts and the Company's annual operating plans adjusted for terminal value assumptions. The fair value of the Company's reporting units and other indefinite lived intangible assets are determined utilizing the best estimate of future revenues, operating expenses, including commission expense, market and general economic conditions, trends in the industry, as well as assumptions that management believes marketplace participants would utilize including discount rates, cost of capital, trademark royalty rates, and long-term growth rates. The trademark royalty rate was determined by reviewing similar trademark agreements with third parties. Although management believes that assumptions are reasonable, actual results may vary significantly. These impairment assessments involve the use of accounting estimates and assumptions, changes in which could materially impact our financial condition or operating performance if actual results differ from such estimates and assumptions. To address this uncertainty, a sensitivity analysis is performed on key estimates and assumptions.

Significant negative industry or economic trends, disruptions to our business, unexpected significant changes or planned changes in use of the assets, a decrease in our business results, growth rates that fall below our assumptions, divestitures, and a sustained decline in our stock price and market capitalization may have a negative effect on the fair values and key valuation assumptions, and such changes could result in changes to our estimates of our fair value and a material impairment of goodwill or other indefinite-lived intangible assets.

During the third quarter of 2019, management determined that the decrease in the stock price of the Company and the impact on future earnings related to the discontinuation of the USAA affinity program qualified as triggering events for all of its reporting units and accordingly management performed an impairment assessment of goodwill and other indefinite-lived intangible assets as of September 1, 2019. The impairment assessment indicated that the carrying value of Realogy Brokerage Group exceeded its estimated fair value by \$180 million primarily as a result of a reduction in Realogy Brokerage Group's long-term forecast. Accounting Standard Update No. 2017-04 (Topic 350), "Simplifying the Test of Goodwill Impairment", which the Company early adopted in the third quarter of 2019, requires that the impairment charge and deferred tax effect are calculated using the simultaneous equation method which effectively grosses up the goodwill impairment charge to account for the related tax benefit so that the resulting carrying value does not exceed the calculated fair value. As a result, management recognized a goodwill impairment charge to reduce goodwill at Realogy Brokerage Group by \$237 million offset by an income tax benefit of \$57 million resulting in a net reduction in carrying value of \$180 million. The impairment charge is recorded on the impairment line in the accompanying Consolidated Statements of Operations and is non-cash in nature.

The results of the Company's interim impairment test indicated no other impairment charges were required for the other reporting units or other indefinite-lived intangibles. Management evaluated the effect of lowering the estimated fair value for each of the passing reporting units by 10% and determined no impairment of goodwill or other indefinite-lived intangible assets would have been recognized under this evaluation. Based upon the impairment assessment performed in the fourth

quarter of 2019, 2018 and 2017, there was no impairment of goodwill or other indefinite-lived intangible assets for these years. Management evaluated the effect of lowering the estimated fair value for each of the passing reporting units by 10% and determined no impairment of goodwill or other indefinite-lived intangible assets would have been recognized under this evaluation for 2018 or 2017.

Common stock valuation

On an annual basis, we grant stock-based awards to certain senior management, employees and directors. These awards are measured based on the fair value on the grant date. The fair value of restricted stock, restricted stock units and performance share units without a market condition is equal to the closing sale price of the Company's common stock on the date of grant. The fair value of options is estimated on the date of grant using the Black-Scholes option-pricing model and the fair value of performance share units with market conditions is estimated on the date of grant using the Monte Carlo Simulation method. Expense for stock-based awards is recognized over the service period based on the vesting requirements, or when requisite performance metrics or milestones are achieved, and forfeitures are recognized as they occur. Determining the fair value of stock-based awards at the grant date requires considerable judgment, including estimating expected volatility, expected term and risk-free rate.

Our expected volatility is based on the average volatility rates of the Company and similar actively traded companies since we only have trading history as a public company since October 2012. The expected term is calculated based on the simplified method and is estimated to be 6.25 years for time vesting stock options. The risk-free rate is derived from the U.S. Treasury yield curve in effect at the time of the grant using the estimated grant holding period. If factors change and we employ different assumptions, the fair value of future awards and resulting stock-based compensation expense may differ significantly from what we have estimated historically.

Income taxes

Deferred tax assets and liabilities are determined based on the difference between the financial statements and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. Our provision for income taxes is based on domestic and international statutory income tax rates in the jurisdictions in which we operate. Significant judgment is required in determining income tax provisions as well as deferred tax asset and liability balances, including the estimation of valuation allowances and the evaluation of tax positions.

Net deferred tax assets and liabilities are primarily comprised of temporary differences, net operating loss carryforwards and tax credit carryforwards that are available to reduce taxable income in future periods. The determination of the amount of valuation allowance to be provided on deferred tax assets involves estimates regarding (1) the timing and amount of the reversal of taxable temporary differences, (2) expected future taxable income, and (3) the impact of tax planning strategies.

Significant judgment is required in determining income tax provisions and in evaluating tax positions. We establish additional reserves for income taxes when, despite the belief that tax positions are fully supportable, there remain certain positions that do not meet the minimum recognition threshold. The approach for evaluating certain and uncertain tax positions is defined by the authoritative guidance and this guidance determines when a tax position is more likely than not to be sustained upon examination by the applicable taxing authority. In the normal course of business, the Company and its subsidiaries are examined by various federal, state and foreign tax authorities. We regularly assess the potential outcomes of these examinations and any future examinations for the current or prior years in determining the adequacy of our provision for income taxes. We continually assess the likelihood and amount of potential adjustments and adjust the income tax provision, the current tax liability and deferred taxes in the period in which the facts that give rise to a revision become known.

Recently Issued Accounting Pronouncements

See Note 2 of the Notes to the Consolidated Financial Statements for a discussion of recently issued accounting pronouncements.

Item 7A. Quantitative and Qualitative Disclosures about Market Risks.

We are exposed to market risk from changes in interest rates primarily through our senior secured debt. At December 31, 2019, our primary interest rate exposure was to interest rate fluctuations, specifically LIBOR, due to its impact on our variable rate borrowings of our Revolving Credit Facility and Term Loan B under the Senior Secured Credit Facility and the Term Loan A Facility. Given that our borrowings under the Senior Secured Credit Facility and Term Loan

A Facility are generally based upon LIBOR, this rate (or any replacement rate) will be the Company's primary market risk exposure for the foreseeable future. We do not have significant exposure to foreign currency risk nor do we expect to have significant exposure to foreign currency risk in the foreseeable future.

We assess our market risk based on changes in interest rates utilizing a sensitivity analysis. The sensitivity analysis measures the potential impact on earnings, fair values and cash flows based on a hypothetical change (increase and decrease) in interest rates.

At December 31, 2019, we had variable interest rate long-term debt outstanding under our Senior Secured Credit Facility and Term Loan A Facility of \$1,965 million. The weighted average interest rate on the outstanding amounts under our Senior Secured Credit Facility and Term Loan A Facility at December 31, 2019 was 4.01%. The interest rate with respect to the Term Loan B is based on adjusted LIBOR plus 2.25% (with a LIBOR floor of 0.75%). The interest rates with respect to the Revolving Credit Facility and term loans under the Term Loan A Facility are based on adjusted LIBOR plus an additional margin subject to adjustment based on the current senior secured leverage ratio. Based on the December 31, 2019 senior secured leverage ratio, the LIBOR margin was 2.25%. At December 31, 2019, the one-month LIBOR rate was 1.76%; therefore, we have estimated that a 0.25% increase in LIBOR would have a \$5 million impact on our annual interest expense.

As of December 31, 2019, we had interest rate swaps with a notional value of \$1,600 million to manage a portion of our exposure to changes in interest rates associated with our \$1,965 million of variable rate borrowings. Our interest rate swaps were as follows:

Notional Value (in millions)	Commencement Date	Expiration Date
\$600	August 2015	August 2020
\$450	November 2017	November 2022
\$400	August 2020	August 2025
\$150	November 2022	November 2027

The swaps help protect our outstanding variable rate borrowings from future interest rate volatility. The fixed interest rates on the swaps range from 2.07% to 3.11%. The Company had a liability of \$47 million for the fair value of the interest rate swaps at December 31, 2019, and an asset of \$6 million and a liability of \$16 million at December 31, 2018. The fair value of these interest rate swaps is subject to movements in LIBOR and will fluctuate in future periods. We have estimated that a 0.25% increase in the LIBOR yield curve would increase the fair value of our interest rate swaps by \$10 million and would decrease interest expense. While these results may be used as a benchmark, they should not be viewed as a forecast of future results.

Item 8. Financial Statements and Supplementary Data.

See "Index to Financial Statements" on page F-1.

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

Not applicable.

Item 9A. Controls and Procedures.

Controls and Procedures for Realogy Holdings Corp.

- Realogy Holdings Corp. ("Realogy Holdings") maintains disclosure controls and procedures that are designed to ensure that information required to be disclosed in its filings under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), is recorded, processed, summarized and reported within the periods specified in the rules and forms of the Securities and Exchange Commission and that such information is accumulated and communicated to its management, including its Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. Realogy Holdings' management, including the Chief Executive Officer and the Chief Financial Officer, recognizes that any set of controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives.
- As of the end of the period covered by this Annual Report on Form 10-K, Realogy Holdings has carried out an evaluation, under the supervision and with the participation of its management, including its Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of its disclosure controls and

procedures. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that Realogy Holdings' disclosure controls and procedures are effective at the "reasonable assurance" level.

- (c) There has not been any change in Realogy Holdings' internal control over financial reporting during the period covered by this Annual Report on Form 10-K that has materially affected, or is reasonably likely to materially affect, its internal control over financial reporting.

Management's Report on Internal Control Over Financial Reporting for Realogy Holdings Corp.

Realogy Holdings' management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Realogy Holdings' 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. Realogy Holdings' internal control over financial reporting includes those policies and procedures that:

- i. pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of Realogy Holdings' assets;
- ii. 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 Realogy Holdings' management and directors; and
- iii. provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of Realogy Holdings' 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.

Management assessed the effectiveness of Realogy Holdings' internal control over financial reporting as of December 31, 2019. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in its 2013 Internal Control-Integrated Framework. Based on this assessment, management determined that Realogy Holdings maintained effective internal control over financial reporting as of December 31, 2019.

Auditor Report on the Effectiveness of Realogy Holdings Corp.'s Internal Control Over Financial Reporting

PricewaterhouseCoopers LLP, the independent registered public accounting firm that audited the financial statements included in this Annual Report, has issued an attestation report on the effectiveness of Realogy Holdings' internal control over financial reporting, which is included within their audit opinion on page F-2.

* * *

Controls and Procedures for Realogy Group LLC

- (a) Realogy Group LLC ("Realogy Group") maintains disclosure controls and procedures that are designed to ensure that information required to be disclosed in its filings under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), is recorded, processed, summarized and reported within the periods specified in the rules and forms of the Securities and Exchange Commission and that such information is accumulated and communicated to its management, including its Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. Realogy Group's management, including the Chief Executive Officer and the Chief Financial Officer, recognizes that any set of controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives.
- (b) As of the end of the period covered by this Annual Report on Form 10-K, Realogy Group has carried out an evaluation, under the supervision and with the participation of its management, including its Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of its disclosure controls and procedures. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that Realogy Group's disclosure controls and procedures are effective at the "reasonable assurance" level.
- (c) There has not been any change in Realogy Group's internal control over financial reporting during the period covered by this Annual Report on Form 10-K that has materially affected, or is reasonably likely to materially affect, its internal control over financial reporting.

Management's Report on Internal Control Over Financial Reporting for Realogy Group LLC

Realogy Group's management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Realogy Group'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. Realogy Group's internal control over financial reporting includes those policies and procedures that:

- (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of Realogy Group's assets;
- (ii) 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 Realogy Group's management and directors; and
- (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of Realogy Group'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.

Management assessed the effectiveness of Realogy Group's internal control over financial reporting as of December 31, 2019. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in its 2013 Internal Control-Integrated Framework. Based on this assessment, management determined that Realogy Group maintained effective internal control over financial reporting as of December 31, 2019.

Auditor Report on the Effectiveness of Realogy Group LLC's Internal Control Over Financial Reporting

PricewaterhouseCoopers LLP, the independent registered public accounting firm that audited the financial statements included in this Annual Report, has issued an attestation report on the effectiveness of Realogy Group's internal control over financial reporting, which is included within their audit opinion on page F-5.

Item 9B. Other Information.

On February 24, 2020, the Compensation Committee of the Board of Directors (the "Committee") of Realogy Holdings Corp. (the "Company"), awarded John Peyton (the "Executive"), a special cash bonus of \$1.0 million (the "Award") in order to assure continuity in leadership across business operations. The Award will vest and be payable in three equal installments on each of February 24, 2021, February 24, 2022 and February 24, 2023.

In making the Award, the Committee considered that, since commencing employment with the Company in 2017, the Executive has assumed evolving levels of responsibility for the Company's business, has consistently demonstrated exemplary leadership and has provided critical assistance in the implementation of the Company's strategic objectives. The Committee also considered the competitive landscape for executive talent, in particular with respect to the Executive, and the potential business distribution likely to be caused by unplanned attrition.

The Award will remain subject to repayment if the Executive is found to be in breach of his restrictive covenant agreements with the Company (per the terms of such agreements), including those related to non-competition and non-solicitation. Any unvested tranches of the Award will be forfeited in the event that the Executive voluntarily terminates his employment with the Company without "good reason" or is terminated by the Company with "cause" (as such terms are defined in the Company's 2018 Long-Term Incentive Plan). If the Executive's employment with the Company is terminated by the Company other than for cause or by the Executive for good reason, he will be entitled to receive a pro-rated payment of the portion of the Award applicable to the year the termination event occurs, but future unvested tranches will be forfeited.

The summary above is qualified in its entirety by the Award agreement, which is attached as Exhibit 10.80 to this Annual Report.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

Identification of Directors

The information required by this item is included in the Proxy Statement under the caption "Proposal 1: Election of Directors" and is incorporated by reference to this report.

Identification of Executive Officers

The information relating to executive officers required by this item is included herein in Part I under the caption "Information about our Executive Officers."

Code of Ethics

The information required by this item is included in the Proxy Statement under the caption "Code of Business Conduct and Ethics" and is incorporated by reference to this Annual Report.

Corporate Governance

The information required by this item is included in the Proxy Statement under the caption "Governance of the Company" and is incorporated by reference to this Annual Report.

Item 11. Executive Compensation.

The information required by this item is included in the Proxy Statement under the captions "Governance of the Company—Compensation of Directors," "Governance of the Company—Committees of the Board" and "Executive Compensation" and is incorporated by reference to this Annual Report.

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

Securities Authorized for Issuance Under Equity Compensation Plans

The following table provides information about shares of our common stock that may be issued upon the exercise of options, that may vest pursuant to awards of restricted stock units, performance stock units or that may be issued under deferred stock units under all of our existing equity compensation plans as of December 31, 2019.

Plan Category	Number of Securities to be Issued Upon Exercise or Vesting of Outstanding Options, Warrants and Rights		Weighted Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans	
Equity compensation plans approved by stockholders	12,358,323	(1)	\$27.04	(2)	643,698 (3)
Equity compensation plan not approved by stockholders	287,955	(4)	\$32.80	(5)	—

-
- (1) Consists of 4,063,618 outstanding options, 3,666,737 restricted stock units, 52,874 performance restricted stock units, 4,460,593 performance stock units and 114,501 deferred stock units issuable under the 2007 Stock Incentive Plan, the 2012 Plan and the 2018 Plan. The amount set forth in the table assumes maximum payout under the unvested performance share unit awards. The number of shares, if any, to be issued pursuant to unvested performance stock unit awards will be determined based upon the extent to which the performance goals are achieved.
- (2) Weighted average exercise price of outstanding stock options under the 2007 Stock Incentive Plan, the 2012 Plan and the 2018 Plan. The weighted average remaining term of outstanding options is 5.2 years. The other outstanding awards do not have exercise prices and are accordingly excluded from this column.
- (3) Consists of shares available for future grant under the 2018 Plan.
- (4) Consists of 261,234 outstanding options and 25,407 unvested restricted stock units granted to Mr. Schneider on October 23, 2017 (the "Grant Date") as an inducement material to his entry into employment with us, as well as 1,314 unvested dividend equivalent units accrued on the restricted stock unit award as of December 31, 2019. If the underlying restricted stock unit award fails to vest, such dividend equivalent units will be forfeited.

Each grant was approved by our Compensation Committee and disclosed in a press release. Under applicable NYSE Listing Rules, inducement grants are not subject to security holder approval.

The terms of each inducement grant are materially consistent with the terms of awards made under the 2012 and 2018 Plans. The stock options expire ten years from the Grant Date and vest over a four-year period, in equal annual installments on each anniversary date of the Grant Date. The restricted stock units vest over a three-year period, in equal annual installments on each anniversary date of the Grant Date and carry dividend equivalent rights related to any cash dividend paid by the Company while the restricted stock units are outstanding. Vesting of the equity awards accelerate if employment terminates due to death or disability. The equity awards contain "double trigger" provisions that provide for accelerated vesting upon a qualifying termination within 24 months of a change in control of the Company (or, if the awards are not assumed or equitably converted by the successor company, upon the change in control).

- (5) Exercise price of options granted to Mr. Schneider on October 23, 2017.

See Note 14, "Stock-Based Compensation", in the Consolidated Financial Statements for additional information on the 2007 Stock Incentive Plan, the Amended and Restated 2012 Long-Term Incentive Plan and 2018 Long-Term Incentive Plan.

The remaining information required by this item is included in the Proxy Statement under the caption "Governance of the Company—Ownership of Our Common Stock" and is incorporated by reference to this Annual Report.

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

The information required by this item is included in the Proxy Statement under the captions "Governance of the Company—Director Independence Criteria and —Determination of Director Independence" and "Related Person Transactions" and is incorporated by reference to this Annual Report.

Item 14. Principal Accounting Fees and Services.

The information required by this item is included in the Proxy Statement under the captions "Disclosure About Fees" and "Pre-Approval of Audit and Non-Audit Services" under the section entitled "Proposal 3: Ratification of the Appointment of the Independent Registered Public Accounting Firm" and is incorporated by reference to this Annual Report.

PART IV

Item 15. Exhibits, Financial Statements and Schedules.

(A)(1) and (2) Financial Statements

The consolidated financial statements of the registrants listed in the "Index to Financial Statements" on page F-1 together with the reports of PricewaterhouseCoopers LLP, independent auditors, are filed as part of this Annual Report.

(A)(3) Exhibits

See Index to Exhibits.

The agreements included or incorporated by reference as exhibits to this Annual Report contain representations and warranties by each of the parties to the applicable agreement. These representations and warranties were made solely for the benefit of the other parties to the applicable agreement and (i) were not intended to be treated as categorical statements of fact, but rather as a way of allocating the risk to one of the parties if those statements prove to be inaccurate; (ii) may have been qualified in such agreement by disclosures that were made to the other party in connection with the negotiation of the applicable agreement; (iii) may apply contract standards of "materiality" that are different from "materiality" under the applicable securities laws; and (iv) were made only as of the date of the applicable agreement or such other date or dates as may be specified in the agreement. We acknowledge that, notwithstanding the inclusion of the foregoing cautionary statements, we are responsible for considering whether additional specific disclosures of material information regarding material contractual provisions are required to make the statements in this Annual Report not misleading.

(A)(4) Consolidated Financial Statement Schedules

Schedule II—Valuation and Qualifying Accounts for the years ended December 31, 2019, 2018 and 2017:

(in millions)

(in millions)		Additions				
	Balance at Beginning of Period	Charged to Costs and Expenses	Charged to Other Accounts	Deductions	Balance at End of Period	
Description						
Allowance for doubtful accounts (a)						
Year ended December 31, 2019	\$ 9	\$ 5	\$ —	\$ (3)	\$ 11	
Year ended December 31, 2018	11	1	—	(3)	9	
Year ended December 31, 2017	13	3	—	(5)	11	
Deferred tax asset valuation allowance						
Year ended December 31, 2019	\$ 14	\$ —	\$ —	\$ —	\$ 14	
Year ended December 31, 2018	10	4	—	—	14	
Year ended December 31, 2017	6	4	—	—	10	

(a) The deduction column represents uncollectible accounts written off, net of recoveries from Trade Receivables, in the Consolidated Balance Sheets.

Item 16. Form 10-K Summary.

None.

SIGNATURES

Pursuant to the requirements of Section 15(d) of the Securities Exchange Act of 1934, the registrants have duly caused this Annual Report on Form 10-K to be signed on their behalf by the undersigned, thereunto duly authorized, on February 25, 2020.

REALOGY HOLDINGS CORP.
and
REALOGY GROUP LLC
(Registrants)

By: /s/ RYAN M. SCHNEIDER

Name: Ryan M. Schneider

Title: Chief Executive Officer and President

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints **Ryan M. Schneider, Charlotte C. Simonelli** and **Marilyn J. Wasser**, and each of them severally, his or her true and lawful attorney-in-fact with power of substitution and resubstitution to sign in his or her name, place and stead, in any and all capacities, to do any and all things and execute any and all instruments that such attorney may deem necessary or advisable under the Securities Exchange Act of 1934 and any rules, regulations and requirements of the U.S. Securities and Exchange Commission in connection with this Annual Report on Form 10-K and any and all amendments hereto, as fully and for all intents and purposes as he or she might do or could do in person, and hereby ratifies and confirms all said attorneys-in-fact and agents, each acting alone, and his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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

Name	Title	Date
<u>/s/ RYAN M. SCHNEIDER</u> Ryan M. Schneider	Chief Executive Officer, President and Director (Principal Executive Officer)	February 25, 2020
<u>/s/ CHARLOTTE C. SIMONELLI</u> Charlotte C. Simonelli	Executive Vice President, Chief Financial Officer and Treasurer (Principal Financial Officer)	February 25, 2020
<u>/s/ TIMOTHY B. GUSTAVSON</u> Timothy B. Gustavson	Senior Vice President, Chief Accounting Officer and Controller (Principal Accounting Officer)	February 25, 2020
<u>/s/ MICHAEL J. WILLIAMS</u> Michael J. Williams	Chairman of the Board of Directors of Realogy Holdings Corp. and Manager of Realogy Group LLC	February 25, 2020
<u>/s/ FIONA P. DIAS</u> Fiona P. Dias	Director of Realogy Holdings Corp. and Manager of Realogy Group LLC	February 25, 2020
<u>/s/ MATTHEW J. ESPE</u> Matthew J. Espe	Director of Realogy Holdings Corp. and Manager of Realogy Group LLC	February 25, 2020
<u>/s/ V. ANN HAILEY</u> V. Ann Hailey	Director of Realogy Holdings Corp. and Manager of Realogy Group LLC	February 25, 2020
<u>/s/ BRYSON KOEHLER</u> Bryson Koehler	Director of Realogy Holdings Corp. and Manager of Realogy Group LLC	February 26, 2019
<u>/s/ DUNCAN L. NIEDERAUER</u> Duncan L. Niederauer	Director of Realogy Holdings Corp. and Manager of Realogy Group LLC	February 25, 2020
<u>/s/ ENRIQUE SILVA</u> Enrique Silva	Director of Realogy Holdings Corp. and Manager of Realogy Group LLC	February 25, 2020
<u>/s/ SHERRY M. SMITH</u> Sherry M. Smith	Director of Realogy Holdings Corp. and Manager of Realogy Group LLC	February 25, 2020
<u>/s/ CHRIS TERRILL</u> Chris Terrill	Director of Realogy Holdings Corp. and Manager of Realogy Group LLC	February 25, 2020

INDEX TO FINANCIAL STATEMENTS

	<u>Page</u>
Report of Independent Registered Public Accounting Firm for Realogy Holdings Corp.	F-2
Report of Independent Registered Public Accounting Firm for Realogy Group LLC	F-5
Consolidated Statements of Operations for the years ended December 31, 2019, 2018 and 2017	F-7
Consolidated Statements of Comprehensive (Loss) Income for the years ended December 31, 2019, 2018 and 2017	F-8
Consolidated Balance Sheets as of December 31, 2019 and 2018	F-9
Consolidated Statements of Cash Flows for the years ended December 31, 2019, 2018 and 2017	F-10
Consolidated Statements of Equity for the years ended December 31, 2019, 2018 and 2017	F-12
Notes to Consolidated Financial Statements	F-13

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Realogy Holdings Corp.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Realogy Holdings Corp. and its subsidiaries (the "Company") as of December 31, 2019 and 2018, and the related consolidated statements of operations, of comprehensive (loss) income, of equity and of cash flows for each of the three years in the period ended December 31, 2019, including the related notes and schedule of valuation and qualifying accounts for each of the three years in the period ended December 31, 2019 appearing under Item 15(A)(4) (collectively referred to as 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 (COSO).

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 three years in the period ended December 31, 2019 in conformity with accounting principles generally accepted in the United States of America. 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 COSO.

Change in Accounting Principle

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in 2019.

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 Management's Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and 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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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 (i) relate to accounts or disclosures that are material to the consolidated financial statements and (ii) 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.

Goodwill Impairment Assessment

As described in Notes 2 and 6 to the consolidated financial statements, the Company's consolidated goodwill balance was \$3,300 million as of December 31, 2019. Management conducts an impairment assessment as of October 1 of each year, or whenever events or changes in circumstances indicate that the carrying amount may not be fully recoverable. This assessment compares the carrying values of the reporting units to their respective fair values and when appropriate, the carrying value is reduced to fair value. Fair value of each reporting unit is estimated using the income approach, a discounted cash flow approach. The fair value of the Company's reporting units are determined utilizing the best estimate of future revenues, operating expenses, including commission expense, market and general economic conditions, as well as assumptions that management believes marketplace participants would utilize including discount rates, cost of capital, and long-term growth rates. During the third quarter of 2019, management determined that the decrease in the stock price of the Company and the impact on future earnings related to the discontinuation of the USAA affinity program qualified as triggering events for all of its reporting units and accordingly management performed an impairment assessment of goodwill and other indefinite-lived intangible assets as of September 1, 2019. As a result of the interim impairment test, management recognized a goodwill impairment charge totaling \$237 million related to Realogy Brokerage Group.

The principal considerations for our determination that performing procedures relating to the goodwill impairment assessment is a critical audit matter are there was significant judgment by management when developing the fair value measurement of the reporting units. This in turn led to a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating audit evidence relating to management's cash flow projections and significant assumptions, including future revenues, operating expenses, including commission expense, and the discount rates. In addition, the audit effort involved the use of professionals with specialized skill and knowledge to assist in performing these procedures and evaluating the audit evidence obtained.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's goodwill impairment assessment, including controls over the determination of the fair value of the Company's reporting units. These procedures also included, among others, testing management's process for developing the fair value estimates, testing the completeness and accuracy of the underlying data used in the valuation model, and evaluating the reasonableness of the significant assumptions, including future revenues, operating expenses, including commission expense, and discount rates. Evaluating management's assumptions related to future revenues and operating expenses, including commission expense involved evaluating whether the assumptions used by management were reasonable considering the current and past performance of the reporting units and whether the assumptions were consistent with evidence obtained in other areas of the audit. Additionally, for future revenues, the evaluation also considered whether the assumption was consistent with external market and industry data. Professionals with specialized skill and knowledge were used to assist in the evaluation of the appropriateness of the Company's discounted cash flow model and discount rates.

Other Indefinite-Lived Assets Impairment Assessment – Trademark Intangible Assets

As described in Notes 2 and 6 to the consolidated financial statements, the Company's consolidated other indefinite-lived intangible assets balance was \$692 million as of December 31, 2019, including trademark intangible assets of \$673 million. Management conducts an impairment assessment as of October 1 of each year, or whenever events or changes in circumstances indicate that the carrying amount may not be fully recoverable. This assessment compares the carrying values

of the other indefinite lived assets to their respective fair values and, when appropriate, the carrying value is reduced to fair value. Fair value of the other indefinite-lived intangible assets is estimated using the relief from royalty method. The fair value of the Company's other indefinite lived intangible assets are determined utilizing the best estimate of future revenues, market and general economic conditions as well as assumptions that management believes marketplace participants would utilize including discount rates, cost of capital, trademark royalty rates, and long-term growth rates. During the third quarter of 2019, management determined that the decrease in the stock price of the Company and the impact on future earnings related to the discontinuation of the USAA affinity program qualified as triggering events for all of its reporting units and accordingly management performed an impairment assessment of goodwill and other indefinite-lived intangible assets as of September 1, 2019.

The principal considerations for our determination that performing procedures relating to the other indefinite-lived intangible assets impairment assessment - trademark intangible assets is a critical audit matter are there was significant judgment by management when developing the fair value measurement of the trademark intangible assets. This in turn led to a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating audit evidence relating to management's significant assumptions, including future revenues and the discount rates. In addition, the audit effort involved the use of professionals with specialized skill and knowledge to assist in performing these procedures and evaluating the audit evidence obtained.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's trademark intangible asset impairment assessment, including controls over the determination of the fair value of the Company's trademark intangible assets. These procedures also included, among others, testing management's process for developing the fair value estimates, testing the completeness and accuracy of the underlying data used in the valuation model and evaluating the reasonableness of the significant assumptions, including future revenues and discount rates. Evaluating management's assumption related to future revenues involved evaluating whether the assumption used by management was reasonable considering the current and past performance of the business associated with the trademark, consistency with external market and industry data, and whether the assumption was consistent with evidence obtained in other areas of the audit. Professionals with specialized skill and knowledge were used to assist in the evaluation of the appropriateness of the Company's relief from royalty method, the trademark royalty rates, and discount rates.

/s/ PricewaterhouseCoopers LLP
Florham Park, New Jersey
February 25, 2020

We have served as the Company's auditor since 2009.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholder of Realogy Group LLC

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Realogy Group LLC and its subsidiaries (the "Company") as of December 31, 2019 and 2018, and the related consolidated statements of operations, of comprehensive (loss) income and of cash flows for each of the three years in the period ended December 31, 2019, including the related notes and schedule of valuation and qualifying accounts for each of the three years in the period ended December 31, 2019 appearing under Item 15(A)(4) (collectively referred to as 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 (COSO).

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 three years in the period ended December 31, 2019 in conformity with accounting principles generally accepted in the United States of America. 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 COSO.

Change in Accounting Principle

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in 2019.

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 Management's Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and 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 and in accordance with auditing standards generally accepted in the United States of America. 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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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/ PricewaterhouseCoopers LLP
Florham Park, New Jersey
February 25, 2020

We have served as the Company's auditor since 2009.

REALOGY HOLDINGS CORP. AND REALOGY GROUP LLC
CONSOLIDATED STATEMENTS OF OPERATIONS
(In millions, except per share data)

	Year Ended December 31,		
	2019	2018	2017
Revenues			
Gross commission income	\$ 4,330	\$ 4,533	\$ 4,576
Service revenue	673	654	638
Franchise fees	386	393	396
Other	209	202	200
Net revenues	5,598	5,782	5,810
Expenses			
Commission and other agent-related costs	3,156	3,282	3,230
Operating	1,345	1,351	1,344
Marketing	262	256	258
General and administrative	288	265	303
Former parent legacy cost (benefit), net	1	4	(10)
Restructuring costs, net	42	47	12
Impairments	249	—	—
Depreciation and amortization	169	164	166
Interest expense, net	249	189	157
(Gain) loss on the early extinguishment of debt	(5)	7	5
Other expense, net	—	—	1
Total expenses	5,756	5,565	5,466
(Loss) income from continuing operations before income taxes, equity in (earnings) losses and noncontrolling interests	(158)	217	344
Income tax (benefit) expense from continuing operations	(22)	67	(66)
Equity in (earnings) losses of unconsolidated entities	(18)	4	(18)
Net (loss) income from continuing operations	(118)	146	428
(Loss) income from discontinued operations, net of tax	(7)	(6)	6
Estimated loss on the sale of discontinued operations, net of tax	(60)	—	—
Net (loss) income from discontinued operations	(67)	(6)	6
Net (loss) income	(185)	140	434
Less: Net income attributable to noncontrolling interests	(3)	(3)	(3)
Net (loss) income attributable to Realogy Holdings and Realogy Group	<u>\$ (188)</u>	<u>\$ 137</u>	<u>\$ 431</u>
Basic (loss) earnings per share attributable to Realogy Holdings shareholders:			
Basic (loss) earnings per share from continuing operations	\$ (1.06)	\$ 1.15	\$ 3.11
Basic (loss) earnings per share from discontinued operations	(0.59)	(0.05)	0.04
Basic (loss) earnings per share	<u>\$ (1.65)</u>	<u>\$ 1.10</u>	<u>\$ 3.15</u>
Diluted (loss) earnings per share attributable to Realogy Holdings shareholders:			
Diluted (loss) earnings per share from continuing operations	\$ (1.06)	\$ 1.14	\$ 3.07
Diluted (loss) earnings per share from discontinued operations	(0.59)	(0.05)	0.04
Diluted (loss) earnings per share	<u>\$ (1.65)</u>	<u>\$ 1.09</u>	<u>\$ 3.11</u>
Weighted average common and common equivalent shares of Realogy Holdings outstanding:			
Basic	114.2	124.0	136.7
Diluted	114.2	125.3	138.4

See Notes to Consolidated Financial Statements.

REALOGY HOLDINGS CORP. AND REALOGY GROUP LLC
CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME
(In millions)

	Year Ended December 31,		
	2019	2018	2017
Net (loss) income	\$ (185)	\$ 140	\$ 434
Currency translation adjustment	—	(3)	3
Defined Benefit Plans:			
Actuarial loss for the plans	(8)	(6)	(1)
Less: amortization of actuarial loss to periodic pension cost	(2)	(2)	(2)
Defined benefit plans	(6)	(4)	1
Other comprehensive (loss) income, before tax	(6)	(7)	4
Income tax (benefit) expense related to items of other comprehensive income (loss)	(2)	(1)	1
Other comprehensive (loss) income, net of tax	(4)	(6)	3
Comprehensive (loss) income	(189)	134	437
Less: comprehensive income attributable to noncontrolling interests	(3)	(3)	(3)
Comprehensive (loss) income attributable to Realogy Holdings and Realogy Group	<u>\$ (192)</u>	<u>\$ 131</u>	<u>\$ 434</u>

See Notes to Consolidated Financial Statements.

REALOGY HOLDINGS CORP. AND REALOGY GROUP LLC
CONSOLIDATED BALANCE SHEETS
(In millions, except share data)

	December 31,	
	2019	2018
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 235	\$ 203
Restricted cash	—	2
Trade receivables (net of allowance for doubtful accounts of \$11 and \$9)	79	85
Other current assets	147	140
Current assets - held for sale	750	338
Total current assets	1,211	768
Property and equipment, net	308	273
Operating lease assets, net	515	—
Goodwill	3,300	3,536
Trademarks	673	673
Franchise agreements, net	1,160	1,227
Other intangibles, net	72	80
Other non-current assets	304	272
Non-current assets - held for sale	—	461
Total assets	\$ 7,543	\$ 7,290
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	\$ 84	\$ 83
Current portion of long-term debt	234	748
Current portion of operating lease liabilities	122	—
Accrued expenses and other current liabilities	350	344
Current liabilities - held for sale	356	352
Total current liabilities	1,146	1,527
Long-term debt	3,211	2,800
Long-term operating lease liabilities	467	—
Deferred income taxes	390	389
Other non-current liabilities	233	256
Non-current liabilities - held for sale	—	3
Total liabilities	5,447	4,975
Commitments and contingencies (Note 15)		
Equity:		
Realogy Holdings preferred stock: \$0.01 par value; 50,000,000 shares authorized, none issued and outstanding at December 31, 2019 and December 31, 2018	—	—
Realogy Holdings common stock: \$0.01 par value; 400,000,000 shares authorized, 114,355,519 shares issued and outstanding at December 31, 2019 and 114,620,499 shares issued and outstanding at December 31, 2018	1	1
Additional paid-in capital	4,842	4,869
Accumulated deficit	(2,695)	(2,507)
Accumulated other comprehensive loss	(56)	(52)
Total stockholders' equity	2,092	2,311
Noncontrolling interests	4	4
Total equity	2,096	2,315
Total liabilities and equity	\$ 7,543	\$ 7,290

See Notes to Consolidated Financial Statements.

REALOGY HOLDINGS CORP. AND REALOGY GROUP LLC
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In millions)

	Year Ended December 31,		
	2019	2018	2017
Operating Activities			
Net (loss) income	\$ (185)	\$ 140	\$ 434
Net loss (income) from discontinued operations	67	6	(6)
Net (loss) income from continuing operations	(118)	146	428
Adjustments to reconcile net (loss) income to net cash provided by operating activities:			
Depreciation and amortization	169	164	166
Deferred income taxes	(34)	71	(64)
Impairments	249	—	—
Amortization of deferred financing costs and debt discount	10	15	16
(Gain) loss on the early extinguishment of debt	(5)	7	5
Equity in (earnings) losses of unconsolidated entities	(18)	4	(18)
Stock-based compensation	28	37	47
Mark-to-market adjustments on derivatives	39	4	(4)
Other adjustments to net (loss) income	(3)	—	—
Net change in assets and liabilities, excluding the impact of acquisitions and dispositions:			
Trade receivables	5	7	(2)
Other assets	1	(8)	(20)
Accounts payable, accrued expenses and other liabilities	(11)	(43)	(4)
Dividends received from unconsolidated entities	3	3	52
Other, net	1	(7)	(12)
Net cash provided by operating activities from continuing operations	316	400	590
Net cash provided by (used in) operating activities from discontinued operations	55	(6)	77
Net cash provided by operating activities	371	394	667
Investing Activities			
Property and equipment additions	(108)	(92)	(90)
Payments for acquisitions, net of cash acquired	(1)	(1)	(18)
Investment in unconsolidated entities	(12)	(15)	(55)
Proceeds from investments in unconsolidated entities	—	19	11
Other, net	4	11	4
Net cash used in investing activities from continuing operations	(117)	(78)	(148)
Net cash (used in) provided by investing activities from discontinued operations	(11)	(13)	2
Net cash used in investing activities	\$ (128)	\$ (91)	\$ (146)

See Notes to Consolidated Financial Statements.

	Year Ended December 31,		
	2019	2018	2017
Financing Activities			
Net change in Revolving Credit Facility	\$ (80)	\$ 200	\$ (130)
Payments for refinancing of Term Loan B	—	(4)	—
Proceeds from refinancing of Term Loan A & A-1	—	17	—
Proceeds from issuance of Senior Notes	550	—	—
Redemption and repurchase of Senior Notes	(533)	—	—
Amortization payments on term loan facilities	(30)	(25)	(42)
Debt issuance costs	(9)	(16)	(6)
Cash paid for fees associated with early extinguishment of debt	(5)	—	(1)
Repurchase of common stock	(20)	(402)	(280)
Dividends paid on common stock	(31)	(45)	(49)
Proceeds from exercise of stock options	—	1	8
Taxes paid related to net share settlement for stock-based compensation	(6)	(10)	(11)
Payments of contingent consideration related to acquisitions	(3)	(22)	(22)
Other, net	(25)	(25)	(30)
Net cash used in financing activities from continuing operations	(192)	(331)	(563)
Net cash (used in) provided by financing activities from discontinued operations	(23)	34	(7)
Net cash used in financing activities	(215)	(297)	(570)
Effect of changes in exchange rates on cash, cash equivalents and restricted cash	—	(2)	2
Net increase (decrease) in cash, cash equivalents and restricted cash	28	4	(47)
Cash, cash equivalents and restricted cash, beginning of period	238	234	281
Cash, cash equivalents and restricted cash, end of period	266	238	234
Less cash, cash equivalents and restricted cash of discontinued operations, end of period	31	33	38
Cash, cash equivalents and restricted cash of continuing operations, end of period	<u>\$ 235</u>	<u>\$ 205</u>	<u>\$ 196</u>
Supplemental Disclosure of Cash Flow Information			
Interest payments for continuing operations	\$ 201	\$ 176	\$ 165
Income tax (refunds) payments for continuing operations, net	(3)	6	11

See Notes to Consolidated Financial Statements.

REALOGY HOLDINGS CORP.
CONSOLIDATED STATEMENTS OF EQUITY
(In millions)

	Realogy Holdings Stockholders' Equity						
	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Non- controlling Interests	Total Equity
	Shares	Amount					
Balance at January 1, 2017	140.2	\$ 1	\$ 5,565	\$ (3,062)	\$ (40)	\$ 5	\$ 2,469
Net income	—	—	—	431	—	3	434
Other comprehensive income	—	—	—	—	3	—	3
Repurchase of common stock	(9.5)	—	(280)	—	—	—	(280)
Exercise of stock options	0.3	—	8	—	—	—	8
Stock-based compensation	—	—	52	—	—	—	52
Issuance of shares for vesting of equity awards	1.0	—	—	—	—	—	—
Shares withheld for taxes on equity awards	(0.4)	—	(11)	—	—	—	(11)
Dividends (\$0.36 per share)	—	—	(49)	—	—	(4)	(53)
Balance at December 31, 2017	131.6	\$ 1	\$ 5,285	\$ (2,631)	\$ (37)	\$ 4	\$ 2,622
Cumulative effect of adoption of new accounting pronouncements	—	—	—	(13)	(9)	—	(22)
Net income	—	—	—	137	—	3	140
Other comprehensive loss	—	—	—	—	(6)	—	(6)
Repurchase of common stock	(17.9)	—	(402)	—	—	—	(402)
Exercise of stock options	—	—	1	—	—	—	1
Stock-based compensation	—	—	40	—	—	—	40
Issuance of shares for vesting of equity awards	1.2	—	—	—	—	—	—
Shares withheld for taxes on equity awards	(0.3)	—	(10)	—	—	—	(10)
Dividends (\$0.36 per share)	—	—	(45)	—	—	(3)	(48)
Balance at December 31, 2018	114.6	\$ 1	\$ 4,869	\$ (2,507)	\$ (52)	\$ 4	\$ 2,315
Net (loss) income	—	—	—	(188)	—	3	(185)
Other comprehensive loss	—	—	—	—	(4)	—	(4)
Repurchase of common stock	(1.2)	—	(20)	—	—	—	(20)
Stock-based compensation	—	—	30	—	—	—	30
Issuance of shares for vesting of equity awards	1.4	—	—	—	—	—	—
Shares withheld for taxes on equity awards	(0.4)	—	(6)	—	—	—	(6)
Dividends (\$0.27 per share)	—	—	(31)	—	—	(3)	(34)
Balance at December 31, 2019	114.4	\$ 1	\$ 4,842	\$ (2,695)	\$ (56)	\$ 4	\$ 2,096

See Notes to Consolidated Financial Statements.

REALOGY HOLDINGS CORP. AND REALOGY GROUP LLC
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Unless otherwise noted, all amounts are in millions, except per share amounts)

1. BASIS OF PRESENTATION

Realogy Holdings Corp. ("Realogy Holdings", "Realogy" or the "Company") is a holding company for its consolidated subsidiaries including Realogy Intermediate Holdings LLC ("Realogy Intermediate") and Realogy Group LLC ("Realogy Group") and its consolidated subsidiaries. Realogy, through its subsidiaries, is a global provider of residential real estate services. Neither Realogy Holdings, the indirect parent of Realogy Group, nor Realogy Intermediate, the direct parent company of Realogy Group, conducts any operations other than with respect to its respective direct or indirect ownership of Realogy Group. As a result, the consolidated financial positions, results of operations, comprehensive income (loss) and cash flows of Realogy Holdings, Realogy Intermediate and Realogy Group are the same.

The accompanying Consolidated Financial Statements include the financial statements of Realogy Holdings and Realogy Group. Realogy Holdings' only asset is its investment in the common stock of Realogy Intermediate, and Realogy Intermediate's only asset is its investment in Realogy Group. Realogy Holdings' only obligations are its guarantees of certain borrowings and certain franchise obligations of Realogy Group. All expenses incurred by Realogy Holdings and Realogy Intermediate are for the benefit of Realogy Group and have been reflected in Realogy Group's consolidated financial statements. The consolidated financial statements of the Company have been prepared in accordance with accounting principles generally accepted in the United States of America. All intercompany balances and transactions have been eliminated.

On November 6, 2019, the Company entered into a Purchase and Sale Agreement (the "Purchase Agreement") with a subsidiary of SIRVA, Inc. ("SIRVA"). Pursuant to the Purchase Agreement, Realogy has agreed to sell its Cartus Relocation Services business, held by Cartus Corporation, an indirect subsidiary of the Company ("Cartus") to SIRVA. Subject to the terms and conditions of the Purchase Agreement, and following the completion of certain restructuring steps to separate from Cartus the affinity, broker-to-broker referral, and broker network management businesses that Realogy will retain under the name Realogy Leads Group, SIRVA will purchase all of the outstanding equity interests in Cartus for an aggregate purchase price of \$400 million, consisting of \$375 million in cash payable at the closing of the transaction, subject to certain adjustments set forth in the Purchase Agreement, and a \$25 million deferred payment payable after the closing. The transaction is expected to close in the next couple of months, subject to satisfaction or waiver of the closing conditions set forth in the Purchase Agreement.

As a result, the Company met the requirements of ASC 360 to report the operating results of the Cartus Relocation Services business as discontinued operations, and reflected the (loss) income in "Net (loss) income from discontinued operations" on the Consolidated Statements of Operations for all periods presented. In addition, the related assets and liabilities as of November 6, 2019 have been reported as assets and liabilities held for sale in the Consolidated Balance Sheets. The cash flows related to discontinued operations have been segregated and are included in the Consolidated Statements of Cash Flows. Unless otherwise noted, discussion within these notes to the consolidated financial statements relates only to continuing operations. Refer to Note 3, "Discontinued Operations", for additional information related to discontinued operations.

Business Description

The Company reports its operations in the following four business segments (the number of offices and agents are unaudited):

- **Realogy Franchise Group** (formerly referred to as Real Estate Franchise Services, or RFG)—franchises the Century 21[®], Coldwell Banker[®], Coldwell Banker Commercial[®], Corcoran[®], ERA[®], Sotheby's International Realty[®] and Better Homes and Gardens[®] Real Estate brand names. As of December 31, 2019, our real estate franchise systems and proprietary brands had approximately 302,400 independent sales agents worldwide, including approximately 189,900 independent sales agents operating in the U.S. (which included approximately 52,200 company owned brokerage independent sales agents). As of December 31, 2019, our real estate franchise systems and proprietary brands had approximately 18,500 offices worldwide in 114 countries and territories, including approximately 5,900 brokerage offices in the U.S. (which included approximately 710 company owned brokerage offices).

- **Realogy Brokerage Group** (formerly referred to as Company Owned Real Estate Brokerage Services, or NRT)—operates a full-service real estate brokerage business with approximately 710 owned and operated brokerage offices with approximately 52,200 independent sales agents principally under the Coldwell Banker®, Corcoran® and Sotheby's International Realty® brand names in many of the largest metropolitan areas in the U.S.
- **Realogy Title Group** (formerly referred to as Title and Settlement Services, or TRG)—provides full-service title and settlement services to real estate companies, affinity groups, corporations and financial institutions with many of these services provided in connection with the Company's real estate brokerage. This segment also includes the Company's share of equity earnings and losses for our Guaranteed Rate Affinity mortgage origination joint venture.
- **Realogy Leads Group** (previously formed part of Relocation Services)—Realogy Leads Group consists of affinity programs (both company- and client-directed) as well as broker-to-broker referrals. Through its highly concentrated affinity business, this segment has traditionally provided and continues to provide assistance with residential real estate transactions to members of affinity clients. Referrals from affinity programs are handled by the Realogy Broker Network. Member brokers of the Realogy Broker Network, including certain franchisees and company owned brokerages, have traditionally received referrals from the Cartus Relocation Services, Realogy Leads Group and from each other through broker-to-broker referrals in exchange for a referral fee.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

USE OF ESTIMATES

In presenting the consolidated financial statements, management makes estimates and assumptions that affect the amounts reported and related disclosures. Estimates, by their nature, are based on judgment and available information. Accordingly, actual results could differ materially from those estimates.

ASSETS HELD FOR SALE AND DISCONTINUED OPERATIONS

The Company reports the results of operations of a business as discontinued operations if a disposal represents a strategic shift that has or will have a major effect on the Company's operations and financial results when the business is sold and classified as held for sale, in accordance with the criteria of Accounting Standard Codification ("ASC") Topic 205 Presentation of Financial Statements ("ASC 205") and ASC Topic 360 Property, Plant and Equipment ("ASC 360"). Assets and liabilities of a business classified as held for sale are recorded at the lower of its carrying amount or estimated fair value less cost to sell and depreciation ceases on the date that the held for sale criteria are met. If the carrying amount of the business exceeds its estimated fair value less cost to sell, a loss is recognized. Assets and liabilities related to a business classified as held for sale are segregated in the current and prior balance sheets in the period in which the business is classified as held for sale. The results of discontinued operations are reported in "Net (loss) income from discontinued operations" in the accompanying Consolidated Statements of Operations for the current and prior periods commencing in the period in which the business meets the criteria, and includes any gain or loss recognized on closing, or adjustment of the carrying amount to fair value less cost to sell. Transactions between the businesses held for sale and businesses held for use that are expected to continue to exist after the disposal are not eliminated to appropriately reflect the continuing operations and balances held for sale. See Note 3, "Discontinued Operations", for further discussion.

LEASES

See Note 4, "Leases", for discussion.

REVENUE RECOGNITION

See Note 5, "Revenue Recognition", for discussion.

CONSOLIDATION

The Company consolidates any variable interest entity ("VIE") for which it is the primary beneficiary with a controlling financial interest. Also, the Company consolidates an entity not deemed a VIE if its ownership, direct or indirect, exceeds 50% of the outstanding voting shares of an entity and/or it has the ability to control the financial or operating policies through its voting rights, board representation or other similar rights. For entities where the Company does not have a controlling interest (financial or operating), the investments in such entities are accounted for using the equity method or at fair value with changes in fair value recognized in net income, as appropriate. The Company applies the equity method of accounting when it has the ability to exercise significant influence over operating and financial policies of an investee. The

Company measures all other investments at fair value with changes in fair value recognized in net income or in the case that an equity investment does not have readily determinable fair values, at cost minus impairment (if any) plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment.

CASH AND CASH EQUIVALENTS

The Company considers highly liquid investments with remaining maturities not exceeding three months at the date of purchase to be cash equivalents.

ALLOWANCE FOR DOUBTFUL ACCOUNTS

The Company estimates the allowance necessary to provide for uncollectible accounts receivable. The estimate is based on historical experience, combined with a review of current developments and includes specific accounts for which payment has become unlikely. The process by which the Company calculates the allowance begins in the individual business units where specific problem accounts are identified and reserved primarily based upon the age profile of the receivables and specific payment issues.

ADVERTISING EXPENSES

Advertising costs are generally expensed in the period incurred. Advertising expenses, recorded within the marketing expense line item on the Company's Consolidated Statements of Operations, were approximately \$196 million, \$207 million and \$211 million for the years ended December 31, 2019, 2018 and 2017, respectively.

DEBT ISSUANCE COSTS

Debt issuance costs include costs incurred in connection with obtaining debt and extending existing debt. These financing costs are presented in the balance sheet as a direct deduction from the carrying value of the associated debt liability, consistent with the presentation of a debt discount, with the exception of the debt issuance costs related to the Revolving Credit Facility which are classified as a deferred financing asset within other assets. The debt issuance costs are amortized via the effective interest method and the amortization period is the life of the related debt.

INCOME TAXES

The Company's provision for income taxes is determined using the asset and liability method, under which deferred tax assets and liabilities are calculated based upon the temporary differences between the financial statement and income tax bases of assets and liabilities using currently enacted tax rates. These differences are based upon estimated differences between the book and tax basis of the assets and liabilities for the Company. Certain tax assets and liabilities of the Company may be adjusted in connection with the finalization of income tax audits.

The Company's deferred tax assets are recorded net of a valuation allowance when, based on the weight of available evidence, it is more likely than not that all or some portion of the recorded deferred tax balances will not be realized in future periods. Decreases to the valuation allowance are recorded as reductions to the Company's provision for income taxes and increases to the valuation allowance result in additional provision for income taxes.

DERIVATIVE INSTRUMENTS

The Company records derivatives and hedging activities on the balance sheet at their respective fair values. The Company uses interest rate swaps to manage its exposure to future interest rate volatility associated with its variable rate borrowings. The Company has not elected to utilize hedge accounting for these instruments; therefore, any change in fair value is recorded in the Consolidated Statements of Operations. However, the fluctuations in the value of these instruments generally offset the impact of changes in the value of the underlying risk that they are intended to economically hedge. See Note 18, "Risk Management and Fair Value of Financial Instruments", for further discussion.

INVESTMENTS

Guaranteed Rate Affinity, LLC ("Guaranteed Rate Affinity") originates and markets its mortgage lending services to the Company's real estate brokerage as well as other real estate brokerage companies across the country. Guaranteed Rate, Inc. ("Guaranteed Rate") owns a controlling 50.1% stake of Guaranteed Rate Affinity and the Company owns 49.9%. The Company has certain governance rights related to the joint venture, however it does not have control of the day-to-day operations of Guaranteed Rate Affinity. During the first quarter of 2018, the Company's interest in PHH Home Loans LLC

("PHH Home Loans"), the Company's former 49.9% mortgage joint venture, was sold to a subsidiary of PHH Corporation and the Company received net cash proceeds of \$19 million reducing the investment balance in PHH Home Loans to zero. Guaranteed Rate Affinity began doing business in August 2017 on a phased-in basis. The equity earnings or losses related to PHH Home Loans were included in the financial results of Realogy Brokerage Group and the equity earnings or losses related to Guaranteed Rate Affinity are included in the financial results of Realogy Title Group.

At December 31, 2019 and 2018, the Company had various equity method investments aggregating \$69 million and \$51 million, respectively, which are recorded within other non-current assets on the accompanying Consolidated Balance Sheets. The \$69 million investment balance at December 31, 2019 included \$60 million for the Company's investment in Guaranteed Rate Affinity. The \$51 million investment balance at December 31, 2018 included \$43 million for the Company's investment in Guaranteed Rate Affinity.

For the year ended December 31, 2019, the Company recorded equity earnings of \$18 million at Realogy Title Group primarily related to earnings from the operations of Guaranteed Rate Affinity.

For the year ended December 31, 2018, the Company recorded equity losses of \$4 million at Realogy Title Group primarily related to losses from the operations of Guaranteed Rate Affinity.

For the year ended December 31, 2017, the Company recorded equity earnings of \$18 million which consisted of \$35 million of earnings from the sale of PHH Home Loans' assets to Guaranteed Rate Affinity, partially offset by \$7 million of exit costs and losses of \$6 million from the continuing operations of PHH Home Loans. In addition, there was a \$4 million loss from equity method investments at Realogy Title Group primarily related to costs associated with the start up of operations of Guaranteed Rate Affinity, including \$3 million of amortization of intangible assets recorded in purchase accounting.

The Company received \$3 million, \$3 million and \$63 million in cash dividends from equity method investments during the years ended December 31, 2019, 2018 and 2017, respectively. The Company invested \$2 million, \$4 million and \$55 million of cash into Guaranteed Rate Affinity during the years ended December 31, 2019, 2018 and 2017, respectively.

PROPERTY AND EQUIPMENT

Property and equipment (including leasehold improvements) are initially recorded at cost, net of accumulated depreciation and amortization. Depreciation, recorded as a component of depreciation and amortization on the Consolidated Statements of Operations, is computed utilizing the straight-line method over the estimated useful lives of the related assets. Amortization of leasehold improvements, also recorded as a component of depreciation and amortization, is computed utilizing the straight-line method over the estimated benefit period of the related assets or the lease term, if shorter. Useful lives are 30 years for buildings, up to 20 years for leasehold improvements, and from 3 to 7 years for furniture, fixtures and equipment.

The Company capitalizes the costs of software developed for internal use which commences during the development phase of the project. The Company amortizes software developed or obtained for internal use on a straight-line basis, generally from 1 to 5 years, when such software is ready for use. The net carrying value of software developed or obtained for internal use was \$97 million and \$93 million at December 31, 2019 and 2018, respectively.

IMPAIRMENT OF GOODWILL, INTANGIBLE ASSETS AND OTHER LONG-LIVED ASSETS

Goodwill represents the excess of acquisition costs over the fair value of the net tangible assets and identifiable intangible assets acquired in a business combination. Other indefinite-lived intangible assets primarily consist of trademarks acquired in business combinations. Goodwill and other indefinite-lived assets are not amortized, but are subject to impairment testing. The aggregate carrying values of our goodwill and other indefinite-lived intangible assets were \$3,300 million and \$692 million, respectively, at December 31, 2019 and are subject to an impairment assessment annually as of October 1, or whenever events or changes in circumstances indicate that the carrying amount may not be fully recoverable. This assessment compares carrying values of the goodwill reporting units and other indefinite lived intangible assets to their respective fair values and, when appropriate, the carrying value is reduced to fair value.

In testing goodwill, the fair value of each reporting unit is estimated using the income approach, a discounted cash flow approach. For the other indefinite lived intangible assets, fair value is estimated using the relief from royalty method. Management utilizes long-term cash flow forecasts and the Company's annual operating plans adjusted for terminal value assumptions. The fair value of the Company's reporting units and other indefinite lived intangible assets are determined

utilizing the best estimate of future revenues, operating expenses including commission expense, market and general economic conditions, trends in the industry, as well as assumptions that management believes marketplace participants would utilize including discount rates, cost of capital, trademark royalty rates, and long-term growth rates. The trademark royalty rate was determined by reviewing similar trademark agreements with third parties. Although management believes that assumptions are reasonable, actual results may vary significantly. These impairment assessments involve the use of accounting estimates and assumptions, changes in which could materially impact our financial condition or operating performance if actual results differ from such estimates and assumptions. To address this uncertainty, a sensitivity analysis is performed on key estimates and assumptions.

During the third quarter of 2019, management determined that the decrease in the stock price of the Company and the impact on future earnings related to the discontinuation of the USAA affinity program qualified as triggering events for all of its reporting units and accordingly management performed an impairment assessment of goodwill and other indefinite-lived intangible assets as of September 1, 2019. The impairment assessment indicated that the carrying value of Realogy Brokerage Group exceeded its estimated fair value by \$180 million primarily as a result of a reduction in Realogy Brokerage Group's long-term forecast. Accounting Standard Update No. 2017-04 (Topic 350), "Simplifying the Test of Goodwill Impairment", which the Company early adopted in the third quarter of 2019, requires that the impairment charge and deferred tax effect are calculated using the simultaneous equation method which effectively grosses up the goodwill impairment charge to account for the related tax benefit so that the resulting carrying value does not exceed the calculated fair value. As a result, management recognized a goodwill impairment charge to reduce goodwill at Realogy Brokerage Group by \$237 million offset by an income tax benefit of \$57 million resulting in a net reduction in carrying value of \$180 million.

The results of the Company's interim impairment test indicated no other impairment charges were required for the other reporting units or other indefinite-lived intangibles. Management evaluated the effect of lowering the estimated fair value for each of the passing reporting units by 10% and determined no impairment of goodwill or other indefinite-lived intangible assets would have been recognized under this evaluation. Based upon the impairment assessment performed in the fourth quarter of 2019, 2018 and 2017, there was no impairment of goodwill or other indefinite-lived intangible assets for these years. Management evaluated the effect of lowering the estimated fair value for each of the passing reporting units by 10% and determined no impairment of goodwill or other indefinite-lived intangible assets would have been recognized under this evaluation for 2018 or 2017.

The Company evaluates the recoverability of its other long-lived assets, including amortizable intangible assets, if circumstances indicate an impairment may have occurred. This assessment is performed by comparing the respective carrying values of the assets to the current and expected future cash flows, on an undiscounted basis, to be generated from such assets. If such assessment indicates that the carrying value of these assets is not recoverable, then the carrying value of such assets is reduced to fair value through a charge to the Company's Consolidated Statements of Operations.

STOCK-BASED COMPENSATION

The Company grants stock-based awards to certain senior management, employees and directors including non-qualified stock options, restricted stock units and performance share units. The fair value of non-qualified stock options is estimated using the Black-Scholes option pricing model on the grant date and is recognized as expense over the service period based on the vesting requirements. The fair value of restricted stock units and performance share units without a market condition is measured based on the closing price of the Company's common stock on the grant date and is recognized as expense over the service period of the award, or when requisite performance metrics or milestones are probable of being achieved. The fair value of awards with a market condition are estimated using the Monte Carlo simulation method and expense is recognized on a straight-line basis over the requisite service period of the award. The Company recognizes forfeitures as they occur. Determining the fair value of stock-based awards at the grant date requires considerable judgment, including estimating expected volatility and expected term, risk-free rate.

RECENTLY ADOPTED ACCOUNTING PRONOUNCEMENTS

Adoption of the New Leasing Standard

In February 2016, the FASB issued Accounting Standard Update No. 2016-02 (Topic 842) "Leases" (the "new leasing standard") which requires virtually all leases to be recognized on the balance sheet. Effective January 1, 2019, the Company adopted the new leasing standard using the modified retrospective transition approach with optional transition relief and recognized the cumulative effect of applying the new leasing standard to existing contracts on the balance sheet on January 1, 2019. Therefore, results for reporting periods beginning after January 1, 2019 are presented under the new leasing standard; however, the comparative prior period amounts have not been restated and continue to be reported in accordance with historical accounting under ASC Topic 840. The most significant effects of adoption of the new leasing standard relate to the recognition of new right-of-use assets and lease liabilities on the balance sheet for operating leases. The new leasing standard did not impact our Consolidated Statement of Operations and Consolidated Statement of Cash Flows. The impact of the changes to the Consolidated Balance Sheets for the adoption of the new leasing standard were as follows:

	Balance Sheet accounts prior to the new leasing standard adoption adjustments	Adjustments due to the adoption of the new leasing standard	Balance Sheet accounts after the new leasing standard adoption adjustments
ASSETS			
Current assets:			
Other current assets	\$ 140	\$ (13)	\$ 127
Current assets - held for sale	338	(1)	337
Total current assets	768	(14)	754
Operating lease assets, net	—	525	525
Other non-current assets	272	—	272
Non-current assets - held for sale	461	41	502
Total assets (a)	\$ 7,290	\$ 552	\$ 7,842
LIABILITIES AND EQUITY			
Current liabilities:			
Current portion of operating lease liabilities	\$ —	\$ 126	\$ 126
Accrued expenses and other current liabilities	344	(12)	332
Current liabilities - held for sale	352	—	352
Total current liabilities	1,527	114	1,641
Long-term operating lease liabilities	—	458	458
Other non-current liabilities	256	(60)	196
Non-current liabilities - held for sale	3	40	43
Total liabilities	4,975	552	5,527
Total equity	2,315	—	2,315
Total liabilities and equity	\$ 7,290	\$ 552	\$ 7,842

(a) The \$552 million adjustment to Total assets due to the adoption of the new leasing standard consists of \$414 million at Realogy Brokerage Group, \$52 million at Corporate and Other, \$46 million at Realogy Title Group and \$40 million of assets held for sale related to the pending sale of Cartus' Relocation Services business.

The Company elected a package of practical expedients that were consequently applied to all leases. The Company did not reassess whether expired or existing contracts contain leases under the new definition of a lease, lease classification for expired or existing leases, nor whether previously capitalized initial direct costs would qualify for capitalization under the new standard. Upon transition, the Company did not elect to use hindsight with respect to lease renewals and purchase options when accounting for existing leases, as well as assessing the impairment of right-of-use assets. Therefore, lease terms largely remained unchanged. In addition, the Company elected the short-term lease recognition exemption and did not recognize a lease obligation and right-of-use asset on its balance sheet for all leases with terms of 12 months or less. The Company elected the practical expedient to combine lease and non-lease components in total gross rent for all of its leases which resulted in a larger lease liability recorded on the balance sheet.

Adoption of Other Accounting Pronouncements

In January 2017, the FASB issued Accounting Standard Update No. 2017-04 (Topic 350), "Simplifying the Test of Goodwill Impairment." This update simplifies how the Company is required to test goodwill for impairment by eliminating step two, which requires a hypothetical purchase price allocation, from the goodwill impairment test. Under the new guidance, a goodwill impairment will equal the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. The new guidance requires that the impairment charge and deferred tax effect are calculated using the simultaneous equation method which effectively grosses up the goodwill impairment charge to account for the related tax benefit so that the resulting carrying value does not exceed the calculated fair value. The standard is effective for interim or annual goodwill impairment tests during fiscal years beginning after December 15, 2019, with early adoption permitted, and should be applied prospectively. The Company elected to early adopt this standard as of September 1, 2019.

RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

The Company considers the applicability and impact of all Accounting Standards Updates. Recently issued standards were assessed and determined to be either not applicable or are expected to have minimal impact on our consolidated financial position or results of operations.

3. DISCONTINUED OPERATIONS

The Company entered into the Purchase Agreement on November 6, 2019 (the "Purchase Agreement"), pursuant to which SIRVA will acquire Cartus Relocation Services, the Company's global employee relocation business. Under the terms of the Purchase Agreement, the Company will receive \$375 million in cash at closing, subject to certain adjustments set forth in the Purchase Agreement, and a \$25 million deferred payment after the closing of the transaction. The \$375 million purchase price is subject to adjustments for cash, indebtedness, working capital, securitization obligations and other items, as defined and described in the Purchase Agreement. The transaction is expected to close in the next couple of months, subject to the satisfaction of closing conditions described in the Purchase Agreement.

The transaction includes all of Cartus Relocation Services, but does not include Realogy Leads Group. Realogy Leads Group is comprised of the Company's affinity and broker-to-broker business, as well as the broker network made up of agents and brokers from Realogy's residential real estate brands and certain independent real estate brokers (which was formerly referred to as the Cartus Broker Network).

As a result of the pending transaction, the Company met the requirements under ASC 360 and ASC 205 and accordingly the assets and liabilities of Cartus Relocation Services are classified as held for sale in the Consolidated Balance Sheets and the operating results of Cartus Relocation Services are reported as discontinued operations and reflected in "Net (loss) income from discontinued operations" on the Consolidated Statements of Operations for all periods presented. The cash flows related to discontinued operations have been segregated and are included in the Consolidated Statements of Cash Flows.

The following table summarizes the operating results of discontinued operations described above and reflected within "Net (loss) income from discontinued operations" in the Company's Consolidated Statements of Operations for each of the periods presented:

	Year Ended December 31,		
	2019	2018	2017
Net revenues	\$ 272	\$ 297	\$ 304
Total expenses	281	305	297
(Loss) income from discontinued operations	(9)	(8)	7
Estimated loss on the sale of discontinued operations (a)	(22)	—	—
Income tax expense (benefit) from discontinued operations (b)	36	(2)	1
Net (loss) income from discontinued operations	\$ (67)	\$ (6)	\$ 6

(a) Adjustment to record assets and liabilities held for sale at the lower of carrying value or fair value less any costs to sell based on the Purchase Agreement.

(b) Income tax expense for the year ended December 31, 2019 relates to tax expense as a result of the expected taxable gain on the sale of Cartus Relocation Services, primarily as a result of the Company's low tax basis in goodwill, trademarks and other intangibles.

Assets and liabilities held for sale related to discontinued operations presented in the Consolidated Balance Sheets at December 31, 2019 and 2018 are as follows:

	December 31,	
	2019 (a)	2018
Carrying amounts of the major classes of assets held for sale		
Cash and cash equivalents	\$ 28	\$ 22
Restricted cash	3	11
Trade receivables	46	61
Relocation receivables	203	231
Other current assets	12	13
<i>Total current assets</i>		338
Property and equipment, net	36	31
Operating lease assets, net	36	—
Goodwill	176	176
Trademarks	76	76
Other intangibles, net	156	174
Other non-current assets	—	4
<i>Total non-current assets</i>		461
Allowance for reduction of assets held for sale (b)	(22)	
Total assets classified as held for sale	\$ 750	\$ 799
Carrying amounts of the major classes of liabilities held for sale		
Accounts payable	\$ 53	\$ 64
Securitization obligations	206	231
Current portion of operating lease liabilities	6	—
Accrued expenses and other current liabilities	62	57
<i>Total current liabilities</i>		352
Long-term operating lease liabilities	29	—
Other non-current liabilities	—	3
<i>Total non-current liabilities</i>		3
Total liabilities classified as held for sale	\$ 356	\$ 355

- (a) The assets and liabilities of Cartus Relocation Services are classified as current on the December 31, 2019 balance sheet because it is probable that the sale will occur and proceeds will be collected within one year.
- (b) Adjustment to record assets and liabilities held for sale at the lower of carrying value or fair value less any costs to sell based on the Purchase Agreement.

Securitization Obligations

Securitization Obligations in the table above are further broken out as follows:

	December 31,	
	2019	2018
Securitization Obligations:		
Apple Ridge Funding LLC	\$ 195	\$ 218
Cartus Financing Limited	11	13
Total Securitization Obligations	\$ 206	\$ 231

Realogy Group has secured obligations through Apple Ridge Funding LLC under a securitization program which expires in June 2020. As of December 31, 2019, the Company had \$250 million of borrowing capacity under the Apple Ridge Funding LLC securitization program with \$195 million being utilized leaving \$55 million of available capacity.

Realogy Group, through a special purpose entity known as Cartus Financing Limited, has agreements providing for a £10 million revolving loan facility and a £5 million working capital facility which expires in August 2020. As of December 31, 2019, there were \$11 million of outstanding borrowings under the facilities leaving \$9 million of available capacity. These Cartus Financing Limited facilities are secured by the relocation assets of a U.K. government contract in this special purpose entity and are therefore classified as permitted securitization financings as defined in Realogy Group's Senior Secured Credit Agreement and the indentures governing the Unsecured Notes.

The Apple Ridge entities and the Cartus Financing Limited entity are consolidated special purpose entities that are utilized to securitize relocation receivables and related assets. These assets are generated from advancing funds on behalf of clients of Realogy Group's relocation business in order to facilitate the relocation of their employees. Assets of these special purpose entities are not available to pay Realogy Group's general obligations. Under the Apple Ridge program, provided no termination or amortization event has occurred, any new receivables generated under the designated relocation management agreements are sold into the securitization program and as new eligible relocation management agreements are entered into, the new agreements are designated to the program. The Apple Ridge program has restrictive covenants and trigger events, including performance triggers linked to the age and quality of the underlying assets, foreign obligor limits, multicurrency limits, financial reporting requirements, restrictions on mergers and change of control, any uncured breach of Realogy Group's senior secured leverage ratio under Realogy Group's Senior Secured Credit Facility, and cross-defaults to Realogy Group's material indebtedness. The occurrence of a trigger event under the Apple Ridge securitization facility could restrict our ability to access new or existing funding under this facility or result in termination of the facility, either of which would adversely affect the operation of our relocation business.

Certain of the funds that Realogy Group receives from relocation receivables and related assets must be utilized to repay securitization obligations. These obligations were collateralized by \$200 million and \$238 million of underlying relocation receivables and other related relocation assets at December 31, 2019 and 2018, respectively. Substantially all relocation related assets are realized in less than twelve months from the transaction date.

Interest incurred in connection with borrowings under these facilities amounted to \$8 million and \$9 million for the years ended December 31, 2019 and 2018, respectively. These securitization obligations represent floating rate debt for which the average weighted interest rate was 4.2% and 3.8% for the years ended December 31, 2019 and 2018, respectively.

4. LEASES

The Company's lease portfolio consists primarily of office space and equipment. The Company has approximately 1,100 real estate leases with lease terms ranging from less than 1 year to 17 years and includes the Company's brokerage sales offices, regional and branch offices for our title and relocation businesses, corporate headquarters, regional headquarters, and facilities serving as local administration, training and storage. The Company's brokerage sales offices are generally located in shopping centers and small office parks, typically with lease terms of 1 year to 5 years. In addition, the Company has equipment leases which primarily consist of furniture, computers and other office equipment.

Right-of-use assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. At lease commencement, the Company records a liability for its lease obligation measured at the present value of future lease payments and a right-of-use asset equal to the lease liability adjusted for prepayments and lease incentives. The Company uses its collateralized incremental borrowing rate to calculate the present value of lease liabilities as most of its leases do not provide an implicit rate that is readily determinable. The Company does not recognize a lease obligation and right-of-use asset on its balance sheet for any leases with an initial term of 12 months or less. Some real estate leases include one or more options to renew or terminate a lease. The exercise of a lease renewal or termination option is assessed at commencement of the lease and only reflected in the lease term if the Company is reasonably certain to exercise the option. The Company has lease agreements that contain both lease and non-lease components, such as common area maintenance fees, and has made a policy election to combine both fixed lease and non-lease components in total gross rent for all of its leases. Expense for operating leases is recognized on a straight-line basis over the lease term. Finance lease assets are amortized on a straight-line basis over the shorter of the estimated useful life of the underlying asset or the lease term. The interest component of a finance lease is included in interest expense and recognized using the effective interest method over the lease term.

Supplemental balance sheet information related to the Company's leases was as follows:

Lease Type	Balance Sheet Classification	December 31, 2019
Assets:		
Operating lease assets	Operating lease assets, net	\$ 515
Finance lease assets (a)	Property and equipment, net	41
Total lease assets, net		\$ 556
Liabilities:		
Current:		
Operating lease liabilities	Current portion of operating lease liabilities	\$ 122
Finance lease liabilities	Accrued expenses and other current liabilities	13
Non-current:		
Operating lease liabilities	Long-term operating lease liabilities	467
Finance lease liabilities	Other non-current liabilities	22
Total lease liabilities		\$ 624
Weighted Average Lease Term and Discount Rate		
Weighted average remaining lease term (years):		
Operating leases		6.1
Finance leases		3.1
Weighted average discount rate:		
Operating leases		5.1 %
Finance leases		4.1 %

(a) Finance lease assets are recorded net of accumulated amortization of \$34 million.

As of December 31, 2019, maturities of lease liabilities by fiscal year were as follows:

Maturity of Lease Liabilities	Operating Leases	Finance Leases	Total
2020	\$ 144	\$ 13	\$ 157
2021	135	11	146
2022	110	8	118
2023	85	4	89
2024	64	2	66
Thereafter	153	—	153
Total lease payments	691	38	729
Less: Interest	102	3	105
Present value of lease liabilities	\$ 589	\$ 35	\$ 624

Supplemental income statement information related to the Company's leases is as follows:

Lease Costs	Year Ended December 31, 2019
Operating lease costs	\$ 158
Finance lease costs:	
Amortization of leased assets	13
Interest on lease liabilities	1
Other lease costs (a)	28
Impairment (b)	12
Less: Sublease income, gross	3
Net lease cost	\$ 209

- (a) Primarily consists of variable lease costs.
- (b) Impairment charges relate to the exit and sublease of certain real estate operating leases.

Supplemental cash flow information related to leases was as follows:

	Year Ended December 31, 2019
Supplemental cash flow information:	
Operating cash flows from operating leases	\$ 153
Operating cash flows from finance leases	1
Financing cash flows from finance leases	14
Supplemental non-cash information:	
Lease assets obtained in exchange for lease obligations:	
Operating leases	\$ 153
Finance leases	18

As previously disclosed in our 2018 Annual Report on Form 10-K and under historical lease accounting guidance:

Future minimum lease payments for noncancelable operating leases as of December 31, 2018 were as follows:

Year	As of December 31, 2018	
2019	\$	156
2020		136
2021		113
2022		90
2023		75
Thereafter		175
Total	\$	745

Capital lease obligations were \$33 million, net of \$2 million of imputed interest as of December 31, 2018.

The Company incurred rent expense of \$196 million and \$192 million for the years ended December 31, 2018 and 2017, respectively.

Significant non-cash transactions included finance lease additions of \$20 million and \$18 million for the years ended December 31, 2018 and 2017, respectively, which resulted in non-cash additions to property and equipment, net and other non-current liabilities.

5. REVENUE RECOGNITION

Revenue is recognized upon the transfer of control of promised services to customers in an amount that reflects the consideration the Company expects to receive in exchange for those services in accordance with the revenue standard. The Company's revenue is disaggregated by major revenue categories on our Consolidated Statements of Operations and further disaggregated by business segment as follows:

	Years Ended December 31, 2019 vs December 31, 2018											
	Realogy Franchise Group		Realogy Brokerage Group		Realogy Title Group		Realogy Leads Group		Corporate and Other		Total Company	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Gross commission income (a)	\$ —	\$ —	\$ 4,330	\$ 4,533	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 4,330	\$ 4,533
Service revenue (b)	—	—	11	9	579	564	83	81	—	—	673	654
Franchise fees (c)	668	688	—	—	—	—	—	—	(282)	(295)	386	393
Other (d)	135	132	68	65	17	16	—	—	(11)	(11)	209	202
Net revenues	\$ 803	\$ 820	\$ 4,409	\$ 4,607	\$ 596	\$ 580	\$ 83	\$ 81	\$ (293)	\$ (306)	\$ 5,598	\$ 5,782

	Years Ended December 31, 2018 vs December 31, 2017 (e)											
	Realogy Franchise Group		Realogy Brokerage Group		Realogy Title Group		Realogy Leads Group		Corporate and Other		Total Company	
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Gross commission income (a)	\$ —	\$ —	\$ 4,533	\$ 4,576	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 4,533	\$ 4,576
Service revenue (b)	—	—	9	9	564	551	81	78	—	—	654	638
Franchise fees (c)	688	695	—	—	—	—	—	—	(295)	(299)	393	396
Other (d)	132	135	65	58	16	19	—	—	(11)	(12)	202	200
Net revenues	<u>\$ 820</u>	<u>\$ 830</u>	<u>\$ 4,607</u>	<u>\$ 4,643</u>	<u>\$ 580</u>	<u>\$ 570</u>	<u>\$ 81</u>	<u>\$ 78</u>	<u>\$ (306)</u>	<u>\$ (311)</u>	<u>\$ 5,782</u>	<u>\$ 5,810</u>

- (a) Approximately 80% of the Company's total net revenues is related to gross commission income at Realogy Brokerage Group, which is recognized at a point in time at the closing of a homesale transaction.
- (b) Approximately 10% of the Company's total net revenues is related to service fees primarily consisting of title and escrow fees at Realogy Title Group, which are recognized at a point in time at the closing of a homesale transaction.
- (c) Approximately 7% of the Company's total net revenues is related to franchise fees at Realogy Franchise Group, primarily domestic royalties, which are recognized at a point in time when the underlying franchisee revenue is earned (upon close of the homesale transaction).
- (d) Less than 5% of the Company's total net revenues is related to other revenue, which comprised of brand marketing funds received at Realogy Franchise Group from franchisees, third-party listing fees and other miscellaneous revenues across all of the business segments.
- (e) Amounts for the year ended December 31, 2017 have not been adjusted under the modified retrospective method.

The Company's revenue streams are discussed further below by business segment:

Realogy Franchise Group

The Company franchises its real estate brands to real estate brokerage businesses that are independently owned and operated. Franchise revenue principally consists of royalty and marketing fees from the Company's franchisees. The royalty received is primarily based on a gross percentage (generally 6%) of the franchisee's gross commission income. Royalty fees are accrued as the underlying franchisee revenue is earned (upon close of the homesale transaction). Annual volume incentives given to certain franchisees on royalty fees are recorded as a reduction to revenue and are accrued for in relative proportion to the recognition of the underlying gross franchise revenue. Other sales incentives are generally recorded as a reduction to revenue ratably over the related performance period or from the date of issuance through the remaining life of the related franchise agreement. Franchise revenue also includes domestic initial franchise fees which are generally non-refundable and recognized by the Company as revenue upon the execution or opening of a new franchisee office to cover the upfront costs associated with opening the franchisee for business under one of Realogy's brands.

The Company also earns marketing fees from its franchisees and utilizes such fees to fund marketing campaigns on behalf of its franchisees. As such, brand marketing fund fees are recorded as deferred revenue when received and recognized into revenue as earned when these funds are spent on marketing activities. The balance for deferred brand marketing fund fees increased from \$12 million at January 1, 2019 to \$13 million at December 31, 2019 primarily due to additional fees received from franchisees, partially offset by amounts recognized into revenue matching expenses for marketing activities during the year ended December 31, 2019.

The Company collects initial area development fees ("ADFs") for international territory transactions, which are recorded as deferred revenue when received and are classified as current or non-current liabilities in the Consolidated Balance Sheets based on the expected timing of revenue recognition. ADFs are recognized into franchise revenue over the average 25 year life of the related franchise agreement as consideration for the right to access and benefit from Realogy's brands. In the event an ADF agreement is terminated prior to the end of its term, the unamortized deferred revenue balance will be recognized into revenue immediately upon termination. The balance for deferred ADFs decreased from \$54 million at January 1, 2019 to \$48 million at December 31, 2019 due to revenues of \$8 million recognized during the year ended December 31, 2019 that were included in the deferred revenue balance at the beginning of the period, partially offset by \$2 million of additional area development fees received during the year ended December 31, 2019.

In addition, the Company recognizes a deferred asset for commissions paid to Realogy franchise sales employees upon the sale of a new franchise as these are considered costs of obtaining a contract with a customer that are expected to provide benefits to the Company for longer than one year. The Company classifies prepaid commissions as current or non-current

assets in the Consolidated Balance Sheets based on the expected timing of recognizing expense. The amount of commissions is calculated as a percentage of the anticipated gross commission income of the new franchisee or ADF and is amortized over 30 years for domestic franchise agreements or the agreement term for international franchise agreements (generally 25 years). The amount of prepaid commissions was \$24 million and \$25 million at December 31, 2019 and 2018, respectively.

Realogy Brokerage Group

As an owner-operator of real estate brokerages, the Company assists home buyers and sellers in listing, marketing, selling and finding homes. Real estate commissions earned by the Company's real estate brokerage business are recorded as revenue at a point in time which is upon the closing of a real estate transaction (i.e., purchase or sale of a home). These revenues are referred to as gross commission income. The commissions the Company pays to real estate agents are recognized concurrently with associated revenues and presented as the commission and other agent-related costs line item on the accompanying Consolidated Statements of Operations.

The Company has relationships with developers, primarily in major cities, to provide marketing and brokerage services in new developments. New development closings generally have a development period of between 18 and 24 months from contracted date to closing. In some cases, the Company receives advanced commissions which are recorded as deferred revenue when received and recognized as revenue when the new development closes. The balance of advanced commissions related to developments decreased from \$10 million at January 1, 2019 to \$9 million at December 31, 2019 due to a \$2 million decrease as a result of revenues recognized on units closed, partially offset by a \$1 million increase related to additional commissions received for new developments.

Realogy Title Group

The Company provides title and closing services, which include title search procedures for title insurance policies, homesale escrow and other closing services. Title revenues and title and closing service fees are recorded at a point in time which occurs at the time a homesale transaction or refinancing closes. The Company also owns an underwriter of title insurance. For unaffiliated agents, the underwriter recognizes policy premium revenue on a gross basis (before deduction of agent commission) upon notice of policy issuance from the agent. For affiliated title agents, the underwriter recognizes the incremental policy premium revenue upon the effective date of the title policy as the agent commission revenue is already recognized by the affiliated title agent.

Realogy Leads Group

The Company provides home buying and selling assistance to members of affinity organizations. The Company earns referral commission revenue primarily from real estate brokers for the home sale and purchase for affinity members, which is recognized at a point in time when the underlying property closes. Realogy Leads Group also manages the Realogy Broker Network, which is a network of real estate brokers consisting of our company owned brokerage operations, select franchisees and independent real estate brokers who have been approved to become members. Network fees are billed in advance and recognized into revenue on a straight-line basis each month during the membership period. The balance for deferred network fees increased from zero at January 1, 2019 to \$3 million at December 31, 2019 due to a \$13 million increase related to new network fees, partially offset by \$10 million of revenues recognized during the year that were included in the deferred revenue balance at the beginning of the period.

Contract Balances (Deferred Revenue)

The following table shows the change in the Company's contract liabilities related to revenue contracts by reportable segment for the period:

	Year Ended December 31, 2019			
	Beginning Balance at January 1, 2019	Additions during the period	Recognized as Revenue during the period	Ending Balance at December 31, 2019
Realogy Franchise Group (a)	\$ 78	\$ 118	\$ (127)	\$ 69
Realogy Brokerage Group	14	8	(9)	13
Realogy Leads Group	—	13	(10)	3
Total	<u>\$ 92</u>	<u>\$ 139</u>	<u>\$ (146)</u>	<u>\$ 85</u>

(a) Revenues recognized include intercompany marketing fees paid by Realogy Brokerage Group.

The majority of the Company's contracts are transactional in nature or have a duration of one-year or less. Accordingly, the Company does not disclose the value of unsatisfied performance obligations for contracts with an original expected length of one year or less.

6. GOODWILL AND INTANGIBLE ASSETS

Goodwill by reporting unit and changes in the carrying amount are as follows:

	Realogy Franchise Group	Realogy Brokerage Group	Realogy Title Group	Realogy Leads Group	Total Company
Balance at January 1, 2017	\$ 2,292	\$ 893	\$ 145	\$ 184	\$ 3,514
Goodwill acquired (a)	—	11	9	—	20
Balance at December 31, 2017	2,292	904	154	184	3,534
Goodwill acquired (b)	—	2	—	—	2
Balance at December 31, 2018	2,292	906	154	184	3,536
Goodwill acquired (c)	—	—	1	—	1
Impairment (d)	—	(237)	—	—	(237)
Balance at December 31, 2019	\$ 2,292	\$ 669	\$ 155	\$ 184	\$ 3,300
<i>Goodwill and accumulated impairment summary</i>					
Gross goodwill	\$ 3,315	\$ 1,064	\$ 479	\$ 321	\$ 5,179
Accumulated impairments (e)	(1,023)	(395)	(324)	(137)	(1,879)
Balance at December 31, 2019	\$ 2,292	\$ 669	\$ 155	\$ 184	\$ 3,300

- (a) Goodwill acquired during the year ended December 31, 2017 relates to the acquisition of sixteen real estate brokerage operations and two title and settlement operations.
- (b) Goodwill acquired during the year ended December 31, 2018 relates to the acquisition of three real estate brokerage operations.
- (c) Goodwill acquired during the year ended December 31, 2019 relates to the acquisition of two title and settlement operations.
- (d) The Company recognized a goodwill impairment charge of \$237 million during the third quarter of 2019 related to Realogy Brokerage Group. The impairment charge of \$237 million was offset by an income tax benefit of \$57 million resulting in a net reduction in the carrying value of Realogy Brokerage Group of \$180 million (see Note 20, "Selected Quarterly Financial Data", for additional information).
- (e) Includes impairment charges which reduced goodwill by \$237 million, \$1,153 million and \$489 million during the third quarter of 2019, fourth quarter of 2008 and fourth quarter of 2007, respectively.

Intangible assets are as follows:

	As of December 31, 2019			As of December 31, 2018		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Amortizable—Franchise agreements (a)	\$ 2,019	\$ 859	\$ 1,160	\$ 2,019	\$ 792	\$ 1,227
Indefinite life—Trademarks (b)	\$ 673		\$ 673	\$ 673		\$ 673
<i>Other Intangibles</i>						
Amortizable—License agreements (c)	\$ 45	\$ 12	\$ 33	\$ 45	\$ 11	\$ 34
Amortizable—Customer relationships (d)	71	57	14	71	55	16
Indefinite life—Title plant shares (e)	19		19	18		18
Amortizable—Other (f)	27	21	6	33	21	12
Total Other Intangibles	\$ 162	\$ 90	\$ 72	\$ 167	\$ 87	\$ 80

- (a) Generally amortized over a period of 30 years.
- (b) Primarily related to real estate franchise brands which are expected to generate future cash flows for an indefinite period of time.
- (c) Relates to the Sotheby's International Realty® and Better Homes and Gardens® Real Estate agreements which are being amortized over 50 years (the contractual term of the license agreements).
- (d) Relates to the customer relationships at Realogy Title Group and Realogy Brokerage Group. These relationships are being amortized over a period of 2 to 12 years.
- (e) Ownership in a title plant is required to transact title insurance in certain states. The Company expects to generate future cash flows for an indefinite period of time.
- (f) Consists of covenants not to compete which are amortized over their contract lives and other intangibles which are generally amortized over periods ranging from 5 to 10 years.

Intangible asset amortization expense is as follows:

	For the Year Ended December 31,		
	2019	2018	2017
Franchise agreements	\$ 67	\$ 67	\$ 67
License agreements	1	1	1
Customer relationships	2	3	4
Other	6	5	9
Total	\$ 76	\$ 76	\$ 81

Based on the Company's amortizable intangible assets as of December 31, 2019, the Company expects related amortization expense to be approximately \$73 million, \$71 million, \$70 million, \$70 million, \$70 million and \$859 million in 2020, 2021, 2022, 2023, 2024 and thereafter, respectively.

7. FRANCHISING AND MARKETING ACTIVITIES

Franchise fee revenue includes domestic initial franchise fees and international area development fees of \$9 million, \$6 million and \$8 million for each of the years ended December 31, 2019, 2018 and 2017, respectively. The Company's real estate franchisees may receive volume incentives on their royalty payments. Such annual incentives are based upon the amount of the franchisees commission income earned and paid to the Company during the calendar year. Each brand has several different annual incentive schedules currently in effect. Franchise fee revenue is recorded net of annual volume incentives provided to real estate franchisees of \$50 million, \$52 million and \$62 million for the years ended December 31, 2019, 2018 and 2017, respectively.

The Company's wholly-owned real estate brokerage services segment, Realogy Brokerage Group, pays royalties to the Company's franchise business; however, such amounts are eliminated in consolidation. Realogy Brokerage Group paid royalties to Realogy Franchise Group of \$282 million, \$295 million and \$299 million for the years ended December 31, 2019, 2018 and 2017, respectively.

Marketing fees are generally paid by the Company's real estate franchisees and are generally calculated based on a specified percentage of gross closed commissions earned on real estate transactions, and may be subject to certain minimum and maximum payments. Brand marketing fund revenue was \$90 million, \$86 million and \$87 million for the years ended December 31, 2019, 2018 and 2017, respectively, which included marketing fees paid to Realogy Franchise Group from Realogy Brokerage Group of \$11 million, \$11 million and \$12 million for the years ended December 31, 2019, 2018 and 2017, respectively. As provided for in the franchise agreements and generally at the Company's discretion, all of these fees are to be expended for marketing purposes.

The number of franchised and company owned offices in operation are as follows:

	(Unaudited) As of December 31,		
	2019	2018	2017
<i>Franchised (domestic and international):</i>			
Century 21®	11,640	9,637	7,973
ERA®	2,301	2,331	2,298
Coldwell Banker®	2,323	2,380	2,330
Coldwell Banker Commercial®	159	171	180
Sotheby's International Realty®	962	949	905
Better Homes and Gardens® Real Estate	391	362	353
Total Franchised	17,776	15,830	14,039
<i>Company owned:</i>			
Coldwell Banker®	634	672	707
Sotheby's International Realty®	37	41	41
Corcoran®/Other	42	42	41
Total Company Owned	713	755	789

The number of franchised and company owned offices (in the aggregate) changed as follows:

	(Unaudited) For the Year Ended December 31,		
	2019	2018	2017
<i>Franchised (domestic and international):</i>			
Beginning balance	15,830	14,039	13,314
Additions	2,399	2,149	1,137
Terminations	(453)	(358)	(412)
Ending balance	17,776	15,830	14,039
<i>Company owned:</i>			
Beginning balance	755	789	789
Additions	4	8	20
Closures	(46)	(42)	(20)
Ending balance	713	755	789

As of December 31, 2019, there were an insignificant number of franchise agreements that were executed for which offices are not yet operating. Additionally, as of December 31, 2019, there were an insignificant number of franchise agreements pending termination.

In order to assist franchisees in converting to one of the Company's brands or as an incentive to renew their franchise agreement, the Company may at its discretion, provide incentives, primarily in the form of conversion notes. Provided the franchisee meets certain minimum annual revenue thresholds during the term of the notes and is in compliance with the terms of the franchise agreement, the amount of the note is forgiven annually in equal ratable amounts generally over the life of the franchise agreement. Otherwise, related principal is due and payable to the Company. The amount of such franchisee conversion notes were \$134 million and \$131 million, at December 31, 2019 and 2018, respectively. These notes are principally classified within other non-current assets in the Company's Consolidated Balance Sheets. The Company recorded a contra-revenue in the statement of operations related to the forgiveness and impairment of these notes and other sales incentives of \$29 million, \$29 million and \$25 million for the years ended December 31, 2019, 2018 and 2017, respectively.

8. PROPERTY AND EQUIPMENT, NET

Property and equipment, net consisted of:

	December 31,	
	2019	2018
Furniture, fixtures and equipment	\$ 162	\$ 176
Capitalized software	334	293
Finance/capital lease assets	76	64
Building and leasehold improvements	292	275
Land	3	3
Gross property and equipment	867	811
Less: accumulated depreciation	(559)	(538)
Property and equipment, net	\$ 308	\$ 273

The Company recorded depreciation expense related to property and equipment of \$93 million, \$88 million and \$85 million for the years ended December 31, 2019, 2018 and 2017, respectively.

9. ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

Accrued expenses and other current liabilities consisted of:

	December 31,	
	2019	2018
Accrued payroll and related employee costs	\$ 103	\$ 106
Accrued volume incentives	35	37
Accrued commissions	32	30
Restructuring accruals	11	14
Deferred income	43	50
Accrued interest	18	15
Current portion of finance/capital lease liabilities	13	12
Due to former parent	18	21
Other	77	59
Total accrued expenses and other current liabilities	\$ 350	\$ 344

10. SHORT AND LONG-TERM DEBT

Total indebtedness is as follows:

	December 31,	
	2019	2018
Senior Secured Credit Facility:		
Revolving Credit Facility	\$ 190	\$ 270
Term Loan B	1,045	1,053
Term Loan A Facility:		
Term Loan A	714	732
4.50% Senior Notes	—	449
5.25% Senior Notes	548	547
4.875% Senior Notes	405	497
9.375% Senior Notes	543	—
Total Short-Term & Long-Term Debt	\$ 3,445	\$ 3,548

Indebtedness Table

As of December 31, 2019, the Company's borrowing arrangements were as follows:

	Interest Rate	Expiration Date	Principal Amount	Unamortized Discount and Debt Issuance Costs	Net Amount
Senior Secured Credit Facility:					
Revolving Credit Facility (1)	(2)	February 2023	\$ 190	\$ *	\$ 190
Term Loan B	(3)	February 2025	1,058	13	1,045
Term Loan A Facility:					
Term Loan A	(4)	February 2023	717	3	714
Senior Notes	5.25%	December 2021	550	2	548
Senior Notes	4.875%	June 2023	407	2	405
Senior Notes	9.375%	April 2027	550	7	543
Total			\$ 3,472	\$ 27	\$ 3,445

* The debt issuance costs related to our Revolving Credit Facility are classified as a deferred financing asset within other assets.

- As of December 31, 2019, the \$1,425 million Revolving Credit Facility had outstanding borrowings of \$190 million, as well as \$57 million of outstanding letters of credit. The Revolving Credit Facility expires in February 2023 but is classified on the balance sheet as current due to the revolving nature and terms and conditions of the facility. On February 21, 2020, the Company had \$310 million in outstanding borrowings under the Revolving Credit Facility and \$57 million of outstanding letters of credit.
- Interest rates with respect to revolving loans under the Senior Secured Credit Facility at December 31, 2019 were based on, at the Company's option, (a) adjusted London Interbank Offering Rate ("LIBOR") plus an additional margin or (b) JP Morgan Chase Bank, N.A.'s prime rate ("ABR") plus an additional margin, in each case subject to adjustment based on the then current senior secured leverage ratio. Based on the previous quarter's senior secured leverage ratio, the LIBOR margin was 2.25% and the ABR margin was 1.25% for the three months ended December 31, 2019.
- The Term Loan B provides for quarterly amortization payments totaling 1% per annum of the original principal amount. The interest rate with respect to term loans under the Term Loan B is based on, at the Company's option, (a) adjusted LIBOR plus 2.25% (with a LIBOR floor of 0.75%) or (b) ABR plus 1.25% (with an ABR floor of 1.75%).
- The Term Loan A provides for quarterly amortization payments, which commenced on June 30, 2018, totaling per annum 2.5%, 2.5%, 5.0%, 7.5% and 10.0% of the original principal amount of the Term Loan A, with the balance of the Term Loan A due at maturity on February 8, 2023. The interest rates with respect to the Term Loan A are based on, at the Company's option, (a) adjusted LIBOR plus an additional margin or (b) ABR plus an additional margin, in each case subject to adjustment based on the then current senior secured leverage ratio. Based on the previous quarter's senior secured leverage ratio, the LIBOR margin was 2.25% and the ABR margin was 1.25% for the three months ended December 31, 2019.

Maturities Table

As of December 31, 2019, the combined aggregate amount of maturities for long-term borrowings for each of the next five years is as follows:

Year	Amount
2020 (a)	\$ 234
2021	612
2022	81
2023	981
2024	11

- The current portion of long term debt consists of four quarters of 2020 amortization payments totaling \$33 million and \$11 million for the Term Loan A and Term Loan B facilities, respectively, as well as \$190 million of revolver borrowings under the Revolving Credit Facility which expires in February 2023, but is classified on the balance sheet as current due to the revolving nature and terms and conditions of the facility.

Senior Secured Credit Facility

In February 2018, Realogy Group entered into a fifth amendment (the "Fifth Amendment") to the Amended and Restated Senior Secured Credit Agreement (as amended, amended and restated, modified or supplemented from time to time, the "Senior Secured Credit Agreement") that replaced the Term Loan B due February 2022 with a new \$1,080 million Term Loan B due February 2025.

In February 2018, Realogy Group entered into the sixth amendment (the "Sixth Amendment") to the Amended and Restated Senior Secured Credit Agreement which increased the borrowing capacity under its Revolving Credit Facility to \$1,400 million from the prior \$1,050 million and extended the maturity date to February 2023. In March 2019, Realogy Group entered into an incremental assumption agreement to the Senior Secured Credit Agreement that provided for an incremental revolving facility commitment of \$25 million, increasing the borrowing capacity under the Revolving Credit Facility to \$1,425 million.

The Senior Secured Credit Agreement provides for:

- (a) the Term Loan B issued in the original aggregate principal amount of \$1,080 million with a maturity date of February 2025. The Term Loan B has quarterly amortization payments totaling 1% per annum of the initial aggregate principal amount. The interest rate with respect to term loans under the Term Loan B is based on, at Realogy Group's option, adjusted LIBOR plus 2.25% (with a LIBOR floor of 0.75%) or ABR plus 1.25% (with an ABR floor of 1.75%); and
- (b) a \$1,425 million Revolving Credit Facility with a maturity date of February 2023, which includes a \$125 million letter of credit subfacility. The interest rate with respect to revolving loans under the Revolving Credit Facility is based on, at Realogy Group's option, adjusted LIBOR or ABR plus an additional margin subject to the following adjustments based on the Company's then current senior secured leverage ratio:

Senior Secured Leverage Ratio	Applicable LIBOR Margin	Applicable ABR Margin
Greater than 3.50 to 1.00	2.50%	1.50%
Less than or equal to 3.50 to 1.00 but greater than or equal to 2.50 to 1.00	2.25%	1.25%
Less than 2.50 to 1.00 but greater than or equal to 2.00 to 1.00	2.00%	1.00%
Less than 2.00 to 1.00	1.75%	0.75%

The Senior Secured Credit Agreement permits the Company to obtain up to \$500 million of additional credit facilities on a combined basis with the Term Loan A Agreement (less any amounts previously incurred under this provision) from lenders reasonably satisfactory to the administrative agent and us, without the consent of the existing lenders under the new senior secured credit facility, plus an unlimited amount if Realogy Group's senior secured leverage ratio is less than 3.50 to 1.00 on a pro forma basis. Subject to certain restrictions, the Senior Secured Credit Agreement also permits the Company to issue senior secured or unsecured notes in lieu of any incremental facility.

The obligations under the Senior Secured Credit Agreement are secured to the extent legally permissible by substantially all of the assets of Realogy Group, Realogy Intermediate and all of their domestic subsidiaries, other than certain excluded subsidiaries.

Realogy Group's Senior Secured Credit Agreement contains financial, affirmative and negative covenants and requires Realogy Group to maintain (so long as the Revolving Credit Facility is outstanding) a senior secured leverage ratio, not to exceed 4.75 to 1.00. The leverage ratio is tested quarterly regardless of the amount of borrowings outstanding and letters of credit issued under the Revolving Credit Facility at the testing date. Total senior secured net debt does not include unsecured indebtedness, including the Unsecured Notes. At December 31, 2019, Realogy Group was in compliance with the senior secured leverage ratio covenant.

Term Loan A Facility

In February 2018, Realogy Group entered into a second amendment to the Term Loan A Agreement. Under the amendment, the Company aggregated the existing \$435 million Term Loan A and \$355 million Term Loan A-1 tranches due October 2020 and July 2021, respectively, into a new single tranche of \$750 million Term Loan A due February 2023. The Term Loan A provides for quarterly amortization payments totaling per annum 2.5%, 2.5%, 5.0%, 7.5% and 10.0% of the original principal amount of the Term Loan A, which commenced on June 30, 2018 and continue through February 8,

2023. The interest rates with respect to the Term Loan A are based on, at our option, adjusted LIBOR or ABR plus an additional margin subject to the following adjustments based on the Company's then current senior secured leverage ratio:

Senior Secured Leverage Ratio	Applicable LIBOR Margin	Applicable ABR Margin
Greater than 3.50 to 1.00	2.50%	1.50%
Less than or equal to 3.50 to 1.00 but greater than or equal to 2.50 to 1.00	2.25%	1.25%
Less than 2.50 to 1.00 but greater than or equal to 2.00 to 1.00	2.00%	1.00%
Less than 2.00 to 1.00	1.75%	0.75%

Consistent with the Senior Secured Credit Agreement, the Term Loan A Agreement permits the Company to obtain up to \$500 million of additional credit facilities on a combined basis with the Senior Secured Credit Agreement (less any amounts previously incurred under this provision) from lenders reasonably satisfactory to the administrative agent and the Company, without the consent of the existing lenders under the Term Loan A, plus an unlimited amount if the Company's senior secured leverage ratio is less than 3.50 to 1.00 on a pro forma basis. Subject to certain restrictions, the Term Loan A Facility also permits the Company to issue senior secured or unsecured notes in lieu of any incremental facility. The Term Loan A Agreement contains negative covenants consistent with those included in the Senior Secured Credit Agreement.

Unsecured Notes

In February 2019, the Company used borrowings under its Revolving Credit Facility and cash on hand to fund the redemption of all of its outstanding \$450 million 4.50% Senior Notes. In March 2019, the Company issued \$550 million of 9.375% Senior Notes due in April 2027. The Company used \$540 million of the net proceeds to repay a portion of outstanding borrowings under its Revolving Credit Facility.

During the third quarter of 2019, Realogy Group used cash on hand to repurchase \$93 million of its 4.875% Senior Notes in open market purchases at an aggregate purchase price of \$83 million, plus accrued interest to the repurchase date. In conjunction with the repurchase, the Company recorded a gain on the early extinguishment of debt of \$10 million.

The 5.25% Senior Notes, 4.875% Senior Notes and the 9.375% Senior Notes (collectively the "Unsecured Notes") are unsecured senior obligations of Realogy Group that mature on December 1, 2021, June 1, 2023 and April 1, 2027, respectively. Interest on the Unsecured Notes is payable each year semiannually on June 1 and December 1 for both the 5.25% Senior Notes and 4.875% Senior Notes, and on April 1 and October 1 for the 9.375% Senior Notes.

The Unsecured Notes are guaranteed on an unsecured senior basis by each domestic subsidiary of Realogy Group that is a guarantor under the Senior Secured Credit Facility and Realogy Group's outstanding debt securities, and are guaranteed by Realogy Holdings on an unsecured senior subordinated basis.

The indentures governing the Unsecured Notes contain various negative covenants that limit Realogy Group's and its restricted subsidiaries' ability to take certain actions, which covenants are subject to a number of important exceptions and qualifications. These covenants include limitations on Realogy Group's and its restricted subsidiaries' ability to (a) incur or guarantee additional indebtedness, or issue disqualified stock or preferred stock, (b) pay dividends or make distributions to their stockholders, (c) repurchase or redeem capital stock, (d) make investments or acquisitions, (e) incur restrictions on the ability of certain of their subsidiaries to pay dividends or to make other payments to Realogy Group, (f) enter into transactions with affiliates, (g) create liens, (h) merge or consolidate with other companies or transfer all or substantially all of their assets, (i) transfer or sell assets, including capital stock of subsidiaries and (j) prepay, redeem or repurchase debt that is subordinated in right of payment to the Unsecured Notes.

The covenants in the indenture governing the 9.375% Senior Notes are substantially similar to the covenants in the indentures governing the other Unsecured Notes, with certain exceptions, including several changes relating to Realogy Group's ability to make restricted payments, and, in particular, its ability to repurchase shares and pay dividends. Specifically, (a) the cumulative credit basket for restricted payments (i) was reset to zero and builds from January 1, 2019, (ii) builds at 25% of Consolidated Net Income (as defined in the indenture governing the 9.375% Senior Notes) when the consolidated leverage ratio (as defined below) is equal to or greater than 4.0 to 1.0 (and 50% of Consolidated Net Income when it is less than 4.0 to 1.0) and, consistent with the indentures governing the other Unsecured Notes, is reduced by 100% of the deficit when Consolidated Net Income is a deficit and (iii) may not be used when the consolidated leverage ratio is equal to or greater than 4.0 to 1.0; (b) the \$100 million general restricted payment basket may be used only for Restricted Investments (as defined in the indenture governing the 9.375% Senior Notes); (c) the indenture governing the 9.375%

Senior Notes requires the consolidated leverage ratio to be less than 3.0 to 1.0 to use the unlimited general restricted payment basket (which payments will reduce the cumulative credit basket, but not below zero); and (d) the indenture governing the 9.375% Senior Notes contains a new restricted payment basket that may be used for up to \$45 million of dividends per calendar year.

The consolidated leverage ratio is measured by dividing Realogy Group's total net debt by the trailing twelve-month EBITDA. EBITDA, as defined in the indenture governing the 9.375% Senior Notes, is substantially similar to EBITDA calculated on a Pro Forma Basis, as those terms are defined in the Senior Secured Credit Agreement. Net debt under the indenture is Realogy Group's total indebtedness less (i) its cash and cash equivalents in excess of restricted cash and (ii) a \$200 million seasonality adjustment permitted when measuring the ratio on a date during the period of March 1 to May 31.

Other Debt Facilities

The Company had an Unsecured Letter of Credit Facility to provide for the issuance of letters of credit required for general corporate purposes. At December 31, 2018, the capacity was \$66 million, with \$63 million being utilized. The Facility expired in December 2019 and was not renewed. All outstanding letters of credit are currently under the Company's Revolving Credit Facility as of December 31, 2019.

Gain/Loss on the Early Extinguishment of Debt and Write-Off of Financing Costs

During the year ended December 31, 2019, the Company recorded a gain on the early extinguishment of debt of \$5 million which consisted of a \$10 million gain as a result of the repurchase of \$93 million of its 4.875% Senior Notes during the third quarter of 2019, partially offset by a \$5 million loss as a result of the refinancing transactions in the first quarter of 2019.

As a result of the refinancing transactions in February 2018, the Company recorded a loss on the early extinguishment of debt of \$7 million and wrote off financing costs of \$2 million to interest expense during the year ended December 31, 2018.

As a result of the refinancing transaction in January 2017 and a reduction of the Unsecured Letter of Credit Facility in September of 2017, the Company recorded losses on the early extinguishment of debt of \$5 million during the year ended December 31, 2017.

11. EMPLOYEE BENEFIT PLANS

DEFINED BENEFIT PENSION PLAN

The Company's defined benefit pension plan was closed to new entrants as of July 1, 1997 and existing participants do not accrue any additional benefits. The net periodic pension cost for 2019 was \$2 million and was comprised of interest cost of approximately \$5 million and the amortization of the actuarial net loss of \$2 million, offset by a benefit of \$5 million for the expected return on assets. The net periodic pension cost for 2018 was less than \$1 million and was comprised of interest cost of approximately \$5 million and the amortization of the actuarial net loss of \$2 million, offset by a benefit of \$7 million for the expected return on assets.

At December 31, 2019 and 2018, the accumulated benefit obligation of this plan was \$143 million and \$128 million, respectively, and the fair value of the plan assets were \$100 million and \$90 million, respectively, resulting in an unfunded accumulated benefit obligation of \$43 million and \$38 million, respectively, which is recorded in Other current and non-current liabilities in the Consolidated Balance Sheets.

Estimated future benefit payments as of December 31, 2019 are as follows:

Year	Amount
2020	\$ 9
2021	9
2022	9
2023	9
2024	9
2025 through 2029	45

The minimum funding required during 2020 is estimated to be \$8 million.

The following table presents the fair values of plan assets by category as of December 31, 2019:

Asset Category	Quoted Price in Active Market for Identical Assets (Level I)	Significant Other Observable Inputs (Level II)	Significant Unobservable Inputs (Level III)	Total
Cash and cash equivalents	\$ 1	\$ —	\$ —	\$ 1
Equity securities	—	51	—	51
Fixed income securities	—	48	—	48
Total	\$ 1	\$ 99	\$ —	\$ 100

The following table presents the fair values of plan assets by category as of December 31, 2018:

Asset Category	Quoted Price in Active Market for Identical Assets (Level I)	Significant Other Observable Inputs (Level II)	Significant Unobservable Inputs (Level III)	Total
Cash and cash equivalents	\$ 3	\$ —	\$ —	\$ 3
Equity securities	—	43	—	43
Fixed income securities	—	44	—	44
Total	\$ 3	\$ 87	\$ —	\$ 90

OTHER EMPLOYEE BENEFIT PLANS

The Company also maintains post-retirement health and welfare plans for certain subsidiaries and a non-qualified pension plan for certain individuals. At December 31, 2019 and 2018, the related projected benefit obligation for these plans accrued on the Company's Consolidated Balance Sheets (primarily within other non-current liabilities) was \$5 million for both periods.

DEFINED CONTRIBUTION SAVINGS PLAN

The Company sponsors a defined contribution savings plan that provides certain of its eligible employees an opportunity to accumulate funds for retirement and has a Company match for a portion of the contributions made by participating employees. The Company's cost for contributions to this plan was \$17 million, \$16 million and \$16 million for the years ended December 31, 2019, 2018 and 2017, respectively.

12. INCOME TAXES

The components of pretax income for domestic and foreign operations consisted of the following:

	Year Ended December 31,		
	2019	2018	2017
Domestic	\$ (140)	\$ 213	\$ 362
Foreign	—	—	—
Pretax (loss) income	\$ (140)	\$ 213	\$ 362

The components of income tax expense (benefit) consisted of the following:

	Year Ended December 31,		
	2019	2018	2017
<i>Current:</i>			
Federal	\$ 3	\$ (11)	\$ (8)
State	7	5	4
Foreign	2	2	2
Total current	12	(4)	(2)
<i>Deferred:</i>			
Federal	(25)	61	(73)
State	(9)	10	9
Foreign	—	—	—
Total deferred	(34)	71	(64)
Income tax (benefit) expense	\$ (22)	\$ 67	\$ (66)

The Tax Cuts and Jobs Act of 2017 (the “2017 Tax Act”), which became law on December 22, 2017, reduced the U.S. Federal corporate tax rate from 35% to 21% for tax years beginning in 2018. The \$66 million income tax benefit in 2017 included a tax benefit of approximately \$184 million due to the re-measurement of the Company’s net deferred tax liabilities associated with the 2017 Tax Act and a \$32 million reduction in the Company’s reserve for uncertain tax positions, partially offset by current operating results.

A reconciliation of the Company’s effective income tax rate at the U.S. federal statutory rate of 21% to the actual expense was as follows:

	Year Ended December 31,		
	2019	2018	2017
Federal statutory rate	21 %	21 %	35 %
State and local income taxes, net of federal tax benefits	6	5	4
Impact of the 2017 Tax Act	—	—	(50)
Non-deductible equity compensation	(4)	2	—
Non-deductible executive compensation	(1)	1	—
Goodwill impairment	(3)	—	—
Meals & entertainment	(2)	—	—
Other permanent differences	(1)	1	—
Uncertain tax positions	—	(1)	(9)
Net change in valuation allowance	—	2	1
Other	—	—	1
Effective tax rate	16 %	31 %	(18) %

Deferred income taxes result from temporary differences between the amount of assets and liabilities recognized for financial reporting and tax purposes. The components of the deferred income tax assets and liabilities, as of December 31, are as follows:

	2019	2018
<i>Deferred income tax assets:</i>		
Net operating loss carryforwards	\$ 173	\$ 236
Tax credit carryforwards	29	24
Accrued liabilities and deferred income	77	92
Operating leases	169	—
Minimum pension obligations	18	16
Provision for doubtful accounts	7	7
Liability for unrecognized tax benefits	1	1
Interest rate swaps	12	5
Total deferred tax assets	486	381
Less: valuation allowance	(14)	(14)
Total deferred income tax assets after valuation allowance	472	367
<i>Deferred income tax liabilities:</i>		
Depreciation and amortization	704	747
Operating leases	146	—
Prepaid expenses	8	8
Basis difference in investment in joint ventures	2	1
Other	2	—
Total deferred tax liabilities	862	756
Net deferred income tax liabilities	\$ (390)	\$ (389)

As of December 31, 2019, the Company had gross federal and state net operating loss carryforwards of \$588 million. The federal net operating loss carryforwards expire between 2030 and 2033 and the state net operating loss carryforwards expire between 2020 and 2033.

Accounting for Uncertainty in Income Taxes

The Company utilizes the FASB guidance for accounting for uncertainty in income taxes, which prescribes a recognition threshold and a measurement attribute for the financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. The Company reflects changes in its liability for unrecognized tax benefits as income tax expense in the Consolidated Statements of Operations. As of December 31, 2019, the Company's gross liability for unrecognized tax benefits was \$20 million, of which \$17 million would affect the Company's effective tax rate, if recognized. The Company does not expect that its unrecognized tax benefits will significantly change over the next twelve months.

The Company files U.S., state and foreign income tax returns in jurisdictions with varying statutes of limitations. Tax returns for the 2006 through 2019 tax years remain subject to examination by federal and certain state tax authorities. In significant foreign jurisdictions, tax returns for the 2015 through 2019 tax years generally remain subject to examination by their respective tax authorities. The Company believes that it is reasonably possible that the total amount of its unrecognized tax benefits could decrease by \$1 million in certain taxing jurisdictions where the statute of limitations is set to expire within the next twelve months.

The Company recognizes accrued interest and penalties related to unrecognized tax benefits in interest expense and operating expenses, respectively. The Company did not recognize a change of interest expense for the year ended December 31, 2019. Additionally, the Company recognized a reduction of interest expense of \$1 million for the year ended December 31, 2018 and a reduction of interest expense of \$2 million for the year ended December 31, 2017.

The rollforward of unrecognized tax benefits are summarized in the table below:

Unrecognized tax benefits—January 1, 2017	\$	75
Gross decreases—tax positions in prior periods		(54)
Reduction due to lapse of statute of limitations		(1)
Unrecognized tax benefits—December 31, 2017		20
Reduction due to lapse of statute of limitations		(1)
Unrecognized tax benefits—December 31, 2018		19
Gross increases—tax positions in prior periods		1
Unrecognized tax benefits—December 31, 2019	\$	20

The Company is subject to income taxes in the United States and several foreign jurisdictions. Significant judgment is required in determining the worldwide provision for income taxes and recording related assets and liabilities. In the ordinary course of business, there are many transactions and calculations where the ultimate tax determination is uncertain. The Company is regularly under audit by tax authorities whereby the outcome of the audits is uncertain. The Company believes there is appropriate support for positions taken on its tax returns. The liabilities that have been recorded represent the best estimates of the probable loss on certain positions and are adequate for all open years based on an assessment of many factors including past experience and interpretations of tax law applied to the facts of each matter. However, the outcomes of tax audits are inherently uncertain.

Tax Sharing Agreement

Under the Tax Sharing Agreement with Cendant, Wyndham Worldwide and Travelport, the Company is generally responsible for 62.5% of payments made to settle claims with respect to tax periods ending on or prior to December 31, 2006 that relate to income taxes imposed on Cendant and certain of its subsidiaries, the operations (or former operations) of which were determined by Cendant not to relate specifically to the respective businesses of Realogy, Wyndham Worldwide, Avis Budget or Travelport. With respect to any remaining residual legacy Cendant tax liabilities, the Company and its former parent believe there is appropriate support for the positions taken on Cendant's tax returns. However, tax audits and any related litigation, including disputes or litigation on the allocation of tax liabilities between parties under the Tax Sharing Agreement, could result in outcomes for the Company that are different from those reflected in the Company's historical financial statements.

13. RESTRUCTURING COSTS

Restructuring charges for the years ended December 31, 2019, 2018 and 2017 were \$42 million, \$47 million and \$12 million, respectively. The components of the restructuring charges for the years ended December 31, 2019, 2018 and 2017 were as follows:

	Years Ended December 31,		
	2019	2018	2017
Personnel-related costs (1)	\$ 24	\$ 17	\$ 7
Facility-related costs (2)	17	20	4
Internal use software impairment (3)	—	10	—
Other restructuring costs (4)	1	—	1
Total restructuring charges (5)	<u>\$ 42</u>	<u>\$ 47</u>	<u>\$ 12</u>

- (1) Personnel-related costs consist of severance costs provided to employees who have been terminated and duplicate payroll costs during transition.
- (2) Facility-related costs consist of costs associated with planned facility closures such as contract termination costs, amortization of lease assets that will continue to be incurred under the contract for its remaining term without economic benefit to the Company, accelerated depreciation on asset disposals and other facility and employee relocation related costs.
- (3) Internal use software impairment relates to development costs capitalized for a project that was determined to not meet the Company's strategic goals when analyzed by the Company's new leadership team.
- (4) Other restructuring costs consist of costs related to professional fees, consulting fees and other costs associated with restructuring activities which are primarily included in the Corporate and Other business segment.
- (5) The year ended December 31, 2019 includes \$38 million of expense related to the Facility and Operational Efficiencies Program and \$4 million of expense related to prior restructuring programs. The years ended December 31, 2018 and December 31, 2017 relate to prior restructuring programs.

Facility and Operational Efficiencies Program

Beginning in the first quarter of 2019, the Company commenced the implementation of a plan to accelerate its office consolidation to reduce storefront costs, as well as institute other operational efficiencies to drive profitability. In addition, the Company commenced a plan to transform and centralize certain aspects of the operational support and drive changes in how it serves its affiliated independent sales agents from a marketing and technology perspective to help such agents be more productive and enable them to make their businesses more profitable. In the fourth quarter of 2019, the Company expanded its operational efficiencies program to focus on workforce optimization. This workforce optimization initiative is focused on consolidating similar or overlapping roles, reducing the number of hierarchical layers and streamlining work and decision making. Separately, the Company also reduced headcount in the third quarter in connection with the wind down of a former affinity program. Furthermore, at the end of 2019 the Company identified other strategic initiatives which are expected to result in additional operational and facility related efficiencies in 2020.

The following is a reconciliation of the beginning and ending reserve balances related to the Facility and Operational Efficiencies Program:

	Personnel-related costs	Facility-related costs (1)	Other restructuring costs	Total
Balance at December 31, 2018	\$ —	\$ —	\$ —	\$ —
Restructuring charges	21	16	1	38
Costs paid or otherwise settled	(15)	(11)	(1)	(27)
Balance at December 31, 2019	<u>\$ 6</u>	<u>\$ 5</u>	<u>\$ —</u>	<u>\$ 11</u>

- (1) In addition, the Company incurred an additional \$12 million related to lease asset impairments in connection with the Facility and Operational Efficiencies Program during the year ended December 31, 2019.

The following table shows the total costs currently expected to be incurred by type of cost related to the Facility and Operational Efficiencies Program:

	Total amount expected to be incurred	Amount incurred through December 31, 2019	Total amount remaining to be incurred
Personnel-related costs	\$ 24	\$ 21	\$ 3
Facility-related costs (1)	46	16	30
Other restructuring costs	1	1	—
Total	\$ 71	\$ 38	\$ 33

(1) Facility-related costs includes lease asset impairments expected to be incurred under the Facility and Operational Efficiencies Program.

The following table shows the total costs currently expected to be incurred by reportable segment related to the Facility and Operational Efficiencies Program:

	Total amount expected to be incurred	Amount incurred through December 31, 2019	Total amount remaining to be incurred
Realogy Franchise Group	\$ 3	\$ 2	\$ 1
Realogy Brokerage Group	54	25	29
Realogy Title Group	2	2	—
Realogy Leads Group	2	2	—
Corporate and Other	10	7	3
Total	\$ 71	\$ 38	\$ 33

Leadership Realignment and Other Restructuring Activities

Beginning in the first quarter of 2018, the Company commenced the implementation of a plan to drive its business forward and enhance stockholder value. The key aspects of this plan included senior leadership realignment, an enhanced focus on technology and talent, as well as further attention to office footprint and other operational efficiencies. The activities undertaken in connection with the restructuring plan are complete. At December 31, 2018, the remaining liability was \$17 million. During the year ended December 31, 2019, the Company incurred personnel-related costs of \$3 million, paid or settled costs of \$12 million and reclassified \$3 million to offset related lease assets upon adoption of the new leasing standard, resulting in a remaining accrual of \$5 million related to personnel and facility related liabilities.

14. STOCK-BASED COMPENSATION

The Company grants stock-based compensation awards to certain senior management, employees and directors including non-qualified stock options, restricted stock units ("RSUs"), performance restricted stock units ("PRSUs") and performance share units ("PSUs").

The Company's stockholders approved the 2018 Long-Term Incentive Plan (the "2018 Plan") at the 2018 Annual Meeting of Stockholders held on May 2, 2018. Upon approval of the 2018 Plan, the 2012 Amended and Restated Long-Term Incentive Plan, as amended (the "2012 Plan") was terminated, no future awards were permitted to be granted under the 2012 Plan, and any shares available for future issuance under the 2012 Plan were canceled. Under the 2018 Plan, 6 million shares were authorized for issuance plus any shares that expire or are forfeited under the 2012 Plan after March 1, 2018. As of December 31, 2019, there are approximately 0.6 million shares available for future grants.

Each of the 2012 and 2018 Plan includes a retirement provision for equity grants which provide for continued vesting of awards once an employee has attained the age of 65 years, or 55 years of age or older plus at least ten years of tenure with the Company, provided they have been employed or provided services to the Company for one year following the date of grant or start of the performance period.

A summary of activity for the year ended December 31, 2019 is presented below (number of shares in millions):

	Restricted Stock Units	Weighted Average Grant Date Fair Value	Performance Share Units (a)	Weighted Average Grant Date Fair Value	Options (e)	Weighted Average Exercise Price
Outstanding at January 1, 2019	2.2	\$ 27.37	1.7	\$ 28.10	3.7	\$ 30.98
Granted	2.5	13.41	0.9	11.06	0.8	13.44
Distributed/Exercised	(1.0) (b)	28.17	(0.2) (c)	32.66	—	—
Forfeited/Expired	(0.3)	18.81	(0.1)	19.35	(0.4)	28.74
Outstanding at December 31, 2019	3.4	\$ 17.89	2.3	\$ 19.16	4.1 (d)	\$ 27.50

- (a) The PSU amounts in the table are shown at the target amount of the award.
- (b) The total fair value of RSUs which were distributed during the year ended December 31, 2019 was \$27 million.
- (c) The total fair value of PSUs which were distributed during the year ended December 31, 2019 was \$8 million.
- (d) Options outstanding at December 31, 2019 have an intrinsic value of zero and have a weighted average remaining contractual life of 5.7 years.
- (e) As of December 31, 2019, 2.5 million of the 4.1 million outstanding stock options were exercisable with a weighted average exercise price of \$32.19, an intrinsic value of zero and a weighted average remaining contractual life of 3.9 years.

Awards granted annually include a mix of RSUs (PRSUs for the CEO and direct reports in 2017), options and PSUs.

The RSUs and PRSUs vest over three years, with 33.33% vesting on each anniversary of the grant date. The fair value of RSUs and PRSUs are equal to the closing sale price of the Company's common stock on the date of grant. Time-vesting of the PRSUs granted to the CEO and direct reports in 2017 was subject to achievement of a minimum EBITDA performance goal during the year that the award was granted.

The PSUs are incentives that reward grantees based upon the Company's financial performance over a three-year performance period which begins January 1st of the grant year and ends on December 31st of the third year following the grant year. There are two PSU awards: one is based upon the total stockholder return of Realogy's common stock relative to the total stockholder return of the SPDR S&P Homebuilders Index ("XHB") or the S&P MidCap 400 index (the "RTSR award"), and the other is based upon the achievement of cumulative free cash flow goals. The number of shares that may be issued under each PSU award is variable and based upon the extent to which the performance goals are achieved over the performance period (with a range of payout from 0% to 175% of target for the RTSR award and 0% to 200% of target for the achievement of cumulative free cash flow award). The shares earned will be distributed during the first quarter after the end of the performance period. The fair value of PSUs without a market condition is equal to the closing sale price of the Company's common stock on the date of grant. The fair value of the PSU RTSR awards was estimated on the date of grant using the Monte Carlo Simulation method utilizing the following assumptions:

	2019 RTSR PSU	2018 RTSR PSU	2017 RTSR PSU
Weighted average grant date fair value	\$ 7.82	\$ 25.45	\$ 27.98
Weighted average expected volatility (a)	34.8 %	29.8 %	29.0 %
Weighted average volatility of S&P 400	13.5 %		
Weighted average volatility of XHB		17.9 %	18.4 %
Weighted average correlation coefficient	0.42	0.44	0.53
Weighted average risk-free interest rate	2.5 %	2.6 %	1.5 %
Weighted average dividend yield	—	—	—

- (a) Expected volatility is based on historical volatilities of the Company and select comparable companies.

The stock options have a maximum term of ten years and vest over four years, with 25% vesting on each anniversary date of the grant date. The options have an exercise price equal to the closing sale price of the Company's common stock on the date of grant. The fair value of the options was estimated on the date of grant using the Black-Scholes option-pricing model utilizing the following assumptions:

	2019 Options	2018 Options	2017 Options
Weighted average grant date fair value	\$ 3.40	\$ 7.12	\$ 8.61
Weighted average expected volatility (a)	31.4 %	28.5 %	30.7 %
Weighted average expected term (years) (b)	6.25	6.25	6.25
Weighted average risk-free interest rate (c)	2.5 %	2.7 %	2.0 %
Weighted average dividend yield	2.7 %	1.4 %	1.2 %

- (a) Expected volatility was based on historical volatilities of the Company and select comparable companies.
- (b) The expected term of the options granted represents the period of time that options are expected to be outstanding and is based on the simplified method.
- (c) The risk-free interest rate was based on the U.S. Treasury yield curve in effect at the time of the grant, which corresponds to the expected term of the options.

Stock-Based Compensation Expense

As of December 31, 2019, based on current performance achievement expectations, there was \$35 million of unrecognized compensation cost related to incentive equity awards under the plans which would be recorded in future periods as compensation expense over a remaining weighted average period of approximately 1.9 years. The Company recorded stock-based compensation expense related to the incentive equity awards of \$28 million, \$37 million and \$47 million for the years ended December 31, 2019, 2018 and 2017, respectively.

15. COMMITMENTS AND CONTINGENCIES

Litigation

The Company is involved in claims, legal proceedings, alternative dispute resolution and governmental inquiries related to alleged contract disputes, business practices, intellectual property and other commercial, employment, regulatory and tax matters. Examples of such matters include but are not limited to allegations:

- that independent residential real estate sales agents engaged by Realogy Brokerage Group or by affiliated franchisees—under certain state or federal laws—are potentially employees instead of independent contractors, and they or regulators therefore may bring claims against Realogy Brokerage Group for breach of contract, wage and hour classification claims, wrongful discharge, unemployment and workers' compensation and could seek benefits, back wages, overtime, indemnification, penalties related to classification practices and expense reimbursement available to employees or similar claims against Realogy Franchise Group as an alleged joint employer of an affiliated franchisee's independent sales agents;
- concerning other employment law matters, including other types of worker classification claims as well as wage and hour claims and retaliation claims;
- concerning anti-trust and anti-competition matters;
- that the Company is vicariously liable for the acts of franchisees under theories of actual or apparent agency;
- by current or former franchisees that franchise agreements were breached including improper terminations;
- concerning alleged RESPA or state real estate law violations;
- concerning claims related to the Telephone Consumer Protection Act, including autodialer claims;
- concerning claims generally against the company owned brokerage operations for negligence, misrepresentation or breach of fiduciary duty in connection with the performance of real estate brokerage or other professional services as well as other brokerage claims associated with listing information and property history;
- related to copyright law, including infringement actions alleging improper use of copyrighted photographs on websites or in marketing materials without consent of the copyright holder;
- concerning breach of obligations to make websites and other services accessible for consumers with disabilities;

- concerning claims generally against the title agent contending that the agent knew or should have known that a transaction was fraudulent or that the agent was negligent in addressing title defects or conducting the settlement;
- concerning information security and cyber-crime, including claims under new and emerging data privacy laws related to the protection of customer, employee or third-party information, as well as those related to the diversion of homesale transaction closing funds; and
- those related to general fraud claims.

Worker Classification Litigation

Whitlach v. Premier Valley, Inc. d/b/a Century 21 M&M and Century 21 Real Estate LLC (Superior Court of California, Stanislaus County). This was filed as a putative class action complaint on December 20, 2018 by plaintiff James Whitlach against Premier Valley Inc., a Century 21 Real Estate independently-owned franchisee doing business as Century 21 M&M (“Century 21 M&M”). The complaint also names Century 21 Real Estate LLC, a wholly-owned subsidiary of the Company and the franchisor of Century 21 Real Estate (“Century 21”), as an alleged joint employer of the franchisee’s independent sales agents and seeks to certify a class that could potentially include all agents of both Century 21 M&M and Century 21 in California. The plaintiff alleges that Century 21 M&M misclassified all of its independent real estate agents, salespeople, sales professionals, broker associates and other similar positions as independent contractors, failed to pay minimum wages, failed to provide meal and rest breaks, failed to pay timely wages, failed to keep proper records, failed to provide appropriate wage statements, made unlawful deductions from wages, and failed to reimburse plaintiff and the putative class for business related expenses, resulting in violations of the California Labor Code. The complaint also asserts an unfair business practice claim based on the alleged violations described above.

On February 15, 2019, the plaintiff amended his complaint to assert claims pursuant to the California Private Attorneys General Act (“PAGA”). The PAGA claims included in the amended complaint are substantively similar to those asserted in the original complaint. Under California law, PAGA claims are generally not subject to arbitration and may result in exposure in the form of additional penalties. In April 2019, the defendants filed motions to compel arbitration of the non-PAGA claims and to stay the PAGA claims pending resolution of the arbitrable claims. On June 5, 2019, the court dismissed the plaintiff’s non-PAGA claims without prejudice and withdrew the defendants’ motion to compel arbitration by stipulation of the parties. The plaintiff continues to pursue his PAGA claims as a representative of purported “aggrieved employees” as defined by PAGA. The plaintiff currently seeks, as the representative of all purported aggrieved employees, all non-individualized relief available to the purported aggrieved employees under PAGA, as well as attorneys’ fees. On November 15, 2019, Century 21 M&M filed a demurrer to the complaint, seeking to dismiss the remaining claim in the action, to which Century 21 filed a joinder, and on February 12, 2020 a brief in opposition was filed by the plaintiff.

Fenley v. Realogy Franchise Group LLC, Sotheby’s International Realty, Inc., Wish Properties, Inc. and DOES 1-100 (Superior Court of California, Kern County). This is a putative class action complaint filed on April 25, 2019 by plaintiff Elizabeth Fenley against Wish Properties, Inc, a Sotheby’s International Realty independently-owned franchisee doing business as Wish Sotheby’s International Realty (“Wish SIR”). The complaint also names Realogy Franchise Group LLC and Sotheby’s International Realty, Inc., wholly-owned subsidiaries of the Company, as alleged joint employers of the franchisee’s independent sales agents and seeks to certify a class that could potentially include all agents in California affiliated with any Realogy Franchise Group brand. The plaintiff alleges that all defendants are jointly responsible for misclassifying Wish SIR’s agents as independent contractors and failed to reimburse for business expenses, provide accurate wage statements and pay wages timely, all in violation of the California Labor Code. The complaint also asserts an unfair business practice claim based on the violations previously described. The plaintiff seeks reimbursement of allegedly necessary expenses, liquidated damages, waiting time penalties, civil penalties, pre- and post-judgment interest, restitution, injunctive relief, and attorneys’ fees and costs. On September 17, 2019, the Court denied the defendants’ motions to compel arbitration. In February 2020, the matter was settled on an individual basis.

These cases raise various previously unlitigated claims and the PAGA claims in the *Whitlach* matter add additional litigation, financial and operating uncertainties. There are similar classification cases pending against several other brokerages in the state of California and developments in one or more of those cases could impact progress in these cases.

Real Estate Industry Litigation

Moehrl, Cole, Darnell, Nager, Ramey, Sawbill Strategic, Inc., Umpa and Ruh v. The National Association of Realtors, Realogy Holdings Corp., Homeservices of America, Inc., BHH Affiliates, LLC, The Long & Foster Companies, Inc., RE/MAX LLC, and Keller Williams Realty, Inc. (U.S. District Court for the Northern District of Illinois). This amended putative class action complaint (the “amended Moehler complaint”), filed on June 14, 2019, (i) consolidates the *Moehrl* and *Sawbill*

litigation reported in our Form 10-Q for the period ended March 31, 2019, (ii) adds certain plaintiffs and defendants, and (iii) serves as a response to the separate motions to dismiss filed on May 17, 2019 in the prior *Moehrl* litigation by each of NAR and the Company (along with the other defendants named in the prior *Moehrl* complaint).

In the amended *Moehrl* complaint, the plaintiffs allege that the defendants engaged in a continuing contract, combination, or conspiracy to unreasonably restrain trade and commerce in violation of Section 1 of the Sherman Act because defendant NAR allegedly established mandatory anticompetitive policies for the multiple listing services and its member brokers that require brokers to make an offer of buyer broker compensation when listing a property. The plaintiffs further allege that commission sharing, which provides for the broker representing the seller sharing or paying a portion of its commission to the broker representing the buyer, is anticompetitive and violates the Sherman Act, and that the defendant franchisors conspired with NAR by requiring their respective franchisees to comply with NAR's policies and Code of Ethics. The plaintiffs seek a permanent injunction enjoining the defendants from requiring home sellers to pay buyer broker commissions or to otherwise restrict competition among buyer brokers, an award of damages and/or restitution, attorneys fees and costs of suit. Plaintiffs' counsel has filed a motion to appoint lead counsel in the case, which has yet to be decided by the court. On August 9, 2019, NAR and the Company (together with the other defendants named in the amended *Moehler* complaint) each filed separate motions to dismiss this litigation. The plaintiffs filed their opposition to the motions to dismiss on September 13, 2019, and the defendants filed their replies in support of the motions on October 18, 2019.

Sitzer and Winger v. The National Association of Realtors, Realogy Holdings Corp., Homeservices of America, Inc., RE/MAX Holdings, Inc., and Keller Williams Realty, Inc. (U.S. District Court for the Western District of Missouri). This is a putative class action complaint filed on April 29, 2019 and amended on June 21, 2019 by plaintiffs Joshua Sitzer and Amy Winger against NAR, the Company, Homeservices of America, Inc., RE/MAX Holdings, Inc., and Keller Williams Realty, Inc. The complaint contains substantially similar allegations, and seeks the same relief under the Sherman Act, as the *Moehrl* litigation. The *Sitzer* litigation is limited both in allegations and relief sought to the State of Missouri and includes an additional cause of action for alleged violation of the Missouri Merchandising Practices Act, or MMPA. On August 22, 2019, the Court denied defendants' motions to transfer the *Sitzer* matter to the U.S. District Court for the Northern District of Illinois and on October 16, 2019, denied the motions to dismiss this litigation filed respectively by NAR and the Company (together with the other named brokerage/franchisor defendants).

Securities Litigation

Tanaskovic v. Realogy Holdings Corp., et al. (U.S. District Court for the District of New Jersey). This is a putative class action complaint filed on July 11, 2019 by plaintiff Sasa Tanaskovic against the Company and certain of its current and former executive officers. The lawsuit alleges violations of Sections 10(b), 20(a) and Rule 10b-5 of the Exchange Act in connection with allegedly false and misleading statements made by the Company about its business, operations, and prospects. The plaintiffs seek, among other things, compensatory damages for purchasers of the Company's common stock between February 24, 2017 through May 22, 2019, as well as attorneys' fees and costs. Locals 302 and 612 of the International Union of Operating Engineers-Employers Construction Industry Retirement Trust (the "Retirement Trust"), was appointed lead plaintiff on November 7, 2019. Lead plaintiff has until March 6, 2020 to file its amended complaint per the stipulation of the parties entered by the Court on January 8, 2020.

Fried v. Realogy Holdings Corp., et al. (U.S. District Court for the District of New Jersey). This is a putative derivative action filed on October 23, 2019 by plaintiff Adam Fried against the Company (as nominal defendant) and certain of its current and former executive officers and members of its Board of Directors (as defendants). The lawsuit alleges violations of Section 14(a) of the Exchange Act and breach of fiduciary duties for, among other things, allegedly false and misleading statements made by the Company about its business, operations and prospects as well as unjust enrichment claims. The plaintiff seeks, among other things, compensatory damages, disgorgement of improper compensation, certain reforms to the Company's corporate governance and internal procedures and attorneys' fees and costs. On December 23, 2019, the Court approved a motion staying this case pending further action in the *Tanaskovic* matter.

The Company disputes the allegations in each of the captioned matters described above and will vigorously defend these actions. Given the early stages of each of these cases, we cannot estimate a range of reasonably possible losses for this litigation.

The Company believes that it has adequately accrued for legal matters as appropriate. The Company records litigation accruals for legal matters which are both probable and estimable.

Litigation and other disputes are inherently unpredictable and subject to substantial uncertainties and unfavorable resolutions could occur. In addition, class action lawsuits can be costly to defend and, depending on the class size and

claims, could be costly to settle. As such, the Company could incur judgments or enter into settlements of claims with liability that are materially in excess of amounts accrued and these settlements could have a material adverse effect on the Company's financial condition, results of operations or cash flows in any particular period.

* * *

Company-Initiated Litigation

Realogy Holdings Corp., NRT New York LLC (d/b/a The Corcoran Group), Sotheby's International Realty, Inc., Coldwell Banker Residential Brokerage Company, Coldwell Banker Residential Real Estate LLC, NRT West, Inc., Martha Turner Properties, L.P. And Better Homes and Gardens Real Estate LLC v. Urban Compass, Inc., and Compass, Inc. (Supreme Court New York, New York County). On July 10, 2019, the Company and certain of its subsidiaries, filed a complaint against Urban Compass, Inc. and Compass, Inc. (together, "Compass") alleging misappropriation of trade secrets; tortious interference with contract; intentional and tortious interference with prospective economic advantage; unfair competition under New York common law; violations of the California Unfair Competition Law, Business and Professional Code Section 17200 et. seq. (unfair competition); violations of New York General Business Law Section 349 (deceptive acts or practices); violations of New York General Business Law Sections 350 and 350-a (false advertising); conversion; and aiding and abetting breach of contract. The Company seeks, among other things, actual and compensatory damages, injunctive relief, and attorneys' fees and costs. On September 6, 2019, Compass filed a motion to dismiss this litigation. On September 26, 2019, the Company filed an amended complaint, which adds certain factual allegations in support of the Company's claims, withdraws the count for aiding and abetting breach of contract and adds a count for defamation. On November 25, 2019, Compass filed a motion to compel arbitration of the claims asserted by The Corcoran Group as well as a separate motion to dismiss this litigation. On January 14, 2020, the Company opposed both motions and on February 10, 2020 Compass filed reply briefs on both motions.

* * *

The Company is involved in certain other claims and legal actions arising in the ordinary course of our business. Such litigation, regulatory actions and other proceedings may include, but are not limited to, actions relating to intellectual property, commercial arrangements, franchising arrangements, the fiduciary duties of brokers, standard brokerage disputes like the failure to disclose accurate square footage or hidden defects in the property such as mold, vicarious liability based upon conduct of individuals or entities outside of our control, including franchisees and independent sales agents, antitrust and anti-competition claims, general fraud claims (including wire fraud associated with third-party diversion of funds from a brokerage transaction), employment law claims, including claims challenging the classification of our sales agents as independent contractors, wage and hour classification claims and claims alleging violations of RESPA or state consumer fraud statutes or federal consumer protection statutes. While the results of such claims and legal actions cannot be predicted with certainty, we do not believe based on information currently available to us that the final outcome of current proceedings against the Company will have a material adverse effect on our consolidated financial position, results of operations or cash flows. In addition, with the increasing requirements resulting from government laws and regulations concerning data breach notifications and data privacy and protection obligations, claims associated with these laws may become more common. While most litigation involves claims against the Company, from time to time the Company commences litigation, including litigation against former employees, franchisees and competitors when it alleges that such persons or entities have breached agreements or engaged in other wrongful conduct.

* * *

Cendant Corporate Liabilities and Guarantees to Cendant and Affiliates

Realogy Group (then Realogy Corporation) separated from Cendant on July 31, 2006 (the "Separation"), pursuant to a plan by Cendant (now known as Avis Budget Group, Inc.) to separate into four independent companies—one for each of Cendant's business units—real estate services (Realogy Group), travel distribution services ("Travelport"), hospitality services, including timeshare resorts ("Wyndham Worldwide"), and vehicle rental ("Avis Budget Group"). Pursuant to the Separation and Distribution Agreement dated as of July 27, 2006 among Cendant, Realogy Group, Wyndham Worldwide and Travelport, (the "Separation and Distribution Agreement"), each of Realogy Group, Wyndham Worldwide and Travelport have assumed certain contingent and other corporate liabilities (and related costs and expenses), which are primarily related to each of their respective businesses. In addition, Realogy Group has assumed 62.5% and Wyndham Worldwide has assumed 37.5% of certain contingent and other corporate liabilities (and related costs and expenses) of Cendant.

The due to former parent balance was \$18 million and \$21 million at December 31, 2019 and 2018, respectively. The due to former parent balance was comprised of the Company's portion of the following: (i) Cendant's remaining contingent tax liabilities, (ii) accrued interest on contingent tax liabilities, (iii) potential liabilities related to Cendant's terminated or divested businesses, and (iv) potential liabilities related to the residual portion of accruals for Cendant operations.

Tax Matters

The Company is subject to income taxes in the United States and several foreign jurisdictions. Significant judgment is required in determining the worldwide provision for income taxes and recording related assets and liabilities. In the ordinary course of business, there are many transactions and calculations where the ultimate tax determination is uncertain. The Company is regularly under audit by tax authorities whereby the outcome of the audits is uncertain. The Company believes there is appropriate support for positions taken on its tax returns. The liabilities that have been recorded represent the best estimates of the probable loss on certain positions and are adequate for all open years based on an assessment of many factors including past experience and interpretations of tax law applied to the facts of each matter. However, the outcomes of tax audits are inherently uncertain.

Escrow and Trust Deposits

As a service to its customers, the Company administers escrow and trust deposits which represent undisbursed amounts received for the settlement of real estate transactions. Deposits at FDIC-insured institutions are insured up to \$250 thousand. These escrow and trust deposits totaled \$475 million and \$426 million at December 31, 2019 and 2018, respectively. These escrow and trust deposits are not assets of the Company and, therefore, are excluded from the accompanying Consolidated Balance Sheets. However, the Company remains contingently liable for the disposition of these deposits.

Purchase Commitments and Minimum Licensing Fees

In the normal course of business, the Company makes various commitments to purchase goods or services from specific suppliers, including those related to capital expenditures. The purchase commitments made by the Company as of December 31, 2019 are approximately \$73 million.

The Company is required to pay a minimum licensing fee to Sotheby's which began in 2009 and continues through 2054. The annual minimum licensing fee is approximately \$2 million per year. The Company is also required to pay a minimum licensing fee to Meredith Corporation for the licensing of the Better Homes and Gardens Real Estate brand. The annual minimum licensing fee began in 2009 at \$0.5 million and increased to \$4 million in 2014, where it will generally remain through 2058.

Future minimum payments for these purchase commitments and minimum licensing fees as of December 31, 2019 are as follows:

Year	Amount
2020	\$ 44
2021	24
2022	11
2023	9
2024	8
Thereafter	217
Total	<u>\$ 313</u>

Standard Guarantees/Indemnifications

In the ordinary course of business, the Company enters into numerous agreements that contain standard guarantees and indemnities whereby the Company indemnifies another party for breaches of representations and warranties. In addition, many of these parties are also indemnified against any third-party claim resulting from the transaction that is contemplated in the underlying agreement. Such guarantees or indemnifications are granted under various agreements, including those governing: (i) purchases, sales or outsourcing of assets or businesses, (ii) leases and sales of real estate, (iii) licensing of trademarks, (iv) use of derivatives, and (v) issuances of debt securities. The guarantees or indemnifications issued are for the benefit of the: (i) buyers in sale agreements and sellers in purchase agreements, (ii) landlords in lease contracts, (iii) franchisees in licensing agreements, (iv) financial institutions in derivative contracts, and (v) underwriters in issuances

of securities. While some of these guarantees extend only for the duration of the underlying agreement, many survive the expiration of the term of the agreement or extend into perpetuity (unless subject to a legal statute of limitations). There are no specific limitations on the maximum potential amount of future payments that the Company could be required to make under these guarantees, nor is the Company able to develop an estimate of the maximum potential amount of future payments to be made under these guarantees as the triggering events are not subject to predictability. With respect to certain of the aforementioned guarantees, such as indemnifications of landlords against third-party claims for the use of real estate property leased by the Company, the Company maintains insurance coverage that mitigates any potential payments to be made.

Other Guarantees/Indemnifications

In the normal course of business, the Company coordinates numerous events for its franchisees and thus reserves a number of venues with certain minimum guarantees, such as room rentals at hotels local to the conference center. However, such room rentals are paid by each individual franchisee. If the franchisees do not meet the minimum guarantees, the Company is obligated to fulfill the minimum guaranteed fees. The maximum potential amount of future payments that the Company would be required to make under such guarantees is approximately \$10 million. The Company would only be required to pay this maximum amount if none of the franchisees conducted their planned events at the reserved venues. Historically, the Company has not been required to make material payments under these guarantees.

Insurance and Self-Insurance

At December 31, 2019 and 2018, the Consolidated Balance Sheets include approximately \$25 million and \$24 million, respectively, of liabilities relating to: (i) self-insured risks for errors and omissions and other legal matters incurred in the ordinary course of business within Realogy Brokerage Group and (ii) premium and claim reserves for the Company's title underwriting business. The Company may also be subject to legal claims arising from the handling of escrow transactions and closings. Realogy Brokerage Group carries errors and omissions insurance for errors made during the real estate settlement process of \$15 million in the aggregate, subject to a deductible of \$1 million per occurrence. In addition, the Company carries an additional errors and omissions insurance policy for Realogy Holdings Corp. and its subsidiaries for errors made for real estate related services up to \$45 million in the aggregate, subject to a deductible of \$2.5 million per occurrence. This policy also provides excess coverage to Realogy Brokerage Group creating an aggregate limit of \$60 million, subject to Realogy Brokerage Group's deductible of \$1 million per occurrence.

The Company issues title insurance policies which provide coverage for real property to mortgage lenders and buyers of real property. When acting as a title agent issuing a policy on behalf of an underwriter, assuming no negligence on part of the title agent, the Company is not liable for losses under those policies but rather the title insurer is typically liable for such losses. The title underwriter which the Company acquired in January 2006 typically underwrites title insurance policies of up to \$1.5 million. For policies in excess of \$1.5 million, the Company typically obtains a reinsurance policy from a national underwriter to reinsure the excess amount. The Company, as an underwriter, manages our claims losses through strict agent vetting, clear underwriting guidelines, training and frequent communications with our agents.

Fraud, defalcation and misconduct by employees are also risks inherent in the business. The Company is the custodian of cash deposited by customers with specific instructions as to its disbursement from escrow, trust and account servicing files. The Company maintains Fidelity insurance covering the loss or theft of funds of up to \$30 million per occurrence, subject to a deductible of \$750 thousand per occurrence.

The Company also maintains self-insurance arrangements relating to health and welfare, workers' compensation, auto and general liability in addition to other benefits provided to the Company's employees. The accruals for these self-insurance arrangements totaled approximately \$15 million for both December 31, 2019 and 2018.

16. EQUITY

Changes in Accumulated Other Comprehensive Loss

The components of accumulated other comprehensive losses are as follows:

	Currency Translation Adjustments (1)	Minimum Pension Liability Adjustment	Accumulated Other Comprehensive Loss (2)
Balance at January 1, 2017	\$ (6)	\$ (34)	\$ (40)
Other comprehensive income (loss) before reclassifications	3	(1)	2
Amounts reclassified from accumulated other comprehensive loss	—	2 (3)	2
Income tax expense	(1)	—	(1)
Current period change	2	1	3
Balance at December 31, 2017	(4)	(33)	(37)
Adoption of a new accounting pronouncement	(1) (4)	(8) (4)	(9)
Other comprehensive loss before reclassifications	(3)	(6)	(9)
Amounts reclassified from accumulated other comprehensive loss	—	2 (3)	2
Income tax benefit	—	1	1
Current period change	(4)	(11)	(15)
Balance at December 31, 2018	(8)	(44)	(52)
Other comprehensive loss before reclassifications	—	(8)	(8)
Amounts reclassified from accumulated other comprehensive loss	—	2 (3)	2
Income tax benefit	—	2	2
Current period change	—	(4)	(4)
Balance at December 31, 2019	\$ (8)	\$ (48)	\$ (56)

- (1) Assets and liabilities of foreign subsidiaries having non-U.S. dollar functional currencies are translated at exchange rates at the balance sheet dates and equity accounts are translated at historical spot rates. Revenues and expenses are translated at average exchange rates during the periods presented. The gains or losses resulting from translating foreign currency financial statements into U.S. dollars are included in accumulated other comprehensive income (loss). Gains or losses resulting from foreign currency transactions are included in the Consolidated Statements of Operations and primarily relate to discontinued operations.
- (2) As of December 31, 2019, the Company does not have any after-tax components of accumulated other comprehensive loss attributable to noncontrolling interests.
- (3) These amounts represent the amortization of actuarial loss to periodic pension cost and were reclassified from accumulated other comprehensive income to the general and administrative expenses line on the statement of operations.
- (4) These amounts represent adjustments for the adoption of the accounting standard update on stranded tax effects related to the 2017 Tax Act which resulted in a debit to Accumulated other comprehensive loss and a credit to Accumulated deficit of \$9 million during the first quarter of 2018.

Dividend Policy

The Board declared and paid quarterly cash dividends of \$0.09 per share of the Company's common stock since August 2016. In early November 2019, the Company's Board of Directors determined that, effective immediately, it will no longer pay a dividend. The Company returned a total of \$31 million, \$45 million and \$49 million to stockholders in cash dividends during the years ended December 31, 2019, 2018 and 2017, respectively.

Pursuant to the Company's policy, dividends payable in cash are treated as a reduction of additional paid-in capital since the Company is currently in an accumulated deficit position.

Realogy Group Statements of Equity for the years ended December 31, 2019, 2018 and 2017

Total equity for Realogy Group equals that of Realogy Holdings, but the components, common stock and additional paid-in capital are different. The table below presents information regarding the balances and changes in common stock and additional paid-in capital of Realogy Group for each of the three years ended December 31, 2019, 2018 and 2017.

	Realogy Group Stockholder's Equity					Non- controlling Interests	Total Equity
	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss		
	Shares	Amount					
Balance at January 1, 2017	—	\$ —	\$ 5,566	\$ (3,062)	\$ (40)	\$ 5	\$ 2,469
Net income	—	—	—	431	—	3	434
Other comprehensive income	—	—	—	—	3	—	3
Repurchase of Common Stock	—	—	(280)	—	—	—	(280)
Contributions from Realogy Holdings	—	—	8	—	—	—	8
Stock-based compensation	—	—	41	—	—	—	41
Dividends	—	—	(49)	—	—	(4)	(53)
Balance at December 31, 2017	—	\$ —	\$ 5,286	\$ (2,631)	\$ (37)	\$ 4	\$ 2,622
Cumulative effect of adoption of new accounting pronouncements	—	—	—	(13)	(9)	—	(22)
Net income	—	—	—	137	—	3	140
Other comprehensive loss	—	—	—	—	(6)	—	(6)
Repurchase of Common Stock	—	—	(402)	—	—	—	(402)
Contributions from Realogy Holdings	—	—	1	—	—	—	1
Stock-based compensation	—	—	30	—	—	—	30
Dividends	—	—	(45)	—	—	(3)	(48)
Balance at December 31, 2018	—	\$ —	\$ 4,870	\$ (2,507)	\$ (52)	\$ 4	\$ 2,315
Net (loss) income	—	—	—	(188)	—	3	(185)
Other comprehensive income	—	—	—	—	(4)	—	(4)
Repurchase of Common Stock	—	—	(20)	—	—	—	(20)
Stock-based compensation	—	—	24	—	—	—	24
Dividends	—	—	(31)	—	—	(3)	(34)
Balance at December 31, 2019	—	\$ —	\$ 4,843	\$ (2,695)	\$ (56)	\$ 4	\$ 2,096

17. EARNINGS (LOSS) PER SHARE

Earnings (loss) per share attributable to Realogy Holdings

Basic earnings (loss) per share is computed based on net income (loss) attributable to Realogy Holdings stockholders divided by the basic weighted-average shares outstanding during the period. Dilutive earnings per share is computed consistently with the basic computation while giving effect to all dilutive potential common shares and common share equivalents that were outstanding during the period. Realogy Holdings uses the treasury stock method to reflect the potential dilutive effect of unvested stock awards and unexercised options. The following table sets forth the computation of basic and diluted earnings (loss) per share:

<i>(in millions, except per share data)</i>	Year Ended December 31,		
	2019	2018	2017
Numerator:			
Numerator for earnings per share—continuing operations			
Net income (loss) from continuing operations	\$ (118)	\$ 146	\$ 428
Less: Net income attributable to noncontrolling interests	(3)	(3)	(3)
Net (loss) income from continuing operations attributable to Realogy Holdings	\$ (121)	\$ 143	\$ 425
Numerator for earnings per share—discontinued operations			
Net (loss) income from discontinued operations	\$ (67)	\$ (6)	\$ 6
Net (loss) income attributable to Realogy Holdings shareholders	\$ (188)	\$ 137	\$ 431
Denominator:			
Weighted average common shares outstanding (denominator for basic (loss) earnings per share calculation)	114.2	124.0	136.7
Dilutive effect of stock-based compensation (a) (b)	—	1.3	1.7
Weighted average common shares outstanding (denominator for diluted (loss) earnings per share calculation)	114.2	125.3	138.4
Basic (loss) earnings per share attributable to Realogy Holdings shareholders:			
Basic (loss) earnings per share from continuing operations	\$ (1.06)	\$ 1.15	\$ 3.11
Basic (loss) earnings per share from discontinued operations	(0.59)	(0.05)	0.04
Basic (loss) earnings per share	\$ (1.65)	\$ 1.10	\$ 3.15
Diluted (loss) earnings per share attributable to Realogy Holdings shareholders:			
Diluted (loss) earnings per share from continuing operations	\$ (1.06)	\$ 1.14	\$ 3.07
Diluted (loss) earnings per share from discontinued operations	(0.59)	(0.05)	0.04
Diluted (loss) earnings per share	\$ (1.65)	\$ 1.09	\$ 3.11

- (a) The Company was in a net loss position for the year ended December 31, 2019 and therefore the impact of incentive equity awards were excluded from the computation of dilutive loss per share as the inclusion of such amounts would be anti-dilutive (see Note 14, "Stock-Based Compensation", for outstanding equity awards as of December 31, 2019).
- (b) The years ended December 31, 2018 and 2017, respectively, exclude 6.9 million and 5.3 million shares of common stock issuable for incentive equity awards which includes performance share units based on the achievement of target amounts, that are anti-dilutive to the diluted earnings per share computation.

Under the 2017, 2018 and 2019 share repurchase programs, the Company's Board of Directors authorized up to \$825 million of the Company's common stock. In the first quarter of 2019, the Company repurchased and retired 1.2 million shares of common stock for \$20 million at a weighted average market price of \$17.21 per share. The Company did not repurchase any shares under the share repurchase programs during the second, third and fourth quarters of 2019. For the year ended December 31, 2018, the Company repurchased and retired 17.9 million shares of common stock for \$402 million at a weighted average market price of \$22.47 per share. For the year ended December 31, 2017, the Company repurchased and retired 9.4 million shares of common stock for \$276 million at a weighted average market price of \$29.38 per share. The purchase of shares under these plans reduce the weighted-average number of shares outstanding in the basic earnings per share calculation.

18. RISK MANAGEMENT AND FAIR VALUE OF FINANCIAL INSTRUMENTS

RISK MANAGEMENT

The following is a description of the Company's risk management policies.

Interest Rate Risk

The Company is exposed to market risk from changes in interest rates primarily through senior secured debt. At December 31, 2019, the Company's primary interest rate exposure was to interest rate fluctuations, specifically LIBOR, due to its impact on variable rate borrowings of Revolving Credit Facility and Term Loan B under the Senior Secured Credit Agreement and Term Loan A Facility. At December 31, 2019, the Company had variable interest rate long-term debt, which was based on LIBOR, from the outstanding term loans and revolver under its Senior Secured Credit Facility and Term Loan A Facility of \$1,965 million.

The Company has interest rate swaps with an aggregate notional value of \$1,600 million to manage a portion of the Company's exposure to changes in interest rate associated with variable rate borrowings. The fixed interest rates on the swaps range from 2.07% to 3.11%. Although the Company has entered into these interest rate swaps, involving the exchange of floating for fixed rate interest payments, such interest rate swaps do not eliminate interest rate volatility for all of the Company's variable rate indebtedness at December 31, 2019. In addition, the fair value of the interest rate swaps is also subject to movements in LIBOR and will fluctuate in future periods. The Company has recognized a liability of \$47 million for the fair value of the interest rate swaps at December 31, 2019. Therefore, an increase in the LIBOR yield curve could increase the fair value of the interest rate swaps and decrease interest expense.

Credit Risk and Exposure

The Company is exposed to counterparty credit risk in the event of nonperformance by counterparties to various agreements and sales transactions. The Company manages such risk by evaluating the financial position and creditworthiness of such counterparties and by requiring collateral in instances in which financing is provided. The Company mitigates counterparty credit risk associated with its derivative contracts by monitoring the amounts at risk with each counterparty to such contracts, periodically evaluating counterparty creditworthiness and financial position, and where possible, dispersing its risk among multiple counterparties.

As of December 31, 2019, there were no significant concentrations of credit risk with any individual counterparty or a group of counterparties. The Company actively monitors the credit risk associated with the Company's receivables.

Market Risk Exposure

Realogy Brokerage Group owns real estate brokerage offices located in and around large metropolitan areas in the U.S. Realogy Brokerage Group has more offices and realizes more of its revenues in California, Florida and the New York metropolitan area than any other regions of the country. For the year ended December 31, 2019, Realogy Brokerage Group generated approximately 25% of its revenues from California, 22% from the New York metropolitan area and 10% from Florida. For the year ended December 31, 2018, Realogy Brokerage Group generated approximately 27% of its revenues from California, 20% from the New York metropolitan area and 9% from Florida. For the year ended December 31, 2017, Realogy Brokerage Group generated approximately 27% of its revenues from California, 22% from the New York metropolitan area and 9% from Florida.

Derivative Instruments

The Company records derivatives and hedging activities on the balance sheet at their respective fair values. The Company enters into interest rate swaps to manage its exposure to changes in interest rates associated with its variable rate borrowings. As of December 31, 2019, the Company had interest rate swaps with an aggregate notional value of \$1,600 million to offset the variability in cash flows resulting from the term loan facilities as follows:

<u>Notional Value (in millions)</u>	<u>Commencement Date</u>	<u>Expiration Date</u>
\$600	August 2015	August 2020
\$450	November 2017	November 2022
\$400	August 2020	August 2025
\$150	November 2022	November 2027

The swaps help to protect our outstanding variable rate borrowings from future interest rate volatility. The Company has not elected to utilize hedge accounting for these interest rate swaps; therefore, any change in fair value is recorded in the Consolidated Statements of Operations.

The fair value of derivative instruments was as follows:

Not Designated as Hedging Instruments	Balance Sheet Location	December 31, 2019	December 31, 2018
Interest rate swap contracts	Other non-current assets	\$ —	\$ 6
	Other current and non-current liabilities	47	16

The effect of derivative instruments on earnings was as follows:

Derivative Instruments Not Designated as Hedging Instruments	Location of (Gain) or Loss Recognized for Derivative Instruments	(Gain) or Loss Recognized on Derivatives		
		Year Ended December 31,		
		2019	2018	2017
Interest rate swap contracts	Interest expense	\$ 39	\$ 4	\$ (4)

Fair Value Measurements

The following tables present the Company's assets and liabilities that are measured at fair value on a recurring basis and are categorized using the fair value hierarchy. The fair value hierarchy has three levels based on the reliability of the inputs used to determine fair value.

Level Input:	Input Definitions:
Level I	Inputs are unadjusted, quoted prices for identical assets or liabilities in active markets at the measurement date.
Level II	Inputs other than quoted prices included in Level I that are observable for the asset or liability through corroboration with market data at the measurement date.
Level III	Unobservable inputs that reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date.

The availability of observable inputs can vary from asset to asset and is affected by a wide variety of factors including, for example, the type of asset, whether the asset is new and not yet established in the marketplace, and other characteristics particular to the transaction. To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised by the Company in determining fair value is greatest for instruments categorized in Level III. In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, for disclosure purposes, the level in the fair value hierarchy within which the fair value measurement in its entirety falls is determined based on the lowest level input that is significant to the fair value measurement in its entirety.

The fair value of financial instruments is generally determined by reference to quoted market values. In cases where quoted market prices are not available, fair value is based on estimates using present value or other valuation techniques, as appropriate. The fair value of interest rate swaps is determined based upon a discounted cash flow approach.

The Company measures financial instruments at fair value on a recurring basis and recognizes transfers within the fair value hierarchy at the end of the fiscal quarter in which the change in circumstances that caused the transfer occurred.

The following table summarizes fair value measurements by level at December 31, 2019 for assets and liabilities measured at fair value on a recurring basis:

	Level I	Level II	Level III	Total
Deferred compensation plan assets (included in other non-current assets)	\$ 2	\$ —	\$ —	\$ 2
Interest rate swaps (included in other current and non-current liabilities)	—	47	—	47
Contingent consideration for acquisitions (included in accrued expenses and other current liabilities and other non-current liabilities)	—	—	4	4

The following table summarizes fair value measurements by level at December 31, 2018 for assets and liabilities measured at fair value on a recurring basis:

	Level I	Level II	Level III	Total
Deferred compensation plan assets (included in other non-current assets)	\$ 2	\$ —	\$ —	\$ 2
Interest rate swaps (included in other non-current assets)	—	6	—	6
Interest rate swaps (included in other non-current liabilities)	—	16	—	16
Contingent consideration for acquisitions (included in accrued expenses and other current liabilities and other non-current liabilities)	—	—	10	10

The fair value of the Company's contingent consideration for acquisitions is measured using a probability weighted-average discount rate to estimate future cash flows based upon the likelihood of achieving future operating results for individual acquisitions. These assumptions are deemed to be unobservable inputs and as such the Company's contingent consideration is classified within Level III of the valuation hierarchy. The Company reassesses the fair value of the contingent consideration liabilities on a quarterly basis.

The following table presents changes in Level III financial liabilities measured at fair value on a recurring basis:

	Level III
Fair value of contingent consideration at December 31, 2018	\$ 10
Additions: contingent consideration related to acquisitions completed during the period	—
Reductions: payments of contingent consideration	(4)
Changes in fair value (reflected in general and administrative expenses)	(2)
Fair value of contingent consideration at December 31, 2019	\$ 4

The following table summarizes the principal amount of the Company's indebtedness compared to the estimated fair value, primarily determined by quoted market values, at:

Debt	December 31, 2019		December 31, 2018	
	Principal Amount	Estimated Fair Value (a)	Principal Amount	Estimated Fair Value (a)
Senior Secured Credit Facility:				
Revolving Credit Facility	\$ 190	\$ 190	\$ 270	\$ 270
Term Loan B	1,058	1,048	1,069	1,010
Term Loan A Facility:				
Term Loan A	717	705	736	707
4.50% Senior Notes	—	—	450	447
5.25% Senior Notes	550	557	550	524
4.875% Senior Notes	407	401	500	434
9.375% Senior Notes	550	572	—	—

(a) The fair value of the Company's indebtedness is categorized as Level II.

19. SEGMENT INFORMATION

The reportable segments presented below represent the Company's segments for which separate financial information is available and which is utilized on a regular basis by its chief operating decision maker to assess performance and to allocate resources. In identifying its reportable segments, the Company also considers the nature of services provided by its segments. Management evaluates the operating results of each of its reportable segments based upon revenue and Operating EBITDA. Operating EBITDA is defined by us as net income (loss) before depreciation and amortization, interest expense, net, income taxes, and other items that are not core to the operating activities of the Company such as restructuring charges, former parent legacy items, gains or losses on the early extinguishment of debt, impairments, gains or losses on discontinued operations and gains or losses on the sale of investments or other assets. The Company's presentation of Operating EBITDA may not be comparable to similar measures used by other companies.

	Revenues (a) (b)		
	Year Ended December 31,		
	2019	2018	2017
Realogy Franchise Group	\$ 803	\$ 820	\$ 830
Realogy Brokerage Group	4,409	4,607	4,643
Realogy Title Group	596	580	570
Realogy Leads Group	83	81	78
Corporate and Other (c)	(293)	(306)	(311)
Total Company	<u>\$ 5,598</u>	<u>\$ 5,782</u>	<u>\$ 5,810</u>

- (a) Transactions between segments are eliminated in consolidation. Revenues for Realogy Franchise Group include intercompany royalties and marketing fees paid by Realogy Brokerage Group of \$293 million, \$306 million and \$311 million for the years ended December 31, 2019, 2018 and 2017, respectively. Such amounts are eliminated through the Corporate and Other line.
- (b) Revenues for Realogy Leads Group include intercompany referral commissions paid by Realogy Brokerage Group of \$18 million for each of the years ended December 31, 2019, 2018 and 2017. Such amounts are recorded as contra-revenues by Realogy Brokerage Group. There are no other material intersegment transactions.
- (c) Includes the elimination of transactions between segments.

Set forth in the tables below is a reconciliation of Net (loss) income to Operating EBITDA and Operating EBITDA presented by reportable segment for the years ended December 31, 2019, 2018 and 2017:

	Year Ended December 31,		
	2019	2018	2017
Net (loss) income attributable to Realogy Holdings and Realogy Group	\$ (188)	\$ 137	\$ 431
Less: Net (loss) income from discontinued operations	(67)	(6)	6
Add: Income tax (benefit) expense from continuing operations (a)	(22)	67	(66)
(Loss) income from continuing operations before income taxes	(143)	210	359
Add: Depreciation and amortization (b)	169	166	169
Interest expense, net	249	189	157
Restructuring costs, net (c)	42	47	12
Impairments (d)	249	—	—
Former parent legacy cost (benefit) (e)	1	4	(10)
(Gain) loss on the early extinguishment of debt (e)	(5)	7	5
Operating EBITDA	<u>\$ 562</u>	<u>\$ 623</u>	<u>\$ 692</u>

	Operating EBITDA		
	Year Ended December 31,		
	2019	2018	2017
Realogy Franchise Group	\$ 535	\$ 564	\$ 560
Realogy Brokerage Group (f)	4	44	135
Realogy Title Group	68	49	59
Realogy Leads Group	53	51	45
Corporate and Other (e)(g)	(98)	(85)	(107)
Total	<u>\$ 562</u>	<u>\$ 623</u>	<u>\$ 692</u>

- (a) Income tax benefit for the year ended December 31, 2017 reflects the impact of the 2017 Tax Act.
- (b) Depreciation and amortization for the years ended December 31, 2018 and 2017 includes \$2 million and \$3 million, respectively, of amortization expense related to Guaranteed Rate Affinity's purchase accounting included in the "Equity in (earnings) losses of unconsolidated entities" line on the Consolidated Statement of Operations.
- (c) The year ended December 31, 2019 includes restructuring charges of \$2 million at Realogy Franchise Group, \$25 million at Realogy Brokerage Group, \$3 million at Realogy Title Group, \$2 million at Realogy Leads Group and \$10 million at Corporate and Other.
The year ended December 31, 2018 includes restructuring charges of \$3 million at Realogy Franchise Group, \$37 million at Realogy Brokerage Group, \$4 million at Realogy Title Group and \$3 million at Corporate and Other.
The year ended December 31, 2017 includes restructuring charges of \$1 million at Realogy Franchise Group, \$9 million at Realogy Brokerage Group, \$1 million at Realogy Title Group and \$1 million at Corporate and Other.
- (d) Impairments for the year ended December 31, 2019 includes a goodwill impairment charge of \$237 million at Realogy Brokerage Group. The impairment charge of \$237 million was offset by an income tax benefit of \$57 million resulting in a net reduction in the carrying value of Realogy Brokerage Group of \$180 million (see Note 2, "Summary of Significant Accounting Policies", for additional information). In addition, other impairment charges, primarily related to lease asset impairments, of \$12 million were incurred for the year ended December 31, 2019.
- (e) Former parent legacy items and (Gain) loss on the early extinguishment of debt are recorded in Corporate and Other.
- (f) Includes \$22 million of equity earnings from PHH Home Loans for the year ended December 31, 2017.
- (g) Includes the elimination of transactions between segments.

Depreciation and Amortization

	Year Ended December 31,		
	2019	2018	2017
Realogy Franchise Group	\$ 77	\$ 77	\$ 79
Realogy Brokerage Group	54	51	50
Realogy Title Group	13	13	16
Realogy Leads Group	1	2	1
Corporate and Other	24	21	20
Total Company	<u>\$ 169</u>	<u>\$ 164</u>	<u>\$ 166</u>

Segment Assets

	As of December 31,	
	2019	2018
Realogy Franchise Group	\$ 4,317	\$ 4,388
Realogy Brokerage Group	1,448	1,228
Realogy Title Group	576	492
Realogy Leads Group	192	193
Corporate and Other	260	190
Assets - held for sale	750	799
Total Company	<u>\$ 7,543</u>	<u>\$ 7,290</u>

Capital Expenditures

	Year Ended December 31,		
	2019	2018	2017
Realogy Franchise Group	\$ 19	\$ 10	\$ 9
Realogy Brokerage Group	56	44	44
Realogy Title Group	10	11	13
Realogy Leads Group	2	—	2
Corporate and Other	21	27	22
Total Company	<u>\$ 108</u>	<u>\$ 92</u>	<u>\$ 90</u>

20. SELECTED QUARTERLY FINANCIAL DATA (UNAUDITED)

Revision of Third Quarter 2019 Financial Statements

The Company performed an interim impairment analysis of goodwill and indefinite-lived intangible assets as of September 1, 2019 and early adopted the new goodwill guidance in connection with this assessment. The new standard has a new requirement that calls for the impairment charge and deferred tax effect to be adjusted using the "simultaneous equation method" which effectively grosses up the goodwill impairment charge to account for the related income tax benefit so that the resulting carrying value does not exceed the calculated fair value. When the Company recorded the impairment charge of \$180 million for the Realogy Brokerage Group in the third quarter it did not apply the simultaneous equation method, which resulted in an understatement of the non-cash impairment charge for the quarter ended September 30, 2019. The Company evaluated the impact of the revision in accordance with SEC Staff Accounting Bulletin (SAB) No. 99, "Materiality" and concluded that it was not material to the third quarter 2019 reporting period. As such, the revision is reflected below and will be included in the third quarter 2020 Form 10-Q containing such financial information.

As a result of the pending sale of Cartus Relocation Services, the Company met the held for sale requirements under ASC 360 and the discontinued operations criteria under ASC 205 in the fourth quarter of 2019. Therefore, amounts reported in the Company's Form 10-Q for the third quarter of 2019 were not adjusted for discontinued operations. The table below includes the "revised" numbers for the third quarter of 2019 as presented in the third quarter as well as "revised and adjusted for discontinued operations" to reflect the impact of discontinued operations as presented in the 10-K for the year ended December 31, 2019.

The impact of the revision to the Condensed Consolidated Statements of Operations as filed in the Company's Form 10-Q for the three and nine months ended September 30, 2019, as well as for the three and nine months ended September 30, 2019 as a result of the revision are as follows:

	Three Months Ended September 30, 2019			
	As Previously Reported	Adjustment	Revised	Revised and adjusted for discontinued operations
Expenses				
Impairments	\$ 183	\$ 57	\$ 240	\$ 240
Total expenses	1,713	57	1,770	1,700
Loss from continuing operations before income taxes, equity in earnings and noncontrolling interests	(84)	(57)	(141)	(150)
Income tax benefit from continuing operations	(8)	(14)	(22)	(23)
Net loss	(69)	(43)	(112)	(112)
Net loss attributable to Realogy Holdings and Realogy Group	\$ (70)	\$ (43)	\$ (113)	\$ (113)
Loss per share attributable to Realogy Holdings shareholders:				
Basic loss per share	\$ (0.61)	\$ (0.38)	\$ (0.99)	\$ (0.99)
Diluted loss per share	\$ (0.61)	\$ (0.38)	\$ (0.99)	\$ (0.99)
	Nine Months Ended September 30, 2019			
	As Previously Reported	Adjustment	Revised	Revised and adjusted for discontinued operations
Expenses				
Impairments	\$ 186	\$ 57	\$ 243	\$ 243
Total expenses	4,600	57	4,657	4,441
Loss from continuing operations before income taxes, equity in earnings and noncontrolling interests	(122)	(57)	(179)	(173)
Income tax benefit from continuing operations	(9)	(14)	(23)	(22)
Net loss	(98)	(43)	(141)	(141)
Net loss attributable to Realogy Holdings and Realogy Group	\$ (100)	\$ (43)	\$ (143)	\$ (143)
Loss per share attributable to Realogy Holdings shareholders:				
Basic loss per share	\$ (0.88)	\$ (0.37)	\$ (1.25)	\$ (1.25)
Diluted loss per share	\$ (0.88)	\$ (0.37)	\$ (1.25)	\$ (1.25)

The impact of the change to the Condensed Consolidated Statements of Comprehensive Loss for the three and nine months ended September 30, 2019 as a result of the revision is as follows:

	Three Months Ended September 30, 2019			
	As Previously Reported	Adjustment	Revised	Revised and adjusted for discontinued operations
Net loss	\$ (69)	\$ (43)	\$ (112)	\$ (112)
Comprehensive loss	(70)	(43)	(113)	(113)
Comprehensive loss attributable to Realogy Holdings and Realogy Group	\$ (71)	\$ (43)	\$ (114)	\$ (114)

	Nine Months Ended September 30, 2019			
	As Previously Reported	Adjustment	Revised	Revised and adjusted for discontinued operations
Net loss	\$ (98)	\$ (43)	\$ (141)	\$ (141)
Comprehensive loss	(98)	(43)	(141)	(141)
Comprehensive loss attributable to Realogy Holdings and Realogy Group	\$ (100)	\$ (43)	\$ (143)	\$ (143)

The impact of the change to the Condensed Consolidated Balance Sheets as of September 30, 2019 as a result of the revision is as follows:

	As of September 30, 2019			
	As Previously Reported	Adjustment	Revised	Revised and adjusted for discontinued operations
ASSETS				
Goodwill	\$ 3,532	\$ (57)	\$ 3,475	\$ 3,300
Total assets	7,717	(57)	7,660	7,660
LIABILITIES AND EQUITY				
Deferred income taxes	374	(14)	360	360
Total liabilities	5,534	(14)	5,520	5,520
Accumulated deficit	(2,607)	(43)	(2,650)	(2,650)
Total stockholders' equity	2,179	(43)	2,136	2,136
Total equity	2,183	(43)	2,140	2,140
Total liabilities and equity	\$ 7,717	\$ (57)	\$ 7,660	\$ 7,660

The impact of the change to the Condensed Consolidated Statements of Cash Flows for the nine months ended September 30, 2019 as a result of the revision is as follows:

	Nine Months Ended September 30, 2019			
	As Previously Reported	Adjustment	Revised	Revised and adjusted for discontinued operations
Operating Activities				
Net loss from continuing operations	\$ (98)	\$ (43)	\$ (141)	\$ (136)
Adjustments to reconcile net loss from continuing operations to net cash provided by operating activities:				
Deferred income taxes	(16)	(14)	(30)	(29)
Impairments	186	57	243	243
Net cash provided by operating activities	\$ 230	\$ —	\$ 230	\$ 230

Selected Quarterly Financial Data

Provided below is selected unaudited quarterly financial data for 2019 and 2018.

	2019			
	First (d)	Second (d)	Third (d)	Fourth
Net revenues				
Realogy Franchise Group	\$ 163	\$ 234	\$ 216	\$ 190
Realogy Brokerage Group	816	1,331	1,222	1,040
Realogy Title Group	114	160	170	152
Realogy Leads Group	16	26	24	17
Corporate and Other (a)	(55)	(87)	(82)	(69)
Total Company	<u>\$ 1,054</u>	<u>\$ 1,664</u>	<u>\$ 1,550</u>	<u>\$ 1,330</u>
(Loss) income from continuing operations before income taxes, equity in earnings and noncontrolling interests (b)				
Realogy Franchise Group	\$ 71	\$ 142	\$ 134	\$ 108
Realogy Brokerage Group	(80)	25	(231)	(38)
Realogy Title Group	(13)	22	21	7
Realogy Leads Group	8	16	16	11
Corporate and Other	(104)	(110)	(90)	(73)
Total Company	<u>\$ (118)</u>	<u>\$ 95</u>	<u>\$ (150)</u>	<u>\$ 15</u>
Net (loss) income from continuing operations attributable to Realogy Holdings shareholders	\$ (85)	\$ 68	\$ (121)	\$ 17
Net (loss) income from discontinued operations attributable to Realogy Holdings shareholders	(14)	1	8	(62)
Net (loss) income attributable to Realogy Holdings and Realogy Group	<u>\$ (99)</u>	<u>\$ 69</u>	<u>\$ (113)</u>	<u>\$ (45)</u>
(Loss) earnings per share attributable to Realogy Holdings (c):				
Basic (loss) earnings per share from continuing operations	\$ (0.75)	\$ 0.59	\$ (1.06)	\$ 0.15
Basic (loss) earnings per share from discontinued operations	(0.12)	0.01	0.07	(0.54)
Basic (loss) earnings per share	<u>(0.87)</u>	<u>0.60</u>	<u>(0.99)</u>	<u>(0.39)</u>
Diluted (loss) earnings per share from continuing operations	(0.75)	0.59	(1.06)	0.15
Diluted (loss) earnings per share from discontinued operations	(0.12)	0.01	0.07	(0.54)
Diluted (loss) earnings per share	<u>\$ (0.87)</u>	<u>\$ 0.60</u>	<u>\$ (0.99)</u>	<u>\$ (0.39)</u>

(a) Represents the elimination of transactions primarily between Realogy Franchise Group and Realogy Brokerage Group.

(b) The quarterly results include the following:

- restructuring charges of \$9 million, \$9 million, \$11 million and \$13 million in the first, second, third and fourth quarters, respectively;
- a goodwill impairment charge of \$237 million in the third quarter which reduced the net carrying value of Realogy Brokerage Group by \$180 million after accounting for the related income tax benefit of \$57 million and \$1 million, \$2 million, \$3 million and \$6 million of other impairment charges primarily related to lease asset impairments incurred in the first, second, third and fourth quarters, respectively;
- former parent legacy net cost of \$1 million in the third quarter; and
- a loss on the early extinguishment of debt of \$5 million in the first quarter and a gain on the early extinguishment of debt of \$10 million in the third quarter.

(c) Basic and diluted EPS amounts in each quarter are computed using the weighted-average number of shares outstanding during that quarter, while basic and diluted EPS for the full year is computed using the weighted-average number of shares outstanding during the year. Therefore, the sum of the four quarters' basic or diluted EPS may not equal the full year basic or diluted EPS (see Note 17 "Earnings (Loss) Per Share" for further information).

(d) As a result of the pending sale of Cartus Relocation Services, the Company met held for sale requirements under ASC 360 and discontinued operations under ASC 205 in the fourth quarter of 2019. Therefore, amounts presented in the Company's Form 10-Qs for the periods prior to the fourth quarter of 2019 did not reflect discontinued operations, but have been adjusted to reflect discontinued operations in the tables above.

	2018			
	First (d)	Second (d)	Third (d)	Fourth (d)
Net revenues				
Realogy Franchise Group	\$ 176	\$ 237	\$ 221	\$ 186
Realogy Brokerage Group	917	1,408	1,268	1,014
Realogy Title Group	120	162	162	136
Realogy Leads Group	16	25	23	17
Corporate and Other (a)	(63)	(92)	(83)	(68)
Total Company	<u>\$ 1,166</u>	<u>\$ 1,740</u>	<u>\$ 1,591</u>	<u>\$ 1,285</u>
(Loss) income from continuing operations before income taxes, equity in earnings and noncontrolling interests (b)				
Realogy Franchise Group	\$ 85	\$ 152	\$ 141	\$ 107
Realogy Brokerage Group	(76)	45	22	(37)
Realogy Title Group	(8)	26	18	1
Realogy Leads Group	7	17	16	9
Corporate and Other	(66)	(73)	(67)	(102)
Total Company	<u>\$ (58)</u>	<u>\$ 167</u>	<u>\$ 130</u>	<u>\$ (22)</u>
Net (loss) income from continuing operations attributable to Realogy Holdings shareholders	\$ (49)	\$ 118	\$ 93	\$ (19)
Net (loss) income from discontinued operations attributable to Realogy Holdings shareholders	(18)	5	10	(3)
Net (loss) income attributable to Realogy Holdings and Realogy Group	<u><u>\$ (67)</u></u>	<u><u>\$ 123</u></u>	<u><u>\$ 103</u></u>	<u><u>\$ (22)</u></u>
(Loss) earnings per share attributable to Realogy Holdings (c):				
Basic (loss) earnings per share from continuing operations	\$ (0.38)	\$ 0.93	\$ 0.76	\$ (0.16)
Basic (loss) earnings per share from discontinued operations	(0.13)	0.04	0.08	(0.03)
Basic (loss) earnings per share	<u>(0.51)</u>	<u>0.97</u>	<u>0.84</u>	<u>(0.19)</u>
Diluted (loss) earnings per share from continuing operations	(0.38)	0.92	0.75	(0.16)
Diluted (loss) earnings per share from discontinued operations	(0.13)	0.04	0.08	(0.03)
Diluted (loss) earnings per share	<u><u>\$ (0.51)</u></u>	<u><u>\$ 0.96</u></u>	<u><u>\$ 0.83</u></u>	<u><u>\$ (0.19)</u></u>

(a) Represents the elimination of transactions primarily between Realogy Franchise Group and Realogy Brokerage Group.

(b) The quarterly results include the following:

- restructuring charges of \$22 million, \$5 million, \$9 million and \$11 million in the first, second, third and fourth quarters, respectively;
- former parent legacy net cost of \$4 million in the fourth quarter; and
- a loss on the early extinguishment of debt of \$7 million in the first quarter.

(c) Basic and diluted EPS amounts in each quarter are computed using the weighted-average number of shares outstanding during that quarter, while basic and diluted EPS for the full year is computed using the weighted-average number of shares outstanding during the year. Therefore, the sum of the four quarters' basic or diluted EPS may not equal the full year basic or diluted EPS.

(d) As a result of the pending sale of Cartus Relocation Services, the Company met held for sale requirements under ASC 360 and discontinued operations under ASC 205 in the fourth quarter of 2019. Therefore, amounts presented in the Company's Form 10-Qs for the periods prior to the fourth quarter of 2019 did not reflect discontinued operations, but have been adjusted to reflect discontinued operations in the tables above.

EXHIBIT INDEX

Exhibit Description

- 2.1 [Separation and Distribution Agreement by and among Cendant Corporation, Realogy Group LLC \(f/k/a Realogy Corporation\), Wyndham Worldwide Corporation and Travelport Inc. dated as of July 27, 2006 \(Incorporated by reference to Exhibit 2.1 to Realogy Corporation's Current Report on Form 8-K filed July 31, 2006\).](#)
- 2.2 [Letter Agreement dated August 23, 2006 relating to the Separation and Distribution Agreement by and among Realogy Group LLC \(f/k/a Realogy Corporation\), Cendant Corporation, Wyndham Worldwide Corporation and Travelport Inc. dated as of July 27, 2006 \(Incorporated by reference to Exhibit 2.1 to Realogy Corporation's Current Report on Form 8-K filed August 23, 2006\).](#)
- 2.3 [Purchase and Sale Agreement, dated as of November 6, 2019, by and between SIRVA Worldwide, Inc. and Realogy Holdings Corp. \(Incorporated by reference to Exhibit 2.1 to the Registrants' Current Report on Form 8-K filed November 7, 2019\).](#) Schedules and exhibits have been omitted pursuant to Section 601(b)(2) of Regulation S-K; the Registrants agree to furnish supplementally a copy of any omitted schedule or exhibit to the SEC upon request.
- 3.1 [Fourth Amended and Restated Certificate of Incorporation of Realogy Holdings Corp. \(Incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on May 2, 2019\).](#)
- 3.2 [Fifth Amended and Restated Bylaws of Realogy Holdings Corp., as adopted by the Board of Directors, effective February 23, 2019 \(Incorporated by reference to Exhibit 3.2 to the Registrant's Form 10-K for the year ended December 31, 2018\).](#)
- 3.3 [Certificate of Conversion of Realogy Corporation \(Incorporated by reference to Exhibit 3.1 to Registrants' Current Report on Form 8-K filed on October 16, 2012\).](#)
- 3.4 [Certificate of Formation of Realogy Group LLC \(Incorporated by reference to Exhibit 3.2 to Registrants' Current Report on Form 8-K filed on October 16, 2012\).](#)
- 3.5 [Limited Liability Company Agreement of Realogy Group LLC \(Incorporated by reference to Exhibit 3.3 to Registrants' Current Report on Form 8-K filed on October 16, 2012\).](#)
- 4.1 [Indenture, dated as of November 21, 2014, among Realogy Group LLC, as Issuer, Realogy Co-Issuer Corp., as Co-Issuer, Realogy Holdings Corp., the Note Guarantors \(as defined therein\), and The Bank of New York Mellon Trust Company, N.A., as Trustee, governing the 5.250% Senior Notes due 2021 \(the "5.250% Senior Note Indenture"\) \(Incorporated by reference to Exhibit 4.27 to Registrants' Form 10-K for the year ended December 31, 2014\).](#)
- 4.2 [Supplemental Indenture No. 1 dated as of January 2, 2015 to the 5.250% Senior Note Indenture \(Incorporated by reference to Exhibit 4.28 to Registrants' Form 10-K for the year ended December 31, 2014\).](#)
- 4.3 [Supplemental Indenture No. 2 dated as of October 15, 2015 to the 5.250% Senior Note Indenture \(Incorporated by reference to Exhibit 4.19 to Registrants' Form 10-K for the year ended December 31, 2015\).](#)
- 4.4 [Supplemental Indenture No. 3 dated as of February 9, 2016 to the 5.250% Senior Note Indenture \(Incorporated by reference to Exhibit 4.20 to Registrants' Form 10-K for the year ended December 31, 2015\).](#)
- 4.5 [Supplemental Indenture No. 4 dated as of March 1, 2016 to the 5.250% Senior Note Indenture \(Incorporated by reference to Exhibit 4.2 to Registrants' Current Report on Form 8-K filed on March 1, 2016\).](#)
- 4.6 [Supplemental Indenture No. 5 dated as of October 31, 2016 to the 5.250% Senior Note Indenture \(Incorporated by reference to Exhibit 4.15 to Registrants' Form 10-K for the year ended December 31, 2016\).](#)
- 4.7 [Supplemental Indenture No. 6 dated as of February 6, 2018 to the 5.250% Senior Note Indenture \(Incorporated by reference to Exhibit 4.2 to the Registrants' Form 10-Q for the three months ended March 31, 2018\).](#)
- 4.8 [Supplemental Indenture No. 7 dated as of November 14, 2018 to the 5.250% Senior Note Indenture. \(Incorporated by reference to Exhibit 4.8 to Registrants' Form 10-K for the year ended December 31, 2018\).](#)
- 4.9 [Form of 5.250% Senior Notes due 2021 \(included in the 5.250% Senior Note Indenture \(included in the 5.250% Senior Note Indenture filed as Exhibit 4.27 to Registrants' Form 10-K for the year ended December 31, 2014\).](#)
- 4.10 [Indenture, dated as of June 1, 2016, among Realogy Group LLC, as Issuer, Realogy Co-Issuer Corp., as Co-Issuer, Realogy Holdings Corp., the Note Guarantors \(as defined therein\), and The Bank of New York Mellon Trust Company, N.A., as Trustee, governing the 4.875% Senior Notes due 2023 \(the "4.875% Senior Note Indenture"\) \(Incorporated by reference to Exhibit 4.1 to Registrants' Current Report on Form 8-K filed on June 3, 2016\).](#)

Exhibit Description

- 4.11 [Supplemental Indenture No. 1 dated as of October 31, 2016 to the 4.875% Senior Note Indenture \(Incorporated by reference to Exhibit 4.18 to Registrants' Form 10-K for the year ended December 31, 2016\).](#)
- 4.12 [Supplemental Indenture No. 2 dated as of June 26, 2017 to the 4.875% Senior Note Indenture \(Incorporated by reference to Exhibit 4.2 to Registrants' Form 10-Q for the three months ended June 30, 2017\).](#)
- 4.13 [Supplemental Indenture No. 3 dated as of February 6, 2018 to the 4.875% Senior Note Indenture \(Incorporated by reference to Exhibit 4.3 to the Registrants' Form 10-Q for the three month period ended March 31, 2018\).](#)
- 4.14 [Supplemental Indenture No. 4 dated as of November 14, 2018 to the 4.875% Senior Note Indenture.\(Incorporated by reference to Exhibit 4.14 to Registrants' Form 10-K for the year ended December 31, 2018\).](#)
- 4.15 [Form of 4.875% Senior Notes due 2023 \(included in the 5.250% Senior Note Indenture \(included in the 4.875% Senior Note Indenture filed as Exhibit 4.1 to Registrants' Current Report on Form 8-K filed on June 3, 2016\).](#)
- 4.16 [Indenture, dated as of March 29, 2019, among Realogy Group LLC, as Issuer, Realogy Co-Issuer Corp., as Co-Issuer, Realogy Holdings Corp., the Note Guarantors \(as defined therein\) and The Bank of New York Mellon Trust Company, N.A., as Trustee, governing the 9.375% Senior Notes due 2027 \(Incorporated by reference to Exhibit 4.1 to the Registrants' Current Report on Form 8-K filed on March 29, 2019\).](#)
- 4.17 [Form of 9.375% Senior Notes due 2027 \(included in the 9.375% Senior Note Indenture \(included in the 9.375% Senior Note Indenture filed as Exhibit 4.1 to the Registrants' Form 8-K filed on March 29, 2019\).](#)
- 4.18* [Description of the Registrants' Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934.](#)
- 10.1 [Tax Sharing Agreement by and among Realogy Group LLC \(f/k/a Realogy Corporation\), Cendant Corporation, Wyndham Worldwide Corporation and Travelport Inc. dated as of July 28, 2006 \(Incorporated by reference to Exhibit 10.1 to Realogy Group LLC's \(f/k/a Realogy Corporation's\) Quarterly Report on Form 10-Q for the three months ended June 30, 2009\).](#)
- 10.2 [Amendment executed July 8, 2008 and effective as of July 26, 2006 to the Tax Sharing Agreement filed as Exhibit 10.2 \(Incorporated by reference to Exhibit 10.2 to Realogy Group LLC's \(f/k/a Realogy Corporation's\) Form 10-Q for the three months ended June 30, 2008\).](#)
- 10.3 [Amended and Restated Credit Agreement, dated as of March 5, 2013, among Realogy Intermediate Holdings LLC, Realogy Group LLC, the lenders party thereto from time to time, JPMorgan Chase Bank, N.A., as administrative agent for the lenders, and the other financial institutions parties thereto \(Incorporated by reference to Exhibit 10.4 to Registrants' Form 10-Q for the three months ended March 31, 2013\).](#)
- 10.4 [First Amendment, dated as of March 10, 2014, to the Amended and Restated Credit Agreement, dated as of March 5, 2013, among Realogy Intermediate Holdings LLC, Realogy Group LLC, the lenders from time to time party thereto, JPMorgan Chase Bank, N.A., as administrative agent, and the other agents parties thereto \(Incorporated by reference to Exhibit 10.1 to Registrants' Current Report on Form 8-K filed on March 10, 2014\).](#)
- 10.5 [Second Amendment, dated as of October 23, 2015, to the Amended and Restated Credit Agreement, dated as of March 5, 2013, as amended, among Realogy Intermediate Holdings LLC, Realogy Group LLC, the several lenders parties thereto from time to time, JPMorgan Chase Bank, N.A., as administrative agent for the lenders, and the other agents parties thereto \(Incorporated by reference to Exhibit 10.1 to Registrants' Current Report on Form 8-K filed on October 28, 2015\).](#)
- 10.6 [Third Amendment, dated as of July 20, 2016, to the Amended and Restated Credit Agreement, dated as of March 5, 2013, as amended, among Realogy Intermediate Holdings LLC, Realogy Group LLC, the several lenders parties thereto from time to time, JPMorgan Chase Bank, N.A., as administrative agent for the lenders, and the other agents parties thereto \(Incorporated by reference to Exhibit 10.2 to Registrants' Current Report on Form 8-K filed on July 22, 2016\).](#)
- 10.7 [Fourth Amendment, dated as of January 23, 2017, to the Amended and Restated Credit Agreement, dated as of March 5, 2013, as amended, among Realogy Intermediate Holdings LLC, Realogy Group LLC, the several lenders parties thereto from time to time, JPMorgan Chase Bank, N.A., as administrative agent for the lenders, and the other agents parties thereto \(Incorporated by reference to Exhibit 10.1 to Registrants' Current Report on Form 8-K filed on January 23, 2017\).](#)
- 10.8 [Fifth Amendment, dated as of February 8, 2018, to the Amended and Restated Credit Agreement, dated as of March 5, 2013, as amended, among Realogy Intermediate Holdings LLC, Realogy Group LLC, the several lenders parties thereto from time to time, JPMorgan Chase Bank, N.A., as administrative agent for the lenders, and the other agents parties thereto \(Incorporated by reference to Exhibit 10.1 to Registrants' Current Report on Form 8-K filed on February 8, 2018\).](#)

Exhibit Description

- 10.9 [Sixth Amendment, dated as of February 8, 2018, to the Amended and Restated Credit Agreement, dated as of March 5, 2013, as amended, among Realogy Intermediate Holdings LLC, Realogy Group LLC, the several lenders parties thereto from time to time, JPMorgan Chase Bank, N.A., as administrative agent for the lenders, and the other agents parties thereto \(Incorporated by reference to Exhibit 10.2 to Registrants' Current Report on Form 8-K filed on February 8, 2018\).](#)
- 10.10 [Eighth Amendment, dated as of August 2, 2019, to the Amended and Restated Credit Agreement, dated as of March 5, 2013, as amended, among Realogy Intermediate Holdings LLC, Realogy Group LLC, the several lenders parties thereto from time to time, JPMorgan Chase Bank, N.A., as administrative agent for the lenders, and the other agents parties thereto \(Incorporated by reference to Exhibit 10.2 to the Registrants' Quarterly Report on Form 10-Q for the three month period ended June 30, 2019\).](#)
- 10.11 [Incremental Assumption Agreement, dated as of January 23, 2017, among Realogy Intermediate Holdings LLC, Realogy Group LLC, the financial institutions party thereto, and JPMorgan Chase Bank, N.A., as administrative agent \(Incorporated by reference to Exhibit 10.2 to Registrants' Current Report on Form 8-K filed on January 23, 2017\).](#)
- 10.12 [2019 Incremental Assumption Agreement, dated as of March 27, 2019, among Realogy Intermediate Holdings LLC, Realogy Group LLC, the financial institution party thereto and JPMorgan Chase Bank, N.A., as administrative agent \(Incorporated by reference to Exhibit 10.1 to Registrants' Current Report on Form 8-K filed on March 29, 2019\).](#)
- 10.13 [Amended and Restated Guaranty and Collateral Agreement, dated as of March 5, 2013, among Realogy Intermediate Holdings LLC, Realogy Group LLC, the subsidiary loan parties thereto, and JPMorgan Chase Bank, N.A., as administrative and collateral agent \(Incorporated by reference to Exhibit 10.2 to Registrants' Current Report on Form 8-K filed on March 8, 2013\).](#)
- 10.14 [Term Loan A Agreement, dated as of October 23, 2015, among Realogy Intermediate Holdings LLC, Realogy Group LLC, the lenders party thereto from time to time and JPMorgan Chase Bank, N.A., as administrative agent for the lenders \(Incorporated by reference to Exhibit 10.2 to Registrants' Current Report on Form 8-K filed on October 28, 2015\).](#) Note: The Term Loan A Agreement reflecting the cumulative effect of all amendments through February 8, 2018 is attached as Exhibit A to Exhibit 10.14 in this Exhibit Index.
- 10.15 [First Amendment, dated as of July 20, 2016, to the Term Loan A Agreement, dated as of October 23, 2015, among Realogy Intermediate Holdings LLC, Realogy Group LLC, the lenders party thereto from time to time and JPMorgan Chase Bank, N.A., as administrative agent for the lenders \(Incorporated by reference to Exhibit 10.1 to Registrants' Current Report on Form 8-K filed on July 22, 2016\).](#)
- 10.16 [Second Amendment, dated as of February 8, 2018, to the Term Loan A Agreement, dated as of October 23, 2015, among Realogy Intermediate Holdings LLC, Realogy Group LLC, the lenders party thereto from time to time and JPMorgan Chase Bank, N.A., as administrative agent for the lenders \(Incorporated by reference to Exhibit 10.3 to Registrants' Current Report on Form 8-K filed on February 8, 2018\).](#) Note: The Term Loan A Agreement reflecting the cumulative effect of all amendments through February 8, 2018 is attached as Exhibit A to this Exhibit 10.14.
- 10.17 [Term Loan A Guaranty and Collateral Agreement, dated as of October 23, 2015, among Realogy Intermediate Holdings LLC, Realogy Group LLC, the subsidiary loan parties thereto and JPMorgan Chase Bank, N.A., as administrative and collateral agent \(Incorporated by reference to Exhibit 10.3 to Registrants' Current Report on Form 8-K filed on October 28, 2015\).](#)
- 10.18 [Intercreditor Agreement, dated as of February 2, 2012, among Realogy Group LLC \(f/k/a Realogy Corporation\), the other Grantors \(as defined therein\) from time to time party hereto, JPMorgan Chase Bank, N.A., as collateral agent for the Credit Agreement Secured Parties \(as defined therein\) and as Authorized Representative for the Credit Agreement Secured Parties, The Bank of New York, Mellon Trust Company, N.A., as the collateral agent and Authorized Representative for the Initial Additional First Lien Priority Note Secured Parties \(as defined therein\) \(Incorporated by reference as Exhibit 10.13 to Registrants' Form 10-K for the year ended December 31, 2011\).](#)
- 10.19 [Joinder No. 1 dated as of October 23, 2015 to the First Lien Priority Intercreditor Agreement dated as of February 2, 2012, with JPMorgan Chase Bank, N.A. and the other parties thereto \(Incorporated by reference to Exhibit 10.4 to Registrants' Current Report on Form 8-K filed on October 28, 2015\).](#)
- 10.20** [Employment Agreement, dated as of October 17, 2017, between Realogy Holdings Corp. and Ryan M. Schneider \(Incorporated by reference to Exhibit 10.1 to Registrants' Current Report on Form 8-K filed on October 23, 2017\).](#)

Exhibit Description

- 10.21** [Non-Plan Inducement Stock Option Agreement, dated October 23, 2017, between Realogy Holdings Corp. and Ryan M. Schneider \(Incorporated by reference to Exhibit 10.2 to Registrants' Current Report on Form 8-K filed on October 23, 2017\).](#)
- 10.22** [Non-Plan Inducement Restricted Stock Unit Agreement, dated October 23, 2017, between Realogy Holdings Corp. and Ryan M. Schneider \(Incorporated by reference to Exhibit 10.3 to Registrants' Current Report on Form 8-K filed on October 23, 2017\).](#)
- 10.23** [Employment Agreement, dated as of March 13, 2017, between Realogy Holdings Corp. and Richard A. Smith \(Incorporated by reference to Exhibit 10.1 to Registrants' Current Report on Form 8-K filed on March 13, 2017\).](#)
- 10.24** [Amendment, dated October 23, 2017, to Employment Agreement, dated as of March 13, 2017, between Realogy Holdings Corp. and Richard A. Smith \(Incorporated by reference to Exhibit 10.5 to Registrants' Current Report on Form 8-K filed on October 23, 2017\).](#)
- 10.25** [Amendment No. 2, dated December 21, 2017, to Employment Agreement, dated as of March 13, 2017, as amended on October 23, 2017, between Realogy Holdings Corp. and Richard A. Smith \(Incorporated by reference to Exhibit 10.1 to Registrants' Current Report on Form 8-K filed on December 22, 2017\).](#)
- 10.26** [Advisory Services Agreement, dated December 21, 2017, between Realogy Holdings Corp. and Richard A. Smith \(Incorporated by reference to Exhibit 10.2 to Registrants' Current Report on Form 8-K filed on December 22, 2017\).](#)
- 10.27** [Realogy Holdings Corp. Severance Pay Plan for Executives \(Incorporated by reference to Exhibit 10.1 to Registrants' Current Report on Form 8-K filed on November 6, 2018\).](#)
- 10.28** [Realogy Holdings Corp. Change in Control Plan for Executives \(Incorporated by reference to Exhibit 10.2 to Registrants' Current Report on Form 8-K filed on November 6, 2018\).](#)
- 10.29** [Realogy Holdings Corp. Executive Restrictive Covenant Agreement \(Incorporated by reference to Exhibit 10.3 to Registrants' Current Report on Form 8-K filed on November 6, 2018\).](#)
- 10.30** [Realogy Holdings Corp. 2007 Stock Incentive Plan \(Incorporated by reference to Exhibit 10.6 to Registrants' Form 10-Q for the three months ended September 30, 2012\).](#)
- 10.31** [Form of Option Agreement under 2007 Stock Incentive Plan between Realogy Holdings Corp. and the Optionee party thereto governing time-vested options \(Incorporated by reference to Exhibit 10.6 to Realogy Group LLC's \(f/k/a Realogy Corporation's\) Form 10-Q for the three months ended September 30, 2010\).](#)
- 10.32** [Amended and Restated Realogy Group LLC Executive Deferred Compensation Plan \(Incorporated by reference to Exhibit 10.1 to Registrants' Current Report on Form 8-K filed on April 9, 2013\).](#)
- 10.33** [Amendment No. 1 dated November 4, 2014 to Realogy Group LLC Amended and Restated Realogy Group LLC Executive Deferred Compensation Plan \(Incorporated by reference to Exhibit 10.26 to Registrants' Form 10-K for the year ended December 31, 2014\).](#)
- 10.34** [Amendment No. 2 dated December 11, 2014 to Realogy Group LLC Amended and Restated Realogy Group LLC Executive Deferred Compensation Plan \(Incorporated by reference to Exhibit 10.27 to Registrants' Form 10-K for the year ended December 31, 2014\).](#)
- 10.35** [Amendment No. 3 dated December 15, 2017 to Realogy Group LLC Amended and Restated Realogy Group LLC Executive Deferred Compensation Plan \(Incorporated by reference to Exhibit 10.1 to Registrants' Current Report on Form 8-K filed on December 15, 2017\).](#)
- 10.36** [Realogy Holdings Corp. Director Deferred Compensation Plan \(Incorporated by reference to Exhibit 10.2 to Registrants' Form 10-Q for the three months ended March 31, 2013\).](#)
- 10.37** [Amendment No. 1 dated November 4, 2014 to Realogy Holdings Corp. Director Deferred Compensation Plan \(Incorporated by reference to Exhibit 10.29 to Registrants' Form 10-K for the year ended December 31, 2014\).](#)
- 10.38** [Amendment No. 2 dated December 11, 2014 to Realogy Holdings Corp. Director Deferred Compensation Plan \(Incorporated by reference to Exhibit 10.30 to Registrants' Form 10-K for the year ended December 31, 2014\).](#)
- 10.39 [Trademark License Agreement, dated as of February 17, 2004, among SPTC Delaware LLC \(as assignee of SPTC, Inc.\), Sotheby's \(as successor to Sotheby's Holdings, Inc.\), Cendant Corporation and Monticello Licensee Corporation \(Incorporated by reference to Exhibit 10.12 to Realogy Group LLC's \(f/k/a Realogy Corporation's\) Registration Statement on Form 10 \(File No. 001-32852\)\).](#)

Exhibit Description

- 10.40 [Amendment No. 1 to Trademark License Agreement, dated May 2, 2005, by and among SPTC Delaware LLC \(as assignee of SPTC, Inc.\), Sotheby's \(as successor to Sotheby's Holdings, Inc.\), Cendant Corporation and Sotheby's International Realty Licensee Corporation \(f/k/a Monticello Licensee Corporation\) \(Incorporated by reference to Exhibit 10.12\(a\) to Realogy Group LLC's \(f/k/a Realogy Corporation's\) Registration Statement on Form 10 \(File No. 001-32852\)\).](#)
- 10.41 [Amendment No. 2 to Trademark License Agreement, dated May 2, 2005, by and among SPTC Delaware LLC \(as assignee of SPTC, Inc.\), Sotheby's \(as successor to Sotheby's Holdings, Inc.\), Cendant Corporation and Sotheby's International Realty Licensee Corporation \(f/k/a Monticello Licensee Corporation\) \(Incorporated by reference to Exhibit 10.12\(b\) to Realogy Group LLC's \(f/k/a Realogy Corporation's\) Registration Statement on Form 10 \(File No. 001-32852\)\).](#)
- 10.42 [Consent of SPTC Delaware LLC, Sotheby's \(as successor to Sotheby's Holdings, Inc.\) and Sotheby's International Realty License Corporation \(Incorporated by reference to Exhibit 10.12\(c\) to Amendment No. 5 to Realogy Group LLC's \(f/k/a Realogy Corporation's\) Registration Statement on Form 10 \(File No. 001-32852\)\).](#)
- 10.43 [Joinder Agreement dated as of January 1, 2005, between SPTC Delaware LLC, Sotheby's \(as successor to Sotheby's Holdings, Inc.\), and Cendant Corporation and Sotheby's International Realty Licensee Corporation \(Incorporated by reference to Exhibit 10.11 to Realogy Group LLC's \(f/k/a Realogy Corporation's\) Quarterly Report on Form 10-Q for the three months ended June 30, 2009\).](#)
- 10.44 [Amendment No. 3 to Trademark License Agreement dated January 14, 2011, by and among SPTC Delaware LLC \(as assignee of SPTC, Inc.\) and Sotheby's, as successor by merger to Sotheby's Holdings, Inc., on the one hand, and Realogy Group LLC \(f/k/a Realogy Corporation\), as successor to Cendant Corporation, and Sotheby's International Realty Licensee \(f/k/a Monticello Licensee Corporation\) \(Incorporated by reference to Exhibit 10.49 to Realogy Group LLC's \(f/k/a Realogy Corporation's\) Form 10-K for the year ended December 31, 2010\).](#)
- 10.45 [Lease Agreement dated November 23, 2011, between 175 Park Avenue, LLC and Realogy Operations LLC \(Incorporated by reference to Exhibit 10.57 to Registrants' Form 10-K for the year ended December 31, 2011\).](#)
- 10.46 [First Amendment to Lease dated April 29, 2013, between 175 Park Avenue, LLC and Realogy Operations LLC amending Lease dated November 23, 2011 \(Incorporated by reference to Exhibit 10.3 to Registrants' Form 10-Q for the three months ended March 31, 2013\).](#)
- 10.47 [Guaranty dated November 23, 2011, by Realogy Group LLC \(f/k/a Realogy Corporation\) to 175 Park Avenue, LLC \(Incorporated by reference to Exhibit 10.58 to Registrants' Form 10-K for the year ended December 31, 2011\).](#)
- 10.48 [Note Purchase Agreement \(Secured Variable Funding Notes, Series 2011-1\) dated as of December 14, 2011, among Apple Ridge Funding LLC, Cartus Corporation, the commercial paper conduit purchasers party thereto, the financial institutions party thereto, the managing agents party thereto, and committed purchases and managing agents party thereto and Crédit Agricole Corporate and Investment Bank, as administrative and lead arranger \(Incorporated by reference to Exhibit 10.60 to Registrants' Form 10-K for the year ended December 31, 2011\).](#)
- 10.49 [Amendment dated June 13, 2014 to the Note Purchase Agreement dated as of December 14, 2011, by and among Apple Ridge Funding LLC, Cartus Corporation, Realogy Group LLC, the managing agents, committed purchasers and conduit purchasers named therein, and Crédit Agricole Corporate and Investment Bank, as administrative agent \(Incorporated by reference to Exhibit 10.1 to the Registrants' Form 10-Q for the three months ended June 30, 2014\).](#)
- 10.50 [Amendment dated November 10, 2014 to the Note Purchase Agreement dated as of December 14, 2011, by and among Apple Ridge Funding LLC, Cartus Corporation, Realogy Group LLC, the managing agents, committed purchasers and conduit purchasers named therein, and Crédit Agricole Corporate and Investment Bank, as administrative agent \(Incorporated by reference to Exhibit 10.49 to Registrants' Form 10-K for the year ended December 31, 2014\).](#)
- 10.51 [Amendment to Note Purchase Agreement, dated as of June 1, 2016, among Apple Ridge Funding LLC, Cartus Corporation, Realogy Group LLC, the Managing Agents, Committed Purchasers and Conduit Purchasers, and Crédit Agricole Corporate and Investment Bank, as Administrative Agent \(Incorporated by reference to Exhibit 10.1 to Registrants' Current Report on Form 8-K filed with the Securities and Exchange Commission on June 3, 2016\).](#)

Exhibit Description

- 10.52 [Series 2011-1 Indenture Supplement, dated as of December 16, 2011, between Apple Ridge Funding LLC and U.S. Bank National Association, as indenture trustee, paying agent, authentication agent, transfer agent and registrar, which modifies the Master Indenture, dated as of April 25, 2000, among Apple Ridge Funding LLC and U.S. Bank National Association, as indenture trustee, paying agent, authentication agent, transfer agent and registrar \(Incorporated by reference to Exhibit 10.61 to Registrants' Form 10-K for the year ended December 31, 2011\).](#)
- 10.53 [Eighth Omnibus Amendment, dated as of September 11, 2013, among Cartus Corporation, Cartus Financial Corporation, Apple Ridge Services Corporation, Apple Ridge Funding LLC, Realogy Group LLC, U.S. Bank National Association, the managing agents party to the Note Purchase Agreement dated December 14, 2011 and Crédit Agricole Corporate and Investment Bank \(Incorporated by reference to Exhibit 10.1 to Registrants' Current Report on Form 8-K filed on September 13, 2013\).](#)
- 10.54 [Ninth Omnibus Amendment, dated as of June 11, 2015, among Cartus Corporation, Cartus Financial Corporation, Apple Ridge Services Corporation, Apple Ridge Funding LLC, Realogy Group LLC, U.S. Bank National Association, the managing agents party to the Note Purchase Agreement dated December 14, 2011 and Crédit Agricole Corporate and Investment Bank. \(Incorporated by reference to Exhibit 10.1 to the Registrants' Current Report on Form 8-K filed on June 12, 2015\).](#)
- 10.55 [Tenth Omnibus Amendment, dated as of June 9, 2017, among Cartus Corporation, Cartus Financial Corporation, Apple Ridge Services Corporation, Apple Ridge Funding LLC, Realogy Group LLC, U.S. Bank National Association, the managing agents party to the Note Purchase Agreement dated December 14, 2011 and Crédit Agricole Corporate and Investment Bank. \(Incorporated by reference to Exhibit 10.1 to the Registrants' Current Report on Form 8-K filed on June 13, 2017\).](#)
- 10.56 [Eleventh Omnibus Amendment, dated as of June 8, 2018, among Cartus Corporation, Cartus Financial Corporation, Apple Ridge Services Corporation, Apple Ridge Funding LLC, Realogy Group LLC, U.S. Bank National Association, the managing agents party to the Note Purchase Agreement dated December 14, 2011 and Crédit Agricole Corporate and Investment Bank. \(Incorporated by reference to Exhibit 10.1 to the Registrants' Current Report on Form 8-K filed on June 11, 2018\).](#)
- 10.57 [Twelfth Omnibus Amendment, dated as of June 7, 2019, among Cartus Corporation, Cartus Financial Corporation, Apple Ridge Services Corporation, Apple Ridge Funding LLC, Realogy Group LLC, U.S. Bank National Association, the managing agents party to the Note Purchase Agreement dated December 14, 2011, as amended, and Crédit Agricole Corporate and Investment Bank \(Incorporated by reference to Exhibit 10.1 to the Registrants' Current Report on Form 8-K filed on June 7, 2019\).](#)
- 10.58* [Thirteenth Omnibus Amendment, dated as of December 6, 2019, among Cartus Corporation, Cartus Financial Corporation, Apple Ridge Services Corporation, Apple Ridge Funding LLC, Realogy Group LLC, U.S. Bank National Association, the managing agents party to the Note Purchase Agreement dated December 14, 2011, as amended, and Crédit Agricole Corporate and Investment Bank.](#)
- 10.59** [Form of Option Agreement for Independent Directors under 2007 Stock Incentive Plan \(Incorporated by reference to Exhibit 10.51 to Realogy Group LLC's \(f/k/a Realogy Corporation's\) Form 10-K for the year ended December 31, 2007\).](#)
- 10.60** [Amended and Restated Realogy Holdings Corp. 2012 Long-Term Incentive Plan \(Incorporated by reference to Exhibit 10.1 to Realogy Holdings Corp.'s Current Report on Form 8-K filed on May 5, 2016\).](#)
- 10.61** [Amendment to the Amended and Restated Realogy Holdings Corp. 2012 Long-Term Incentive Plan \(Incorporated by reference to Exhibit 10.5 to Realogy Holdings Corp.'s Form 10-Q for the three-month period ended September 30, 2017\).](#)
- 10.62** [Form of Stock Option Agreement under Amended and Restated 2012 Long-Term Incentive Plan \(Incorporated by reference to Exhibit 10.50 to Registrants' Form 10-K for the year ended December 31, 2016\).](#)
- 10.63** [Form of Director Restricted Stock Unit Notice of Grant and Restricted Stock Unit Agreement under the Amended and Restated Realogy Holdings Corp. 2012 Long-Term Incentive Plan \(Incorporated by reference to Exhibit 10.51 to Registrants' Form 10-K for the year ended December 31, 2016\).](#)
- 10.64** [Form of NEO Notice of Grant and Performance Share Unit Agreement under Amended and Restated Realogy Holdings Corp. 2012 Long-Term Incentive Plan \(Incorporated by reference to Exhibit 10.2 to the Registrants' Form 10-Q for the three months ended March 31, 2016\).](#)

Exhibit Description

- 10.65** [Form of NEO Performance Restricted Stock Unit Notice of Grant and Performance Restricted Stock Unit Agreement under Amended and Restated Realogy Holdings Corp. 2012 Long-Term Incentive Plan \(Incorporated by reference to Exhibit 10.1 to the Registrants' Form 10-Q for the three months ended March 31, 2016\).](#)
- 10.66** [Realogy Holdings Corp. 2018 Long-Term Incentive Plan \(Incorporated by reference to Exhibit 10.1 to the Registrants' Registration Statement on Form S-8 filed on May 2, 2018\).](#)
- 10.67** [Form of Notice of Grant and Stock Option Agreement under 2018 Long-Term Incentive Plan \(Incorporated by referenced to Exhibit 10.67 to the Registrant's Form 10-K for the year ended December 31, 2018\).](#)
- 10.68** [Form of Notice of Grant and Restricted Stock Unit Agreement under the 2018 Long-Term Incentive Plan \(Incorporated by referenced to Exhibit 10.68 to the Registrant's Form 10-K for the year ended December 31, 2018\).](#)
- 10.69** [Form of Notice of Grant and Performance Share Unit Agreement under the 2018 Long-Term Incentive Plan \(Incorporated by referenced to Exhibit 10.69 to the Registrant's Form 10-K for the year ended December 31, 2018\).](#)
- 10.70** [Form of Director Restricted Stock Unit Notice of Grant and Restricted Stock Unit Agreement under the 2018 Long-Term Incentive Plan \(Incorporated by reference to Exhibit 10.4 to the Registrants' Form 10-Q for the three months ended March 31, 2018\).](#)
- 10.71 * ** [Form of Notice of Grant and Cash-Settled Restricted Stock Unit Agreement under the 2018 Long-Term Incentive Plan.](#)
- 10.72* ** [Form of Notice of Grant and Long-Term Performance Award Agreement under the 2018 Long-Term Incentive Plan.](#)
- 10.73* ** [Form of Notice of Grant and Time-Vested Cash Award Agreement under the 2018 Long-Term Incentive Plan.](#)
- 10.74 [Form of Indemnification Agreement \(Incorporated by reference to Exhibit 10.79 to Realogy Holdings Corp.'s Registration Statement on Form S-1 \(File No. 333-181988\).](#)
- 10.75** [Letter Agreement dated February 23, 2019 between Realogy Holdings Corp. and Donald J. Casey \(Incorporated by reference to Exhibit 10.72 to the Registrants' Form 10-K for the year ended December 31, 2018\).](#)
- 10.76** [Letter Agreement dated September 30, 2019 between Realogy Holdings Corp. and John W. Peyton \(Incorporated by reference to Exhibit 10.1 to the Registrants' Form 10-Q for the three months ended September 30, 2019\).](#)
- 10.77** [Letter Agreement dated February 28, 2019 between Realogy Holdings Corp. and Charlotte Simonelli \(Incorporated by reference to Exhibit 10.1 to the Registrants' Current Report on Form 8-K filed on March 11, 2019\).](#)
- 10.78** [Letter Agreement dated February 26, 2019 between Realogy Holdings Corp. and Marilyn J. Wasser \(Incorporated by reference to Exhibit 10.4 to the Registrants' Quarterly Report on Form 10-Q for the three month period ended March 31, 2019\).](#)
- 10.79* ** [Severance Agreement dated July 9, 2018 between Realogy Holdings Corp. and Katrina Helmkamp.](#)
- 10.80* ** [Special Retention Award dated February 24, 2020 between Realogy Holdings Corp. and John W. Peyton.](#)
- 21.1* [Subsidiaries of Realogy Holdings Corp. and Realogy Group LLC.](#)
- 23.1* [Consent of PricewaterhouseCoopers LLP.](#)
- 24.1* [Power of Attorney of Directors and Officers of the Registrants \(included on signature pages to this Form 10-K\).](#)
- 31.1* [Certification of the Chief Executive Officer of Realogy Holdings Corp. pursuant to Rules 13\(a\)-14\(a\) and 15\(d\)-14\(a\).promulgated under the Securities Exchange Act of 1934, as amended.](#)
- 31.2* [Certification of the Chief Financial Officer of Realogy Holdings Corp. pursuant to Rules 13\(a\)-14\(a\) and 15\(d\)-14\(a\).promulgated under the Securities Exchange Act of 1934, as amended.](#)
- 31.3* [Certification of the Chief Executive Officer of Realogy Group LLC pursuant to Rules 13\(a\)-14\(a\) and 15\(d\)-14\(a\).promulgated under the Securities Exchange Act of 1934, as amended.](#)
- 31.4* [Certification of the Chief Financial Officer of Realogy Group LLC pursuant to Rules 13\(a\)-14\(a\) and 15\(d\)-14\(a\).promulgated under the Securities Exchange Act of 1934, as amended.](#)
- 32.1* [Certification for Realogy Holdings Corp. pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.](#)
- 32.2* [Certification for Realogy Group LLC pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.](#)

Exhibit Description _____

101 The following information from Realogy's Annual Report on Form 10-K for the fiscal year ended December 31, 2019, formatted in iXBRL (Inline Extensible Business Reporting Language): (i) the Consolidated Balance Sheets as of December 31, 2019 and 2018; (ii) the Consolidated Statements of Operations for the years ended December 31, 2019, 2018 and 2017; (iii) the Consolidated Statements of Comprehensive (Loss) Income for the years ended December 31, 2019, 2018 and 2017; (iv) the Consolidated Statements of Stockholders' Equity (Deficit) for the years ended December 31, 2019, 2018 and 2017; (v) the Consolidated Statements of Cash Flows for the years ended December 31, 2019, 2018 and 2017; and (vi) the Notes to the Consolidated Financial Statements.

104 Cover Page Interactive Data File (formatted in iXBRL and contained in Exhibit 101).

* Filed herewith.

** Compensatory plan or arrangement.

**DESCRIPTION OF THE REGISTRANT'S SECURITIES
REGISTERED PURSUANT TO SECTION 12 OF THE
SECURITIES EXCHANGE ACT OF 1934**

Capital Stock

The following description of the capital stock of Realogy Holdings Corp. (the "Company") is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to the Company's Amended and Restated Certificate of Incorporation (the "Certificate of Incorporation"), and the Company's Amended and Restated By-Laws (the "By-Laws"), each of which are incorporated by reference as an exhibit to the Annual Report on Form 10-K of which this Exhibit is a part. See the Certificate of Incorporation, the By-Laws and the applicable provisions of the Delaware General Corporation Law for additional information.

Authorized Shares

Pursuant to the Company's Certificate of Incorporation, the Company's capital stock consists of 450,000,000 authorized shares, of which 400,000,000 shares, par value \$0.01 per share, are designated as "common stock," and 50,000,000 shares, par value \$0.01 per share, are designated as "preferred stock." No shares of preferred stock are outstanding. All outstanding shares of the Company's common stock are fully paid and non-assessable.

Common Stock

Voting Rights. Holders of common stock are entitled to one vote per share on all matters to be voted upon by the stockholders. Except as required by the Certificate of Incorporation, Bylaws or the rules or regulations of any stock exchange applicable to the Company, or as otherwise provided by law or pursuant to any regulation applicable to the Company or its securities, matters will generally be decided by a majority of votes cast.

Dividend Rights. Subject to the rights of the holders of preferred stock, holders of common stock are entitled to receive ratably dividends if, as and when dividends are declared from time to time by the Company's Board of Directors ("Board") out of funds legally available for that purpose, after payment of dividends required to be paid on outstanding preferred stock, as described below, if any.

Liquidation Rights. Upon liquidation, dissolution or winding up, the holders of common stock are entitled to receive ratably the assets available for distribution to the stockholders after payment of liabilities and accrued but unpaid dividends and liquidation preferences on any outstanding preferred stock.

Other Rights and Preferences. The common stock has no preemptive, subscription or conversion rights. There are no redemption or sinking fund provisions applicable to the common stock.

Listing. The common stock is traded on the New York Stock Exchange under the trading symbol "RLGY."

Certain other Provisions of our Certificate of Incorporation or Bylaws. The Certificate of Incorporation and/or By-Laws include the following provisions that may have an effect of delaying, deferring or preventing a change in control of the Company:

Effect of Preferred Stock. The Certificate of Incorporation contains provisions that permit the Board to issue, without any further vote or action by the stockholders, shares of preferred stock in one or more series and, with respect to each such series, to fix the number of shares constituting the series and the designation of the series, the dividend rates and whether such dividends will be cumulative or non-cumulative, the voting conversion or exchange rights of the shares of the series (if any), redemption rights, whether or not the shares of the series will be entitled to the benefit of a retirement or sinking fund, liquidation rights, the powers, preferences and relative, participation, optional and other special rights, if any, and any qualifications, limitations or restrictions, of the shares of such series.

Removal of Directors, Vacancies. Pursuant to the Certificate of Incorporation, stockholders are able to remove directors only by the affirmative vote of the holders of 75% of the voting power entitled to vote for the election of directors. Vacancies on the Board may be filled only by a majority of the Board, although less than a quorum.

No Cumulative Voting. Pursuant to the Certificate of Incorporation, stockholders do not have the right to cumulative votes in the election of directors.

No Stockholder Action by Written Consent; Calling of Special Meetings of Stockholders. Pursuant to the Certificate of Incorporation (i) any action required or permitted to be taken by the Company's stockholders must be effected at a duly called annual or special meeting of such stockholders and may not be effected by any consent or consents and (ii) special meetings of the stockholders may be called only by a majority of the Board or the chairman of the Board, and only proposals included in the Company's notice may be considered at such special meetings.

Advance Notice Requirements for Stockholders Proposals and Director Nominations. The Bylaws establish an advance notice procedure for stockholder proposals, including nominations to the Board, to be brought before an annual meeting of stockholders (but not included in the Company's proxy statement). Pursuant to the Bylaws, stockholders seeking to bring such business or nominations must provide timely notice thereof in writing. To be timely, a stockholder's notice generally will have to be delivered to and received at the Company's principal executive offices not less than 90 days nor more than 120 days prior to the first anniversary of the preceding year's annual meeting; provided, that in the event that the date of such meeting is advanced more than 30 days prior to, or delayed by more than 60 days after, the anniversary of the preceding year's annual meeting of the Company's stockholders, a stockholder's notice to be timely will have to be so delivered not earlier than the close of business on the 120th day prior to such meeting and not later than the close of business on the later of the 90th day prior to such meeting or, if the first public announcement of the date of such annual meeting is less than 100 days prior to such meeting, the tenth day following the day on which public announcement of the date of such meeting is first made. The Bylaws also specify certain requirements as to the form and content of a stockholder's notice.

Preferred Stock

Pursuant to the Certificate of Incorporation, shares of preferred stock are issuable from time to time, in one or more series, with the designations of the series, the dividend rates and whether such dividends will be cumulative or non-cumulative, the voting conversion or exchange rights of the shares of the series (if any), redemption rights, whether or not the shares of the series will be entitled to the benefit of a retirement or sinking fund, liquidation rights, the powers, preferences and relative, participation, optional or other special rights (if any), and any qualifications, limitations or restrictions thereof as the Board from time to time may adopt by resolution (and without further stockholder approval), subject to certain limitations. Each series will consist of that number of shares as will be stated and expressed in the certificate of designations providing for the issuance of the stock of the series, which number may be increased or decreased from time to time by the Board. All shares of any one series of preferred stock will be identical.

THIRTEENTH OMNIBUS AMENDMENT

(Apple Ridge Funding LLC)

THIS Thirteenth Omnibus Amendment (this “Amendment”) is entered into this 6th day of December, 2019 for the purpose of making amendments to the documents described in this Amendment.

WHEREAS, this Amendment is among (i) Cartus Corporation, a Delaware corporation (“Cartus”), (ii) Cartus Financial Corporation, a Delaware corporation (“CFC”), (iii) Apple Ridge Services Corporation, a Delaware corporation (“ARSC”) (iv) Apple Ridge Funding LLC, a limited liability company organized under the laws of the State of Delaware (the “Issuer”), (v) Realogy Group LLC (f/k/a Realogy Corporation), a Delaware limited liability company (“Realogy”), (vi) U.S. Bank National Association, a national banking association (“U.S. Bank”), as indenture trustee (the “Indenture Trustee”), paying agent, authentication agent, and transfer agent and registrar, (vii) the Managing Agents party to the Note Purchase Agreement defined below, and (viii) Crédit Agricole Corporate and Investment Bank (“CA-CIB”), as Administrative Agent and Lead Arranger (the “Administrative Agent”).

WHEREAS, this Amendment relates to the following documents (as such documents have previously been amended):

(i) Purchase Agreement, dated as of April 25, 2000 (the “Purchase Agreement”), by and between Cartus and CFC;

(ii) Transfer and Servicing Agreement, dated as of April 25, 2000 (the “Transfer and Servicing Agreement”), by and among ARSC, as transferor, Cartus, as originator and servicer, CFC, as originator, the Issuer, as transferee, and the Indenture Trustee;

(iii) Receivables Purchase Agreement, dated as of April 25, 2000 (the “Receivables Purchase Agreement”), by and between CFC and ARSC;

(iv) Master Indenture, dated as of April 25, 2000 (the “Master Indenture”), by and between the Issuer and U.S. Bank, as indenture trustee, paying agent, authentication agent and transfer agent and registrar;

(v) Series 2011-1 Indenture Supplement dated as of December 16, 2011 (the “Indenture Supplement”) by and between the Issuer and U.S. Bank, as indenture trustee, paying agent, authentication agent and transfer agent and registrar;

(vi) Note Purchase Agreement, dated as of December 14, 2011 (the “Note Purchase Agreement”), among the Issuer, Cartus, as Servicer, the financial institutions and commercial paper conduits party thereto and the Administrative Agent, relating to the Series 2011-1 Secured Variable Funding Notes.

WHEREAS, the Purchase Agreement, the Transfer and Servicing Agreement, the Receivables Purchase Agreement, the Master Indenture, the Indenture Supplement and the Note Purchase Agreement are collectively referred to in this Amendment as the “Affected Documents”; and

WHEREAS, terms used in this Amendment and not defined herein shall have the meanings assigned to such terms in the Master Indenture, and, if not defined therein, as defined in the Indenture Supplement:

NOW, THEREFORE, the parties hereto hereby recognize and agree:

1. Amendment to Master Indenture. Effective as of the date hereof, Section 1.01 of the Master Indenture is hereby amended as follows:

(a) A new definition "Designated Obligor December 2019" is hereby added in appropriate alphabetical order to read as follows:

"Designated Obligor December 2019" shall mean any Obligor specified as a "Designated Obligor December 2019" in that certain letter agreement, dated December 6, 2019, by and between the Issuer and the Indenture Trustee, as the same may be amended, restated, supplemented or otherwise modified from time to time in accordance with the terms thereof.

2. Amendments to Purchase Agreement. Effective as of the date hereof, the Purchase Agreement is hereby amended as follows:

(a) The definition of "Eligible Contract" is hereby amended to amend and restate subclause (v) of clause (a) thereof to read as follows:

(v) the Receivables under which, once billed, are required to be paid within 90 days of the original invoice date (or, if the related Obligor is a Designated Obligor December 2019, which are required to be paid within 100 days of the original invoice date) and

(b) The definition of "Eligible Receivable" is hereby amended to amend and restate clause (f) thereof to read as follows:

(f) (i) that is not a Defaulted Receivable, (ii) in the case of a Billed Receivable for which the related Obligor is a Foreign Obligor, has not been outstanding for more than 60 days after the due date thereof and (iii) in the case of a Billed Receivable for which the related Obligor is a Designated Obligor December 2019, in the event 5% or more of the aggregate Unpaid Balance of all Billed Receivables for which the related Obligor is a Designated Obligor December 2019 has been outstanding for more than 20 days after the due date thereof, has not been outstanding after the due date thereof;

3. Waiver of Delivery. Each of the Managing Agents signatory hereto waives any prior notice or delivery requirement set forth in the Transaction Documents with respect to this Amendment (including, without limitation, pursuant to Section 10.02 of the Master Indenture).

4. Conditions Precedent. This Amendment shall be effective upon (a) the Indenture Trustee's receipt of counterparts to this Amendment, (b) the Issuer's payment of all fees required to be paid on or prior to the date hereof and (c) the Issuer's payment and/or reimbursement, to the extent invoiced, of the Administrative Agent's, each Managing Agent's and each Purchaser's reasonable costs and expenses incurred in connection with this Amendment and the other Transaction Documents.

5. GOVERNING LAW. THIS AMENDMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE INTERNAL LAWS OF THE STATE OF NEW YORK, INCLUDING §5-1401 OF THE NEW YORK GENERAL OBLIGATIONS LAW, BUT OTHERWISE WITHOUT REGARD TO CONFLICT OF LAWS PRINCIPLES.

6. Counterparts. This Amendment may be executed in any number of counterparts and by different parties hereto in separate counterparts, each of which when so executed shall be

deemed to be an original and all of which when taken together shall constitute one and the same agreement.

7. References to and Effect on Affected Documents. On and after the date hereof: (i) all references in any Affected Document to “this Agreement,” “hereof,” “herein” or words of similar effect referring to such Affected Document shall be deemed to be references to such Affected Document as amended by this Amendment; (ii) each reference in any of the Affected Documents to any other Affected Document and each reference in any of the other Transaction Documents among the parties hereto to any of the Affected Documents shall each mean and be a reference to such Affected Document as amended by this Amendment; and (iii) each reference in any Transaction Document among the parties hereto to any of the terms or provisions of an Affected Document which are redefined or otherwise modified hereby shall mean and be a reference to such terms or provisions as redefined or otherwise modified by this Amendment; provided, that, notwithstanding the foregoing or any other provisions of this Amendment, the amendments contained in this Amendment shall not be effective to (x) modify on a retroactive basis any representations or warranties previously made under any Affected Document with respect to Receivables transferred or purported to have been transferred prior to the date hereof, which representations and warranties shall continue to speak as of the dates such Receivables were transferred and based on the terms and provisions of the Affected Documents as in effect at such time or (y) otherwise modify the terms of any transfer or purported transfer of any Receivable transferred or purported to be transferred pursuant to an Affected Document prior to the date hereof.
8. Reaffirmation of Performance Guaranty. Effective as of the date hereof, Realogy, in its capacity as the Performance Guarantor under the Performance Guaranty, hereby consents to this Amendment and acknowledges and agrees that the Performance Guaranty remains in full force and effect is hereby reaffirmed, ratified and confirmed.
9. No Waiver. This Amendment shall not be deemed, either expressly or impliedly, to waive, amend or supplement any provision of the Affected Documents other than as set forth herein, each of which Affected Documents, as modified hereby, remains in full force and effect and is hereby reaffirmed, ratified and confirmed.
10. Issuer Representations re: Outstanding Series. As of the date hereof, the Issuer represents and warrants that the Series 2011-1 Notes are the only Notes outstanding under the Master Indenture.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, the parties have caused this Amendment to be executed by their respective officers thereunto duly authorized as of the date first above written.

CARTUS CORPORATION

By: /s/ Eric Barnes
Name: Eric Barnes
Title: SVP & CFO

CARTUS FINANCIAL CORPORATION

By: /s/ Eric Barnes
Name: Eric Barnes
Title: SVP & CFO

APPLE RIDGE SERVICES CORPORATION

By: /s/ Eric Barnes
Name: Eric Barnes
Title: SVP & CFO

APPLE RIDGE FUNDING LLC

By: /s/ Eric Barnes
Name: Eric Barnes
Title: SVP & CFO

REALOGY GROUP LLC

By: /s/ Seth Truwit
Name: Seth I. Truwit
Title: SVP and Assistant Secretary

Signature Page to Thirteenth Omnibus Amendment

U.S. BANK NATIONAL ASSOCIATION, as Indenture Trustee, Paying Agent, Authentication Agent and Transfer Agent and Registrar

By: /s/ Brian Giel
Name: Brian Giel
Title: Vice President

CRÉDIT AGRICOLE CORPORATE AND INVESTMENT BANK, as Administrative Agent and a Managing Agent

By: /s/ Michael Regan
Name: Michael Regan
Title: Managing Director

By: /s/ Kostantina Kourmpetis
Name: Kostantina Kourmpetis
Title: Managing Director

THE BANK OF NOVA SCOTIA, as a Managing Agent

By: /s/ Doug Noe
Name: Doug Noe
Title: Managing Director

WELLS FARGO BANK, NATIONAL ASSOCIATION, as a Managing Agent

By: /s/ Dale Abernathy
Name: Dale Abernathy
Title: Vice President

BARCLAYS BANK PLC, as a Managing Agent

By: /s/ David Hufnagel
Name: David Hufnagel
Title: Director

Signature Page to Thirteenth Omnibus Amendment

**REALOGY HOLDINGS CORP.
2018 LONG-TERM INCENTIVE PLAN
CASH-SETTLED RESTRICTED STOCK UNIT NOTICE OF GRANT &
CASH-SETTLED RESTRICTED STOCK UNIT AGREEMENT**

Realogy Holdings Corp. (the “Company”), pursuant to Section 8.4 of the Company’s 2018 Long-Term Incentive Plan (the “Plan”), hereby grants to the individual listed below (the “Participant”), an Award of Cash-Settled Restricted Stock Units (“CRSUs”). The Award of CRSUs is subject to all of the terms and conditions set forth herein and in the CRSU agreement attached hereto as Exhibit A (the “Agreement”) and the Plan, which are incorporated herein by reference. In addition, as a condition to receiving this Award of CRSUs, the Participant understands and agrees to be bound by and comply with the restrictive covenants and other provisions set forth in the agreement attached hereto as Exhibit B to this Agreement (the “Restrictive Covenants Agreement”), a copy of which the Participant acknowledges receipt. The Participant understands and agrees that the Restrictive Covenants Agreement shall survive the grant, vesting or termination of the CRSUs and any termination of employment of the Participant, and that full compliance with the Restrictive Covenants Agreement is an express condition precedent to (i) the receipt, delivery and vesting of any CRSUs and (ii) any rights to any payments with respect to the CRSUs.

Unless otherwise defined herein, the terms defined in the Plan shall have the same defined meanings in this Notice of Grant (“Notice”) and the Agreement.

Participant:

Grant Date:

Total Number of CRSUs:

Vesting Dates: One-third of the CRSUs will vest on each of the first three grant anniversary dates: _____, _____, and _____ (each, a “Vesting Date”).

By accepting this CRSU Award, the Participant agrees to be bound by the terms and conditions of the Plan, the Agreement and this Notice, including the Restrictive Covenants Agreement. The Participant has reviewed the Agreement, the Plan and this Notice in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Notice and fully understands all provisions of this Notice, the Agreement and the Plan. The Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or relating to the CRSU Award.

Participant's Consent Regarding Use of Personal Information. By accepting this CRSU Award, the Participant explicitly consents (i) to the use of the Participant's Personal Information (as defined in Section 6.15 of the Agreement and to the extent permitted by law) for the purpose of implementing, administering and managing the Participant's CRSU Award under the Plan and of being considered for participation in future equity, deferred cash or other award programs (to the extent he/she is eligible under the terms of such plan or program, and without any guarantee that any award will be made); and (ii) to the use, transfer, processing and storage, electronically or otherwise, of his/her Personal Information, as such use has occurred to date, and as such use may occur in the future, in connection with this or any equity or other award, as described above.

Note: Participants electing to accept this grant via the Fidelity Stock Plan Services Net Benefits OnLine Grant Award Acceptance Process are not required to print and sign this Agreement.

REALOGY HOLDINGS CORP. PARTICIPANT

By: _____ By: _____

Print Name: Print Name:

Title:

Exhibit A: CASH-SETTLED RESTRICTED STOCK UNIT AGREEMENT

Pursuant to the Cash-Settled Restricted Stock Unit Notice of Grant (the “Notice”) to which this Cash-Settled Restricted Stock Unit Agreement (this “Agreement”) is attached, Realogy Holdings Corp. (the “Company”) has granted to the Participant the number of Cash-Settled Restricted Stock Units (“CRSUs”) under Section 8.4 of the Company’s 2018 Long-Term Incentive Plan (the “Plan”) as indicated in the Notice. Capitalized terms not specifically defined herein shall have the meanings specified in the Plan and Notice.

ARTICLE I

GENERAL

1.1 Incorporation of Terms of Plan. The CRSU Award is subject to the terms and conditions of the Plan, which are incorporated herein by reference. In the event of any inconsistency between the Plan and this Agreement, the terms of the Plan shall control.

ARTICLE II

GRANT OF CASH-SETTLED RESTRICTED STOCK UNITS

2.1 Grant of Cash-Settled Restricted Stock Units. In consideration of the Participant’s past and/or continued employment with or Services to the Company or any Affiliate and for other good and valuable consideration, effective as of the Grant Date set forth in the Notice (the “Grant Date”), the Company grants to the Participant the number of CRSUs as set forth in the Notice, upon the terms and conditions set forth in the Plan and this Agreement, and subject to the Participant’s full compliance at all times with the restrictive covenants and other provisions set forth in the Restrictive Covenants Agreement (as defined in the Notice), which is an express condition precedent to (i) the receipt, delivery and vesting of any CRSUs and (ii) any rights to any payments with respect to the CRSUs.

2.2 Consideration to the Company. In consideration of the grant of the CRSUs by the Company, the Participant agrees to render Services to the Company or any Affiliate and to comply at all times with the Restrictive Covenants Agreement. Nothing in the Plan or this Agreement shall confer upon the Participant any right to continue in the employ or Service of the Company or any Affiliate or shall interfere with or restrict in any way the rights of the Company and its Affiliates, which rights are hereby expressly reserved, to discharge or terminate the Services of the Participant at any time for any reason whatsoever, with or without Cause, except to the extent expressly provided otherwise in a written agreement between the Company or an Affiliate and the Participant.

ARTICLE III

RESTRICTIONS AND RESTRICTION PERIOD

3.1 Restrictions. The CRSUs granted hereunder may not be sold, assigned, transferred, pledged, hypothecated or otherwise disposed of and shall be subject to a risk of forfeiture as described in Section 4.1 below until the CRSUs vests.

3.2 Restricted Period. Subject to Articles 4 and 5 of this Agreement, the CRSUs shall vest on each Vesting Date as set forth in the Notice.

3.3 Settlement of CRSUs. Except as set forth in Sections 4.2, 4.3 and 5.1 of this Agreement, within a reasonable period of time following vesting of the CRSUs (and in no event more than 60 days following such vesting), the Company shall pay and transfer to the Participant a cash payment equal in aggregate, to the 20-Day Average Fair Market Value of one share of the Common Stock multiplied by the number of whole CRSUs vesting on the Vesting Date, subject to the Participant’s full compliance at all times with the Restrictive Covenants Agreement. The Company and its Affiliates shall have the authority and the right to deduct or withhold, or require a Participant to remit to the Company or an Affiliate, an amount sufficient to satisfy federal, state, local and foreign taxes (including the Participant’s social security, Medicare and any other employment tax obligation)

required by law to be withheld with respect to any taxable event concerning a Participant arising in connection with the CRSU Award.

3.4 No Rights as a Stockholder. The CRSU Award is not an equity interest in the Company and the Participant shall not be or have any of the rights or privileges of a stockholder of the Company with respect to the CRSUs.

3.5 No Dividend or Dividend Equivalents Rights. The CRSUs carry no dividend or dividend equivalent rights related to any cash or other dividend paid by the Company while the CRSU Award is outstanding.

ARTICLE IV

FORFEITURES

4.1 Termination of Employment. Except as provided in Sections 4.2, 4.3 and 5.1 of this Agreement, if the Participant terminates employment with or ceases to provide Services to the Company or any Affiliate for any reason, then the CRSUs, to the extent not vested, shall be forfeited to the Company without payment of any consideration by the Company, and neither the Participant nor any of his or her successors, heirs, assigns or personal representatives shall thereafter have any further rights or interests in such CRSUs.

4.2 Retirement. In the case of a Participant's Retirement on or following the first anniversary of the Grant Date, the CRSUs, to the extent not vested, shall become fully vested upon such Retirement and the Company shall pay and transfer to the Participant cash payments in such amounts and at such times as are set forth in the Notice as if the Participant had remained employed with the Company, provided that the Participant fully complies at all times with the Restrictive Covenants Agreement. Notwithstanding anything to the contrary in this Section 4.2, the 20-Day Average Fair Market Value of one share of the Common Stock shall be calculated as of each of the Vesting Dates set forth in the Notice and not as of the date of the Participant's Retirement.

4.3 Death or Disability. If the Participant terminates employment with or ceases to provide Services to the Company or any Affiliate on account of death or Disability, the CRSUs, to the extent not vested, shall become fully vested upon such termination of employment or Services and shall be paid in accordance with Section 3.3 above. The 20-Day Average Fair Market Value of one share of the Common Stock shall be calculated as of the date of the Participant's death or Disability.

ARTICLE V

CHANGE IN CONTROL

5.1 Change in Control. In the event of a Change in Control:

(a) With respect to each outstanding CRSU that is assumed or substituted in connection with a Change in Control, in the event that during the twenty-four (24) month period following such Change in Control a Participant's employment or Service is terminated without Cause by the Company or any Affiliate or the Participant resigns from employment or Service from the Company or any Affiliate with Good Reason, (i) the restrictions, payment conditions, and forfeiture conditions applicable to such CRSU shall lapse (but, the Participant's obligations under the Restrictive Covenants Agreement and this Agreement shall not lapse), and (ii) such CRSU shall become fully vested and payable within ten (10) days following such termination of employment or Services.

(b) With respect to each outstanding CRSU that is not assumed or substituted in connection with a Change in Control, except as would result in the imposition of additional taxes and penalties under Section 409A of the Code, immediately upon the occurrence of the Change in Control, (i) the restrictions, payment conditions, and forfeiture conditions applicable to such CRSU granted shall lapse (but, the Participant's obligations under the Restrictive Covenants Agreement and this Agreement shall not lapse), and (ii) such CRSU shall become fully vested and payable within ten (10) days following the Change in Control.

5.2 Assumption/Substitution. For purposes of Section 5.1, the CRSUs shall be considered assumed or substituted for if, following the Change in Control, the value of the CRSUs are (i) based on shares of common stock that are traded on an established U.S. securities market and (ii) of comparable value and remains subject to the same terms and conditions that were applicable to the CRSUs immediately prior to the Change in Control except that the CRSUs that relate to the 20-Day Average Fair Market Value of the Common Stock shall instead relate to the 20-Day Average Fair Market Value of the common stock of the acquiring or ultimate parent entity, determined in the same manner as set forth in this Agreement.

ARTICLE VI

MISCELLANEOUS

6.1 Administration. The Administrator shall have the power to interpret the Plan, the Restrictive Covenants Agreement and this Agreement and to adopt such rules for the administration, interpretation and application of the Plan as are consistent therewith and to interpret, amend or revoke any such rules. All actions taken and all interpretations and determinations made by the Administrator in good faith shall be final and binding upon the Participant, the Company and all other interested persons. No member of the Administrator or the Board shall be personally liable for any action, determination or interpretation made in good faith with respect to the Plan, this Agreement or the CRSUs.

6.2 Restrictions on Transfer. CRSUs that have not vested may not be transferred or otherwise disposed of by the Participant, including by way of sale, assignment, transfer, pledge, hypothecation or otherwise, except as permitted by the Administrator, or by will or the laws of descent and distribution.

6.3 Invalid Transfers. No purported sale, assignment, mortgage, hypothecation, transfer, pledge, encumbrance, gift, transfer in trust (voting or other) or other disposition of, or creation of a security interest in or lien on, any of the CRSUs by any holder thereof in violation of the provisions of this Agreement shall be valid, and the Company will not transfer any of said CRSUs on its books or otherwise, unless and until there has been full compliance with said provisions to the satisfaction of the Company. The foregoing restrictions are in addition to and not in lieu of any other remedies, legal or equitable, available to enforce said provisions.

6.4 Adjustments. The Participant acknowledges that the CRSUs are subject to modification and termination in certain events as provided in this Agreement and Article 3 of the Plan.

6.5 Termination of Employment or Service/Breach of the Restrictive Covenants Agreement. The Administrator, in its sole discretion, shall determine the effect of all matters and questions relating to termination of employment or Service, including without limitation, whether a termination has occurred, whether any termination resulted from a discharge for Cause and whether any particular leave of absence constitutes a termination, as well as whether the Participant has fully complied with the Restrictive Covenants Agreement for purposes of this Agreement.

6.6 Notices. Any notice to be given under the terms of this Agreement to the Company shall be addressed to the Company in care of the Chief Human Resources Officer at the Company's principal office, and any notice to be given to the Participant shall be addressed to the Participant's last address reflected on the Company's records.

6.7 Titles. Titles are provided herein for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.

6.8 Governing Law. The laws of the State of Delaware shall govern the interpretation, validity, administration, enforcement and performance of the terms of this Agreement regardless of the law that might be applied under principles of conflicts of laws.

6.9 Conformity to Securities Laws. The Participant acknowledges that the Plan and this Agreement are intended to conform to the extent necessary with all provisions of the Securities Act and the Exchange Act and any and all regulations and rules promulgated by the Securities and Exchange Commission thereunder, and state securities laws and regulations. Notwithstanding anything herein to the contrary, the Plan shall be administered, and the CRSUs are granted, only in such a manner as to conform to such laws, rules and

regulations. To the extent permitted by applicable law, the Plan and this Agreement shall be deemed amended to the extent necessary to conform to such laws, rules and regulations.

6.10 Amendments, Suspension and Termination. To the extent permitted by the Plan, this Agreement may be wholly or partially amended or otherwise modified, suspended or terminated at any time or from time to time by the Administrator or the Board; provided, however, that, except as may otherwise be provided by the Plan, no amendment, modification, suspension or termination of this Agreement shall adversely affect the CRSUs in any material way without the prior written consent of the Participant.

6.11 Successors and Assigns. The Company may assign any of its rights under this Agreement to single or multiple assignees, and this Agreement shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth in this Article 6, this Agreement shall be binding upon the Participant and his or her heirs, executors, administrators, successors and assigns.

6.12 Unfunded Status of Awards. With respect to any payments not yet made to the Participant pursuant to the Plan, including this Award of CRSUs, nothing contained in the Plan, the Notice, the Restrictive Covenants Agreement or this Agreement shall give the Participant any rights that are greater than those of a general creditor of the Company or any Affiliate.

6.13 Entire Agreement. The Plan, the Notice, the Restrictive Covenants Agreement and this Agreement (including all Exhibits thereto, if any) constitute the entire agreement of the parties and supersede in their entirety all prior undertakings and agreements of the Company and the Participant with respect to the subject matter hereof.

6.14 Section 409A. The intent of the parties is that payments and benefits under this Agreement and the Award be exempt from, or comply with, Section 409A of the Internal Revenue Code (the "Code"), and accordingly, to the maximum extent permitted, this Agreement and the Award shall be interpreted and administered to be in accordance therewith. Notwithstanding anything contained herein to the contrary, the Participant shall not be considered to have terminated employment with the Company for purposes of any payments under this Agreement and the Award which are subject to Section 409A of the Code until the Participant would be considered to have incurred a "separation from service" from the Company within the meaning of Section 409A of the Code. Each amount to be paid or benefit to be provided under this Agreement and the Award shall be construed as a separate identified payment for purposes of Section 409A of the Code, and any payments described in this Agreement and the Award that are due within the "short term deferral period" as defined in Section 409A of the Code shall not be treated as deferred compensation unless applicable law requires otherwise. Without limiting the foregoing and notwithstanding anything contained herein to the contrary, to the extent required in order to avoid accelerated taxation and/or tax penalties under Section 409A of the Code, amounts that would otherwise be payable and benefits that would otherwise be provided pursuant to this Agreement and the Award during the six-month period immediately following the Participant's separation from service shall instead be paid on the first business day after the date that is six months following the Participant's separation from service (or, if earlier, the Participant's death). The Company makes no representation that any or all of the payments described in this Agreement and the Award will be exempt from or comply with Section 409A of the Code and makes no undertaking to preclude Section 409A of the Code from applying to any such payment. The Participant understands and agrees that he or she shall be solely responsible for the payment of any taxes and penalties incurred under Section 409A.

6.15 Disclosure Regarding Use of Personal Information.

(a) Definition and Use of "Personal Information". In connection with the grant of the CRSU Award, and any other award under other incentive award programs, and the implementation and administration of any such program, including, without limitation, the Participant's actual participation, or consideration by the Company for potential future participation, in any program at any time, it is or may become necessary for the Company to collect, transfer, use, and hold certain personal information regarding Participant in and/or outside of Participant's country of employment. The "Personal Information" the Company may collect, process, store and transfer for the purposes outlined above may include the Participant's name, nationality, citizenship, tax or other residency status, work authorization, date of birth, age, government/tax identification number, passport number, brokerage account information, GEID or other internal identifying information, home address, work address, job and location history, compensation and incentive award information and history, business

unit, employing entity, and the Participant's beneficiaries and contact information. The Participant may obtain more details regarding the access and use of his or her personal information, and may correct or update such information, by contacting his or her human resources representative or local equity coordinator.

(b) Use, Transfer, Storage and Processing of Personal Information. The use, transfer, storage and processing of Personal Information electronically or otherwise, may be in connection with the Company's internal administration of its incentive award programs, or in connection with tax or other governmental and regulatory compliance activities directly or indirectly related to an incentive award program. To the extent permitted by law, Personal Information may be used by third parties retained by the Company to assist with the administration and compliance activities of its incentive award programs, and may be transferred by the entity that employs (or any entity that has employed) the Participant from the Participant's country of employment to the Company (or its Affiliates or Subsidiaries) and third parties located in the U.S. and in other countries. Specifically, those parties that may have access to the Participant's Personal Information for the purposes described herein include, but are not limited to: (i) human resources personnel responsible for administering the award programs, including local and regional equity award coordinators, and global coordinators located in the U.S.; (ii) Participant's U.S. broker and equity account administrator and trade facilitator; (iii) Participant's U.S., regional and local employing entity and business unit management, including Participant's supervisor and his or her superiors; (iv) the Administrator; (v) the Company's technology systems support team (but only to the extent necessary to maintain the proper operation of electronic information systems that support the incentive award programs); and (vi) internal and external legal, tax and accounting advisors (but only to the extent necessary for them to advise the Company on compliance and other issues affecting the incentive award programs in their respective fields of expertise). At all times, Company personnel and third parties will be obligated to maintain the confidentiality of the Participant's Personal Information except to the extent the Company is required to provide such information to governmental agencies or other parties. Such action will always be undertaken only in accordance with applicable law.

ARTICLE VII

DEFINITIONS

Wherever the following terms are used in the Agreement they shall have the meanings specified below, unless the context clearly indicates otherwise. The singular pronoun shall include the plural where the context so indicates.

7.1 "20-Day Average Fair Market Value" shall mean the average Fair Market Value of a share of Common Stock calculated using the Fair Market Value on the Vesting Date and each of the immediately preceding nineteen (19) trading days.

7.2 "Disability" shall mean a condition such that an individual would be considered disabled for the purposes of Section 409(A) of the Code.

7.3 "Retirement" shall mean a "separation from service" (within the meaning of Section 409A of the Code) with the Company and all Affiliates (other than for Cause) after attaining eligibility for Retirement. A Participant attains eligibility for Retirement upon the earlier of (a) age 65 or (b) age 55 with at least ten (10) whole years of consecutive Service starting from the Participant's most recent hire date with the Company and all Affiliates. For the avoidance of doubt, the phrase "consecutive service" in the preceding sentence shall not include time spent by the Participant:

(a) as a consultant or advisor to the Company or its Affiliates following a "separation from service" within the meaning of Section 409A of the Code;

(b) engaged as an independent sales agent affiliated with one of the Company's or its Affiliates' real estate brands; or

(c) employed with or providing services to any business acquired by the Company or any Affiliate prior to the time such business was acquired by the Company or any Affiliate or employed with or providing services to any business after the time such business was divested by the Company or any Affiliate.

7.4 “Service” or “Services” shall mean services performed by the Participant for the Company or its Affiliates as an Employee, consultant or advisor, provided that services performed by a Participant in the capacity as an independent sales agent affiliated with one of the Company’s or its Affiliates’ real estate brands shall not constitute Service.

REALOGY HOLDINGS CORP.
2018 LONG-TERM INCENTIVE PLAN
LONG-TERM PERFORMANCE AWARD NOTICE OF GRANT
& LONG-TERM PERFORMANCE AWARD AGREEMENT

Realogy Holdings Corp. (the “Company”), pursuant to Section 8.1 of the 2018 Long-Term Incentive Plan (the “Plan”), hereby grants to the individual listed below (the “Participant”), a Long-Term Performance Award. The Long-Term Performance Award is subject to all of the terms and conditions set forth herein and in the Long-Term Performance Award Agreement attached hereto as Exhibit A (the “Agreement”) and the Plan, which are incorporated herein by reference. In addition, as a condition to receiving this Long-Term Performance Award, the Participant understands and agrees to be bound by and comply with the restrictive covenants and other provisions set forth in the Restrictive Covenant Agreement attached hereto as Exhibit B (the “Restrictive Covenant Agreement”), a copy of which the Participant acknowledges receipt. The Participant understands and agrees that the Restrictive Covenant Agreement shall survive the grant, payment, vesting or termination of the Long-Term Performance Award and any termination of employment of the Participant, and that full compliance with the Restrictive Covenant Agreement is an express condition precedent to (i) the receipt, delivery and vesting of the Long-Term Performance Award and (ii) any rights to any payments with respect to the Long-Term Performance Award.

Unless otherwise defined herein, the terms defined in the Plan shall have the same defined meanings in this Notice of Grant (“Notice”) and the Agreement.

Participant:

Grant Date:

Target Grant: \$

Performance Period: January 1, 2020 – December 31, 2022

Performance Criteria: See Schedule 1 to Exhibit A attached hereto

By accepting this Long-Term Performance Award, the Participant agrees to be bound by the terms and conditions of the Plan, the Agreement and this Notice, including the Restrictive Covenants Agreement. The Participant has reviewed the Agreement, the Plan and this Notice in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Notice and fully understands all provisions of this Notice, the Agreement and the Plan. The Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or relating to the Long-Term Performance Award.

Participant’s Consent Regarding Use of Personal Information. By accepting this Long-Term Performance Award, the Participant explicitly consents (i) to the use of the Participant’s Personal Information (as defined in Section 6.14 of the Agreement and to the extent permitted by law) for the purpose of implementing, administering and managing the Participant’s Long-Term Performance Award under the Plan and of being considered for participation in future equity, deferred cash or other award programs (to the extent he/she is eligible under the terms of such plan or program, and without any guarantee that any award will be made); and (ii) to the use, transfer, processing and storage, electronically or otherwise, of his/her Personal Information, as such use has occurred to date, and as such use may occur in the future, in connection with this or any equity or other award, as described above.

Note: Participants electing to accept this grant via the Fidelity Stock Plan Services Net Benefits OnLine Grant Award Acceptance Process are not required to print and sign this Agreement.

REALOGY HOLDINGS CORP. PARTICIPANT

By: _____ By: _____

Print Name: Print Name:

Exhibit A: LONG-TERM PERFORMANCE AWARD AGREEMENT

Pursuant to the Long-Term Performance Award Notice of Grant (the “Notice”) to which this Long-Term Performance Award Agreement (this “Agreement”) is attached, Realogy Holdings Corp. (the “Company”) has granted under Section 8.1 of the Company’s 2018 Long-Term Incentive Plan (the “Plan”) the Long-Term Performance Award indicated in the Notice, subject to the terms and conditions set forth in this Agreement, the Notice and the Plan, including the performance conditions set forth in Schedule 1 hereto. Capitalized terms not specifically defined herein shall have the meanings specified in the Plan and Notice.

ARTICLE I

GENERAL

1.1 Incorporation of Terms of Plan. The Long-Term Performance Award is subject to the terms and conditions of the Plan, which are incorporated herein by reference. In the event of any inconsistency between the Plan and this Agreement, the terms of the Plan shall control.

ARTICLE II

GRANT OF LONG-TERM PERFORMANCE AWARD

2.1 Grant of Long-Term Performance Award. In consideration of the Participant’s past and/or continued employment with or Service to the Company or any Affiliate and for other good and valuable consideration, effective as of the Grant Date set forth in the Notice (the “Grant Date”), the Company grants to the Participant the Long-Term Performance Award set forth in the Notice (the “Target Grant”), subject to the terms and conditions set forth in the Plan and this Agreement, including Schedule 1 attached hereto, and subject to the Participant’s full compliance at all times with the restrictive covenants and other provisions set forth in the Restrictive Covenants Agreement (as defined in the Notice), which is an express condition precedent to (i) the receipt, delivery and vesting of any Long-Term Performance Award and (ii) any rights to any payments with respect to the Long-Term Performance Award.

2.2 Consideration to the Company. In consideration of the grant of the Long-Term Performance Award by the Company, the Participant agrees to render Services to the Company or any Affiliate and to comply at all times with the Restrictive Covenants Agreement. Nothing in the Plan or this Agreement shall confer upon the Participant any right to continue in the employ or Service of the Company or any Affiliate or shall interfere with or restrict in any way the rights of the Company and its Affiliates, which rights are hereby expressly reserved, to discharge or terminate the Services of the Participant at any time for any reason whatsoever, with or without Cause, except to the extent expressly provided otherwise in a written agreement between the Company or an Affiliate and the Participant.

ARTICLE III

PERFORMANCE CRITERIA AND PERFORMANCE PERIOD

3.1 Performance Period. Subject to the remaining terms of this Agreement, after completion of the Performance Period as set forth on the Grant Notice, the amount ultimately earned under the Long-Term Performance Award pursuant to this Agreement will be based on the Company’s performance against certain criteria (the “Performance Criteria”) as set forth on Schedule 1 hereto.

3.2 Settlement of Long-Term Performance Award. The Participant shall be entitled to receive a cash payment equal to a multiple of the Target Grant, as determined in accordance with Schedule 1 hereto and subject to the terms and conditions described herein (subject to any reductions for tax withholding or otherwise to the extent permitted under the Plan or this Agreement), including the Participant’s full compliance at all times with the Restrictive Covenants Agreement. Except as provided in Article V below, any payment earned under this Agreement shall be delivered as soon as reasonably practicable following approval of the amount earned under the

Long-Term Performance Award, but in no event later than two and half months following the end of the Performance Period, provided that the Participant fully complies at all times with the Restrictive Covenants Agreement. Any portion of the Long-Term Performance Award that could have been earned in accordance with the provisions of Schedule 1 that is not earned as of the end of the Performance Period shall be immediately forfeited at the end of the Performance Period.

3.3 No Rights as a Stockholder. The Long-Term Performance Award is a cash award and is not an equity interest in the Company and the Participant shall not be, or have any of the rights or privileges of a stockholder of the Company with respect to, the Long-Term Performance Award.

3.4 No Dividend or Dividend Equivalents Rights. The Long-Term Performance Award carries no dividend or dividend equivalent rights related to any cash or other dividend paid by the Company while the Long-Term Performance Award is outstanding.

ARTICLE IV

FORFEITURES

4.1 Termination of Employment. Except as otherwise specifically set forth in this Article IV or Article V, if the Participant terminates employment with or ceases to provide Services to the Company or any Affiliate prior to the date on which the Performance Period ends, this Agreement will terminate and be of no further force or effect on the date that the Participant is no longer actively employed by or providing Services to the Company or any of its Affiliates and the Long-Term Performance Award shall be forfeited on such date. The Participant will, however, be entitled to receive his or her earned cash payment based upon actual performance under this Agreement if the Participant's employment terminates or Services cease after the Performance Period but before the Participant's receipt of such payment.

4.2 Death or Disability. Except as set forth in Section 5.1 below, if the Participant terminates employment with or ceases to provide Services to the Company or any Affiliate prior the end of the Performance Period on account of death or Disability, the Participant will be entitled to receive his or her earned cash payment based upon actual performance under this Agreement had the Participant's employment or Services not terminated, with such payment pro-rated for the number of full months of the Performance Period during which the Participant was employed by or was providing Services to the Company or any Affiliate.

4.3 Termination other than for Cause or for Good Reason. Except as set forth in Section 5.1 below, in the case where the Participant terminates employment with or ceases to provide Services to the Company or any Affiliate prior to the end of the Performance Period other than for Cause or the Participant resigns from employment from the Company or any Affiliate with Good Reason, the Participant will be entitled to receive his or her earned cash payment based upon actual performance under this Agreement had the Participant's employment or Services not terminated, with such payment pro-rated for the number of full months of the Performance Period during which the Participant was employed by or was providing Services to the Company or any Affiliate.

4.4 Retirement. In the case of a Participant's Retirement on or following the first anniversary of the commencement of the Performance Period, the Participant will be entitled to receive his or her earned cash payment based upon actual performance under this Agreement had the Participant's employment or Services not terminated, without pro-ration.

4.5 Timing of Payment. Without limiting the foregoing, in the event the Participant's employment or Services terminate before the end of the Performance Period on account of death, Disability, Retirement or termination by the Company other than for Cause or a resignation for Good Reason, any amount that becomes payable in accordance with any of Sections 4.2, 4.3 or 4.4 above shall be payable at the time and in the manner set forth in Section 3.2 following the end of the Performance Period, provided that the Participant fully complies at all times with the Restrictive Covenants Agreement.

ARTICLE V

CHANGE IN CONTROL

5.1 Change in Control. In the event that Change in Control occurs during the Performance Period, the Long-Term Performance Award shall, immediately prior to the Change in Control, (a) be converted to a time-based cash award equal to the Target Grant, (b) cease to be subject to the achievement of the Performance Criteria and (c) be payable in full at the end of the Performance Period provided the Participant is employed by or is providing Services to the Company or any Affiliate on such date and fully complies at all times with the Restrictive Covenants Agreement, subject to the following:

(a) If the Long-Term Performance Award is assumed or substituted in connection with the Change in Control, in the event that during the Performance Period,

(i) a Participant's employment or Service is terminated other than for Cause by the Company or any Affiliate or the Participant resigns from employment from the Company or any Affiliate with Good Reason, (1) the Long-Term Performance Award shall become fully payable and (2) the Long-Term Performance Award shall be settled in a cash payment as soon as practicable, but in no event later than ten (10) days following such termination, provided that the Participant fully complies at all times with the Restrictive Covenants Agreement; or

(ii) a Participant's employment or Service is terminated on account of death or Disability, (1) the Long-Term Performance Award shall become fully payable and (2) the Long-Term Performance Award shall be settled in a cash payment as soon as practicable, but in no event later than ten (10) days following such termination, provided that the Participant fully complies at all times with the Restrictive Covenants Agreement.

(b) If the Long-Term Performance Award is not assumed or substituted in connection with a Change in Control, immediately upon the occurrence of the Change in Control, (i) the Long-Term Performance Award shall become fully payable and (ii) the Participant shall receive a cash payment equal to the Target Grant, provided that the Participant fully complies at all times with the Restrictive Covenants Agreement. As soon as practicable, but in no event later than ten (10) days, following the Change in Control, the Company or its successor shall deliver to the Participant (or, if applicable, the Participant's estate) the cash payment as calculated pursuant to the preceding sentence.

5.2 Assumption/Substitution. For purposes of Section 5.1, the Long-Term Performance Award shall be considered assumed or substituted for if, following the Change in Control, the Long-Term Performance Award remains subject to the same terms and conditions that were applicable to the Long-Term Performance Award immediately prior to the Change in Control except that the Long-Term Performance Award shall no longer be subject to the achievement of the Performance Criteria.

ARTICLE VI

MISCELLANEOUS

6.1 Administration. The Administrator shall have the power to interpret the Plan, the Restrictive Covenants Agreement and this Agreement and to adopt such rules for the administration, interpretation and application of the Plan as are consistent therewith and to interpret, amend or revoke any such rules. All actions taken and all interpretations and determinations made by the Administrator in good faith shall be final and binding upon the Participant, the Company and all other interested persons. No member of the Administrator or the Board shall be personally liable for any action, determination or interpretation made in good faith with respect to the Plan, this Agreement or the Long-Term Performance Award.

6.2 Restrictions on Transfer. The Long-Term Performance Award may not be transferred or otherwise disposed of by the Participant, including by way of sale, assignment, transfer, pledge, hypothecation or otherwise, except as permitted by the Administrator, or by will or the laws of descent and distribution.

6.3 Invalid Transfers. No purported sale, assignment, mortgage, hypothecation, transfer, pledge, encumbrance, gift, transfer in trust (voting or other) or other disposition of, or creation of a security interest in or lien on, the Long-Term Performance Award by any holder thereof in violation of the provisions of this Agreement shall be valid, and the Company will not transfer any Long-Term Performance Award on its books or otherwise. The foregoing restrictions are in addition to and not in lieu of any other remedies, legal or equitable, available to enforce said provisions.

6.4 Termination of Employment or Service/Breach of the Restrictive Covenants Agreement. The Administrator, in its sole discretion, shall determine the effect of all matters and questions relating to termination of employment or Service, including without limitation, whether a termination has occurred, whether any termination resulted from a discharge for Cause and whether any particular leave of absence constitutes a termination, as well as whether the Participant has fully complied with the Restrictive Covenants Agreement for purposes of this Agreement.

6.5 Notices. Any notice to be given under the terms of this Agreement to the Company shall be addressed to the Company in care of the Chief Human Resources Officer at the Company's principal office, and any notice to be given to the Participant shall be addressed to the Participant's last address reflected on the Company's records.

6.6 Titles. Titles are provided herein for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.

6.7 Governing Law. The laws of the State of Delaware shall govern the interpretation, validity, administration, enforcement and performance of the terms of this Agreement regardless of the law that might be applied under principles of conflicts of laws.

6.8 Conformity to Securities Laws. The Participant acknowledges that the Plan and this Agreement are intended to conform to the extent necessary with all provisions of the Securities Act and the Exchange Act and any and all regulations and rules promulgated by the Securities and Exchange Commission thereunder, and state securities laws and regulations. Notwithstanding anything herein to the contrary, the Plan shall be administered, and the Long-Term Performance Award is granted, only in such a manner as to conform to such laws, rules and regulations. To the extent permitted by applicable law, the Plan and this Agreement shall be deemed amended to the extent necessary to conform to such laws, rules and regulations.

6.9 Amendments, Suspension and Termination. To the extent permitted by the Plan, this Agreement may be wholly or partially amended or otherwise modified, suspended or terminated at any time or from time to time by the Administrator or the Board; provided, however, that, except as may otherwise be provided by the Plan, no amendment, modification, suspension or termination of this Agreement shall adversely affect the Long-Term Performance Award in any material way without the prior written consent of the Participant.

6.10 Successors and Assigns. The Company may assign any of its rights under this Agreement to single or multiple assignees, and this Agreement shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth in this Article 6, this Agreement shall be binding upon the Participant and his or her heirs, executors, administrators, successors and assigns.

6.11 Unfunded Status of Long-Term Performance Award. With respect to any payments not yet made to the Participant pursuant to the Plan, including this Long-Term Performance Award, nothing contained in the Plan, the Notice, the Restrictive Covenants Agreement or this Agreement shall give the Participant any rights that are greater than those of a general creditor of the Company or any Affiliate.

6.12 Entire Agreement. The Plan, the Notice, the Restrictive Covenants Agreement and this Agreement (including all Exhibits and Schedules thereto) constitute the entire agreement of the parties and supersede in their entirety all prior undertakings and agreements of the Company and the Participant with respect to the subject matter hereof.

6.13 Section 409A. The intent of the parties is that payments and benefits under this Agreement and the Long-Term Performance Award be exempt from, or comply with, Section 409A of the Internal Revenue Code (the “Code”), and accordingly, to the maximum extent permitted, this Agreement and the Long-Term Performance Award shall be interpreted and administered to be in accordance therewith. Notwithstanding anything contained herein to the contrary, the Participant shall not be considered to have terminated employment with the Company for purposes of any payments under this Agreement and the Long-Term Performance Award which are subject to Section 409A of the Code until the Participant would be considered to have incurred a “separation from service” from the Company within the meaning of Section 409A of the Code. Each amount to be paid or benefit to be provided under this Agreement and the Long-Term Performance Award shall be construed as a separate identified payment for purposes of Section 409A of the Code, and any payments described in this Agreement and the Long-Term Performance Award that are due within the “short term deferral period” as defined in Section 409A of the Code shall not be treated as deferred compensation unless applicable law requires otherwise. Without limiting the foregoing and notwithstanding anything contained herein to the contrary, to the extent required in order to avoid accelerated taxation and/or tax penalties under Section 409A of the Code, amounts that would otherwise be payable and benefits that would otherwise be provided pursuant to this Agreement and the Long-Term Performance Award during the six-month period immediately following the Participant’s separation from service shall instead be paid on the first business day after the date that is six months following the Participant’s separation from service (or, if earlier, the Participant’s death). The Company makes no representation that any or all of the payments described in this Agreement and the Long-Term Performance Award will be exempt from or comply with Section 409A of the Code and makes no undertaking to preclude Section 409A of the Code from applying to any such payment. The Participant understands and agrees that he or she shall be solely responsible for the payment of any taxes and penalties incurred under Section 409A.

6.14 Disclosure Regarding Use of Personal Information.

(a) Definition and Use of “Personal Information”. In connection with the grant of the Long-Term Performance Award, and any other award under other incentive award programs, and the implementation and administration of any such program, including, without limitation, the Participant’s actual participation, or consideration by the Company for potential future participation, in any program at any time, it is or may become necessary for the Company to collect, transfer, use, and hold certain personal information regarding Participant in and/or outside of Participant’s country of employment. The “Personal Information” the Company may collect, process, store and transfer for the purposes outlined above may include the Participant’s name, nationality, citizenship, tax or other residency status, work authorization, date of birth, age, government/tax identification number, passport number, brokerage account information, GEID or other internal identifying information, home address, work address, job and location history, compensation and incentive award information and history, business unit, employing entity, and the Participant’s beneficiaries and contact information. The Participant may obtain more details regarding the access and use of his or her personal information, and may correct or update such information, by contacting his or her human resources representative or local equity coordinator.

(b) Use, Transfer, Storage and Processing of Personal Information. The use, transfer, storage and processing of Personal Information electronically or otherwise, may be in connection with the Company’s internal administration of its incentive award programs, or in connection with tax or other governmental and regulatory compliance activities directly or indirectly related to an incentive award program. To the extent permitted by law, Personal Information may be used by third parties retained by the Company to assist with the administration and compliance activities of its incentive award programs, and may be transferred by the entity that employs (or any entity that has employed) the Participant from the Participant’s country of employment to the Company (or its Affiliates or Subsidiaries) and third parties located in the U.S. and in other countries. Specifically, those parties that may have access to the Participant’s Personal Information for the purposes described herein include, but are not limited to: (i) human resources personnel responsible for administering the award programs, including local and regional equity award coordinators, and global coordinators located in the U.S.; (ii) Participant’s U.S. broker and equity account administrator and trade facilitator; (iii) Participant’s U.S., regional and local employing entity and business unit management, including Participant’s supervisor and his or her superiors; (iv) the Administrator; (v) the Company’s technology systems support team (but only to the extent necessary to maintain the proper operation of electronic information systems that support the incentive award programs); and (vi) internal and

external legal, tax and accounting advisors (but only to the extent necessary for them to advise the Company on compliance and other issues affecting the incentive award programs in their respective fields of expertise). At all times, Company personnel and third parties will be obligated to maintain the confidentiality of the Participant's Personal Information except to the extent the Company is required to provide such information to governmental agencies or other parties. Such action will always be undertaken only in accordance with applicable law.

ARTICLE VII

DEFINITIONS

Wherever the following terms are used in the Agreement they shall have the meanings specified below, unless the context clearly indicates otherwise. The singular pronoun shall include the plural where the context so indicates.

7.1 "Disability" shall mean a condition such that an individual would be considered disabled for the purposes of Section 409(A) of the Code.

7.2 "Retirement" shall mean a "separation from service" (within the meaning of Section 409A of the Code) with the Company and all Affiliates (other than for Cause) after attaining eligibility for Retirement. A Participant attains eligibility for Retirement upon the earlier of (a) age 65 or (b) age 55 with at least ten (10) whole years of consecutive Service starting from the Participant's most recent hire date with the Company and all Affiliates. For the avoidance of doubt, the phrase "consecutive service" in the preceding sentence shall not include time spent by the Participant:

(a) as a consultant or advisor to the Company or its Affiliates following a "separation from service" within the meaning of Section 409A of the Code;

(b) engaged as an independent sales agent affiliated with one of the Company's or its Affiliates' real estate brands; or

(c) employed with or providing services to any business acquired by the Company or any Affiliate prior to the time such business was acquired by the Company or any Affiliate or employed with or providing services to any business after the time such business was divested by the Company or any Affiliate.

7.3 "Service" or "Services" shall mean services performed by the Participant for the Company or its Affiliates as an Employee, consultant or adviser, provided that services performed by a Participant in the capacity as an independent sales agent affiliated with one of the Company's or its Affiliates' real estate brands shall not constitute Service.

REALOGY HOLDINGS CORP.
2018 LONG-TERM INCENTIVE PLAN

TIME VESTED CASH AWARD NOTICE OF GRANT & TIME-VESTED CASH AWARD AGREEMENT

Realogy Holdings Corp. (the “Company”), pursuant to Section 8.1 of the Company’s 2018 Long-Term Incentive Plan (the “Plan”), hereby grants to the individual listed below (the “Participant”), a Time-Vested Cash Award. The Time-Vested Cash Award is subject to all of the terms and conditions set forth herein and in the Time-Vested Cash Award agreement attached hereto as Exhibit A (the “Agreement”) and the Plan, which are incorporated herein by reference. In addition, as a condition to receiving this Time-Vested Cash Award, the Participant understands and agrees to be bound by and comply with the restrictive covenants and other provisions set forth in the agreement attached hereto as Exhibit B to this Agreement (the “Restrictive Covenants Agreement”), a copy of which the Participant acknowledges receipt. The Participant understands and agrees that the Restrictive Covenants Agreement shall survive the grant, vesting or termination of the Time-Vested Cash Award, and any termination of employment of the Participant, and that full compliance with the Restrictive Covenants Agreement is an express condition precedent to (i) the receipt, delivery and vesting of any portion of the Time-Vested Cash Award and (ii) any rights to any payments with respect to the Time-Vested Cash Award.

Unless otherwise defined herein, the terms defined in the Plan shall have the same defined meanings in this Notice of Grant (“Notice”) and the Agreement.

Participant: {Participant Name}

Grant Date: _____

Value of Time-Vested Cash Award: {Cash Award Granted}

Vesting Dates: One-third of the Time-Vested Cash Award will vest on each of the first three grant anniversary dates: _____, _____, and _____ (each, a “Vesting Date”).

By accepting this Time-Vested Cash Award, the Participant agrees to be bound by the terms and conditions of the Plan, the Agreement and this Notice, including the Restrictive Covenants Agreement. The Participant has reviewed the Agreement, the Plan and this Notice in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Notice and fully understands all provisions of this Notice, the Agreement and the Plan. The Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or relating to the Plan, this Notice or the Time-Vested Cash Award.

Participant's Consent Regarding Use of Personal Information. By accepting this Time-Vested Cash Award, the Participant explicitly consents (i) to the use of the Participant's Personal Information (as defined in Section 6.13 of the Agreement and to the extent permitted by law) for the purpose of implementing, administering and managing the Participant's Time-Vested Cash Award under the Plan and of being considered for participation in future equity, deferred cash or other award programs (to the extent he/she is eligible under the terms of such plan or program, and without any guarantee that any award will be made); and (ii) to the use, transfer, processing and storage, electronically or otherwise, of his/her Personal Information, as such use has occurred to date, and as such use may occur in the future, in connection with this or any equity or other award, as described above.

Note: Participants electing to accept this grant via the Fidelity Stock Plan Services Net Benefits OnLine Grant Award Acceptance Process are not required to print and sign this Agreement.

REALOGY HOLDINGS CORP. PARTICIPANT

By: _____ By: _____

Print Name: Print Name: {Participant Name}

Title:

Exhibit A: TIME-VESTED CASH AWARD AGREEMENT

Pursuant to the Time-Vested Cash Award Notice of Grant (the “Notice”) to which this Time-Vested Cash Award Agreement (this “Agreement”) is attached, Realogy Holdings Corp. (the “Company”) has granted to the Participant, pursuant to Section 8.1 of the Company’s 2018 Long-Term Incentive Plan (the “Plan”), the Time-Vested Cash Award indicated in the Notice. Capitalized terms not specifically defined herein shall have the meanings specified in the Plan and Notice.

ARTICLE I

GENERAL

1.1 Incorporation of Terms of Plan. The Time-Vested Cash Award is subject to the terms and conditions of the Plan, which are incorporated herein by reference. In the event of any inconsistency between the Plan and this Agreement, the terms of the Plan shall control.

ARTICLE II

GRANT OF TIME-VESTED CASH AWARD

2.1 Grant of Time-Vested Cash Award. In consideration of the Participant’s past and/or continued employment with or Services to the Company or any Affiliate and for other good and valuable consideration, effective as of the Grant Date set forth in the Notice (the “Grant Date”), the Company grants to the Participant Time-Vested Cash Award as set forth in the Notice, upon the terms and conditions set forth in the Plan and this Agreement, and subject to the Participant’s full compliance at all times with the restrictive covenants and other provisions set forth in the Restrictive Covenants Agreement (as defined in the Notice), which is an express condition precedent to (i) the receipt, delivery and vesting of any portion of the Time-Vested Cash Award and (ii) any rights to any payments with respect to the Time-Vested Cash Award.

2.2 Consideration to the Company. In consideration of the grant of the Time-Vested Cash Award by the Company, the Participant agrees to render Services to the Company or any Affiliate and to comply at all times with the Restrictive Covenants Agreement. Nothing in the Plan or this Agreement shall confer upon the Participant any right to continue in the employ or Service of the Company or any Affiliate or shall interfere with or restrict in any way the rights of the Company and its Affiliates, which rights are hereby expressly reserved, to discharge or terminate the Services of the Participant at any time for any reason whatsoever, with or without Cause, except to the extent expressly provided otherwise in a written agreement between the Company or an Affiliate and the Participant.

ARTICLE III

RESTRICTIONS AND RESTRICTION PERIOD

3.1 Restrictions. The Time-Vested Cash Award granted hereunder may not be sold, assigned, transferred, pledged, hypothecated or otherwise disposed of and shall be subject to a risk of forfeiture as described in Section 4.1 below until the Time-Vested Cash Award vests.

3.2 Restricted Period. Subject to Articles 4 and 5 of this Agreement, the Time-Vested Cash Award shall vest on each Vesting Date as set forth in the Notice.

3.3 Settlement of Time-Vested Cash Award. The Time-Vested Cash Award represents the right to receive a cash payment, subject to the fulfillment of the vesting and other conditions set forth in this Agreement. Except as set forth in Sections 4.2, 4.3 and 5.1 of this Agreement, within a reasonable period of time following vesting of the Time-Vested Cash Award (and in no event more than 60 days following such vesting), the Company shall pay and transfer to the Participant a cash payment equal to the value of the portion of the Time-Vested Cash Award that vested, subject to the Participant’s full compliance at all times with the Restrictive Covenants Agreement. The Company and its Affiliates shall have the authority and the right to deduct or withhold, or require the Participant to remit to the Company or an Affiliate, an amount sufficient to satisfy federal, state, local and foreign taxes (including the Participant’s social security, Medicare and any other employment tax obligation) required by law to be withheld with respect to any taxable event concerning a Participant arising in connection with the Time-Vested Cash Award.

3.4 No Rights as a Stockholder. The Time-Vested Cash Award is not an equity interest in the Company and the Participant shall not be or have any of the rights or privileges of a stockholder of the Company with respect to the Time-Vested Cash Award.

3.5 No Dividend or Dividend Equivalents Rights. The Time-Vested Cash Award carries no dividend or dividend equivalent rights related to any cash or other dividend paid by the Company while the Time-Vested Cash Award is outstanding.

ARTICLE IV

FORFEITURES

4.1 Termination of Employment. Except as provided in Sections 4.2, 4.3 and 5.1 of this Agreement, if the Participant terminates employment with or ceases to provide Services to the Company or any Affiliate for any reason, then the Time-Vested Cash Award, to the extent not vested, shall be forfeited to the Company without payment of any consideration by the Company, and neither the Participant nor any of his or her successors, heirs, assigns or personal representatives shall thereafter have any further rights or interests in such Time-Vested Cash Award.

4.2 Retirement. In the case of a Participant's Retirement on or following the first anniversary of the Grant Date, the Time-Vested Cash Award, to the extent not vested, shall become fully vested upon such Retirement and the Company shall pay and transfer to the Participant cash payments in such amounts and at such times as are set forth in the Notice as if the Participant had remained employed with the Company, provided that the Participant fully complies at all times with the Restrictive Covenants Agreement.

4.3 Death or Disability. If the Participant terminates employment with or ceases to provide Services to the Company or any Affiliate on account of death or Disability, the Time-Vested Cash Award, to the extent not vested, shall become fully vested upon such termination of employment or Services and shall be paid in accordance with Section 3.3 above.

ARTICLE V

CHANGE IN CONTROL

5.1 Change in Control. In the event of a Change in Control:

(a) With respect to each outstanding Time-Vested Cash Award that is assumed or substituted in connection with a Change in Control, in the event that during the twenty-four (24) month period following such Change in Control a Participant's employment or Service is terminated without Cause by the Company or any Affiliate or the Participant resigns from employment or Service from the Company or any Affiliate with Good Reason, (i) the restrictions, payment conditions, and forfeiture conditions applicable to such Time-Vested Cash Award shall lapse (but, the Participant's obligations under the Restrictive Covenants Agreement and this Agreement shall not lapse), and (ii) such Time-Vested Cash Award shall become fully vested and payable within ten (10) days following such termination of employment or Services.

(b) With respect to each outstanding Time-Vested Cash Award that is not assumed or substituted in connection with a Change in Control, except as would result in the imposition of additional taxes and penalties under Section 409A of the Code, immediately upon the occurrence of the Change in Control, (i) the restrictions, payment conditions, and forfeiture conditions applicable to such Time-Vested Cash Award granted shall lapse (but, the Participant's obligations under the Restrictive Covenants Agreement and this Agreement shall not lapse), and (ii) such Time-Vested Cash Award shall become fully vested and payable within ten (10) days following the Change in Control.

5.2 Assumption/Substitution. For purposes of Section 5.1, a Time-Vested Cash Award shall be considered assumed or substituted for if, following the Change in Control, the Time-Vested Cash Award remains subject to the same terms and conditions that were applicable to the Time-Vested Cash Award immediately prior to the Change in Control.

ARTICLE VI

MISCELLANEOUS

6.1 Administration. The Administrator shall have the power to interpret the Plan, the Restrictive Covenants Agreement and this Agreement and to adopt such rules for the administration, interpretation and application of the Plan as are consistent therewith and to interpret, amend or revoke any such rules. All actions taken and all interpretations and determinations made by the Administrator in good faith shall be final and binding upon the Participant, the Company and all other interested persons. No member of the Administrator or the Board shall be personally liable for any action, determination or interpretation made in good faith with respect to the Plan, this Agreement or the Time-Vested Cash Award.

6.2 Restrictions on Transfer. Any unvested portion of a Time-Vested Cash Award may not be transferred or otherwise disposed of by the Participant, including by way of sale, assignment, transfer, pledge, hypothecation or otherwise, except as permitted by the Administrator, or by will or the laws of descent and distribution.

6.3 Invalid Transfers. No purported sale, assignment, mortgage, hypothecation, transfer, pledge, encumbrance, gift, transfer in trust (voting or other) or other disposition of, or creation of a security interest in or lien on, any unvested portion of the Time-Vested Cash Award by any holder thereof in violation of the provisions of this Agreement shall be valid, and the Company will not transfer any of said unvested Time-Vested Cash Award on its books or otherwise, unless and until there has been full compliance with said provisions to the satisfaction of the Company. The foregoing restrictions are in addition to and not in lieu of any other remedies, legal or equitable, available to enforce said provisions.

6.4 Termination of Employment or Service/Breach of the Restrictive Covenants Agreement. The Administrator, in its sole discretion, shall determine the effect of all matters and questions relating to termination of employment or Service, including without limitation, whether a termination has occurred, whether any termination resulted from a discharge for Cause and whether any particular leave of absence constitutes a termination, as well as whether the Participant has fully complied with the Restrictive Covenants Agreement for purposes of this Agreement.

6.5 Notices. Any notice to be given under the terms of this Agreement to the Company shall be addressed to the Company in care of the Chief Human Resources Officer at the Company's principal office, and any notice to be given to the Participant shall be addressed to the Participant's last address reflected on the Company's records.

6.6 Titles. Titles are provided herein for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.

6.7 Governing Law. The laws of the State of Delaware shall govern the interpretation, validity, administration, enforcement and performance of the terms of this Agreement regardless of the law that might be applied under principles of conflicts of laws.

6.8 Amendments, Suspension and Termination. To the extent permitted by the Plan, this Agreement may be wholly or partially amended or otherwise modified, suspended or terminated at any time or from time to time by the Administrator or the Board; provided, however, that, except as may otherwise be provided by the Plan, no amendment, modification, suspension or termination of this Agreement shall adversely affect the Time-Vested Cash Award in any material way without the prior written consent of the Participant.

6.9 Successors and Assigns. The Company may assign any of its rights under this Agreement to single or multiple assignees, and this Agreement shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth in this Article 6, this Agreement shall be binding upon the Participant and his or her heirs, executors, administrators, successors and assigns.

6.10 Unfunded Status of Awards. With respect to any payments not yet made to the Participant pursuant to the Plan, including this Time-Vested Cash Award, nothing contained in the Plan, the Notice, the Restrictive Covenants Agreement or this Agreement shall give the Participant any rights that are greater than those of a general creditor of the Company or any Affiliate.

6.11 Entire Agreement. The Plan, the Notice, the Restrictive Covenants Agreement and this Agreement (including all Exhibits thereto, if any) constitute the entire agreement of the parties and supersede in

their entirety all prior undertakings and agreements of the Company and the Participant with respect to the subject matter hereof.

6.12 Section 409A. The intent of the parties is that payments and benefits under this Agreement and the Time-Vested Cash Award be exempt from, or comply with, Section 409A of the Internal Revenue Code (the “Code”), and accordingly, to the maximum extent permitted, this Agreement and the Award shall be interpreted and administered to be in accordance therewith. Notwithstanding anything contained herein to the contrary, the Participant shall not be considered to have terminated employment with the Company for purposes of any payments under this Agreement and the Time-Vested Cash Award which are subject to Section 409A of the Code until the Participant would be considered to have incurred a “separation from service” from the Company within the meaning of Section 409A of the Code. Each amount to be paid or benefit to be provided under this Agreement and the Time-Vested Cash Award shall be construed as a separate identified payment for purposes of Section 409A of the Code, and any payments described in this Agreement and the Time-Vested Cash Award that are due within the “short term deferral period” as defined in Section 409A of the Code shall not be treated as deferred compensation unless applicable law requires otherwise. Without limiting the foregoing and notwithstanding anything contained herein to the contrary, to the extent required in order to avoid accelerated taxation and/or tax penalties under Section 409A of the Code, amounts that would otherwise be payable and benefits that would otherwise be provided pursuant to this Agreement and the Time-Vested Cash Award during the six-month period immediately following the Participant’s separation from service shall instead be paid on the first business day after the date that is six months following the Participant’s separation from service (or, if earlier, the Participant’s death). The Company makes no representation that any or all of the payments described in this Agreement and the Time-Vested Cash Award will be exempt from or comply with Section 409A of the Code and makes no undertaking to preclude Section 409A of the Code from applying to any such payment. The Participant understands and agrees that he or she shall be solely responsible for the payment of any taxes and penalties incurred under Section 409A.

6.13 Disclosure Regarding Use of Personal Information.

(a) Definition and Use of “Personal Information”. In connection with the grant of the Time-Vested Cash Award, and any other award under other incentive award programs, and the implementation and administration of any such program, including, without limitation, the Participant’s actual participation, or consideration by the Company for potential future participation, in any program at any time, it is or may become necessary for the Company to collect, transfer, use, and hold certain personal information regarding Participant in and/or outside of Participant’s country of employment. The “Personal Information” the Company may collect, process, store and transfer for the purposes outlined above may include the Participant’s name, nationality, citizenship, tax or other residency status, work authorization, date of birth, age, government/tax identification number, passport number, brokerage account information, GEID or other internal identifying information, home address, work address, job and location history, compensation and incentive award information and history, business unit, employing entity, and the Participant’s beneficiaries and contact information. The Participant may obtain more details regarding the access and use of his or her personal information, and may correct or update such information, by contacting his or her human resources representative or local equity coordinator.

(b) Use, Transfer, Storage and Processing of Personal Information. The use, transfer, storage and processing of Personal Information electronically or otherwise, may be in connection with the Company’s internal administration of its incentive award programs, or in connection with tax or other governmental and regulatory compliance activities directly or indirectly related to an incentive award program. To the extent permitted by law, Personal Information may be used by third parties retained by the Company to assist with the administration and compliance activities of its incentive award programs, and may be transferred by the entity that employs (or any entity that has employed) the Participant from the Participant’s country of employment to the Company (or its Affiliates or Subsidiaries) and third parties located in the U.S. and in other countries. Specifically, those parties that may have access to the Participant’s Personal Information for the purposes described herein include, but are not limited to: (i) human resources personnel responsible for administering the award programs, including local and regional equity award coordinators, and global coordinators located in the U.S.; (ii) Participant’s U.S. broker and equity account administrator and trade facilitator; (iii) Participant’s U.S., regional and local employing entity and business unit management, including Participant’s supervisor and his or her superiors; (iv) the Administrator; (v) the Company’s technology systems support team (but only to the extent necessary to maintain the proper operation of electronic information systems that support the incentive award programs); and (vi) internal and

external legal, tax and accounting advisors (but only to the extent necessary for them to advise the Company on compliance and other issues affecting the incentive award programs in their respective fields of expertise). At all times, Company personnel and third parties will be obligated to maintain the confidentiality of the Participant's Personal Information except to the extent the Company is required to provide such information to governmental agencies or other parties. Such action will always be undertaken only in accordance with applicable law.

ARTICLE VII

DEFINITIONS

Wherever the following terms are used in this Agreement they shall have the meanings specified below, unless the context clearly indicates otherwise. The singular pronoun shall include the plural where the context so indicates.

7.1 "Disability" shall mean a condition such that an individual would be considered disabled for the purposes of Section 409(A) of the Code.

7.2 "Retirement" shall mean a "separation from service" (within the meaning of Section 409A of the Code) with the Company and all Affiliates (other than for Cause) after attaining eligibility for Retirement. A Participant attains eligibility for Retirement upon the earlier of (a) age 65 or (b) age 55 with at least ten (10) whole years of consecutive Service starting from the Participant's most recent hire date with the Company and all Affiliates. For the avoidance of doubt, the phrase "consecutive service" in the preceding sentence shall not include time spent by the Participant:

(a) as a consultant or advisor to the Company or its Affiliates following a "separation from service" within the meaning of Section 409A of the Code;

(b) engaged as an independent sales agent affiliated with one of the Company's or its Affiliates' real estate brands; or

(c) employed with or providing services to any business acquired by the Company or any Affiliate prior to the time such business was acquired by the Company or any Affiliate or employed with or providing services to any business after the time such business was divested by the Company or any Affiliate.

7.3 "Service" or "Services" shall mean services performed by the Participant for the Company or its Affiliates as an Employee, consultant or advisor, provided that services performed by a Participant in the capacity as an independent sales agent affiliated with one of the Company's or its Affiliates' real estate brands shall not constitute Service.

REALOGY HOLDINGS CORP.
EXECUTIVE SEVERANCE AGREEMENT

THIS SEVERANCE AGREEMENT (this “Agreement”) is hereby entered into as of July 9, 2018, by and between Realogy Holdings Corp. (the “Company”) and Katrina L. Helmkamp (“Executive”) (hereinafter collectively referred to as the “Parties”).

In consideration of the respective agreements of the Parties contained herein, it is agreed as follows:

1. Term. The term of employment shall commence on July 9, 2018 (the “Effective Date”) and end on the date of termination of employment pursuant to Section 5 (the “Term”), and Executive shall be an “employee at will.”

2. Employment. During the Term:

(a) Executive shall be assigned with the duties and responsibilities of President and Chief Executive Officer, Cartus Corporation or as may reasonably be assigned to Executive from time to time by the Chief Executive Officer of the Company. Executive shall perform such duties, undertake the responsibilities, and exercise the authorities customarily performed, undertaken and exercised by persons situated in a similar executive capacity at a similar company. In performing Executive’s duties hereunder, Executive shall report to the Chief Executive Officer and President of the Company. If, at any time, Executive is elected as a director of the Company or as a director or officer of any of the Company’s Affiliates, Executive will fulfill Executive’s duties as such director or officer without additional compensation.

(b) Executive shall devote Executive’s full-time business attention to the business and affairs of the Company and its Affiliates and shall use Executive’s best efforts to faithfully and diligently serve the business and affairs of the Company and its Affiliates. Notwithstanding the foregoing, Executive may, subject to the Company’s policy as in effect from time to time, (i) serve on civic, charitable or non-profit boards or committees, (ii) serve on for-profit boards or committees, subject to the approval of the Compensation Committee or with respect to service on public boards, the Board, which approval shall not be unreasonably withheld or delayed, and (iii) manage personal and family investments and affairs, participate in industry organizations and deliver lectures at educational institutions, in each case so long as such service and activity does not interfere, individually or in the aggregate, with the performance of her responsibilities hereunder and subject to the code of conduct and other applicable policies of the Company and its Affiliates as in effect from time to time.

(c) Executive shall be subject to and shall abide by each of the personnel and compliance policies of the Company and its Affiliates applicable and communicated in writing to senior executives, including, without limitation, the Company’s Clawback Policy as in effect from time to time.

3. Annual Compensation.

(a) Base Salary. The Company agrees to pay or cause to be paid to Executive during the Term a base salary at the rate of \$650,000 per annum or such increased amount as the Compensation Committee of the Board of Directors of the Company (the “Committee”) may from time to time determine (the “Base Salary”); provided, however, Executive’s Base Salary may be reduced up to 10% in connection with a broader compensation reduction that applies similarly to all senior executives of the Company. Such Base Salary shall be payable in accordance with the Company’s customary practices applicable to its executives, but no less frequently than monthly.

(b) Inducement Equity Grant. On the Effective Date, Executive shall be granted a restricted stock unit award under the Company’s 2018 Long-Term Incentive Plan with a grant date fair value \$400,000, which shall

vest in three equal installments on each of the first three grant anniversary dates, based on continued service through each vesting date.

(c) Incentive Compensation. For each fiscal year of the Company ending during the Term, Executive shall be eligible to receive annual cash incentive compensation (the "Incentive Compensation"). Executive shall be eligible to individual target eligible funding under the annual cash bonus of 100% of her "eligible earnings" (as defined below) for the applicable bonus year, as may hereafter be increased (the "Individual Target Eligible Funding"), with the opportunity to receive a cash bonus subject to and in accordance with the terms of the applicable annual cash bonus plan as in effect from time to time, which may include payments based upon Company performance measures and/or Executive's relative individual performance. For purposes of this Agreement, "eligible earnings" in respect of such bonus year shall be calculated in accordance with the applicable annual cash bonus plan as in effect from time to time. Such annual cash bonus shall be paid in no event later than March 15th of the taxable year following the end of the taxable year to which the performance targets relate, provided that Executive is employed by the Company or one of its Affiliates through the date specified in the annual cash bonus plan.

(d) Long-Term Incentive Compensation. With respect to the 2019 fiscal year, Executive shall be entitled to receive a long-term incentive award with an aggregate grant date fair value of \$1,000,000, but the composition and terms of the grants shall be determined by the Committee which shall be allocated across various equity vehicles and shall be generally consistent with the grants made to the senior executives of the Company. For each subsequent fiscal year of the Company ending during the Term, Executive may be eligible for long-term incentive compensation awards as determined by the Compensation Committee in its sole discretion.

4. Other Benefits.

(a) Employee Benefits. During the Term, Executive shall be entitled to participate in all employee benefit plans, practices and programs maintained by the Company or its Affiliates and made available to employees of the Company generally, including, without limitation, all retirement, savings, medical, hospitalization, disability, dental, life or travel accident insurance benefit, and vacation/paid time-off plans and policies, to the extent Executive is eligible under the terms of such plans. Executive's participation in such plans, practices and programs shall be commensurate with Executive's position at the Company. Executive shall also be entitled to participate in a death and dismemberment benefit plan that shall provide death and dismemberment insurance in the amount of two and a half times Executive's Base Salary at the time of death or dismemberment up to \$2 million, subject to Executive's eligibility of insurability. For the avoidance of doubt, Executive shall not be entitled to any excise tax gross-up under Section 280G or 4999 of the Internal Revenue Code of 1986, as amended (the "Code") (or any successor provision) or any other tax gross-up.

(b) Relocation Expenses. Executive shall be eligible for relocation assistance in accordance with Realogy's Renter Relocation Policy Plan to relocate from Pennsylvania to Connecticut; provided that such relocation must be executed within one year of that date of Executive's execution of this Agreement. Executive acknowledges and expressly agrees that should she voluntarily terminate her employment (including for Good Reason, as defined herein) or be involuntarily terminated by the Company for Cause (as defined herein) within twelve (12) months of the Effective Date, Executive shall repay the Company the full amount of any relocation benefits she has received.

(c) Business Expenses. Upon submission of proper invoices in accordance with the Company's normal procedures, Executive shall be entitled to receive prompt reimbursement of all reasonable out-of-pocket business, entertainment and travel expenses incurred by Executive in connection with the performance of Executive's duties hereunder that have been incurred in accordance with the Company's business expense and travel and entertainment policies in effect from time to time. Such reimbursement shall be made as soon as practicable and in no event later than the end of the calendar year following the calendar year in which the expenses were incurred.

5. Termination. The Term and Executive's employment hereunder may be terminated under the circumstances set forth below; provided, however, that notwithstanding anything contained herein to the contrary,

Executive shall not have any duties or responsibilities to the Company after Executive's termination of employment that would preclude Executive from having a "separation from service" from the Company within the meaning of Section 409A of the Code, upon such termination of employment.

(a) Disability. The Company may terminate Executive's employment, on written notice to Executive after having reasonably established Executive's Disability (as defined below). For purposes of this Agreement, "Disability" means (i) Executive's inability to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment that can be expected to result in death or can be expected to last for a continuous period of not less than 12 months, or (ii) Executive is, by reason of any medically determinable physical or mental impairment that can be expected to result in death or can be expected to last for a continuous period of not less than 12 months, receiving income replacement benefits for a period of not less than three months under an accident or health plan covering employees of the Company. Whether Executive has incurred a "Disability" shall be determined by a physician selected by the Company or its insurers. Executive shall be entitled to the compensation and benefits provided for under this Agreement for any period prior to Executive's termination by reason of Disability during which Executive is unable to work due to a physical or mental infirmity in accordance with the Company's policies for similarly-situated executives (without duplication of compensation and benefits payable under any applicable disability policies).

(b) Death. Executive's employment shall be terminated as of the date of Executive's death.

(c) Cause. The Company may terminate Executive's employment for "Cause" by providing a Notice of Termination (as defined in Section 6 below) that notifies Executive of her termination for Cause (as defined below), effective as of the date of such notice. For purposes of this Agreement, "Cause" shall mean (i) Executive's willful failure to substantially perform her duties as an employee of the Company or any subsidiary (other than any such failure resulting from incapacity due to physical or mental illness), (ii) any act of fraud, misappropriation, dishonesty, embezzlement or similar conduct against the Company or any subsidiary, (iii) Executive's conviction of, or plea of guilty or nolo contendere to a charge of commission of, a felony or crime involving moral turpitude, (iv) Executive's indictment for a charge of commission of a felony or any crime involving moral turpitude, provided that the Board of Directors of the Company (the "Board") determines in good faith that such indictment would result in a material adverse impact to the business or reputation of the Company, (v) Executive's gross negligence in the performance of her duties, (vi) Executive purposefully or negligently makes (or has been found to have made) a false certification to the Company pertaining to its financial statements, (vii) the habitual use of drugs or habitual, excessive use of alcohol to the extent that any of such uses in the Board's good faith determination materially interferes with the performance of Executive's duties under this Agreement, (viii) a breach of fiduciary duty and/or (ix) a material breach by Executive of any of the terms and conditions of this Agreement or a material breach of any of Executive's representations in this Agreement. A termination will not be for "Cause" pursuant to clause (i), (ii), (v) or (ix), to the extent such conduct is curable, unless the Company shall have notified Executive in writing describing such conduct and Executive shall have failed to cure such conduct within ten (10) business days after her receipt of such written notice.

(d) Without Cause. The Company may terminate Executive's employment other than for Cause, Disability or death. The Company shall deliver to Executive a Notice of Termination and the Company may, in its sole discretion, select any date as the effective date for Executive's termination of employment other than for Cause, Disability or death.

(e) Termination by Executive Without Good Reason. Executive may voluntarily terminate Executive's employment without Good Reason by delivering to the Company a Notice of Termination not less than thirty (30) days prior to the termination of Executive's employment, and the Company may, in its sole discretion, select any date within such notice period as the effective date for Executive's termination of employment without Good Reason.

(f) Termination by Executive for Good Reason. Executive may terminate employment with the Company for Good Reason (as defined below) by delivering to the Company a Notice of Termination not less than thirty (30) days prior to the termination of Executive's employment for Good Reason. The Company shall have the

option of terminating Executive's duties and responsibilities prior to the expiration of such thirty-day notice period. For purposes of this Agreement, "Good Reason" means voluntary resignation after any of the following actions taken by the Company or any of its subsidiaries without Executive's consent: (i) a reduction in Base Salary or Individual Target Eligible Funding (not including any diminution in Base Salary permitted by Section 3(a) of this Agreement); (ii) a material breach by the Company of a material provision of this Agreement (which for the avoidance of doubt includes Section 2(a) of this Agreement, but which would not include any promotion or lateral assignment); or (iii) a material reduction of Executive's duties and responsibilities to the Company occurring on or after a Change in Control (other than any such reduction resulting from incapacity due to physical or mental illness). Executive shall provide notice of the existence of the Good Reason condition within ninety (90) days of the date Executive learns of the condition, and the Company shall have a period of thirty (30) days during which it may remedy the condition, and in case of full remedy such condition shall not be deemed to constitute Good Reason hereunder. In the event the Company is unable to remedy the Good Reason condition in all material respects within the thirty (30) day period, Executive's employment with the Company shall terminate for Good Reason at the expiration of the thirty (30) day period.

(g) Termination by Executive for Retirement. Executive may voluntarily terminate Executive's employment due to Retirement (as defined below) by delivering to the Company a Notice of Termination not less than thirty (30) days prior to the termination of Executive's employment, and the Company may, in its sole discretion, select any date within such notice period as the effective date for Executive's termination of employment due to Retirement. For purposes of this Agreement, "Retirement" means a "separation from service" (as defined in Section 409A of the Code) with the Company and all Affiliates (other than for Cause) after attaining eligibility for Retirement. Executive attains eligibility for Retirement upon the earlier of (i) age 65 or (ii) age 55 with at least ten (10) whole years of service with the Company and all Affiliates.

6. Notice of Termination. Any purported termination by the Company or by Executive shall be communicated by written Notice of Termination (as defined below) to the other Party hereto. For purposes of this Agreement, a "Notice of Termination" shall mean a notice that indicates a termination date, the specific termination provision in this Agreement relied upon and sets forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of Executive's employment under the provision so indicated. For purposes of this Agreement, no such purported termination of Executive's employment hereunder shall be effective without such Notice of Termination (unless waived by the Party entitled to receive such notice, in the manner described in Section 12(j) below).

7. Compensation Upon Termination. Executive shall be eligible to receive the compensation under this Section 7 only for any termination of employment occurring (A) prior to the third anniversary of the Effective Date or (B) following a Change in Control (as defined herein), prior to the later of (i) the third anniversary of the Effective Date and (ii) the second anniversary of the Change in Control, in either case, subject to earlier termination as set forth in Section 5. For the avoidance of doubt, the use of "Term" in this Section 7 shall cover only the period described in the preceding sentence.

(a) Termination by the Company for Cause or by Executive Other Than for Good Reason. If Executive's employment is terminated (A) by the Company for Cause or (B) by Executive for any reason, other than for Good Reason, in either case, during the Term, the Company shall provide Executive with the following payments and benefits:

(i) any accrued and unpaid Base Salary;

(ii) except in the event a termination of employment by the Company for Cause, any annual bonus earned but unpaid in respect of any completed fiscal year preceding the termination date;

(iii) reimbursement for any and all monies advanced or expenses incurred in connection with Executive's employment for reasonable and necessary expenses incurred by Executive on behalf of the Company for the period ending on the termination date in accordance with the Company's expense reimbursement and travel and entertainment policies in effect from time to time;

(iv) any accrued and unpaid vacation pay in accordance with the terms of the Company's vacation policy as in effect from time to time;

(v) any previous compensation that Executive has previously deferred (including any interest earned or credited thereon), in accordance with the terms and conditions of the applicable deferred compensation plans or arrangements then in effect, to the extent vested as of Executive's termination date; and

(vi) any amount or benefit as provided under any plan, program, agreement or corporate governance document of the Company or its Affiliates that are then-applicable, in accordance with the terms thereof.

(the foregoing items in Sections 7(a)(i) through 7(a)(vi) being collectively referred to as the "Accrued Compensation").

(b) Termination by the Company for Disability. If Executive's employment is terminated by the Company for Disability during the Term, the Company shall pay or provide to Executive:

(i) the Accrued Compensation; and

(ii) an amount equal to the Incentive Compensation that Executive would have been entitled to receive in respect of the fiscal year in which Executive's termination date occurs, had Executive continued in employment through the date the payment is made, which amount, determined based on the Company's actual performance for such year relative to the performance goals applicable to Executive shall be multiplied by a fraction (A) the numerator of which is the number of days in such fiscal year through termination date and (B) the denominator of which is 365 (the "Pro-Rata Bonus") and shall be payable in a lump sum payment at the time such bonus or incentive awards are payable to other participants.

(c) Termination By Reason of Death. If Executive's employment is terminated by reason of Executive's death during the Term, the Company shall pay or provide to Executive's beneficiaries:

(i) the Accrued Compensation;

(ii) the Pro-Rata Bonus payable in a lump sum at the time such bonus or incentive awards are payable to other participants; and

(iii) a death insurance benefit in the amount of two and a half times Executive's Base Salary at the time of death (which shall be inclusive of any Company provided life insurance policy applicable to Executive) up to \$2 million, subject to Executive's eligibility of insurability.

(d) Termination by the Company Without Cause or by Executive for Good Reason Not In Connection With a Change in Control. If Executive's employment is terminated by the Company without Cause (other than on account of Executive's death or Disability) or by Executive for Good Reason, in either case, not in connection with a Change in Control (as defined in Section 7(e)) during the Term, Executive shall be entitled to the benefits provided in this Section 7(d):

(i) the Accrued Compensation;

(ii) the Pro-Rata Bonus payable in a lump sum at the time such bonus or incentive awards are payable to other participants;

(iii) subject to Executive's compliance with Sections 9 and 12(h) hereof, a payment equal to one times the sum of Executive's Base Salary and Annual Bonus (as defined below) as in effect immediately prior to Executive's termination of employment (or if greater, the Base Salary as in effect

immediately preceding the occurrence of the Good Reason condition) and such payment shall be made in twenty-four equal monthly installments, with the first installment payable in the first regular payroll occurring following the sixtieth (60th) day following such termination of employment;

(iv) subject to Executive's compliance with Sections 9 and 12(h) hereof, the Company shall provide Executive and Executive's dependents, if applicable, with continued coverage under the terms of the medical or dental program or policy as in effect from time to time at the Company for eighteen (18) months following such termination (which such 18 month period shall run concurrently with the COBRA period and which coverage shall become secondary to any Medicare coverage for which Executive becomes eligible) and Executive shall pay for such benefits at the same cost that active employees of the Company are required to pay for such benefits from time to time; provided, however, the Parties agree to cooperate such that the continued coverage is, to the extent practicable, provided in a manner so as to minimize adverse tax consequences to the Company under Section 4980D of the Code; provided, further, continued coverage shall cease at such time as Executive becomes eligible for coverage with a subsequent employer; and

(v) subject to Executive's compliance with Sections 9 and 12(h) hereof, the Company shall provide for the 12-month period beginning on the date on which Executive's employment terminates, or until Executive begins other full-time employment with a new employer, whichever occurs first, outplacement services that are directly related to the type of services Executive provided to the Company and are actually provided by an outplacement services firm, paid by the Company; provided, however, the cost of the outplacement services may not exceed \$50,000.

For purposes of this Agreement, "Annual Bonus" shall mean 100% of Base Salary.

(e) Termination by the Company Without Cause or by Executive for Good Reason Following a Change in Control. If during the two (2) year period following a Change in Control Executive's employment is terminated by the Company without Cause (other than on account of Executive's death or Disability) or by Executive for Good Reason, in either case, during the Term, Executive shall be entitled to the benefits provided in this Section 7(e):

(i) the Accrued Compensation;

(ii) the Pro-Rata Bonus payable in a lump sum at the time such bonus or incentive awards are payable to other participants;

(iii) subject to Executive's compliance with Sections 9 and 12(h) hereof, a payment equal to two times the sum of Executive's Base Salary and Annual Bonus as in effect immediately prior to Executive's termination of employment (or if greater, the Base Salary as in effect immediately preceding the occurrence of the Good Reason condition) payable in a lump sum in the first regular payroll occurring following the sixtieth (60th) day following such termination of employment; provided, however, if the Change in Control is not a change in the ownership or effective control of the Company or a change in ownership of a substantial portion of the assets of the Company under Section 409A of the Code, then the payments shall be made in twenty-four equal monthly installments;

(iv) subject to Executive's compliance with Sections 9 and 12(h) hereof, the Company shall provide Executive and Executive's dependents, if applicable, with continued coverage under the terms of the medical or dental program or policy as in effect from time to time at the Company for eighteen (18) months following such termination (which such 18 month period shall run concurrently with the COBRA period and which coverage shall become secondary to any Medicare coverage for which Executive becomes eligible) and Executive shall pay for such benefits at the same cost that active employees of the Company are required to pay for such benefits from time to time; provided, however, the Parties agree to cooperate such that the continued coverage is, to the extent practicable, provided in a manner so as to minimize adverse tax consequences to the Company under Section 4980D of the Code; provided, further,

continued coverage shall cease at such time as Executive becomes eligible for coverage with a subsequent employer; and

(v) subject to Executive's compliance with Sections 9 and 12(h) hereof, the Company shall provide for the 12-month period beginning on the date on which Executive's employment terminates, or until Executive begins other full-time employment with a new employer, whichever occurs first, outplacement services that are directly related to the type of services Executive provided to the Company and are actually provided by an outplacement services firm, paid by the Company; provided, however, the cost of the outplacement services may not exceed \$50,000.

For purposes of this Agreement, a "Change in Control" shall be deemed to have occurred if the event set forth in any one of the following paragraphs shall have occurred:

(I) the acquisition (other than from the Company), by any person (as such term is defined in Section 13(c) or 14(d) of the Securities and Exchange Act of 1934, as amended (the "Exchange Act")) of beneficial ownership (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of more than fifty percent (50%) of the combined voting power of the Company's then outstanding voting securities; or

(II) the individuals who, as of the date hereof, are members of the Board (the "Incumbent Board"), cease for any reason to constitute at least a majority of the Board, unless the election, or nomination for election by the Company's shareholders, of any new director was approved by a vote of at least a majority of the Incumbent Board, and such new director shall be considered as a member of the Incumbent Board; or

(III) there is consummated a merger or consolidation of the Company or any direct or indirect subsidiary of the Company with any other corporation or other entity, if (1) the shareholders of the Company, immediately before such merger or consolidation, do not, as a result of such merger or consolidation, own, directly or indirectly, more than fifty percent (50%) of the combined voting power of the then outstanding voting securities of the entity resulting from such merger or consolidation in substantially the same proportion as their ownership of the combined voting power of the voting securities of the Company outstanding immediately before such merger or consolidation or (2) immediately following the merger or consolidation, the individuals who comprised the Board immediately prior thereto do not constitute at least a majority of the board of directors of the entity resulting from such merger or consolidation (or, if the entity resulting from such merger or consolidation is then a subsidiary, the ultimate parent thereof); or

(IV) a complete liquidation or dissolution of the Company or the closing of an agreement for the sale or other disposition of all or substantially all of the assets of the Company.

Notwithstanding the foregoing, a Change in Control shall not be deemed to occur solely because more than fifty percent (50%) of the combined voting power of the Company's then outstanding securities is acquired by (x) a trustee or other fiduciary holding securities under one or more employee benefit plans maintained by the Company or any of its subsidiaries or (y) any corporation which, immediately prior to such acquisition, is owned directly or indirectly by the shareholders of the Company in the same proportion as their ownership of shares in the Company immediately prior to such acquisition.

(f) Termination by Executive for Retirement. If Executive's employment is terminated due to Executive's Retirement during the Term, the Company shall provide Executive with the following payments and benefits:

(i) the Accrued Compensation; and

(ii) the Pro-Rata Bonus payable in a lump sum at the time such bonus or incentive awards are payable to other participants.

For the avoidance of doubt, Executive's Retirement during the Term shall not be deemed a termination of employment other than for Cause, Disability or death or a termination of employment for Good Reason.

(g) No Mitigation. Executive shall not be required to mitigate the amount of any payment provided for under this Agreement by seeking other employment or otherwise and, except as provided in Sections 7(d)(iv) or (v) or 7(e)(iv) or (v) above, no such payment shall be offset or reduced by the amount of any compensation or benefits provided to Executive in any subsequent employment.

(h) Survival. The Company's obligations under this Section 7 shall survive the termination of the Term for any termination of employment occurring prior to the expiration of the Term as used in this Section 7.

8. Certain Tax Treatment.

(a) Reduction of Payments in Certain Circumstances. Notwithstanding anything to the contrary contained herein (or any other agreement entered into by and between the Company and Executive, or any incentive arrangement or plan offered by the Company), in the event that any amount or benefit paid or distributed to Executive pursuant to this Agreement, taken together with any amounts or benefits otherwise paid to Executive by the Company or any Affiliate of the Company (collectively, the "Covered Payments"), would constitute an "excess parachute payment" as defined in Section 280G of the Code, and would thereby subject Executive to an excise tax under Section 4999 of the Code (an "Excise Tax"), the provisions of this Section 8 shall apply. If the aggregate present value (as determined for purposes of Section 280G of the Code) of the Covered Payments exceeds the amount which can be paid to Executive without Executive incurring an Excise Tax, then, solely to the extent that Executive would be better off on an after tax basis by receiving the maximum amount which may be paid hereunder without Executive becoming subject to the Excise Tax, as determined by a nationally recognized accounting firm designated by the Company with the consent of Executive (which consent shall not be unreasonably withheld or delayed), the amounts payable to Executive under this Agreement (or any other agreement by and between Executive and Company or any of its Affiliates or pursuant to any incentive arrangement or plan offered by the Company or any of its Affiliates) shall be reduced (but not below zero) to the maximum amount which may be paid hereunder without Executive becoming subject to the Excise Tax (such reduced payments to be referred to as the "Payment Cap"). In the event Executive receives reduced payments and benefits as a result of application of this Section 8, Executive shall have the right to designate which of the payments and benefits otherwise set forth herein (or any other agreement between the Company and Executive or any incentive arrangement or plan offered by the Company) shall be received in connection with the application of the Payment Cap, subject to the following sentence. Reduction shall be made in the following order: (i) at the discretion of Executive, payments that are valued in full under Treasury Regulation Section 1.280G-1, Q&A 24 and are not subject to Section 409A of the Code, (ii) payments that are valued in full under Treasury Regulation Section 1.280G-1, Q&A 24 and are subject to Section 409A of the Code, with the amounts that are payable last reduced first, (iii) at the discretion of Executive, payments that are valued at less than full value under Treasury Regulation Section 1.280G-1, Q&A 24 and are not subject to Section 409A of the Code and (iv) payments that are valued at less than full value under Treasury Regulation Section 1.280G-1, Q&A 24 and are subject to Section 409A of the Code, with the amounts that are payable last reduced first.

(b) Section 409A. The Parties intend for the payments and benefits under this Agreement to be exempt from Section 409A of the Code or, if not so exempt, to be paid or provided in a manner which complies with the requirements of such section, and intend that this Agreement shall be construed and administered in accordance with such intention. Notwithstanding anything contained herein to the contrary, to the extent required in order to avoid accelerated taxation and/or tax penalties under Section 409A of the Code, (i) no amounts shall be paid to Executive under Section 7 of this Agreement until Executive would be considered to have incurred a "separation from service" from the Company within the meaning of Section 409A of the Code, (ii) amounts that would otherwise be payable and benefits that would otherwise be provided pursuant to this Agreement during the six-month period immediately following Executive's separation from service shall instead be paid on the first business day after the date that is six (6) months following Executive's separation from service (or Executive's death, if earlier), (iii) each amount to be paid or benefit to be provided under this Agreement shall be construed as a separately identified payment for purposes of Section 409A of the Code, (iv) any payments that are due within the

“short term deferral period” as defined in Section 409A of the Code shall not be treated as deferred compensation unless applicable law requires otherwise and (v) amounts reimbursable to Executive under this Agreement shall be paid to Executive on or before the last day of the year following the year in which the expense was incurred and the amount of expenses eligible for reimbursement (and in-kind benefits provided to Executive) during any one (1) year may not effect amounts reimbursable or provided in any subsequent year.

9. Restrictive Covenants.

(a) Acknowledgments. Executive acknowledges and agrees that: (i) the business in which the Company and its Affiliates are engaged is intensely competitive and that Executive’s employment by the Company has required, and will continue to require, that Executive have access to, and knowledge of, Confidential Information (as defined herein); (ii) the disclosure of any Confidential Information could place the Company at a serious competitive disadvantage and could do serious damage, financial and otherwise, to the business of the Company and its Affiliates; (iii) Executive has been given access to, and developed relationships with, customers of the Company and its Affiliates at the time and expense of the Company; (iv) by Executive’s training, experience and expertise, Executive’s services to the Company are, and will continue to be, extraordinary, special and unique; and (v) Executive has received good and valuable consideration for the restrictive covenants set forth herein, including without limitation, the right to acquire and own securities of the Company, the employment by the Company and the related compensation and benefits and other good and valuable consideration, the sufficiency of which is hereby acknowledged.

(b) Non-Solicitation; Non-Interference; No-Hire. From the Effective Date through the third anniversary of Executive’s termination date, Executive shall not, directly or indirectly, on Executive’s own behalf or by, through, or on behalf of, another Person: (i) solicit, induce, encourage or persuade, or attempt to solicit, induce, encourage or persuade, any then-current employee, consultant or independent contractor of the Company or any Affiliate of the Company to leave the employ of, or engagement with, the Company or any such Affiliate, or in any way interfere with the relationship between the Company or any such Affiliate, on the one hand, and any then-current employee, consultant or independent contractor thereof, on the other hand, (ii) hire or engage any person or entity who or which was an employee, consultant or independent contractor of the Company or any Affiliate of the Company at any time within the last one (1) year of Executive’s employment with the Company; (iii) solicit, induce, encourage or persuade, or attempt to solicit, induce, encourage or persuade any then-current customer, supplier, licensee or other business relation of the Company or any Affiliate of the Company to cease doing business with, or to reduce its current or contemplated level of business with, the Company or such Affiliate, or in any way interfere with the relationship between any such customer, supplier, licensee or business relation, on the one hand, and the Company or any such Affiliate, on the other hand; or (iv) solicit, induce, encourage or persuade, or attempt to solicit, induce, encourage or persuade any potential customer, supplier, licensee or other potential business relation of the Company or any Affiliate of the Company, whom the Company had solicited, was attempting to solicit, or had identified for solicitation during the last twelve (12) months of Executive’s employment with the Company and whom or which Executive knew to be such a potential customer, supplier, licensee or other potential business relation, in each case, to cease doing business with, or to reduce its contemplated level of business with, the Company or such Affiliate, or in any way interfere with the relationship between any such potential customer, supplier, licensee or other potential business relation, on the one hand, and the Company or any such Affiliate, on the other hand.

(c) Non-Competition. From the Effective Date through the second anniversary of Executive’s termination date, Executive shall not, directly or indirectly, on Executive’s own behalf or by, through, or on behalf of, another Person, own, manage, operate, control, be employed by (whether as an employee, consultant, independent contractor or otherwise, and whether or not for compensation) or render services to any Person, firm, corporation or other entity, in whatever form, engaged in (1) real estate brokerage, the franchising of real estate, employee relocation business, title services, settlement services, or technology-related businesses supporting any of the foregoing, (2) any business with business assets, technology, relationships or services in residential real estate that has the ability to divert business from the residential real estate brokerage, franchising of residential real estate brokerage, employee relocation, or title or settlement services markets, (3) any businesses involved in or related to residential real estate brokerage through the use of on-line databases and listings, or (4) any other business of the

same type as any business in which the Company or any of its Affiliates is engaged on the date of termination of Executive's employment or in which they have proposed, on or prior to such date, to be engaged in on or after such date and in which Executive has been involved to any extent (other than de minimis) at any time during the two (2) year period ending with the date of termination of such Executive's employment, anywhere in the world in which the Company or its Affiliates conduct business. Nothing in this Section 9(c) shall prohibit Executive from being a passive owner of not more than 4.99% of the outstanding stock of any class of a corporation which is publicly traded, so long as Executive has no active participation in the business of such corporation.

(d) Non-Disclosure; Non-Use of Confidential Information. Executive shall not disclose or use at any time, either during her employment with the Company and its Affiliates or thereafter, any Confidential Information (as defined herein) of which Executive is or becomes aware, whether or not such information is developed by her, except to the extent that such disclosure or use is directly related to and required by Executive's performance in good faith of duties assigned to Executive by the Company. Executive will take all appropriate steps to safeguard Confidential Information in her possession and to protect it against disclosure, misuse, espionage, loss and theft. Executive shall deliver to the Company at the termination of her employment with the Company and its Affiliates, or at any time the Company may request, all memoranda, notes, plans, records, reports, computer tapes and software and other documents and data (and copies thereof) relating to the Confidential Information or the Work Product (as hereinafter defined) of the business of the Company or any of its Affiliates that Executive may then possess or have under her control.

(e) Proprietary Rights. Executive recognizes that the Company and its Affiliates possess a proprietary interest in all Confidential Information and Work Product and have the exclusive right and privilege to use, protect by copyright, patent or trademark, or otherwise exploit the processes, ideas and concepts described therein to the exclusion of Executive, except as otherwise agreed between the Company and Executive in writing. Executive expressly agrees that any Work Product made or developed by Executive or Executive's agents or Affiliates during the course of Executive's employment, including any Work Product which is based on or arises out of Work Product, shall be the property of and inure to the exclusive benefit of the Company and its Affiliates. Executive further agrees that all Work Product developed by Executive (whether or not able to be protected by copyright, patent or trademark) during the course of Executive's employment, or involving the use of the time, materials or other resources of the Company or any of its Affiliates, shall be promptly disclosed to the Company and shall become the exclusive property of the Company, and Executive shall execute and deliver any and all documents necessary or appropriate to implement the foregoing.

(f) Nondisparagement. Executive covenants that during and following the Term, Executive will not disparage or encourage or induce others to disparage the Company or its Affiliates, together with all of their respective past and present directors and officers, as well as their respective past and present managers, officers, shareholders, partners, employees, agents, attorneys, servants and customers and each of their predecessors, successors and assigns (collectively, the "Company Entities and Persons"); provided that such limitation shall extend to past and present managers, officers, shareholders, partners, employees, agents, attorneys, servants and customers only in their capacities as such or in respect of their relationship with the Company and its Affiliates. The term "disparage" includes, without limitation, comments or statements adversely affecting in any manner (i) the conduct of the business of the Company Entities and Persons, or (ii) the business reputation of the Company Entities and Persons. Nothing in this Agreement is intended to or shall prevent either Party from providing, or limiting testimony in response to a valid subpoena, court order, regulatory request or other judicial, administrative or legal process or otherwise as required by law.

(g) Cooperation in Any Investigations and Litigation. Executive agrees that Executive will reasonably cooperate with the Company and its Affiliates, and its counsel, in connection with any investigation, inquiry, administrative proceeding or litigation relating to any matter in which Executive becomes involved or of which Executive has knowledge as a result of Executive's service with the Company by providing truthful information. The Company agrees to promptly reimburse Executive for reasonable expenses approved in writing in advance of being incurred (including travel expenses, attorneys' fees and other expenses of counsel) by Executive, in connection with Executive's cooperation pursuant to this Section 9(g). Such reimbursements shall be made within sixty (60) days following Executive's submission of a written invoice to the Company describing such

expenses in reasonable detail, and in no event later than the calendar year following the year in which the expenses are incurred. Executive agrees that, in the event Executive is subpoenaed by any person or entity (including, but not limited to, any government agency) to give testimony (in a deposition, court proceeding or otherwise) which in any way relates to Executive's employment by the Company, Executive will, to the extent not legally prohibited from doing so, give prompt notice of such request to the Company's General Counsel so that the Company may contest the right of the requesting person or entity to such disclosure before making such disclosure. Nothing in this provision shall require Executive to violate Executive's obligation to comply with valid legal process. Executive shall also not, directly or indirectly, direct, encourage, assist, or advise any non-governmental third party to institute, commence or prosecute any claims, rights or causes of action in law or in equity in any forum or proceeding whatsoever against any of the Company Entities and Persons.

(h) Permitted Disclosures. Pursuant to 18 U.S.C. § 1833(b), Executive will not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of a trade secret of the Company that (a) is made (i) in confidence to a Federal, State, or local government official, either directly or indirectly, or to Executive's attorney and (ii) solely for the purpose of reporting or investigating a suspected violation of law; or (b) is made in a complaint or other document that is filed under seal in a lawsuit or other proceeding. If Executive files a lawsuit for retaliation by the Company for reporting a suspected violation of law, Executive may disclose the trade secret to Executive's attorney and use the trade secret information in the court proceeding, if Executive (I) files any document containing the trade secret under seal, and (II) does not disclose the trade secret, except pursuant to court order. Nothing in this Agreement is intended to conflict with 18 U.S.C. § 1833(b) or create liability for disclosures of trade secrets that are expressly allowed by such section. Further, nothing in any agreement Executive has with the Company shall prohibit or restrict Executive from making any voluntary disclosure of information or documents related to any violation of law to any governmental agency or legislative body, or any self-regulatory organization, in each case, without advance notice to the Company.

(i) Blue Pencil. It is the intent and desire of Executive and the Company that the provisions of this Section 9 be enforced to the fullest extent permissible under the laws and public policies as applied in each jurisdiction in which enforcement is sought. If any particular provision of this Section 9 shall be determined to be invalid or unenforceable, such covenant shall be amended, without any action on the part of either Party hereto, to delete therefrom the portion so determined to be invalid or unenforceable, such deletion to apply only with respect to the operation of such covenant in the particular jurisdiction in which such adjudication is made.

(j) Survival. Executive's obligations under this Section 9 shall survive the termination of the Term.

(k) Certain Definitions.

(i) For purposes of this Agreement, "Affiliates" means:

(1) in the case of the Company, a Person that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, the Company; and

(2) in the case of an individual: (i) any member of the immediate family of Executive, including parents, siblings, spouse and children (including those by adoption); the parents, siblings, spouse, or children (including those by adoption) of such immediate family member, and in any such case any trust whose primary beneficiary is such individual or one or more members of such immediate family and/or Executive's lineal descendants; (ii) the legal representative or guardian of the individual or of any such immediate family member in the event the individual or any such immediate family member becomes mentally incompetent; and (iii) any Person controlling, controlled by or under common control with Executive.

As used in this definition, the term "control," including the correlative terms "controlling," "controlled by" and "under common control with," means possession, directly or indirectly, of the power to direct or cause the direction of management or policies (whether

through ownership of securities or any partnership or other ownership interest, by contract or otherwise) of a Person.

(ii) For purposes of this Agreement, “Confidential Information” means information that is not generally known to the public (except for information known to the public because of Executive’s violation of Section 9(d) of this Agreement) and that is used, developed or obtained by the Company in connection with its business, including, but not limited to, information, observations and data obtained by Executive while employed by the Company or any predecessors thereof (including those obtained prior to the date of this Agreement) concerning (i) the business or affairs of the Company (or such predecessors), (ii) products or services, (iii) fees, costs and pricing structures, (iv) designs, (v) analyses, (vi) drawings, photographs and reports, (vii) computer software, including operating systems, applications and program listings, (viii) flow charts, manuals and documentation, (ix) databases, (x) accounting and business methods, (xi) inventions, devices, new developments, methods and processes, whether patentable or unpatentable and whether or not reduced to practice, (xii) customers and clients and customer or client lists, (xiii) other copyrightable works, (xiv) all production methods, processes, technology and trade secrets, and (xv) all similar and related information in whatever form. Confidential Information will not include any information that has been published in a form generally available to the public prior to the date Executive proposes to disclose or use such information. Confidential Information will not be deemed to have been published or otherwise disclosed merely because individual portions of the information have been separately published, but only if all material features comprising such information have been published in combination. For purposes of this definition, the “Company” shall mean the Company collectively with its Affiliates.

(iii) For purposes of this Agreement, “Person” shall be construed broadly and shall include, without limitation, an individual, a partnership, a limited liability company, a corporation, an association, a joint stock company, a trust, a joint venture, an unincorporated organization and a governmental entity or any department, agency or political subdivision thereof.

(iv) For purposes of this Agreement, “Work Product” means all inventions, innovations, improvements, technical information, systems, software developments, methods, designs, analyses, drawings, reports, service marks, trademarks, trade names, logos and all similar or related information (whether patentable or unpatentable) that relates to the Company’s or any of its Affiliates’ actual or anticipated business, research and development or existing or future products or services and that are conceived, developed or made by Executive (whether or not during usual business hours and whether or not alone or in conjunction with any other person) while employed by the Company or any of its Affiliates (including those conceived, developed or made prior to the date of this Agreement) together with all patent applications, letters patent, trademark, trade name and service mark applications or registrations, copyrights and reissues thereof that may be granted for or upon any of the foregoing.

10. Remedies for Breach of Obligations under Sections 9 or 10 hereof. Executive acknowledges that the Company and its Affiliates will suffer irreparable injury, not readily susceptible of valuation in monetary damages, if Executive breaches Executive’s obligations under Section 9 hereof. Accordingly, Executive agrees that the Company and its Affiliates will be entitled, in addition to any other available remedies, to obtain injunctive relief in aid of arbitration against any breach or prospective breach by Executive of Executive’s obligations under Section 9 hereof in any Federal or state court sitting in the state of Delaware, or, at the Company’s election, in any other state in which Executive maintains Executive’s principal residence or Executive’s principal place of business. Executive hereby submits to the non-exclusive jurisdiction of all those courts for the purposes of any actions or proceedings instituted by the Company or its Affiliates to obtain that injunctive relief in aid of arbitration, and Executive agrees that process in any or all of those actions or proceedings may be served by registered mail, addressed to the last address provided by Executive to the Company, or in any other manner authorized by law.

11. Representations and Warranties.

(a) The Company represents and warrants that (i) it is fully authorized to enter into this Agreement and to perform its obligations under it, (ii) the execution, delivery and performance of this Agreement by it does not violate any applicable law, regulation, order, judgment or decree or any agreement, arrangement, plan or corporate governance document (x) to which it is a Party or (y) by which it is bound, and (iii) upon the execution and delivery of this Agreement by the Parties, this Agreement shall be a valid and binding obligation, enforceable against it in accordance with its terms, except to the extent that enforceability may be limited by applicable bankruptcy, insolvency or similar laws affecting the enforcement of creditors' rights generally.

(b) Executive represents and warrants to the Company that the execution and delivery by Executive of this Agreement do not, and the performance by Executive of Executive's obligations hereunder will not, with or without the giving of notice or the passage of time, or both: (i) violate any judgment, writ, injunction, or order of any court, arbitrator, or governmental agency applicable to Executive; or (ii) conflict with, result in the breach of any provisions of or the termination of, or constitute a default under, any agreement to which Executive is a Party or by which Executive is or may be bound.

12. Miscellaneous.

(a) Successors and Assigns.

(iii) This Agreement shall be binding upon and shall inure to the benefit of the Company, its successors and permitted assigns and the Company shall require any successor or assign to expressly assume and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform if no such succession or assignment had taken place. The Company may not assign or delegate any rights or obligations hereunder except to a successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business and/or assets of the Company or to an Affiliate of the Company. The term "the Company" as used herein shall include a corporation or other entity acquiring all or substantially all the assets and business of the Company (including this Agreement) whether by operation of law or otherwise.

(iv) Neither this Agreement nor any right or interest hereunder shall be assignable or transferable by Executive, Executive's beneficiaries or legal representatives, except by will or by the laws of descent and distribution. This Agreement shall inure to the benefit of and be enforceable by Executive's legal representatives.

(b) Clawback Policy. Executive acknowledges and agrees that (i) she is subject to the terms and conditions of the Company's Clawback Policy as in effect from time to time, (ii) such Clawback Policy, in each case, shall apply to, among other things, all currently outstanding vested and unvested awards and all awards that have been previously exercised or paid, including any proceeds, gains or other economic benefit in respect of the award and (iii) to the extent permitted by applicable law and notwithstanding the terms and conditions of the Clawback Policy as in effect from time to time, such Clawback Policy shall apply in the event Executive breaches her covenants as set forth in Section 9 of this Agreement.

(c) Indemnification. Executive shall be indemnified by the Company as, and to the extent, provided in the certificate of incorporation and bylaws of the Company and as provided in Executive's Director and Officer Indemnification Agreement dated as of July 9, 2018 and shall be provided with director and officer liability insurance on a basis no less favorable than provided to any other officer or director of the Company. The obligations under this paragraph shall survive termination of the Term.

(d) Enforcement.

(i) Arbitration. Except for the Company or its Affiliates' right to obtain injunctive relief in aid of arbitration for violation of Section 9 of this Agreement, any controversy, dispute or claim arising out of or relating to this Agreement, or its interpretation, application, implementation, breach or enforcement which the parties are unable to resolve by mutual agreement, shall be settled by submission by

either party of the controversy, claim or dispute to binding arbitration in New York City, in the Borough of Manhattan (unless the parties agree in writing to a different location), before a single arbitrator in accordance with the Employment Dispute Resolution Rules of the American Arbitration Association then in effect. In any such arbitration proceeding the parties agree to provide all discovery deemed necessary by the arbitrator. The decision and award made by the arbitrator shall be final, binding and conclusive on all parties hereto for all purposes, and judgment may be entered thereon in any court having jurisdiction thereof. Each party shall bear its or her costs and expenses in any such arbitration, including, but not limited to, attorneys' fees; provided, however, if Executive prevails on substantially all material claims, the Company shall reimburse Executive for all of her reasonable attorneys' fees and costs. It is part of the essence of this Agreement that any claims hereunder shall be resolved expeditiously and as confidentially as possible. Accordingly, the Company and Executive agree that all proceedings in any arbitration shall be conducted under seal and kept strictly confidential. In that regard, no party shall use, disclose or permit the disclosure of any information, evidence or documents produced by any other party in the arbitration proceedings or about the existence, contents or results of the proceedings except as necessary and appropriate for the preparation and conduct of the arbitration proceedings, or as may be required by any legal process, or as required in an action in aid of arbitration or for enforcement of or appeal from an arbitral award. Before making any disclosure permitted by the preceding sentence, the party intending to make such disclosure shall give the other party reasonable written notice of the intended disclosure and afford such other party a reasonable opportunity to protect its interests.

(ii) Remedies. All remedies hereunder are cumulative, are in addition to any other remedies provided for by law and may, to the extent permitted by law, be exercised concurrently or separately, and the exercise of any one remedy shall not be deemed to be an election of such remedy or to preclude the exercise of any other remedy.

(iii) Waiver of Jury Trial. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES ALL RIGHT TO TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM ARISING OUT OF OR RELATING TO THIS AGREEMENT.

(e) Right to Counsel. Executive acknowledges that Executive has had the opportunity to consult with legal counsel of Executive's choice in connection with the drafting, negotiation and execution of this Agreement and related employment arrangements.

(f) Notice. For the purposes of this Agreement, notices and all other communications provided for in the Agreement (including the Notice of Termination) shall be in writing and shall be deemed to have been duly given when personally delivered or sent by Certified mail, return receipt requested, postage prepaid, addressed to the respective addresses last given by each Party to the other, provided that all notices to the Company shall be directed to the attention of the Company's Chief Executive Officer with a copy to the Company's General Counsel. All notices and communications shall be deemed to have been received on the date of delivery thereof or on the third business day after the mailing thereof, except that notice of change of address shall be effective only upon receipt.

(g) Withholding. The Company shall be entitled to withhold the amount, if any, of all taxes of any applicable jurisdiction required to be withheld by an employer with respect to any amount paid to Executive hereunder. The Company, in its sole and absolute discretion, shall make all determinations as to whether it is obligated to withhold any taxes hereunder and the amount thereof.

(h) Release of Claims. The termination benefits described in Section 7(d)(ii)-(v) and Section 7(e)(ii)-(v) of this Agreement shall be conditioned on Executive delivering to the Company, a signed release of claims in the form of Exhibit A hereto within forty-five (45) days or twenty-one (21) days, as may be applicable under the Age Discrimination in Employment Act of 1967, as amended by the Older Workers Benefit Protection Act, following Executive's termination date, and not revoking Executive's consent to such release of claims within seven (7) days of such execution; provided, however, that Executive shall not be required to release any rights Executive may have to be indemnified by the Company under Section 12(c) of this Agreement or under any other indemnification agreement entered into between Executive and the Company provided, further, that in no event shall

the timing of Executive's execution (and non-revocation) of the general release, directly or indirectly, result in Executive designating the calendar year of payment, and if a payment that is subject to execution (and non-revocation) of the general release could be made in more than one taxable year, payment shall be made in the later taxable year.

(i) Resignation as Officer or Director. Upon a termination of employment for any reason, Executive shall resign each position (if any) that Executive then holds as an officer or director of the Company and any of its Affiliates, as well as any positions Executive holds as a trustee or fiduciary of any employee benefit plan maintained by the Company. Executive's execution of this Agreement shall be deemed the grant by Executive to the officers of the Company of a limited power of attorney to sign in Executive's name and on Executive's behalf any such documentation as may be required to be executed solely for the limited purposes of effectuating such resignations.

(j) Modification. No provision of this Agreement may be modified, waived or discharged unless such waiver, modification or discharge is agreed to in writing and signed by Executive and the Company. No waiver by either Party hereto at any time of any breach by the other Party hereto of, or noncompliance with, any condition or provision of this Agreement to be performed by such other Party shall be deemed a waiver of similar or dissimilar provisions or conditions at the same or at any prior or subsequent time. No agreements or representations, oral or otherwise, express or implied, with respect to the subject matter hereof have been made by either Party which are not expressly set forth in this Agreement.

(k) Effect of Other Law. Anything herein to the contrary notwithstanding, the terms of this Agreement shall be modified to the extent required to meet the provisions of the Sarbanes-Oxley Act of 2002, Section 409A of the Code, or other federal law applicable to the employment arrangements between Executive and the Company. Any delay in providing benefits or payments, any failure to provide a benefit or payment, or any repayment of compensation that is required under the preceding sentence shall not in and of itself constitute a breach of this Agreement, provided, however, that the Company shall provide economically equivalent payments or benefits to Executive to the extent permitted by law.

(l) Governing Law. This Agreement shall be governed by and construed and enforced in accordance with the laws of the state of Delaware applicable to contracts executed in and to be performed entirely within such state, without giving effect to the conflict of law principles thereof.

(m) No Conflicts. Executive represents and warrants to the Company that Executive is not a party to or otherwise bound by any agreement or arrangement (including, without limitation, any license, covenant, or commitment of any nature), or subject to any judgment, decree, or order of any court or administrative agency, that would conflict with or will be in conflict with or in any way preclude, limit or inhibit Executive's ability to execute this Agreement or to carry out Executive's duties and responsibilities hereunder.

(n) Inconsistencies. In the event of any inconsistency between any provision of this Agreement and any provision of any employee handbook, personnel manual, program, policy, or arrangement of the Company or its Affiliates (including, without limitation, any provisions relating to notice requirements and post-employment restrictions), the provisions of this Agreement shall control, unless Executive otherwise agrees in a writing that expressly refers to the provision of this Agreement whose control she is waiving.

(o) Beneficiaries/References. In the event of Executive's death or a judicial determination of her incompetence, references in this Agreement to Executive shall be deemed, where appropriate, to refer to her beneficiary, estate or other legal representative.

(p) Survivorship. Except as otherwise set forth in this Agreement, the respective rights and obligations of the Parties hereunder shall survive the Term and any termination of Executive's employment. Without limiting the generality of the forgoing, the provisions of Section 7, 9 and 10 shall survive the Term.

(q) Severability. The provisions of this Agreement shall be deemed severable and the invalidity or unenforceability of any provision shall not affect the validity or enforceability of the other provisions hereof.

(r) Entire Agreement. This Agreement constitutes the entire agreement between the Parties hereto and supersedes all prior agreements, if any, understandings and arrangements, oral or written, between the Parties hereto with respect to the subject matter hereof, including, without limitation, the Letter Agreement dated April 12, 2018 between the Company and Executive.

(s) Counterparts. This Agreement may be executed in one or more counterparts, each of which will be deemed to be an original copy of this Agreement and all of which, when taken together, will be deemed to constitute one and the same agreement.

13. Certain Rules of Construction.

(a) The headings and subheadings set forth in this Agreement are inserted for the convenience of reference only and are to be ignored in any construction of the terms set forth herein.

(b) Wherever applicable, the neuter, feminine or masculine pronoun as used herein shall also include the masculine or feminine, as the case may be.

(c) The term “including” is not limiting and means “including without limitation.”

(d) References in this Agreement to any statute or statutory provisions include a reference to such statute or statutory provisions as from time to time amended, modified, reenacted, extended, consolidated or replaced (whether before or after the date of this Agreement) and to any subordinate legislation made from time to time under such statute or statutory provision.

(e) References to “writing” or “written” include any non-transient means of representing or copying words legibly, including by facsimile or electronic mail.

(f) References to “\$” are to United States Dollars.

IN WITNESS WHEREOF, the Company has caused this Agreement to be executed by its duly authorized officer and Executive has executed this Agreement as of the day and year first above written.

REALOGY HOLDINGS CORP.

By: /s/ Sunita Holzer

Name: Sunita Holzer

Title: Executive Vice President and
Chief Human Resources Officer

EXECUTIVE

By: /s/ Katrina Helmkamp

Name: Katrina L. Helmkamp

EXHIBIT A

FORM OF RELEASE AGREEMENT

THIS RELEASE AGREEMENT (the “Release”) is made by and between Katrina L. Helmkamp (“Executive”) and Realogy Holdings Corp. (the “Company”).

1. For and in consideration of the payments and benefits provided in [Section 7(d)(ii)-(v)][Section 7(e)(ii)-(v)] of the Severance Agreement between Executive and the Company dated as of July 9, 2018 (the “Severance Agreement”), Executive, for herself, her successors and assigns, executors and administrators, now and forever hereby releases and discharges the Company, together with all of its past and present parents, subsidiaries, and Affiliates, together with each of their officers, directors, stockholders, partners, employees, agents, representatives and attorneys, and each of their subsidiaries, Affiliates, estates, predecessors, successors, and assigns (hereinafter collectively referred to as the “Releasees”) from any and all rights, claims, charges, actions, causes of action, complaints, sums of money, suits, debts, covenants, contracts, agreements, promises, obligations, damages, demands or liabilities of every kind whatsoever, in law or in equity, whether known or unknown, suspected or unsuspected, which Executive or Executive’s executors, administrators, successors or assigns ever had, now has or may hereafter claim to have by reason of any matter, cause or thing whatsoever; (i) arising from the beginning of time up to the date upon which Executive signs the Release; (ii) arising out of, relating in any way to, Executive’s employment with the Company or any of the other Releasees, or the termination of Executive’s employment relationship with the Company or any of the other Releasees; (iii) arising under or relating to the Severance Agreement; (iv) arising under any federal, local or state law, executive order, statute or regulation, including, without limitation, the Age Discrimination in Employment Act of 1967, as amended by the Older Workers Benefit Protection Act, Title VII of the Civil Rights Act of 1964, the Americans with Disabilities Act of 1990, the Employee Retirement Income Security Act of 1974, the Civil Rights Act of 1991, the Family and Medical Leave Act of 1993, the Fair Labor Standards Act of 1938, the Equal Pay Act of 1963, the Sarbanes-Oxley Act of 2002, any “whistleblower” or retaliation claims (to the extent permitted by applicable law), and/or the applicable federal, state or local law, executive order, statute or regulation against discrimination, each as amended; (v) relating to wrongful employment termination or breach of contract; or (vi) arising under or relating to any policy, agreement, understanding or promise, written or oral, formal or informal, between the Company and any of the Releasees and Executive; provided, however, that notwithstanding the foregoing, nothing contained in the Release shall in any way diminish or impair: (a) any rights Executive may have, from and after the date upon which Executive signs the Release; (b) any rights to indemnification that may exist from time to time under the Company’s certificate of incorporation or bylaws, or state law or any other indemnification agreement entered into between Executive and the Company; (c) Executive’s ability to bring appropriate proceedings to enforce the Release; and (d) any rights or claims Executive may have that cannot be waived under applicable law (collectively, the “Excluded Claims”). Executive further acknowledges and agrees that, except with respect to Excluded Claims, the Company and the Releasees have fully satisfied any and all obligations whatsoever owed to Executive arising out of Executive’s employment with the Company or any of the Releasees, and that no further payments or benefits are owed to Executive by the Company or any of the Releasees.

2. Executive understands and agrees that, except for the Excluded Claims, Executive has knowingly relinquished, waived and forever released any and all rights to any personal recovery in any action or proceeding that may be commenced on Executive’s behalf arising out of the aforesaid employment relationship or the termination thereof, including, without limitation, claims for back pay, front pay, liquidated damages, compensatory damages, general damages, special damages, punitive damages, exemplary damages, costs, expenses and attorneys’ fees.

3. Executive acknowledges and agrees that Executive has been advised of Executive’s right to consult with an attorney of Executive’s choosing prior to signing the Release. Executive understands and agrees that Executive has the right and has been given the opportunity to review the Release with an attorney of Executive’s choice should Executive so desire. Executive also agrees that Executive has entered into the Release knowingly, freely and voluntarily. Executive further acknowledges and agrees that Executive has twenty-one (21) calendar days, or in the

event of a group termination, forty-five (45) calendar days, to consider the Release, and any exhibits hereto, although Executive may sign it sooner if Executive wishes. In addition, once Executive has signed the Release, Executive shall have seven (7) additional days from the date of execution to revoke Executive's consent and may do so by writing to the Company's Chief Human Resources Officer, which must be received by the Company within such seven (7) day revocation period. The Release shall not be effective, and no payments shall be due hereunder, earlier than the eighth (8th) day after Executive shall have executed the Release and returned it to the Company, assuming that Executive had not revoked Executive's consent to the Release prior to such date.

4. It is understood and agreed by Executive that any payment made to Executive is not to be construed as an admission of any liability whatsoever on the part of the Company or any of the other Releasees, by whom liability is expressly denied.

5. The Release is executed by Executive voluntarily and is not based upon any representations or statements of any kind made by the Company or any of the other Releasees as to the merits, legal liabilities or value of Executive's claims. Executive acknowledges that Executive has had a full and reasonable opportunity to consider the Release and that Executive has not been pressured or in any way coerced into executing the Release. Executive further acknowledges and agrees that she is executing this Release in exchange for good and valuable consideration in addition to anything of value to which Executive is otherwise entitled.

6. The exclusive venue for any disputes arising hereunder shall be the state or federal courts located in the State of Delaware, and each of the parties hereto irrevocably waives, to the fullest extent permitted by law, any objection which it may now or hereafter have to the laying of the venue of any such proceeding brought in such a court and any claim that any such proceeding brought in such a court has been brought in an inconvenient forum. Each of the parties hereto also agrees that any final and unappealable judgment against a party hereto in connection with any action, suit or other proceeding may be enforced in any court of competent jurisdiction, either within or outside of the United States. A certified or exemplified copy of such award or judgment shall be conclusive evidence of the fact and amount of such award or judgment.

7. The Release and the rights and obligations of the parties hereto shall be governed and construed in accordance with the laws of the state of Delaware. If any provision hereof is unenforceable or is held to be unenforceable, such provision shall be fully severable, and this document and its terms shall be construed and enforced as if such unenforceable provision had never comprised a part hereof, the remaining provisions hereof shall remain in full force and effect, and the court construing the provisions shall add as a part hereof a provision as similar in terms and effect to such unenforceable provision as may be enforceable, in lieu of the unenforceable provision.

8. The Release shall inure to the benefit of and be binding upon the Company and its successors and assigns.

IN WITNESS WHEREOF, Executive and the Company have executed the Release as of the below-written dates.

IMPORTANT NOTICE: BY SIGNING BELOW YOU RELEASE AND GIVE UP ANY AND ALL LEGAL CLAIMS, KNOWN AND UNKNOWN, THAT YOU MAY HAVE AGAINST THE COMPANY AND RELATED PARTIES.

REALOGY HOLDINGS CORP. Katrina L. Helmkamp

Dated:_____ Dated:_____

REALOGY HOLDINGS CORP.

2018 LONG-TERM INCENTIVE PLAN

SPECIAL RETENTION AWARD NOTICE OF GRANT & AWARD AGREEMENT

Realogy Holdings Corp. (the “Company”), pursuant to Section 8.1 of the Company’s 2018 Long-Term Incentive Plan (the “Plan”), hereby grants to the individual listed below (the “Participant”), a Special Retention Award (the “Award”). The Award is subject to all of the terms and conditions set forth herein and in the Award agreement attached hereto as Exhibit A (the “Agreement”) and the Plan, which are incorporated herein by reference.

In addition, as a condition to receiving this Award, the Participant understands and agrees to be bound by and comply with the restrictive covenants and other provisions set forth in the Participant’s Executive Restrictive Covenant Agreement with the Company (the “Restrictive Covenant Agreement”), a copy of which the Participant acknowledges receipt. The Participant understands and agrees that the Restrictive Covenant Agreement shall survive the grant, vesting or termination of the Award, and any termination of employment of the Participant, and that full compliance with the Restrictive Covenant Agreement is an express condition precedent to (i) the receipt, delivery and vesting of any portion of the Award and (ii) any rights to any payments with respect to the Award.

Participant acknowledges and agrees that the Award is a special retention award and does not fall within the definition of Base Salary or Incentive Compensation under the Company’s Severance Pay Plan for Executives or Change in Control Plan for Executives.

Unless otherwise defined herein, the terms defined in the Plan shall have the same defined meanings in this Notice of Grant (“Notice”) and the Agreement.

Participant: John W. Peyton

Grant Date: February 24, 2020

Value of Award: \$1,000,000

Vesting Dates: One-third of the Award (each, a “Vesting Tranche”) will vest on each of the first three grant anniversary dates: February 24, 2021, February 24, 2022, and February 24, 2023 (each, a “Vesting Date” and the time period between each Vesting Date, a “Vesting Period”).

By accepting this Award, the Participant agrees to be bound by the terms and conditions of the Plan, the Agreement and this Notice, including the Restrictive Covenant Agreement. The Participant has reviewed the Agreement, the Plan and this Notice in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Notice and fully understands all provisions of this Notice, the Agreement and the Plan. The Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or relating to the Plan, this Notice or the Award.

Participant's Consent Regarding Use of Personal Information. By accepting this Award, the Participant explicitly consents (i) to the use of the Participant's Personal Information (as defined in Section 6.13 of the Agreement and to the extent permitted by law) for the purpose of implementing, administering and managing the Participant's Award under the Plan and of being considered for participation in future equity, deferred cash or other award programs (to the extent he/she is eligible under the terms of such plan or program, and without any guarantee that any award will be made); and (ii) to the use, transfer, processing and storage, electronically or otherwise, of his/her Personal Information, as such use has occurred to date, and as such use may occur in the future, in connection with this or any equity or other award, as described above.

Note: Participants electing to accept this grant via the Fidelity Stock Plan Services Net Benefits OnLine Grant Award Acceptance Process are not required to print and sign this Agreement.

REALOGY HOLDINGS CORP. PARTICIPANT

By: /s/Sunita Holzer By: /s/ John W. Peyton

Print Name: Sunita Holzer Print Name: John W. Peyton

Title: Executive Vice President and Chief Human Resources Officer

Exhibit A

SPECIAL RETENTION AWARD AGREEMENT

Pursuant to the Award Notice of Grant (the “Notice”) to which this Award Agreement (this “Agreement”) is attached, Realogy Holdings Corp. (the “Company”) has granted to the Participant, pursuant to Section 8.1 of the Company’s 2018 Long-Term Incentive Plan (the “Plan”), the Award indicated in the Notice. Capitalized terms not specifically defined herein shall have the meanings specified in the Plan and Notice.

ARTICLE I GENERAL

1.1 Incorporation of Terms of Plan. The Award is subject to the terms and conditions of the Plan, which are incorporated herein by reference. In the event of any inconsistency between the Plan and this Agreement, the terms of the Plan shall control.

ARTICLE II GRANT OF AWARD

2.1 Grant of Award. In consideration of the Participant’s past and/or continued employment with or Services to the Company or any Affiliate and for other good and valuable consideration, effective as of the Grant Date set forth in the Notice (the “Grant Date”), the Company grants to the Participant Award as set forth in the Notice, upon the terms and conditions set forth in the Plan and this Agreement, and subject to the Participant’s full compliance at all times with the restrictive covenants and other provisions set forth in the Restrictive Covenant Agreement (as defined in the Notice), which is an express condition precedent to (i) the receipt, delivery and vesting of any portion of the Award and (ii) any rights to any payments with respect to the Award.

2.2 Consideration to the Company. In consideration of the grant of the Award by the Company, the Participant agrees to render Services to the Company or any Affiliate and to comply at all times with the Restrictive Covenant Agreement. Nothing in the Plan or this Agreement shall confer upon the Participant any right to continue in the employ or Service of the Company or any Affiliate or shall interfere with or restrict in any way the rights of the Company and its Affiliates, which rights are hereby expressly reserved, to discharge or terminate the Services of the Participant at any time for any reason whatsoever, with or without Cause, except to the extent expressly provided otherwise in a written agreement between the Company or an Affiliate and the Participant.

ARTICLE III RESTRICTIONS AND RESTRICTION PERIOD

3.1 Restrictions. The Award granted hereunder may not be sold, assigned, transferred, pledged, hypothecated or otherwise disposed of and shall be subject to a risk of forfeiture as described in Section 4.1 below until the Award vests.

3.2 Restricted Period. Subject to Articles 4 and 5 of this Agreement, the Award shall vest on each Vesting Date as set forth in the Notice.

3.3 Settlement of Award. The Award represents the right to receive a cash payment, subject to the fulfillment of the vesting and other conditions set forth in this Agreement. Except as set forth in Sections 4.2, 4.3 and 5.1 of this Agreement, within a reasonable period of time following vesting of the Award (and in no event more than 60 days following such vesting), the Company shall pay and transfer to the Participant a cash payment equal to the value of the portion of the Award that vested, subject to the Participant’s full compliance at all times with the Restrictive Covenant Agreement. The Company and its Affiliates shall have the authority and the right to deduct or withhold, or require the Participant to remit to the Company or an Affiliate, an amount sufficient to satisfy federal, state, local and foreign taxes (including the Participant’s social security, Medicare and any other employment tax obligation) required by law to be withheld with respect to any taxable event concerning a Participant arising in connection with the Award.

3.4 No Rights as a Stockholder. The Award is not an equity interest in the Company and the Participant shall not be or have any of the rights or privileges of a stockholder of the Company with respect to the Award.

3.5 No Dividend or Dividend Equivalents Rights. The Award carries no dividend or dividend equivalent rights related to any cash or other dividend paid by the Company while the Award is outstanding.

3.6 Not Base Salary or Incentive Compensation. The Award is a special retention award and does not fall within the definition of Base Salary or Incentive Compensation under the Company's Severance Pay Plan for Executives or Change in Control Plan for Executives or for any other plan providing for severance pay to Participant.

ARTICLE IV FORFEITURES

4.1 Termination of Employment. Except as provided in Sections 4.3, 4.4 and 5.1 of this Agreement, if the Participant terminates employment with or ceases to provide Services to the Company or any Affiliate for any reason, then the Award, to the extent not vested, shall be forfeited to the Company without payment of any consideration by the Company, and neither the Participant nor any of his or her successors, heirs, assigns or personal representatives shall thereafter have any further rights or interests in such Award.

4.2 Clawback of Award. In the event that the Administrator determines in its sole discretion that the Participant has violated the Restrictive Covenant Agreement, the Company may require reimbursement or forfeiture of all or a portion of any proceeds, gains or other economic benefit realized or realizable by the Participant under the Award. Upon such determination any such proceeds, gains or other economic benefit must be paid by the Participant to the Company and any unvested portion of the Award shall immediately terminate and shall be forfeited.

4.3 Termination other than for Cause or for Good Reason. Except as set forth in Section 5.1 below, in the case where the Participant terminates employment with or ceases to provide Services to the Company or any Affiliate during a Vesting Period other than for Cause or the Participant resigns from employment from the Company or any Affiliate with Good Reason, the Participant will be entitled to receive a portion of the applicable Vesting Tranche pro-rated for the number of full months of the Vesting Period during which the Participant was employed by or was providing Services to the Company or any Affiliate, which shall be paid in accordance with Section 3.3 above. Any further portion of the Award, to the extent not vested, shall be forfeited to the Company without payment of any consideration by the Company, and neither the Participant nor any of his or her successors, heirs, assigns or personal representatives shall thereafter have any further rights or interests in such Award.

Example: Participant's employment terminates due to termination by the Company other than for Cause or by the Participant for Good Reason on November 4, 2022. Participant would be deemed to have served 7 full months of the Vesting Period of February 24, 2021 to February 24, 2022 and would be entitled to receive \$194,444.44 in accordance with Section 3.3 of this Agreement, subject to the Participant's full compliance at all times with the Restrictive Covenant Agreement. The remaining portion of the Award for the Vesting Period of February 24, 2022 to February 22, 2023 (\$138,889) shall be forfeited to the Company on November 4, 2022.

4.4 Death or Disability. If the Participant terminates employment with or ceases to provide Services to the Company or any Affiliate on account of death or Disability, the Award, to the extent not vested, shall become fully vested upon such termination of employment or Services and shall be paid in accordance with Section 3.3 above.

ARTICLE V CHANGE IN CONTROL AND RESTRICTION PERIOD

5.1 Change in Control. In the event of a Change in Control:

(a) With respect to each outstanding Award that is assumed or substituted in connection with a Change in Control, in the event that during the twenty-four (24) month period following such Change in Control a

Participant's employment or Service is terminated without Cause by the Company or any Affiliate or the Participant resigns from employment or Service from the Company or any Affiliate with Good Reason, (i) the restrictions, payment conditions, and forfeiture conditions applicable to such Award shall lapse (but, the Participant's obligations under the Restrictive Covenant Agreement and this Agreement shall not lapse), and (ii) such Award shall become fully vested and payable within ten (10) days following such termination of employment or Services.

(b) With respect to each outstanding Award that is not assumed or substituted in connection with a Change in Control, except as would result in the imposition of additional taxes and penalties under Section 409A of the Code, immediately upon the occurrence of the Change in Control, (i) the restrictions, payment conditions, and forfeiture conditions applicable to such Award granted shall lapse (but, the Participant's obligations under the Restrictive Covenant Agreement and this Agreement shall not lapse), and (ii) such Award shall become fully vested and payable within ten (10) days following the Change in Control.

5.2 Assumption/Substitution. For purposes of Section 5.1 (a), the Award shall be considered assumed or substituted for if, following the Change in Control, the Award remains subject to the same terms and conditions that were applicable to the Award immediately prior to the Change in Control.

ARTICLE VI

MISCELLANEOUS

6.1 Administration. The Administrator shall have the power to interpret the Plan, the Restrictive Covenant Agreement and this Agreement and to adopt such rules for the administration, interpretation and application of the Plan as are consistent therewith and to interpret, amend or revoke any such rules. All actions taken and all interpretations and determinations made by the Administrator in good faith shall be final and binding upon the Participant, the Company and all other interested persons. No member of the Administrator or the Board shall be personally liable for any action, determination or interpretation made in good faith with respect to the Plan, this Agreement or the Award.

6.2 Restrictions on Transfer. Any unvested portion of an Award may not be transferred or otherwise disposed of by the Participant, including by way of sale, assignment, transfer, pledge, hypothecation or otherwise, except as permitted by the Administrator, or by will or the laws of descent and distribution.

6.3 Invalid Transfers. No purported sale, assignment, mortgage, hypothecation, transfer, pledge, encumbrance, gift, transfer in trust (voting or other) or other disposition of, or creation of a security interest in or lien on, any unvested portion of the Award by any holder thereof in violation of the provisions of this Agreement shall be valid, and the Company will not transfer any of said unvested Award on its books or otherwise, unless and until there has been full compliance with said provisions to the satisfaction of the Company. The foregoing restrictions are in addition to and not in lieu of any other remedies, legal or equitable, available to enforce said provisions.

6.4 Termination of Employment or Service/Breach of the Restrictive Covenant Agreement. The Administrator, in its sole discretion, shall determine the effect of all matters and questions relating to termination of employment or Service, including without limitation, whether a termination has occurred, whether any termination resulted from a discharge for Cause and whether any particular leave of absence constitutes a termination, as well as whether the Participant has fully complied with the Restrictive Covenant Agreement for purposes of this Agreement.

6.5 Notices. Any notice to be given under the terms of this Agreement to the Company shall be addressed to the Company in care of the Chief Human Resources Officer at the Company's principal office, and any notice to be given to the Participant shall be addressed to the Participant's last address reflected on the Company's records.

6.6 Titles. Titles are provided herein for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.

6.7 Governing Law. The laws of the State of Delaware shall govern the interpretation, validity, administration, enforcement and performance of the terms of this Agreement regardless of the law that might be applied under principles of conflicts of laws.

6.8 Amendments, Suspension and Termination. To the extent permitted by the Plan, this Agreement may be wholly or partially amended or otherwise modified, suspended or terminated at any time or from time to time by the Administrator or the Board; provided, however, that, except as may otherwise be provided by the Plan, no amendment, modification, suspension or termination of this Agreement shall adversely affect the Award in any material way without the prior written consent of the Participant.

6.9 Successors and Assigns. The Company may assign any of its rights under this Agreement to single or multiple assignees, and this Agreement shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth in this Article 6, this Agreement shall be binding upon the Participant and his or her heirs, executors, administrators, successors and assigns.

6.10 Unfunded Status of Awards. With respect to any payments not yet made to the Participant pursuant to the Plan, including this Award, nothing contained in the Plan, the Notice, the Restrictive Covenant Agreement or this Agreement shall give the Participant any rights that are greater than those of a general creditor of the Company or any Affiliate.

6.11 Entire Agreement. The Plan, the Notice, the Restrictive Covenant Agreement and this Agreement (including all Exhibits thereto, if any) constitute the entire agreement of the parties and supersede in their entirety all prior undertakings and agreements of the Company and the Participant with respect to the subject matter hereof.

6.12 Section 409A. The intent of the parties is that payments and benefits under this Agreement and the Award be exempt from, or comply with, Section 409A of the Internal Revenue Code (the "Code"), and accordingly, to the maximum extent permitted, this Agreement and the Award shall be interpreted and administered to be in accordance therewith. Notwithstanding anything contained herein to the contrary, the Participant shall not be considered to have terminated employment with the Company for purposes of any payments under this Agreement and the Award which are subject to Section 409A of the Code until the Participant would be considered to have incurred a "separation from service" from the Company within the meaning of Section 409A of the Code. Each amount to be paid or benefit to be provided under this Agreement and the Award shall be construed as a separate identified payment for purposes of Section 409A of the Code, and any payments described in this Agreement and the Award that are due within the "short term deferral period" as defined in Section 409A of the Code shall not be treated as deferred compensation unless applicable law requires otherwise. Without limiting the foregoing and notwithstanding anything contained herein to the contrary, to the extent required in order to avoid accelerated taxation and/or tax penalties under Section 409A of the Code, amounts that would otherwise be payable and benefits that would otherwise be provided pursuant to this Agreement and the Award during the six-month period immediately following the Participant's separation from service shall instead be paid on the first business day after the date that is six months following the Participant's separation from service (or, if earlier, the Participant's death). The Company makes no representation that any or all of the payments described in this Agreement and the Award will be exempt from or comply with Section 409A of the Code and makes no undertaking to preclude Section 409A of the Code from applying to any such payment. The Participant understands and agrees that he or she shall be solely responsible for the payment of any taxes and penalties incurred under Section 409A.

6.13 Disclosure Regarding Use of Personal Information.

(a) Definition and Use of "Personal Information". In connection with the grant of the Award, and any other award under other incentive award programs, and the implementation and administration of any such program, including, without limitation, the Participant's actual participation, or consideration by the Company for potential future participation, in any program at any time, it is or may become necessary for the Company to collect, transfer, use, and hold certain personal information regarding Participant in and/or outside of Participant's country of employment. The "Personal Information" the Company may collect, process, store and transfer for the purposes outlined above may include the Participant's name, nationality, citizenship, tax or other residency status, work authorization, date of birth, age, government/tax identification number, passport number, brokerage account information, GEID or other internal identifying information, home address, work address, job and location history, compensation and incentive award information and history, business unit, employing entity, and the Participant's beneficiaries and contact information. The Participant may obtain more details regarding the access and use of his or her personal information, and may correct or update such information, by contacting his or her human resources representative or local equity coordinator.

(b) Use, Transfer, Storage and Processing of Personal Information. The use, transfer, storage and processing of Personal Information electronically or otherwise, may be in connection with the Company's internal administration of its incentive award programs, or in connection with tax or other governmental and regulatory compliance activities directly or indirectly related to an incentive award program. To the extent permitted by law, Personal Information may be used by third parties retained by the Company to assist with the administration and compliance activities of its incentive award programs, and may be transferred by the entity that employs (or any entity that has employed) the Participant from the Participant's country of employment to the Company (or its Affiliates or Subsidiaries) and third parties located in the U.S. and in other countries. Specifically, those parties that may have access to the Participant's Personal Information for the purposes described herein include, but are not limited to: (i) human resources personnel responsible for administering the award programs, including local and regional equity award coordinators, and global coordinators located in the U.S.; (ii) Participant's U.S. broker and equity account administrator and trade facilitator; (iii) Participant's U.S., regional and local employing entity and business unit management, including Participant's supervisor and his or her superiors; (iv) the Administrator; (v) the Company's technology systems support team (but only to the extent necessary to maintain the proper operation of electronic information systems that support the incentive award programs); and (vi) internal and external legal, tax and accounting advisors (but only to the extent necessary for them to advise the Company on compliance and other issues affecting the incentive award programs in their respective fields of expertise). At all times, Company personnel and third parties will be obligated to maintain the confidentiality of the Participant's Personal Information except to the extent the Company is required to provide such information to governmental agencies or other parties. Such action will always be undertaken only in accordance with applicable law.

ARTICLE VII

DEFINITIONS

Wherever the following terms are used in this Agreement they shall have the meanings specified below, unless the context clearly indicates otherwise. The singular pronoun shall include the plural where the context so indicates.

7.1 "Disability," shall mean a condition such that an individual would be considered disabled for the purposes of Section 409(A) of the Code.

7.2 "Retirement" shall mean a "separation from service" (within the meaning of Section 409A of the Code) with the Company and all Affiliates (other than for Cause) after attaining eligibility for Retirement. A Participant attains eligibility for Retirement upon the earlier of (a) age 65 or (b) age 55 with at least ten (10) whole years of consecutive Service starting from the Participant's most recent hire date with the Company and all Affiliates. For the avoidance of doubt, the phrase "consecutive service" in the preceding sentence shall not include time spent by the Participant:

(a) as a consultant or advisor to the Company or its Affiliates following a "separation from service" within the meaning of Section 409A of the Code;

(b) engaged as an independent sales agent affiliated with one of the Company's or its Affiliates' real estate brands; or

(c) employed with or providing services to any business acquired by the Company or any Affiliate prior to the time such business was acquired by the Company or any Affiliate or employed with or providing services to any business after the time such business was divested by the Company or any Affiliate.

7.3 "Service" or "Services" shall mean services performed by the Participant for the Company or its Affiliates as an Employee, consultant or advisor, provided that services performed by a Participant in the capacity as an independent sales agent affiliated with one of the Company's or its Affiliates' real estate brands shall not constitute Service.

REALOGY HOLDINGS CORP. SUBSIDIARIES Exhibit 21.1

Name	State
Alpha Referral Network LLC	Texas
Apple Ridge Funding LLC	Delaware
Apple Ridge Services Corporation	Delaware
Better Homes and Gardens Real Estate Licensee LLC	Delaware
Better Homes and Gardens Real Estate LLC	Delaware
Broker Technology Solutions LLC	Delaware
Bromac Title Services LLC	Delaware
Burgdorff LLC	Delaware
Burnet Realty LLC	Minnesota
Burnet Title of Indiana, LLC	Indiana
Career Development Center, LLC	Delaware
Cartus B.V.	Netherlands
Cartus Brasil Serviços de Relocação Ltda.	Brazil
Cartus Business Answers No. 2 Plc	United Kingdom
Cartus Corporation	Delaware
Cartus Corporation Limited	Hong Kong
Cartus Corporation Pte. Ltd.	Singapore
Cartus Financial Corporation	Delaware
Cartus Financing Limited	United Kingdom
Cartus Global Holdings Limited	Hong Kong
Cartus Holdings Limited	United Kingdom
Cartus II Limited	United Kingdom
Cartus India Private Limited	India
Cartus Limited	United Kingdom
Cartus Management Consulting (Shanghai) Co., Ltd.	China
Cartus Puerto Rico Corporation	Puerto Rico
Cartus Real Estate Consultancy (Shanghai) Co., Ltd.	China
Cartus Relocation Canada Limited	Canada
Cartus Relocation Corporation	Delaware
Cartus Relocation Hong Kong Limited	Hong Kong
Cartus Sarl	Switzerland
Cartus SAS	France
Cartus Services II Limited	United Kingdom
Cartus UK Plc	United Kingdom
Case Title Company	California
Castle Edge Insurance Agency, Inc.	Massachusetts
CB Commercial NRT Pennsylvania LLC	Delaware
CDRE TM LLC	Delaware
Century 21 Real Estate LLC	Delaware
CGRN, Inc.	Delaware
Climb Franchise Systems LLC	Delaware
Climb Real Estate, Inc.	California
Climb Real Estate LLC	Delaware
Coldwell Banker Canada Operations ULC	Canada
Coldwell Banker Commercial Pacific Properties LLC	Hawaii
Coldwell Banker LLC	Delaware

Coldwell Banker LLC	
Coldwell Banker NRT RealVitalize, Inc.	Delaware
Coldwell Banker NRT RealVitalize LLC	Delaware
Coldwell Banker Pacific Properties LLC	Hawaii
Coldwell Banker Real Estate LLC	California
Coldwell Banker Real Estate Services LLC	Delaware
Coldwell Banker Residential Brokerage Company	California

Name	State
Coldwell Banker Residential Brokerage LLC	Delaware
Coldwell Banker Residential Real Estate LLC	California
Coldwell Banker Residential Referral Network	California
Coldwell Banker Residential Referral Network, Inc.	Pennsylvania
Colorado Commercial, LLC	Colorado
Corcoran Group LLC	Delaware
Cornerstone Title Company	California
Equity Title Company	California
Equity Title Messenger Service Holding LLC	Delaware
ERA Franchise Systems LLC	Delaware
Estately, Inc.	Washington
Fairtide Insurance Ltd.	Bermuda
First Advantage Title, LLC	Delaware
First California Escrow Corporation	Delaware
Guardian Holding Company	Delaware
Guardian Title Company	California
HFS LLC	Delaware
HFS.com Connecticut Real Estate LLC	Delaware
HFS.com Real Estate Incorporated	Delaware
HFS.com Real Estate LLC	Delaware
Home Referral Network LLC	Minnesota
Jack Gaughen LLC	Delaware
Lakecrest Title, LLC	Tennessee
Land Title and Escrow, Inc.	Idaho
Martha Turner Properties, L.P.	Texas
Martha Turner Sotheby's International Realty Referral Company LLC	Texas
Mercury Title LLC	Arkansas
Metro Title, LLC	Delaware
MTPGP, LLC	Texas
NRT Arizona Commercial LLC	Delaware
NRT Arizona LLC	Delaware
NRT Arizona Referral LLC	Delaware
NRT California Incorporated	Delaware
NRT Carolinas LLC	Delaware
NRT Carolinas Referral Network LLC	Delaware
NRT Colorado LLC	Colorado
NRT Columbus LLC	Delaware
NRT Commercial LLC	Delaware
NRT Development Advisors LLC	Delaware
NRT Devonshire LLC	Delaware
NRT Devonshire West LLC	Delaware
NRT Florida LLC	Delaware
NRT Hawaii Referral, LLC	Delaware
NRT Long Island City LLC	Delaware
NRT Mid-Atlantic LLC	Delaware
NRT Missouri LLC	Delaware

NRT Missouri Referral Network LLC	Delaware
NRT New England LLC	Delaware
NRT New York LLC	Delaware
NRT Northfork LLC	Delaware
NRT NY RP Holding LLC	Delaware
NRT Philadelphia LLC	Delaware

Name	State
NRT Pittsburgh LLC	Delaware
NRT Property Care LLC	Delaware
NRT Property Management Arizona LLC	Delaware
NRT Property Management Atlanta LLC	Georgia
NRT Property Management California, Inc.	Delaware
NRT Property Management Colorado LLC	Delaware
NRT Property Management DC LLC	Delaware
NRT Property Management Delaware LLC	Delaware
NRT Property Management Florida LLC	Delaware
NRT Property Management Hawaii LLC	Delaware
NRT Property Management Illinois LLC	Delaware
NRT Property Management Louisiana LLC	Delaware
NRT Property Management Maryland LLC	Delaware
NRT Property Management Minnesota LLC	Delaware
NRT Property Management Nevada LLC	Delaware
NRT Property Management New Jersey LLC	Delaware
NRT Property Management North Carolina LLC	Delaware
NRT Property Management Ohio LLC	Delaware
NRT Property Management Oklahoma LLC	Delaware
NRT Property Management Pennsylvania LLC	Delaware
NRT Property Management South Carolina LLC	Delaware
NRT Property Management Tennessee LLC	Delaware
NRT Property Management Texas LLC	Delaware
NRT Property Management Utah LLC	Delaware
NRT Property Management Virginia LLC	Delaware
NRT Queens LLC	Delaware
NRT Referral Network LLC (DE)	Delaware
NRT Referral Network LLC (Utah)	Utah
NRT Relocation LLC	Delaware
NRT Rental Management Solutions LLC	Delaware
NRT REOExperts LLC	Delaware
NRT Sunshine Inc.	Delaware
NRT Texas LLC	Texas
NRT Title Agency, LLC	Delaware
NRT Utah LLC	Delaware
NRT Vacation Rentals Arizona LLC	Delaware
NRT Vacation Rentals California, Inc.	Delaware
NRT Vacation Rentals Delaware LLC	Delaware
NRT Vacation Rentals Florida LLC	Delaware
NRT Vacation Rentals Maryland LLC	Delaware
NRT West Rents, Inc.	California
NRT West, Inc.	California
NRT ZipRealty LLC	Delaware
On Collaborative, Inc.	California
On Collaborative LLC	Delaware
Oncor International LLC	Delaware

Plymouth Abstract LLC	Delaware
Quality Choice Title LLC	Delaware
Real Estate Referral LLC	Delaware
Real Estate Referrals LLC	Delaware
Real Estate Services LLC	Delaware
Realogy Blue Devil Holdco LLC	Delaware

Name	State
Realogy Brokerage Group LLC	Delaware
Realogy Cavalier Holdco LLC	Delaware
Realogy Co-Issuer Corp.	Florida
Realogy Franchise Group LLC	Delaware
Realogy Global Services LLC	Delaware
Realogy Group LLC	Delaware
Realogy Intermediate Holdings LLC	Delaware
Realogy Licensing LLC	Delaware
Realogy Lead Management Services, Inc.	Delaware
Realogy Operations LLC	California
Realogy Services Group LLC	Delaware
Realogy Services Venture Partner LLC	Delaware
Realogy Title Group LLC	Delaware
REALtech Title LLC	Delaware
Referral Associates of New England LLC	Massachusetts
Referral Network LLC	Florida
Referral Network Plus, Inc.	California
Referral Network, LLC	Colorado
Regency Title Company, L.L.C.	Georgia
Riverbend Title, LLC	Delaware
RT Title Agency, LLC	Delaware
Secured Land Transfers LLC	Delaware
Sotheby's International Realty Affiliates LLC	Delaware
Sotheby's International Realty Global Development Advisors LLC	Delaware
Sotheby's International Realty Licensee LLC	Delaware
Sotheby's International Realty Referral Company Inc.	California
Sotheby's International Realty Referral Company, LLC	Delaware
Sotheby's International Realty, Inc.	Michigan
St. Mary's Title Services, LLC	New Hampshire
Terra Coastal Escrow, Inc.	California
The Sunshine Group, Ltd.	New York
Title Resource Group Affiliates Holdings LLC	Delaware
Title Resource Group Holdings LLC	Delaware
Title Resource Group Settlement Services, LLC	Alabama
Title Resources Guaranty Company	Texas
TRG Maryland Holdings LLC	Delaware
TRG Services, Escrow, Inc.	Delaware
TRG Settlement Services, LLP	Pennsylvania
TRG Venture Partner LLC	Delaware
True Line Technologies LLC	Ohio
West Coast Escrow Company	California
ZapLabs LLC	Delaware

Name	Assumed Name
Alpha Referral Network LLC	Coldwell Banker Realty Referral Network Referral Network Realty Referral Company
Bromac Title Services LLC	Equity Closing Platinum Title & Settlement Services Platinum Title
Burgdorff LLC	Burgdorff ERA
Burnet Realty LLC	Burnet Financial Group Burnet Relocation Management Castle Edge Mobility Coldwell Banker Burnet Coldwell Banker Burnet Home Services Coldwell Banker Burnet Realty Coldwell Banker Burnet - Realty Coldwell Banker-Global Luxury Coldwell Banker Realty Coldwell Banker Realty-Burnet On Collaborative
Cartus Brasil Serviços de Relocação Ltda.	Cartus Brasil Relocation Services
CB Commercial NRT Pennsylvania LLC	Coldwell Banker Commercial Realty
CGRN, Inc.	The Referral Center
Climb Real Estate, Inc.	Condo Store
Coldwell Banker Canada Operations ULC	Coldwell Banker Affiliates of Canada
Coldwell Banker Commercial Pacific Properties LLC	Coldwell Banker Commercial Pacific Properties Coldwell Banker Commercial Realty
Coldwell Banker Pacific Properties LLC	Coldwell Banker Pacific Properties Coldwell Banker Pacific Properties Real Estate School Coldwell Banker Realty
Coldwell Banker Real Estate LLC	Coldwell Banker Commercial Affiliates

Name	Assumed Name
Coldwell Banker Real Estate Services LLC	Coldwell Banker Commercial Realty Coldwell Banker Country Properties Coldwell Banker NRT Coldwell Banker Realty Coldwell Banker Sammis Trylon Realty of Great Neck Coldwell Banker Success Academy First Choice Real Estate National Homefinders Signature Properties Signature Properties of Long Island
Coldwell Banker Residential Brokerage Company	Coldwell Banker Realty Coldwell Banker NRT Powerhouse Properties On Collaborative
Coldwell Banker Residential Real Estate LLC	Chicago Apartment Finders Coldwell Banker NRT Coldwell Banker Realty Coldwell Banker Residential Real Estate Coldwell Banker West Shell The Gold Coast School of Real Estate Coldwell Banker Residential Group Coldwell Banker The Condo Store On Collaborative
Coldwell Banker Residential Referral Network	RNI Referral Network Referral Network, Inc. Coldwell Banker Realty Referral Network National Real Estate Referral Associates Coldwell Banker Residential Referral Network Coldwell Banker Residential Referral Network, Inc. Coldwell Banker Realty Referral Network
Coldwell Banker Residential Referral Network, Inc.	Coldwell Banker Commercial Realty
Colorado Commercial, LLC	
HFS.com Real Estate Incorporated	HFS.com Homesforsale.com
HFS.com Real Estate LLC	HFS.com Homesforsale.com
HFS.com Connecticut Real Estate LLC	HFS.com Homesforsale.com
HFS LLC	HFS
Home Referral Network LLC	Coldwell Banker Realty Referral Network Network Connect

Name	Assumed Name
Jack Gaughen LLC	Jack Gaughen ERA Jack Gaughen Realtor ERA R & L Appraisal Associates Coldwell Banker Realty
Martha Turner Properties, L.P.	Martha Turner Sotheby's International Realty
Mercury Title LLC	TRG Closing Services
Metro Title LLC	TRG Closing Services
NRT Arizona Commercial LLC	Coldwell Banker Commercial Realty
NRT Arizona LLC	Coldwell Banker Realty Coldwell Banker NRT On Collaborative
NRT Arizona Referral LLC	Coldwell Banker Realty Referral Network
NRT California Incorporated	Corcoran The Corcoran Group
NRT Carolinas LLC	Coldwell Banker Realty Coldwell Banker Commercial Realty Coldwell Banker United, Realtors®
NRT Carolinas Referral Network LLC	Coldwell Banker Realty Referral Network
NRT Colorado LLC	Coldwell Banker Realty Coldwell Banker NRT On Collaborative
NRT Columbus LLC	Coldwell Banker King Thompson Coldwell Banker Realty
NRT Commercial LLC	Coldwell Banker Commercial Realty
NRT Development Advisors LLC	Coldwell Banker NRT Development Advisors Coldwell Banker Realty
NRT Devonshire LLC	Coldwell Banker Realty Coldwell Banker NRT
NRT Devonshire West LLC	Coldwell Banker Devonshire West Coldwell Banker Realty
NRT Florida LLC	Coldwell Banker United, Realtors® Sunbelt Real Estate Academy
NRT Hawaii Referral, LLC	Coldwell Banker Realty Referral Network

Name	Assumed Name
NRT Mid-Atlantic LLC	Coldwell Banker Commercial Realty Coldwell Banker Realty Coldwell Banker NRT Coldwell Banker Vacations Coldwell Banker Residential Brokerage School of Real Estate Coldwell Banker Residential Brokerage Real Estate School On Collaborative
NRT Missouri LLC	Coldwell Banker Gundaker Coldwell Banker Gundaker School of Real Estate Coldwell Banker Realty - Gundaker Coldwell Banker NRT Laura McCarthy Laura McCarthy RE Laura McCarthy Real Estate Laura McCarthy Realtors www.cbgschool.com
NRT Missouri Referral Network LLC	Coldwell Banker Gundaker Referrals Coldwell Banker Realty Referral Network Coldwell Banker Realty - Gundaker Referral Network
NRT New England LLC	Castle Edge Mobility Coldwell Banker Commercial Realty Coldwell Banker Realty Coldwell Banker NRT The Collaborative Companies
NRT New York LLC	aptsandlofts.com CH Commercial Real Estate Group Citi Habitats Citi Habitats America Citi Habitats New Developments Citi Move In Solutions Corcoran Group Marketing Corcoran Group Real Estate Corcoran Sunshine Marketing Group Corcoran Wexler Healthcare Properties Metro Walls Solofts The Corcoran Group The Corcoran Group Brooklyn
NRT Northfork LLC	Corcoran
NRT Philadelphia LLC	Coldwell Banker Commercial Realty Coldwell Banker Preferred Coldwell Banker Realty Coldwell Banker Realty

Name	Assumed Name
NRT Pittsburgh LLC	Coldwell Banker Commercial Realty Coldwell Banker Real Estate Services Coldwell Banker Realty
NRT Property Care LLC	ER Property Care Prime Residential Services
NRT Property Management Arizona LLC	Property Frameworks
NRT Property Management Atlanta LLC	Property Frameworks Crown Realty & Management One Prop
NRT Property Management California, Inc.	Property Frameworks
NRT Property Management Colorado LLC	Property Frameworks
NRT Property Management DC LLC	Property Frameworks
NRT Property Management Delaware LLC	Property Frameworks
NRT Property Management Florida LLC	Property Frameworks United Property Management of the Gulf Coast
NRT Property Management Hawaii LLC	Property Frameworks
NRT Property Management Illinois LLC	Property Frameworks One Prop
NRT Property Management Louisiana LLC	Property Frameworks One Prop
NRT Property Management Maryland LLC	Property Frameworks
NRT Property Management Minnesota LLC	Property Frameworks
NRT Property Management Nevada LLC	Property Frameworks
NRT Property Management New Jersey LLC	Property Frameworks
NRT Property Management North Carolina LLC	Property Frameworks One Prop
NRT Property Management Ohio LLC	Property Frameworks
NRT Property Management Oklahoma LLC	Property Frameworks One Prop
NRT Property Management Pennsylvania LLC	Property Frameworks
NRT Property Management Tennessee LLC	Property Frameworks
NRT Property Management Texas LLC	Property Frameworks One Prop Tenant Care
NRT Property Management Utah LLC	Property Frameworks
NRT Property Management Virginia LLC	Property Frameworks
NRT Queens	Citi Habitats
NRT Referral Network LLC (DE)	Coldwell Banker Realty Referral Network

Name	Assumed Name
NRT Referral Network LLC (UT)	Coldwell Banker Realty Referral Network
NRT Sunshine Inc.	Corcoran Sunshine Marketing Group The Sunshine Group The Sunshine Group West
NRT Relocation LLC	Castle Edge Mobility
NRT Texas LLC	Coldwell Banker Commercial Realty Coldwell Banker Realty DFW Real Estate Academy The Real Estate School, D/FW The Real Estate School, Dallas/Fort Worth Coldwell Banker United, Realtors® Fine Properties Group Get There First Realty Get There First Realty Services GTF Realty Coldwell Banker Commercial Realty ZipRealty Residential Brokerage On Collaborative
NRT Utah LLC	Coldwell Banker Realty Coldwell Banker NRT
NRT Vacation Rentals Arizona LLC	Coldwell Banker Vacations
NRT Vacation Rentals Delaware LLC	Coldwell Banker Vacations
NRT Vacation Rentals Florida LLC	Coldwell Banker Vacations

Name	Assumed Name
NRT West LLC	Coldwell Banker Global Luxury On Collaborative Bertrando & Associates C & C Cashin Company CB Rents Coker & Cook Coker & Cook Real Estate Coker Ewing Cook & Cook Coker-Ewing Real Estate Company Coldwell Banker Coldwell Banker Bertrando & Associates Coldwell Banker Commercial Coldwell Banker Commercial Realty West Coldwell Banker Cornish & Carey Coldwell Banker Cornish and Carey Coldwell Banker Del Monte Coldwell Banker Del Monte Realty Coldwell Banker Fox & Carskadon Coldwell Banker Northern California Coldwell Banker Polley Polley Madsen Coldwell Banker PPM Coldwell Banker Previews International Coldwell Banker Property Management Coldwell Banker Realty Coldwell Banker Residential Real Estate Coldwell Banker Residential Real Estate NRT West Coldwell Banker Residential Real Estate Services Coldwell Banker Residential Real Estate Services of Northern California Coldwell Banker TRI Coldwell Banker/Valley of California Cook & Cook Realtors Cornish & Carey Cornish & Carey Real Estate Cornish and Carey Cornish and Carey Real Estate Cornish and Carey Residential Del Monte Del Monte Coldwell Banker Residential Real Estate Del Monte Realty Polley Polley Madsen Tri Coldwell Banker Tri Coldwell Banker Residential Real Estate Valley Valley of California ZipRealty Residential Brokerage On Collaborative Coldwell Banker Realty Referral Network
NRT ZipRealty LLC	
On Collaborative LLC	
Real Estate Referral LLC	

Name**Assumed Name**

Real Estate Referrals LLC

Real Estate Referral Network
Coldwell Banker Realty Referral Network

Realogy Brokerage Group LLC

Coldwell Banker NRT

Realogy Title Group LLC

Resource Settlement Group LLC

Referral Associates of New England LLC

Coldwell Banker Realty Referral Network

Referral Network LLC

Coldwell Banker Realty Referral Network

Referral Network Plus, Inc.

Coldwell Banker Realty Referral Network
Referral Network, Inc.
On Collaborative

Referral Network, LLC

Coldwell Banker Realty Referral Network

Riverbend Title, LLC

Riverbend Title Agency, LLC

RT Title Agency, LLC

Residential Title
Residential Title Agency

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (No. 333-184383, No. 333-211160, No. 333-221080 and No. 333-224609) of Realogy Holdings Corp. and its subsidiaries of our report dated February 25, 2020 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP
Florham Park, New Jersey
February 25, 2020

CERTIFICATION

I, Ryan M. Schneider, certify that:

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

Date: February 25, 2020

/s/ RYAN M. SCHNEIDER
CHIEF EXECUTIVE OFFICER

CERTIFICATION

I, Charlotte C. Simonelli, certify that:

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

Date: February 25, 2020

/s/ CHARLOTTE C. SIMONELLI
CHIEF FINANCIAL OFFICER

CERTIFICATION

I, Ryan M. Schneider, certify that:

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

Date: February 25, 2020

/s/ RYAN M. SCHNEIDER
CHIEF EXECUTIVE OFFICER

CERTIFICATION

I, Charlotte C. Simonelli, certify that:

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

Date: February 25, 2020

/s/ CHARLOTTE C. SIMONELLI
CHIEF FINANCIAL OFFICER

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

In connection with the Annual Report of Realogy Holdings Corp. (the “Company”) on Form 10-K for the period ended December 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), Ryan M. Schneider, as Chief Executive Officer of the Company, and Charlotte C. Simonelli, as Chief Financial Officer of the Company, each hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of his or her knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

This certification accompanies the Report pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by the Sarbanes-Oxley Act of 2002 be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

/S/ RYAN M. SCHNEIDER
RYAN M. SCHNEIDER
CHIEF EXECUTIVE OFFICER
February 25, 2020

/S/ CHARLOTTE C. SIMONELLI
CHARLOTTE C. SIMONELLI
EXECUTIVE VICE PRESIDENT AND
CHIEF FINANCIAL OFFICER
February 25, 2020

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

In connection with the Annual Report of Realogy Group LLC (the “Company”) on Form 10-K for the period ended December 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), Ryan M. Schneider, as Chief Executive Officer of the Company, and Charlotte C. Simonelli, as Chief Financial Officer of the Company, each hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of his or her knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

This certification accompanies the Report pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by the Sarbanes-Oxley Act of 2002 be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

/S/ RYAN M. SCHNEIDER
RYAN M. SCHNEIDER
CHIEF EXECUTIVE OFFICER
February 25, 2020

/S/ CHARLOTTE C. SIMONELLI
CHARLOTTE C. SIMONELLI
EXECUTIVE VICE PRESIDENT AND
CHIEF FINANCIAL OFFICER
February 25, 2020